

ATTACHMENT A

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Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
AGENCIES				
A-Caltrans	Yunsheng Luo, Associate Transportation Planner, California Department of Transportation, District 4	E-mail January 24, 2022	1	GC-5: Public Involvement and Collaboration or Coordination
A-CCC	Peter Benham, Coastal Planner, California Coastal Commission, North Central Coast District	Letter January 24, 2022	1	AL-1: Range of Alternatives
			2	AL-1: Range of Alternatives
			3	RE-1: Recreation Impacts
			4	PD-4: Revegetation and Landscape Management
			5	PD-5: Public Access, Parking, and Restroom Improvements
			6	PD-7: Project Construction
			7	RE-1: Recreation Impacts
			8	PD-5: Public Access, Parking, and Restroom Improvements
			9	PD-5: Public Access, Parking, and Restroom Improvements
			10	TR-5: Parking Impacts
			11	RE-1: Recreation Impacts
			12	PP-1: Consistency with Local Plans and Policies
			13	AE-1: Aesthetics Impacts
			14	PD-4: Revegetation and Landscape Management
			15	PD-6: Beach Nourishment
			16	PD-6: Beach Nourishment
			17	PD-6: Beach Nourishment
			18	PD-6: Beach Nourishment
			19	PD-6: Beach Nourishment
			20	RE-1: Recreation Impacts
			21	PD-6: Beach Nourishment
			22	PD-6: Beach Nourishment
			23	PD-9: Other Project Elements

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
AGENCIES (CONTINUED)				
A-CCC (cont.)			24	PD-3: Slope Stabilization Layer
			25	PD-2: Buried Wall
			26	PD-2: Buried Wall
			27	PD-4: Revegetation and Landscape Management
			28	BI-7: Conflicts with Local Policies or Ordinances
			29	TC-1: Tribal Consultation
			30	BI-1: Bank Swallow Habitat Impacts
			31	BI-4: Marine Biological Resources Impacts
			32	BI-5: Benthic Community Impacts
			33	BI-2: Dune Ecosystem Impacts
			34	PD-4: Revegetation and Landscape Management
			35	PD-4: Revegetation and Landscape Management
			A-CDFW	Erin Chappell, Regional Manager, Bay Delta Region (3), and Craig Shuman, D. Env., Regional Manager, Marine Region (7), California Department of Fish and Wildlife
2	BI-1: Bank Swallow Habitat Impacts			
3	PD-10: Permits/Approvals/Regulatory Compliance			
4	BI-1: Bank Swallow Habitat Impacts			
5	BI-4: Marine Biological Resources Impacts			
6	BI-3: Special Status Plant Impacts			
7	BI-6: Other Wildlife or Habitat Impacts			
8	BI-6: Other Wildlife or Habitat Impacts			
9	GC-5: Public Involvement and Collaboration or Coordination			
A-CPC-1	Sue Diamond, Commissioner, San Francisco Planning Commission	Planning Commission Hearing Transcript January 6, 2022	1	GC-3: Clarifications, Multiple Issues
			2	NO-1: Construction Noise Impacts
			3	GC-3: Clarifications, Multiple Issues
			4	PD-10: Permits/Approvals/Regulatory Compliance
A-CPC-2	Kathrin Moore, Commissioner, San Francisco Planning Commission	Planning Commission Hearing Transcript January 6, 2022	1	BI-1: Bank Swallow Habitat Impacts

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
AGENCIES (CONTINUED)				
A-GGNRA	Laura E. Joss, Golden Gate National Recreation Area, National Park Service, United States Department of the Interior	Letter January 26, 2022	1	GC-5: Public Involvement and Collaboration or Coordination
			2	GC-3: Clarifications, Multiple Issues
			3	GC-5: Public Involvement and Collaboration or Coordination
			4	GC-3: Clarifications, Multiple Issues
			5	PD-6: Beach Nourishment
			6	GC-3: Clarifications, Multiple Issues
			7	GC-3: Clarifications, Multiple Issues
			8	GC-3: Clarifications, Multiple Issues
			9	AE-1: Aesthetics Impacts
			10	PD-6: Beach Nourishment
			11	PD-8: Project Operations and Maintenance
			12	PP-1: Consistency with Local Plans and Policies
			13	GC-4: Cumulative Impacts
			14	TR-2: Transportation Safety Impacts
			15	PD-6: Beach Nourishment
			16	BI-4: Marine Biological Resources Impacts
			17	BI-1: Bank Swallow Habitat Impacts
			18	BI-1: Bank Swallow Habitat Impacts
			19	PD-6: Beach Nourishment
			20	BI-5: Benthic Community Impacts
			21	AL-2: Alternatives Analysis
			22	AL-2: Alternatives Analysis
			23	AL-1: Range of Alternatives
			24	GC-5: Public Involvement and Collaboration or Coordination
A-SFBOS	Myrna Melgar, Supervisor, District 7, San Francisco Board of Supervisors	Letter January 24, 2022	1	TR-4: Vehicle Miles Traveled (VMT) Impacts
			2	GC-5: Public Involvement and Collaboration or Coordination

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
ORGANIZATIONS				
O-CNPS	California Native Plant Society, Yerba Buena Chapter board members: Eddie Bartley, President; Paul Bouscal, V.P.; Sophie Constantinou, Secretary; Bob Hall, Treasurer; Jake Sigg, Conservation; Noreen Weeden, Field Trips, Speaker Programs; Susan Karasoff, Outreach; Beth Cataldo, Volunteering; Libby Ingalls, Newsletter Production; Elliot Goliger, Horticulture	Letter January 24, 2022	1	PD-4: Revegetation and Landscape Management
			2	PD-4: Revegetation and Landscape Management
			3	BI-3: Special Status Plant Impacts
			4	BI-3: Special Status Plant Impacts
			5	PD-4: Revegetation and Landscape Management
			6	PD-8: Project Operations and Maintenance
			7	BI-1: Bank Swallow Habitat Impacts
			8	PD-4: Revegetation and Landscape Management
O-GGAS	Whitney Grover, Chair, Golden Gate Audubon Society San Francisco Conservation Committee, Board Member, Golden Gate Audubon Society	Letter January 24, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	BI-1: Bank Swallow Habitat Impacts
O-SFB	Ian Wren, Staff Scientist, San Francisco Baykeeper	Letter January 25, 2022	1	GE-1: Shoreline Erosion Impacts
			2	AL-1: Range of Alternatives
			3	GC-1: Scope of CEQA Review
O-SURF	Holden Hardcastle, Chair, Surfrider Foundation San Francisco Chapter, and Laura Walsh, California Policy Manager, Surfrider Foundation	Letter January 18, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	PD-2: Buried Wall
			3	GE-1: Shoreline Erosion Impacts
			4	PD-6: Beach Nourishment
			5	GC-3: Clarifications, Multiple Issues
			6	EN-1: Energy Use Comparison Between Alternatives
			7	TR-5: Parking Impacts
			8	PD-9: Other Project Elements
			9	PD-5: Public Access, Parking, and Restroom Improvements
			10	GC-5: Public Involvement and Collaboration or Coordination
O-WSF	Jodie Medeiros, Executive Director, Walk San Francisco	Letter January 24, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS				
I-Aguilar	Lisa Aguilar	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Akin	Kelley Akin	E-mail January 23, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Anderson	Jon Anderson	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Antell	Edmund Antell	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Argaman	Maya Argaman	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Atkind-1	Nina Atkind	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Atkind-2	Nina Atkind	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Barzano	Laura Barzano	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Basso	Anne-Marie Basso	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Beale	Katharine Beale	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Bekkerman	Alina Bekkerman	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Belden	Peter Belden	E-mail January 18, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Bense-Kang	Delia Bense-Kang	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Block	Corey Block	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Boccia	Daniel Boccia	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Bocharova	Maria Bocharova	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Boken-1	Eileen Boken	E-mail January 23, 2022	1	GE-1: Shoreline Erosion Impacts
I-Boken-2	Eileen Boken	Planning Commission Hearing Transcript January 6, 2022	1	GE-1: Shoreline Erosion Impacts
I-Brinner	Kristin Brinner	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Bruchman	Christian Bruchman	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Burke	Anamarie Burke	E-mail January 23, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Busse	Ben Busse	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Cassa	Mary Rose Cassa	E-mail January 13, 2022	1	PD-5: Public Access, Parking, and Restroom Improvements
I-Cawthon-1	Michael Cawthon	Planning Commission Hearing Transcript, January 6, 2022	1	TR-4: Vehicle Miles Traveled (VMT) Impacts
			2	GHG-1: Greenhouse Gas Emissions Impacts
I-Cawthon-2	Michael Cawthon	E-mail January 24, 2022	1	TR-4: Vehicle Miles Traveled (VMT) Impacts
			2	GHG-1: Greenhouse Gas Emissions Impacts
I-Chen	June Chen	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Ciganek	Matt Ciganek	E-mail January 20, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	GC-2: Support, Opposition, and Opinions Related to the Project
			3	GC-5: Public Involvement and Collaboration and Coordination
			4	GE-1: Shoreline Erosion Impacts
			5	GC-4: Cumulative Impacts
I-Colvin	Lucy Colvin	E-mail January 24, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	AL-1: Range of Alternatives

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INDIVIDUALS (CONTINUED)				
I-D	s d	E-mail January 23, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Damon	Paul Damon	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Daniel	Jeff Daniel	E-mail January 18, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Dave	Dave	E-mail January 20, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Davies	Lynne Davies	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Day	Parker Day	E-mail January 19, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Deanna	Deanna	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Derbin	Maksim Derbin	E-mail January 22, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Devore	Ashley Devore	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Dillingham	Shelby Dillingham	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Doolittle	Georgina Doolittle	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Dorazio	Marissa Dorazio	E-mail January 22, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Dow	Brian Dow	E-mail January 23, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
			3	GC-2: Support, Opposition, and Opinions Related to the Project
I-Dumanovsky	James Dumanovsky	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Eberspächer	Timo Eberspächer	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

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Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Ernst	Max Ernst	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Feeny	Scott Feeny	E-mail January 21, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Flack	Andrew Flack	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Foo	Amy Foo	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Fowler	Margaret Fowler	E-mail January 23, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Fu	Alan Fu	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Garneau	Courtney Garneau	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Gates	Damian Gates	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Gill	Elise Gill	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Giovara	Joey Giovara	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Gold	Josh Gold	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Gorski	Judi Gorski	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Greer	Paul Greer	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Hall	Spencer Hall	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Hanley	Will Hanley	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Hansen	Heidi Hansen	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Hardcastle	Holden Hardcastle	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Hardison	Heather Hardison	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Haslam	Christopher Haslam	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Hill-1	Steven Hill	E-mail January 23, 2022	1	PD-1: Roadway and Intersection Modifications
			2	AL-1: Range of Alternatives
			3	GC-2: Support, Opposition, and Opinions Related to the Project
			4	GC-2: Support, Opposition, and Opinions Related to the Project
I-Hill-2	Steven Hill	Planning Commission Hearing Transcript, January 6, 2022	1	TR-3: Emergency Access Impacts
			2	PD-1: Roadway and Intersection Modifications
			3	AL-1: Range of Alternatives
			4	GC-2: Support, Opposition, and Opinions Related to the Project
I-Holl-1	Dennis Holl	E-mail December 14, 2021	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	PP-1: Consistency with Local Plans and Policies
			3	AL-1: Range of Alternatives
I-Holl-2	Dennis Holl	E-mail December 23, 2021	1	AL-1: Range of Alternatives
			2	AL-1: Range of Alternatives
			3	GC-3: Clarifications, Multiple Issues
			4	GE-1: Shoreline Erosion Impacts
			5	GC-2: Support, Opposition, and Opinions Related to the Project
			6	AL-1: Range of Alternatives
I-Holl-3	Dennis Holl	E-mail January 24, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Holstad	Hennie Holstad	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

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Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Honan	Harper Honan	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Howell	Krista Howell	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Huang_L	Lena Huang	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Huang_P	Paul Huang	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Huckins	Mark Huckins	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Hunt	Ryan Hunt	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Ingram	Linda Ingram	E-mail January 22, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Ininns	Matt Ininns	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Jaffee	Jim Jaffee	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Jca	Anonymous	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Jo	Chanti Jo	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Kagel	Adam Kagel	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Kelly_B	Brian Kelly	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Kelly_J	Joshua Kelly	E-mail January 18, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project

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INDIVIDUALS (CONTINUED)				
I-Ketchum	Toby Ketchum	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Krumm	Christoph Krumm	E-mail January 19, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Kwong	Jonny Kwong	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Laharty	James Laharty	E-mail January 22, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Latham	Jennifer Latham	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Lawrence-1	Steve Lawrence	E-mail December 13, 2021	1	AL-1: Range of Alternatives
I-Lawrence-2	Steve Lawrence	E-mail January 5, 2022	1	AL-1: Range of Alternatives
I-Lenahan	Colleen Lenahan	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Liu	Helen Liu	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Louie	Denise Louie	E-mail January 23, 2022	1	PD-4: Revegetation and Landscape Management
			2	PD-4: Revegetation and Landscape Management
			3	PD-4: Revegetation and Landscape Management
			4	BI-1: Bank Swallow Habitat Impacts
			5	PD-4: Revegetation and Landscape Management
			6	PD-4: Revegetation and Landscape Management
			7	PD-8: Project Operations and Maintenance
I-Lux	Lucas Lux	E-mail January 19, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Lyford	Henry Lyford	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Mach	J. Mach	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

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INDIVIDUALS (CONTINUED)				
I-Madsen	Drew Madsen	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Malone	Marni Malone	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Marshall	Brett Marshall	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Martin	Alix Martin	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Matt	Matt	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Matt_R	Matt	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-McCubbin	Kendra McCubbin	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-McLaughlin	Bill McLaughlin	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Meyerowitz	Zachary Meyerowitz	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Miller	Vanessa Miller	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Montgomery	Matt Montgomery	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Moore	Goffrey Moore	Letter January 23, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	GC-2: Support, Opposition, and Opinions Related to the Project
			3	GC-3: Clarifications, Multiple Issues
			4	GC-3: Clarifications, Multiple Issues
			5	GC-2: Support, Opposition, and Opinions Related to the Project
			6	GC-1: Scope of CEQA Review
			7	GC-4: Cumulative Impacts

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Moore (cont.)			8	GC-3: Clarifications, Multiple Issues
			9	GC-6: Traffic Congestion Impacts
			10	PD-1: Roadway and Intersection Modifications
			11	TR-4: Vehicle Miles Traveled (VMT) Impacts
			12	NO-1: Noise Impacts
			13	GC-4: Cumulative Impacts
			14	GC-1: Scope of CEQA Review
			15	GE-1: Shoreline Erosion Impacts
			16	GC-1: Scope of CEQA Review
I-Moseson	Heidi Moseson	E-mail January 18, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Musselman	Mark Musselman	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Neeser	Amy Neeser	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Nelissen	Pieter Nelissen	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Niffenegger	Molly Niffenegger	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Olsen	Anna Olsen	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-O'Neil	Hazel O'Neil	E-mail January 24, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	TR-1: Baseline and Cumulative Assumptions for Transportation Impact Analysis
			3	PD-8: Project Operations and Maintenance
I-Pace	Maggie Pace	E-mail January 19, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Page	Will Page	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Pam	Robin Pam	E-mail January 19, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Perry	Richard Perry	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Peshkin	Dan Peshkin	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Petterson-1	Paul Petterson	E-mail January 3, 2022	1	GC-6: Traffic Congestion Impacts
			2	AL-1: Range of Alternatives
I-Petterson-2	Paul Petterson	Planning Commission Hearing Transcript January 6, 2022	1	GC-6: Traffic Congestion Impacts
			2	TR-2: Transportation Safety Impacts
			3	AL-1: Range of Alternatives
I-Pielock	Christopher Pielock	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Pirolli	Peter Pirolli	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
			3	PD-1: Roadway and Intersection Modifications
			4	AL-1: Range of Alternatives
			5	GC-2: Support, Opposition, and Opinions Related to the Project
			6	GC-2: Support, Opposition, and Opinions Related to the Project
I-Place	Pizza Place	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Polesky	Alice Polesky	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Raimondi	Ayni Raimondi	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Raskin	Adam Raskin	Voicemail January 4, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Rasmussen	David Rasmussen	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Reckas	Ted Reckas	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Regan	Mike Regan	E-mail January 6, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	TR-3: Emergency Access Impacts
			3	GC-2: Support, Opposition, and Opinions Related to the Project

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Richardson-1	Emily Richardson	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Richardson-2	Emily Richardson	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Rife	Tessa Rife	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Robertson	Benek Robertson	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Royer-1	James Royer	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Royer-2	James Royer	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-San Francisco Events	Anonymous	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Sarjapur	Melinda A. Sarjapur	Letter January 24, 2022	1	GC-4: Cumulative Impacts
I-Segal	Chad Segal	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Sheffield	Sheffield	E-mail January 18, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Silverstein	Mitch Silverstein	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Simonian	Mike Simonian	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Solmssen	Christopher Solmssen	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Sowalsky	Bobby Sowalsky	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Spector-1	Beverly Spector	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Spector-2	Beverly Spector	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Stanfield	Sky Stanfield	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Stevens	Aaliyah Stevens	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Strader	Rachel Strader	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Stuebe	Max Stuebe	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Sugino	Chris Sugino	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Sullivan	Meg Haywood Sullivan	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Surin	Pinya Surin	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Taputuarai	Irwin Taputuarai	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Thompson	Teagan Thompson	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Ting	Antonio Ting	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Tull-1	Katy Jane Tull	E-mail January 19, 2022	1	BI-5: Benthic Community Impacts
I-Tull-2	Katy Jane Tull	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Unidentified	(unidentified speaker)	Planning Commission Hearing Transcript, January 6, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
			2	TR-3: Emergency Access Impacts
			3	GC-2: Support, Opposition, and Opinions Related to the Project

Table A-1 Written Comments from Agencies, Organizations, and Individuals

Commenter Code	Name and Title of Commenter	Format	Comment Number	Topic Code
INDIVIDUALS (CONTINUED)				
I-Veraldi	Anne Veraldi	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Wahn	Udo WAHN	E-mail January 21, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Wang	David Wang	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Ward	Steve Ward	E-mail January 20, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Weinberger	Mark Weinberger	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Weiss	Lisa Weiss	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Weyland	Nathan Weyland	E-mail January 24, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Whitworth	Michael Whitworth	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts
I-Winklerprins	Lukas Winklerprins	E-mail January 20, 2022	1	GC-2: Support, Opposition, and Opinions Related to the Project
I-Wittenmeier	Forrest Wittenmeier	E-mail January 19, 2022	1	PP-1: Consistency with Local Plans and Policies
			2	GE-1: Shoreline Erosion Impacts

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A-1 AGENCY COMMENTS

1/24/22, 12:15 PM

Mail - CPC.OceanBeachEIR - Outlook

comment for Ocean Beach Climate Change Adaptation project, DEIR

Luo, Yunsheng@DOT <Yunsheng.Luo@dot.ca.gov>

Mon 1/24/2022 6:24 PM

To: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sfgov.org>

Cc: Leong, Mark@DOT <Mark.Leong@dot.ca.gov>

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello Julie,

This is Yunsheng Luo from Caltrans D4. We have reviewed the DEIR for the Ocean Beach Climate Change Adaptation project and have the following comment:

Please keep Caltrans Transportation Planning & Local Assistance's Climate Change Branch informed about adaptation measures as they are developed and implemented near Skyline/SR-35 and the nearby multi-use bike/ped trail network. Caltrans Bay Area is interested in engaging in multi-agency collaboration early and often, to find multi-benefit solutions when planning and implementing adaptation measures, including nature-based solutions outlined in this DEIR. Please contact Vishal Ream-Rao, Climate Change Branch Chief, at vishal.ream-rao@dot.ca.gov with any questions.

1
GC-5

Please feel free to reach out to me if you have any questions. Thank you!

Best,

Yunsheng Luo

Associate Transportation Planner

Local Development Review (LDR), Caltrans D4

Work Cell: 510-496-9285

For early coordination and project circulation, please reach out to LDR-D4@dot.ca.gov

CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT
 455 MARKET STREET, SUITE 300
 SAN FRANCISCO, CA 94105
 PHONE: (415) 904-5260
 FAX: (415) 904-5400
 WEB: WWW.COASTAL.CA.GOV



January 24, 2022

Julie Moore
 City and County of San Francisco Planning Department
 49 South Van Ness Ave, Suite 1400
 San Francisco, CA 94103

Subject: Draft Environmental Impact Report for the City and County of San Francisco's Ocean Beach Climate Change Adaptation Project South of Sloat Boulevard

Dear Ms. Moore:

Thank you for the opportunity to comment on the above-referenced Draft Environmental Impact Report (DEIR) for the Ocean Beach Climate Change Adaptation Project proposed in the western shoreline area of San Francisco extending roughly from Sloat Boulevard to Fort Funston (often referred to as South Ocean Beach). The project includes permanently closing the Great Highway between Sloat and Skyline Boulevards, constructing a buried seawall and other armoring to protect wastewater infrastructure, removing existing bluff-fronting revetment and sandbag structures, reshaping/restoring the underlying bluff landform, implementing a long-term beach nourishment scheme, and constructing a series of public coastal access improvements (e.g., multi-use trails, beach access stairway, restrooms, parking areas, etc.).

As an initial matter, we note that we have worked together with City staff on various iterations of potential and realized projects at this location, as well as on the Ocean Beach Master Plan, and thus have a keen understanding of the issues and problems needing to be addressed, as well as the concerns that any potential solutions may raise. We also note that the project in question represents the City's required response to the Coastal Commission's coastal development permit (CDP) requirements for a long-term plan to be implemented at this location (pursuant to CDP 2-15-1357, as amended) to address coastal hazard concerns, where current deadlines for implementation of same extend to June 30, 2023. This CEQA document is an important component of the supporting materials that the City is developing toward that end, and thus the importance of a thorough evaluation in it is heightened. Please accept the following comments, which were developed with all of that in mind.

Alternatives Analysis

A robust analysis of alternatives is perhaps the most critical information need for a project of this sort when it is ultimately considered for a CDP by the Commission. In particular, the DEIR should explain and evaluate both non-armoring and armoring options, as well as potential permutations, across similar evaluation factors and to a similar level of detail. The DEIR alternatives do not provide for an adequate range of a

1
 AL-1

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)
Page 2

non-armoring alternatives. In fact, the “No Project” alternative (i.e., “Alternative A: No Project” as described in Section 6.3.1) indicates that none of the revetments, rubble, sand bags and related development currently in place would be removed as a part of this project alternative. For one thing, that makes that an armoring alternative. For another, that would require its own CDP authorization as such development was only authorized on a temporary basis and is required to be removed and the area restored by June 30, 2022 (CDP 2-15-1357-A1). In other words, this is not a true ‘no project’ alternative,¹ and it needs to be framed and explored differently by the DEIR, including in terms of an evaluation of maintaining such armoring’s impacts on coastal resources (e.g., in terms of direct coverage, passive erosion, recreation, views, etc.). This is also not, as the DEIR represents, an alternative without impacts, and cannot be considered the “environmentally superior” alternative, at least not without further analysis and comparison of impacts associated with that alternative.

↑
1 (cont.)
AL-1

Similarly, the other alleged non-armoring alternative (i.e., “Alternative B: Protect Critical Infrastructure with Increased Beach Nourishment” as also described in Section 6.3.2), while including removal of the temporary features described above, does not consider the use of dune vegetation to prevent erosion, or the creation of a dune system to increase the resilience of the shoreline to sea level rise. In addition, this alternative considers the emergency placement of sand bags or revetment in the event of substantial erosion, which the Commission would not support.

↑

It will be critical for the DEIR to provide an explanation of non-armoring alternatives, and these need to be explained and evaluated on a co-equal footing as other alternatives, even if the City does not ultimately find them feasible or preferred.² It is important that decision-makers have a full knowledge of the various potential alternatives and permutations, evaluated to similar levels of detail and against the same evaluation criteria, so that thoughtful decisions about them can be rendered, and the CEQA process is the place where that is intended to come together.

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2
AL-1

Conversely, it is also appropriate to evaluate armoring alternatives, including the proposed project, in the DEIR. Importantly, and as alluded to above, costs and benefits of these alternatives and others, including non-armoring alternatives, need to be evaluated at a similar level of detail to allow for direct comparisons to be made. This includes identifying the types of impacts that accrue from armoring in these coastal settings, including as it relates to loss of beach and beach recreational resources. We would be happy to work with you as you structure your alternatives analysis, including

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¹ And at the least the DEIR needs to be supplemented on this point with a true ‘no project’ alternative that explores what that project alternative would actually look like, including after all of the temporarily allowed armoring-related development were removed and the area restored to natural conditions.

² For example, in addition to the ‘no project’ alternative described, other non-armoring alternatives that should at a minimum be evaluated include dune creation, beach nourishment, relocation of threatened development, and combinations and permutations of all of these.

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

Page 3

providing you examples of, and assistance in, applying the Commission’s methodology as it relates to armoring.

↑ 2 (cont.)
AL-1

Mitigation for Impacts on Coastal Resources

Another piece of critical information that is currently lacking is a comprehensive assessment of the impacts the project has on coastal resources and an appropriate mitigation package that accounts for each of these impacts. While this is partially addressed in Chapter 4: “Environmental Setting, Impacts and Mitigation Measures,” several key impacts and mitigation for said impacts are missing, including impacts to public access and recreation during construction, impacts to lateral access during the operational life of the project, impacts to sand supply and beach dynamics, and impacts to biological resources, among others.

3
RE-1

Specific comments on some of these impacts are included below, but generally the City should re-evaluate the impacts involved in closing access to a heavily used parking lot and portion of the Ocean Beach for 4 years or more during the construction phase, and clearly outline how the City plans to mitigate for these impacts. In addition, the City should consider what impacts on recreation, lateral access, safe beach access, and coastal dynamics will occur in years when the buried sea wall is exposed, and propose mitigation for such impacts.

Dune System

One major concern of this DEIR is that the establishment of a dune system and dune habitat is not viewed as one of the project’s main priorities. Given the expectation set out in the Ocean Beach Master Plan, the potential visual and ecological benefits, and the potential for new dune habitat to provide mitigation for the construction and operational impacts of the project, we consider creating and sustaining a dune system (within design constraints) to be a key element of success for this project. The lack of prioritization of a dune system is particularly evident in the proposed nourishment scheme, which is based off of triggers to protect the hard infrastructure, as opposed to sustaining/protecting the dune system. In addition, there appears to be a lack of consideration for the type and quality of sand used for initial establishment, and the use of wind erosion techniques that might be incompatible with the success of dune vegetation. These concerns are addressed in more detail below.

4
PD-4

Other Questions/Comments

We also have a number of questions and comments on the information provided in the DIER thus far, some of which overlap with the alternatives and mitigation issues, and each of which is numbered for ease of reference.

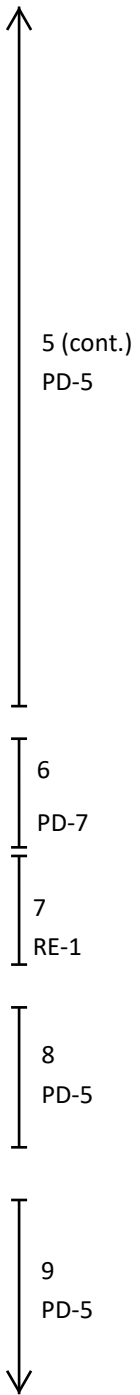
- 1. **Beach Access Points.** In Section 2.4.4 (“Public Access, Parking, and Restroom Improvements” on page 2-17), as well as in the Impact RE-1 analysis (“Operation Impacts” for “Beach Access and Recreation Resources” on page 4.5-15), the two access points to the sandy beach area are proposed as a staircase installed mid-

5
PD-5
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Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)
Page 4

way along the proposed multi-use throughway, and a sand ramp at the north end of the throughway near Sloat Boulevard, placed in a similar location to the existing sand ramp. We have several questions regarding these points of access:

- a. This section states that the expected average elevation difference between the staircase and the beach will be some 40 feet. Please explain whether the City anticipates the public to access the beach informally from any other points, for example through the proposed dune system extending through the project area. If so, please clarify if there will be delineated access paths established through the dunes to protect sensitive plant species or clear signage and fencing to restrict access onto these dunes.
 - b. Please elaborate on how the City plans to maintain the sand ramp to the beach should seasonal sand movement expose the sea wall and create unsafe access conditions. Given there is up to a year lag expected between sand placements (as outlined in Section 2.4.6 “Beach Nourishment” on page 2-19), and the importance of this sand ramp as an access point in this area, please clarify whether there is a plan in place to maintain the sand ramp when needed, such as via the use of stockpiled sand, including to allow for its uninterrupted use.
 - c. Please evaluate whether ADA access can be provided to and on the beach, such as a through a Mobi-mat system or equivalent.
- 2. Construction Access.** Please explain why it is necessary to completely close the entire 0.5-mile-long beach area for 4 years, and evaluate whether it is possible to phase construction so as to maintain some access to this stretch of beach throughout the construction period. We would also suggest that the complete loss of such access in this area for 4 years is not a “less than significant” impact, as is noted in the DEIR. In addition, this requires its own mitigation component, which the DEIR should identify in order to commensurately mitigate for this impact.
- 3. Bicycle Access.** Section 2.4.1.2 (“Service Road” on page 2-12) mentions that in addition to usage by service and emergency vehicles, the service road may also be used as a bikeway once the project is completed. Please provide details on the City’s vision for this, including identifying bicycle access points and use parameters (e.g., protected bike lanes, etc.).
- 4. Restrooms.** While the proposed project includes a new restroom facility to replace the existing restroom facility at Sloat Boulevard, there are not any restroom or shower facilities planned for the new 60-space parking lot at the intersection of the Great Highway and Skyline Boulevard (referred to in the DEIR as the “Skyline Coastal Parking” lot). Due to the users being redirected to this location by the project for recreational use of the beach and multi-use pathway, please evaluate the



Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

Page 5

potential for an additional bathroom facility at the proposed Skyline Coastal Parking Lot.³

9 (cont.)
PD-5

5. Paid Parking. In Section 2.4.4.3 (“Parking Improvements” on page 2-19) the DEIR indicates that the parking at the proposed Skyline Coastal Parking Lot may be paid parking. Two things are noted here. First it will be important for the City to first identify public parking that will be lost due to the project, including temporary losses during construction, and then at a minimum ensure that such parking be replaced. Second, we recommend that parking facilities be provided free of charge to the public, including accommodating electric vehicle charging and ADA needs. These types of facilities are the type that can serve as replacement parking and, once that need is satisfied, as additional mitigation for other project impacts. However, if any of the parking is going to be paid parking, then that parking cannot be considered mitigation, and it will need to be evaluated differently, including ways in which free or low-cost parking options can be provided for those unable or unwilling to pay such parking fees, how impacts for the loss of free access will be mitigated, and where revenues will be directed. The Commission has some experience in evaluating these types of programs and can provide relevant examples that could prove useful as the DEIR is further developed on this point.

10
TR-4

6. Construction. The Sloat Boulevard parking lot and restroom facilities are currently used by surfers, recreational fishers, and other beachgoers, but will be closed for an estimated 4 years, once construction begins. The DEIR states in the “Construction Impacts” analysis (in Section 4.5.4.2 “Impact Evaluation” on page 4.5-13) that there are sufficient facilities and access points along the Great Highway to manage the overflow of the public to open beach access points when these facilities are closed. However, this parking area will most likely still be used by the public despite the closure, given the proximity of this parking area to the beach, which is obviously preferred by such user groups. In addition, aside from these restrooms, the nearest restroom facility from this parking lot is about a half-mile away and would most certainly experience increased usage over the 4-year construction timeline before any new facilities are available at the new proposed location. As such, please evaluate possibility of installing temporary restroom and trash facilities, as well as safe, clearly indicated access points adjacent to the construction, to offset these expected public access impacts. In addition, strong ocean currents often carry surfers south in the project area, and this may lead to inadvertent interactions between beach users and construction areas. Please evaluate the addition of a safe corridor for surfers to walk north out of the construction zone.

11
RE-1

7. Access Infrastructure. While there is some discussion of LCP provisions related to recreational access development (in Section 4.5.3.3 “Local”), there should be further review and discussion on how the proposed public recreational access facilities align

12
PP-1

³ And note that public amenities such as this can be used to offset certain project impacts as part of an overall mitigation package for the project.

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

Page 6

with the policies outlined in the LCP, and especially Sections 1 and 2 of Policy 12.4, which states (in part):

Public recreational access facilities (e.g., public parks, restroom facilities, parking, bicycle facilities, trails, and paths), public infrastructure (e.g., public roads, sidewalks, and public utilities), and coastal-dependent development shall be sited and designed in such a way as to limit potential impacts to coastal resources over the structure's lifetime. As appropriate, such development may be allowed within the immediate shoreline area only if it meets all of the following criteria:

1. The development is required to serve public recreational access and/or public trust needs and cannot be feasibly sited in an alternative area that avoids current and future hazards.

2. The development will not require a new or expanded shoreline protective device and the development shall be sited and designed to be easy to relocated and/or removed, without significant damage to shoreline and/or bluff areas, when it can no longer serve its intended purpose due to coastal hazards.

3. The development shall only be allowed when it will not cause, expand, or accelerate instability of a bluff.

Specifically, these LCP tests will need to be met by any such proposed development, and the DEIR should explore the ways in which that is the case. Of particular import is the concept of avoiding armoring and allowing for easy relocation in the face of potential hazards, and the DEIR needs to explain how that is accomplished by project siting and design.

8. Visual Impacts. Impact AE-4 states: “Project operation would not substantially adversely affect a scenic vista, degrade the existing visual character or quality of public views of the site or its surroundings, or damage scenic resources. (Less than Significant)” (page 4.2-21). This analysis discusses the potential visual impacts of the exposure of the seawall. However, there does not seem to be a discussion of the visual impacts of potential dune degradation, exposure of the slope stabilization layer (SSL), or any suggested mitigation of these impacts, such as plans to increase the speed at which the City can place sand in response to exposure events or perform proactive nourishment. A scenario where the seawall or SSL is exposed yearly and remains exposed for a large portion of the year would constitute a significant visual impact and should be evaluated, and mitigation for such impacts should be proposed.

9. Coarse Sand Impacts. Section 2.4.3 (“Debris and Revetment Removal, and Sand Placement and Revegetation” on page 2-16), as well as Impact BI-10 (page 4.6-67), mention the use of coarse sand as a form of erosion control. Please clarify if the City



12 (cont.)
PP-1

13
AE-1

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PD-4

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

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plans to use this erosion control technique in the proposed dune system. If so, please evaluate the effects the coarse sand may have on the ability for the dune system to become established, or on the survival of dune vegetation. If the placement of coarse sand is found to be incompatible or has a negative effect on the proposed dune plants, alternatives should be identified.

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14 (cont.)
PD-4

10. Beach Nourishment – Triggers, Goals, and Outcomes. In Section 2.4.5 (“Beach Nourishment” on page 2-19) the process and triggers for beach nourishment are described as: “The first trigger would be reached if the beach width were observed to be less than 50 feet over 500 or more total linear feet of beach. The second trigger would be reached if 500 feet or more total length of the buried wall were observed to be exposed. Sand placements would occur as soon as possible after the trigger is reached, generally within one year.” We have several questions regarding this process:

- a. Please clarify what exactly each trigger will activate in terms of the amount of sand placed, and whether the second trigger speeds up the process, or results in a larger amount of sand placed.
- b. Please explain how often the City expects these triggers to be reached. On, Table 2-1 (page 2-26) the City outlines the frequency and duration of sand placements. Please clarify if this table is based on the expected triggers.
- c. Waiting for up to one year for sand to be placed represents a very long period of time for the buried wall to be exposed and for lateral access to the beach to be limited would undoubtedly lead to adverse impacts to public access that are not allowable under the Coastal Act or the City’s certified LCP. Further, this sort of impact would require its own mitigation under this DEIR. Please indicate if the City has considered a mechanism to reduce the wait time for sand placement to significantly less than one year, such as creating a stockpile of sand near the project site. To ensure lateral access to the beach and adequate protection of the exposed seawall, the City should consider contingency mitigation/adaptation plans for the times when they are unable to address the triggering event within a reasonable timeframe (e.g., a month or less).
- d. Please indicate if there will be funding sources secured for the sand placement when it is needed or whether such funding would be secured in advance.
- e. Please explain if the City anticipates the beach nourishment activities such as truck movement negatively impacting the slope stabilization layer.
- f. The goals and expected outcomes of the nourishment should be better defined. Ideal goals and outcomes could include but are not limited to: maintain safe public access to the beach and ideal beach width; maintain full coverage of the sea wall and SSL; establish and maintain dune integrity; maintain a certain slope

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PD-6
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Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

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between the multi-use path and beach; and maintain the sand ramp as an access point.

↑ 15 (cont.)
PD-6

11. Beach Nourishment - Mean High Water Level vs. Dynamic Total Water Level.

Section 2.4.5 “Beach Nourishment” describes using the mean high water level (MHWL) as the measurement for nourishment triggers. The MHWL is not an ideal measure for triggering nourishing events as it is not conservative when considering impacts as it does not account for wave runup. Using a trigger based on the MHWL elevation that does not include wave runup is not inclusive or precautionary when considering potential coastal resource impacts, including maintaining ideal dry beach width in order to promote recreation and public access opportunities. Instead, there should be an analysis based on dynamic total water level (TWL), to measure the seaward limit of the 50-foot-wide recreational beach.

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PD-6

12. Beach Nourishment - Public Access and Recreation. Beach nourishment should be sufficient to provide safe lateral access seaward of the seawall. Please provide evidence that a trigger of 50 feet between the MHWL (or preferably TWL, both of which should be analyzed) and the seawall would provide dry sand for pass and repass. The concern here is to provide enough sandy beach area for public access and recreation, whereas the triggers as described seem to be focused primarily on providing protection to the seawall.

17
PD-6

13. Beach Nourishment - Dune System. Previous projects along the California coast that involve both beach nourishment and the establishment of a dune system have recognized the need to balance maintenance of beach width with the protection of the dune system.⁴ As such, we have several questions regarding the nourishment plans and the long-term establishment and success of the planned dune system:

- a. The triggers for sand placement mention “...beach widths were observed to be less than 50 feet over 500 or more total linear feet of the beach.” Please indicate if this beach width includes the dune system.
- b. Please elaborate on how the City anticipates the nourishment (large or small scale) interacting with the dune system.
- c. Please analyze whether there is sufficient space for the large-scale nourishment to be placed while ensuring the dune vegetation is not buried, given the placement of the seawall and SSL. An image of where sand is expected to be placed in relation to the dunes, the sea wall, and the beach is necessary to be illustrative of this condition.

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PD-6

⁴ See, for example, the Cardiff Beach Living Shoreline project and the Pillar Point Harbor West Trail Living Shoreline project.

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- d. Please calibrate the nourishment trigger to better facilitate dune persistence to improve the dune’s likelihood to provide some level of habitat value, in addition to protecting the sea wall infrastructure.

↑ 18 (cont.)
PD-6

- 14. Beach Nourishment - North Ocean Beach.** Please explain how the proposed use of North Ocean Beach material will affect the sand budget in this area over both the short- and long-term and whether potential changes in North Ocean Beach volume or width have been evaluated. Section 2.4.5.4 of the DEIR indicates that semiannual monitoring at North Ocean Beach will be performed to ascertain whether there is “adequate sand” for redistribution to South Ocean Beach. Please clarify how the adequacy of the North Ocean Beach sand supply will be defined and determined and elaborate on what safeguards will be in place to prevent significant impacts to public access and recreational uses at North Ocean Beach. In addition, please add beach volleyball and ultimate frisbee to the list of recreational uses in Table 4.5-1. These recreational uses will need to be considered in the analysis for impacts to North Ocean Beach if sand will be excavated from that location.

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PD-6

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RE-1

- 15. Beach Nourishment - Shoreline Monitoring.** If monitoring is proposed at North Ocean Beach to determine the adequacy of sediment supply, an adequate baseline for comparison needs to be established either through prior measurements or surveys that begin before sediment from this area is needed. The baseline and subsequent surveys should consider beach width, elevation, and potential impacts to recreational uses that result from changes to the general dry shore topography and areal extent.

21
PD-6

- 16. Beach Nourishment - Large Sand Placements.** Regarding Section 2.4.5.3 (“Large Sand Placements” on page 2-22), during the previous large sand placement by the U.S. Army Corps of Engineers, large amounts of sediment were lost offshore and offshore waters were quite turbid. Some loss of sediment is anticipated as the deposited sediment adjusts to the ocean, including tides and waves; however, large losses of sediment can lead to both coastal resource impacts (e.g., high turbidity, marine resources, recreational access, etc.) as well as inefficient nourishment efforts. Please elaborate on the following: the BMPs associated with large sand placements; the anticipated losses of sediment associated with large nourishment events; incorporation of adaptation measures to keep more sediment on the beach before, during, or after placement efforts; and what efforts can be taken to reduce or slow the sediment losses and increased turbidity.

22
PD-6

- 17. Sandbag Use.** The phase of the project outlined in Section 2.5.1.3 (Phase 3) the DEIR provides this measure: “Remove revetments and rubble, place sand on beach” (page 2-30). Please note that the City is already required to place the sand from the existing sandbags onto the beach (per CDP 2-15-1357), and this needs to be made clear. It should also be made clear that such sand is already mitigation for past activities and cannot be assessed as added mitigation value here. In addition, the City is also required to remove degraded sandbags and pieces of sandbags as part of such sand freeing activities.

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PD-9

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

18. Slope Stabilization Layer (SSL) The addition of the slope stabilization layer to the seawall, which the City purports will protect against scour behind the wall during high surf conditions, adds additional height and width to the proposed seawall, with the top of the wall ranging from +16 to +21 feet NAVD, and the top of the SSL ranging from +30 to +50 feet NAVD. This addition of greater seawall height and width will result in additional impacts to coastal resources such as occupied beach footprint, impacts to sand supply available to the beach, and recreational impacts. The City needs to provide a thorough analysis of why the added SSL component is the least environmentally damaging alternative for protection of the threatened structures and how these additional impacts will be mitigated for, should the SSL component be installed. In addition, each of the following require additional evaluation:

- a. In Section 2.5.1.2 (“Phase 2-Construct Buried Wall” on page 2-28), the SSL is described as being “...constructed using either a soil-cement mix, by mixing the existing soils with a cementitious grout in place; or a controlled low strength material, using a mixture of cement, aggregate, and water placed in sections with terraced wooden forms.” Please explain if there is a difference between the various SSL options in terms of strength, erodibility, and appearance; and if the SSL will match the appearance and character of the surrounding bluffs when exposed, given either of these SSL options.
- b. Please explain the anticipated maintenance needs for the cemented slope stabilization material above the buried wall if/when it becomes exposed. Please clarify whether the entire slope needs to be cemented, or if it would be sufficient protection to only cement/stabilize the lower portion of the slope. If wave runup is the primary erosion concern, the City should provide wave runup analyses that demonstrate the need to stabilize the entire slope over the tunnel.
- c. Please provide an explanation as to why the final grade depicted in Figure S-3 (on page S-8) is substantially lower than the original grade and whether the intent of this is to maintain a slope suitable for replanting and/or recreation. If the SSL is meant to be accessible to the public when the sand topping erodes it away, please evaluate an option of making the steps wider and easier to sit/recreate upon.

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PD-3

19. Buried Wall. Regarding Section 2.4.2 (“Buried Wall” on page 2-13), please provide justification for the size and location of the tiebacks. To reduce the amount of beach encroachment, please analyze whether it is possible that the tiebacks could be shorter, angled differently, or driven in at a lower elevation, or if the wall could be reinforced in another manner so that the minimum distance of 27-feet between the wall and tunnel might be reduced and the wall could be located further landward. Please explain whether drainage for the buried wall has been considered and incorporated into the design and conduct such an analysis if it has not already been done.

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PD-2

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

Page 11

In addition, please provide justification for the extent (60-100-feet below grade) of the buried wall secant piles and specifically address whether the proposed depth is intended for lateral support of the upper landward materials. We remain concerned about unnecessary disturbances to the substrate and the ease of potential future removal should the City decide to reconsider managed retreat at a later date. Please clarify if there is a means to stabilize the wall to account for lateral pressure that would allow for a reduction in the pile depth. In addition, please provide a copy of the full geotechnical report once available and indicate the referenced grade and bottom pile depth elevations on the site plans.

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25 (cont.)
PD-2

20. Seawall Exposure. In the discussion of Impact RE-1, the potential operational impacts on recreation during exposure of the proposed seawall analyzed are as follows: “While the wall would be buried initially, over time as beach recession continues with shore erosion the wall would become exposed, similar to conditions that periodically occur along the Taraval seawall” (page 4.5-17). It is our understanding that the Taraval seawall is at a lower profile than the proposed seawall, and does not include the additional footprint of the proposed SSL. For the seawall proposed as part of this project, please indicate an estimated average height of the wall that will be exposed, what percentage of the wall would be exposed, and how often (how much of the year) the exposures would occur.

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PD-2

21. Beach and Landscape Maintenance. Section 2.6.2 (“Beach and Landscape Maintenance” on page 2-37) provides an estimate of plant and dune maintenance that will be required after sand placement or erosion events. The City should evaluate the need for more plant and dune maintenance than is anticipated here. The 3:1 slope, combined with environmental and physical pressures, may require several rounds of replanting as well as the installation of sand fencing or other adaptive measures. The City needs to ensure that resources exist to both monitor and enact adaptive management strategies when needed to maintain viable dune habitat.

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PD-4

22. Impact BI-10. The DEIR asserts that construction and operation of the project would not conflict with any local policies or ordinances protecting biological resources. And in the discussion of Impact BI-10 (page 4.6-67), LCP Policy 6.2 of the Western Shoreline Plan is cited as the only policy that relates to biological resources in Ocean Beach. This is inaccurate. In fact, LCP Policies 12.2(e), 12.2(f), and 12.6 of the Western Shoreline Plan also include sections on biological resources at Ocean Beach. These policies, and a discussion of how the project will be consistent with their requirements, should be included in this discussion. In addition, since these policies include measures on preserving, enhancing, and restoring dunes and natural resources, this section should clarify that measures should be focused on maintaining the planned dune system, not solely on preventing sand displacement.

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BI-7

23. Tribal Cultural Resources. According to Impact TC-1 outlined in Appendix B, “The project would not result in a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code section 21074. (Less than

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TC-1

Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

Significant)” As outlined in Appendix B, “Initial Study”, the last time the City reached out to tribal authorities was in 2019. Please indicate if there has been any additional contact since then, or if there is any plan for follow-up communication now that the project is in its final stages of environmental review. The State Native American Heritage Commission needs to be contacted, and full Tribal Consultation with affected Tribes must occur, and be documented. Where modifications sought by Tribes are not implemented, justification and analysis needs to also be provided.

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29 (cont.)
TC-1

24. Bank Swallow Impacts. Impact BI-2 states: “Construction of the project would, but the operation of the project would not, have a substantial adverse effect on bank swallows. (Significant and Unavoidable with Mitigation)” (page 4.6-41). Bank swallows are a state special-status protected species, and their habitat generally constitutes environmentally sensitive habitat area (ESHA). Please note that CEQA and the Coastal Act/LCP work differently as it relates to such habitat. CEQA can allow for any number of uses in such habitats and can seek to mitigate for impacts as a means of finding consistency. The Coastal Act/LCP, however, operate much differently. Namely, under the Coastal Act/LCP the only use and development allowed in ESHA is resource-dependent uses, and only provided that such uses do not significantly disrupt the resource. It is not clear to us that the impacts identified can be found consistent with these Coastal Act/LCP requirements. Please evaluate means to avoid impacts to such habitat, and, if unavoidable as suggested in the DEIR, please identify potential compensatory mitigation with this Coastal Act/LCP framework in mind.

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BI-1

25. Marine Resource Impacts. Impact BI-5 states: “The construction and operation of the project would not have a substantial adverse effect on special-status marine species. (Less than Significant)” (page 4.6-41). As with the bank swallow discussion above, the DEIR needs to first establish whether such species and their habitats constitute ESHA, to which the same framework would apply. Past that, it is not clear to us from the information provided thus far that project impacts on these species would be either unsubstantial or less than significant, as stated in the DEIR. Please provide further information on these points, including characterizing the impacts of sand placements on special-status marine species and habitat, especially regarding the impacts of introducing differing grain sizes on benthic habitat.

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BI-4

26. Impacts on Benthic Community. Impact BI-5 States “The construction and operation of the project would not have a substantial adverse effect on special-status marine species.” In the operation impacts on page 4.6-52, many of the papers cited to support the argument that beach nourishment has a less than significant impact on benthic invertebrates and sandy beach invertebrate communities are from the Netherlands and other geographies with little studies based in California. The selective use of studies effectively minimizes the concern of sand placement on these communities and misrepresents the state of knowledge in California. Please provide further analysis on this topic that includes a review of studies performed in

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BI-5
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Ocean Beach Adaptation Project DEIR Comments (January 24, 2022)

Page 13

California, of which there are several.⁵ This analysis should also include the impacts of grain size on these communities.

↑ 32 (cont.)
BI-5

27. Dune Impacts. Impact BI-6 states: “Construction and operation of the project would not have a substantial adverse effect on the California Department of Fish and Wildlife-designated sensitive natural communities or jurisdictional wetlands or waters. (Less than Significant)” (page 4.6-55). This section appears to only contain a qualitative analysis of potentially sensitive plant habitats, including “locally significant plants.” Please include more details of what locally significant plants are present. In addition Section 4.6.2.2 Project Setting (Pg. 4.6-3) states: “ ...while these fragmented areas contain sandy soils with disturbed dune mat vegetation, they are not part of an evolved, complex and dynamic dune system that meets the criteria of an ESHA.” Please note that as a general rule, dune habitat, regardless of condition, is considered ESHA under the Coastal Act/LCP. Please completely update the dune habitat analysis, accordingly, including in terms of avoidance alternatives and mitigations.

33
BI-2

In addition, Section 2.5.1.3 Phase 3 (“Remove revetments and rubble, place sand on beach” (page 2-30)), states: “The reshaped bluff would include a minimum of 4 feet of graded sand over the slope stabilization.” As we understand it, this sand will come from the excavation conducted to build the seawall. Please clarify if this type of sand and bluff material is appropriate for successfully establishing dune vegetation, and if all the excavated material will be reused as a fill over the SSL, or if some will be exported offsite. Further, the City should confirm that sand placement will avoid the newly created dune habitat, and only be placed in a “sacrificial zone” between the beach and the dune habitat. There is a concern here that one version of this project will only use coarse sand and not native plantings as an erosion control technique (given the success of coarse sand placement during previous Ocean Beach sand placements).

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PD-4

And finally, Section 2.5.1.4 Phase 4 (“Install multi-use trail, service road, and public parking lot, construct beach access stairway and restroom, restripe Great Highway/Skyline Boulevard intersection” (page 2-30)) describes the establishment of dunes, but lacks follow-up details on how this will be done successfully. In order to assure successful establishment of dunes here, the DEIR should provide further information for how the dunes will be established including: what will be used as a reference; what sand will be used; and how the dune forms will be initially formed. In addition, performance of the system needs be assessed, including through the definition of goals, objectives, indicators and sampling methods, statistical tests, and adaptive management actions that may be employed should the dunes fail to perform as intended. This should speak to not only the establishment and

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PD-4
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⁵ This includes: “Wooldridge, T., H.J. Henter, and J.R. Kohn, 2016. Effects of beach replenishment on intertidal invertebrates: A 15-month, eight beach study. Estuarine Coastal, and Shelf Science. 175: 24-33.”, as well as Jenifer Dugan’s work on California beach ecology.

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persistence of dune forms themselves but also ecological goals including the establishment of native dune vegetation.

↑ 35 (cont.)
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Thank you again for the opportunity to comment on the DEIR for this project, and for continuing to coordinate closely on it with Commission staff. Please note that these are our preliminary comments at this time, and we may have additional comments and information requests as we learn more about the proposed project and potential alternatives and permutations, including depending on the nature of the DEIR changes made in response to this letter. In addition, we intend to continue to work with the City on these types of issues/questions through the required CDP process for the required subsequent long-term project at this location. While there is obvious overlap, it is likely that we will also have additional feedback on the project in the context of that CDP application, which is currently pending with the Commission. Please do not hesitate to contact me if you have any questions.

Sincerely,

Peter Benham

Peter Benham
Coastal Planner
North Central Coast District
California Coastal Commission

cc: Anna Roche, San Francisco Public Utilities Commission (CDP Applicant)
Myrna Melger, San Francisco District 7 Supervisor
State CEQA Clearinghouse (SCH # 2020090171)



State of California – The Natural Resources Agency
 DEPARTMENT OF FISH AND WILDLIFE
 Bay Delta Region
 2825 Cordelia Road, Suite 100
 Fairfield, CA 94534
 (707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



January 21, 2022

Julie Moore
 City and County of San Francisco, Environmental Planner
 49 South Van Ness Avenue #1400
 San Francisco, California 94103

Subject: Ocean Beach Climate Change Adaption Project, Draft Environmental Impact Report, SCH #2020090171, City and County of San Francisco

Dear Ms. Moore:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Environmental Impact Report (DEIR) with attached appendices prepared by the City and County of San Francisco for the Ocean Beach Climate Change Adaption Project (Project) located in the County of San Francisco. CDFW is submitting comments on the DEIR regarding significant impacts to fish and wildlife resources associated with the Project, with an emphasis on Project impacts to Bank swallows (*Riparia riparia*).

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, section 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code (FGC) that afford protection to the state's fish and wildlife trust resources. CDFW is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA permit must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the project. Take, as defined by Fish and Game Code section 86 is to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Issuance of a CESA permit is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early

Conserving California's Wildlife Since 1870

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City and County of San Francisco
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consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA permit.

Lake and Streambed Alteration Program

Notification is required, pursuant to CDFW's LSA Program (FGC section 1600 et. seq.) for any Project-related activities that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are generally subject to notification requirements. CDFW, as a Responsible Agency under CEQA, will consider the CEQA document for the Project. CDFW may not execute a final LSA Agreement until it has complied with CEQA (Pub. Resources Code section 21000 et seq.) as the responsible agency.

PROJECT LOCATION

The Project is located in the City and County of San Francisco at Ocean Beach, extending west of the Oceanside Water Pollution Control Plant, north to the northern edge of the Fort Funston bluffs, and a portion of Ocean Beach north of Lincoln Way.

PROJECT DESCRIPTION

The Project involves coastal adaption and sea level rise resiliency and is needed to address shoreline erosion, severe coastal storm and wave hazards, and sea level rise. Major Project components include: (1) permanently closing the Great Highway between Sloat and Skyline boulevards to public vehicular traffic, reconfiguring affected intersections and San Francisco Zoo parking access, and maintaining a service road to the San Francisco Public Utilities Commission (SFPUC) facilities; (2) construct a buried, 3-foot-thick concrete wall from Sloat Boulevard, 3,200 feet to the south. The wall will be buried under sand and set back as far from the shoreline as feasible. The wall must be a minimum of 27 feet away from the Lake Merced Tunnel to allow for tieback anchors. The Project will reshape the bluff face with a separate 4-foot thick, gently sloping (3:1 horizontal to vertical slope) layer of cementitious material, composed of a soil-cement mix or controlled low strength material. The 3,200-foot-long wall is meant to protect existing wastewater infrastructure from shoreline erosion; (3) removing pavement, rock and sandbag revetments, rubble, and debris from the beach, reshaping the bluff, and planting native vegetation; (4) constructing a multi-use trail, beach access stairway, coastal access parking, and restrooms; and (5) providing long-term beach nourishment (sand replenishment).

MARINE BIOLOGICAL SIGNIFICANCE

San Francisco County is bordered by two distinct marine regions: the San Francisco Bay and the outer Pacific coast. The San Francisco Bay-Delta is the second largest estuary in the United States and supports numerous aquatic habitats and biological communities. It encompasses 479 square miles, including shallow mudflats. The outer coast of Northern California hosts diverse habitats, including sandy beaches, kelp forests, and rocky reefs, and is considered one of the most biologically productive marine systems in the world. Together, these ecologically significant ecosystems support thousands of species, including a few state and federally

Julie Moore
 City and County of San Francisco
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threatened and endangered species, and sustain important commercial and recreational fisheries.

ENVIRONMENTAL SETTING

The special-status species that have the potential to occur in or near the Project site, include, but are not limited to:

Common Name	Scientific Name	Status
Bank swallow	<i>Riparia riparia</i>	ST
California black rail	<i>Laterallus jamaicensis contumiculus</i>	SP, ST
Western snowy plover	<i>Charadrius nivosus nivosus</i>	FT, SSC
Western burrowing owl	<i>Athene cinicularia</i>	SSC
Western red bat	<i>Lasiurus blossevillii</i>	SSC
San Francisco common yellowthroat	<i>Geothlypic trichas</i>	SSC
Brown pelican	<i>Pelecanus occidentalis californicus</i>	SP
American peregrine falcon	<i>Falco peregrines anatum</i>	SP
Western bumble bee	<i>Bombus occidentalis</i>	SC
San Francisco lessingia	<i>Lessingia germanorum</i>	FE,SE
Beach layia	<i>Layia carnosa</i>	FE,SE
Chinook salmon (Spring-run)	<i>Oncorhynchus tshawytscha</i>	FT,ST
Chinook salmon (Winter-run)	<i>Oncorhynchus tshawytscha</i>	FE,SE
Steelhead (Central CA Coast & Central Valley ESUs)	<i>Oncorhynchus mykiss</i>	FT
Green sturgeon (Southern District Populations [DPS])	<i>Acipenser medirostris</i>	FT,SSC
Longfin smelt	<i>Spirinchus thaleichtys</i>	FC,ST
California sea lion	<i>Zalophus californianus</i>	MMPA
Harbor seal	<i>Phoca vitulina richardii</i>	MMPA
Harbord porpoise	<i>Phocoena phocoena</i>	MMPA
Killer whale (Southern Resident DPS)	<i>Orcinus orca</i>	FE, MMPA
Humpback whale (Mexico DPS)	<i>Megaptera novaengliae</i>	

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Gray whale (Eastern North Pacific DPS)

Eschrichtius robustus

FT,
 MMPA
 MMPA

Notes:

FT= federally threatened under ESA; FE = federally endangered under ESA; FC = federal candidate for federal listing under ESA; SE = state endangered under CESA; ST = state threatened under CESA; SC = state candidate for state listing under CESA; SSC = state species of special concern; SP = state listed as fully protected; SR = state rare under the Native Plant Protection Act; MMPA = Marine Mammal Protect Act

Several species with important commercial and recreational fisheries value that could potentially be impacted by Project activities include:

- Dungeness crab (*Cancer magister*),
- Pacific herring (*Clupea pallasii*),
- Rockfish (*Sebastes* spp.),
- California halibut (*Paralichthys californicus*)
- Surfperches (*Embiotocidae*)

COMMENTS AND RECOMMENDATIONS

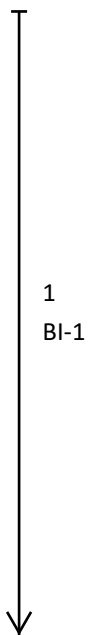
CDFW offers the following comments and recommendations to assist the City and County of San Francisco in adequately identifying and/or mitigating the Project’s significant, or potentially significant, direct, and indirect impacts on biological resources.

COMMENT 1: Bank Swallows

Issue 1: The DEIR does not adequately identify suitable Bank swallow nesting habitat within the Project area, does not adequately evaluate impacts from the Project to Bank swallows, and fails to consider cumulative impacts from recent past impacts.

Evidence: The DEIR provides an over simplified evaluation of impacts to suitable Bank swallow habitat based on a linear footage assessment. The evaluation does not sufficiently account for non-uniform site use or define assumptions or parameters used to quantify the amount of suitable nesting area within the cliffs vertically (spatially) throughout the Project area.

The Bank swallow is listed as a Threatened species under CESA. According to California Partners in Flight Riparian Bird Conservation Plan, Bank swallows are typically located in tall, vertical banks in friable soils along rivers, lakes, and ocean coasts. In California, (64%) of Bank swallow colonies were located within sandy loam soils (Garrison unpublished data). Burrow density decreases from top to bottom (Sieber 1980). Burrows placed in the upper third of the bank are less susceptible to many ground predators (Sieber 1980). Burrows in loose sand were deeper than those in compact sand, and deeper burrows had greater breeding success than shallow burrows (Sieber 1980, Garrison 1998). Heights of the vertical banks and cliffs at nesting Bank swallow colonies averages 3.3 meters high in California (Humphrey and Garrison 1987). On average, new Bank swallow burrows are dug each year, especially if the bank or cliff face used the previous year collapsed from erosions or human disturbance and no old burrows remain (Hickman 1979, Cramp 1988). Some Bank swallow burrows are reused, and burrows



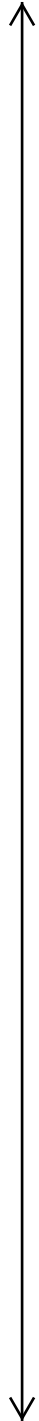
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are enlarged and depended on excavation activities that are part of pair bond (Petersen 1955, Garrison 1998). Old nests are removed from reused burrows and new nests are constructed (Petersen 1955, Garrison 1998). Bank Swallow nests are generally lacking vegetation along the bluff or cliff face where the Bank swallow nests are located. This is usually because of the reoccurring and needed erosion and steepness of the cliff or bank (Garrison 1998). Vegetation on the top of the bank or cliff, however, is extremely variable depending on the colonies location. This variation occurs in nearly all measures including vegetative cover, height, and species composition. The primary factors for selected Bank swallow nesting locations depend on soil type, height, and slope (Garrison 1998). Colonies at coastal locations are generally located under coastal grassland and coastal scrub communities (Garrison 1998). Bank Swallows need a slope of 70 degrees or more for suitable nesting habitat according to the Environment and Climate change Canada. Lack or erosion results in banks and bluffs becoming more gently sloped and unsuitable for nesting. Bank swallows prefer banks or cliffs that are vertical (90 degrees) or slightly inclined (75 degrees) (Hejertaas 1984).

On November 16, 2021, CDFW, along with the National Park Service (NPS) observed and examined the Bank swallow nesting area from Sloat Boulevard to Phillip Burton Memorial Beach. On this date, CDFW and the NPS observed numerous Bank swallow nests along the southern end of the Project. From the southern end of the Project, south towards Phillip Burton Memorial Beach, CDFW and the NPS did not observe nearly as many Bank swallow nests as observed in the southern end of the Project. Areas observed in 2021 are consistent with scientific documentation of Bank swallow habitat usage described above. Bank swallows within the Project area appear to nest under a hardpan soil layer, typically under an overhang or where the bank or cliff has a subtle c-like curve, appropriate slopes, sandy soils, and a few meters distance from the ground.

The southern section of the Project overlaps with the northern extent of cliffs used by the Bank swallow colony. This area of cliff has been impacted without benefit of previous environmental analysis from recent past events. In 2013, San Francisco Public Works proceeded without CESA authorization and dumped sand over the edge of Highway 1 to address erosion and buried nesting Bank swallows in the same section of cliff. Resulting documentation showed a total of 43 Bank swallow deaths. In 2021, a large sand nourishment project took place which resulted in sand being pushed up against the top of the rock revetment, further altering the conditions of the cliffs within historic Bank swallow nesting habitat.

Bank swallow nesting habitat is ephemeral due to the interaction between the friable soils need for nest burrow excavation and the cliff or bluff that is suitable (Garrison 1998). Burrows are not found to occupy all suitable locations within an individual colony site (Garrison 1998). Furthermore, there is considerable turnover in colony sites year to year. Along the Sacramento River, Bank swallows generally nest in 40-60% of the total number of banks that are suitable for nesting in a given year (Garrison 1998). Bank swallow populations require habitat surplus in order to remain viable over the long-term. In other words, Bank swallows will not nest within a portion of their suitable habitat for a certain amount of time in order for that area to erode and become more viable. The recent absence of nesting along the southern end of the Project is common and expected, and as long as this area is kept suitable for Bank swallows to nest, CDFW believes the Bank swallows will return to the southern end of the Project consistent with their life history.



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As stated in the 1987 statewide survey, human harassment is one of the leading causes for the decline in Bank swallows. Continued human activity, as well as other human related harassment such as off-leash dogs, and people digging, sliding, and camping along the Bank swallow nesting area has undoubtedly contributed to decreased populations at this location.

Recommendation: CDFW recommends the EIR provide additional spatial analysis to accurately quantify the amount of suitable nesting habitat within the Project area. As part of the analysis, recent past impacts to Bank swallows should be disclosed and evaluated in the EIR. Additional analysis should also include areas south of the Project site that may inform additional mitigation opportunities. A complete impact analysis should not only include the amount of suitable nesting habitat that currently exists but also the cumulative amount lost within the Project area due to recent past events. A similar analysis should be developed for determining the potential quantity of habitat that may be “enhanced,” in nearby cliffs to provide mitigation for lost nesting habitat. For example, removing invasive plants such as ice-plant, where suitable nesting conditions occur may be a feasible action that can provide increased Bank swallow nesting opportunities immediately south of the Project location.

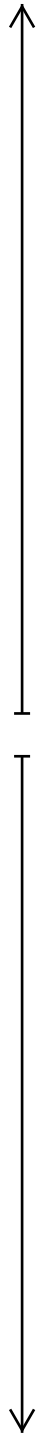
Lastly, the additional analysis should account for non-uniform Bank swallow nesting distribution and define assumptions and parameters used when quantifying Bank swallow nesting habitat that includes slope, soil density, thickness and length of the overhang, and height from ground level. Any field surveys should be conducted in close coordination with qualified biologists. The lead agency should consult with CDFW on a revised analysis methodology for review and acceptance prior to conducting additional analysis. A final analysis methodology should be included as part of the EIR to allow public review and commenting.

Issue 2: CDFW concurs with the DEIR that the Project will result in significant impacts to Bank swallow breeding habitat. CDFW does not agree that the proposed mitigation to add signage will be sufficient to reduce Project impacts to less than significant.

Evidence: Bank swallow habitat along the California coastline is extremely limited. In Southern California, Bank swallows are now extirpated and no longer breed in the region (CDFW 1992). Their entire California range is estimated to have been reduced by as much as 50% (Zeiner et al. 1988). CDFW concluded in the 1987 statewide survey that, “Bank swallow nesting habitats in all regions are threatened by riprapping, various water development projects, and human harassment” (CDFG 1992). The activities proposed by the Project are similar to activities in Southern California that have extirpated Bank swallow populations there.

Since 1905, Bank swallows have been known to nest along the cliffs of Ocean Beach (Laymon et al. 1987) located in the southern of the Project. The colony is known to move around from Ocean Beach to Fort Funston. Fort Funston is located roughly one (1) mile south of Ocean Beach. In between Ocean Beach and Fort Funston is an area of steep vertical cliff bluffs that have not shown high numbers of nesting Bank swallows. Hard soils, low erosion rates, or the slope of the cliff bluff may be limiting factors for nest building.

Bank swallows at the Project site are known to nest along the ocean cliff bluffs and forage at Lake Merced, less than a mile to the east of the Project. Lake Merced does not have suitable nesting habitat for Bank swallows. Bank swallows return to the Project location each year around March to April and immediately begin building their nests. Bank swallows will typically



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fledge in July and between August and September Bank swallows begin making their 5,000-mile journey to South America.

Burrow counts between 1993 – 2006 for the Ocean Beach and Fort Funston (all one colony) ranged from 140 to almost 1,000 (National Park Service 2007). Bank swallows have occurred at the southern end of the Project boundaries since the National Park Service (NPS) began surveying the colony annually in 1993. Data from the NPS shows Bank swallows predominantly use the southern portion of the Project area, especially in 2008, and 2009 when this area was the only area where Bank swallows nested. 2007 was a similar year with burrow counts of nearly 300 with just a few burrows located at Fort Funston. Activities listed in the 1987 statewide survey include rippapping, and human harassment, has contributed to the extirpation of Bank swallows in southern California. Similar activities being proposed by the Project are similar to activities that caused the extirpation in southern California.

Recommendation: Based on further analysis consistent with recommendations above, CDFW recommends additional on-site avoidance, minimization and mitigation measures be developed in consultation with CDFW to reduce Project impacts to less than significant. Project impacts to Bank swallows that cannot be mitigated on-site may necessitate off-site mitigation to reduce the impacts to less than significant. In order to reduce the impacts to less than significant, demonstration of successful mitigation is needed to be implemented and proven successful prior to the start of construction. CDFW recommends the following on-site mitigation be incorporated into the EIR:

- Fencing be installed above all the cliffs from Ocean Beach to Thornton State Beach, including Fort Funston and Phillip Memorial, to protect the unique habitat that Bank swallows need to create nesting burrows. Incorporate signage and fencing at the same location between the beach and cliff face to keep people and dogs from approaching the cliff's face.

- A habitat enhancement and management plan be developed in close coordination with CDFW and the NPS for the area between Sloat Boulevard to Phillip Burton Memorial Beach which includes success criteria to be met prior to Project construction. Potential enhancement activities include the removal of ice plant and other plant species that overgrow the cliff tops. CDFW believes that this will allow more opportunity for Bank swallows to nest.

- An off-site mitigation plan be developed with CDFW and the Bank Swallow Technical Advisory Committee (BANS-TAC) if on site mitigation cannot fully mitigate the Project's impacts. Mitigation opportunities may include removing rock along the Sacramento River and/or enhancing habitat at another Bank Swallow colonies along the coast. Note, this mitigation approach is considered "out of kind" and will not directly benefit the coastal colony.

Issue 3: Without additional Project mitigation, significant impacts to Bank swallow breeding habitat may reduce the carrying capacity of the bluffs to support Bank swallow colonies. Bank swallows are protected under CESA and the Migratory Bird Protection Act.

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Removal of important Bank swallow nesting habitat is expected to result in take of Bank swallows indirectly and possibly directly. Direct take could occur if construction timing is not strictly limited. In the event of a sudden collapse of any occupied nest or hole from Project activities, potential exists for Bank swallow individuals to be killed. Recontouring and coating of the bluff are activities that can directly injure, kill, or displace established Bank swallow colonies, resulting in direct take of chicks, eggs and/or adults.

Under section 2.5.1 Construction Activities and Phasing, the Project will be conducted in (5) five phases. Phase 2, phase 3, and phase 4, all have activities that can cause significant impacts to Bank swallows.

- Phase 2 includes the removal of the Great Highway southbound lanes, construction of the buried wall, and stabilizing the slope. This activity is expected to begin in 2024 and end in 2026.
- Phase 3 includes removal of the revetments and rubble from beach and placing sand along the beach. These activities are expected to begin in 2024 and end in 2026.
- Phase 4 includes removing or repurposing the Great Highway northbound lanes; install the multi-use trail and service road; construct Skyline coastal parking lot, new restroom, and beach access stairways, install multi-use trail landscaping; and restripe the Great Highway/Skyline Boulevard intersection. These activities are expected to begin in 2025 and end in 2026.

Evidence: Previous actions at the Project location conducted by the San Francisco Department of Public Works have resulted in take of Bank swallow. NPS monitoring data demonstrates a reduction in Bank swallow colony numbers in recent years.

California courts have held that take includes incidental take and is not limited to hunting and fishing and other activities that are specifically intended to kill protected fish and wildlife “The broad definition of “take” in Fish and Game Code section 86 ensures that CDFW can maintain legal control over actions interfering with threatened, endangered and fully protected animals even where actions may not have been intended to kill or hurt the animal” (Affirming California’s Protections for Migratory Birds 2018). Under California law it is unlawful to:

- Take a bird, mammal, fish, reptile, or amphibian (Fish and Game Code § 2000);
- Take, possess, or needlessly destroy the nest or eggs of any bird (Fish and Game Code § 3503);
- Take, possess, or destroy any bird of prey in the orders Strigiformes (owls) and Falconiformes (such as falcons, hawks and eagles) or the nests or eggs of such bird (Fish and Game Code § 3503.5);
- Take or possess any of the thirteen fully protected bird species listed in Fish and Game Code section 3511;
- Take any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird) (Fish and Game Code § 3800);
- Take or possess any migratory non-game bird as designated in the MBTA or any part of such bird, except as provided by rules or regulations adopted by the Secretary of the Interior under the MBTA (Fish and Game Code § 3513);



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• Take, import, export, possess, purchase, or sell any bird (or products of a bird), listed as an endangered or threatened species under the California Endangered Species Act unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW (Fish and Game Code § 2050 et seq.).

Recommendation: CDFW strongly recommends the Project obtain a CESA ITP for Bank swallows (pursuant to Fish and Game Code Section 2080 et seq.) in advance of Project implementation. The ITP process would allow CDFW to continue to work with the Project applicant to avoid, minimize and fully mitigate Project impacts to Bank swallows that can occur from the Project.

Issuance of a CESA Permit is subject to CEQA documentation; therefore, the CEQA document should consult with CDFW, specify impacts and mitigation, and should fully describe a mitigation, monitoring and reporting program. More information on the CESA permitting process and protocol survey procedures can be found on the CDFW website at <https://www.wildlife.ca.gov/Conservation/CESA> or <https://www.wildlife.ca.gov/Conservation/Survey-Protocols>

COMMENT 2: Pertains to Section 2.4.4.1 Public Access, Parking, and Restroom Improvements

Issue: The Project includes the construction of a new beach access stairway connecting the trail and beach. at the southern end of the Project area. This beach access stairway is located in a section of beach where Bank swallows nesting has been observed from 2003 to 2019 according to National Park Service surveys. This beach access will eliminate suitable and historic Bank swallow nesting habitat, facilitate additional human disturbances near Bank swallow nesting habitat, and will likely contribute to continued decline of the colony Bank swallow population

Evidence: Human disturbances, especially off-leash dogs, are known to hunt birds. Data collected by the NPS on people and dog use of the site was collected from 2000-2006 during the same time Bank swallow surveys were being conducted. The NPS concluded that there were about 2 people for every dog observed and over 90% of the dogs in all the years were unleashed (NPS 2007). Dogs were observed pursuing and attempting to catch, capture, and kill birds during surveys in 4 of the 7 years.

Recommendation: CDFW recommends the beach stairway access be relocate farther to the north and away from potential nesting Bank swallows in order to reduce human disturbance.

Comment 3: Beach Nourishment

The DEIR includes two beach nourishment options. The first option is to excavate and truck sand from the north end of Ocean Beach to the south end of the beach and is the current method of delivering sand to eroding portions of the beach. The second option is to pump sand onto the beach from a dredge. The pumping of dredged sand poses additional potential impacts beyond just the temporary impacts to the beach and intertidal areas during sand placement. As described within the DEIR, water would need to be added into the dredged sand to create the sand/water slurry making it possible to pump the material onto the beach. It is CDFW's



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understanding that the water needed is usually pumped from the dredge, a barge, or some additional remote location for this to happen. The pumping of water in areas where listed fish species are present to maintain the sand/water slurry poses the risk of entrainment and/or impingement to listed species and other marine organisms.

Recommendation 1: CDFW recommends the EIR (FEIR) include discussion on the impacts from pumping water from the nearshore environment where state and federally listed fish species may be present and discuss mitigation and minimization measures that could avoid significant impacts. The discussion should include the following:

- Additional information to describe the process in which the sand would be pumped to the beach, including whether the slurry water will come strictly from the dredge or if there will be a separate remote pump along the pipeline to help deliver sand to the beach.
- A description of the type of dredge, and specific vessel if known, that would be used by the U.S Army Corps of Engineers to conduct the large-scale sand placement.
- The type and size of screens that may be utilized on all water intake structures.
- The volume of water needed pump 575,000 cubic yards of sand onto the beach.
- The water intake velocity to create the slurry.

Recommendation 2: CDFW recommends the Project consult with CDFW regarding beach nourishment activities utilizing an offshore dredge to pump sand onto the beach in order to assess if an ITP would be recommended to cover potential take of state listed species during beach nourishment activities utilizing an offshore dredge to pump sand onto the beach.

COMMENT 4: State Threatened, Endangered, or Rare Plant Species

Issue: State threatened, endangered or rare plant species may occur within the Project area. Without appropriate mitigation measures, the Project could potentially have a significant impact on these species. Potential impacts to special-status plants include inability to reproduce and direct mortality. Unauthorized take of plant species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

Special-status plants are typically narrowly distributed endemic species. These species are susceptible to habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species.

Recommendations: The Project area should be surveyed for State-listed plant species by a qualified biologist following protocol-level surveys. Protocol-level surveys, which are intended to maximize detectability, may include identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. For more information on protocol-level surveys please see <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>.



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Special-status plant species should be avoided through delineation and establishment of a no-disturbance buffer of at least 50 feet from the outer edge of the plant population or specific habitat type required by special-status plant species.
If State-listed plant species are identified during surveys and full avoidance of take is not feasible, take authorization through CDFW issuance of an ITP would be required.

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COMMENT 5: Nesting Birds

Issue: If ground-disturbing or vegetation-disturbing activities must occur during the breeding season (February through early-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or Fish and Game Code.

Recommendations: CDFW recommends that a qualified avian biologist conduct pre-activity surveys for active nests no more than seven (7) days prior to the start of ground or vegetation disturbance and every fourteen (14) days during Project activities to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected by the Project. Prior to initiation of ground or vegetation disturbance, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once Project activities begins, CDFW recommends having the qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified avian biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified avian biologist advise and support any variance from these buffers.

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Comment 6: Pertains to Section 4.2.2.5 Lighting

Issue: Portions of the Project area do not contain overhead artificial light sources and CDFW is unable to determine if the Project proposes the installation of new or replacement light sources in or around nesting or potential nesting Bank swallow habitat. CDFW strongly recommends that no new artificial lighting is installed as part of the Project. New lighting, especially in areas where no lighting currently exists, has potential for significant impacts to nesting Bank swallows and other wildlife. Artificial light spillage into natural areas where Bank swallows may nest could result in a potentially significant impacts through substantial degradation of the quality of the environment. Unlike the natural brightness created by the monthly cycle of the moon, the permanent and continuously powered lighting fixtures create an unnatural light regime that produces a constant light output. Continuous light output for 365 days a year can also have cumulatively significant impacts on fish and wildlife populations.

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Evidence the impact would be significant: Artificial night lighting can disrupt the circadian rhythms of many wildlife species. Many species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004). For nocturnally migrating birds, direct mortality as a result of collisions with anthropogenic structures due to attraction to light (Gauthreux, 2006) is another direct effect of artificial light pollution. There are also more subtle effects, such as disrupted orientation (Poot et al. 2008) and changes in habitat selection (McLaren et al. 2018). There is also growing evidence that light pollution alters behavior at regional scales, with migrants occupying urban centers at higher-than-expected rates as a function of urban illumination (La Sorte et al. 2021). While artificial light pollution can act as an attractant at both regional (La Sorte et al. 2021) and local (Van Doren et al. 2017) scales, there is also evidence of migrating birds avoiding strongly lit areas when selecting critical resting sites needed to rebuild energy stores (McLaren et al. 2018). Due to the high potential for Bank swallows and special status species such as American badger, CDFW recommends no new or replacement lighting is installed as part of the Project.



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Recommended Mitigation Measure 1 – Light Impacts: If new and replacement lighting is proposed for the Project, CDFW recommends Isolux Diagrams showing pre-Project and post-Project lighting conditions be included in the EIR. Any Increase in post-project lighting should be discussed with CDFW and mitigated as appropriate. Potential minimization measures include:

- All installed lighting shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.
- Solid barriers at a minimum height of 3.5 feet should be installed in areas where there is the potential to reduce illumination from vehicles in natural areas. Barriers should only be utilized if they do not create a significant barrier to wildlife movement. Privacy slats installed into the spacing of cyclone fencing to create light barriers can also be used.
- Implement retro reflectivity of signs and road striping to reduce the need for lighting.
- Shielding of new and replacement light poles and other light sources and the modification of light pole arm length and mast heights to reduce excessive light spillage into natural habitats. In areas with sensitive natural habitats the light poles can be placed at non-standard intervals.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Submitting-Data#44524420-pdf-field-survey-form>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.



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FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (FGC, Section 711.4; Pub. Resources Code, section 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

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Thank you for the opportunity to comment on the Project's DEIR. If you have any questions regarding this letter or for further coordination with CDFW, please contact Will Kanz, Environmental Scientist at (707) 337-1187 or Will.Kanz@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
Erin Chappell
Regional Manager
Bay Delta Region (3)

DocuSigned by:
Craig Shuman
Craig Shuman, D. Env.
Regional Manager
Marine Region (7)

- cc: State Clearinghouse #2020090171
- ec: Craig Weightman, Environmental Program Manager
Department of Fish and Wildlife – Region 3
Craig.Weightman@wildlife.ca.gov

Wesley Stokes, Senior Environmental Scientist (Supervisor)
Department of Fish and Wildlife – Region 3
Welsey.Stokes@wildlife.ca.gov

Will Kanz, Environmental Scientist
Department of Fish and Wildlife – Region 3
Will.Kanz@wildlife.ca.gov

Becky Ota, Program Manager
Department of Fish and Wildlife – Region 7
Becky.Ota@wildlife.ca.gov

Eric Wilkins, Senior Environmental Scientist
Department of Fish and Wildlife – Region 7
Eric.Wilkins@wildlife.ca.gov

Arn Aarreberg, Environmental Scientist
Department of Fish and Wildlife – Region 7
Arn.Aarreberg@wildlife.ca.gov

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William (Bill) Merkle
National Park Service
Bill_Merkle@nps.gov

Alison Forrestel
National Park Service
Alison_Forrestel@nps.gov

Joseph Terry
United States Fish and Wildlife Service
joseph_terry@fws.gov

Xavier Fernandez
Sacramento Regional Water Quality Control Board
Xavier.Fernandez@waterboards.ca.gov

Agnes Farres
Sacramento Regional Water Quality Control Board
Agnes.Farres@waterboards.ca.gov

Tahsa Sturgis
Sacramento Regional Water Quality Control Board
Tahsa.Sturgis@Waterboards.ca.gov

Peter Benham
California Coastal Commission
peter.benham@coastal.ca.gov

Thomas Wadsworth
National Oceanic & Atmospheric Administration
thomas.wadsworth@noaa.gov

Jenna Rais
United States Army Corps of Engineers
Jenna.S.Rais@usace.army.mil

Bryan Matsumoto
United States Army Corps of Engineers
Bryan.T.Matsumoto@usace.army.mil

Elise Piazza
United States Army Corps of Engineers
Elise.H.Piazza@usace.army.mil

Kendra Spicher
United States Army Corps of Engineers
Kendra.A.Spicher@usace.army.mil

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Stephen Ryan
United States Army Corps of Engineers
Stephen.Q.Ryan@usace.army.mil

Jason Chambers
United States Army Corps of Engineers
Jason.C.Chambers@usace.army.mil

Sarah Firestone
United States Army Corps of Engineers
Sarah.M.Firestone@usace.army.mil

Jessica Vargas
United States Army Corps of Engineers
Jessica.M.Vargas@usace.army.mil

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Julie Moore
 City and County of San Francisco
 January 21, 2022
 Page 17 of 17

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United States Department of the Interior



NATIONAL PARK SERVICE
Golden Gate National Recreation Area
Building 201, Fort Mason
San Francisco, CA 94123-0022

IN REPLY REFER TO:
I.A.1 (GOGA-PEP)

January 26, 2022

Ms. Julie Moore
San Francisco Planning Department
49 South Van Ness Ave, Suite 1400
San Francisco, CA 94103

Dear Ms. Moore:

The Golden Gate National Recreation Area (GGNRA), a National Park Service (NPS or park) unit, has reviewed the draft Environmental Impact Report (DEIR) for the Ocean Climate Change Adaptation Project. The NPS has an interest in this project because substantial project elements of the proposed action would be constructed on and immediately adjacent to property owned and managed by the NPS.

1
GC-5

The NPS is pleased to submit the attached comments on the DEIR for the Ocean Beach Climate Change Adaptation Project at Ocean Beach. We appreciate your close coordination with our park interdisciplinary team to develop the draft, including numerous discussions and meetings about the proposed action, possible alternatives, GGNRA’s General Management Plan (GMP), NPS policy, and resource impact analyses. We look forward to continuing the collaborative dialogue in support of a project that advances our shared goals at Ocean Beach.

Given global climate change and sea level rise, the NPS understands the proposed project’s purpose, need, and goals to address shoreline erosion, severe coastal storm, and wave hazards which threaten city infrastructure, coastal access, recreational facilities, and public safety at Ocean Beach. At the same time, the NPS underscores the importance of natural resources and values in areas directly impacted by project elements on park lands, and indirectly by construction on city property adjacent to park lands. Under its enabling legislation, GGNRA is charged with protecting and preserving coastal natural processes, among other fundamental resources. While this project may be necessary to protect critical infrastructure, it shifts management of a shoreline in a direction away from “natural” conditions. Although admittedly the project area has been previously altered, the project would leave a permanently hardened shoreline, even with the seawall buried. Many of the comments address this tension. This is a complex project, needing to protect resources, but also to respect the jurisdictions of numerous agencies and a highly engaged community. Underlying this, the coastal environment continues to prove powerful and dynamic.

2
GC-3

We note that GGNRA was among the primary proponents for conceptual planning that eventually led to San Francisco Public Utilities Commission’s proposed project at Ocean Beach. When the Ocean Beach Vision Council (Council) was created by Mayor Gavin Newsom in 2008, then Superintendent Brian O’Neill said, “Ocean Beach is as unique and irreplaceable as Muir Woods, the Presidio, the Marin Headlands or any other part of the Golden Gate National Recreation Area. We [the National Park Service and the City of San Francisco] now have an unprecedented opportunity to work together towards the rejuvenation of Ocean Beach.” Four years later, the vision of the Council was achieved when the Ocean Beach Master Plan was published by San Francisco Planning and Urban Research Association

3
GC-5

(SPUR). Mr. O'Neill passed away in 2009, and SPUR dedicated the Master Plan to honor his invaluable leadership.

Thank you for the opportunity to share our issues and concerns again as the environmental analysis moves forward. And thank you for the opportunity to advance the vision established by our predecessors. I encourage the San Francisco Planning Department and SFPUC to actively collaborate with my staff on resolving the direct and indirect impacts this project would have on GGNRA lands and resources. If you have questions or need further clarification regarding our comments, contact Larry Miranda, Environmental Protection Specialist, at 628-218-1722 or larry_miranda@nps.gov.

3 (cont.)
GC-5

Sincerely,



/s/ Laura E. Joss
Signed original on file

Enclosure

cc:
Regional Director, NPS Interior Regions 8, 9, 10 & 12
Regional Environmental Coordinator, NPS Interior Regions 8, 9, 10 & 12

NPS Comments on the SFPUC Ocean Beach Climate Change Adaptation Project DEIR

As noted in the cover letter, the NPS has an interest in this project because substantial project elements of the proposed action would be constructed on and immediately adjacent to property owned and managed by the NPS. The following NPS comments on the DEIR have, therefore, been prepared by the park's interdisciplinary team, to submit to the San Francisco Planning Department and San Francisco Public Utilities Commission. The comments are primarily focused on the proposed action's elements that would directly and indirectly affect park lands and resources managed by the Golden Gate National Recreation Area.

- **SUMMARY, S.2 Background:** For clear public disclosure, update second paragraph that elements of the “project” at South Ocean Beach would be on property owned and managed by the GGNRA. This section and other sections throughout the document do not acknowledge that Ocean Beach and its potentially impacted assets and resources are on National Park Service (NPS) land managed by the GGNRA. For example, in first sentence of the first paragraph in **Background**, revise “Ocean Beach comprises a 3.5-mile stretch of sandy beach that forms the western boundary of San Francisco” to read Ocean Beach, **which is owned and managed by the GGNRA, a unit of the National Park Service**, “comprises a 3.5-mile stretch of sandy beach....”

4
GC-3
- **SUMMARY, Section 2. Project Description, 2.4.5.1. Shoreline Monitoring Program:** Due to the project's disclosed impacts to Geology and Soils, especially if sand supply is limited in the future, it is important for the shoreline monitoring program to consider NPS Beach Nourishment Guidance (NPS 2012) that has been provided to SFPUC. That guidance requires any sediments placed on the beach must closely match the native beach in terms of grain size, color, texture, and minerology. Furthermore, given the relative paucity of data on the grain size of native beach material at OB and the remaining uncertainty of how ongoing beach nourishment activities may affect the current and future grain size distribution at South Ocean Beach, the park requests that grain size analyses be added to the monitoring program and an adaptive management strategy developed in collaboration with NPS.

5
PD-6
- **SUMMARY, S.3.1 Proposed Facilities and Project Location:** Same general comment as noted above for **SUMMARY, S.2 Background**. Revise the first paragraph in **S.3.1**, “... (2) constructing a buried wall to protect existing wastewater infrastructure from shoreline erosion;” to read, (2) constructing an approximately 2,000 ft buried wall on City of San Francisco (city) property, with a 1,000 ft segment constructed on NPS property, to protect existing wastewater infrastructure from shoreline erosion;”

6
GC-3
- **SUMMARY, S.3.1 Proposed Facilities and Project Location:** Add that the park restroom at Sloat Blvd. will also be removed.

7
GC-3
- **SUMMARY, S.3.1 and S.3.6., Fig S-1b:** Regarding long-term beach nourishment, clarify that sand removal at North Ocean Beach, a federal property managed by GGNRA, will remain at the discretion of GGNRA and continuation will be dependent upon avoiding significant impacts on resources and recreation. Add a note to Figure S-1b with same clarification.

8
GC-3
- **SUMMARY, S.3.3 Buried Wall and Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.2 Aesthetics:** Add more details and specifications, including color, texture, etc. for the cementitious materials described in **S.3.3** and provide an impact analysis to aesthetics in **4.2** of the visual appearance of the cementitious layer since it will likely be exposed for long durations during the lifetime of the buried wall.

9
AE-1

- **Chapter 2. Project Description, 2.4.5.5 Type and Frequency of Sand Placement and Table 2-1:** Reconsider the accuracy of the description and related analysis in this section. Park staff believe the calculations are underestimated, especially for the large sand placement scenarios. For example, the U.S. Army Corps of Engineers (USACE) project placement of ~260,000 cubic yards took 6 weeks during its 2021 sand nourishment operations. So, the rate of application was ~43,333 cubic yards/week. Based on that average, it would take closer to 12 weeks for a volume over 500,000 cubic yards. The current table shows large placements taking 8 weeks. It would, therefore, be more accurate to describe it as a range, i.e., it could take from 8 to 12 weeks.

10
PD-6

- **Chapter 2. Project Description, 2.6 Project Operations and Maintenance and Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.5. Recreation, p 4.5-15 Beach Access and Recreation Resources:** Include the new beach access stairway in the list of facilities and clearly note that maintenance would be conducted by the city, not GGNRA.

11
PD-8

- **Chapter 3. Plans and Policy, Section 3.6.1 National Park Service Management Policies and 3.6.2 Golden Gate National Recreation Area General Management Plan and Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.1.2 Format of Environmental Analysis:** As described in these related sections, in particular the subsection, **Regulatory Framework, p 4.1-2**, in order to satisfy the ... “federal ... requirements that are directly applicable to the environmental topic being analyzed,” update each appropriate environmental topic section in Chapter 4 to include analysis and a determination whether the proposed action elements, directly and indirectly impacting park lands and resources, would impair park resources, and would each of them be consistent with GGNRA’s GMP.

12
PP-1

- **Table 4.1-3 Projects Considered in Cumulative Impact Analysis and Fig 4.1-1 Cumulative Projects:** The tables and analysis need to include the recent USACE beach nourishment project.

13
GC-4

- **Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.3 Transportation, p. 4.3.3.3: Impacts to Walking and Bicycling:** Consider mitigations such as signage that could encourage use of the path on the east side of Skyline. The park has concerns about the potential increase in southbound bicyclists riding on the west side of Skyline south of the intersection with the Great Highway. Shoulder conditions for bicyclists are less than ideal in that segment.

14
TR-2

- **Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.5 Recreation, p 4.5-15:** Include a statement in this section that the appropriate city agency would coordinate with the park on monitoring and sand nourishment for recreational purposes, which would be especially important for public access and safety in the area proposed for a new beach access stairway.

15
PD-6

- **Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.6 Biological Resources, Marine Communities, p 4.6-10:** Reference pre-and post-placement benthic studies in this section that are being prepared as part of the 2021 and future USACE beach nourishment operations and include appropriate monitoring planning/mitigation measures and adaptive management strategies when the studies and reports are completed.

16
BI-4

- **Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.6 Biological Resources, Bank Swallow Nesting Areas – Fort Funston Colony, Bank Swallow Nesting Areas - Fort Funston Colony, pp 4.6-23 thru 26:** GGNRA requests SFPUC and the CDFW to collaborate with the park to jointly consult with the U.S. Fish and Wildlife Service (USFWS) to determine what, if any, additional feasible mitigations may be possible, including what joint state and federal permitting and/or compensatory measures may be required for the proposed action’s impacts on bank swallows and its critical habitat in the project area. Per NPS Management Policies (2006), Section 4.4.2.3, the NPS is required to take all management actions for the protection and perpetuation of federally, state, or locally listed species through park management planning processes, including consultation with lead federal [USFWS] and state agencies [SFPUC and

17
BI-1

CDFW] as appropriate.

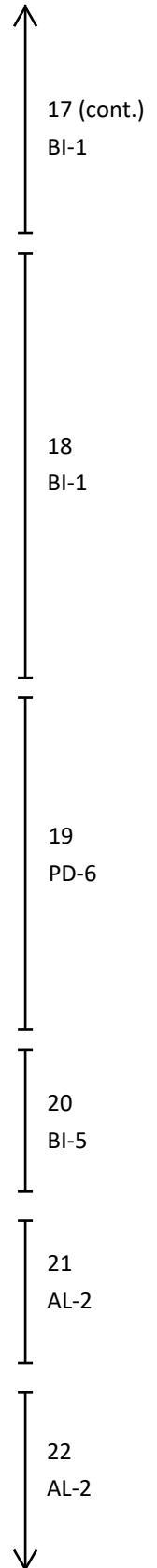
As park biologists currently understand, the proposed action would result in the permanent loss of up to 700 linear feet of bluff face that is suitable nesting habitat for bank swallows, a Threatened Species under the California ESA. Under NPS Management Policies (2006), Section 4.4.2.3, the park is required to provide state listed species with the same management protections as federally listed species to the greatest extent possible. The park requests SFPUC to consult with CDFW to calculate the total area of habitat lost in addition to the linear feet.

Moreover, the location of nesting habitat that would be lost was the preferred nesting location for bank swallows from 2010-2019. The Fort Funston bank swallow population is one of only two extant breeding coastal colonies of bank swallows remaining in California and based on NPS long-term monitoring data, this population appears to be in decline over the last decade or more. The park considers this loss of breeding habitat for this population a significant adverse impact.

Although park biologists understand there is no way to fully mitigate the loss of nesting habitat (methods to create new bank swallow nesting habitat are not known), the park recommends additional mitigations to increase outreach and public awareness, reduce disturbance at breeding sites, and to restore foraging habitat on site to the greatest extent feasible. While these suggested mitigations may enhance the bank swallow population, they would not likely fully make up for the loss of nesting habitat. Since the loss of nesting habitat cannot likely be fully mitigated, the project would have unavoidable adverse impacts to bank swallows and significant adverse impacts to its critical habitat.

- **Chapters 4 and 6, specifically 4.1.4 and 6.2.1.1**, regarding significant and unavoidable impacts: the park remains concerned that there may be significant and unavoidable adverse impacts to Geology and Soils from the proposed action, especially if there are unforeseen issues implementing the SFPUC OB CCAP Sand Management Plan (2020) or if assumptions about sand supply are incorrect. Given the critical role that the Sand Management Plan will play in maintaining a beach and keeping the seawall buried over the next 80 years, we request an explicit description of how and when the Sand Management Plan and the ongoing beach nourishment program will be evaluated to determine how well it is meeting its objectives. One way this could be achieved is by convening a formal technical review at set intervals, e.g., every 3-5 years, that includes interdisciplinary team members from the park, city, USGS, and other interested parties. Address these critical issues in one or both sections.
- **Chapter 4. Environmental Setting, Impacts, and Mitigation Measures, 4.6 Biological Resources, Marine Communities, p 4.6-10:** Include pre-and post-placement benthic study references in this section are currently being prepared as part of the 2021 and future USACE sand nourishment and sand placement operations, and that an appropriate monitoring plan, with mitigation measures, would also be prepared following completion of the studies and reports.
- **Chapter 6 Alternatives, 6.3.1 and 6.3.2, Alternatives A & B:** It is likely that coastal dynamics will continue to adversely impact park facilities south of Sloat. GGNRA has already removed most of its parking because of undercutting. Under Alternatives A and B, it may not be feasible to retain the remaining parking lot, restroom, or MUNI turnaround/layover. Removal of these facilities would have adverse impacts on transportation and recreation. Consider revisions to the text and figures.

In addition, per p 6-5 for Alternative A, “If required to protect public safety and/or wastewater infrastructure from damage due to sudden risk of exposure (e.g., resulting from an unusually strong storm season causing accelerated shoreline erosion), the city would implement temporary emergency shoreline protection measures which could include placement of additional sand, sandbags, revetment rock, and/or longer-term measures if authorized by the environmental regulatory agencies with jurisdiction (e.g., California Coastal Commission).” NPS notes here that the city’s temporary



emergency protection measures would likely adversely impact bank swallow habitat at least as much as the proposed action.

↑ 22 (cont.)
AL-2

- Chapter 6 Alternatives, 6.3.3 Alternative C Protect Critical Infrastructure with Conventional Seawall:** Per the descriptions for *feasible alternatives* provided in section **6.1 Introduction** and earlier in the **Summary** section, e.g., **6.1 Introduction** and **S.5 Alternatives to the Project**, "... potentially feasible alternatives that could avoid or substantially lessen the significant impacts identified for the project while still meeting most of the project objectives," The park does not consider Alternative C feasible because it is not clear in the description and in **Fig. 6-2** how much of the Conventional Seawall would be within park lands and how much would be on city property. This section needs a more detailed description and map clearing indicating the location of the Conventional Seawall with respect to city and park boundaries. As it is, the description in section **6.3.3.1**, "... the city would construct a conventional seawall along the South Ocean Beach shoreline, from Sloat Boulevard to the Fort Funston bluffs" is inadequate for the park to determine. Moreover, construction of a new conventional seawall in a national park is inconsistent with GGNRA's GMP/EIS and NPS policy. The adverse impacts of its construction and operation would likely be more severe (approaching impairment) than the proposed project or Alternative A (No Project). It is highly unlikely the Ocean Beach site would be made available for a Conventional Seawall as proposed in Alternative C. Therefore, described as it currently is in the DEIR, Alternative C would not be feasible.

23
AL-1

- General Comment:** NPS considers the DEIR to be a concise and thorough CEQA document for all of the elements in the proposed action on city property. However, as NPS has already conveyed to SFPUC, and SFPUC has agreed, SFPUC is also responsible for ensuring all of the requirements under the National Environmental Policy Act (NEPA) are fulfilled since many of the city's project elements would either be constructed directly on NPS property (with direct impacts to park resources including bank swallows and bank swallow critical habitat) or constructed adjacent to NPS property (with indirect impacts to park resources). To that end, NPS has approved that the city's consultant, Environmental Sciences Associates (ESA), who has prepared the city's CEQA DEIR, may conduct the NEPA review and documentation at SFPUC's cost, and in coordination with and approval by park.

Earlier during the CEQA process for this project, NPS advised and recommended to the San Francisco Planning Department and SFPUC, that rather than two separate processes and documents, it would be more efficient and cost effective to collaborate and prepare a joint CEQA/NEPA document, as recommended in the handbook, *NEPA and CEQA: Integrating Federal and State Environmental Reviews*, which was prepared and approved by the State of California and the White House Council on Environmental Quality (CEQ) in 2014. Per the guidance recommended in the handbook, the purpose of a joint process and document is to improve efficiency, timely review, and reduced cost of preparing and reviewing one document rather than two for a project affecting both state and federal jurisdictions. The park has recommended the same for earlier multi-agency city projects affecting park lands and requiring CEQA and NEPA reviews, but the city has always declined.

24
GC-5

The NPS would like to take this opportunity to bring the value of the joint process to the attention of SF Planning again and requests that sometime convenient in the future that leadership in both city and GGNRA planning offices meet and discuss how to integrate both compliance processes for future multi-jurisdictional projects affecting the city and the park in order to improve efficiency and reduce costs for both the city and the National Park Service.

Board of Supervisors
District 7



City and County of San Francisco

MYRNA MELGAR

January 24, 2022

Ms. Julie Moore
San Francisco Planning Department
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103

SENT VIA ELECTRONIC MAIL TO: CPC.OceanBeachEIR@sfgov.org

**RE: Comments on the Scope of the Environmental Impact Report (EIR) for
Ocean Beach Climate Change Adaptation Project
Case No. : 2019-020115ENV**

Dear Ms. Moore:

I am submitting this letter to provide written comments in response to the Notice of Preparation of an Environmental Impact Report (EIR) for the Ocean Beach Climate Adaptation Project, Ocean Beach and the Great Highway between Sloat and Skyline Boulevards, and Ocean Beach north of Lincoln Way. The extension of Great Highway also known as South Ocean Beach is a treasured part of urban recreation, not only for westside residents, but for visitors all over the region. As this project is managing challenges of ongoing shoreline erosion, the closure of an essential roadway in District 7 provides the project with a unique opportunity to diminish the traffic impacts and travel patterns that the community will have to endure. I am delighted to see that there are many critical infrastructure ideas in the project that address the climate crisis issues of coastal erosion and sand management. However, I also feel that there are elements that can be further explored.

As such, I recommend that the Environmental Impact analysis include the following:

Adequate Evaluation of Traffic and Circulation Mitigation

The San Francisco Public Utilities Commission (SFPUC) acknowledges that the impact of closing the Great Highway extension will cause increased traffic on other roads throughout District 7, and they state that this impact is significant and unavoidable. They then go on to say that there is no proposed mitigation and do not adequately justify why.

The SFPUC must propose a mitigation plan, as is their responsibility, or justify in the EIR why they are not proposing mitigation. In this Draft EIR, it asserts that there is no feasible plan to minimize traffic impacts in Vehicle Miles Traveled (VMT), however, we know that the San Francisco Municipal Transportation Agency (SFMTA) has identified mitigation methods to minimize impact.

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TR-4

To ensure an expansive analysis, the Draft EIR should propose mitigation as is the SFPUC’s responsibility under their project. If they cannot propose mitigation they must provide ample explanation and justify why they cannot complete mitigation measures that have been identified by the SFMTA. The Draft EIR should also analyze the best possible locations for reducing impacts to surrounding roadway. The unavoidable impact to traffic congestion and roadway travel patterns in District 7 must be captured under SFPUCs preview as is their responsibility to mitigate impacts the project creates. The responsibility to mitigate the impact of the project falls under the SFPUC and not the SFMTA. Under CEQA the SFPUC has not met its responsibility with this current Draft EIR.

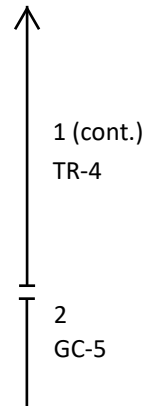
I look forward to ongoing discussion with the Public Utilities Commission, Municipal Transportation Agency, community stakeholders, and nearby residents as we proceed in this review process. Thank you for your consideration and please do not hesitate to contact me at Myrna.Melgar@sfgov.org if I can offer futher clarification.

Sincerely,



Myrna Melgar
Supervisor, District 7
San Francisco Board of Supervisors

Cc: Dennis Herrera, General Manager, San Francisco Public Utilities Commission
Jeffrey Tumlin, Director of Transportation, San Francisco Municipal Transportation Agency
Tom Maguire, Director of Streets Division, San Francisco Municipal Transportation Agency
Anna Roche, Project Manager, Climate Change, San Francisco Public Utilities Commission
Jeremy Spitz, Local and Regional Policy and Government Affairs Manager, San Francisco Public Utilities Commission
Joel Ramos, Local Government Affairs Manager , San Francisco Municipal Transportation Agency



A-2 ORGANIZATION COMMENTS



CALIFORNIA
NATIVE PLANT SOCIETY

Yerba Buena
Chapter

January 24, 2021

Subject: Ocean Beach Climate Adaption Project Draft EIR

Dear San Francisco Environmental Planning Department:

The Yerba Buena Chapter of the California Native Plant Society is pleased to provide comments on the Ocean Beach Climate Project Draft EIR.

The Yerba Buena Chapter of the California Native Plant Society (CNPS) is a non-profit organization with over 600 members in San Francisco and Northern San Mateo County. Our parent organization has over 10,000 members statewide. The mission of CNPS is to conserve California native plants and their natural habitats, and increase understanding, appreciation, and horticultural use of native plants. Our vision includes a future where Californians can experience thriving biological diversity, even in human-altered landscapes.

We salute the city for taking steps to prepare for climate warming. As a coastal city, we're on the frontlines of human-induced change. While it's critical to protect San Francisco's built infrastructure, we feel that protecting our local biodiversity from calamity is equally important. According to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, changes in land and sea use has been identified as the main driver of "unprecedented" biodiversity and ecosystem change over the past 50 years. Three-quarters of the land-based environment and about 66% of the marine environment have been significantly altered by human actions. That's why it's important to recognize that the Draft EIR comes up short on natural resource protection, habitat enhancement and threatened species management. The Draft EIR does mention a small amount of habitat restoration, but not enough, considering how much mechanized development, and earth and water moving, is included in this project.

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PD-4

The following are some topics we feel the DEIR has insufficiently addressed.

Vegetation

Re: Project Description, Section 2.4.3. We're delighted that the Project Description in the Draft EIR clearly states the intent to use native plants. Furthermore, we also appreciate the stated commitment to source the plants from "established nurseries in the region". However, unless the commitment is to using native plants that come from local genetics, further

2
PD-4

environmental analysis would need to be done on possible effects on habitat and biodiversity of, for example, planting Southern California native plants bought from “regional nurseries” -- plants which have little or no relation to the wildlife that has co-evolved with our local plants.

We suggest that especially good local sources for local native plants for this project would be the SF RPD Natural Resources Division, the Golden Gate National Parks Conservancy's nearby Fort Funston nursery or its Presidio nursery, and Literacy for Environmental Justice’s nursery.

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2 (cont.)
PD-4

Rare Plant Habitat

The document states that construction and operation will have a less than significant impact on the rare San Francisco Spine Flower (*Chorizanthe cuspidata* var. *cuspidata*), Yellow Sand Verbena (*Abronia latifolia*), and Beach Burr (*Ambrosia chamissonis*), and that no mitigation is required. This is based on findings that these plants do not occur in the project area. They do however, occur at the very nearby Fort Funston, and note is made of the possibility that those plants could possibly be disturbed. We ask for a mitigation requiring replacement and enhancement areas for plants sacrificed at Fort Funston.

3
BI-3

The document also states that off-trail plant trampling along the new multi-use trail will have a less than significant impact. Please mitigate for that with barriers (manmade or with shrubs) and educational signage.

4
BI-3

Invasive Species Management

In Section 2.6.2 of the DEIR, it is stated that “The NPS does not regularly conduct beach maintenance at Ocean Beach (designated by the NPS as a Natural Zone management area).”³³ The implication is that once operation of the project begins there will be little-to-no landscaping maintenance or follow-up.

5
PD-4

This is unacceptable, and the Draft EIR is incomplete because it has failed to analyze possible environmental impacts that could result from stakeholders NOT doing the following:

- Periodic habitat maintenance sweeps for invasive species, such as ice plant, sea fig, sea rocket and wild radish.
- Inspection and cleaning of materials, including worker clothing, tools, equipment, machinery, vehicles and port-a-potties.
- Inspection of beach nourishment dredgings for invasive species and seeds, and in the case of off-shore dredgings, pollutants from the ocean bottom.

Trash and Waste Management

From Project Description, Section 2.6.1 Public Access, Parking, and Restrooms Rec and Park would maintain the [new] multi-use trail, restroom, and Skyline coastal parking lot. ... The multi-use trail would have posted open hours of 5 a.m. to 12 a.m. daily. Trash collection and restroom cleaning would be administered by Rec and Park. ...

6
PD-8
↓

Because of increased access via the concrete stairs to be constructed, further analysis of possible environmental impacts should be done to (a) establish the frequency with which trash cans will

need to be emptied to prevent overflowing, and to not invite rodents and corvids, and (b) evaluate the impact of humans and off-leash dogs, bonfires and fireworks on plants and wildlife in the project area. Also, recognizing that educational outreach is important to preserve and enhance coastal habitat at South Ocean Beach, the value of local native plants, habitat restoration and biodiversity should be included on sign boards or via digital methods.

↑
6 (cont.)
PD-8

Bank Swallow Habitat

The Draft EIR concludes that disruption of bank swallow habitat is significant and unavoidable and that mitigation measures taken on inland riverbank areas were expensive and has had a high failure rate. While we’re not an avian protection organization, we do recognize the inter-connected nature of all biodiversity. Bank Swallows almost exclusively eat flying or jumping insects, such as bees, wasps, ants, butterflies, and moths, many of which depend on our native plants for sustenance. We ask that you go back to the drawing board and come up with a better solution, even if the solution involves buying and protecting another coastal piece of bank swallow habitat. Either mitigate or replace. Don’t destroy and walk away from this responsibility.

↑
7
BI-1

Finally, the city is to be lauded for developing climate solutions, but we ask that the project stakeholders live by the National Park Service beliefs stated in the Draft EIR: “Preserve and restore the natural abundances, diversities, dynamics, distributions, habitats and behaviors of native plant and animal populations.”

↑
8
PD-4

Sincerely,

California Native Plant Society, Yerba Buena Chapter board members:

- Eddie Bartley, President
- Paul Bouscal, V.P.
- Sophie Constantinou, Secretary
- Bob Hall, Treasurer
- Jake Sigg, Conservation
- Noreen Weeden, Field Trips, Speaker Programs
- Susan Karasoff, Outreach
- Beth Cataldo, Volunteering
- Libby Ingalls, Newsletter Production
- Elliot Goliger, Horticulture

1/24/22, 12:52 PM

Mail - CPC.OceanBeachEIR - Outlook

GGAS Public Comment for 2019-020115ENV Ocean Beach Climate Change Adaptation Project

San Francisco CC <sfcc@goldengateaudubon.org>

Mon 1/24/2022 8:52 PM

To: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sfgov.org>

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*inspiring people to protect
Bay Area birds since 1917*

Jan 24, 2022

To: Julie Moore

CPC.OceanBeachEIR@sfgov.org

RE: 2019-020115ENV Ocean Beach Climate Change Adaptation Project

Dear Ms. Moore,

Thank you for the opportunity to comment on the environmental impact of the Ocean Beach climate change adaptation project. Golden Gate Audubon represents 10,000 members and supporters around the Bay Area who are dedicated to the protection of birds, wildlife, and their habitats. We appreciate your considerable efforts in the Draft EIR to address the questions we put forth in October 2020, and we applaud the city's efforts to address climate change.

1
GC-2

The assessment of significant and unavoidable impact to the Bank Swallow breeding habitat is unacceptable. While the reasons for the habitat removal are clear, and the potential impact to habitat south of the project area with the implementation of any alternative projects is certainly a factor to consider, we ask for a more satisfactory solution for the Bank Swallow breeding habitat.

2
BI-1

Our California population of Bank Swallows are in serious decline, and designated threatened. The Fort Funston colony is only [one of two remaining coastal colonies](#) in California. As stewards of habitat for birds, we cannot watch this habitat accelerate its disappearance due to human impact. We understand the importance of protecting the water treatment facility and the potential dangers climate change pose to its integrity. However, after more than 100 years of breeding in the same location, missing just two years of data in 2020 and 2021 is not sufficient to decide to eliminate this habitat and permanently change the breeding habits of this threatened bird. We would ask for further observation and suspension

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Mail - CPC.OceanBeachEIR - Outlook

of that aspect of the project to ensure the birds have permanently vacated this area for breeding. Further study and research into alternative mitigation strategies are needed.

We appreciate your efforts in respecting the need for biologists on site during breeding season, and recommending training of personnel to recognize breeding birds and empowering them to halt activity on the project for the protection of the Bank Swallows. Any efforts toward public education are worthwhile, and we appreciate your recommendations.

If this project moves forward as described, with bluff removal, we would expect considerable resources to be deployed to protect the remaining habitat south of Fort Funston.

Thank you for your attention to this critical habitat for a species in decline.

Sincerely,

Whitney Grover

sfcc@goldengateaudubon.org

Chair, Golden Gate Audubon Society San Francisco Conservation Committee
Board Member, Golden Gate Audubon Society



2 (cont.)
BI-1



January 25, 2022

Julie Moore
Environmental Planning Department
49 South Van Ness Ave, #1400
San Francisco, CA 94103

Transmitted via email to CPC.OceanBeachEIR@sfgov.org

Subject: SF Baykeeper comments on the DEIR for the Ocean Beach Climate Change Adaptation Project

Dear Ms. Moore

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the Ocean Beach Climate Change Adaptation Project.¹

Baykeeper is a California non-profit organization and submits these comments on behalf of its approximately 5,000 members and supporters who live and recreate in and around the San Francisco Bay Area. Baykeeper’s mission is to defend San Francisco Bay from the biggest threats and hold polluters and government agencies accountable to create healthier communities and help wildlife thrive.

Baykeeper recognizes this plan incorporates an element of managed retreat and removal of existing hardened defenses, including riprap and debris. The preferred alternative will likely result in near-term improvements through widening Ocean Beach and introducing recreational and habitat benefits to the area. Given the fact, however, that south Ocean Beach is experiencing some of the fastest rates of erosion along the West Coast, climate-induced sea level rise is likely to quickly erode any nature-based features established through this project. At that point, the hardened features protecting the Westside Transport Box and Lake Merced Tunnel will become exposed, and an even more costly and environmentally damaging alternative will be required.

Baykeeper is concerned that if the sea wall-based preferred alternative from the DEIR is constructed, the scenario considered in the 2012 Ocean Beach Master Plan becomes an eventuality:²

Depending on its height, a structure might be overtopped by wave runup during storm surges, inundating inland areas. If the coastline recedes until it reaches a hard structure, the beach may be lost, along with the ecological and recreational functions it supports. Reflected wave energy may worsen erosion in adjacent areas. There are nearly 10,000 linear feet of hard structures at Ocean Beach today, in the form of the three existing sea walls and recent revetments. This does not include the Westside Transport Box, which could end up functioning as a sort of seawall if exposed by beach and dune recession. Additional armoring will likely be necessary south of Sloat, but should be placed as part of a proactive and comprehensive strategy to manage coastal dynamics at Ocean Beach. Its placement and design should reflect consideration of ecological and access needs, as well as potential negative secondary erosion effects.

Baykeeper does not feel the preferred alternative represents a sustainable long-term solution to shoreline management at South Ocean Beach, consistent with the objectives of the 2014 legal settlement agreement³ and the 2015 California Coastal Commission permit.⁴ We share the concerns that Surfrider Foundation and others that

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GE-1

¹ San Francisco Planning Case No. 2019-020115ENV; State Clearinghouse No. 2020090171

² SPUR. 2012. Ocean Beach Master Plan. Available at <https://www.spur.org/publications/spur-report/2012-05-21/ocean-beach-master-plan>

³ California Coastal Protection Network v. City & County of San Francisco, Case No. CGC-11-513176. California

⁴ Coastal Commission, Coastal Development Permit 2-15-1537, Issued November 9, 2015.



Pollution hotline: 1 800 KEEP BAY
www.baykeeper.org

1736 Franklin Street, Suite 800
Oakland, CA 94612
(510) 735-9700

the proposed project relies too heavily on grey infrastructure approaches. Any natural features incorporated into the project will quickly erode in the face of modest rates of sea level rise in the coming decades.

The DEIR does not consider the eventual consequences of erosion and how long a beach will exist in the face of gradual sea level rise punctuated by storm surges that have historically resulted in marked increases in coastal erosion along south Ocean Beach. We encourage you to analyze and pursue an alternative that more closely aligns with the vision established in the 2012 Ocean Beach Master Plan.⁵ Although not an essential feature of the 2021 Master Plan, Baykeeper urges the city to recognize the eventual need to relocate wastewater and stormwater infrastructure. We understand this represents a high-cost alternative, though the DEIR itself recognizes the project itself will fail to protect this infrastructure after 2075 to 2100. San Francisco must consider relocating critical infrastructure out of harm's way for a more extended period to avoid more complicated decisions for future generations.

Finally, Baykeeper requests that the City of San Francisco become more engaged in managing sand resources in San Francisco Bay, which have a close connection to Ocean Beach. Sand mining in San Francisco Bay has contributed to permanent sediment loss, documented through recent peer-reviewed research published by the USGS and others, indicating sand mining has reduced the available sand supply to open coast beaches along the San Francisco coast. These studies draw a clear connection between sand mining in the Bay and the observed shrinking of the San Francisco Bar and erosion at Ocean Beach. More recent science thoroughly documented in a 2013 special edition of Marine Geology, which established a "causal link" between sand removal in the Bay with "both the widespread erosion of the ebb-tidal delta and extensive erosion of the adjacent south coast shoreline."⁶

In the absence of sustainable management of sand resources in the region, natural defenses for Ocean Beach cannot form, and unnatural interventions such as costly and environmentally damaging beach replenishment efforts will go on in perpetuity. We encourage the City to engage in a more comprehensive strategy to defend the City from the constant threat of erosion and sea level rise. Such a strategy includes proactive sediment management, innovative nature-based solutions, and necessary engineering interventions that will last much longer than the 50-75 year time horizon.

Baykeeper looks forward to collaborating with you on this critical topic. Please feel free to contact me with any questions at ian@baykeeper.org.

Sincerely,



Ian Wren
Staff Scientist



⁵ SPUR. 2012. Ocean Beach Master Plan. Available at <https://www.spur.org/publications/spur-report/2012-05-21/ocean-beach-master-plan>

⁶ Hein, J. R., Mizell, K. & Barnard, P. L., 2013. Sand sources and transport pathways for the San Francisco Bay coastal system, based on X-ray diffraction mineralogy. Marine Geology, 345, 154-169



January 18, 2021
Julie Moore
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103

via email to CPC.OceanBeachEIR@sfgov.org

Subject: **Draft EIR for the Ocean Beach Climate Change Adaptation Project**

Dear Ms. Moore:

The Surfrider Foundation represents more than 250,000 surfers and beachgoers worldwide and is dedicated to the protection and enjoyment of oceans, waves and beaches. Our San Francisco Chapter has reviewed and commented on shoreline management projects in the City of San Francisco for more than 20 years and has actively participated in robust stakeholder-based sea level rise planning efforts at South Ocean Beach. Surfrider has long advocated for solutions in the area that maximize public access and recreational use of the beach.

In evaluating the Draft Program EIR (EIR) for the Ocean Beach Climate Change Adaptation Project, our comments are focused on the context of the beach in this area, which is being narrowed by sea level rise and erosion. Our primary concern is that the alternative studied in this project does not accurately analyze inconsistencies with other land use plans — in particular the Ocean Beach Master Plan — as required by CEQA. In particular, plans and policies explicitly intended to limit the use of hard armoring and preserve the public beach as sea levels rise are not accurately considered.

The San Francisco Public Utilities Commission (SFPUC) considers the EIR’s preferred project to be an updated version of a design concept that was originally considered and widely accepted in the OBMP in 2012 and then further analyzed by SFPUC in 2015. Surfrider disagrees with this assessment due to substantial differences amongst the two project designs. The proposed project will impact beach width, will decrease sediment accumulation and will result in a narrowed beach. Due to the significant divergence from the OBMP and related goals to limit shoreline armoring, we find that the EIR has failed to identify an environmentally preferable alternative with large implications for many resources.

In general, the relatively low adaptive capacity of the selected EIR alternative also means that SFPUC has not properly analyzed or mitigated for resource impacts related to the existence of a walkable beach; including minerals, public access, and public recreation.



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Land Use Impacts Have Not Been Properly Analyzed

The related problems of sea level rise and erosion in South Ocean Beach have been extensively considered by SFPUC and many other entities for decades. Considerable planning has been done to acknowledge an environmental setting that has been known to be evolving; where sea level rise will exacerbate the erosion issues that the beach south of Sloat already experiences. The EIR points to a number of planning processes that have addressed the challenge of protecting infrastructure and maintaining a beach in the last ten years, and makes the following finding that the project would not cause significant impacts:

“The project would not cause a significant physical environmental impact due to a conflict with any land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.” (EIR, S-28)

Surfrider strongly disagrees with this analysis. We maintain that the policy and planning context is very clear about the need to limit shoreline armoring in this area due to the negative impacts that armoring has on beach space and a wide variety of coastal resources.

A Long Planning History Seeks to Limit Armoring In This Area

In 2012, the Ocean Beach Master Plan sought to balance environmental protection needs with the need to protect infrastructure in South Ocean Beach:

“The Ocean Beach Master Plan is an effort to develop a sustainable long-term vision for Ocean Beach, addressing public access, environmental protection and infrastructure needs in the context of erosion and climate-related sea level rise.” (Ocean Beach Master Plan, I-10).

While the OBMP was generally a visioning process, clear priorities for the beach South of Sloat were put forth to limit armoring and protect the natural capacity of the beach to rebuild itself under conditions of extreme erosion and wave runup. This was memorialized best in two plans that intentionally built off the OBMP — the 2015 Coastal Protection Measures and Strategies for South Ocean Beach¹ framework and the Western Shoreline Area Plan LCP Amendment in 2017².

¹ https://www.spur.org/sites/default/files/2015-08/OB_Coastal_Protection_Mgmt_Final_20150424.pdf

² https://generalplan.sfplanning.org/Western_Shoreline.htm



The 2015 framework was an SFPUC-commissioned effort to more technically evaluate the Lake Merced Tunnel protection device recommended in the OBMP for the area South of Sloat Boulevard. The preferred concept that emerged from that effort was intended to incorporate new information related to sea level rise and was ultimately designed to “emphasize the use of low impact technologies inland of the current shoreline that provide multiple benefits and opportunities for integrated management (e.g. protect critical infrastructure and provide for the protection and enhancement of natural resources).” (Alternatives Analysis, page 1))

The Western Shoreline Area Plan Update in 2017 also explicitly sought to limit hard armoring strategies for the area:

“Western Shoreline Area Plan Objective 6: Maintain and enhance the recreational use of San Francisco’s Ocean Beach Shoreline” (Western Shoreline Area Plan, Chapter 1)

“Shoreline protection devices such as rock revetments and seawalls can negatively impact coastal resources... Because of these impacts, **shoreline protection devices shall be avoided and only implemented where less environmentally damaging alternatives are not feasible**. Shoreline protection devices such as rock revetments and seawalls shall be permitted only where necessary to protect existing critical infrastructure and existing development from a substantial risk of loss or major damage due to erosion and only where less environmentally damaging alternatives such as beach nourishment, dune restoration and managed retreat are determined to be infeasible.” (Western Shoreline Area Plan, Chapter 12)

The broad impacts of hard armoring to environmental resources such as coastal access, coastal recreation, and habitats are summarized in the Coastal Commission’s 2018 Sea Level Rise Policy Guidance³:

“Hard armoring refers to engineered structures that...can result in serious negative impacts to coastal resources, particularly as sea level rises. Most significantly, hard structures form barriers that impede the ability of natural beaches and habitats to migrate inland over time. If they are unable to move inland, public recreational beaches, wetlands, and other habitats will be lost as sea level continues to rise.. Other detrimental impacts may include interference with other ecosystem services. (Sea Level Rise Guidance, page 123)



1 (cont.)
PP-1

³

https://documents.coastal.ca.gov/assets/slr/guidance/2018/0_Full_2018AdoptedSLRGuidanceUpdate.pdf



The Coastal Commission has made exceedingly clear that hard armoring harms beaches. Most recently, the Commission’s 2021 “Sea Level Rise Guidance for Critical Infrastructure⁴” emphasizes the need to protect coastal resources when hard armoring is used:

“Prioritize siting infrastructure to avoid hazards, and where hazard avoidance is not feasible, prioritize nature-based adaptation strategies over hard shoreline armoring. When hard shoreline armoring is used, require mitigation for adverse coastal resource impacts and long-term planning to identify a long-term solution that is most protective of coastal resources.” (Critical Infrastructure Guidance, 136)

Finally, intentions to limit hard armoring in this project have explicitly been memorialized in the Coastal Commission Staff Report⁵ for Phase 1 of this project:

“During the initial up to 6-year term of this permit, existing rock revetments and sandbags along much of the project area south of Sloat Boulevard would be allowed to remain in place, as they are required to help assure short-term structural stability and protection of existing significant public infrastructure in danger from erosion. The long-term project, due to be implemented beginning in 2021, would likely include removal of these revetments and sandbags and a series of managed retreat measures designed to avoid hard armoring as much as possible in favor of instead managing the shoreline more naturally (with sand dunes, for example) and facilitating enhanced public recreational access in the area.” (page 2, 2018 Coastal Commission Staff Report)

In summary, there is a long history — in both the statewide regulatory context and local planning documents — which anticipates sea level rise and intends to limit hard armoring in South Ocean Beach.

The Described Project Departs from Regulatory Recommendations

The project described in the draft EIR includes a 3,200 seawall covered by a 3:1 sloped sand layer that is stabilized by a four foot layer of “cementitious” material. The seawall is massive in scale, the back of the beach has been set by a series of concrete designs (the coastal trail and access road; in addition to the sloped sand layer and buried sea wall), and the enforced slope is steep and requires steady maintenance. All of these characteristics together mean that the project has very low ability to replenish itself and relies on high impact and costly artificial sand

⁴https://documents.coastal.ca.gov/assets/slr/SLR%20Guidance_Critical%20Infrastructure_8.16.21_FINAL_FullPDF.pdf

⁵[Th10a-5-2018-exhibits.pdf](#)



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PP-1



replenishment. Without steady maintenance, the cementitious layer and the seawall will both contribute to further erosion of the beach which does not have the ability to migrate or build itself back. A cement shoreline, when unearthed, also puts recreation and access at high risk.

Surfrider fundamentally cannot characterize this design as an attempt to limit shoreline armoring or as a necessary use of shoreline armoring that is most protective of coastal resources.

Surfrider therefore believes that the EIR project conflicts with the land use policies described in the Ocean Beach Master Plan and the Western Shoreline Area Plan and with important Sea Level Rise Guidance approved by the Coastal Commission. Our conviction is formed by practical questions surrounding the need for such a large seawall and the feasibility of a sediment management program that will mitigate all armoring-caused erosion, which is discussed in a later section.

Our concern also stems from the technical analysis that SFPUC worked on in 2015, entitled "Coastal Protection Measures & Management Strategy For South Ocean Beach - Ocean Beach Master Plan: Coastal Management Framework" (referred to hereafter as the '2015 Design Concept'). While we are aware that SFPUC now considers certain features of the 2015 Design Concept to be technically infeasible, the concept would have drastically different implications for the beach and demonstrates the need for an environmentally preferable alternative that still achieves OBMP goals.

The EIR Has Failed to Analyze an Environmentally Preferable Alternative

While SFPUC seems to treat the 2015 Design Concept as a jumping off point for the project in the draft EIR, the 2015 Design Concept features an armoring proposal with drastically limited impacts to the beach and beach resources. The wall in the 2015 concept was much shorter in both length and height, in addition to being more landward⁶. The concept featured a shotcrete cap covered by 6 feet of artificial fill and sand and colma formation instead of a fixed cementitious layer. In combination with the more seaward siting of other infrastructure discussed in the plan,⁷



1 (cont.)
PP-1



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PD-2

⁶ The 2015 Design Concept states that, "structural protection [of the LMT] consists of a low-profile wall seaward of the tunnel and a cap over the tunnel that provides the required hold down within six feet vertically of the LMT." The 2015 Design Concept also divided the project site into 4 phases, and proposed a wall for approximately 800 linear feet of seawall in phase 1 and another 800 feet in phase 2. Phase 3 and 4 would feature strategies implemented on a trigger basis. (*Coastal Protection Measures & Management Strategy For South Ocean Beach - Ocean Beach Master Plan: Coastal Management Framework*, Page 10).

⁷ The proposed seawall would be located at least 14 feet seaward from the 2015 Design Concept.



these features allowed for a back beach and more traditional dune system which was generally more recreatable and held more capacity to retain sand naturally.

As stated above, Surfrider acknowledges that SFPUC has done further analysis of this design concept and found aspects of the design to be infeasible and/or unaffordable. We reference the concept in order to illustrate the point that, although the EIR concept may 'look' similar to the 2015 Design Concept in certain features (the presence of a low profile wall, and some managed retreat of the beach), many of the environmental benefits of the 2015 design are missing and should be restored in a reimagined design alternative.

The planning context surrounding South Ocean Beach must facilitate a project with increased natural capacity to resist and respond to erosion without constant artificial replenishment. This has widespread impacts for environmental resources; including access, habitat, and recreation.

The EIR fully acknowledges that erosion in combination with high tides could become so significant under sea level rise conditions that the wall in its proposal may become exposed, which would signify the complete loss of portions of the beach and would trigger further erosion-inducing effects caused by the seawall. This is made clear on page 2-14:

“Under normal conditions, the wall and slope stabilization would remain buried. However, the wall and slope stabilization could be exposed after severe storms and high wave conditions when the beach and bluff can erode away rapidly.” (EIR, 2-14)

Surfrider strongly encourages the City to explore opportunities for reinstating aspects of the dune system and back beach; which may include an adjustment to the location of the coastal trail and/or aspects of the seawall that will reduce the slope fronting the wall and allow the wall to be situated more landward.

Further, Surfrider would like to point out that the wall; which is larger, higher, and more seaward than was expected based on previous design concepts and a history of intentions to limit armoring in the area, is not the only form of armoring proposed in the EIR project concept. The pedestrian path is attached to the cementious sand slayer slope, and a service road now exists along the path. All of this is not easily removable and sets a back to the beach as sea levels rise.

The enforced slope in particular will serve as a front line of 'de facto' armoring that can contribute to beach erosion in the near future. Surfrider is aware that the SFPUC project team researched concepts that had made use of this material in order to justify its stabilizing features and make conclusions about its ability to retain sand. However, none of those projects were situated on marine coastlines and would therefore not experience the same impacts from





coastal dynamics. There has been insufficient analysis to show that dunes would actually form on top of this material and the steep 3:1 slope that is planned.

↑ 2 (cont.)
PD-2

Sand Management Details Are Insufficient

Surfrider agrees with statements made in the draft EIR which equate beach loss with impacts to mineral resources, public access, and public recreation. However, Surfrider does not feel at all confident that the draft EIR mitigates for these potential impacts through its descriptions of an artificial sand replenishment program.

Our primary concern is that the EIR does not properly address or characterize a known area of controversy. It does identify the following statement as an area of known controversy related to erosion on the Southern Reach of the beach:

“Estimating rates of sediment transport and erosion of beaches and bluffs are inherently uncertain because of the highly variable nature of the forcing mechanisms that include ocean swells, storm surges, El Nino events, and other unpredictable natural processes.”

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We would like to point out that there is a net average loss of sand over time in parts of the project area⁸ and that sea level rise guarantees further net losses of available beach space. The controversy in question is more about the project’s ability to retain sand in light of these established processes. To that end, Surfrider believes the sand management strategy has not properly considered relevant environmental conditions and we are highly skeptical that the sand retention strategy can effectively mitigate for widespread impacts associated with a project that is unable to retain sand effectively.

The project estimates that sand nourishment will be needed approximately every 2-3 years. This finding stands in contrast to the trend of replenishments needed every 1-3 years. The project assumes that a partnership with the US Army Corps (USACEOE) will bring ‘large’ sand placements to the beach, and these are estimated to be almost 200,000 cubic yards larger than

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PD-6

⁸ “ Monthly U.S. Geological Survey (USGS) shoreline data collected at South Ocean Beach between 2004 and 2020 shows an average annual shoreline erosion rate of about 1.7 feet per year, with as much as 4.3 feet per year occurring towards the south end of the project site (i.e., near the Southwest Ocean Outfall).^{11,12} For context, the USGS data for the shoreline to the north of the project area (“Middle Ocean Beach”, extending south from Lincoln Boulevard to Sloat Boulevard) shows an average annual *accretion* (the accumulation of sand) rate of about 4.3 feet per year. Closer to the project site (i.e., within 1,000 feet upcoast of Sloat Boulevard), the average annual accretion rate is around 0.7 feet per year.¹³ In contrast, the USGS data show average annual bluff and backshore erosion along Fort Funston to the south of the project area as roughly 2 to 3 feet per year, and closer to 5 feet per year immediately adjacent to the project site. *Revetments* slow shoreline retreat by protecting the land from direct exposure to ocean waves.” (EIR, page 14 (I-6))



the largest ever placement in this area (see Table 1-1 in Draft EIR.) Not only are details on the potential partnership very vague, but the additional cost of pumping so much additional sand from offshore has not been calculated. Additionally, the retention of this type of sand has not been properly analyzed, with the only similar offshore placement occurring in 2021 (thus there has not been enough time to analyze this offshore sand for multi-year retention success.)

Surfrider also questions whether the triggers that are meant to enact sand placement will be effective in this context. The first trigger, which would be reached if beach width were less than 50 feet over 500 or more total linear feet of beach, may happen multiple times in a given season when swells are strong. The report states that sand replenishment will likely occur “approximately once every 2-3 years,” “depending on sand availability,” which means the beach could be virtually lost for up to 3 years after a strong storm season.

The second trigger, which states that sand placements would occur if 500 feet or more total length of the buried wall were observed or exposed, doesn’t account for a scenario where less than 500 feet is exposed, and the beach has become pinched such that no lateral access is possible. The impacts on public recreation seem clear. **With such little information about the cost, the Army Corps partnership, the quality of offshore sand for this beach and the effectiveness of triggers in ensuring that the beach is walkable; Surfrider finds it difficult to assume that artificial sand replenishment will indeed keep the beach covered 98% of the time⁹, as the report concludes.**

The associated disappearance of the beach equates to the loss of many resources that are unable to be fully analyzed in the report. A narrow beach means less space for public recreation, including walking, fishing, and swimming. It also increases the likelihood of a ‘pinched’ section of beach, which could destroy lateral access in this area altogether. Any amount of degradation of the vegetated hill would be lost habitats to dune species including the bank swallow. Finally, sand itself is a mineral resource that is becoming increasingly valuable as sea levels rise. The lack of analysis of a project which is better able to maintain sand naturally is a serious oversight.

Even if artificial sand replacement were affordable, successful and guaranteed on a schedule which could properly maintain resources in this area, the report acknowledges that a ‘small’ sand placement for the area includes 2,830 truckloads of sand and weeks of the beach being closed to recreationalists. Again we point out that a project alternative with more adaptive capacity that relies on less artificial sand placement would be far more environmentally preferable and would expose the current plans as using “large amounts of fuel in a wasteful



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PD-6

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EN-1

⁹ Table 2-2 on page 2-26 of the DEIR states that large sand placements will result in beaches being greater than 25 feet wide for 98% of the year/



manner,” in conflict with the finding related to Impact EN-1, which states that “*The project would not result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner*” is less than significant.

↑ 6 (cont.)
EN-1

Other Considerations in the EIR

Parking Conclusions Are Woefully Inadequate

Most of the coastal access parking in this area has been lost due to erosion since the late 1990s. When new wastewater infrastructure at south Ocean Beach was originally installed, more than 200 spaces existed in two parking lots south of Sloat. Now, only a single 35-space parking lot at the Sloat intersection remains. The 2015 Design Concept earmarked two parking lots for restoration — one at the end of Zoo Road, slated to replace the primary access parking lot at Sloat and another near the Skyline intersection. The Zoo road site would have constituted the primary coastal access lot and would have included a restroom, shower, bike rack and trash/recycling facilities. The current project appears to only confirm the Skyline parking lot, which would provide for 65 spaces. This is a serious diminution of parking. The lack of a better plan for parking is particularly disappointing when one takes into account the enormous increase in visitation to Ocean Beach that has been evident to locals in recent years.

7
TR-5

The Service Road is a New Feature of the Plan that Takes Away Beach Space

This feature was not located in the coastal restoration area outlined in the OBMP. The EIR Project features a road that has been placed directly alongside the multi-use path, thus adding new infrastructure and covering more habitat in an area that was intended to be mostly dune. Currently, SFPUC accesses the Wastewater Pumpstation from the Zoo Parking lot, located behind the coastal berm. Surfrider recommends that any service road keep to this more inland route.

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PD-9

The Proposed Accessway is Concrete Subject to Coastal Hazards

The 2015 Design had envisioned wooden sand ladder pathways to the beach similar to the ones found at other National Park Service beach access points in the Golden Gate National Recreation Area. Surfrider applauded that method as it was low impact and easy to fix if damaged by wave attack. Unfortunately, the new seawall is such a large structure that a concrete staircase access system is proposed to safely traverse over it. This again deviates from the goal of minimizing infrastructure that is subjected to coastal hazards.

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PD-5



Conclusion

Thank you for the opportunity to comment on this draft EIR. We hope to work with SFPUC and all interested to pursue changes to this plan that honor the OBMP vision for a more sustainable beach and public access friendly project for the area.

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GC-5

Thank you,

Holden Hardcastle
Chair
Surfrider Foundation San Francisco Chapter

Laura Walsh
California Policy Manager
Surfrider Foundation



January 24, 2022

Julie Moore
San Francisco Planning Department
49 South Van Ness Avenue Suite 1400
San Francisco, CA 94103

Re: Support for the Certification of the Ocean Beach Climate Change Adaptation Project Draft EIR

Dear Ms. Moore,

Walk San Francisco is in strong support of the certification of the SFPUC Ocean Beach Climate Change Adaptation Project Draft Environmental Impact Report. This project represents a transformative opportunity to create new, accessible space for people walking in a safe, healthy manner along the waterfront.

As the city’s only pedestrian advocacy organization speaking up for the city’s 874,000 residents and 24 million visitors who walk in the city, we believe San Francisco can and should be the safest, most walkable city in the United States, and projects like the Climate Change Adaptation Project will get us closer to that goal.

As shown by the popularity of the temporary people-first space along the Upper Great Highway north of Sloat Boulevard, San Franciscans are desperate for more coastal space to travel by foot. By adding a wide, 15-foot multi-use accessible path with enough space for walking and biking, people of all ages and abilities will be able to enjoy outdoor recreation and travel, as well as enjoying new access to the shore.

While we understand that the project may create impacts from traffic noise from auto traffic that is re-routed, we support the possible methods of mitigation noted, such as speed limit reductions, new traffic signals, and traffic-calming measures. Indeed, all of these options help the project align with other official city goals noted, including the Vision Zero goal to end serious and fatal traffic crashes in San Francisco. Additionally, while the Draft EIR notes a possible increase in vehicle miles traveled, we concur with the likelihood that “the actual increased VMT may be less as that increase may not occur every day over an entire year and numerous studies have shown that projects that reduce the number of through lanes result in less or no changes to VMT due to people taking fewer vehicle trips, among other factors.”

Walk SF firmly believes the Climate Change Adaptation Project will bring important pedestrian access improvements to the western part of San Francisco. We recognize this project as a strong step forward toward a city with more places for people to safely walk without fear of the dangers of car traffic. For these reasons, we support the certification of the project’s Draft Environmental Impact Report.

Sincerely,

Jodie Medeiros, Executive Director

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GC-2

A-3 INDIVIDUAL COMMENTS

From: [Lisa Aguilar \(laaguilar1829@sbcglobal.net\)](mailto:laaguilar1829@sbcglobal.net) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 11:45:55 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Lisa Aguilar
532 45th Ave
San Francisco, CA 94121
laaguilar1829@sbcglobal.net
(415) 387-7437

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Kelley Akin \(kelly.akin@gmail.com\)](mailto:kelly.akin@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Sunday, January 23, 2022 4:39:33 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Kelley Akin
486 Arlington St
San Francisco, CA 94131
kelly.akin@gmail.com
(415) 794-9010

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Jon Anderson \(jca101@hotmail.com\)](mailto:jca101@hotmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 3:25:35 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Jon Anderson
1011 Eucalyptus Road
Mckinleyville, CA 95519
jca101@hotmail.com
(707) 834-3775

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Edmund Antell](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Friday, January 21, 2022 7:21:58 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: [Maya argaman](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 9:39:01 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Thanks !
Maya

From: [Nina Atkind](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 9:23:04 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: [Nina Atkind \(ninaatkind@gmail.com\)](mailto:ninaatkind@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Thursday, January 20, 2022 9:20:39 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Nina Atkind
128b Riley Ave
San Francisco, -SELECT- 94129
ninaatkind@gmail.com
(617) 529-7648

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Laura Barzano \(thelostlocust@yahoo.com\)](mailto:thelostlocust@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 9:46:04 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Laura Barzano
2089 sandalwood dr
Santa Maria, CA 93455
thelostlocust@yahoo.com
(562) 341-8411

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Anne-Marie Basso](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 6:23:17 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sent from my iPhone

From: Katharine Beale (katembeale@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 10:59:48 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Katharine Beale
1437 willard st
San Francisco, CA 94117
katembeale@gmail.com
(415) 702-6583

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Alina Bekkerman \(abekkerman@gmail.com\)](mailto:abekkerman@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 5:05:55 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Alina Bekkerman
2780 19th Ave. #64
San Francisco, CA 94132
abekkerman@gmail.com
(415) 385-5652

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Peter Belden](#)
To: [CPC.OceanBeachEIR](#)
Subject: support Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 18, 2022 8:26:15 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco I very rarely drive on the southern half of the great highway. I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Peter Belden
Resident of Potrero Hill
Co-Chair, Potrero Boosters and Dogpatch Neighborhood Associations joint Livable Streets Committee

1
GC-2

From: [Delia Bense-Kang \(dbense-kang@surfrider.org\)](mailto:dbense-kang@surfrider.org) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 10:23:12 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Delia Bense-Kang
2215 Sunset Ridge
McKinleyville, CA 95519
dbense-kang@surfrider.org
(707) 497-8866

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Corey Block](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 8:45:17 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: Daniel Boccia (daniel.boccia@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 1:00:35 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Daniel Boccia
2330, 44th Ave
San Francisco, CA 94116
daniel.boccia@gmail.com
(978) 505-0711

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Maria Bocharova \(mariabocharova@gmail.com\)](mailto:mariabocharova@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 6:38:07 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Maria Bocharova
2235 45th Ave
San Francisco, -SELECT- 94116
mariabocharova@gmail.com
(502) 249-4667

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: aeboken
To: CPC.OceanBeachEIR
Subject: SFPUC Ocean Beach Climate Change Adaptation Project (2019 - 020115 ENV)
Date: Sunday, January 23, 2022 9:34:13 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

RE: SFPUC Ocean Beach Climate Change Adaptation Project (2019 - 020115 ENV)
Planning Commission Meeting January 6, 2022 agenda item #8

This is to follow up on my public comment at the Planning Commission meeting.

The environmental review is inadequate because it fails to analyze the effects on sandmining in San Francisco Bay on erosion at the southern area of Ocean Beach and accretion at the northern area of Ocean Beach.

This has been demonstrated by a US Geological Survey study.

<https://avanan.url-protection.com/v1/url?o=https%3A//www.google.com/amp/s/www.sfgate.com/science/amp/SF-Bay-sand-mining-alarms-conservationists-4121440.php&g=ZWMxMzU4YTYxNzg5ZjllMw==&h=MzE4ZWl0MTZhOGU1NTYyNjM1NzcwYWU1MjcjMDNkODg0YTJjOWIzNDZlNDYxNzc2NjA5YjMyMDQ1ZDg2YzNhYQ==&p=YXAzOnNmZHQyOmE6bzo2ZDI5NGMyYjY5OTAwNjBhYzRmYzkwYjIxZTAxZjUzZTp2MTp0Ok4=>

<https://avanan.url-protection.com/v1/url?o=https%3A//www.sfoxaminer.com/news/sand-mining-in-sf-bay-dealt-blow-by-state-appeals-court&g=ZGM2NjYwMGYzZDI4MmMxMA==&h=NjYzMDQ1ODgxZTBINDk5ZDU5ZDM2ODJiMjQ1N2UzMjcZTFM0Dg1YWI3NGI2ZmRlOWQ2NmRjYjBiYWl0ZGU2OA==&p=YXAzOnNmZHQyOmE6bzo2ZDI5NGMyYjY5OTAwNjBhYzRmYzkwYjIxZTAxZjUzZTp2MTp0Ok4=>

<https://avanan.url-protection.com/v1/url?o=http%3A//www.allgov.com/usa/ca/news/controversies/state-appellate-court-halts-excessive-sand-mining-in-san-francisco-bay-151120%3Fnews%3D857897&g=ZGVIM2RINDU2M2VkJmJyYg==&h=NjUwNDJjOWYwZmIwNWVkn2RiZDlhNTE4ZmJkYTlmYjJhMzQ1MjM4N2QyYTYyYzkwNDk3MzJjMmE1ZWU1OTM0Mg==&p=YXAzOnNmZHQyOmE6bzo2ZDI5NGMyYjY5OTAwNjBhYzRmYzkwYjIxZTAxZjUzZTp2MTp0Ok4=>

Respectfully submitted,

Eileen Boken,

State and Federal Legislative Liaison

Coalition for San Francisco Neighborhoods*

* For identification purposes only.

Sent from my Verizon, Samsung Galaxy smartphone

1
GE-1

From: [Kristin Brinner \(kristin.brinner@gmail.com\)](mailto:kristin.brinner@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 2:35:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Kristin Brinner
246 Barbara Ave
Solana Beach, CA 92075
kristin.brinner@gmail.com
(858) 876-8293

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Christian Bruchman \(bruchmct@gmail.com\)](mailto:bruchmct@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 6:51:21 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Christian Bruchman
1343 De Haro St. Apt 2
San Francisco, CA 94107
bruchmct@gmail.com
(415) 265-4996

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Anamarie Burke (anaburke@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Sunday, January 23, 2022 8:59:37 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Anamarie Burke
3315 Fillmore Street
San Francisco, CA 94123
anaburke@gmail.com
(415) 699-3102

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Ben Busse (benbusse@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 1:12:20 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

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2
GE-1

Thank you

Sincerely,

Ben Busse
25 Madrid Street
San Francisco, CA 94112
benbusse@yahoo.com
(415) 699-2343

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Mazzaferro, Vincent](#)
To: [Mary Rose Cassa](#)
Cc: [Info; CPC.OceanBeachEIR](#)
Subject: RE: Ocean Beach Fact Sheet
Date: Thursday, January 13, 2022 8:34:27 AM

Mary,

Thank you for your response on the email I sent out yesterday. I have shared your comment with our project team, but please remember that to be included in the comment period for the Draft Environmental Impact Report, comments must be submitted to CPC.OceanBeachEIR@sfgov.org, which I have cc'd on this email, or sent to the planner, Julie Moore at the address below.

Environmental Planning Department
49 South Van Ness Ave, #1400
San Francisco, CA 94103

Best,

Vince

-----Original Message-----

From: Mary Rose Cassa <mcassa@earthlink.net>
Sent: Wednesday, January 12, 2022 3:28 PM
To: Info <info@sfgov.org>
Cc: Mazzaferro, Vincent <VMazzaferro@sfgov.org>
Subject: Ocean Beach Fact Sheet

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Regarding the fact sheet that was sent with Vincent Mazzaferro's email of January 12, I note that the proposed new restroom facility and new parking lot are at opposite ends of part of the Great Highway that will be taken out of service. It seems it would make a lot of sense to have restrooms close to the parking lot.

Mary Rose Cassa
Ortega Street, SF

1
PD-5

Public Comment - Ocean Beach Climate Change Adaptation Project

Michael Cawthon <michaelcawthon@comcast.net>

Mon 1/24/2022 6:21 AM

To: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sfgov.org>

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To Whom It May Concern:

I have a couple recommendations to improve the accuracy and completeness of the Draft Environmental Impact Report (EIR) for the Ocean Beach Climate Change Adaptation Project.

Transportation and Circulation

The Draft EIR did not adequately calculate the additional vehicle miles traveled (VMT) caused by the proposed closure of the Great Highway Extension. The report should be corrected to include the additional VMT that will result from all vehicles that will be diverted by the proposed closure of the extension.

The Draft EIR estimated that 20,000 vehicles used the Great Highway Extension daily. The report estimated that 73% of the traffic diverted from the closure of the Great Highway Extension would use the Sloat-to-Skyline route east of the zoo and the wastewater treatment plant. The report estimated that the remaining 27% of the diverted traffic would reroute to other parallel streets (e.g. Sunset Boulevard).

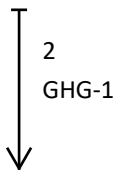
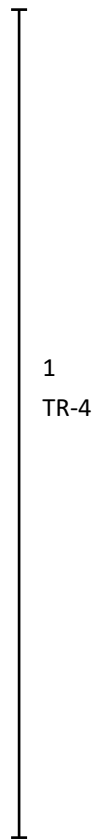
When calculating the additional VMT from the closure of the Great Highway Extension, the report only used the 73% of vehicles diverting to the Sloat-to-Skyline alternative. The report estimated that these 14,600 vehicles/day would travel an additional distance of 0.46 miles each trip. This would result in additional VMT of 2.45 million miles per year, which is the figure included in the draft report.

The report however, did not calculate the additional VMT from the other 5,400 vehicles/day rerouting to Sunset Boulevard or other parallel streets. These other diversions would also generate additional VMT from the closure of the Great Highway Extension. For example, a vehicle starting at the intersection of the Great Highway and Lincoln Way would likely head east on Lincoln to Sunset Boulevard, and travel south on Sunset before eventually connecting to Skyline Boulevard and traveling further south to the intersection with the Great Highway Extension. This route would be nearly one mile longer than the original route incorporating the extension, and about one-half mile longer than the Sloat-to-Skyline alternative described above.

The 5,400 other daily diversions would result in nearly 2.0 million additional VMT per year. The project would therefore result in a total of about 4.4 million of increased VMT annually. This figure should be properly reflected and explained in the Final EIR.

Greenhouse Gas Emissions

The analysis of greenhouse gas emissions (GHG) in the Draft EIR should be updated to reflect the more accurate increase in VMT from the proposed closure of the Great Highway Extension (see Transportation and Circulation above).



1/24/22, 12:18 PM

Mail - CPC.OceanBeachEIR - Outlook

This project alone would not result in enough additional GHG emissions to have a noticeable impact on global climate. As such, agencies are not required to perform a quantitative analysis of the project's additional GHG emissions. Nonetheless, in the interest of accuracy and transparency, the report should be updated to provide a quantitative analysis of GHG emissions from the project.

The report has already concluded that the project would generate significant additional VMT. The volume of GHG emissions from the significant additional traffic generated by this project should also be calculated and included in the report, to provide a more complete and accurate depiction of the impacts of this project. Failure to quantify the amount of additional GHG emissions from this project, simply because it would not have a significant impact on global climate, would be a disservice. The Final EIR should provide an estimate of increased GHG emissions to provide a complete assessment of all environmental impacts of this project.



2 (cont.)
GHG-1

Sincerely,
Michael Cawthon

From: [june.chen](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 10:47:49 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

Regards, June Chen

Sent from my iPhone

1
PP-1
2
GE-1

From: [Matt Ciganek](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 9:05:41 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

As an Outer Sunset Resident and President of the Outer Sunset Safer Streets Neighborhood Association I have come to understand the complexity and with that, the many problems with the current draft proposal. I have discussed this with many members of my association as well as individuals who contributed to your report and project.

1
GC-2

The closure of the Upper Great Highway south of Sloat Boulevard, as much as you'd like to paint it that way, is not a foregone conclusion and you'll soon be hearing additional alternatives to that poorly considered option.

2
GC-2

The seawall that has been proposed appears to have discounted all neighborhood input as well as that of the various environmental groups.

3
GC-5

Predicting a need for a seawall due to climate change and then taking the rosy view that the wall won't cause erosion is clearly an unacceptable juxtaposition with disastrous consequences.

4
GE-1

Trying to plan the "project" South of Sloat without including and incorporating possible future changes to the Upper Great Highway from Sloat to Lincoln as a whole is an exercise in futility and mismanagement of public resources. It simply isn't going to come to pass. Time to start anew, whether you like it or not.

5
GC-4

Matt Ciganek
2064 Great Highway, SF CA

From: [Lucy Colvin](#)
To: [CPC.OceanBeachEIR](#)
Subject: Comment: keep Great extension Hiway open
Date: Monday, January 24, 2022 12:29:51 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: Julie Moore and SF Planning Commission

From: Lucy Colvin

Outer Sunset resident in San Francisco

Dear Ms. Moore,

This is my public Comment.

I have lived in the outer sunset since 1997. I am extremely concerned that you are planning to close the great hiway extension permanently. For those of us who live out here this roadway which connects to Highway 35 is a main arterial in the same way that Oak Street and other essential SF streets are main arterials.

1
GC-2

Up amd down the Northern California coast, HiWay one often collapses and erodes during storms and there is never a question whether they should fix it again so people can navigate to and from their destinations. It is always repaired. Similarly, San Francisco is a big city and there is no reason that one of our main thoroughfares should not be rebuilt and fortified as often as needed to accommodate the needs of those living in the outer Richmond and outer Sunset to expediently get to and from their destinations, which are often involving work or recreation.

There are other options rather than closure to be able to protect the sewage plant and the needs of transportation.

2
AL-1

We believe it is possible to redesign the area by moving the roadway closer to the sewerage treatment plant, and having only a single lane north and southbound, in order to preserve this important westside highway.

Or another solution would be to reroute the Great Highway Extension so that it connects to the access road that currently runs just south of the San Francisco Zoo and intersects with Herbst Road, This access road used to be the road that connected San Franciscans living on the west side to Route 35. It could be again. Why aren't either of these two options being considered?

Please keep the Great HiWay open from Sloat blvd to Hiway 35. Do not Close the Great Hiway extension.

Thank you,
Lucy Colvin
415-412-5368
Lucycolvin@juno.com

Choose to be safer online.

Opt-in to Cyber Safety with NortonLifeLock.
Get Norton 360 with LifeLock starting at \$9.95/month.*
[NetZero.com/NortonLifeLock](https://www.netzero.com/NortonLifeLock)

From: s d (bikesnbooms@msn.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Sunday, January 23, 2022 4:45:18 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

s d
4200 bay st
sag, CT 48603
bikesnbooms@msn.com
(809) 865-4366

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Paul Damon (paul.d.damon@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 10:53:54 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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2
GE-1

Thank you

Sincerely,

Paul Damon
2305 Newell Drive
Aptos, CA 95003
paul.d.damon@gmail.com
(802) 999-5526

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Jeff Daniel](#)
To: [CPC.OceanBeachEIR](#)
Subject: Letter of Support for Great Highway Southern Extension conversion to Bike/Pedestrian Path
Date: Tuesday, January 18, 2022 6:11:01 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am writing to voice my strong support for the Ocean Beach Climate Change Adaptation Project and the plan for a bike path/walking path.

As a resident of the Sunset (District 4) in San Francisco I rarely drive on the southern extension of great highway but walk and ride my bike there often to surf in front of the Water Treatment Plant. Using alternative roads to drive past the Zoo is a small price to pay for this change.

I am looking forward to using the multi-use trail and bike path. Right now it's difficult to walk and dangerous to bike through this route, but I still do it to access surfing spots. I look forward to the improvements that will open up this ocean front space and make it safer and better prepared for climate change-caused erosion.

Thank you for your hard work helping our city adapt to our changing climate.

Jeff Daniel
2586 Great Highway
SF CA 94116
415-948-6039
District 4 resident and voter

1
GC-2

From: [Dave](#)
To: [CPC.OceanBeachEIR](#)
Subject: Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 12:38:54 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Surfrider organization is not concerned with anything other than surfing. A wall would allow use by everyone.

1
GC-2

From: Lynne Davies (lynne.davies3@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 4:53:20 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Lynne Davies
327 Caselli AVE
San Francisco, CA 94114
lynne.davies3@gmail.com
(415) 558-9211

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Parker Day](#)
To: [CPC.OceanBeachEIR](#)
Cc: [Scott, Monica \(REC\)](#)
Subject: Ocean Beach Climate Change Adaptation EIR Public Comment
Date: Wednesday, January 19, 2022 12:29:10 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am a resident of San Francisco and wanted to provide public comment on the Draft EIR and general support for the Ocean Beach Climate Change Adaption Project.

I first learned of the project in 2013, so I am happy to finally have the opportunity to see the Draft EIR and hear of the potential to move this essential project forward. It is clear that closing the Great Highway Extension and replacing it with active transport/recreation infrastructure, along with rebuilding the vital sewer infrastructure, is of the utmost importance. I support this wholeheartedly.

Restoring the coast to be resilient, more in tune with its natural state, and hardening our aging infrastructure is overdue. Using this land as a highway was short-sighted and a mistake.

Thank you for working to adapt our coast to the realities of climate change, while also working to provide new, active transit infrastructure that will help San Franciscans mitigate their environmental impact in the process.

Thanks again,

Parker Day
415-488-6812

1
GC-2

From: [Deanna](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 10:18:28 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: Maksim Derbin (maxim@derbin.io) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Saturday, January 22, 2022 11:52:57 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Maksim Derbin
1977 48th Ave
San Francisco, CA 94116
maxim@derbin.io
(312) 889-4920

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Ashley Devore (ashleycdevore@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:06:41 AM

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Dear Julie Moore,

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2
GE-1

Thank you

Sincerely,

Ashley Devore
839 Dolores St.
San Francisco, CA 94110
ashleycdevore@gmail.com
(415) 824-0964

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Shelby Dillingham \(dilli104@mail.chapman.edu\)](mailto:dilli104@mail.chapman.edu) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:47:23 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

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2
GE-1

Thank you

Sincerely,

Shelby Dillingham
3711 Fillmore St
San Francisco, CA 94123
dilli104@mail.chapman.edu
(925) 984-7176

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Georgina Doolittle \(georgina.doolittle@yahoo.com\)](mailto:georgina.doolittle@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 5:52:01 PM

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Dear Julie Moore,

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2
GE-1

Thank you

Sincerely,

Georgina Doolittle
665 Northern Ave
Mill Valley, CA 94941
georgina.doolittle@yahoo.com
(831) 915-5330

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Marissa Dorazio \(stellardraz@gmail.com\)](mailto:stellardraz@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Saturday, January 22, 2022 11:08:56 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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2
GE-1

Thank you

Sincerely,

Marissa Dorazio
414 Laurel st
SF, CA 94118
stellardraz@gmail.com
(416) 503-9215

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Brian Dow](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Sunday, January 23, 2022 8:01:17 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PD-11

2
GE-1

And on a more personal note - I was the Chair of the SF Surfride Chapter for a few years starting in 2017. We had a long history of working with local organizations and agencies to push a managed retreat and gained support from both the scientific community and local citizens. There needs to be a realistic, long-term outlook for Ocean Beach and armoring with a seawall is neither. Do better, and do the right thing.

3
GC-2

- Brian Dow

From: [James Dumanovsky](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 10:24:05 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1

2
GE-1

-James

From: [Timo Eberspaecher](#)
To: [CPC-OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Monday, January 24, 2022 2:00:51 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To the San Francisco Public Utilities Commission,

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Your sincerely, Timo Eberspächer

From: [Max Ernst \(e.maxernst@gmail.com\)](mailto:e.maxernst@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 7:33:14 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Max Ernst
106 Treanor St
San Rafael, CA 94901
e.maxernst@gmail.com
(310) 218-8998

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Scott Feeney](#)
To: [CPC.OceanBeachEIR](#)
Subject: Support: Ocean Beach Climate Change Adaptation Project
Date: Friday, January 21, 2022 12:55:29 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I'm writing to express support for the Ocean Beach Climate Change Adaptation Project.

The trail connection between Sloat and Skyline is much needed. As an SF resident who loves to visit Fort Funston, I've attempted to ride my bike a couple times on the Great Highway Extension as it is now, and it's a terrifying experience. I wouldn't even dare to try walking it.

So I'm really looking forward to the multi-use trail being open in the future. As for vehicle access, it's totally fine with me to take different routes (e.g. Skyline to Sloat) when I travel in a car.

Thanks for your hard work on this project to open up the coastline for people's enjoyment!

Best,
Scott

1
GC-2

From: Andrew Flack (grewsome632@yahoo.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 3:42:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Andrew Flack
551 Chestnut St. Apt. A
San Francisco, CA 94133
grewsome632@yahoo.com
(415) 433-9700

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Amy Foo (foo2018@lawnet.ucla.edu) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 10:51:45 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Amy Foo
1700 California St, Apt 603
San Francisco, CA 94109
foo2018@lawnet.ucla.edu
(626) 589-8191

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Margaret Fowler (megfowler808@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Sunday, January 23, 2022 8:21:52 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Margaret Fowler
1646 48th. Avenue
San Francisco, CA 94122
megfowler808@gmail.com
(628) 300-8629

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Alan Fu \(alanzfu@gmail.com\)](mailto:alanzfu@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:55:42 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Alan Fu
171 Burnside Ave
San Francisco, CA 94131
alanzfu@gmail.com
(650) 575-8062

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Courtney Garneau \(courtneygarneau1@gmail.com\)](mailto:courtneygarneau1@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:35:00 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Courtney Garneau
4 Cedar Point Road
East Hampton, NY 11937
courtneygarneau1@gmail.com
(631) 907-4106

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Damian Gates \(damianhgates@gmail.com\)](mailto:damianhgates@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Thursday, January 20, 2022 11:39:33 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Damian Gates
1602 Grove st
San Francisco, CA 94117
damianhgates@gmail.com
(617) 694-0031

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Elise Gill](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 8:31:38 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sincerely,
Elise Gill
Sf resident

From: [joeyp_giovara \(joeyp_giovara@yahoo.com\)](mailto:joeyp_giovara@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:13:58 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

joeyp_giovara
15 van ripper court
san anslemo, CA 94960
joeyp_giovara@yahoo.com
(415) 699-4681

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Josh Gold](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 4:19:35 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

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1
PP-1
2
GE-1

Thanks.

Josh Gold

From: [Judi Gorski](#)
To: [CPC.OceanBeachEIR](#)
Cc: [Judi - gmail Gorski](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 7:16:20 PM

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I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Judi Gorski
San Francisco Resident

From: paul greer (paulegreer@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:36:53 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

paul greer
2583 44th Ave
San Francisco, CA 94116
paulegreer@gmail.com
(763) 229-4790

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Spencer Hall \(smhall426@gmail.com\)](mailto:smhall426@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 12:14:53 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Spencer Hall
2345 union st
San francisco, CA 94123
smhall426@gmail.com
(415) 926-2851

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Will Hanley](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 1:13:12 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

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1
PP-1

2
GE-1

Sent from my iPhone

From: [Heidi Hansen \(heidihansen.com\)](mailto:heidihansen.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 8:28:10 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Heidi Hansen
145 Laurel Street # 7
San Francisco, CA 94118
heidihansen.com
(858) 775-2157

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: holden_hardcastle
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 9:03:31 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

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1
PP-1

2
GE-1

—
Holden Hardcastle
holdenhardcastle.com
[p.415.846.2697](tel:415.846.2697)

From: Heather Hardison (hdhardison@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 6:09:33 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Heather Hardison
2935 MLK Jr. Way
Berkeley, CA 94703
hdhardison@gmail.com
(510) 495-5828

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Christopher Haslam (chris.haslam@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 9:53:14 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Christopher Haslam
1909 Rose St
Berkeley, CA 94709
chris.haslam@gmail.com
(415) 310-5124

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Steven Hill
To: CPC.OceanBeachEIR
Cc: Steven Hill
Subject: Julie: comment on EIR and closure of the Great Highway Extension
Date: Sunday, January 23, 2022 11:25:20 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: Julie Moore and SF Planning Commission
From: Steven Hill, Outer Sunset resident in San Francisco
Dear Ms. Moore,

My name is Steven Hill, I live at 4315 Lincoln Way, San Francisco, CA 94122. I have lived at that address in the Outer Sunset neighborhood for nearly 25 years.

I am also a member of the Open The Great Highway Alliance. Besides your EIR, I have read every report I can find related to closure of the Great Highway Extension, including the Ocean Beach Master Plan, the Ocean Beach Transportation Study, [Coastal Protection Measures & Management Strategy Report](#), the draft environmental impact report for the Ocean Beach Climate Change Adaptation Project, reports by SPUR and other reports. To date, we have not been able to find a single study, and no data or research, that has established scientifically that the presence of a road there, i.e. the Great Highway Extension, is in any way contributing to coastal erosion, either now or in the future. Did I miss a report that established this connection between how the Great Highway Extension is contributing to coastal erosion?

1
PD-1

This is an important highway for commuters, workers, and people wanting to recreate south of the city and who all live on the west side of San Francisco. Yet the various city agencies are trying to ram this road closure through, just like they did with JFK Drive, "slow streets," the Upper Great Highway, and other road closures during the pandemic. Despite the lack of science and data on this, it appears that the usual agencies have manipulated the information to create yet another "conventional wisdom" that will be extremely hurtful to people living on the west side.

We believe it is possible to redesign the area by moving the roadway closer to the sewerage treatment plant, and having only a single lane north and southbound, in order to preserve this important westside highway. Another possible redesign could include rerouting the Great Highway Extension so that it connects to the access road that currently runs just south of the San Francisco Zoo and intersects with Herbst Road, close to the Pomeroy Recreation and Rehabilitation Center. Historically speaking, apparently this access road used to be the road that connected San Franciscans living on the west side to Route 35. Why aren't either of these two options being considered?

2
AL-1

Instead, the "conventional wisdom" says that the roadway for automobiles will be replaced by a bicycle path and another parking lot. If coastal erosion is such a threat to a redesigned Great Highway Extension to the point where this roadway must be shut down, why is it not also a threat to a bicycle path and a parking lot?

I am one of six plaintiffs who are currently suing the City and County of San Francisco for shutting down the Upper Great Highway, JFK Drive and MLK Drive during the pandemic, and now trying to permanently keep these roads closed. Those road closures are illegal because state vehicle codes such as Section 21101 prohibit cities from shutting down roadways, except for very explicitly defined reasons. Shutting down the Great Highway Extension because you want to put in a bicycle path is not a reason that is authorized by state or local law. And since you have presented no other rationale for closing down this highway – you have presented no science, research or data that the presence of this highway is contributing to coastal erosion – if you try to shut down the Great Highway Extension and put in a bicycle path, you will be acting illegally.

3
GC-2

If you act illegally to shut down the Great Highway Extension, I can promise you that you will be sued. Money is already being raised, and prospective plaintiffs are ready to file a lawsuit, not against the environmental impacts but because closing this roadway for use by the public will be an illegal act in violation of state vehicle codes.

To avoid a lawsuit, I strongly suggest that you consider the two options I outlined above as ways to allow a version of the Great Highway Extension to continue.

Members of our group, the Open the Great Highway Alliance and other allied organizations, are ready and willing to meet with the leaders of this project to figure out if there is a way to compromise and achieve a win-win solution. I truly hope that you are willing to work with us to avoid litigation.

Thank you, sincerely,
Steven Hill

4
GC-2

www.Steven-Hill.com

@StevenHill1776

(415) 665-5044

From: [Dennis Holl](#)
To: [Steve Lawrence](#)
Cc: [CPC.OceanBeachEIR](#)
Subject: Re: DEIR for Ocean Beach Climate Change Adaptation Project, comment
Date: Tuesday, December 14, 2021 2:11:42 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I agree with you.

Why would the Coastal Commission ever approve of this plan, it is a giant seawall!
It makes no sense to replace one hard structure (rocks) with a giant seawall.

1
GC-2

It is totally contrary to the western shoreline plan that was adopted that forbids new armoring at the shoreline.

2
PP-1

It seems they finally realized that the cobblestones would not protect the Treatment Plant.

They should just reconfigure the existing concrete revetments and then pile cobblestones on top. Then place sand on top of that. We keep the road and the land it sits on. Forget managed retreat, there is no benefit from it only huge additional costs.

3
AL-1

The whole thing is BS. In reality, what the plan describes is Option 4, they are proposing to build Option 4.

Dennis

On Mon, Dec 13, 2021, 7:13 PM Steve Lawrence <steveinsf@outlook.com> wrote:

Options being considered are insufficient. Consider leaving rock revetments in place, keeping them covered with sand as best possible. This saves \$180 million, plus environmental impacts of the proposed construction. Especially saved is the risk that nesting birds vacate permanently. There is little practical difference between a wall and the rock now in place. Both are ugly and unnatural. Cover them up. That's the plan, anyway. The 2012 goal of removing the rock is obsolete and unnecessary; rethink it, and discard it.

Steve Lawrence

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I was shocked when I read this report. Years ago, at a public outreach event, I asked one of the planners why don't we just do sand nourishment instead of managed retreat, I was told that sand nourishment would be too expensive. Then the Ocean Beach Master Plan came out and guess what? After doing managed retreat and building a seawall, regular sand nourishment would be required in order to maintain a sandy beach at South Ocean Beach! So there is no benefit to managed retreat.

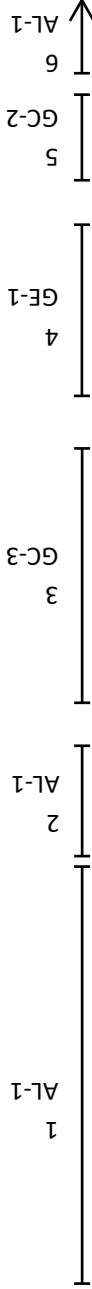
I was told that the rocks at South Ocean Beach had to be removed because the CCC would not approve them. At that time the OBMP included the use of tons of cobblestones to combat erosion, a softer solution than the existing rocks, supplemented with sand nourishment. There is no mention of cobblestones in the Draft EIR. I told the Planning Commission in emails and meetings that the OBMP as written would not protect the Oceanside Wastewater Treatment Plant from erosion by winter waves. Well I guess they heard me finally because the new Draft EIR details a plan to build a huge concrete seawall on top of the low seawall built to protect the Lake Merced Transport tunnel. How is this an improvement over the existing rocks? This is a harder structure than the rocks that are to be removed. How does this comply with the demands of the CCC? Why would they ever approve it? If they would approve a concrete structure from Sloat Boulevard to Fort Funston, then why not build it where the existing rocks are? That would provide better protection from future sea level rise than having it right in front of the Treatment Plant with the added bonus of saving the Great Highway and the natural bluffs under it. Again, there is no benefit from managed retreat.

The OBMP called for a service road from Lake Merced Boulevard to the Treatment Plant entrance and a multi-use trail to the beach. The Draft EIR now has a service road running all the way from Sloat to Lake Merced Boulevard in order to facilitate trucks for sand backpass projects. Might as well forget managed retreat and keep the Great Highway for sand placement operations. And the multi-use trail to the beach? Since the OBMP was concocted, conditions have changed at South Ocean Beach. There is no longer any dry beach south of the Treatment Plant for most of the year. The winter waves eat away at the base of the bluffs at every high tide, causing lots of landslides, one of which killed a young woman on the beach. So the multi-use trail that has been hyped by the Plan leads to nowhere. The Draft EIR includes pictures of a beach access stairwell going down some bluffs but there will be no bluffs, only concrete according to the Plan.

Right now, the existing rock revetment not only protects the Lake Merced Tunnel, the Treatment Plant, and the Great Highway from erosion, it separates the Fort Funston area from the very popular sandy beach from Sloat Boulevard northward. If managed retreat is implemented, the shoreline will recede at South Ocean Beach. This will leave the beach north of Sloat more exposed to erosion from the waves especially during the periodic El Nino winters. It won't be long before the condition of no beach in winter that is south of the revetment to extend northward as it has been doing resulting in a loss of sandy beach at Sloat, Vicente, and Taraval.

This whole project is a boondoggle, written by the same engineers whose firm stands to get more contracts to do the work they called for. It is sheer madness to spend \$180 million to appease the CCC while losing the Great Highway and the beach and exposing the Treatment Plant to more erosion.

The only prudent thing to do is to leave the existing rocks, reconfigure them to a more natural profile, and add tons of cobblestones in front of and on top of them. Then sand nourishment can be done in front of this barrier. This will



result in a much softer structure than the massive concrete seawall called for in the Draft EIR that does not comply with the recently approved Local Coastal Plan. It will save at least \$150 million that will be needed to protect the shore from seas level rise.

Dennis Holl
2951 24th Avenue

↑ 6 (cont.)
AL-1

From: [Dennis Holl](#)
To: [CPC.OceanBeachEIR](#)
Date: Monday, January 24, 2022 9:33:08 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Last week in the Chronicle it said that San Francisco could possibly be hit with a 30 foot tsunami. Even the armoring described in the draft EIR would not protect the Treatment Plant as well as the existing rock revetments would.

1
GC-2

Dennis Holl

From: [Hennie Holstad \(barkvoll@gmail.com\)](mailto:barkvoll@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Thursday, January 20, 2022 12:37:32 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Hennie Holstad
3832 Ortega st
San Francisco, CA 94122
barkvoll@gmail.com
(628) 234-5699

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Harper Honan (harper.honan@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 11:35:14 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Harper Honan
1687 40th Ave
San Francisco, CA 94122
harper.honan@gmail.com
(415) 606-2469

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Krista Howell](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Friday, January 21, 2022 1:25:20 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sincerely,
Krista Howell

Sent from my iPhone

From: [Lena Huang \(lena.huang276@gmail.com\)](mailto:lena.huang276@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:32:04 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Lena Huang
276 Waterville st.
San Francisco, CA 94124
lena.huang276@gmail.com
(415) 770-9881

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Paul Huang (paulyhuang.1@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 1:52:01 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Paul Huang
4103 Cortona Ct
San Jose, CA 95135
paulyhuang.1@gmail.com
(408) 802-9395

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Mark Huckins \(huxstuff@gmail.com\)](mailto:huxstuff@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 2:12:54 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Mark Huckins
11387 Cadence Grove Way
San Diego, CA 92130
huxstuff@gmail.com
(858) 752-4321

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Ryan Hunt (ryanhunt007@hotmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 2:20:25 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Ryan Hunt
2007 46th Ave
San Francisco, CA 94116
ryanhunt007@hotmail.com
(650) 522-0738

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Linda Ingram \(linda3483@gmail.com\)](mailto:linda3483@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Saturday, January 22, 2022 7:05:27 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Linda Ingram
1301 45th Ave, Apt 6
San Francisco, CA 94122
linda3483@gmail.com
(415) 742-5246

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Matthew Ininns](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 5:37:28 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC’s ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Save Sloat!

Matt Ininns

From: [Jim Jaffee \(jimjaffee@gmail.com\)](mailto:jimjaffee@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 2:30:23 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Jim Jaffee
738 Seabright Lane
Solana Beach, CA 92075
jimjaffee@gmail.com
(858) 945-3945

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: jca_
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 3:24:14 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sent from my U.S.Cellular© Smartphone
Get [Outlook for Android](#)

From: [Chanti Jo \(cjolagh@gmail.com\)](mailto:cjolagh@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 10:29:33 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Chanti Jo
1250 48th ave
San Francisco, CA 94122
cjolagh@gmail.com
(209) 513-5426

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Adam Kagel (adam.kagel@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 4:29:10 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Adam Kagel
715 Washington St
Santa Cruz, CA 95060
adam.kagel@gmail.com
(408) 605-5577

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Brian Kelly \(bkkelly4@yahoo.com\)](mailto:bkkelly4@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 2:30:53 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

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2
GE-1

Thank you

Sincerely,

Brian Kelly
11 Marie Street
Sausalito, CA 94965
bkkelly4@yahoo.com
(415) 509-5404

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Joshua Kelly](#)
To: [CPC.OceanBeachEIR](#)
Subject: Support for the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 18, 2022 12:08:59 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

I live at 46th and Vicente and while I sometimes drive the southern half of great highway I have no problem taking Sloat to Skyline Blvd instead.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Josh Kelly
Resident of District 4, San Francisco

1
GC-2

From: [Toby Ketchum](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 12:14:06 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

Thank you,
Toby Ketchum

1
PP-1
2
GE-1

From: [Christoph Krumm](#)
To: [CPC.OceanBeachEIR](#)
Subject: Ocean Beach Project Support
Date: Wednesday, January 19, 2022 10:55:53 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Ocean Beach Planning Team,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of the Outer Richmond neighborhood, I have greatly enjoyed the new public space that has been created by the closure of the great highway. Being able to access nature in a safe way with my entire family (often via bike) has become an activity that we enjoy multiple times per week. While I do drive my car north-south, I have found that the great highway is often a sub-optimal north-south route, and I typically take Sunset Avenue, as it connects better with my destinations.

I very much look forward to the proposed improvements in the Ocean Beach Master plan, including the multi-use trail, as I often feel unsafe as a pedestrian or biker along ocean beach when the Great Highway is open to cars. The wide 4-lane setup encourages speeding, especially where cars exit the Great Highway onto Lincoln, and I find myself waiting as far from the road as possible due to the extreme speeds.

Thank you for your work on this project, and I look forward to an ocean front space that is accessible, environmentally-conscious, and open for all to enjoy.

Best Regards,
Christoph Krumm
D1, Outer Richmond Resident

1
GC-2

From: [Jonny Designs](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Monday, January 24, 2022 4:52:47 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Thanks,
Jonny Kwong
San Francisco Resident and Surfer

From: [James Laharty](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Saturday, January 22, 2022 10:12:45 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sent from my iPad

From: [Jennifer Latham \(jlynnelatham@gmail.com\)](mailto:jlynnelatham@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 8:30:19 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Jennifer Latham
669 54th St.
Oakland, CA 94609
jlynnelatham@gmail.com
(415) 205-6107

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Steve Lawrence](#)
To: [CPC.OceanBeachEIR](#)
Subject: DEIR for Ocean Beach Climate Change Adaptation Project, comment
Date: Monday, December 13, 2021 7:14:15 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Options being considered are insufficient. Consider leaving rock revetments in place, keeping them covered with sand as best possible. This saves \$180 million, plus environmental impacts of the proposed construction. Especially saved is the risk that nesting birds vacate permanently. There is little practical difference between a wall and the rock now in place. Both are ugly and unnatural. Cover them up. That's the plan, anyway. The 2012 goal of removing the rock is obsolete and unnecessary; rethink it, and discard it.

1
AL-1

Steve Lawrence

From: [Steve Lawrence](#)
To: [CPC.OceanBeachEIR](#)
Subject: Comment to Draft EIR for project to build a low-profile pile wall at South Ocean Beach
Date: Wednesday, January 5, 2022 7:27:24 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To best avoid the possibility of permanently terminating nesting of threatened bird species, and to avoid pollution and other adverse environmental effects of using much concrete, cancel the project to build a low-profile wall, and rely instead on existing rock revetments, and future, annual sand placements to retreat in a managed way per the Ocean Beach Master Plan.

1
AL-1

Respectfully, Steve Lawrence

From: [colleen.lenahan](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 2:25:51 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Thank you,

Colleen

Sent from my iPhone

From: [Helen Liu \(liuhelen10@gmail.com\)](mailto:liuhelen10@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 7:43:25 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Helen Liu
765 Arguello Blvd, Apt 7
San Francisco, CA 94118
liuhelen10@gmail.com
(206) 599-9968

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

1/24/22, 12:13 PM

Mail - CPC.OceanBeachEIR - Outlook

Ocean Beach EIR Comments

Denise Louie <denise_louie_sf@yahoo.com>

Sun 1/23/2022 5:25 AM

To: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sfgov.org>

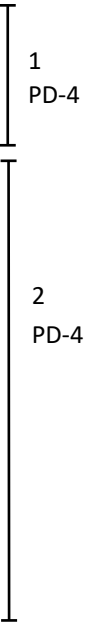
This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi Julie Moore,
Please accept and forward my comments regarding the Ocean Beach EIR.

Thanks,
Denise

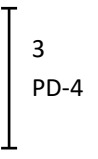
To the San Francisco Planning Department and all concerned with the Ocean Beach EIR:
Thank you for this opportunity to provide public comment.

The EIR is heavily focused on movement and placement of sand and benefits for human use, even though a primary objective is to "preserve and enhance coastal...habitat...at South Ocean Beach". For example, plants and wildlife are not mentioned in the first few pages; only 3 words, "plant native vegetation" appear on p. 10, Biological Resources on p. 11. Further, while there is only one area marked for restoration of native plants, the EIR should require all SF native plants for the entire project and to source plants from nurseries like the Golden Gate National Parks Conservancy's nearby Fort Funston nursery or LEJ. LEJ propagates plants for projects like this.



"The plants selected would be native, climate-appropriate, locally adapted, and non-invasive, and would require low amounts of water." Nowhere is "native" defined; the EIR should define native as "native to San Francisco", inasmuch as "native" plants from outside SF are not native to SF. And the project is in or near sensitive habitats that have been degraded but still support naturally occurring rare, threatened or endangered indigenous species. Ref: p. 2-30. 2.5.1.4 PHASE 4

Regarding invasive plants, the EIR should address cleaning of all materials--including clothing, tools, equipment, machinery, vehicles and port-a-potties--to avoid introduction or spread of invasive plants. (Not addressed in the EIR)



The EIR concludes that disruption of bank swallow habitat is significant and unavoidable and claims signage is the only mitigation because one other attempt to protect a riparian nesting site elsewhere failed. This is too easy and hasty a conclusion. "[T]he potential impact on bank

swallows from construction of the buried wall and bluff reshaping would eliminate [approximately 500 feet of historical] bank swallow breeding habitat within the project site, the ability of mitigation to fully offset the habitat loss is uncertain, and implementing the identified mitigation relies on outside parties. For these reasons, the project impact would be significant and unavoidable with mitigation." p. 4.6-48

↑
4 (cont.)
BI-1

The EIR should focus more on restoring habitat, which would be in line with the SF Board of Supervisors' Biodiversity Resolution, the State's Biodiversity Initiative, as well as the United Nations' Decade on Habitat Restoration. Considering all the cumulative negative environmental impacts humans have had on what was once an intact ecosystem, we should build back better, as President Biden would say. Consider also that "adverse effects on San Francisco spineflower, nesting bank swallow and other nesting birds, the sensitive natural community yellow sand verbena – beach burr dune mat alliance, jurisdictional waters, avian migration, and special-status bats or maternal roosts could occur under construction of the project or the cumulative projects." p. 4.6-72 Restoring habitat should include removal of iceplant and other invasive plants and their replacement with specific SF native plants.

5
PD-4
6
PD-4

Because of increased access via the concrete stairs to be constructed, the EIR should (a) ensure that trash cans will be more regularly emptied to prevent overflowing and designed not invite rodents and corvids, (b) evaluate the impact of humans and dogs on plants and wildlife in the project area and (c) require educational outreach. Educational outreach is important to "preserve and enhance coastal...habitat...at South Ocean Beach". Litter, bonfires and fireworks are detrimental. The value of local native plants, habitat restoration and biodiversity should at a minimum be included on sign boards.

7
PD-8

Sincerely,
Denise Louie
Native of San Francisco
Member, Center for Biological Diversity

From: [Lucas LL](#)
To: [CPC.OceanBeachEIR](#)
Subject: supporting Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 19, 2022 1:33:04 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

As a resident of the Sunset District in San Francisco I rarely drive on the southern half of the Great Highway. I am fine with using alternative roads to make north-south connections by car.

I am looking forward to using the multi-use trail. I am also excited about the addition of a paved coastal trail that will be more accessible for elderly and disabled folks to use and enjoy the coast.

Thank you for your hard work helping our city adapt to our changing climate.

Best,
Lucas Lux

1
GC-2

From: Henry Lyford (hlyford11@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:57:55 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Henry Lyford
1654 39th Ave
San Francisco, CA 94122
hlyford11@gmail.com
(907) 947-8364

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [J. Mach113](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 12:39:19 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC’s ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1

2
GE-1

From: [Drew Madsen \(drew.madsen2013@gmail.com\)](mailto:drew.madsen2013@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:11:42 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Drew Madsen
523 44th Ave
San Francisco, CA 94121
drew.madsen2013@gmail.com
(858) 997-7441

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Marni Malone \(enolamm@gmail.com\)](mailto:enolamm@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 10:54:21 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
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2
GE-1

Thank you

Sincerely,

Marni Malone
1345 16th Avenue, Unit 4
San Francisco, CA 94122
enolamm@gmail.com
(415) 717-6732

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Brett Marshall \(brett911@sonic.net\)](mailto:brett911@sonic.net) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 1:34:48 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Brett Marshall
107 Redwood St
Santa Cruz, CA 95060
brett911@sonic.net
(707) 486-5636

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Alix Martin \(alixatblu@gmail.com\)](mailto:alixatblu@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 4:37:58 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Alix Martin
1337 45th Ave
San Francisco, CA 93122
alixatblu@gmail.com
(408) 802-0024

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Matt](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 6:22:06 PM

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I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sent from my iPhone

From: [Matt R](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 12:03:46 PM

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Hi,

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also reconvene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1

2
GE-1

Thanks,
Matt

From: [Kendra McCubbin](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 11:32:15 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: [Bill McLaughlin](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 12:24:08 PM

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I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about the environmental, recreational and access impacts from artificial, steep sloped crown of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Bill McLaughlin
Surfrider Foundation Member and Beach Preservation Activist

1834 45th Ave San Francisco 94122

From: Zachary Meyerowitz (zachmeyerowitz@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 2:25:11 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

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2
GE-1

Thank you

Sincerely,

Zachary Meyerowitz
1555 Shafter Ave
San Francisco, CA 94124
zachmeyerowitz@gmail.com
(818) 590-2016

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Vanessa Miller](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 6:43:13 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To whom it may concern,

Hello, my name is Vanessa Miller and I am a San Francisco local, alumni of San Francisco State, and a current high school educator. Protecting the city of San Francisco is one of my upmost missions in life, as I love the beauty of the city as most people do, but believe we should preserve and protect the nature of the city any way that we can.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sincerely,

Vanessa Miller

From: [Matt Montgomery \(mtmont@gmail.com\)](mailto:mtmont@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 2:12:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Matt Montgomery
1472 48th Ave Apt 6
San Francisco, CA 94122
mtmont@gmail.com
(415) 606-1722

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

To the SFPUC and affected stakeholders and regulators:

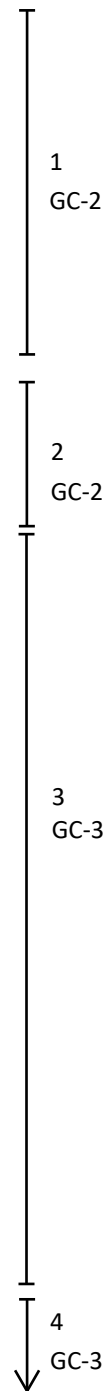
I am writing to both support and object to certain portions of the Draft Environmental Impact Report (“DEIR”) for the Ocean Beach Climate Change Adaptation Project (“Project”), and to raise significant questions with respect to the Project framework itself.

While I support the efforts of certain employees of the City of San Francisco (the “City”) to consider and address material issues with Ocean Beach, and I also support the broad concepts of providing beach and recreational access amidst important environmental considerations, I cannot support an initiative which continues to demonstrate an insufficient and fundamentally flawed response to the current issues in the area. I am hopeful that my disposition towards support of the DEIR, and the Project itself, is respectfully considered by appropriate regulatory agencies such that additional steps are taken to address material risks and concerns in the region.

Specifically, the DEIR has failed to coordinate its analysis with a full review by all necessary City and California state agencies, has been conducted in an information vacuum (which the DEIR itself acknowledges), and demonstrates that one or more city agencies may not be operating in good faith, nor providing sufficient, full, and credible information to the Ocean Beach community about infrastructure needs and risks. As such, I believe that the Project should be rejected and that the California Coastal Commission and other appropriate state agencies should secure and maintain direct oversight of all ongoing project initiatives in the region, and with the City’s authority to unilaterally approve construction permits alongside Ocean Beach immediately rescinded.

The Project is fundamentally and materially flawed for several reasons, including:

1. Certain City agencies have not provided sufficient information to the public about possible project considerations and environmental effects and risks, and may be operating in bad faith due to one or more potential conflicts of interest, including with respect to budgeting deficiencies and special interest considerations.
2. The Project has not been properly coordinated amidst other area projects, and contrary to representations made previously to the public that separate environmental reviews would in fact take place.
3. The Project affects state infrastructure and coastal regions amidst the City’s unilateral authority to issue permits.
4. The Project directly contradicts state requirements with respect to “managed retreat” concepts for proper coastal management, including the development of brand new construction which relies upon a vertical seawall that will enhance the pace of erosion near critical local and state infrastructure.
5. The Project does not address the long-term risks and multi-billion-dollar costs associated with the critical sewage management infrastructure in the area, including with respect to material erosion threats to the Lake Merced Tunnel (“LMT”) and Westside Pump Station (“WPS”).
6. The Project may create additional environmental impacts in the form of noise and emissions which have not been fully studied, yet are inappropriately assumed to be immaterial without sufficient supporting information.



- 7. The Project acknowledges but provides no proposed solution to significant traffic impacts, including increased miles traveled, and increased traffic congestion, which likely will create additional emissions.
- 8. The Project could have a material impact on the City’s litigation profile, as well as federal and state environmental regulatory obligations, and jeopardizes city regulatory compliance as well as tax revenue.
- 9. The Project may impair the City’s ability to adhere to City Charter requirements with respect to sand and pollution management obligations.

↑ 4 (cont.)
GC-3

For all of these reasons the Project should be terminated unless and until each of these material issues have been properly addressed in collaboration with and to the satisfaction of all appropriate and necessary federal and state authorities, and consistent with applicable regulation.

5
GC-2

The source of all these shortcomings has not only been a negligent failure by the City to properly manage the area, but a purposefully deceptive campaign by one or more city agencies or officials to obfuscate certain risks due to potential conflicts of interest. The City has a direct vested interest in limiting costs associated with proper management of its sewage infrastructure, and has been avoiding its civic responsibilities to analyze the long-term solution and costs to a metastasizing problem: **the sewage treatment infrastructure along Ocean Beach - which by some accounts handles a third of the City’s raw sewage - is under assault, and must be relocated.** The very basis for the DEIR and the Project – the assumption that erosion will remove sand on the west side of the WPS and LMT – seems not to be analyzed sufficiently to its obvious conclusion with respect to this critical infrastructure.

6
GC-1

Unfortunately, the erosion isn’t a “goldilocks” scenario where there is not too little, nor too much, but just the right amount of erosion such that existing roadway infrastructure should be displaced in favor of a new bike path, yet no managed retreat simultaneously undertaken with respect to the LMT and the WPS. *If there is indeed erosion it must necessarily mean that the nearby sewage infrastructure is threatened.* While the concept of beach erosion is a fundamentally sound concern, the extent, pace, and effects of possible erosion have not been fully vetted. No further Project work should proceed on an environmental review when the underlying concern has not been examined sufficiently. It is possible that there are *not* material erosion threats to the LMT and roadway above it, particularly if the periodic continuation of the sensible and ongoing project to place dredged sand from the Golden Gate shipping channel by the Army Corps of Engineers is successful. Alternatively, if there are indeed material erosion threats (my personal opinion, for what it may be worth) and those threats have been identified, quantified, and validated such that the project area does indeed require threat mitigation, then the analyzed threat should be addressed by relocating the sewage infrastructure consistent with managed retreat principles rather than just engaging in new construction. San Francisco needs to be clear with its citizens what exact erosion threat it is addressing, how it will be addressed, and whether its residents and other environmentally sensitive parts of the ecosystem are or are not exposed to the risk of raw sewage outfall due to a failure of the LMT and/or the WPS. Given the legacy history of mismanagement in this area – we’ve smelled the sewage before, and will undoubtedly encounter the issue again unless a full solution is implemented – there needs to be a deeper and closer review accompanied by a clearly enunciated statement for the community about the intended handling of the sewage infrastructure.

This review also needs to be conducted independent from the City, which simply does not have the stomach nor budgeting resources to come clean with its residents about where the sewage infrastructure



will be relocated, and how such relocation will be funded. Exacerbating this political issue, and beyond the fundamental conflict of interest associated with City budgeting, is that a more insidious conflict of interest has infected the local community in the form of special interest needs subverting common sense. Specifically, one or more public servants have been supporting the efforts of special interest groups hoping to restrict certain types of vehicular travel, which has a direct impact on the environment and requires further review before the Project may proceed. The targeted type of vehicular travel has been with respect to some but not all motorized vehicles, including personal and commercial vehicles which emit greenhouse gas, such as typical non-electric automobiles and trucks. Certain special interest groups with “sole source” contracts that rely almost entirely on taxpayer money to fund their existence have been encouraging certain city officials to actively impair certain types of vehicular traffic for purported safety and environmental concerns. None of these conflicts, and the associated impact on environmental analysis and issues, have been addressed sufficiently in the DEIR.

To be clear, my personal view is that vehicular travel that minimizes the reliance on fossil fuel vehicles should be encouraged and achieved wherever reasonably possible. Global warming is a real and existential threat which requires good and careful solutions. However, impairing the *efficiency* of vehicular traffic flow just to build a bike path or park is not a holistic solution to a complicated problem, and could in fact create more detrimental emissions. This possible outcome has been observed and questioned by many residents, and was a focal point of attention in a July 27, 2021 letter from the Sierra Club to certain City agencies regarding the use of the Upper Great Highway (“UGH”) roadway, and its proposed closure (“UGH Project”). Unfortunately, while the sewage system beneath the roadway is under threat, certain transportation officials have frittered with road closure goals that are misguided and impair efficient traffic flow for all vehicles.

Evidence of conflicted officials, and even the possibility of their corruption, seems sadly obvious and overwhelming, and at minimum the appearance of impropriety impairs the public process and the credibility of the City and those employees and public servants who are working honestly to address significant issues. In fact, the mishandling of the UGH Project has implicated one transportation leader who was being paid *two* separate salaries – one as a publicly elected member of the BART Board, and another simultaneously as an advocate for a special interest group – and who was the subject of a BART Inspector General Investigation regarding their statements about the UGH Project and the communication protocols associated with their public office.¹ Another senior leader of the city, and *the manager for the city agency directly responsible for UGH oversight*, has recently been deemed to have willfully violated the law with respect to the production of public records in relation to the UGH Project.² One member of the Board of Supervisors, who has sensibly advocated for neighborhood safety with respect to emergency firefighter water pressure amidst obvious earthquake risks, has inexplicably also advocated for the community’s tsunami and earthquake risk to be increased by ongoing road closures - and despite open comments from the city’s fire personnel that closed streets raise risks and impair emergency response times.³ Another member of the City’s own Board of Supervisors has publicly advocated in social media

¹ [https://www.bart.gov/sites/default/files/docs/064-](https://www.bart.gov/sites/default/files/docs/064-2022_RPT_Public%20Summary_Elected%20Official%20Social%20Media%20Best%20Practices_Final_111221_0.pdf)

2022_RPT_Public%20Summary_Elected%20Official%20Social%20Media%20Best%20Practices_Final_111221_0.pdf

² Refer to the **unanimous** finding of the Sunshine Ordinance Task Force on July 5, 2022 under Administrative Code Section 67.34 that Phil Ginsburg as General Manager of the Recreation and Parks Department committed willful violations of the law, constituting official misconduct.

³ See e.g., <https://sf-fire.org/files/2021-06/May%2012%202021%20meeting%20minutes.pdf>

that bike protestors purposefully block vehicular traffic on the UGH and violate transportation code requirements to yield lane usage,⁴ while the City’s own police force has not enforced the transportation code (by some accounts, directly at the instruction of the Mayor of the City). In fact, the Mayor has taken no action with respect to these issues despite community requests⁵, which is particularly unsettling when a senior public official has willfully and in bad faith withheld relevant documents. Meanwhile, City leadership has been working to undermine CEQA requirements despite opposition from the Sierra Club and other advocates for balanced environmental review processes.⁶ The civic duties associated with a project involving an environmentally sensitive area must be managed according to the law and the highest ethical standards of public servants. These willful incursions cannot be tolerated by those of us who advocate for lawful discourse and common sense legislative processes – including those bicycle and environmental enthusiasts who are disgusted by the selfish protests of a few misguided riders, which not only serve ironically to create more emissions in blocked traffic (arguably the same irony demonstrated by area projects generally) but also impair the credibility of the broader and just cause for better vehicle planning and resources.



6 (cont.)
GC-1

Amidst this backdrop of possible malfeasance, the DEIR surprisingly asks residents and regulatory officials to just simply take things on faith. Specifically, the DEIR indicates that missing data related to the UGH Project and this Project will be forthcoming and will show that there is no material environmental impact when (if?) the information ever happens to materialize (at some undetermined time and in some undetermined form in the future). Brazenly and openly, the DEIR acknowledges that data is missing but will be forthcoming in “good faith” and must necessarily demonstrate unseen that there are no material environmental concerns. In fact, the single instance of the phrase “good faith” even being used in the DEIR appears as follows: “Because detailed analyses of the Upper Great Highway project have not been conducted by other agencies (e.g., Rec and Park, SFMTA or SFCTA), the analysis of this additional cumulative scenario is a good faith effort that considers the best available information.” Translation – “you should just trust us as we move forward, and this project is fine because we think other agencies will do their job properly, eventually, even though there isn’t sufficient information available and a full analysis has not been conducted to conclude whether we might be right . . . because that is the responsibility of another part of the City, and we just can’t be bothered to coordinate things.”



7
GC-4

The obvious lack of information is staggering, and the conflicted behavior of certain public officials is on full display. There is no explanation in the EIR for why the City should have unilateral authority to proceed in a “good faith” information vacuum in which a public official tied to the project has already been found unanimously by an ethics mechanism to have operated in bad faith. The California Coastal Commission and associated state agencies cannot permit this unilateral approach in “good faith” in an information vacuum under these conditions. It is not acceptable for the City to take the position that essentially says: “we would like to proceed even though we don’t have all the information, because we just think that the information will be forthcoming in good faith and won’t adversely affect any issues for

⁴ Dean Preston social media account on Twitter <https://twitter.com/deanpreston/status/1430661127483002881>

⁵ See e.g., comments raised by Supervisor Chan in previous public proceedings asking for greater transparency and review of the City’s ongoing decisions to close roads for public access, as well as https://www.openthegreathighway.com/lettertobreed?fbclid=IwAR0L_6xacukD1RUGtQS8_wPn-Xu0R90bWJDRre-UTZWzNgt2chCWMXMvLBM

⁶ See e.g., <https://www.sierraclub.org/san-francisco-bay/blog/2021/05/take-action-protect-california-environmental-quality-act-san>

which we've already indicated that there are material traffic impacts." This hamfisted approach impairs the credibility of the process and underscores the need for state oversight by state officials.

If there is any doubt that the UGH Project and this Project are not inextricably intertwined, consider what the City itself has previously said. In addition to public officials advocating with circular logic that the UGH closure must necessarily be justified because the Sloat extension will just be closed too (and in some cases, vice versa), the City represented directly to the public that environmental concerns with respect to *both* projects were critical, and that the concerns would be addressed properly via multiple EIRs.

Specifically, the City is already aware of the important linkage among various area projects, and has previously acknowledged that critical environmental concerns require further consideration and coordination. The City previously represented to the public that an EIR would be conducted with respect to the UGH Project, yet has refused to conduct such a review, and continues to attempt to subvert CEQA requirements with respect to the UGH Project due to the conflicts discussed above. Specifically, page 5 of the September 9, 2020 EIR notice indicates that the UGH Project will be subjected to an EIR.⁷ Yet no such action has taken place, and so no data exists which informs this Project which is itself relying on an acknowledged gap in data. Instead, the DEIR takes the position that future data may be forthcoming, and asks the public to proceed based on "best available information." That's not an approach in compliance with EIR requirements, nor the representation the City made to the public – either the data exists and should be considered properly, or it doesn't exist and should be collected first before project analysis is undertaken.

Importantly, the environmental effects of multiple road closures are unknown, but there is the possibility that additional road closures will create additional greenhouse gas emissions due to traffic congestion, as well as additional neighborhood noise. There is also the possibility that the Project will create new erosion due to a vertical wall. The current proposal does not factor in any consideration or review of the possible effects noted by multiple environmental groups, including Surfrider Foundation and the Sierra Club. The project will in fact cause additional vehicle miles traveled by altering the transportation network – this is stated plainly in the DEIR, with no mitigation described, and insufficient discussion of greenhouse gas emission effects. The DEIR simply suggest to reroute traffic into residential neighborhoods, as if this is not a big deal, and concludes that traffic impact may be "significant and unavoidable." For a DEIR to conclude that there are "significant and unavoidable" traffic impacts – words used in the DEIR itself – but not analyze the noise or emission effects of those significant impacts nor any



7 (cont.)
GC-4

8
GC-3

⁷ The DEIR notes the following: "There are also several other separate projects that may occur in the vicinity of South Ocean Beach. The city and the California Department of Transportation (Caltrans) have proposed separate projects to improve the operations and safety of Skyline Boulevard (State Route 35) at its Great Highway and at Sloat Boulevard intersections. NPS is planning a trail to link the proposed multi-use trail to Fort Funston's existing trail network. The city and the U.S. Army Corps of Engineers (Army Corps) are currently planning and designing a project to place sand dredged from San Francisco's main shipping channel along South Ocean Beach in 2021. The San Francisco County Transportation Authority is leading the District 4 Mobility Study and will be exploring the feasibility of modifying the Great Highway between Lincoln Way and Sloat Boulevard, which is currently temporarily closed due to COVID-19. In addition, Rec and Park, with support from SFMTA and Public Works, is considering temporary closure of the southbound lanes of the Great Highway between Sloat and Skyline boulevards. **Each of these separate projects would be subject to separate environmental review.**" Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting, September 9, 2020, Page 5 (emphasis added).

mitigation considerations (which have simply been precluded without explanation) is at best intellectually corrupt.

While vehicle miles traveled (“VMT”) may have been quantified in the DEIR, increased congestion (and resulting emissions) was not. This failure is sadly consistent with the shortsighted viewpoint that vehicle impairment must necessarily be a byproduct of new bike path construction. The DEIR states that “[n]o feasible mitigation measures are available for the VMT impact. The substantial additional VMT is caused by the project’s closure of the Great Highway between Sloat and Skyline boulevards and associated vehicular travel redistribution. This roadway closure is a key component of the project that is needed to accommodate the shoreline changes for long-term coastal management, including managed retreat, sea level rise adaptation, and to preserve and enhance coastal public access and recreation, habitat, and scenic quality at South Ocean Beach. Therefore, its removal from the project would not be feasible.” There is no explanation as to why public access for “vehicles” is framed such that some motorized vehicles would be precluded from further use in the area, while other motorized vehicles and non-motorized vehicles would be given preference, nor why a “managed retreat” strategy includes the creation of new infrastructure for certain vehicles in the erosion zone – not only bicycles, but public works vehicles at the exclusion of community vehicles. There is also no explanation as to why roadway usage must be repurposed at all when the Project goal seemingly is directed towards the ongoing protection of separate infrastructure just beneath it, nor why the existing vehicle roadway would be repurposed for use solely by public official vehicles when the roadway could simply be narrowed to one lane in each direction for broad and ongoing community use.⁸

The circular logic underpinning the Project is then underscored further below this discussion, as transit options are considered. The DEIR states: “Development of such new intercounty transit service would be beyond SFPUC’s control and would require coordination and participation between multiple jurisdictions and transit agencies. In addition, such a new transit service would require funding commitments well beyond the fair share of this project’s impact.” Translation – we know that transit is a big issue, and we know there will be negative impacts, but we just can’t be responsible for coordinating it, nor paying for it, and so the project should just proceed without this significant impact being addressed properly.” Further below in the report, this twisted logic is applied again in the discussion of pricing strategies, which includes an acknowledgement that neighborhood roadways and local streets could be affected, but without any plan to do anything about that acknowledged impact.

Likewise, there is no material review of noise pollution and its effects on habitat, endangered species, and residents from increased usage and congested traffic. Noise levels will certainly increase, but there is once again a concept of operating in an information vacuum alongside the UGH project. How can local residents know that resulting noise levels will not be material when there has been no EIR with respect to proposed changes with the UGH?

⁸ The possibility of maintaining the Sloat extension in single lanes for community usage, or otherwise moving the road inland closer to the zoo, was raised when the Ocean Beach Master Plan was first being formulated, and was ignored by SPUR and other project coordinators so intent on maximizing bike access that they were unable to avoid designing a mutually exclusive framework. This idea continues to be discounted by City officials with no analysis or explanation of possible traffic and emissions benefits, notwithstanding the significant congestion that has been introduced at the Sloat, Skyline, and 39th Avenue intersection during UGH closure, as well as the significant new safety risks introduced at 45th and Sloat by the inexplicable and reactive closure of the intersection at 47th and Sloat.

↑ 8 (cont.)
GC-3

9
GC-6

10
PD-1

11
TR-4

12
NO-1

Underscoring this faulty analysis and defective project justification is the very real possibility that multiple projects are negatively impacting the area without appropriate independent oversight and common sense. The City has supported significant real estate development along the westward section of Sloat Boulevard, with significant additional vehicles, while simultaneously proposing that the end of the road essentially be transformed into a dead end with no exits except into residential neighborhoods. Skyline Boulevard is a state facility, and has already seen increased congestion during the UGH closure, which highlights the need for a comprehensive project with multiple EIRs scoped together for the area. Yet the City continues to assert that a large number of people are now suddenly using a closed UGH such that closure can be justified by the new usage demand, but resisting the obvious conclusion that a large influx of people does not require an environmental assessment of the garbage, sand displacement, dunes and other impacted areas along the UGH. The City continues to ignore the possibility that its sewage system may fail due to increased erosion, yet insists it must build a new erosion-inducing vertical wall as the solution.

13
GC-4

If City officials are so concerned with the level of erosion that they feel a vertical wall must be built, doesn't that demonstrate that there are significant enough erosion issues in play that the WPS should be moved, or at minimum that a clear and actionable management plan be included in the Project and vetted for approval? Accelerated erosion due to a vertical wall could threaten the ecosystem, the LMT, and surrounding homes, and backfire versus the intended project. Property owners may have a private cause of action, potentially as a represented class, to the extent that the city fails to adhere to the requirements of the city charter with respect to sand pollution, let alone raw sewage discharge.

14
GC-1

15
GE-1

In short, the process has been defective, and the Project as proposed clearly reflects the defect. The Draft EIR admits in writing that sufficient analysis has not been conducted, nor sufficient coordination achieved. The Sunshine Ordinance Task force has voted unanimously that willful violation of the law was committed by a senior public servant directly responsible for project coordination in the area, a removable offense for the public servant. The city attorney is well aware that the project area has historically been, and continues to be, a subject of regulatory findings and litigation, and that prior settlement terms with respect to the management of the area may be in effect.⁹ As such the city attorney, and the client that is represented, are on notice of the possibility of significant legal and regulatory risk and taxpayer cost if the project is not handled in accordance with the law. In the event that local public servants cannot follow this basic process, any approvals of this project should be voided by the California Coastal Commission. Deceiving the community, ignoring sand removal requests, failing to maintain and protect critical public sewage and roadway infrastructure, willfully ignoring public records requests, and fiddling with a bike path when a multi-billion dollar time bomb is ticking within the City's sewage system is not what residents and voters want. The City represented that EIRs would be conducted with respect to surrounding projects – there has been no such coordination, and the city has been resisting an EIR related to the UGH Project, and has not done its homework with this Project. The City has impaired its credibility, cannot and should not be trusted, and needs to immediately be subjected to state and federal oversight.

16
GC-1

The mismanagement of these collective projects demonstrates at minimum gross negligence on the part of the city of San Francisco, and cannot be permitted to proceed under the theory that "good faith" analysis will eventually be forthcoming from an agency whose leader has been found to have exhibited

⁹ See e.g., <https://www.documentcloud.org/documents/6591934-California-Coastal-Protection-Network-Settlement.html>

bad faith and willful misconduct. The credibility of the city is at issue with respect to the mismanagement of traffic that affects a state roadway, and must be reviewed and considered independently and in collaboration with the California Coastal Commission, whose jurisdiction on any approval must be handled unilaterally by that state agency. Environmental reviews should not be subjected to conjecture and assumptions amidst willful violations of public rules, nor should the residents of the area and affected state infrastructure be placed at risk in such a grossly negligent fashion. The obvious inability or unwillingness of all City agencies to fully coordinate, which is noted in the DEIR itself, and the obviously deficient analysis resulting from that failure, all highlight exactly why the city's jurisdiction to approve coastal development should be immediately withdrawn. The San Francisco Planning Commission should have its authority to issue coastal development permits withheld unless and until the City has demonstrated to state authorities that it is capable of operating pursuant to process rather than good faith assumptions about information vacuums and the proper coordination of all city agencies. Meanwhile, the City should go back to the drawing board, explain to the public why a vertical seawall is necessary if the wastewater treatment plant is somehow not itself at risk, and describe why a managed retreat plan supports the creation of any new infrastructure, particularly infrastructure which could enhance erosion, or which favors certain modes of transportation even though the acknowledged vehicle impacts are again - in the words of the DEIR itself – significant and unavoidable.

The City of San Francisco continues to treat the local area and its residents like a petri dish in an unwelcome experiment of assumptions and conjecture, with insufficient coordination among agencies, admitted deficiencies in information, and reliance upon a “good faith” guess about the handling of area projects despite the clear and obviously purposeful mishandling of civic responsibilities to date. We can all do better than this – this isn't the Embarcadero. It's Ocean Beach, and its natural beauty and the safety of its inhabitants hasn't just been suffering from beach erosion, but from the erosion in public trust and management that our public servants owe to the area.

Sincerely,

Goffrey Moore, Ocean Beach resident



16 (cont.)
GC-1

From: [Heidi Moseson](#)
To: [CPC.OceanBeachEIR](#)
Subject: Ocean Beach Climate Adaptation Project
Date: Tuesday, January 18, 2022 5:25:31 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie and the OB climate adaptation project team,

I live on the lower Great Highway and am a longtime resident of the Outer Sunset, and am emailing to express my support for the Ocean Beach Climate Change Adaptation Project. I live on the southern end of the lower Great Highway and often drive on the Great Highway extension south of Sloat when I need to get south - **but am 100% willing and enthused to give that up and use alternative roads to make north-south connections by car, as a tradeoff for protecting our coast and keeping the road network safe, while adding a needed new park in its stead.**

With my kids and older parents, I am looking forward to using the multi-use trail proposed in the plan. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this beautiful ocean front space for more people to enjoy, while protecting essential city infrastructure.

Thank you for your dedication and perseverance to help our city adapt to our changing climate.

Many thanks,
Heidi
Outer Sunset (D4) resident

1
GC-2

From: [Mark Musselman \(musselman@gmail.com\)](mailto:musselman@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 5:15:25 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Mark Musselman
1343 Livingston Ave
Pacifica, CA 94044
musselman@gmail.com
(415) 264-3031

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Amy Neeser](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 7:11:48 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: Pieter Nelissen (pieter.nelissen@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:48:26 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Pieter Nelissen
1888 Golden gate ave
San Francisco, CA 94115
pieter.nelissen@gmail.com
(619) 857-4201

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Molly Niffenegger](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 9:52:51 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Thank you for your time.

Best,
Molly

From: [Anna Olsen](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 10:07:54 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC’s ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sent from my iPhone

From: [Hazel O'Neil](#)
To: [CPC.OceanBeachEIR](#)
Subject: Fwd: Ocean beach climate change adaptation project EIR comment
Date: Monday, January 24, 2022 8:54:40 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I want to state my overall support for the project. I thought the EIR was clear and informative.

As a resident of the west side of San Francisco, driving on the project area scares me because it seems precarious—this intuition was confirmed by the project description—so I support closing the road segment to vehicular traffic.

1
GC-2

Given that the proposed project would close public through-traffic on the southern portion of the Great Highway, therefore reducing the usefulness of the rest of the single access segment of the Great Highway; that the Great Highway was built on interfered sand (section 1.4.3) and is therefore potentially more susceptible to sea level rise; and that the popularity of the Great Highway's closure due to pandemic public health orders has put the road's future in question, I believe this EIR needs to include transportation analysis using a baseline in which the upper Great Highway from Sloat to Lincoln is closed to vehicular traffic. That baseline could yield different transportation impacts that could be mitigated to less than significant through roadway changes elsewhere in the western neighborhoods.

2
TR-1

Additionally, it would be useful if the EIR stated how long the proposed project is expected to protect the critical wastewater infrastructure in the executive summary or introduction.

3
PD-8

Thank you for your time and work,
Hazel O'Neil
5700 California st, 94121

From: [Maggie P](#)
To: [CPC.OceanBeachEIR](#)
Subject: Support for Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 19, 2022 11:17:58 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. We are all going to have to make many changes due to the changing climate caused by greenhouse gas emissions. This project is the right decision both to make our streets safer and to come to terms with climate change (both its effects and causes).

As a resident of San Francisco I very rarely drive on the southern half of great highway. I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Maggie Pace
Resident of Lower Haight

|

1
GC-2

From: [William Page](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 1:40:43 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

-Will Page

From: [Robin Pam](#)
To: [CPC.OceanBeachEIR](#)
Subject: Public Comment on Ocean Beach Master Plan EIR
Date: Wednesday, January 19, 2022 10:41:33 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the city to move forward on the Ocean Beach Climate Change Adaptation Project.

I live in Sunnyside, and travel regularly to the Great Highway by car to park on Sloat. I almost never drive on the southern half of the Great Highway, and am not inconvenienced by using alternative roads to make north-south connections by car.

What's more, I'm really looking forward to using the multi-use trail with my family, and having a new public space for my kids and everyone in the city to enjoy. Right now it's impossible to walk and dangerous to bike on this route, making it difficult to travel to or enjoy our coastline by doing anything other than driving. I look forward to the improvements that will open up this ocean front space for people to enjoy, and give people the option to not drive.

Thank you for your hard work helping our city adapt to our changing climate.

Robin Pam
Resident of Sunnyside (94127 / District 7)

1

GC-2

From: RICHARD PERRY (rescue8@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:00:55 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you. Richard Perry

Sincerely,

RICHARD PERRY
1300 Page Street
San Francisco, CA 94117
rescue8@gmail.com
(415) 760-1867

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Dan Peshkin (dpeshkin@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:00:13 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Dan Peshkin
2356 Larkin St
San Francisco, CA 94109
dpeshkin@yahoo.com
(415) 350-9961

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: captainsquid56@aol.com
To: [CPC.OceanBeachEIR](#)
Subject: re-routing traffic
Date: Monday, January 3, 2022 5:19:35 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Traffic at the intersection of Skyline and Sloat is already very heavy. Closing off the Great Highway from Skyline for good is not going to work, when that road has been closed in the past, traffic backs up for half a mile or more. That intersection at Sloat and Skyline can't handle the traffic load. Cars honk their horns and drivers are cussing and yelling at each other. It is very annoying, my neighbors and I are tired of it. My house is right in front of that intersection. On warm days we can't open the windows because the car exhaust is so bad. The project should include at least one lane open each way on the Great Highway from Skyline to Sloat and the upper Great Highway from Sloat to Lincoln Way should stay open all the time. Also on the beach from Sloat Sout to the sewer plant A sea wall such as the one by Playland and also the middle of the Great Highway from Noriega st. to Quintara st. should be built. Those sea wall designs have withstood the test of time and stabilized the beach for decades.. thats what works!! I hope you make adjustments to the plan. Paul Petterson

1
GC-6
2
AL-1

From: [Christopher Pielock](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 9:54:43 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From the road

Great Highway Extension/South of Sloat EIR

Peter Pirolli <peter.pirolli@gmail.com>

Mon 1/24/2022 5:29 PM

To: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sf.gov.org>

CC: Peter Pirolli <peter.pirolli@gmail.com>

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

To: Julie Moore and SF Planning Commission

From: Peter Pirolli Outer Sunset resident in San Francisco

Dear Ms. Moore,

I have lived at the corner of Sloat and the Great Highway for 25 years. I am also a member of the Open The Great Highway Alliance and a member of Surf rider. Besides your EIR, I have read every report I can find related to closure of the Great Highway Extension, including the Ocean Beach Master Plan, the Ocean Beach Transportation Study, [Coastal Protection Measures & Management Strategy Report](#), the draft environmental impact report for the Ocean Beach Climate Change Adaptation Project, reports by SPUR and other reports. First and foremost I believe that the proposed plans and design for the GH south of Sloat are inconsistent with the spirit of the Ocean Beach Master Plan and contrary to the managed retreat proposal that have been championed by Surf rider. The EIR suggests that the proposed seawall will destroy the beach. Currently one can walk from the middle range of Ocean Beach all the way past Funston and Thornton Beach—a remarkable stretch of beach that makes one forget that San Francisco and Daly City are just on the other side of those cliffs. Destroying that beach would be an enormous environmental and recreational sacrifice.

The proposed destruction of the Great Highway is unmotivated. To date, we have not been able to find a single study, and no data or research, that has established scientifically that the presence of a road there, i.e. the Great Highway Extension, is in any way contributing to coastal erosion, either now or in the future. Did I miss a report that established this connection between how the Great Highway Extension is contributing to coastal erosion?

This is an important highway for commuters, workers, and people wanting to recreate south of the city and who all live on the west side of San Francisco. Yet the various city agencies are trying to ram this road closure through, just like they did with JFK Drive, "slow streets," the Upper Great Highway, and other road closures during the pandemic. Despite the lack of science and data on this, it appears that the usual agencies have manipulated the information to create yet another "conventional wisdom" that will be extremely hurtful to people living on the west side.

We believe it is possible to redesign the area by moving the roadway closer to the sewerage treatment plant, and having only a single lane north and southbound, in order to preserve this important westside highway. Another possible redesign could include rerouting the Great Highway Extension so that it connects to the access road that currently runs just south of the San Francisco Zoo and intersects with Herbst Road, close to the Pomeroy Recreation and Rehabilitation Center. Historically speaking, apparently this access road used to be the road that connected San Franciscans living on the west side to Route 35. Why aren't either of these two options being considered?

Instead, the "conventional wisdom" says that the roadway for automobiles will be replaced by a bicycle path and another parking lot. If coastal erosion is such a threat to a redesigned Great Highway Extension to the point where this roadway must be shut down, why is it not also a threat to a bicycle path and a parking lot?

I am one of six plaintiffs who are currently suing the City and County of San Francisco for shutting down the Upper Great Highway, JFK Drive and MLK Drive during the pandemic, and now trying to permanently keep these roads closed. Those road closures are illegal because state vehicle codes such as Section

GC-2
5

AL-1
4

PD-1
3

GE-1
2

PP-1
1

1/24/22, 12:17 PM

Mail - CPC.OceanBeachEIR - Outlook

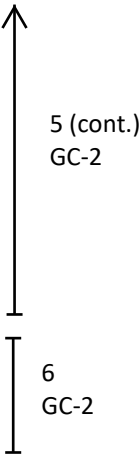
21101 prohibit cities from shutting down roadways, except for very explicitly defined reasons. Shutting down the Great Highway Extension because you want to put in a bicycle path is not a reason that is authorized by state or local law. And since you have presented no other rationale for closing down this highway – you have presented no science, research or data that the presence of this highway is contributing to coastal erosion – if you try to shut down the Great Highway Extension and put in a bicycle path, you will be acting illegally.

If you act illegally to shut down the Great Highway Extension, you will be sued. The lawsuit will be directed, not against the environmental impacts but because closing this roadway for use by the public will be an illegal act in violation of state vehicle codes. To avoid a lawsuit, I strongly suggest that you consider the two options I have outlined above as ways to allow a version of the Great Highway Extension to continue.

Members of our group, the Open the Great Highway Alliance and other allied organizations, are ready and willing to meet with the leaders of this project to figure out if there is a way to compromise and achieve a win-win solution. I truly hope that you are willing to work with the public on the westside of SF to avoid litigation.

Thank you, sincerely,

Peter Pirolli



From: [Pizza Place](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 11:17:01 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: [Alice Polesky \(askalice@pacbell.net\)](mailto:askalice@pacbell.net) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 7:20:50 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

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2
GE-1

Thank you

Sincerely,

Alice Polesky
890 Kansas Street
San Francisco, CA 94107
askalice@pacbell.net
(415) 824-0734

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Ayni Raimondi](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 11:09:17 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

As a member of the outer sunset community - I am writing about south ocean beach.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Thank you for your consideration.

On January 4, 2022, Julie Moore at San Francisco Environmental Planning received a voice message from Adam Raskin regarding the Ocean Beach Climate Change Adaptation Project Draft EIR. Mr. Raskin's comments are summarized as follows:

- A resident at La Playa/Judah.
- Concerned about living in flood plain
- Supports the project and hopes sea level rise and climate change are taken into account

1
GC-3

From: [David Rasmussen \(drasmusster@gmail.com\)](mailto:drasmusster@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 8:03:23 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

David Rasmussen
733 Rockdale Drive
San Francisco, CA 94127
drasmusster@gmail.com
(805) 904-9774

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Ted Reckas \(treckas@gmail.com\)](mailto:treckas@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:14:19 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Ted Reckas
22281 3rdAve
Laguna beach, CA 92651
treckas@gmail.com
(805) 901-1426

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sfgov.org>
Sent: Wednesday, January 19, 2022 11:08 AM
To: Elijah Davidian; Karen Lancelle; Frye, Karen (PUC); Roche, Anna (PUC); Mates-Muchin, Jonathan (PUC)
Subject: Fw: SFPUC OCEAN BEACH CLIMATE CHANGE ADAPTATION PROJECT
Attachments: IMG_5745.JPG

From: Mike Regan <myoldgoat@yahoo.com>
Sent: Thursday, January 6, 2022 10:11 PM
To: CPC.OceanBeachEIR <CPC.OceanBeachEIR@sfgov.org>
Subject: SFPUC OCEAN BEACH CLIMATE CHANGE ADAPTATION PROJECT

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Commissioners:

I and many others strongly oppose the adaptation of "managed retreat" regarding the southern reach of the Great Highway.

Managed retreat is being used as a method for City agencies to perpetuate another land grab at the cost of motorist in the Bay Area. This is a major commuter road and needs to be maintained. In fact this road is part of an Emergency Evacuation route as laid out in the San Francisco's emergency evacuation plan. There are 20,000 vehicles per day that use the Great Highway and their needs are being ignored by the City. People need this road to get to work and conduct the daily business of living a life in this city. There is absolutely no need to close the roadway down to motorist in fact I would say there is a greater need to protect this road. In fact we have already stating protecting the area by the construction of a buried wall to protect existing wastewater infrastructure, reshaping the bluff and providing long-term beach nourishment (sand replenishment), which was just completed this year and will last between 5 and 10 years. It will be more far expensive to close this road than to protect it.

SF Rec and Park want to use the shutdown of the southern reach as a means to close the central reach of the Great Highway and create yet another park where one already exist. There are numerous recreation venues present in this area. This plan calls for spending 130 million dollars to create a park which includes protecting the area; it cost \$200,000 to replenish the sand for 5-10 years from shipping channel dredging. The 130 million would be better spent on housing Veterans or feeding the hungry.

There has been a complete lack of transparency regarding these and other road closures in the city including numerous sunshine ordinance violations.

Over 15,000 people have signed a petition to keep the Great Highway open please do not ignore the needs of working people by closing this stretch of highway.

I am attaching a picture that shows the high lever of usage that this road way gets. It is unconscionable to shut this road down and severely impact all of these motorist and to use climate change and sea level rise as a reason.

Mike Regan

1
GC-2
2 TR-3
3
GC-2



From: [Emily Richardson \(ejrichardson14@gmail.com\)](mailto:ejrichardson14@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Thursday, January 20, 2022 9:20:21 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Emily Richardson
2118 43rd Ave
San Francisco, CA 94116
ejrichardson14@gmail.com
(480) 812-5235

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Emily Richardson](#)
To: [CPC.OceanBeachEIR](#)
Subject: Please Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 9:08:49 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Good morning,

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also reconvene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC’s ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

I would love to see a new plan put in place to ensure that the beach is protected!

Thanks very much,
Emily Richardson
94116

From: Tessa Rife (tessa2.rife@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Thursday, January 20, 2022 3:43:07 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Tessa Rife
2338 46th Avenue
San Francisco, CA 94116
tessa2.rife@gmail.com
(304) 904-1383

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: rbenek@gmail.com
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Monday, January 24, 2022 1:33:15 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Best,
Benek Robertson

From: James Royer (jroyer1@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 7:07:35 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

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1
PP-1

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2
GE-1

Thank you

Sincerely,

James Royer
2710 Ariane Drive Unit 6
San Diego, CA 92117
jroyer1@gmail.com
(443) 852-2563

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: James Royer (jroyer1@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 1:30:38 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

James Royer
2710 Ariane drive unit 6
San Diego, CA 92117
jroyer1@gmail.com
(443) 852-2563

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [San Francisco Events](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Friday, January 21, 2022 10:07:33 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sent from my iPhone

REUBEN, JUNIUS & ROSE, LLP

Melinda A. Sarjapur
msarjapur@reubenlaw.com

January 24, 2022

Delivered Via Email (CPC.OceanBeachEIR@sfgov.org)

Julie Moore
San Francisco Planning Department
49 S. Van Ness Avenue, Suite 1400
San Francisco, CA 94103

**Re: Draft Environmental Impact Report for the Ocean Beach Climate Change
Adaptation Project, Planning Case No. 2019-020115ENV.
Our File No.: 12149.01**

Dear Ms. Moore:

Our office represents 2700 Sloat Holdings, LLC (the “Project Sponsor”), in connection with the property located at 2700 Sloat Boulevard (the “Property”) and with an associated project to construct a 400-unit HOME-SF, mixed-use building at the Property (the “2700 Sloat Boulevard Project”).

On December 8, 2021, the City published the draft Environmental Impact Report (the “DEIR”) for the Ocean Beach Climate Change Adaptation Project (Planning Case No. 2019-020115ENV), which references and considers the 2700 Sloat Boulevard Project in the DEIR’s cumulative projects analysis. The purpose of this letter is to provide the Project Sponsor’s written comment to the DEIR.

As described in further detail below, the DEIR’s cumulative projects analysis considers the 2700 Sloat Boulevard Project based on preliminary applications submitted in early 2020, and the information and project scope referenced in the DEIR are now out-of-date. The Project Sponsor has recently submitted a Project Application for the 2700 Sloat Boulevard Project (Planning Case No. 2021-012382PRJ) and would like to bring attention to the updated project scope.

The Project Sponsor requests that the current scope of the 2700 Sloat Boulevard Project be referenced and considered in the DEIR’s cumulative projects analysis.

I. Updated Project Scope

The current scope of the 2700 Sloat Boulevard Project substantially differs from the project scope referenced in the DEIR. For example, the DEIR describes the project as three 8-to-12 story towers with up to 283 residential units, 250 Class I bicycle parking spaces, and no off-street

1
GC-4

Julie Moore
San Francisco Planning Department
January 24, 2022
Page 2

parking. The current 2700 Sloat Boulevard Project scope, as detailed in the recently submitted project application, consists of 400 total residential units, 200 Class I and 24 Class II bicycle parking spaces, 56 off-street parking spaces, and 9,719 sq. ft. retail space. Please refer to application on file for the official details of the updated project scope. Additionally, we note that while the 2700 Sloat Boulevard Project application anticipates a total of 56 off-street parking spaces, the local zoning controls for allow up to 600 residential accessory parking spaces and 73 retail accessory parking spaces for the current project scope.

II. Transit Stop Relocation

The Project Sponsor would like to draw special attention to the 2700 Sloat Boulevard Project’s proposed relocation of the bus stop currently located in front of the Property, on Sloat Boulevard between 45th Avenue and 46th Avenue. The project is proposing the permanent relocation of the bus stop to 2800 block of Sloat Boulevard, one block to the west of its current location, which places it closer to the Zoo entrance and the signalized crosswalk on 47th Avenue. In addition, the MUNI L Line stop is also located on the 2800 Sloat Blvd block between 47th and 46th Avenues, but on Wawona Street. Relocating the 18 & 23 bus stop to the 2800 Sloat block would eliminate the need for riders transferring between 18 & 23 buses and the MUNI L Line to cross any city streets since all of the MUNI stops would be located on the same block.

III. Conclusion

For the foregoing reasons, we request that the application on file for the 2700 Sloat Boulevard Project (Planning Case No. 2021-012382PRJ) be reviewed, and that the DEIR be updated to reflect and analyze the current scope of this project as it is detailed in that application.

We thank you for your consideration.

Very truly yours,

REUBEN, JUNIUS & ROSE, LLP



1 (cont.)
GC-4

From: Chad Segal (segalchad@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 1:16:05 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Chad Segal
1244 46Th ave
San Francisco, CA 94122
segalchad@gmail.com
(805) 453-4047

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Sheffield](#)
To: [CPC.OceanBeachEIR](#)
Subject: Support project to close dangerous road
Date: Tuesday, January 18, 2022 1:03:53 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I'm an SF resident and would love to have that space for walking and recreation.

- Sheffield

1
GC-2

From: [Mitch Silverstein \(mpsilverstein@gmail.com\)](mailto:mpsilverstein@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 3:04:43 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Mitch Silverstein
4341 Banning St.
San Diego, CA 92107
mpsilverstein@gmail.com
(818) 917-3347

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: mike@mikeandmaaike.com
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 10:08:03 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Thank you

Mike Simonian
San Francisco

From: Christopher Solmssen (topher.solmssen@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 2:34:36 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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PP-1

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2
GE-1

Thank you

Sincerely,

Christopher Solmssen
920 Ashbury Street
San Francisco, CA 94117
topher.solmssen@gmail.com
(415) 269-5089

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Bobby Sowalsky](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 12:16:20 PM

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1
PP-1
2
GE-1

Bobby Sowalsky
m: 404.245.3948

Sent from Bobby's iPhone

From: Beverly Spector (buzbev@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:19:42 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Beverly Spector
41 sutter st
SF, CA 94104
buzbev@gmail.com
(415) 613-5743

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Beverly Spector (buzbev@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Thursday, January 20, 2022 5:20:06 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Beverly Spector
41 sutter st
SF, CA 94104
buzbev@gmail.com
(415) 613-5743

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Sky Stanfield (cedarstuff@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 11:05:52 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Sky Stanfield
931 Scott St. Apt. 4
San Francisco, CA 94115
cedarstuff@gmail.com
(415) 860-8624

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Aaliyah Stevens](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 11:36:30 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

From: Rachel Strader (raestrader@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 6:01:29 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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2
GE-1

Thank you

Sincerely,

Rachel Strader
164 Beulah Street
San Francisco, CA 94117
raestrader@gmail.com
(518) 466-1553

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Max Stuebe \(elainss@gmail.com\)](mailto:elainss@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 12:00:03 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Max Stuebe
1733 20th St.
San Francisco, CA 94107
elainss@gmail.com
(415) 412-5211

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Chris Sugino \(chris_sugino@yahoo.com\)](mailto:chris_sugino@yahoo.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 8:38:31 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Chris Sugino
475 warren dr #5
San Francisco, CA 94131
chris_sugino@yahoo.com
(702) 326-3483

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Meg
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 1:38:32 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear SF Gov,

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC’s ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GE-1

Sincerely,
Meg Haywood Sullivan

<https://avanan.url-protection.com/v1/url?o=WWW.MEGHAYWOODSULLIVAN.COM&g=ZDBjZGZiZmRmOWI5YjllZA==&h=NzZkODkwMDQ0ZTlmOTQ2YmI3MDA5YmE4NTFhYWZiNTM0ZDNhZjY0NjNlZGZjYTczMDE3MmQ4OGE3ODE5MUY1NQ==&p=YXAzOnNmZHQyOmE6bzo3MTI3YmE5Y2UzZWU4ODQ3NGM5ZWYxOGVhZjhmNDdkNTp2MTpwOk4=>

Sent from the road

From: [Pinya Surin](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 10:18:32 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC’s ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1

2
GE-1

Thank you in advance for your climate action,
Pinya

From: [Irwin Taputuarai](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Friday, January 21, 2022 2:50:13 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1

2
GE-1

From: [Teagan Thompson \(teaganthompson3@gmail.com\)](mailto:teaganthompson3@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 1:01:04 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Teagan Thompson
277a Duncan St
San Francisco, CA 94131
teaganthompson3@gmail.com
(707) 799-4399

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Antonio Ting (ting.asun@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:31:00 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
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2
GE-1

Thank you

Sincerely,

Antonio Ting
143A Carmel St
San Francisco, CA 94117
ting.asun@gmail.com
(408) 309-5196

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Katy Jane Tull

To: CPC.OceanBeachELR

Subject: Continued Negative Ocean Beach Environmental Impact

Date: Wednesday, January 19, 2022 6:39:45 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I wrote in at the behest of the surf rider foundation and also want to kick in my personal thoughts.

I'm horrified by the amount of sealife that was scooped up off the sea floor and smooched into tons of sand when the berm was built last fall. I'll include a few pictures below and can send more.

Surely, y'all know about the large, significant, ancient - and contemporary - colony of sand dollars that live off shore near the southern part of Ocean Beach? You can find their mineralized tests embedded in sandstone as fossils around here, too.

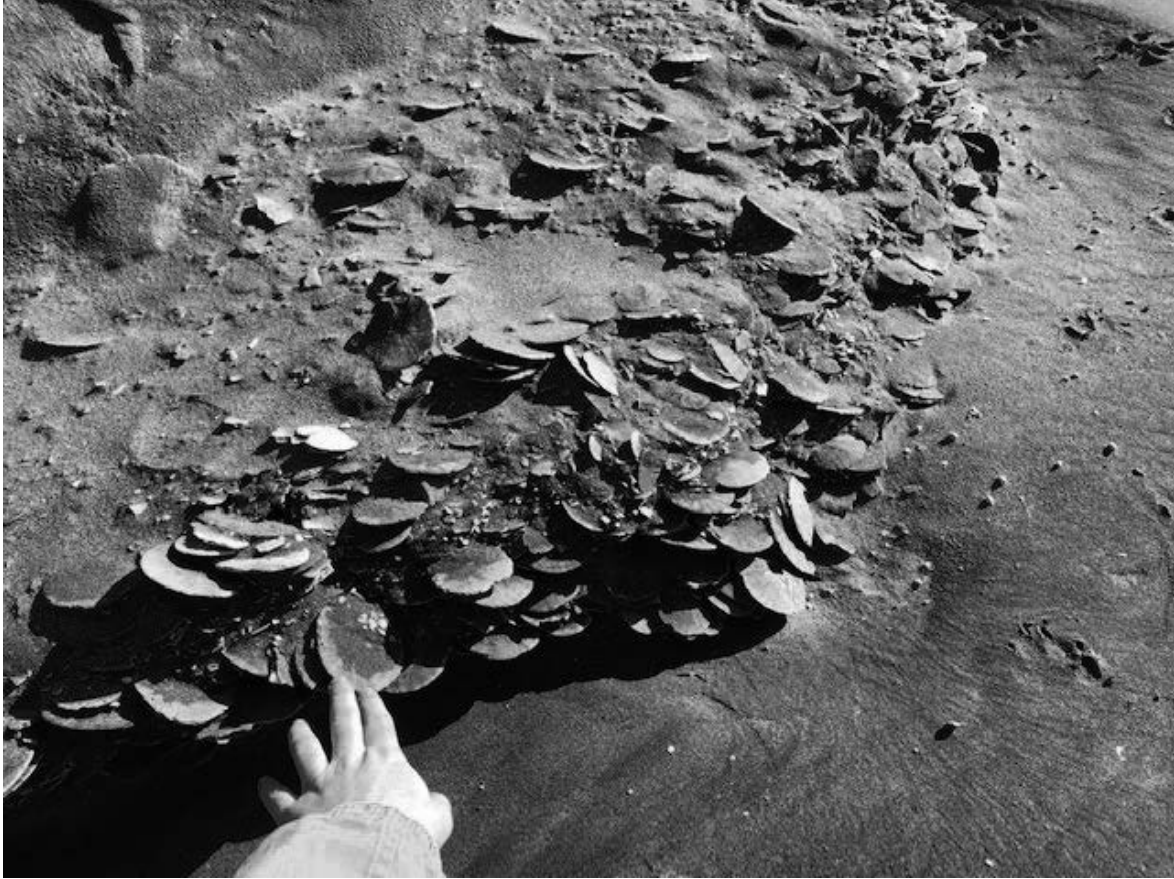
The pics below are bonkers - so many sand dollars! I've been finding little ones, too; first I was stoked cause they are sooooo cute but then I realized that the dredging must have effected sand dollars at all stages of development.

As you consider future building around Sloat, please consider even the smallest residents of this stretch of coastline.

Thank you,
Katy Jane

1
81-5





From: [Katy Jane Tull](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 19, 2022 6:13:58 PM

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1
PP-1
2
GE-1

Sent on the move!

From: [anne.veraldi \(anneveraldi@hotmail.com\)](mailto:anneveraldi@hotmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 2:59:25 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
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2
GE-1

Thank you

Sincerely,

anne veraldi
21 lapidge
San Francisco, CA 94110
anneveraldi@hotmail.com
(415) 552-6917

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Udo WAHN (udo@surfridersd.org) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Friday, January 21, 2022 2:44:30 PM

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Dear Julie Moore,

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2
GE-1

Thank you

Sincerely,

Udo WAHN
1227 Stratford Court
Del Mar, CA 92014
udo@surfridersd.org
(858) 755-4521

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [David Wang \(dw2890@gmail.com\)](mailto:dw2890@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:22:40 AM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

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2
GE-1

Thank you

Sincerely,

David Wang
765 Arguello Blvd, Apt 7
San Francisco, CA 94118
dw2890@gmail.com
(201) 370-3675

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Steve Ward](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 20, 2022 3:03:29 PM

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1
PP-1

2
GE-1

Steve Ward
(SF native son & 30 yr. Great Hwy. resident)
La Playa Park Village Council Member

From: [Mark Weinberger \(msweinberger@hotmail.com\)](mailto:msweinberger@hotmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 11:38:58 AM

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1
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2
GE-1

Thank you

Sincerely,

Mark Weinberger
391 28th Ave
San Francisco, CA 94121
msweinberger@hotmail.com
(415) 895-2658

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Lisa Weiss \(hi.lisa.weiss@gmail.com\)](mailto:hi.lisa.weiss@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 9:11:06 PM

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Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

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2
GE-1

Thank you

Sincerely,

Lisa Weiss
1909 Rose St
Berkeley, -SELECT- 94709
hi.lisa.weiss@gmail.com
(808) 398-0954

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Nathan Weyland (weylandphoto@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Monday, January 24, 2022 9:51:51 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Nathan Weyland
1542 9th St
Oakland, CA 94607
weylandphoto@gmail.com
(415) 264-9858

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: Michael Whitworth (michaelgwhitworth@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 10:55:54 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Michael Whitworth
2976 Washington Street #3
San Francisco, CA 94115
michaelgwhitworth@gmail.com
(215) 776-7092

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Lukas Winklerprins](#)
To: [CPC.OceanBeachEIR](#)
Subject: Stick with the Ocean Beach Master Plan
Date: Thursday, January 20, 2022 9:05:25 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hi,

I'd like to voice concern for the change in plans for the plans around South Ocean Beach. I agree with statements by the SF Surfrider Foundation... this area is really valuable for recreation and I would like for San Francisco to stay committed to its local ecology, too. A seawall presents risks of driving scour to other areas on the beach, and disconnecting the continuum from sand dune to water beyond what has already taken place.

1
GC-2

I look forward to seeing where this development goes,
Lukas

From: [Forrest Wittenmeier \(fwittenmeier@gmail.com\)](mailto:fwittenmeier@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Wednesday, January 19, 2022 3:18:11 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GE-1

Thank you

Sincerely,

Forrest Wittenmeier
2259 41st Avenue
San Francisco, CA 94116
fwittenmeier@gmail.com
(415) 847-7948

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

A-4 HEARING COMMENTS

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CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
PLANNING COMMISSION
REGULAR MEETING

---000---

Transcript of Proceedings
Item #8 - 2019-020115 ENV

JANUARY 6, 2022

Transcribed by:

Connie J. Parchman, RPR, CRR, CSR 6137

JAN BROWN & ASSOCIATES
WORLDWIDE DEPOSITION & VIDEOGRAPHY SERVICES
701 Battery Street, 3rd Floor, San Francisco, CA 94111
(415) 981-3498 or (800) 522-7096

1 COMMISSIONERS PRESENT:

2 Joel Koppel, President

3 Kathrin Moore, Vice-President

4 Deland Chan, Commissioner

5 Sue Diamond, Commissioner

6 Frank S. Fung, Commissioner

7 Theresa Imperial, Commissioner

8 Rachael Tanner, Commissioner

9

10 STAFF PRESENT:

11 Jonas P. Ionin, Commission Secretary

12 Julie Moore, Principal Environmental Planner

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THURSDAY, JANUARY 6, 2022

P R O C E E D I N G S

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...

(Prior proceedings not transcribed.)

SECRETARY IONIN: We can move on to your regular calendar, commissioners, item 8, 2019-020115 ENV for the SFPUC Ocean Beach Climate Change Adaptation. This is the Draft Environmental Impact Report for your review and comment.

Please note that written comments will be accepted at the Planning Department or at the email address of CPC.OceanBeachEIR@SFgov.org until 5:00 P.M. on January 24th, 2022.

Staff, are you prepared to make your presentation?

JULIE MOORE: Yes, I am.

THE COURT: Okay. The floor is yours.

JULIE MOORE: I'm trying to share. Sorry. I'm asked to open system preferences. I'm sorry.

I don't know why it's not sharing.

SECRETARY IONIN: Okay. Julie, we're going to let Josee share her screen so that you can get your presentation up. Just let her know when you want her to

1 go to her next slide.

2 JULIE MOORE: Okay. Thank you very much.

3 SECRETARY IONIN: Thank you, Josee.

4 JULIE MOORE: Good afternoon. Happy new year,
5 President Koppel and members of the commission.

6 I'm Julie Moore, Planning Department staff and
7 environmental coordinator for the Ocean Beach Climate
8 Change Adaptation Project.

9 The item before you today is review and comment
10 on the Draft Environmental Impact Report, or Draft EIR,
11 for the proposed project.

12 The purpose of today's hearing is to take
13 public comments on the adequacy, accuracy and
14 completeness of the Draft EIR pursuant to the California
15 Environmental Quality Act, or CEQA, and San Francisco's
16 local procedures for implementing CEQA.

17 No approval action on the -- this document is
18 requested at this time.

19 Next slide, please.

20 The proposed project is located in South Ocean
21 Beach, an approximately one-mile stretch of Pacific Ocean
22 coastline that extends from Sloat Boulevard south to the
23 Fort Funston bluffs.

24 Chronic erosion of the beach and bluffs along
25 this stretch has damaged beach parking lots, storm drain

1 facilities and the Great Highway and threatens existing
2 underground wastewater system infrastructure, such as the
3 Lake Merced Tunnel located beneath the Great Highway.

4 In addition, it has constrained public
5 shoreline access and recreation.

6 The project design represents the City's
7 long-term strategy for addressing erosion challenges at
8 South Ocean Beach while removing rock and rubble
9 revetments from the beach in compliance with its
10 California Coastal Commission permit and a legal
11 settlement agreement.

12 It is based on the vision of the Ocean Beach
13 Master Plan and the adopted policies of the Western
14 Shoreline Plan.

15 The project would involve managed retreat,
16 beach nourishment and shoreline protection strategies to
17 preserve and enhance public access, coastal recreation
18 and scenic resources, while protecting wastewater system
19 infrastructure from damage due to coastal hazards.

20 The project is a multi-agency initiative with
21 the San Francisco Public Utilities Commission leading
22 project planning and design, the Recreation and Parks
23 Department leading the multi-use trail and open space
24 aspects, and additionally, involvement and coordination
25 with Public Works, SFMTA, the National Park Service, the

1 Federal Highway Administration and the US Army Corps of
2 Engineers.

3 The main components of the project would
4 permanently close the Great Highway between Sloat and
5 Skyline Boulevards to public vehicular traffic,
6 reconfigure affected intersections, San Francisco Zoo
7 parking access and maintain a service road to SFPUC
8 facilities.

9 It would construct a buried wall to protect
10 existing wastewater infrastructure from shoreline
11 erosion, remove pavement, rock, and sandbag revetments,
12 rubble and debris from the beach, reshape the bluff and
13 plant native vegetation.

14 It would construct a multi-use trail between
15 Sloat and Skyline Boulevards, install a beach access
16 stairway, coastal access parking, restrooms, and provide
17 long-term beach nourishment or sand replenishment.

18 Next slide, please.

19 This slide is a typical cross-section showing
20 the existing Lake Merced Tunnel currently located beneath
21 the Great Highway.

22 The proposed buried wall with tieback, slope
23 stabilization layer extending from the wall at an angle
24 above the tunnel, and coastal trail at the top left
25 adjacent to the seawall.

1 The inset depicts a proposed service wall,
2 service road and multi-use trail.

3 This section also shows the current grade in
4 the dashed line at the top, and the project's final grade
5 of sand above the slope stabilization layer showing a
6 wider, more gently sloped beach in the future.

7 Next slide, please.

8 Finally the rendering on the left depicts
9 project from Sloat Boulevard looking south with the plaza
10 and rest room in the foreground and trail along the
11 bluff.

12 The three renderings on the right depict the
13 coastal access stairway at various beach elevations on
14 the southern portion of the site near the proposed
15 coastal parking lot.

16 Next slide, please.

17 Now I would like to provide you with a brief
18 summary of the findings of the Draft EIR. The Draft EIR
19 found that the project would have significant and
20 unavoidable impacts related to transportation, noise, and
21 biological resources.

22 Transportation: The permanent closure of the
23 Great Highway south of Sloat Boulevard would reroute
24 vehicles onto Sloat and Skyline Boulevards adding
25 approximately half mile per trip, which amounts to 2.5

1 million vehicle miles traveled, or VMT, per year, which
2 exceeds the Planning Department's significance threshold
3 of 2 million VMT per year. No feasible mitigation was
4 identified.

5 Noise: The additional vehicular traffic would
6 result in significant levels of roadway noise on portions
7 of Sloat and Skyline Boulevard. Mitigation to reduce
8 traffic noise could include speed limit reduction, new
9 traffic signals and/or street redesign.

10 However, due to uncertainty regarding
11 implementation of this mitigation, the impact is
12 considered significant and unavoidable.

13 Biological resources: Sandy bluffs at south
14 Ocean Beach and Fort Funston are used seasonally by Bank
15 Swallow as nesting habitat in burrows excavated in the
16 bluff face. This breeding area, referred to as Fort
17 Funston colony, is one of the few coastal breeding
18 locations in California for the state-listed threatened
19 species. The proposed project would removal
20 approximately 500 feet of bluff habitat above the
21 existing revetments.

22 The EIR calls for mitigation, including
23 educational signage and fencing, which could protect
24 adjacent Bank Swallow habitat in Fort Funston from public
25 access.

1 However, there is no known feasible mitigation
2 to replace or otherwise compensate for the lost local
3 Bank Swallow breeding habitat. Therefore the EIR
4 concludes that the impact on Bank Swallow habitat would
5 be significant and unavoidable with mitigation.

6 The Draft EIR and initial study also identified
7 the construction-related impacts on noise, air quality,
8 biological resources, and paleontological resources would
9 be significant but could be mitigated to a less than
10 significant level.

11 All other impacts from the proposed project
12 were found to be less than significant or would result in
13 no impact.

14 Next slide, please.

15 The Draft EIR analyzed four project
16 alternatives, including the no project alternative which
17 is required by CEQA.

18 Under the no project alternative, there would
19 be no change to the roadway, revetments and rubble or
20 existing National Park Service parking lot until affected
21 by erosion.

22 No shoreline protection or coastal trail would
23 be constructed. Periodic sand placements and emergency
24 shoreline protection would continue to be implemented and
25 the wastewater infrastructure would remain vulnerable to

1 coastal hazards.

2 The increased beach nourishment alternative
3 would be similar to the no project alternative, except
4 that the revetments and rubble would be removed and
5 approximately five more times sand than the project would
6 be placed to maintain the beach and limit further
7 shoreline erosion.

8 Despite this amount of sand placement, the
9 wastewater infrastructure would still remain vulnerable
10 to coastal hazards.

11 As an aside, this photo below is from the Army
12 Corps of Engineers' Beneficial Use Project, which placed
13 over 265,000 cubic yards of sand dredged from the main
14 ship channel on South Ocean Beach this past summer.

15 The EIR analyzed a conventional seawall
16 alternative such as the photo of this seawall in Santa
17 Cruz. This would not require any changes to the existing
18 roadway and parking lots and would remove the rubble and
19 revetments. This would also require about three times
20 more sand placement than the project in order to
21 require -- in order to maintain a sandy beach.

22 The fourth alternative analyzed abandoning the
23 Lake Merced Tunnel and replacing its function with inland
24 infrastructure, likely beneath Skyline Boulevard, Sloat
25 Boulevard and/or Herbst and Zoo Roads. This would

1 include removal of rubble and revetments, construction of
2 a parking lot and multi-use trail and similar sand
3 placement as the project.

4 Without shoreline protection, the City would
5 need to close the Great Highway. An additional
6 wastewater infrastructure located further east of the
7 Lake Merced Tunnel would continue to be vulnerable.

8 Next slide, please.

9 In comparison, all four alternatives would
10 reduce the direct impact of the removal of the bluff
11 containing Bank Swallow habitat and three of the
12 alternatives would reduce the project operation's VMT and
13 noise impacts related to the diverted traffic from Great
14 Highway closure.

15 However, it should be noted that with removal
16 of rock and rubble revetment at the base of the bluff
17 under increased beach nourishment alternative, the bluff
18 is anticipated to erode over time resulting in future
19 habitat loss and roadway closure.

20 The inland infrastructure alternative includes
21 removing the roadway, but could also result in the future
22 loss of Bank Swallow habitat as the unprotected bluff
23 erodes.

24 Next slide, please.

25 Today the Planning Department is seeking

1 comments on the adequacy and accuracy of the information
2 contained in the Draft EIR. For members of the public
3 who wish to provide verbal comments, please state your
4 name for the record. Please speak slowly and clearly so
5 that the Planning Department can make an accurate
6 transcript of today's proceedings.

7 Staff are not here to respond to comments
8 today. Comments will be transcribed and responded to in
9 writing in a Responses to Comments document which will
10 respond to all relevant verbal and written comments
11 received during the public comment period and make
12 revisions to the Draft EIR as appropriate.

13 The Draft EIR for the proposed project was
14 published on December 8th, 2021, and the public review
15 period extends until January 24th, 2022.

16 Those who are interested in commenting on the
17 Draft EIR in writing may submit their comments to me at
18 CPC.OceanBeachEIR@SFgov.org or mail them to Julie Moore,
19 49 South Van Ness Avenue, Suite 1400, San Francisco,
20 California, 94103 by 5:00 P.M. on Monday, January 24th,
21 when the public comment period closes.

22 All commenters who provide their contact
23 information will receive a notice of availability of the
24 Response to Comments document, also known as the final
25 EIR, when it is published.

1 If you are providing verbal comments today and
2 you wish to receive this notice, or if you wish to
3 receive a hard copy or electronic copy of the Draft or
4 Final EIR, please provide your contact information to the
5 email address above or call me at (628)652-7566 and leave
6 a message with that information.

7 This concludes my presentation.

8 Thank you.

9 SECRETARY IONIN: Thank you. Members of the
10 public, if you wish to address the Commission on the
11 accuracy and adequacy of the Environmental Impact Report,
12 please press star 3.

13 I would like to stress that we are not taking
14 comment on the project itself, just the adequacy and
15 accuracy of the Environmental Impact Report.

16 Through the chair, you will each have two
17 minutes and when you hear that your line has been
18 unmuted, that is your indication to begin speaking.

19 MR. PEDERSEN: Yes, I'm Paul Pedersen. And our
20 house is right across from Sloat and Skyline on
21 Lakeshore.

22 My neighbors and I are really against the
23 rerouting of traffic through there because when the Great
24 Highway's closed or clearing sand and other issues, the
25 traffic backs up for half mile and the drivers are

I-Petterson-2

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GC-6

1 honking their horns, cussing and yelling. And there's a
2 lot of excess that intersection just can't handle the
3 load. And it's gotten a lot worse in the last 15 years.

4 And over the last 35 years plus, that
5 intersection has seen pedestrians killed, and fatal car
6 collisions. And if, as a last resort you need to route
7 traffic through there, then I would recommend a
8 roundabout because signals and stop signs don't work. A
9 lot of the drivers just blow through them.

10 As an alternative, when I was a kid, the
11 traffic from Skyline used to go up through -- between
12 Funston and the zoo there, well actually now where the
13 sewer plant treatment facility is, and the handicapped
14 center, I believe the street is call Herbst Street and it
15 went up and it came out between Fleishhacker Pool, which
16 is now the zoo parking lot, and the sewer plant.

17 So, that's just one option. You could reroute
18 the traffic through there. Or at least keep one lane
19 each way of the Great Highway open.

20 In addition to that, I can't understand why
21 over the years that the City of San Francisco and the
22 Park Service has not built an O'Shaughnessy style seawall
23 such as the one in the middle of the Great Highway and
24 the one up by Playland from the Cliff House from Lincoln
25 Way.

1 (cont.)
GC-6

2
TR-2

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AL-1

1 We were starting to lose the Great Highway in
2 the '80s. And the O'Shaughnessy seawall, there's a --
3 Mother Nature takes its cycles --

4 SECRETARY IONIN: That's --

5 PHONE APPEARANCE: -- sand came back.

6 SECRETARY IONIN: Thank you, sir. That is your
7 time.

8 I will remind members of the public that,
9 again, we're taking comment on the adequacy and accuracy
10 of the Environmental Impact Report, not the project
11 itself.

12 MS. BOKEN: Eileen Boken, Coalition for
13 San Francisco Neighborhoods speaking on my own behalf.

14 Regarding sand replenishment as part of this
15 project, the 800-pound gorilla in the room is commercial
16 sand mining in San Francisco Bay with the sand being used
17 for construction purposes.

18 The US Geological Survey in Santa Cruz has
19 conducted modeling of sand coming down from the Sierras,
20 being transported through San Francisco Bay and then out
21 through the Golden Gate. The USGS modeling concluded
22 that sand mining around Angel Island and Alcatraz changes
23 the sand transport patterns.

24 On the south end of Ocean Beach this has
25 exacerbated erosion. On the north end of Ocean Beach,

↑
3 (cont.)
AL-1

I-Boken-2

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GE-1
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1 this has caused accretion or buildup.

2 The sand mining issue has been brought to the
3 attention of the SFPUC Commission. Key permitting
4 agencies for commercial sand mining in San Francisco Bay
5 are the State Lands Commission and the Bay Conservation
6 and Development Commission BCDC.

7 I would urge the Planning Commission to conduct
8 an informational hearing on the sand mining issue.

9 Thank you.

10 UNIDENTIFIED PUBLIC SPEAKER: Can you hear me?
11 Hello?

12 SECRETARY IONIN: Yes, sir, we can.

13 UNIDENTIFIED PUBLIC SPEAKER: All right.

14 Commissioners, I and many other citizens
15 strongly oppose the adaptation of the managed retreat
16 regarding the southern reach of the Great Highway.

17 Managed retreat is being used as a method for
18 City agencies to perpetuate another landgrab at the
19 cost -- at the expense of the motorists in the Bay Area.

20 This is major commuter route that needs to be
21 maintained. The fact is it's part of the emergency
22 evacuation route as laid out in San Francisco evacuation
23 plan.

24 There are 20,000 vehicles per day that use the
25 Great Highway and their needs are being ignored by the

1 (cont.)
GE-1

I-Unidentified

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GC-2

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TR-3

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GC-2

1 city. People need this road to get to work, and conduct
2 daily business of living a life in the city.

3 At a time when we are attempting to increase
4 densities in the western part of the city, closing roads
5 is the wrong thing to do.

6 There is absolutely no need to close the road
7 down to motorists. In fact, I would say there is a
8 greater need to protect this road.

9 We've already started protecting the area by
10 reshaping the glove and providing long-term beach
11 nourishment and sand replenishment just completed and
12 last year and will last another five to ten years. It
13 would be far more expensive to close the road than to
14 protect it.

15 SF Parks and Rec wants you to close down the
16 southern route to the central reach of the Great Highway
17 and create yet another park when one already exists.

18 There are numerous recreational venues present
19 in this area. This plan calls for spending \$130 million
20 to create a park which includes protecting -- which
21 includes protecting the area.

22 It costs \$200,000 to replenish the sand from
23 ship channel dredging. The \$130 million would be best
24 spent on housing veterans or feeding the hungry.

25 There's a complete lack of transparency

3 (cont.)
GC-2

1 regarding these and other road closures in the city,
2 including numerous Sunshine Ordinance violations against
3 the head of the city agency.

4 Over 15,000 people have signed a petition to
5 keep the Great Highway open. Please do not ignore the
6 needs of working people by closing this stretch of the
7 highway. Thank you.

8 MR. HILL: Hello. Can you hear me?

9 SECRETARY IONIN: Yes, we can hear you.

10 MR. HILL: Thank you.

11 My name is Steven Hill. I'm a 25-year resident
12 of the Outer Sunset. I don't think your EIR is
13 acceptable. It seems like you have not -- you've taken a
14 very narrow view of the environment and you haven't
15 looked at what is the impact of a road closure on the
16 people of the west side of San Francisco.

17 This road is a major commute route. It's a way
18 that the people of the west side have to evacuate during
19 emergencies and it -- none of that appears, as far as I
20 can tell, in your EIR.

21 In fact, I read through just about every
22 document you have beyond EIR, and no one has made a case
23 for why the road, the existing road, and the continuance
24 of that road or automobiles are contributing to coastal
25 erosion. There just seems to be an assumption. There's



3 (cont.)
GC-2

I-Hill-2

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TR-3

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PD-1

1 no data, no science, no research showing that coastal
2 erosion is somehow being abetted by the presence of this
3 road or automobiles.

4 So then why are these -- is this road and these
5 automobiles being removed in total disregard of the needs
6 of the people on the west side?

7 There are other options available to you. For
8 example, you could -- instead of having two lanes north
9 and southbound, you could have one lane north and
10 southbound and move it in closer to the treatment plants.
11 At the current rate of erosion that buy us at least
12 another 25 years of usage of that road. Why isn't that
13 being explored?

14 Also in looking at your aerial overhead, that
15 access road that is in the middle, that also could be
16 used as the road that connects to Skyline and that way
17 you wouldn't have automobiles going so far out on that
18 point. Instead, they could cut more through the middle.
19 Why isn't that being explored?

20 Why is it that somehow the needs of bicyclists
21 and pedestrians to have a trail just take precedence over
22 working people that need that road and people who need
23 that road to -- in case of emergency.

24 Why wouldn't a bike path also be threatened by
25 coastal erosion?

2 (cont.)
PD-1

3
AL-1

1 And yet you're talking about putting in a
2 bicycle path instead of maintaining the road that you
3 have where you could put a bicycle path next to the road
4 by redesigning that with a little bit of creativity.

↑
3 (cont.)
AL-1

5 SECRETARY IONIN: That is --

6 MR. HILL: Do not take this road away from
7 people. Thank you.

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GC-2

8 MR. CAUZEN: Hello commissioners, my name is
9 Michael Cauzen (phonetic). Thank you for your work on
10 the draft report.

11 I have not had the opportunity yet to
12 thoroughly review all of the documents yet, but I have
13 identified at least two potential concerns with the
14 accuracy and completeness of the report.

15 First, calculation of the additional vehicle
16 miles traveled from the operations of the project,
17 estimating in the draft plan at 2.5 million miles per
18 year is understated.

I-Cawthon-2

19 VMT calculated using 73 percent of the current
20 traffic volume which is expected to use Sloat Boulevard
21 to reach Skyline however the calculation ignores the
22 additional VMT that will absolutely result from the other
23 27 percent of the current traffic volume that will use
24 even longer routes such as Sunset Boulevard or 19th
25 Avenue. This is additional VMT that will result from the

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TR-4
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1 operations of the project should be added to the total in
2 the Final EIR.

3 Second, even though the plan concludes that
4 there will be a significant increase in VMT it also
5 concludes that the project will not generate greenhouse
6 gas emissions that will significantly impact the
7 environment.

8 That does not seem plausible that a project
9 could generate additional VMT without also generating
10 significant greenhouse gas emissions. This should be
11 addressed in the final EIR.

12 Thank you commissioners for your time and
13 consideration.

14 SECRETARY IONIN: Thank you. Last call,
15 members of the public, for comment on the adequacy and
16 accuracy of the Environmental Impact Report.

17 You need to press star 3 to be added to the
18 queue.

19 Seeing no additional requests to speak from
20 members of the public, public comment on this item is
21 closed.

22 And it is now before you, commissioners.

23 PRESIDENT KOPPEL: Commissioner Diamond.

24 COMMISSIONER DIAMOND: Thank you. I've been
25 reading CEQA documents for over 40 years and I wanted to

1 (cont.)
TR-4

2
GHG-1

1 say that this was one of the most interesting and helpful
2 documents I've read during those four decades.

3 It's a great example of, I think, of why CEQA
4 continues to be extremely important for these conflicts,
5 multi-agency, multi-jurisdictional,
6 public-agency-sponsored projects that have multiple
7 goals.

8 Because it really demonstrates the benefit of
9 the alternative analyses and how each alternative has
10 varying impacts and in addition with respect to each of
11 those goals.

12 And I particularly appreciated the disclosure
13 about what's likely to be the case based upon what's
14 currently known while acknowledging the uncertainty that
15 still exists in the science of waves and the impacts on
16 the littoral zone.

17 I really want to compliment staff and all of
18 the EIR preparers in creating a document, including the
19 response to the questions that were raised today, that
20 will assist the decision makers in ultimately making the
21 decision where they understand the trade-offs that are
22 involved in their choices.

23 So with that, I just wanted to have -- I do
24 have a couple of clarification questions that I would
25 hope would be addressed in the response to comments.

A-CPC-1

1
GC-3

1 The first is that I find figure S-3 which is
 2 the same as 2.6 which is the same figure Ms. Moore put up
 3 at the beginning of her presentation, is somewhat
 4 challenging to read, especially in the EIR. It's very
 5 faint, it's hard to tell the dash lines from the straight
 6 lines. There's not enough labeling. There's a circular
 7 symbol which I assume is the tunnel, but it's not labeled
 8 as tunnel.

9 Just sort of simple things that would make it
 10 easier for the public to understand. That's a very
 11 important cross-section.

12 Secondly, on page S-20, in the summary of the
 13 mitigation measures relating to noise, there is a
 14 sentence that refers to compliance with the 90 dBA and 10
 15 dBA standards. And I think more explanation is necessary
 16 as to what would trigger or what the consequence is of
 17 being greater than 90 dBA or more than nine -- excuse me,
 18 more than 10 dBA relative to existing sounds.

19 So I just think a couple more sentences of
 20 explanation might help clarify the point that's being --
 21 trying to be made there.

22 In section -- excuse me in figure 2.2, which is
 23 on page 2.6, the markers for the trail point to the
 24 plazas at both ends and I assume the trail is the green
 25 line that goes from one parking plaza to the other one,

↑
 1 (cont.)
 GC-3
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 NO-1
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 GC-3
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1 but there's no legend that would indicate that and so I
2 think if the green line is intended to be the trail,
3 there should be a legend that indicates that.

4 And then finally on page 2-39, section 2.7.3,
5 there's a line that describes the role of this commission
6 and it says it's got two purposes.

7 One is certification of the EIR, which is
8 self-evident.

9 The other there's a note that says General Plan
10 referral.

11 I think it would be helpful if you could
12 explain in more detail what exactly it is we're doing
13 with respect to General Plan referral, what is the
14 subject, what part of the general plan, when does that
15 take place, I think more explanation would be helpful in
16 demonstrating to all of the readers of the Draft EIR and
17 the final EIR what the role of the commission is with
18 respect to this EIR.

19 Thank you very much. And again, my compliments
20 to the staff in producing a document that I think really
21 is very challenging to produce because of the complexity
22 of the subject. But it was fascinating to read and I
23 think will be very helpful to the decision makers.

24 SECRETARY IONIN: Okay, commissioners, if
25 there's no further request to speak, from, I --

3 (cont.)
GC-3

4
PD-10

1 PRESIDENT KOPPEL: I see Commissioner Moore
2 requesting.

3 COMMISSIONER MOORE: I would like to echo the
4 appreciation of this particular Draft EIR. It is very
5 thorough, a lot to be learned for everybody.

6 One section I would like to see perhaps treated
7 a little more in depth, and I'm not sure if I'm hitting
8 the sweet spot here.

9 The natural environmental description and
10 future ways to restore protected seems to be not as
11 conclusive as I would like to see. Plant material,
12 additional planting, including knowing a little bit more
13 about a sand burrowing bird I did not have any idea
14 about. And there's no description of what this animal
15 looks like and what it actually does. I'm fascinated by
16 realizing this is a unique habitat on the coast of
17 California and I think it deserves a little bit more
18 in-depth description if at all possible.

19 Otherwise, I'm very impressed by what's in
20 front of me here.

21 And that will conclude my comments. Thank you
22 so much.

23 SECRETARY IONIN: Okay. Seeing no other
24 requests to speak from members of the commission, we can
25 move on to the discretionary review calendar,

A-CPC-2

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BI-1

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Commissioners.

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(Concludes requested Item #8.)

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State of California)
) ss.
County of Alameda)

I, Connie J. Parchman, CSR #6137, do hereby certify: That I am a certified shorthand reporter of the State of California; that I was provided access to audio files; that a verbatim record of the proceedings was made by me using machine shorthand which was thereafter transcribed under my direction; further, that the foregoing is an accurate transcription thereof.

I further certify that I am neither financially interested in the action nor a relative or employee of any attorney or any of the parties.

IN WITNESS WHEREOF, I have subscribed my name.



Connie J. Parchman, CSR #6137

A-5 LATE COMMENTS

From: [James Barrett](#)
To: [CPC.OceanBeachEIR](#)
Subject: Please close the Great Highway to cars
Date: Wednesday, January 26, 2022 4:26:01 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Please close the Great Highway and rename it as: The Great Bicycle and Pedestrian Ocean Trail

1
GC-2

From: [J.B](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:15:57 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

Jina Bartholomew

Resident of Outer Sunset

From: [Scott Bauer](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:26:05 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

Dr. Bauer
Resident of D4

Scott Bauer, MD, ScM
Internal Medicine Resident, UC Primary Care Track
University of California, San Francisco
srbauer@post.harvard.edu

From: [Scott Bauer](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:24:52 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Scott Bauer
Resident of D4

1
GC-2

From: [John Beem](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 11:16:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,
I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

John Beem
Resident of Bernal Heights

From: [Scott Biermann](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:25:31 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

SB
Resident of D4

1
GC-2

From: [Amy Bradac](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 3:23:36 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Amy Bradac

Resident of the Sunset (Parkside)

Sent from my iPhone

1
GC-2

From: [coletteabrooks](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 5:42:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello, I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car. I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.
Colette Brooks and David Harrison
Outer Richmond residents (10 17th Ave.)

1
GC-2

From: [Andrea Davis](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:43:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,
I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco D4, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. I walk and run on the Great Highway every weekend, and frequently bike north and south using this route. When it was car-free 24/7, I ran on the highway every day. Right now it's impossible to walk and dangerous to bike through this route when the highway is open on weekdays. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.
Andréa Davis
Resident of D4, Outer Sunset

1
GC-2

From: [Krista Elkin \(kittensheartme@gmail.com\)](mailto:kittensheartme@gmail.com) Sent You a Personal Message
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Tuesday, January 25, 2022 8:06:59 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GC-3

Thank you

Sincerely,

Krista Elkin
2250 30th Ave
San Francisco, CA 94116
kittensheartme@gmail.com
(650) 422-0117

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Shelly Ericksen](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Wednesday, January 26, 2022 11:45:04 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GC-3

From: Vicki Fay
To: [CPC.OceanBeachEIR](#)
Cc: info@greathighwaypark.com
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 5:49:38 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Good Morning:

As a resident and a senior, the pleasures and safety of Car-free GH and JFK, have been life changing. Please keep these spaces for us, the people of San Francisco.

1
GC-2

Also, I support the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

2
GC-2

Vicki Fay
Lower Haight Resident

From: [Riaz Finnemore](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:35:47 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello, I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car. I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

Thanks!
Riaz Finnemore
Resident of Outer Sunset

From: [Jill Hazeltine](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Thursday, January 27, 2022 4:49:03 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GC-3

Sent from my iPhone

From: [Chantal Jolagh](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:38:24 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Best,

Chantal, Resident of Outer Sunset

1
GC-2

From: [Paula Katz](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 2:42:24 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello, as a walker, I love having the Great Highway closed to vehicular traffic and am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car. I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.

Paula Katz
District 4, Outer Parkside/Sunset

1
GC-2

From: Carolyn Kissick (carolynkissick@gmail.com) Sent You a Personal Message
To: CPC.OceanBeachEIR
Subject: Preserve the Ocean Beach Master Plan at Sloat
Date: Tuesday, January 25, 2022 4:54:17 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Julie Moore,

Hello,

I would like to align my comments with those of the Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The EIR is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard.

1
PP-1

SFPUC should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty.

In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

2
GC-3

Thank you

Sincerely,

Carolyn Kissick
1650 47th Ave
San Francisco, CA 94122
carolynkissick@gmail.com
(916) 276-2617

This message was sent by KnowWho, as a service provider, on behalf of an individual associated with Surfrider. If you need more information, please contact Michelle Kremer at Surfrider at mkremer@surfrider.org or (949) 492-8170.

From: [Ellen Koivisto & Gene Thompson](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 9:46:28 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco and as someone who lives on the lower Great Highway, right across the street from Ocean Beach, I am fine with using alternative roads to make north south connections by car. I am fine with reducing and eliminating car use as much as possible, and what is possible is a LOT more than people are doing. Cars cause climate change. Climate Change is eating at Ocean Beach and rising sea levels. We need to *stop* bowing to cars and start getting serious about survival. It's not a hard equation to work out.

1
GC-2

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike this route. I look forward to the improvements that will open up this ocean front space for people to enjoy, not just cars to destroy.

2
GC-2

Thank you for your hard work helping our city adapt to our changing climate.

Ellen Koivisto

From: [Stephen P. Lambe](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 5:46:16 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello, I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car. I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

Stephen Lambe
Richmond District resident (and frequent ocean beach visitor)

--

Stephen P. Lambe
email: stephenlambe@gmail.com
mobile: 206-920-8310

From: [Zoe Landis](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:55:49 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Zoe Landis

Resident of Outer Sunset

1
GC-2

Sent from my iPhone

From: [Nick Lipanovich](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:13:08 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car. I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

Nick Lipanovich
Resident of Lone Mountain

Sent from my iPhone

From: [O Mandrussow](#)
To: [CPC.OceanBeachEIR](#)
Cc: [Temprano, Tom \(BOS\)](#)
Subject: SUPPORT: Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 4:23:14 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I support the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco for almost 72 years, I am fine with using alternative roads (such as Sunset Boulevard) to make north-south connections by car.

I look forward to the multi-use trail and to the improvements that will make this ocean-front space for people to enjoy.

Thank you for your hard work helping our city adapt to climate change.

Best,
Olga Mandrussow
Resident of the Castro (District 8)

1
GC-2

From: [David Marquardt](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Thursday, January 27, 2022 9:30:32 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

David Marquardt

Resident of Outer Sunset

1
GC-2

From: [Géraldyne Masson](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Tuesday, January 25, 2022 7:29:03 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GC-3

Géraldyne Masson

From: [Ryan Moore](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 2:10:46 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,
I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

Ryan Moore
Resident of Lower Pac Heights neighborhood

From: [Pete Mulvihill](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 2:37:52 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north-south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Pete Mulvihill
Resident of D4, the Outer Sunset

1
GC-2

From: [Peter Munks](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 3:11:49 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello, Please close the Great Highway to cars -make this a permanent park.
I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.
Name
Resident of [neighborhood]

1
GC-2

From: [Veda Murthy](#)
To: [CPC.OceanBeachEIR](#); [MandelmanStaff](#), [BOS]
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 5:02:30 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Name

Veda Murthy resident of the Sunnyside SF, CA

1
GC-2

From: [Lynn Pearce](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 3:54:21 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car. I also walk at Lake Merced/Ocean Beach at least 3 times a week and would love to see the connection between the 2 made significantly safer.

1
GC-2

I am definitely looking forward to using the multi-use trail. Right now it's near impossible to walk safely and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

2
GC-2

Thank you for your hard work helping our city adapt to our changing climate.

Lynn Pearce
Resident of Glen Park/Bernal Heights

From: [Lana Porcello](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 2:46:12 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, I am fine with using alternative roads to make north-south connections by car. I am looking forward to using the multi-use trail, and look forward to the improvements that will open up this ocean front space.

Thank you for your hard work helping our city adapt to our changing climate.

Lana Porcello
Outer Sunset Resident

1
GC-2

From: [Shaina Prasad](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 8:57:57 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.

Shaina Prasad
Resident of Outer Richmond

1
GC-2

From: [Mike Regan](#)
To: [CPC.OceanBeachEIR](#)
Subject: Great Highway
Date: Wednesday, January 26, 2022 9:59:49 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am adamantly opposed to converting the great highway into some sort of play ground for bike riders. We already invest a great deal of time and money into bicycling in this city and it is just never enough for these people. Opening up that area is endangering the nesting area of the snowy plovers and hurting the sand dune grasses. There is absolutely no reason to shut down any part of the great highway. There is plenty of space for recreation here (GGP, Zoo, Ocean Beach, Ft. Funston, Lake Merced to name a few). Voters are feed up with all the road closing to accommodate biking when less than 2% of sunset residents use a bike. These people have been trying to shut down JFK drive since 1967 and have put it to the voters at least twice and failed. The head of Park N Rec negotiated a deal regarding JFK and is now refusing to honor it. These pro close it people have no morals, no conscience and are being funded by city dollars. The SF Bike Coalition received over 50% of its budget from SFMTA and one other "non profit" is also being funded by SFMTA and our tax dollars.

I 1
GC-2
I 2
GC-3
I 3
GC-2

Transit first did NOT mean bikes first. If I could take back that vote I would in a heart beat.

thank you.

Mike Regan

From: [Jennifer Rey](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 6:12:13 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Jennifer Rey

Resident of The Castro District and frequent visitor/cyclist to Great Highway/Ft Funston area

1
GC-2

Sent from my iPhone

From: [Britt-Marie Alm](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Thursday, January 27, 2022 12:15:54 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,
I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.
Name
Brian Reyes

1
GC-2

From: [Uzes Charm](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 2:54:18 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,
I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.
As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.
I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.
Thank you for your hard work helping our city adapt to our changing climate.

Cora Shaw
Resident of District 9

1
GC-2

From: JS
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 9:24:57 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello, I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project. As a resident of San Francisco, and property owner in the Sunset, I am fine with using alternative roads to make north south connections by car. I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy. Thank you for your hard work helping our city adapt to our changing climate.

1
GC-2

John Springer
Resident and property owner in Sunset/Parkside

Sent from my iPhone

From: tvobsf@gmail.com
To: [CPC.OceanBeachEIR](#)
Subject: Open the Great Highway!
Date: Wednesday, January 26, 2022 11:43:38 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Open the Great Highway to cars 24/7 and end the city's waste of money funding Walk SF and SF Bicycle coalition! B C used to promote share the road. Now they want everything for playtime.You're killing the people with gridlock on the west end of the city. The Great Highway has become a commercial dump! The sand dunes are torn apart and destroyed!
Tony Villa

1
GC-2

From: [Peter Vitt](#)
To: [CPC.OceanBeachEIR](#)
Subject: Preserve the Ocean Beach Master Plan at Sloat!
Date: Tuesday, January 25, 2022 9:14:16 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I would like to align my comments with those of the San Francisco Surfrider Foundation. South Ocean Beach is a highly valuable section of beach used for running, surfing, fishing and general enjoyment. The Environmental Impact Report (EIR) is proposing a project that threatens a long history of planning intended to preserve a wide, natural beach in the area near Sloat Boulevard. The San Francisco Public Utility Commission (SFPUC) should address its inconsistencies with the Ocean Beach Master Plan, as outlined by the Surfrider letter. SFPUC should also re-convene the public, including beach stakeholders, to troubleshoot areas of difficulty. In particular, I am concerned about SFPUC's ability to maintain a highly artificial, steep slope in front of the proposed wall. An exposed wall will be unsafe and erode the beach. Even in its best form, the proposed project does not include a beach that is very wide and I am concerned that the triggers and sand management strategy proposed are insufficient for ensuring that lateral access and recreational space will exist on the beach.

1
PP-1
2
GC-3

Sent from my iPhone

From: [Marcia Weisbrot](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Wednesday, January 26, 2022 12:20:50 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Name--Marcia Wweisbrot

Resident of Duboce Triangle

1
GC-2

From: [Leslie Wong](#)
To: [CPC.OceanBeachEIR](#)
Subject: Ocean Beach EIR
Date: Wednesday, January 26, 2022 10:18:25 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to state that I oppose permanent closure of the great highway to be used for park purposes. It has already been shown that use of this thoroughway for motorized vehicles has resulted in more impact to the air quality with stalled vehicles and idling vehicles trying to go through other routes tthrough Gokden Gate Park to get from North to South or South to North. Closure has caused more cars to have to take alternate routes affecting neighborhood safety as well as further cingestion in the park. In addition, persons on bicycles are trampling the ice plant dunes and endangering the snowy plovers.

1
GC-3

Numbers shown at sites that support the closure/park use are inflated and the needs of the greater populace are better met having the Great Highway open for ALL to use. The majority of cycling use has been purely recreational. I have seen very few Cyclists who actually use their bikes to traverse the area; i have noticed as many if not more taking other bicycle routes and are not dependent on The Great Highway for transportation use.

Sincerely,

Leslie C. Wong
284 23rd Avenue
SanFrancisco

From: [Matt Wright](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 2:41:31 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Matt Wright
Resident of the Outer Sunset

1
GC-2

From: [Teo Zanella](#)
To: [CPC.OceanBeachEIR](#)
Subject: I support the Ocean Beach Climate Change Adaptation Project
Date: Tuesday, January 25, 2022 2:37:20 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

I am emailing you to voice my support for the Ocean Beach Climate Change Adaptation Project.

As a resident of San Francisco, I am fine with using alternative roads to make north south connections by car.

I am looking forward to using the multi-use trail. Right now it's impossible to walk and dangerous to bike through this route. I look forward to the improvements that will open up this ocean front space for people to enjoy.

Thank you for your hard work helping our city adapt to our changing climate.

Matteo Zanella

Resident of the Outer Parkside

1
GC-2

From: Nan Zerner
To: CPC.OceanBeachEIR
Subject: OPEN the roads
Date: Wednesday, January 26, 2022 10:25:26 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

I am writing to extend my frustration along with my fellow neighbors, teachers and friends who absolutely OPPOSE the closure of this major artery of our city The Great Highway!

If you were to close Marina Blvd because the people there wanted it for their own playground would you do that? Or the Embarcadero??? This connection allows those of us who live in the Richmond and Sunset and further north to reduce our commute time, avoid traversing through the residential neighborhoods and eliminate the idling of car emissions stopping unnecessarily at every stop sign.

1
GC-2

Maybe the idea of closing streets for those who have the wealth or privilege of working from their homes appeals to your agency but those of us who are educators, health care workers and those who take care of their families are no longer a priority of the city government agencies.

If the Great Highway is closed during the week to commuters you will have over 20,000 cars subjected to road rage, traffic accidents and potential fatalities.

2
TR-4

I would appreciate a response from this email. The ONLY response I have received from anyone in the government of our city is from Connie Chan.I have written over 25 emails and made over 10 calls and it is sickening to not have responses. I am a 30 plus year resident and 20+ educator in San Francisco as well as a tax paying homeowner and all of this corruption will be uncovered to reveal the sideline politics being done to our community.

3
GC-1

Nancy Zerner

--

A good library will never be too neat, or too dusty, because somebody will always be in it, taking books off the shelves and staying up late reading them. ~Lemony Snicket

ATTACHMENT B
SUPPLEMENT TO DRAFT EIR APPENDIX E,
NOISE ANALYSIS SUPPORTING
DOCUMENTATION

Addition of Noise Levels from Placement of North Ocean Beach Sand

Noise Source	S1	S2	S3
	Existing Ambient	Restroom and parking Lot Construction	Sand Placement
Noise Contribution (dBA)	64	68	58
Remove LOG	2511886	6309573	630957
Adding Noise Sources $10 \cdot \text{LOG}(S1+S2+S3)$	69.8		
Change in noise level =	5.8 dBA		

ATTACHMENT C
**SUPPLEMENT TO DRAFT EIR APPENDIX G,
AIR QUALITY TECHNICAL MEMORANDUM AND
HEALTH RISK ASSESSMENT**



memorandum

date June 9, 2023

to Julie Moore, San Francisco Planning Department

from Matt Fagundes, Sarah Patterson, and Elijah Davidian, ESA

subject Ocean Beach Climate Change Adaptation Project –
Air Quality Technical Memorandum and Health Risk Assessment Addendum

1. Introduction

This memorandum provides supplementary technical information for the evaluation of criteria air pollutant emissions and of health risks from the Ocean Beach Climate Change Adaptation Project (proposed project). This memorandum supplements the November 2021 Air Quality Technical Memorandum and Health Risk Assessment (AQTM), which is Appendix G of the draft EIR for the proposed project. A revised project emissions estimates and supplemental health risk assessment were prepared and are separated into three parts that follow this introduction. The first part documents the revised project and its effects on the criteria air pollutant exhaust analysis completed in the AQTM. The second part evaluates annual average fine particulate matter (PM_{2.5}) concentrations from fugitive dust emissions associated with off-road construction activities. The third part evaluates health risks, including lifetime excess cancer risks and annual average PM_{2.5} concentrations at existing worker receptor locations near the proposed project. Evaluating health risks for worker receptors as well as annual average PM_{2.5} concentrations from fugitive construction dust emissions is currently not recommended by the Bay Area Air Quality Management District (BAAQMD) for air quality assessments as stipulated in the BAAQMD CEQA Guidelines.¹

Construction and operations of the proposed project would result in criteria air pollutant emissions and potential risk to human health from emissions of toxic air contaminants (TACs).² Criteria air pollutants were estimated for the construction and operations of the proposed project in the November 2021 AQTM. The November 2021 AQTM estimates health risks at sensitive receptor locations from exposure to emissions of diesel particulate matter (DPM) and PM_{2.5} from diesel-powered construction equipment, haul, and vendor truck travel and idling, and fugitive dust from on-road vehicle travel. The AQTM also estimates health risks at sensitive receptor locations for the reallocation of traffic from the closure of the Great Highway.

¹ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed January 2023.

² Given that there would be no operational activity associated with the proposed project description changes, because the sand placement from North Ocean Beach during construction and the construction schedule are limited to the construction period and as the proposed ADA improvements would be generally maintenance free for the first 10 years after which visual inspections would be conducted every 5 years, this analysis focuses solely on construction-related emissions.

The *Revised Project Description Exhaust Emissions Modeling* section describes the analysis performed for exhaust emissions estimates associated with revisions to the project description that were made subsequent to the release of the Draft EIR. A summary of the project description revisions is provided, followed by a description of the associated revised model assumption and the results of the revised modeling. The *Construction Fugitive Dust Assessment* section describes the analysis performed for fugitive dust emissions and associated annual average PM_{2.5} concentrations. A discussion of fugitive dust mass emissions is followed by a summary of the fugitive dust health risk assessment modeling parameters and associated health risk. The *Worker Health Risk Assessment* section describes the analysis performed for worker receptors and includes an analysis discussion of the risk calculation methods as well as a discussion of the results and implications of the maximum exposed individual receptor (MEIR) locations.

2. Revised Project Description Exhaust Emissions Modeling

Consistent with the AQTM, construction emissions were estimated primarily using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. On-road vehicle emissions calculations were prepared outside of CalEEMod, using California Air Resources Board’s 2017 EMISSION FACTOR (EMFAC2017) model, to supplement the analysis. EMFAC 2017 utilizes more current data to calculate mobile emissions and is used for that purpose in this analysis. Below are summary descriptions of the project description revisions, followed by the revised assumptions used to model construction emissions and the summary of results of the revised project construction emissions.

2.1 Summary of Project Description Revisions

The revisions to the proposed project that required updated air quality emissions modeling assumptions consist of the following:

- Addition of Americans with Disabilities Act (ADA) access improvements between Sloat Boulevard and Taraval Street;
- Addition of placement of North Ocean Beach sand over the slope stabilization layer during construction; and
- Updated project construction schedule.

New Americans with Disabilities Act Access Improvements

The draft EIR’s Chapter 2, *Project Description*, indicates that visitor access to Ocean Beach would be improved with the addition of a new multi-use trail along Great Highway from Sloat Boulevard to Skyline Boulevard, a new beach access stairway connecting the multi-use trail and beach located toward the south end of the project area near Fort Funston, and continued maintenance of an existing sand ramp at Great Highway and Sloat Boulevard. Since publication of the draft EIR, the city has refined the project’s modes of visitor access by incorporating ADA access improvements along a section of the existing multi-use trail along Great Highway from Sloat Boulevard north to Taraval Street. Accordingly, this technical memorandum addendum incorporates these improvements to the analysis of the project.

Placement of North Ocean Beach Sand Over Slope Stabilization Layer During Construction

The draft EIR’s Chapter 2, *Project Description*, states that sand excavated from the sandy bluff would be stockpiled onsite during buried wall and slope stabilization layer construction, and that 40,000 cubic yards of the stockpiled material would be placed on top of these features once constructed. Since publication of the draft EIR, to better account for potential incompatibility of the excavated bluff sand with the beach sand, the SFPUC has refined the project description and Phase 3 construction duration to include the potential use of North Ocean Beach sand to bury the wall and slope stabilization layer. Up to approximately 85,000 cubic yards of sand would be obtained from North Ocean Beach for additional wall and slope stabilization cover at the end of Phase 3. The North Ocean Beach sand would be obtained using the same types of equipment and placed in a manner similar to that of the proposed small sand placements described in draft EIR Section 2.4.5.4, *Small Sand Placements*. The draft EIR has been revised to reflect this change.

Updated Project Schedule

The draft EIR’s Chapter 2, *Project Description*, indicates that construction of the project would occur over a period of approximately 4 years, with an estimated construction period from early 2023 to early 2027. Since publication of the draft EIR, the city has determined that it would be necessary to delay the start of construction until third quarter 2024 and extend the duration of Phase 3 from 18 months to 24 months and extend the duration of Phase 4 from 9 months to 12 months. Accordingly, this technical memorandum addendum incorporates these improvements to the analysis of the project.

2.2 Revised Model Assumptions

Updated Off-road Construction Equipment

Off-road equipment types and quantities are based on project-specific data provided by the SFPUC. Off-road equipment engine tier status and associated emission factors for the uncontrolled scenario are CalEEMod defaults, which are average emissions factors for the equipment inventory for the given calendar year of construction, assumed to be 2024 through 2028.³ The off-road construction equipment was modeled with Tier 4 Final engine emission standards for all equipment greater than 125 hp under the controlled scenario. Equipment hp are CalEEMod defaults except for the grinder that would be required associated with the new ADA access improvements. For the grinder, the CalEEMod equipment type “other construction equipment” was used with a 260 hp. Equipment load factors are also CalEEMod defaults.

Off-road equipment quantities, engine horsepower, and load factor assumptions for two new project components are shown in **Table 1**. Table 1 also identifies the amount of equipment workdays per new project description component, the average hours per workday for the new project description components, and the associated average daily use hours for each of the construction phases. In addition to the assumptions for the new equipment associated with the project descriptions revisions, Table 1 also includes the revised average hours per workday for

³ The city’s Clean Construction Requirement Ordinance (Chapter 25 of the Environmental Code) establishes minimum requirements for off-road construction equipment engines based on whether a project is in or out of the Air Pollutant Exposure Zone (APEZ) as mapped by the San Francisco Health Department. As discussed below the project is not in the APEZ. However, as approved by the planning department, this analysis uses the CalEEMod defaults for equipment engines instead. This is because the available equipment inventory estimated for the construction period on which the CalEEMod default emission factors are based result in a more representative equipment scenario for the project compared to the city’s minimum requirements for the project area.

the equipment previously analyzed in the AQTM due to increasing the number of workdays for Phase 3 from 180 days to 240 days and increasing the number of workdays for Phase 4 from 160 days to 213 days (see *Updated Project Construction Schedule*, below). Since the total modeled equipment hours worked for Phases 3 and 4 remain the same, the increase in workdays resulted in a decrease in average equipment hours per workday for Phases 3 and 4. All other off-road equipment assumptions for the other components of Phases 1, 2, and 5 remain unchanged.

**TABLE 1
REVISED OFF-ROAD EQUIPMENT FLEET ASSUMPTIONS**

Equipment Type	Number of Equipment	Engine Horsepower	Load Factor	Equipment Workdays/Component	Average hours/workday by Component	Average hours/workday by Phase
New ADA Access Improvements Component of Phase 1						
Tractor/loader/backhoe	1	97	0.37	20	8	0.8
Grader	1	187	0.41	10	8	0.4
Paver	2	130	0.42	4	12	0.1
Grinder	1	260	0.42	2	12	0.1
Roller	1	80	0.38	2	12	0.1
Placement of North Ocean Beach Sand Over the Slope Stabilization Layer Component of Phase 3						
Excavators	1	158	0.38	25	7	0.7
Rubber Tired Dozers	4	247	0.40	100	6	0.6
Rubber Tired Loaders	1	203	0.36	25	5	0.5
Changes to Phase 3 Equipment Assumptions Previously Analyzed in AQTM due to Increasing Workdays from 180 days to 240 days						
Air Compressors	-	-	-	-	-	1.0
Cranes	-	-	-	-	-	0.4
Crawler Tractors	-	-	-	-	-	1.5
Excavators	-	-	-	-	-	1.5
Forklifts	-	-	-	-	-	0.4
Generator Sets	-	-	-	-	-	1.0
Heavy-duty Breaker Hammer	-	-	-	-	-	1.3
Motor Grader	-	-	-	-	-	1.8
CAT 980 Front End Loader	-	-	-	-	-	2.1
Pumps	-	-	-	-	-	3.3
Signal Boards	-	-	-	-	-	5.0
Signal Boards	-	-	-	-	-	2.5
Tractors	-	-	-	-	-	2.9
Tractors/Loaders/Backhoes	-	-	-	-	-	2.5
Water Trucks	-	-	-	-	-	1.3

**TABLE 1
REVISED OFF-ROAD EQUIPMENT FLEET ASSUMPTIONS**

Equipment Type	Number of Equipment	Engine Horsepower	Load Factor	Equipment Workdays/Component	Average hours/workday by Component	Average hours/workday by Phase
Changes to Phase 4 Equipment Assumptions Previously Analyzed in AQTM due to Increasing Workdays from 160 days to 213 days						
Air Compressors	-	-	-	-	-	1.9
Cranes	-	-	-	-	-	0.2
Concrete Pump	-	-	-	-	-	0.6
Crawler Tractors	-	-	-	-	-	1.6
Excavators	-	-	-	-	-	0.8
Forklifts	-	-	-	-	-	0.9
Generator Sets	-	-	-	-	-	1.2
Motor Grader	-	-	-	-	-	4.5
CAT 980 Front End Loader	-	-	-	-	-	2.1
Paving Equipment	-	-	-	-	-	1.5
Vibration Compactor	-	-	-	-	-	0.8
AC Roller	-	-	-	-	-	1.7
Pumps	-	-	-	-	-	1.9
Signal Boards	-	-	-	-	-	8.4
Signal Boards	-	-	-	-	-	5.6
Tractors	-	-	-	-	-	1.6
Tractors/Loaders/Backhoes	-	-	-	-	-	2.8
Water Trucks	-	-	-	-	-	2.3

It is anticipated that the new ADA access improvements component of Phase 1 would over a period of approximately one month (20 workdays) and placement of North Ocean Beach sand over the slope stabilization layer component of Phase 3 would over a period of approximately five weeks (25 workdays).

On-road Construction Vehicles

Total vendor trips that would deliver materials and supplies under Phase 1 to the project site would increase by 160 trips due to the new ADA access improvements component of Phase 1 (4 truckloads per day during the 20-workday period). The AQTM estimated average daily truck loads by rounding up the total loads over the workdays for each phase. Therefore, because the average truck loads per day are estimated by rounding up to the nearest digit, the previous average daily vendor truck loads estimate of two truckloads per day (four one-way trips) for the total 245 truckloads remains the same for the revised Phase 1 assumptions relative to the total of 325 truckloads. No revisions to the emissions modeling for Phase 1 vendor trips were necessary.

During Phase 3, the revised project would result in an increase in 5,668 haul trips to transport sand from North Ocean Beach to South Ocean Beach. It is estimated that each of the new haul trips would be approximately 11 miles in length. This would result in a revised total of 10,668 haul trips for Phase 3 that would include an

average trip length of approximately 18 miles (down from 25 miles modeled previously). Refer to **Table 2** for the construction vehicle trips amounts, trip lengths, and vehicle classes used to estimate the revised project’s on-road truck emissions associated with Phase 3 construction.

**TABLE 2
 ADDITIONAL CONSTRUCTION VEHICLE TRIPS, TRIP LENGTHS, AND VEHICLE CLASS**

Component/Phase	Trip Amounts		Trip Lengths		EMFAC Vehicle Class	
	Vendor Trips/day	Hauling Total Trips	Vendor	Hauling	Vendor	Hauling
Sand From North Ocean Beach	0	5,668	0	11.0	HMDT/HHDT	HHDT
Revised Phase 3	0	10,668	7.3	17.6	HMDT/HHDT	HHDT

Daily worker trips traveling to the project sites that would occur during all phases of construction are unchanged.

Paving and Painting

No changes have been made to the modeling assumptions associated with paving and painting for the revised project.

Updated Project Construction Schedule

The draft EIR’s Chapter 2, Project Description, indicates that construction would begin in the second quarter of 2023. Since publication of the draft EIR, the SFPUC has updated the project construction schedule. The draft EIR has been revised to reflect the revised construction start estimated to occur during the third quarter of 2024.

Table 2-3 on draft EIR page 2-32 has been revised to show that Phase 1 construction would start in the third quarter of 2024, and all subsequent construction phases would shift accordingly. Thus, under the revised schedule, Phase 1 of project construction would be expected to commence in the third quarter of 2024, and Phase 5 of project construction would be expected to be completed in the third quarter of 2028. In addition, the duration of Phase 3 has been revised from 18 months to 24 months and the duration of Phase 4 has been revised from 9 months to 12 months; therefore, the modeled workdays associated with Phase 3 has been revised from 180 days to 240 days and the modeled workdays associated with Phase 4 has been revised from 160 days to 213 days. The revised air quality analysis assumed the construction phasing for the five phases as shown below in **Table 3**.

Operational Assumptions

No revisions have been made to the operational emissions modeling.

Health Risk Assessment Assumptions

No revisions have been made to the health risk assessment associated with the revised project description. As discussed above, the project changes would only impact construction activities. The project changes as compared to the entirety of the project would not substantially impact the health risk assessment results. The maximum lifetime excess cancer risk from the construction of the original project design, as presented in the AQTM, was 2.4 per million and the annual average PM_{2.5} concentration was 0.01 µg/m³. The revised project changes would have minimal effect on the previous results.

**TABLE 3
REVISED CONSTRUCTION SCHEDULE**

Phase	Start Date	End Date	Workdays
Pre-Construction Mobilization: Contractor sets up staging areas and trailers.	7/1/2024	9/5/2024	49
Phase 1: Modify Sloat Boulevard/Great Highway intersection, remove National Park Service restroom, reconfigure San Francisco Zoo parking access, reroute Muni 23 Monterey bus layover and turn-around, and then permanently close Great Highway	9/18/2024	6/24/2025	200
Phase 2: Remove Great Highway southbound lanes, construct a buried wall and slope stabilization	9/27/2025	7/30/2027	480
Phase 3: Remove revetments and rubble from beach, place sand on beach and slope stabilization	1/1/2026	12/2/2026	240
Phase 4: Remove or repurpose Great Highway northbound lanes, install multi-use trail and service road, construct Skyline coastal access parking lot, new restroom, and beach access stairs, and install landscaping along multi-use trail, and restripe Great Highway/Skyline intersection	3/5/2027	12/28/2027	213
Phase 5: Install dune landscaping and temporary irrigation (as needed) and undertake site clean-up activities	11/1/2027	3/17/2028	100
Post-Construction Closeout	2/1/2028	5/1/2028	90 (calendar days)

NOTE: The CalEEMod model does not allow the user to factor in non-workday holidays or weather delays into the phase schedules; therefore, in order to incorporate the number of workdays for each phase provided by SFPUC, the end-date schedules provided by SFPUC had to be shortened to reflect the actual "production days."

SOURCE: San Francisco Public Utilities Commission, email from Karen Frye, May 15, 2023.

2.3 Revised Construction Emissions

The following tables present average daily uncontrolled and controlled construction emissions by source (e.g., off-road equipment) for the revised project. **Table 4** presents detailed average daily uncontrolled and controlled construction emissions for the revised proposed project by year.

Table 5 presents the summary average daily uncontrolled and controlled construction emissions for the revised proposed project by year. Incorporating the project revisions into the emissions modeling results in emissions being generated during an additional calendar year; however, the overall length of construction is approximately the same as previously analyzed at four years and the average daily emissions estimates are slightly reduced compared to those described in the AQTM. This is because the modeling assumes that the available construction equipment inventory would continue to become cleaner in the future due to the later start of construction, and because the average daily emissions concentrations would be reduced with the increase in the overall Phase 3 and Phase 4 construction periods. In addition, the maximum-year mitigated estimated oxides of nitrogen (NOx) emissions would be reduced from approximately 53 pounds per day to approximately 43 pounds per day.

**TABLE 4
DETAILED AVERAGE DAILY UNCONTROLLED AND CONTROLLED CONSTRUCTION EMISSIONS BY SOURCE**

Year/Source ^a	Average Daily Emissions (pounds/day) Uncontrolled				Average Daily Emissions (pounds/day) Controlled ^b			
	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust
2024								
Off-Road Equipment	2.76	22.66	1.00	0.96	2.10	15.62	0.68	0.67
Paving	0.13	0.00	0.00	0.00	0.13	0.00	0.00	0.00
Painting	15.14	0.00	0.00	0.00	15.14	0.00	0.00	0.00
Haul Trucks – Travel and Idling	0.09	5.20	0.03	0.03	0.09	5.20	0.03	0.03
Vendor Trucks – Travel and Idling	0.00	0.28	0.00	0.00	0.00	0.28	0.00	0.00
Worker Trips	0.33	0.21	0.01	0.01	0.33	0.21	0.01	0.01
<i>Subtotal</i>	18.45	28.35	1.03	0.99	17.79	21.31	0.72	0.70
2025								
Off-Road Equipment	5.18	41.94	1.72	1.65	3.88	28.99	1.19	1.17
Paving	0.13	0.00	0.00	0.00	0.13	0.00	0.00	0.00
Painting	15.14	0.00	0.00	0.00	15.14	0.00	0.00	0.00
Haul Trucks – Travel and Idling	0.17	11.30	0.06	0.06	0.17	11.30	0.06	0.06
Vendor Trucks – Travel and Idling	0.03	2.07	0.01	0.01	0.03	2.07	0.01	0.01
Worker Trips	0.57	0.34	0.01	0.01	0.57	0.34	0.01	0.01
Increased Great Highway Closure Vehicular Miles ^d	0.47	0.62	0.68	0.28	0.47	0.62	0.68	0.28
<i>Subtotal</i>	21.69	56.27	2.48	2.01	20.39	43.32	1.95	1.53
2026								
Off-Road Equipment	4.50	37.04	1.49	1.43	3.18	23.46	0.95	0.94
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Painting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Haul Trucks – Travel and Idling	0.20	13.69	0.08	0.07	0.20	13.69	0.08	0.07
Vendor Trucks – Travel and Idling	0.03	1.76	0.01	0.01	0.03	1.76	0.01	0.01
Worker Trips	0.38	0.23	0.01	0.01	0.38	0.23	0.01	0.01
Increased Great Highway Closure Vehicular Miles ^d	0.44	0.57	0.68	0.28	0.44	0.57	0.68	0.28
<i>Subtotal</i>	5.56	53.28	2.26	1.80	4.24	39.70	1.72	1.31
2027								
Off-Road Equipment	6.40	52.11	2.05	1.96	4.43	31.96	1.29	1.26
Paving	0.12	0.00	0.00	0.00	0.12	0.00	0.00	0.00
Painting	14.22	0.00	0.00	0.00	14.22	0.00	0.00	0.00
Haul Trucks – Travel and Idling	0.11	7.41	0.04	0.04	0.11	7.41	0.04	0.04
Vendor Trucks – Travel and Idling	0.06	3.08	0.01	0.01	0.06	3.08	0.01	0.01

TABLE 4
DETAILED AVERAGE DAILY UNCONTROLLED AND CONTROLLED CONSTRUCTION EMISSIONS BY SOURCE

Year/Source ^a	Average Daily Emissions (pounds/day) Uncontrolled				Average Daily Emissions (pounds/day) Controlled ^b			
	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust
Worker Trips	0.73	0.42	0.01	0.01	0.73	0.42	0.01	0.01
Increased Great Highway Closure Vehicular Miles ^d	0.42	0.54	0.68	0.28	0.42	0.54	0.68	0.28
<i>Subtotal</i>	22.06	63.56	2.80	2.30	20.09	43.42	2.04	1.61
2028								
Off-Road Equipment	1.81	15.07	0.58	0.55	1.05	7.09	0.28	0.27
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Painting	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Haul Trucks – Travel and Idling	0.00	0.35	0.00	0.00	0.00	0.35	0.00	0.00
Vendor Trucks – Travel and Idling	0.02	1.89	0.00	0.00	0.02	1.89	0.00	0.00
Worker Trips	0.21	0.08	0.00	0.00	0.21	0.08	0.00	0.00
Increased Great Highway Closure Vehicular Miles ^d	0.42	0.54	0.68	0.28	0.42	0.54	0.68	0.28
<i>Subtotal</i>	2.47	17.94	1.27	0.84	1.71	9.95	0.97	0.56

ABBREVIATIONS:

ROG = reactive organic gases PM₁₀ = particulate matter less than or equal to 10 microns in diameter
NO_x = oxides of nitrogen PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter
CalEEMod = CALifornia Emissions Estimator MODel

NOTES:

^a Source categories defined as follows:

- *Off-Road Equipment* = operating emissions from heavy-duty equipment, such as bulldozers, cranes, and excavators. Refer to Tables 3 and 4 for equipment activity assumptions. Emissions were modeled using CalEEMod.
- *Paving* = Fugitive ROG emissions from asphalt paving. Emissions were modeled using CalEEMod.
- *Painting* = Fugitive ROG emissions from the application of paint. Emissions were modeled using CalEEMod.
- *Haul Trucks* = Travel and idling emissions from heavy-duty on-road haul trucks. Emissions were modeled using EMFAC2017.
- *Vendor Trucks* = Travel emissions from heavy-duty and medium-duty on-road haul trucks. Emissions were modeled using EMFAC2017.
- *Worker Trips* = Operating emission from employee vehicles, assumed to be light-duty trucks. Emissions were modeled using EMFAC2017.
- *Great Highway Closure* = Operational emissions from increased Great Highway closure vehicular miles. Emissions were modeled using EMFAC2017. Emissions for 2028 reflect emission factors for 2027, which results in a conservative estimate.

^b Controlled emissions were modelled assuming all off-road construction equipment greater than 125 hp would meet Tier 4 Final engine emission standards.

^c Uncontrolled equipment scenario incorporates CalEEMod defaults, which are average emissions factors for the equipment inventory for the given calendar year of construction, assumed to be 2024 through 2028.

^d Particulate emissions from Increased Great Highway Closure Vehicular Miles include fugitive dust (i.e. brake-wear, tire-wear, and road dust) in addition to the tailpipe exhaust emissions.

SOURCE: ESA, 2023.

TABLE 5
AVERAGE DAILY UNCONTROLLED AND CONTROLLED CONSTRUCTION EMISSIONS

Year	Average Daily Emissions (pounds/day) Uncontrolled				Average Daily Emissions (pounds/day) Controlled ^a			
	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust	ROG	NO _x	PM ₁₀ Exhaust	PM _{2.5} Exhaust
2024	18.45	28.35	1.03	0.99	17.79	21.31	0.72	0.70
2025	21.69	56.27	2.48	2.01	20.39	43.32	1.95	1.53
2026	5.56	53.28	2.26	1.80	4.24	39.70	1.72	1.31
2027	22.06	63.56	2.80	2.30	20.09	43.42	2.04	1.61
2028	2.47	17.94	1.27	0.84	1.71	9.95	0.97	0.56

ABBREVIATIONS:

ROG = reactive organic gases

NO_x = oxides of nitrogen

VOC = volatile organic compounds

PM₁₀ = particulate matter less than or equal to 10 microns in diameter

PM_{2.5} = particulate matter less than or equal to 2.5 microns in diameter

NOTES:

^a Controlled emissions modeling: all off-road construction equipment with greater than 125 hp would meet Tier 4 Final engine emission standards.

SOURCE: ESA, 2023.

3. Construction Fugitive Dust Assessment

The AQTM evaluated the annual average PM_{2.5} concentrations associated with off-road equipment and on-road vehicle fuel combustion (exhaust) along with on-road vehicle fugitive sources including tire wear, brake wear, and road dust that would be emitted by project-related construction sources, consistent with current BAAQMD health risk assessment (HRA) guidance.⁴ This supplementary HRA evaluates additional fugitive dust emission sources from construction activities that would occur at the project site, including truck loading and unloading of materials and grading or sand movement activities. The analysis focuses on the resident sensitive receptors as identified in the AQTM (see AQTM Section 2.3, *Health Risk Assessment*). The same fugitive dust approach is applied for the annual average PM_{2.5} concentration estimates in Section 4, *Worker Health Risk Assessment*, discussed below.

3.1 Mass Emissions of Fugitive Dust

Truck Loading and Unloading

Fugitive dust emissions would occur at the site from the loading and unloading of material from trucks onto storage piles and back onto trucks. These trucks would carry material from offsite locations to the project site or carry material from the project site to offsite locations. Emissions for truck loading were calculated using

⁴ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed January 2023.

CalEEMod Version 2022.1 methods described in below, which are derived from United States Environmental Protection Agency (U.S. EPA) AP-42, Section 13.2.4.^{5,6}

The total cubic yards of material movement were calculated based on truck hauling data provided by SFPUC and the traffic analysis. Cubic yards were converted to short tons based on standard material density values. Annual PM_{2.5} emissions were calculated using the equations described above for truck loading. To capture the effect of the BAAQMD's Basic Construction Mitigation Measure, a 61 percent particulate emission reduction factor was used to represent watering exposed surfaces twice per day.⁷ It was assumed that trucked materials would occur throughout the project site along South Ocean Beach.

Table 6 presents the parameters used to calculate fugitive PM_{2.5} emissions from truck loading and unloading.

Grading Equipment Passes

All five phases require grading equipment for construction activities on site. Fugitive dust emissions from the grading equipment passes on site would occur specifically from the dozers, graders, and crawler tractors. Emissions for grading equipment passes were calculated using CalEEMod Version 2022.1 methods, which are derived from United States Environmental Protection Agency (U.S. EPA) AP-42, Section 11.9.^{8,9}

To capture the effect of the BAAQMD's Basic Construction Mitigation Measure, a 61 percent particulate emission reduction factor was used to represent watering exposed surfaces twice per day.¹⁰ It was assumed that grading equipment passes would occur throughout the project site along South Ocean Beach.

Table 6 presents the parameters used to calculate fugitive PM_{2.5} emissions from grading equipment passes.

Onsite Bulldozing Activities

Phase 3 requires dozer equipment for the construction placement of north ocean beach sand over the slope stabilization layer component. The fugitive dust emissions from these dozer construction activities, were calculated using methods consistent with CalEEMod version 2022.1, which are derived from United States Environmental Protection Agency (U.S. EPA) AP-42, Section 11.9.^{11,12}

⁵ ICF and California Air Pollution Control Officers Association, *California Emissions Estimator Model User Guide Version 2022.1 Appendix C: Emission Calculation Details for CalEEMod*, April 2022, <https://www.caleemod.com/user-guide>, accessed January 2023.

⁶ United States Environmental Protection Agency, *AP-42: Compilation of Air Emissions Factors, Fifth Edition, Volume I Chapter 13: Miscellaneous Sources, Section 13.2.4 Aggregate Handling And Storage Piles*, November 2006, https://www.epa.gov/sites/default/files/2020-10/documents/13.2.4_aggregate_handling_and_storage_piles.pdf, accessed January 2023.

⁷ Ibid.

⁸ Ibid.

⁹ United States Environmental Protection Agency, *AP-42: Compilation of Air Emissions Factors, Fifth Edition, Volume I Chapter 11: Mineral Projects Industry, Section 11.9 Western Surface Coal Mining*, October 1998, <https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf>, accessed June 2023.

¹⁰ Ibid.

¹¹ Ibid.

¹² United States Environmental Protection Agency, *AP-42: Compilation of Air Emissions Factors, Fifth Edition, Volume I Chapter 11: Mineral Projects Industry, Section 11.9 Western Surface Coal Mining*, October 1998, <https://www.epa.gov/sites/default/files/2020-10/documents/c11s09.pdf>, accessed June 2023.

To capture the effect of the BAAQMD’s Basic Construction Mitigation Measure, a 61 percent particulate emission reduction factor was used to represent watering exposed surfaces twice per day.¹³ It was assumed that grading equipment passes would occur throughout the project site along South Ocean Beach.

Table 6 presents the parameters used to calculate fugitive PM_{2.5} emissions from on site bulldozing activities.

**TABLE 6
FUGITIVE DUST MODELING PARAMETERS**

Parameter	Value
Truck Loading and Unloading	
Material Density ^a	1.26 tons / CY
Truck Loading: Material Moisture Content ^a	12%
Particle Size Multiplier – PM _{2.5} (k)	0.053
Mean Wind Speed	10.3 mph
Grading	
Mean Vehicle Speed ^a	7.1 mph
Particle Size Multiplier – PM _{2.5} (k)	0.031
Blade width of grading equipment ^a	12 feet
Bulldozing	
Particle Size Scaling Factor – PM _{2.5} (F)	0.105
Material Moisture Content ^a	7.9%
Material Silt Content ^a	6.9%
Dust control efficiency: Water Exposed Surfaces (2x per day) ^b	61%

ABBREVIATIONS: CY = cubic yard; mph = miles per hour; PM_{2.5} = fine particulate matter.

NOTES:

^a CalEEMod Default (ICF, 2022).

^b CalEEMod measure C-10-A (ICF, 2022).

SOURCES:

1. ICF and California Air Pollution Control Officers Association, *California Emissions Estimator Model User Guide Version 2022.1 Appendix C: Emission Calculation Details for CalEEMod*, April 2022, <https://www.caleemod.com/user-guide>, accessed January 2023.
2. United States Environmental Protection Agency, *AP-42: Compilation of Air Emissions Factors, Fifth Edition, Volume I Chapter 13: Miscellaneous Sources, Section 13.2.4 Aggregate Handling And Storage Piles*, November 2006, https://www.epa.gov/sites/default/files/2020-10/documents/13.2.4_aggregate_handling_and_storage_piles.pdf, accessed January 2023.

Summary of Results

Mass emissions of fugitive dust PM_{2.5} by project activity and phase are presented in **Table 7** below.

¹³ Ibid.

TABLE 7
EMISSIONS OF FUGITIVE PM_{2.5} FROM MATERIAL MOVEMENT ONSITE

Activity Type ^a	PM _{2.5} Emissions (total pounds per Phase)				
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
Uncontrolled Emissions					
Truck Loading and Unloading	4.78	5.87	2.26	0.56	0.12
Onsite Grading/Material Movement	8.08	9.93	14.45	8.08	6.85
Onsite Dozer Fugitive Dust	0.00	0.00	1,204.66	0.00	0.00
Total	12.86	15.80	1,221.37	8.64	6.97
Controlled Emissions					
Truck Loading and Unloading	1.86	2.29	0.88	0.22	0.05
Onsite Grading/Material Movement	3.15	3.87	5.64	3.15	2.67
Onsite Dozer Fugitive Dust	0.00	0.00	469.82	0.00	0.00
Total	5.02	6.16	476.33	3.37	2.72

ABBREVIATIONS: PM_{2.5} = fine particulate matter

NOTES:

^a See *Truck Loading and Unloading*, *Grading Equipment Passes*, and *Onsite Bulldozing Activities*, above.

SOURCES: see Table 6, above.

3.2 Fugitive Dust Health Risk Assessment

Pollutant concentrations were estimated using the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) regulatory air dispersion model (AERMOD version 22112).¹⁴ For the fugitive dust analysis, AQTM subsections *General AERMOD Parameters*, and *Emission Rates* apply (see AQTM Section 2.3).

Modeling Parameters

Table 8 presents AERMOD source configurations and parameters used in the model to represent the fugitive dust emissions at the proposed project site. Off-road construction fugitive dust sources were modeled as an area source within AERMOD, overlaying the project site. The release parameters were acquired from a South Coast Air Quality Management District (SCAQMD) technical support document for its Localized Significance Threshold Methodology.¹⁵ Fugitive dust emissions were modeled as a surface release with a height of 0 meters and an initial vertical dimension of 1 meter. Fine particulate matter, PM_{2.5}, was not run with dry depletion.

¹⁴ United States Environmental Protection Agency, *AERMOD Implementation Guide*, December 2016, https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_implementation_guide.pdf, accessed March 2021.

¹⁵ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, July 2008. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>, accessed January 2023.

TABLE 8
AERMOD SOURCE MODELING PARAMETERS

Parameter	Value
Source Type ^a	Area
Source Dimension	Project Site
Number of Sources	1
Release Height (m) ^b	0.0
Initial Vertical Dimension (m) ^c	1.0
Hours per Day	13 (7:00 a.m.–8:00 p.m.)
Days per Week	7

ABBREVIATION: m = meters

NOTES:

- ^a Construction was modeled as area sources covering the project site, consistent with the Citywide-HRA (SF DPH & SF Planning, 2020).
- ^b Release height consistent with fugitive dust modeling in SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD, 2008).
- ^c Initial vertical dimensions consistent with fugitive dust modeling in SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD, 2008).

SOURCES:

1. San Francisco Department of Public Health, and San Francisco Planning Department, *The San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, September 2020.
2. South Coast Air Quality Management District (SCAQMD), *Final Localized Significance Threshold Methodology*, 2008, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>, accessed January 2023.

The annual average PM_{2.5} concentrations from diesel-powered off-road construction equipment, haul and vendor truck travel and idling, and fugitive dust from on-road vehicle travel, as estimated in the November 2021 AQTM, were added to the estimated fugitive dust PM_{2.5} concentrations to find the total maximum annual average PM_{2.5} concentrations.

Summary of Fugitive Dust Health Risk Assessment Results

Table 9 presents a summary of the maximum average annual PM_{2.5} concentrations (µg/m³) at the MEIR from exposure to the proposed project's construction emissions.

Table 27 of the AQTM presents health risks associated with the proposed project combined with health risks associated with background existing TAC emission sources at the MEIR locations. In the AQTM, there were two scenarios analyzed, each with three results for varying sensitive receptor types. The maximum uncontrolled and controlled annual average PM_{2.5} concentration was 0.297 µg/m³ for the Scenario 2 Resident Receptor. No receptors within the modeling domain were in the APEZ and no receptors were brought into the APEZ as a result of the project.

As presented above in Table 9, the annual average uncontrolled and controlled construction PM_{2.5} concentrations for the MEIR with the addition of onsite fugitive dust are 0.18 µg/m³ and 0.14 µg/m³, respectively. The Scenario 1 Resident MEIR did not change locations from what was presented in the AQTM. This receptor remains outside the air pollution exposure zone even with the addition of fugitive onsite construction dust.

The annual average PM_{2.5} concentration under the construction scenario, Scenario 1 of the AQTM, is less than the residential receptor analyzed under Scenario 2 in the AQTM. Therefore, the lifetime excess cancer risk and annual average PM_{2.5} for the MEIR remains unchanged from the AQTM.

TABLE 9
ANNUAL AVERAGE PM_{2.5} CONCENTRATIONS

Receptor Type/Source	Annual Average PM _{2.5} Concentrations ^a (µg/m ³)			
	Uncontrolled		Controlled ^b	
	Receptor Location ^c (UTM X, UTM Y)	Project Contribution	Receptor Location ^c (UTM X, UTM Y)	Project Contribution
Resident				
Off-road (exhaust) and On-road (exhaust + fugitive)	(543520, 4176620)	0.02	(543520, 4176620)	0.01
Onsite Fugitive Dust	(543520, 4176620)	0.05	(543520, 4176620)	0.02
Operational Mobile Sources	(543520, 4176620)	0.11	(543520, 4176620)	0.11
Total Project	(543520, 4176620)	0.18	(543520, 4176620)	0.14
Existing	(543520, 4176620)	8.51	(543520, 4176620)	8.51
Existing + Project		8.69		8.65

ABBREVIATIONS:

UTM = Universal Transverse Mercator
UTM X = eastward-measured distance
UTM Y = northward-measured distance

PM_{2.5} = fine particulate matter less than 2.5 micrometers in aerodynamic diameter
µg/m³ = micrograms per cubic meters

NOTES:

- ^a Concentrations include implementation of the Construction Dust Control Ordinance for watering material piles twice per day.
- ^b Controls include: all off-road construction equipment was modeled with Tier 4 Final engine emission standards for all engines greater than 125 hp. Fugitive dust controls including water 2x a day.
- ^c The maximally exposed receptor is unchanged from the AQTM and is located on the northeast corner of Sloat Boulevard and the Great Highway

SOURCE: ESA, 2021; ESA, 2022.

4. Worker Health Risk Assessment

The AQTM characterized sensitive receptors as resident children, school-age children, and childcare facilities, consistent with current BAAQMD HRA guidance.¹⁶ This supplementary Worker HRA estimates health risks for nearby worker receptors. Worker receptors are not currently considered sensitive by the BAAQMD.¹⁷

¹⁶ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed January 2023.

¹⁷ Ibid.

4.1 Analysis

Similar to the HRA presented in the AQTM, this supplementary Worker HRA was prepared using technical information and HRA guidance and protocol from the BAAQMD,¹⁸ California Air Resources Board (CARB),¹⁹ the California Office of Environmental Health Hazard Assessment (OEHHA),²⁰ and the 2020 Citywide-HRA.²¹ The Worker HRA evaluates the estimated incremental increase in lifetime cancer risks from exposure of worker receptors to emissions of DPM associated with combustion (i.e., exhaust) and the annual average PM_{2.5} concentrations associated with combustion and fugitive sources including tire wear, brake wear, and road dust, that would be emitted by project-related construction sources. While DPM is a complex mixture of gases and fine particles that includes over 40 substances that are listed by the U.S. EPA as hazardous air pollutants and by CARB as toxic air contaminant, the Worker HRA used PM₁₀ emissions as a surrogate for DPM emissions.^{22,23} Pollutant concentrations were estimated using the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) regulatory air dispersion model (AERMOD version 22112).²⁴

Lifetime excess cancer risks and annual average PM_{2.5} concentrations were estimated at existing worker receptors located within 1,000 feet of the proposed project's boundaries, specifically at the San Francisco Zoo and the Oceanside Water Pollution Control Plant. OEHHA guidance defines sensitive receptors as individuals who may be more sensitive to toxic exposures than the general population and are distributed throughout the total population. Sensitive populations may include young children and chronically ill individuals that may occupy schools, nursing homes, residential care facilities, daycare centers, and hospitals.²⁵ The AQTM evaluated the health risk impacts from the proposed project at these sensitive receptor types. This supplemental health risk assessment evaluates health risk impacts at worker receptor locations.

The project would not generate new sources of operational toxic air containments but would relocate the mobile traffic sources from the Great Highway, because of its closures, to Sloat Boulevard and Skyline Boulevard. Along Sloat Boulevard, sensitive receptors (mostly residents) are abundant and are located as near or nearer to the operational sources of TAC emissions than nearby worker receptors. Similarly, sensitive receptors (mostly residents) are located downwind of Skyline Boulevard and are as near or nearer to the operational sources of TAC

¹⁸ Bay Area Air Quality Management District, *Health Risk Assessment Modeling Protocol*, December 2020, [https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en](https://www.baaqmd.gov/~/media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en), accessed January 2023.

¹⁹ California Air Resources Board, Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values, last updated October 2, 2020, <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/healthval/contable.pdf>, accessed January 2023.

²⁰ Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html, accessed January 2023.

²¹ San Francisco Department of Public Health, and San Francisco Planning Department, *The San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, September 2020.

²² Office of Environmental Health Hazard Assessment, *For the "Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant" Part B: Health Risk Assessment for Diesel Exhaust*, May 1998, https://www.arb.ca.gov/toxics/dieseltac/part_b.pdf, accessed January 2023.

²³ BAAQMD, Regulation 2 Permits Rule 5 New Source Review of Toxic Air Contaminants, December 7, 2016 http://www.baaqmd.gov/~media/dotgov/files/rules/reg-2-rule-5-new-source-review-of-toxic-air-contaminants/documents/rg0205_120716-pdf.pdf?la=en, accessed January 2023.

²⁴ United States Environmental Protection Agency, AERMOD Implementation Guide, December 2016, https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_implementation_guide.pdf, accessed January 2023.

²⁵ Office of Environmental Health Hazard Assessment, *For the "Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant" Part B: Health Risk Assessment for Diesel Exhaust*, May 1998 https://www.arb.ca.gov/toxics/dieseltac/part_b.pdf, accessed June 4, 2021.

emissions than nearby worker receptors. Additionally, the worker receptors at the San Francisco Zoo and the Oceanside Water Pollution Control Plant are adjacent to the Great Highway so its closure would have an operational reduction in health risk at these locations. Therefore, worker receptor health risk impacts from the closure of the Great Highway (Operations) would be no greater than the risk values identified in the AQTM (see Section 3.3, *Health Risk Assessment*). The primary assumptions used to model lifetime excess cancer risks and annual average PM_{2.5} concentrations from construction are presented below.

Toxic Air Contaminant Concentrations

For the Worker HRA, AQTM subsections *General AERMOD Parameters*, *Emission Rates*, *Source Parameters*, and *Variable Emissions* serve as information sources (AQTM Section 2.3). AERMOD was run with the same modeling configuration as in the AQTM, except that receptors were added to represent potential worker locations as discussed above. Consistent with the BAAQMD CEQA Guidelines,²⁶ lifetime excess cancer risk from DPM and annual average PM_{2.5} concentrations were estimated at receptors located within 1,000 feet of the proposed project's boundaries. Worker receptors were modeled with a flagpole height of 1.8 meters using a 20-meter receptor modeling grid at potential worker locations consistent with the AQTM and the city's 2020 Citywide Health Risk Assessment (2020 Citywide HRA), as documented in the *San Francisco Citywide Health Risk Assessment: Technical Support Documentation*.²⁷

Health Risks

Health risk assessments typically evaluate exposure for infants and children. Children are a subpopulation with hematological, nervous, endocrine, and immune systems that are still developing and may be more sensitive to the effects of TACs.²⁸ Although not as sensitive to TACs as children, workers located within the modeling domain are closer to construction activities. As discussed above, the *Exposure Assessment* subsection in the AQTM includes existing resident, childcare, and school student receptors (see AQTM Section 2.3). The supplemental exposure assessment presented in this memorandum addendum is for existing worker receptors only. AQTM subsections *Pollutants Modeled* and *Toxicity Assessment*, as they pertain to construction (see AQTM Section 2.3), are still applicable to this worker risk analysis. The fugitive dust PM_{2.5} concentration identified in the Section 3.2, *Fugitive Dust Health Risk Assessment*, described above is included in the worker annual average PM_{2.5} concentrations.

Maximum lifetime excess cancer risk and annual average PM_{2.5} concentrations were estimated for worker receptors for the approximately 4 years of construction. OEHHA and BAAQMD guidance currently recommends evaluating the lifetime excess cancer risk from exposure to pollutants over a 25-year exposure period for worker receptors. The exposure duration of 4 years represents the total construction period for the proposed project. Exposure starts when construction commences.

²⁶ Bay Area Air Quality Management District, *California Environmental Quality Act Air Quality Guidelines*, May 2017, http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, accessed April 2019.

²⁷ San Francisco Department of Public Health, and San Francisco Planning Department, *The San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, September 2020.

²⁸ Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html, accessed June 2022.

The worker exposure assumptions are presented in **Table 10**; these assumptions are based on risk assessment guidelines from OEHHA²⁹ and BAAQMD.³⁰

TABLE 10
EXPOSURE PARAMETERS

Receptor Type	Age Group	Daily Breathing Rate (L/kg 8 hrs) ^a	Exposure Duration (years) ^b	Fraction of Time at Home (unitless) ^c	Exposure Frequency (days/year) ^d	Averaging Time (days) ^e	Worker Adjustment Factor (unitless) ^f	Age Sensitivity Factor (unitless) ^g
Worker	Age 16–70 Years	230	4	n/a	250	25,550	1.4	1

ABBREVIATIONS: kg = kilogram; L = liter; m³ = cubic meters; hrs = hours; n/a = not applicable.

NOTES:

- ^a Daily breathing rates are from OEHHA (2015) based on BAAQMD guidance (2020) for workers as 95th percentile 8-hour moderate-intensity breathing rates (OEHHA Table 5.8) for age 16–70 years.
- ^b The exposure duration represents 4 years of exposure to construction emissions (the entire construction period for the proposed project).
- ^c Fraction of time at home is not applicable to worker risk, per OEHHA guidance (2015).
- ^d Exposure frequency represents default worker exposure frequency from OEHHA guidance (2015).
- ^e Averaging time represents 70 years for lifetime cancer risk, per OEHHA (2015).
- ^f The Worker Adjustment Factor is applied to adjust the annual average concentration (24 hours per day, 7 days per week) from AERMOD associated with construction emissions, which assumes emissions occur seven days per week; to the actual construction emission schedule and receptor exposure for worker receptors, which is based on 5 days per week of both construction emissions and receptor exposure (equation = $[7 \text{ days} / 5 \text{ days}]$ when construction coincides with work place operations = 1.4).
- ^g Age sensitivity factors from OEHHA (2015) Table 8.3.

SOURCES:

1. Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments, February 2015. http://oehha.ca.gov/air/hot_spots/hotspots2015.html, accessed January 2023.
2. San Francisco Department of Public Health, and San Francisco Planning Department, *The San Francisco Citywide Health Risk Assessment: Technical Support Documentation*, September 2020.
3. Bay Area Air Quality Management District, *Health Risk Assessment Modeling Protocol*, December 2020, https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en, accessed January 2023.

As shown in Table 10, the age sensitivity factor for worker receptors is 1. As noted in AQTM subsection *Age Sensitivity Factors*, the age sensitivity factors for infant and child receptors are 3 to 10; this represents the higher sensitivity of children to TAC exposure (see AQTM Section 2.3).

As discussed in AQTM subsection *Modeling Adjustment Factors*, a worker adjustment factor applies to the worker receptor similar to how it applies to school and childcare receptors (see AQTM Section 2.3, Table 15). Since construction represents a non-continuous source, a worker adjustment factor was used to determine the long-term average daily concentration the worker receptor may be breathing during their time at their place of employment. This is consistent with OEHHA (2015) protocol. For worker receptors, a model adjustment factor of 1.4 was used (equation = $[7 \text{ days} / 5 \text{ days}] = 1.4$).

The same equations presented in AQTM subsections *Calculation of the Intake* and *Calculation of Cancer Risk* are applicable to calculating intake and cancer risk for worker receptors (see AQTM Section 2.3). Equation 1 and

²⁹ Office of Environmental Health Hazard Assessment, *Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments*, February 2015, http://oehha.ca.gov/air/hot_spots/hotspots2015.html, accessed January 2023.

³⁰ Bay Area Air Quality Management District, *Health Risk Assessment Modeling Protocol*, December 2020, https://www.baaqmd.gov/~media/files/ab617-community-health/facility-risk-reduction/documents/baaqmd_hra_modeling_protocol-pdf.pdf?la=en, accessed January 2023.

Equation 2 from the AQTM along with the risk inputs from Table 10, above, are used to calculate lifetime excess cancer risk for workers.

The AQTM analysis assumed that residential receptors would be exposed to construction emissions 350 days per year, 24 hours a day. This supplementary assessment assumes worker receptors are exposed 250 days per year, 8 hours per day. Annual PM_{2.5} average concentrations are estimated for worker receptor locations in the same manner as residential receptors.

4.2 Results

Table 11 presents a summary of the maximum health risk results from the proposed project for the uncontrolled and controlled construction scenario at worker receptor locations. The table includes lifetime excess cancer risk (chances per million) and average annual PM_{2.5} concentrations ($\mu\text{g}/\text{m}^3$ = micrograms per cubic meters) at the MEIR from exposure to the proposed project’s construction emissions.

TABLE 11
SUMMARY OF INCREMENTAL INCREASE IN WORKER LIFETIME EXCESS CANCER RISK AND ANNUAL AVERAGE PM_{2.5} CONCENTRATIONS PLUS EXISTING

Receptor Type	Uncontrolled				Controlled ^a			
	Lifetime Excess Cancer Risk (chances per million)		Annual Average PM _{2.5} Concentrations ($\mu\text{g}/\text{m}^3$)		Lifetime Excess Cancer Risk (chances per million)		Annual Average PM _{2.5} Concentrations ($\mu\text{g}/\text{m}^3$)	
	Receptor Location ^b (UTM X, UTM Y)	Project/ Existing Contribution ^c	Receptor Location ^b (UTM X, UTM Y)	Project/ Existing Contribution ^c	Receptor Location ^b (UTM X, UTM Y)	Project/ Existing Contribution ^c	Receptor Location ^b (UTM X, UTM Y)	Project/ Existing Contribution ^c
Worker								
Project Construction	(543560, 4175760)	2.5	(543560, 4175720)	0.55	(543560, 4175760)	1.6	(543560, 4175720)	0.25
Existing	(543560, 4175760)	29.4	(543560, 4175720)	8.69	(543560, 4175760)	29.4	(543560, 4175720)	8.69
Existing + Project		31.8		9.24		31.0		8.95

ABBREVIATIONS:

UTM = Universal Transverse Mercator
UTM X = eastward-measured distance
UTM Y = northward-measured distance

PM_{2.5} = fine particulate matter less than 2.5 micrometers in aerodynamic diameter
 $\mu\text{g}/\text{m}^3$ = micrograms per cubic meters

NOTES:

- ^a Controls include: all off-road construction equipment was modeled with Tier 4 Final engine emission standards for all engines greater than 125 hp.
- ^b Receptor location for the maximally impacted worker receptor.
- ^c Existing + Project risk may not appear to add due to rounding.

SOURCE: ESA, 2022.

Table 27 of the AQTM presents health risks associated with the proposed project combined with health risks associated with background existing TAC emission sources at the MEIR locations. In the AQTM, there were two scenarios analyzed, each with three results for varying sensitive receptor types. The maximum uncontrolled lifetime excess cancer risk was 4.4 per million for the Scenario 2 Resident Receptor. The maximum uncontrolled

annual average $PM_{2.5}$ concentration was $0.297 \mu\text{g}/\text{m}^3$ for the Scenario 2 Resident Receptor. These values for the MEIRs remain the same for the controlled results as there were no control options for operations. No receptors within the modeling domain were in the APEZ and no receptors were brought into the APEZ as a result of the project.

As presented in Table 11, the lifetime excess cancer risk at the worker receptor is 2.5 per million and 1.6 per million for the uncontrolled and controlled construction emissions, respectively. The annual average $PM_{2.5}$ concentration at the worker receptor is $0.55 \mu\text{g}/\text{m}^3$ and $0.25 \mu\text{g}/\text{m}^3$ for the uncontrolled and controlled construction emissions, respectively. The worker receptor with the highest cancer risk and the highest annual average $PM_{2.5}$ concentration is located at the Oceanside Water Pollution Control Plant. No worker receptors within the modeling domain were in the APEZ and no worker receptors were brought into the APEZ as a result of the project.

Both the controlled lifetime excess cancer risk and the annual average $PM_{2.5}$ concentration for the worker receptor are less than those estimated for the residential receptor analyzed under Scenario 2 in the AQTM. Therefore, the lifetime excess cancer risk and annual average $PM_{2.5}$ concentration for the MEIR remains unchanged from the AQTM.

ATTACHMENT D
FORT FUNSTON BANK SWALLOW HABITAT
ASSESSMENT



memorandum

date January 31, 2023

to Julie Moore (Environmental Planning)

cc JT Mates-Muchin, Karen Frye

from Brian Pittman, CWB (Wildlife Biologist) and Erika Walther (Wildlife Biologist)

subject Fort Funston Bank Swallow Habitat Assessment, Revised January 31, 2023

Introduction

This bank swallow (*Riparia riparia*; BANS) habitat assessment was initiated based on comments received from the California Department of Fish and Wildlife (CDFW) and National Park Service (NPS) on the Ocean Beach Climate Change Adaption Project Draft Environmental Impact Report (EIR), published on December 8, 2021 (CDFW, 2022a; NPS, 2022a). The draft EIR described potential impacts to BANS and their habitat using the best available scientific data, summarized below, which was based on a linear footage assessment of effects. In a January 21, 2022 comment letter, CDFW recommended that the San Francisco Planning Department (Environmental Planning) perform additional analyses to quantify the amount of potential vertical (spatial) BANS nesting habitat within the cliffs in the project area and vicinity (CDFW, 2022a). In a January 26, 2022 comment letter, NPS requested collaboration with CDFW and Environmental Planning staff to determine what, if any, additional feasible mitigations may be possible to reduce impacts on BANS (NPS, 2022a). In response, this technical memorandum provides a spatial analysis that quantifies the amount of suitable BANS nesting habitat within the Ocean Beach Climate Change Adaption Project (project) area and a greater a 2.9-mile-long study area that extends into Fort Funston.

The Fort Funston bank swallow breeding colony has nested on the cliffs at Fort Funston, a protected area within the Golden Gate National Recreation Area since the early 1900s. Habitat loss and other factors led to bank swallows being listed as a threatened species under the California Endangered Species Act in 1989. Habitat estimates indicate that the entire California BANS range has been reduced by as much as 50 percent. Habitat loss at BANS breeding colony sites may continue to impact the species throughout the state. The Fort Funston breeding colony is one of only two remaining coastal breeding sites in California, with the other at Año Nuevo State Park.

The NPS has been the primary steward of the Fort Funston BANS colony since at least the late 1980s. The NPS began systematically monitoring BANS breeding at Fort Funston each spring, beginning in 2000 (NPS,

2007). The monitoring goals are to determine trends within the local breeding population, and to record potential disturbances to BANS and their nesting areas. The CDFW and its partners also performed a statewide Bank Swallow Monitoring in 2021, which also included the cliffs at Fort Funston (BSTAC, 2021). The total number of BANS burrows at the Fort Funston colony has been declining since 2000. The shoreline used by the colony has experienced substantial erosion over the past two decades, including erosion of South Ocean Beach cliffs used by BANS for nesting as illustrated on **Figure 1** (ESA, 2021; California Coastal Records Project, 2022). The low number of nesting BANS in recent years puts this population at imminent risk of extirpation.

In 2000, the NPS surveys spanned the area from the “North End” of Fort Funston to “South Gap,” approximately 500 feet south of Panama Point (see to **Figure 2** in **Attachment A**; NPS, 2007). In 2010, the survey was expanded to encompass the rock revetment north of Funston Beach (part of the current Ocean Beach Climate Change Adaptation project area). In 2019, the survey was again extended south to include the cliffs of Phillip Burton Memorial Beach at the border of San Francisco and San Mateo counties. While surveys have quantified the number of burrows present (whether active or inactive) and the presence of BANS, a comprehensive survey that identifies and quantifies the amount of current, historical, and potential (i.e., possible) BANS habitat at Fort Funston has not been performed.

This field assessment incorporates suggested field parameters of slope, soil density, thickness and length of the overhang, and height from ground level. Environmental Planning collaborated with CDFW and NPS BANS specialists to develop the current survey protocol. Coordination efforts included a draft habitat assessment approach submitted to resource agencies on March 29, 2022 (ESA, 2022); a meeting between CDFW, NPS, California Coastal Commission, Environmental Planning, and ESA biologists Brian Pittman, CWB and Erika Walther on April 4, 2022 to agree upon the survey methodology, survey area, and study goals; and a revised BANS analysis approach shared with agency partners via email on May 13, 2022 (Moore, 2022). The current memorandum was further refined based on NPS and CDFW comments on a draft memorandum (CDFW, 2022b; NPS, 2022b).

Based on the above correspondence, this BANS habitat assessment was approached as a mapping exercise to inventory and determine how much potentially suitable habitat is present within the 2.9-mile waterfront study reach between Sloat Boulevard and Thornton State Beach shown on **Figure 2** in Attachment A.



California Coastal Records Project (CCR) image from September 25, 2004 showing active bank swallow habitat at Fort Funston (in blue), south of the Project area. As an example of historical bank swallow presence and density, approximately 50 burrows are visible in the small inset area (green). The larger habitat area supported hundreds of active burrows. The approximate 2019 bluff line is shown in orange along with two reference points (yellow) showing the progress of blufftop erosion between 2004 and 2019.



CCR imagery from October 1, 2009 shows substantial coastal erosion since 2004 and a related reduction in bank swallow habitat. The approximate 2019 bluff line is shown in orange.



CCR imagery from September 25, 2010 shows continued coastal erosion, the addition of the rock revetment to protect critical infrastructure from erosion, and a further reduction in available bank swallow habitat. The approximate 2019 bluff line is shown in orange.



CCR imagery from October 4, 2019 shows further erosion. Much of the historic bank swallow habitat visible in the top image has eroded away. The approximate 2019 bluff line is shown in orange.

Source: California Coastal Records Project

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 1
Coastal Aerial Imagery from 2004, 2009, 2010, and 2019 at South Ocean Beach and Fort Funston

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The objectives of the habitat assessment were to: 1) identify, describe, and delineate potentially suitable nesting habitat used by the Fort Funston BANS colony; 2) identify and delineate cliff sites that could be enhanced through vegetation management or other means to provide potentially suitable BANS nesting habitat; and 3) quantify potential BANS nesting areas to provide a baseline of available habitat in the region.

This assessment was mainly intended as a BANS habitat inventory to document active and historical BANS habitat; but also, substantially different from the Statewide Bank Swallow Colony Inventory Survey Methods, included an inventory of “potential” habitat within the study area. The Statewide methodology uses the term “active” to describe fresh/potentially occupied burrows and the term “inactive” for old, unused burrows. As suggested by CDFW (2022b) and NPS (2022b), for the current study, the term “active” refers to currently or historically used habitat with viable or intact burrows. The Statewide methodology term “inactive” as applied to burrows, was not adopted because this term does not correctly describe larger habitat areas. The term “historic” was used to denote areas of prior BANS use that lack viable or intact burrows. To these categories, the term “potential” nesting habitat was added, which was defined prior to and during the survey as cliff faces with the following attributes:

- Slope from vertical cliff face (90 degrees) to slightly inclined (minimum 70 degrees)
- Little or lack of vegetation on cliff face
- Presence of friable soils suitable for burrowing, as evidenced by freshly eroded sheer cliffs
- Minimum cliff height of 3 meters (or less, if BANS activity is observed or present historically) (Hjertaas, 1984; Garrison, 1987; Garrison, 1998; CDFW 2021; CDFW, 2022)

As identified by NPS (2022b), it is unclear that areas classified as “potential” habitat have the same characteristics as active and historic areas that BANS have used for nesting. There is some doubt as to whether swallows would shift to nesting in “potential” habitat areas in the future; however, such areas were delineated to quantify all potentially suitable habitat in the study area. This category is considered important nonetheless, if only to record the extent of freshly exposed cliff faces within the study area.

Note that the field assessment did not focus on the increased presence of sand near BANS habitat areas, or potential differences in distribution between the 2019 aerials and 2022 field assessment. Habitat loss due to sand accretion or dune creation was not identified as a contributing factor to BANS habitat loss and was therefore not a component of the habitat inventory.

Survey Methodology

Desktop Review

Environmental Science Associates (ESA) conducted a desktop review of aerial oblique imagery from the CCRP to identify areas of potentially suitable bank swallow (BANS) nesting habitat (California Coastal Records Project, 2022). The 2019 CCRP data set was selected because it provides excellent, high-resolution coverage of the study area and is the most recent aerial oblique imagery that is available.

Field Survey

On June 2, 2022, Brian Pittman, Senior Biologist/Certified Wildlife Biologist, and Erika Walther, Senior Biologist, both from ESA, along with Bill Merkle, Wildlife Ecologist, Golden Gate National Recreation Area, William Kanz, Environmental Scientist, CDFW, and Julie Moore, Principal Environmental Planner, San Francisco Planning Department, surveyed the coastal cliffs south of Sloat Boulevard to Thornton State Beach on foot from the beach. The timing of the survey was selected to fall within the survey period recommended by the CDFW Statewide Bank Swallow Colony Inventory Survey Methods (May 1 to June 15) (CDFW, 2021). The survey occurred after NPS had initiated its annual BANS population surveys and had confirmed the presence of BANS.

Surveyors used binoculars to scan the cliffs for potential BANS nesting habitat. Bill Merkle, who has conducted BANS nesting surveys at Fort Funston and the immediate vicinity since 2004 and conducted previous surveys during the 2022 nesting season, pointed out currently active and known historic nesting sites, and provided input on potential nesting habitat that had not been historically used. Will Kanz conducted surveys earlier in the 2022 nesting season and was aware of active BANS nesting sites. Mr. Kanz also has experience surveying BANS nesting habitat in the Central Valley.

Data Collection

Data was collected in the field using a tablet (iPad) loaded with aerial images from CCRP for the survey area. Areas of active, historic, and potential BANS nesting habitat were circled and labeled directly on the tablet and were also photographed using a camera with telephoto lens. Presence of BANS and number of active burrows were recorded on the corresponding aerial photograph on the tablet. Due to the general inaccessibility of cliff habitat and the absence of supporting geological data, the presence of friable soils could not be carefully examined and was therefore presumed within all identified potential BANS nesting habitat in the study area. Potential disturbances to BANS nesting activity, such as people on cliffs and bootleg trails, off leash dogs, and evidence of human disturbance (e.g., graffiti) were noted and photographed, where feasible.

The following suitable habitat attributes were determined based on analysis of CCRP imagery and/or GIS data:

- Cliff slope within section of cliff otherwise suitable for BANS nesting
- Cliff height from ground level
- Thickness and length of cliff overhang, if applicable
- Presence/absence of vegetation growing on cliff face or hanging over cliff face from top of cliff within section of cliff otherwise suitable for BANS nesting

The following process was used to calculate the spatial area and average slope of habitat areas. First, habitat areas were identified in the field and drawn onto CCRP images using a tablet. Second, using ArcScene (a 3D visualization application) a 3D surface was created using Fort Funston “Structure from Motion point cloud data” from the U.S. Geological Survey (USGS, 2020). High resolution imagery obtained from Nearmap from approximately the same period (08/31/2019) as the CCRP images (10/04/2019) were draped over the 3D surface. Polygons were then digitized on the surface using the habitat areas drawn on the CCRP images. From there, the surface area and average slope of habitat areas were calculated based upon the underlying elevation data.

Results

This BANS habitat assessment was approached as a habitat cataloging and mapping exercise. Hence the survey results are mostly graphic and visual with an accompanying GIS analysis conducted to calculate the area of available habitat on vertical cliff faces. Within the 2.9-mile waterfront study reach between Sloat Boulevard and Thornton State Beach, the survey identified one active BANS nesting area¹ within one cliff face (alpha-numeric ID: A-005; see **Figure 30** in Attachment A),² located at Phillip Burton Memorial Beach. Approximately 8 adult BANS were observed on the day of the survey (June 2). In its preliminary findings, NPS reported observing 11 adult BANS during its survey on June 15 (Merkle, 2022). Twenty-two burrows were observed within the A-005 area on June 2, of which 12 burrows were being actively used for nesting; BANS activity was reported at one burrow in A-001, nesting unconfirmed; and the other three areas were mapped with fresh/potentially occupied burrows (A-002, A-003, and A-004). Four historical nesting sites were identified and mapped (H-001 to H-004) and twelve potential, yet historically unused nesting areas were also identified (P-001 to P-012). The total amount of active BANS habitat identified in the study area is presented in **Table 1** and potential project impacts are presented in **Table 2**. Each of the identified habitat areas are summarized and described in detail in **Table 3** (p. 11) with aerial imagery provided in **Figure 3** to **Figure 39** in Attachment A.

Note that ESA’s survey was not intended to characterize BANS site use or population trends, which are being separately examined by the National Park Service.

TABLE 1
BANK SWALLOW HABITAT IDENTIFIED IN THE SURVEY AREA IN 2022

Habitat Type	Area (Sq. Ft.)	Average Slope (degrees)
Active Habitat in Project Area (A-001)	522	75.7
Other Active Habitat (A-002 to A-005)	1402	78.9
Historic Habitat in Project Area (H-001) ^a	899	80.8
Other Historic Habitat	6,064	70.1
Potential Habitat ^b	24,029	70.3
Total Habitat	32,916	72.0

NOTE:

^a Area H-001 was increased in area by 150 sq. ft. (from 749 sq. ft. to 899 sq. ft.) in response to NPS comments to include additional unmapped historical BANS habitat adjacent to H-001.

^b Area removes 977 sq. ft. of inland habitat per CDFW comment (CDFW, 2022b).

¹ Active nesting habitat was defined as cliff areas with attempted BANS nesting in 2022.

² The first letter of the alpha-numeric identification number indicates whether the site is active (“A”), historic (“H”), or potential (“P”) habitat.

TABLE 2
POTENTIAL BANK SWALLOW HABITAT IMPACTS

Habitat Type	Project Impact (Sq. Ft./Area)	Percent of Total	Total Habitat Remaining after Project (Sq. Ft.)
Active Habitat	522 (A-001)	27% of active	1,402
Historic Habitat	899 (H-001)	13% of historic	6,064
Potential Habitat	0	0	24,029

Recommendations

Five enhancement actions were identified that may improve potential BANS nesting habitat quality and possibly promote recolonization in parts of the study area, discussed below. These include:

- 1) bluff face iceplant removal,
- 2) reducing recreational pressure around active and potential nest sites,
- 3) native plant restoration to improve BANS foraging habitat quality,
- 4) performing mechanical improvements (e.g., sand removal), and
- 5) the use of engineered nesting structures, such as precast concrete walls backed by compacted sand.

Bluff face iceplant removal. Iceplant was identified near more than half of the documented habitat areas, as described in Table 3; however, the small amount of iceplant in and near these areas does not appear to exacerbate site erosion (e.g., it does not appear to be pulling down cliffs) and likely does not markedly reduce BANS habitat quality or use. The removal of iceplant may provide about 20 sq. ft. of habitat benefits at sites A-002 to A-005 by eliminating growth over potential habitat areas. Because iceplant growth is fairly minimal in relation to active and historical nesting areas on cliff faces, its management may not substantially improve nesting habitat quality for BANS.

Reducing recreational pressure. Enhancements to reduce recreational pressure from people and dogs could be implemented at a few strategically important cliffs with the objectives of reducing disturbances to nesting birds and reducing erosion of the unique cliff habitat. In cooperation with NPS, signage and limited movable fencing may keep recreational users off cliff faces in areas where the bank swallows are active. Such actions could be performed at active BANS habitat (site A-002 through A-005) and historic habitat (sites H-002 and H-003 in particular). This approach alone would not be fully effective at reducing such disturbances and while it may be effective in boosting BANS colony numbers, it would not directly mitigate the loss of habitat from the project.

Upland habitat restoration. Proposed native dune plant propagation actions at Fort Funston may improve BANS foraging habitat quality by increasing the local production of insect forage species. The Ocean Beach Climate Change Adaptation Project would include the creation of an approximately 0.5-acre native dune plant propagation site to replace iceplant next to Funston Nursery which would improve insect production compared to existing iceplant stands, and thereby incrementally improve BANS foraging habitat quality at Fort Funston.

Mechanical improvements. Mechanical improvements could be undertaken to uncover historical buried BANS habitat at H-002 and H-003; however, this may not be a practical option due to the risk of cliff destabilization and increased erosion. The removal of sand that has accumulated in front of previously active burrows has the potential to restore swallow use of these habitat areas. Sand appears to have accumulated on the beach up to the burrows because of natural erosion and perhaps due to human damage to the cliff face. Due to the potential risk of potential cliff collapse, NPS does not prefer this approach (NPS, 2022b).

Engineered nesting structures. Several recent Canadian projects have shown the value of precast concrete walls as an effective low maintenance approach to creating BANS nesting habitat. One Québec Port Authority (QPA) pilot project found initial success with BANS nesting in precast concrete walls backed by compacted sand (QPA, 2018) and a similar Montreal Port Authority (MPA) project found similar success (MPA, 2020). After five years of experimentation with varied designs, QPA concluded that BANS have adapted to and accepted the concrete walls as a suitable nesting site (**Figure 40** in Attachment A). In 2018, over 80 percent of the QPA colony nested in the walls and biological surveys showed an increase in the colony's numbers. At MPA's Contrecoeur port site, nesting walls installed in 2019 experienced BANS nesting the following year (MPA, 2020). Both examples show that BANS may readily occupy created habitat. Additional review would be needed to determine if the study area could support habitat restoration of this kind, and if such a beachfront concrete structure would be permissible.

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TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	Total Number of Burrows	Number of Active Burrows	Number of BANS Present
ACTIVE HABITAT								
A-001	201906632 (Fig.5) South Ocean Beach Project Area	522	75.7	2-3 feet	>9 feet	16	0	0
					<p>Presence/Absence of Vegetation and Site Notes Overhanging vegetation is present, but not an issue affecting site use. Some iceplant is present at the base of the exposed cliff.</p> <p>Note that site A-001 is within the Ocean Beach Climate Change Adaption Project area and would be removed by the project. During monitoring in 2022, NPS observed BANS activity at one burrow in A-001 on numerous occasions. NPS considers any area that was historically used as BANS habitat and still has intact burrows to be active habitat (NPS, 2022).</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
ACTIVE HABITAT								
A-002	201906668 (Figs. 29/30) Phillip Burton Memorial Beach	828	81.8	8-12 feet	3-5 feet	4	0	0
				<p>Presence/Absence of Vegetation and Site Notes Limited iceplant overhanging into historical nesting area, perhaps measuring 3 feet wide by 6 feet in height. Vegetation is not threatening burrows and does not appear to be affecting burrow use but could easily be removed either manually or with herbicide.</p> <p>BANS were observed in the vicinity of these burrows on June 2, 2022; however, did not nest in this area this year. The NPS (2021) documented that these burrows were active in 2021. Four historic nesting burrows are visible in the image.</p>				

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
ACTIVE HABITAT								
A-003	201906668 (Figs. 29/30) Phillip Burton Memorial Beach	125	72.8	8-12 feet	3-5 feet	1	0	0
					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant overhanging into historical nesting area, perhaps measuring 6 feet wide by 4 feet in height. Vegetation is not threatening burrows and does not appear to be affecting burrow use.</p> <p>BANS were observed flying in the vicinity of these burrows on June 2, 2022; however, did not nest in this area this year. One historic nesting burrow is visible in the center of the image.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
ACTIVE HABITAT								
A-004	201906668 (Figs. 29/30) Phillip Burton Memorial Beach	173	79.3	6-10 feet	3-5 feet	2	0	0
				<p>Presence/Absence of Vegetation and Site Notes Limited iceplant overhanging historical nesting area, perhaps measuring 6 feet wide by 6 feet in height. Vegetation is not threatening burrows and does not appear to be affecting burrow use.</p> <p>BANS were observed in the vicinity of these burrows on June 2, 2022; however, did not nest in this area this year.</p>				

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS

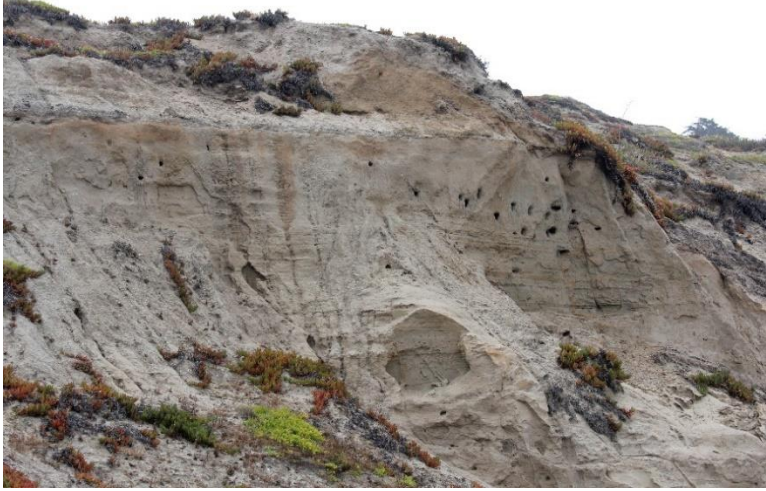

Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
ACTIVE HABITAT								
A-005	201906668 (Figs. 29/30/31); Phillip Burton Memorial Beach	276	81.7	6-12 feet	4-8 feet	22	12	11
								

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
ACTIVE HABITAT								
A-005 (cont.)	201906668 (Figs. 29/30/31); Phillip Burton Memorial Beach	276	81.7	6-12 feet	4-8 feet	22	12	11
				<p>Presence/Absence of Vegetation and Site Notes Limited iceplant overhanging south portion of nesting area, perhaps measuring 2 feet wide by 6 feet in height. Vegetation is not threatening burrows and does not appear to be affecting burrow use.</p> <p>Burrows visible in photos were the only active nesting sites in the entire habitat assessment area in 2022. Note that the two burrows visible in the left portion of the upper left photo are associated with area A-004.</p>				

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS



Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
HISTORIC HABITAT								
H-001	201906635 (Figs. 5, 6) South Ocean Beach Project Area	899	80.8	2-3 feet	>9 feet	0	0	0
<p>Site H-001 on June 2, 2022</p> 					<p>Site H-001 on April 24, 2019, prior to sand placement</p> 			
<p>Presence/Absence of Vegetation and Site Notes</p> <p>While iceplant is present in nearby areas, no vegetation overhangs this area. All prior burrows have sloughed off at this site due to coastal erosion.</p> <p>Site H-001 is within the Ocean Beach Climate Change Adaption Project area and would be removed by the project. While NPS considers any area that was historically used as habitat with intact burrows to be active habitat (NPS, 2022), no historic or intact burrows were noted at this location in 2022.</p> <p>In April 2019, potential BANS habitat (right image, circled in orange) remained steady at Site H-001 prior to and following sand placement in 2021. The identified historic BANS habitat area is not covered by sand in either the 2019 or 2022 image. The area below the orange circled area would not meet BANS habitat criteria because the surface is not a freshly eroded sheer cliff, the slope is lower than the threshold of 70 degrees, and the area does not meet the minimum cliff height criteria of 3 meters.</p>								

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS




Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
HISTORIC HABITAT								
H-002	201906638 (Fig. 8) NPS Area 1	234	52.2	5 to 7 feet	0 feet	7	0	0
								
					<p>Presence/Absence of Vegetation and Site Notes No vegetation present.</p> <p>Photo at left provides detail of the top left photo, with historic burrows present at ground level due to cliff sloughing and accretion of materials that have buried the burrows.</p> <p>A primary threat to this historic nesting site is public use (i.e., recreation) of sandy areas above and below the burrows, which accelerates sloughing and burial of burrows. Site erosion has worsened conditions at this site for BANS.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS



Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
HISTORIC HABITAT								
H-003	201906641 (Fig. 11) NPS Area 2	772	73.5	6+ feet	~ 3 feet	0	0	0
								
					<p>Presence/Absence of Vegetation and Site Notes No vegetation noted.</p> <p>No burrows were observed in this historic nesting area, which is shown in the top portion of the above photos. Recent sand carving graffiti is present across the entire historic nesting area and may limit BANS use.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
HISTORIC HABITAT								
H-004	201906644 (Fig. 15) NPS Area 3	5,058	84.7	n/a	>9 feet	0	0	0
				<p>Presence/Absence of Vegetation and Site Notes No vegetation present in historic nesting area.</p> <p>The sheer cliff face appears to have appropriate conditions for BANS nesting. No burrows were observed at this historic nesting site.</p>				

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-001	201906638 (Fig. 10) NPS Area 1	193	73.5	3-6 feet	6-9 feet	0	0	0
					<p>Presence/Absence of Vegetation and Site Notes No vegetation present.</p> <p>Area of recent cliff sloughing, and newly exposed soils were noted at this location, which is roughly in the center of the photo to the left. There is no documented historical use of this potential nesting area.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-002	201906644 (Fig. 15) NPS Area 3	2384	54.4	n/a	6-9 feet	0	0	0
					<p>Presence/Absence of Vegetation and Site Notes No vegetation present.</p> <p>Area of recent cliff sloughing, and newly exposed soils were noted at this location. There is no documented historical use of this potential nesting area.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-003	201906644 (Fig. 15) NPS Area 3	145	86.4	n/a	3-6 feet	0	0	0
					<p>Presence/Absence of Vegetation and Site Notes No vegetation present.</p> <p>This area is located about 15 feet south of site H-005. The most notable aspect of site P-003 is the large “A+B” graffiti in the potential nesting area. Public access, proximity to the ground, and cliff sloughing are likely impediments to BANS use. However, active BANS sites to the south show similar human activity and physical conditions, therefore this site was included as potential habitat.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS



Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-004	201906647 (Fig. 16) NPS Area 4	3,100	88.5	1 foot concrete	>70-90 feet	0	0	0
								
					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant present on the cliffs is not a deterrent to BANS use of this location.</p> <p>Potential habitat site P-004 is located beneath the overhang of two historic structures that are poised to fall off the cliff. The areas are perhaps 80 feet or higher off the ground and show good sloughing, which is important for BANS nesting sites. BANS have not historically nested in these areas.</p> <p>Trash is visible in the right image, and recreational users may occasionally climb the cliffs in the area.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-005	201906650 (Fig. 19) South of Area 4	6,254	75.7	8-12 feet	6-10 feet	0	0	0
					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant is present above the potential habitat area, which is shown in the center of the photo at left. Vegetation is not an impediment to BANS use of this area.</p> <p>The potential nesting area is a recently eroded “bowl” of exposed sandstone that measures perhaps 6 to 8 feet in height and 40 feet in length. Historic nesting has not been seen at this location.</p>			
P-006	201906653 (Fig. 20) South of Area 4	4,032	50.1	n/a	>70 feet	0	0	0
<p>No photo; see Figure 20 in Attachment A</p>					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant is present to the north of this area, which had sloughed recently since the California Coastal Records Project photo was taken in 2019. Vegetation is not an impediment to BANS use of this area.</p> <p>Historic nesting has not been seen at this location.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS

Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-007	201906653 (Fig. 20) South of Area 4	2,961	88.3	n/a	>80-100 feet	0	0	0
No photo; see Figure 20 in Attachment A					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant is present just above the cliff at site P-007. Vegetation is not an impediment to BANS use of this area.</p> <p>Historic nesting has not been seen at this location.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS


Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-008	201906653 (Fig. 20) South of Area 4	1,931	43.2	>6-10 feet	>60-70 feet	0	0	0
				<p>Presence/Absence of Vegetation and Site Notes Iceplant is present above and to the south side of site P-008; however, may not be accessible for control.</p> <p>This site includes a recently exposed sandstone bowl with soils that appear conducive to BANS occupation. Historic nesting has not been seen at this location.</p>				
P-009	201906653 (Fig. 20) South of Area 4	678	46.6	n/a	30-50 feet	0	0	0
<p>No photo; see Figure 20 in Attachment A</p>				<p>Presence/Absence of Vegetation and Site Notes Limited iceplant is present within site P-009.</p> <p>No photo is available of this site, which is a small, recently exposed sandstone bowl with a generally vertical orientation. Historic nesting has not been seen at this location.</p>				

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS





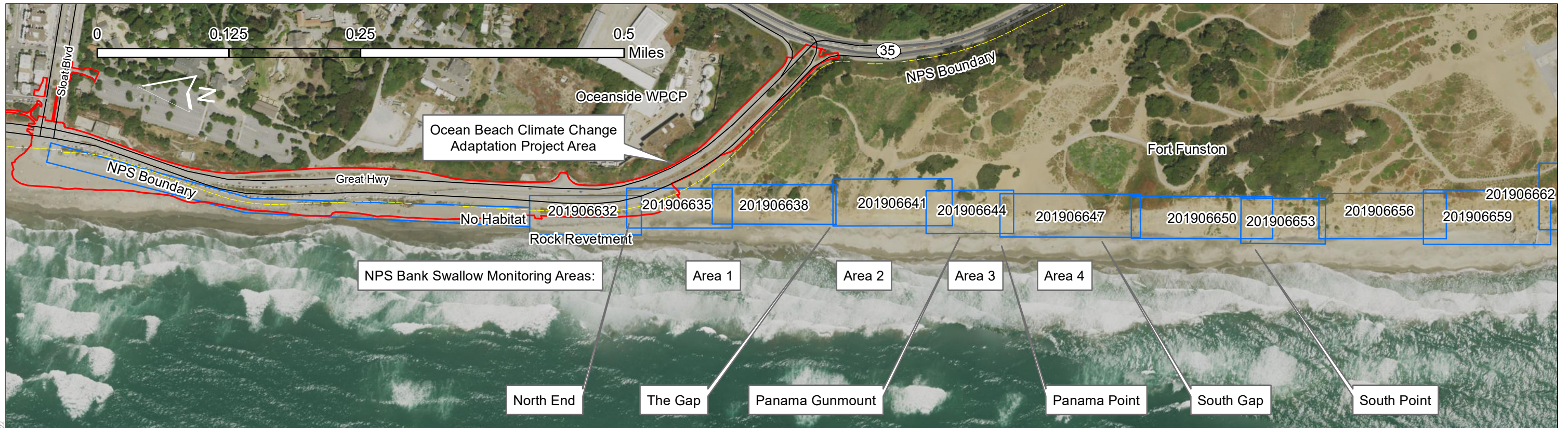
Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-010	201906656 (Fig. 21/22) South of Area 4	14	74.7	>10 feet	>80 feet	0	0	0
No photo; see Figure 21 in Attachment A					<p>Presence/Absence of Vegetation and Site Notes No vegetation was noted near site P-010.</p> <p>No photo is available of this site, which is a very small, perhaps 6-foot by 6-foot, recently exposed sandstone bowl. Historic nesting has not been seen at this location.</p>			
P-011	201906656 (Fig. 21/22) South of Area 4	813	75.5	>10 feet	>80 feet	0	0	0
					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant is present just below this feature, as shown in the photo at left.</p> <p>This site is a recently exposed sandstone bowl. Historic nesting has not been seen at this location.</p>			

TABLE 3. BANK SWALLOW HABITAT ASSESSMENT FINDINGS

Alpha-numeric ID	California Coastal Records Project Image Number (Attachment A Figure #)	Area (sq. ft.)	Average Slope (degrees)	Thickness and Length of Overhang	Height from Ground	# of Total Burrows	# of Active Burrows	Number of BANS Present
POTENTIAL HABITAT								
P-012	201906662 (Fig. 26) South of Area 4	1,524	86.7	n/a	30-50 feet	0	0	0
								
					<p>Presence/Absence of Vegetation and Site Notes Limited iceplant is present above and below this potential habitat area.</p> <p>Site P-012 was identified based on recent sloughing of the cliff face. The tall cliffs at Fort Funston provide marginal habitat overall for BANS nesting, owing to the small amount of recently eroded <u>smooth</u> sandstone face on the cliffs. Site P-012 is still considered somewhat marginal but had some characteristics like recent erosion and smooth sandstone that could be attractive to BANS. Mapped habitat in Figure 25 follows a slanted stratum of sandstone that reaches beach elevation in Figure 24 (left photo). However, potential BANS habitat appears limited to the area mapped in Figure 25. Historic nesting has not been seen at this location.</p>			

ATTACHMENT A

Coastal Aerial Imagery Showing Bank Swallow Habitat Areas



Path: U:\GIS\Projects\13xxxx\130576-28_SFPLUC_OceanBeach\03_MXD\Projects\Coastal\Area\T1\Locations2.mxd; W:\Mac\Collin\ch_10\20\2022

SOURCE: ESA

CCAP Bank Swallow Habitat Assessment



Figure 2
 2.9-Mile Bank Swallow Survey Area from Sloat Blvd (Top Image, Left) to Thornton State Beach (Bottom Image, Right)
 Numbering is Keyed to Corresponding California Coastal Records Project Images. Locations are Shown for Four Designated NPS Bank Swallow Monitoring Areas



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 3
 Potential Bank Swallow Nesting Habitat at South Ocean Beach Project Area (No Habitat in Image)
 California Coastal Records Project Photo Number 201906632, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 4
 Potential Bank Swallow Habitat at South Ocean Beach Project Area (No Habitat in Image)
 California Coastal Records Project Photo Number 201906632, Central Portion



Key:

Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 5
 Active and Historically Occupied Bank Swallow Habitat at the South Ocean Beach Project Area; approximately 100 sq.ft. of Historic Habitat not Mapped between A-001 and H-001
 California Coastal Records Project Photo Number 201906632, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as “A-001”
 Historical BANS habitat areas denoted as “H-001”
 Potential BANS habitat areas denoted as “P-001”

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 6
 Historically Occupied Bank Swallow Habitat at South Ocean Beach Project Area
 California Coastal Records Project Photo Number 201906635, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 7
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906635, South Portion



Key:
Pink = active; prior or current BANS use with viable burrows
Green = historically occupied; no viable burrows
Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
Historical BANS habitat areas denoted as "H-001"
Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 8
Historically Occupied Bank Swallow Habitat at Fort Funston
California Coastal Records Project Photo Number 201906638, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 9
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906638, Central Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 10
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906638, Central Portion



H-003

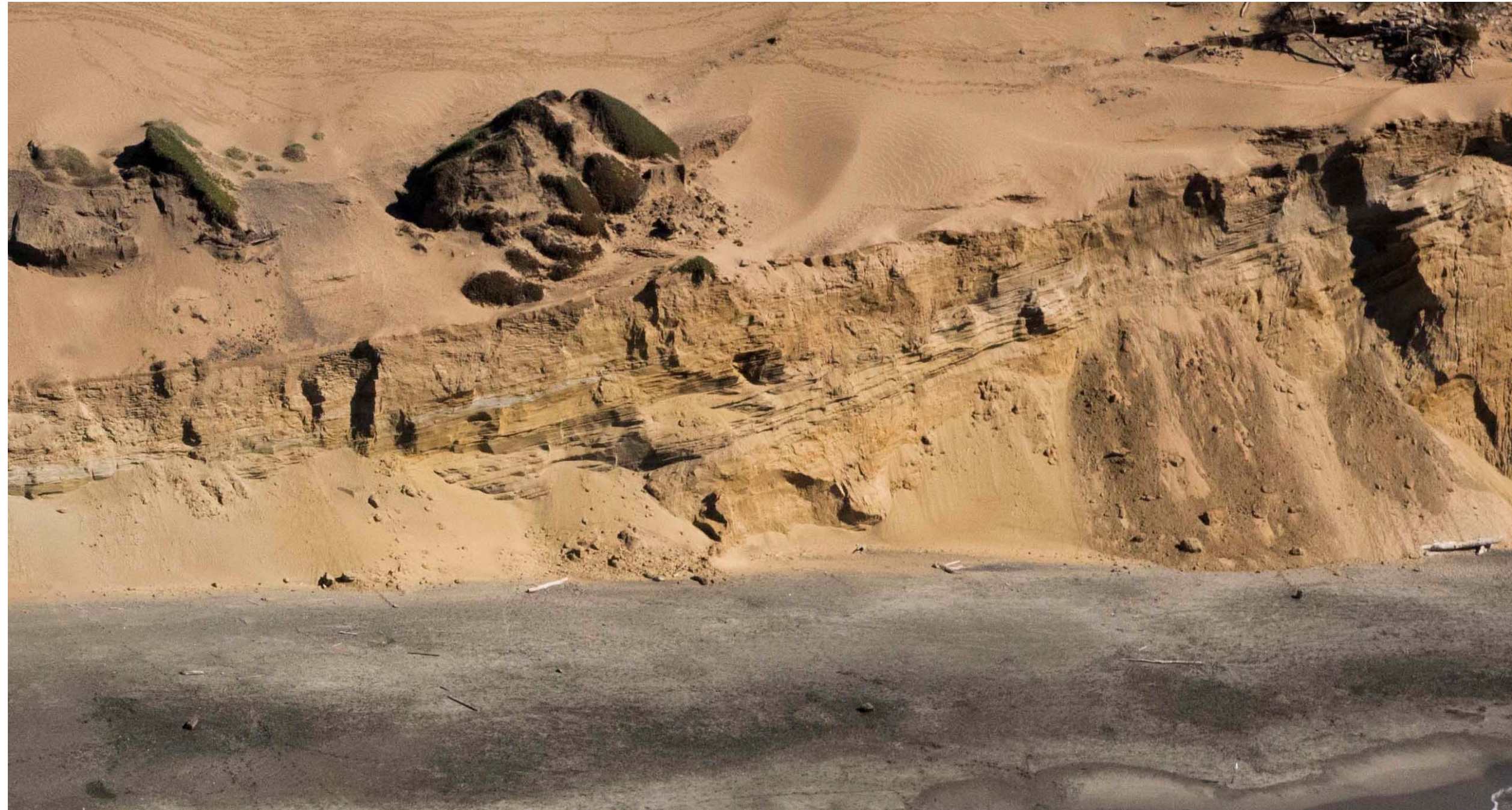
Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 11
 Historically Occupied Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906641, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 12
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906641, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 13
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906644, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 14
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906644, Central Portion



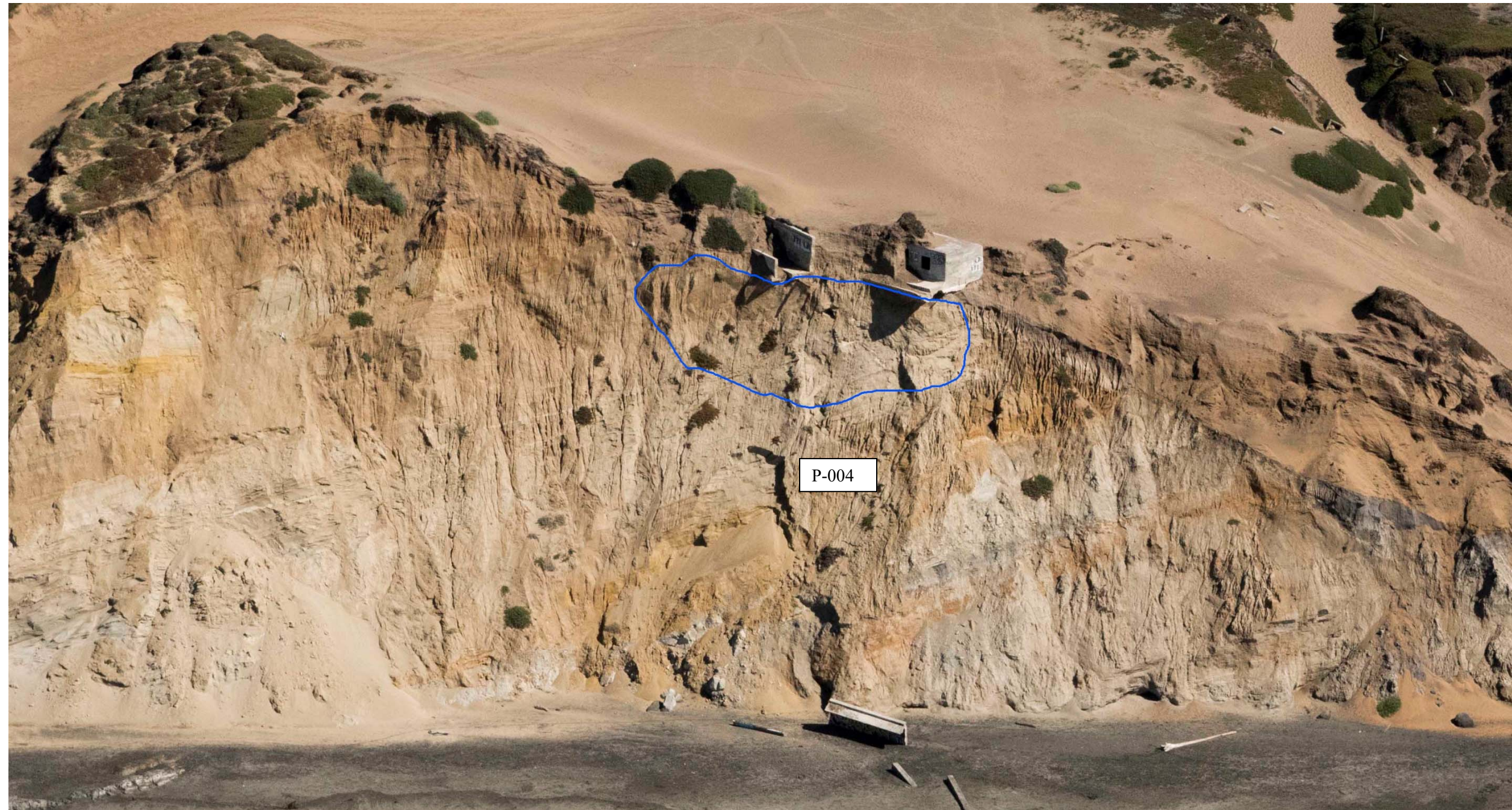
Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 15
 Potential or Historically Occupied Bank Swallow Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906644, South Portion



P-004

Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 16
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906647, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 17
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906647, Central Portion



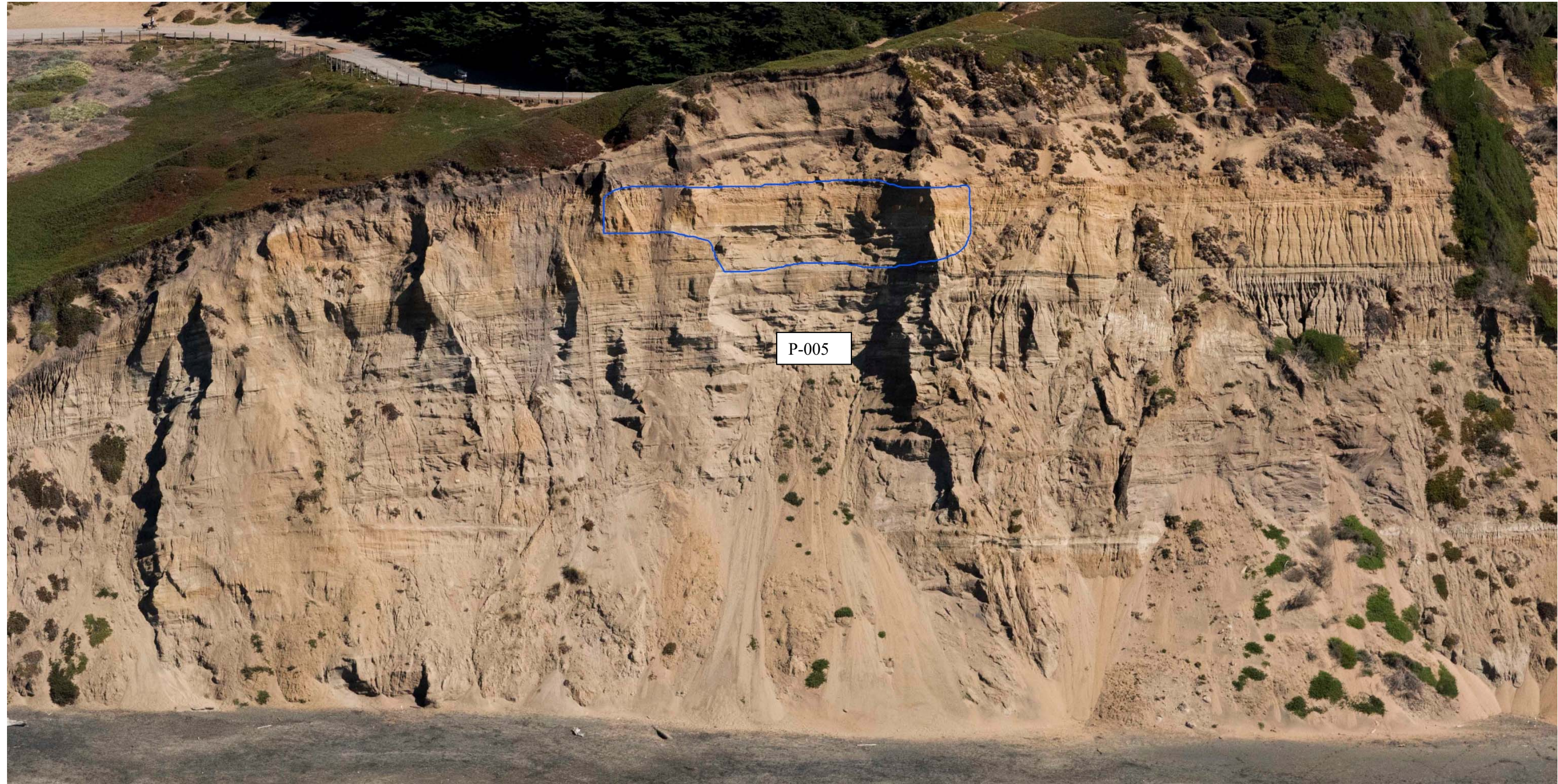
Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 18
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906647, South Portion



P-005

Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 19
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906650



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 20
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906653



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 21
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906656, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 22
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906656, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as “A-001”
 Historical BANS habitat areas denoted as “H-001”
 Potential BANS habitat areas denoted as “P-001”

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 23
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906659, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as “A-001”
 Historical BANS habitat areas denoted as “H-001”
 Potential BANS habitat areas denoted as “P-001”

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 24
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906659, South Portion



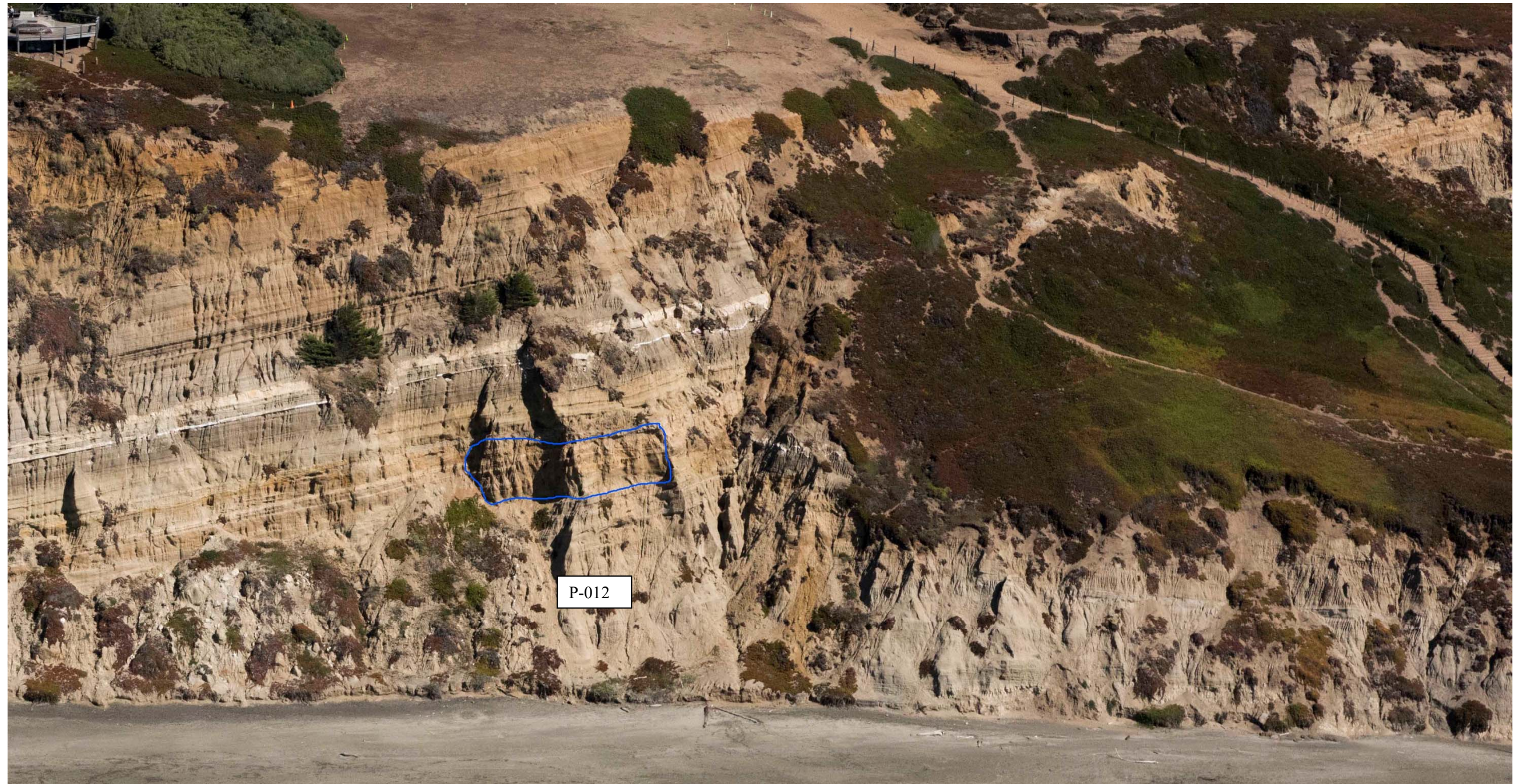
Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 25
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906662, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 26
 Potential Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906662, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as “A-001”
 Historical BANS habitat areas denoted as “H-001”
 Potential BANS habitat areas denoted as “P-001”

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 27
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906665, North Portion



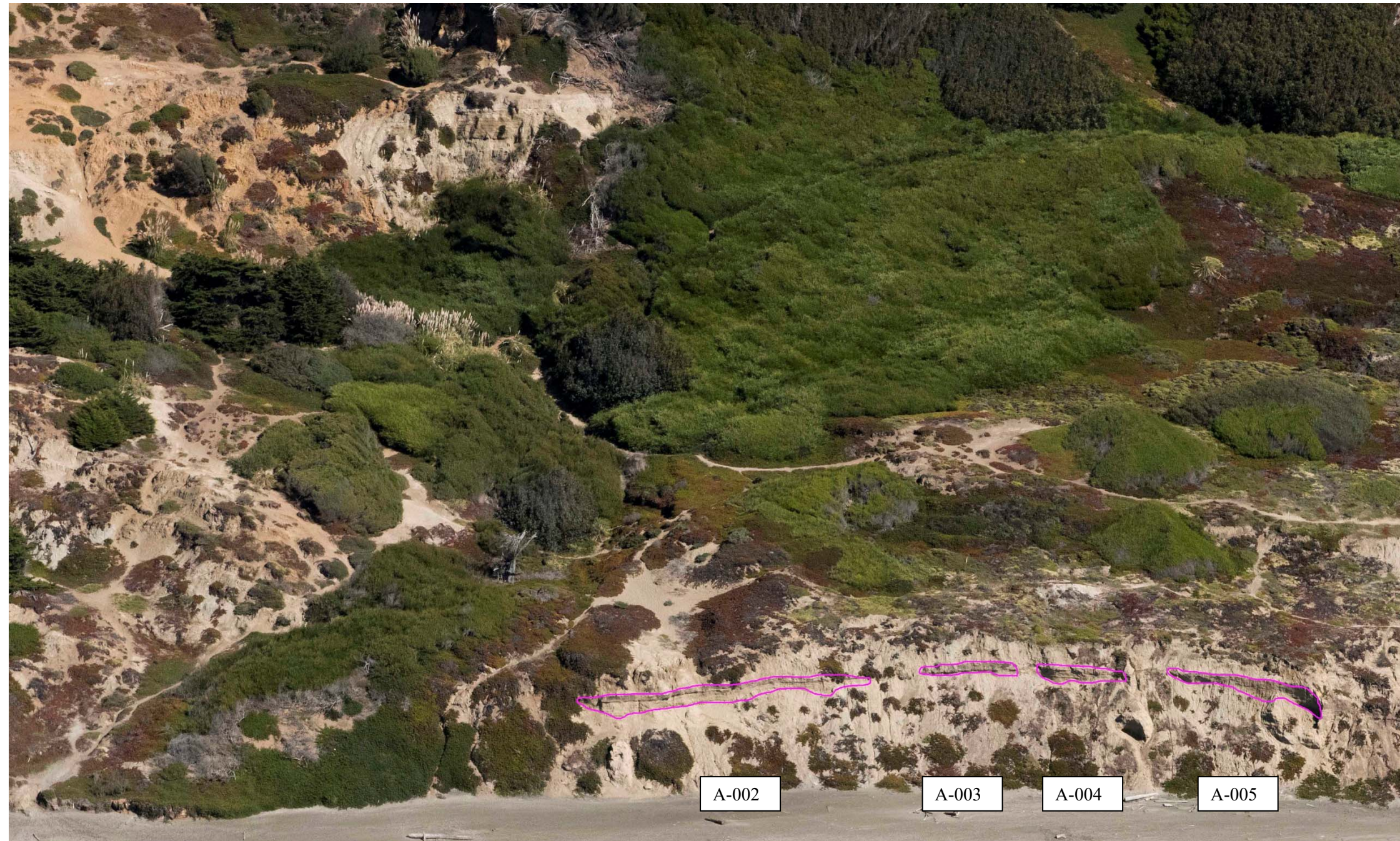
Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 28
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906665, South Portion



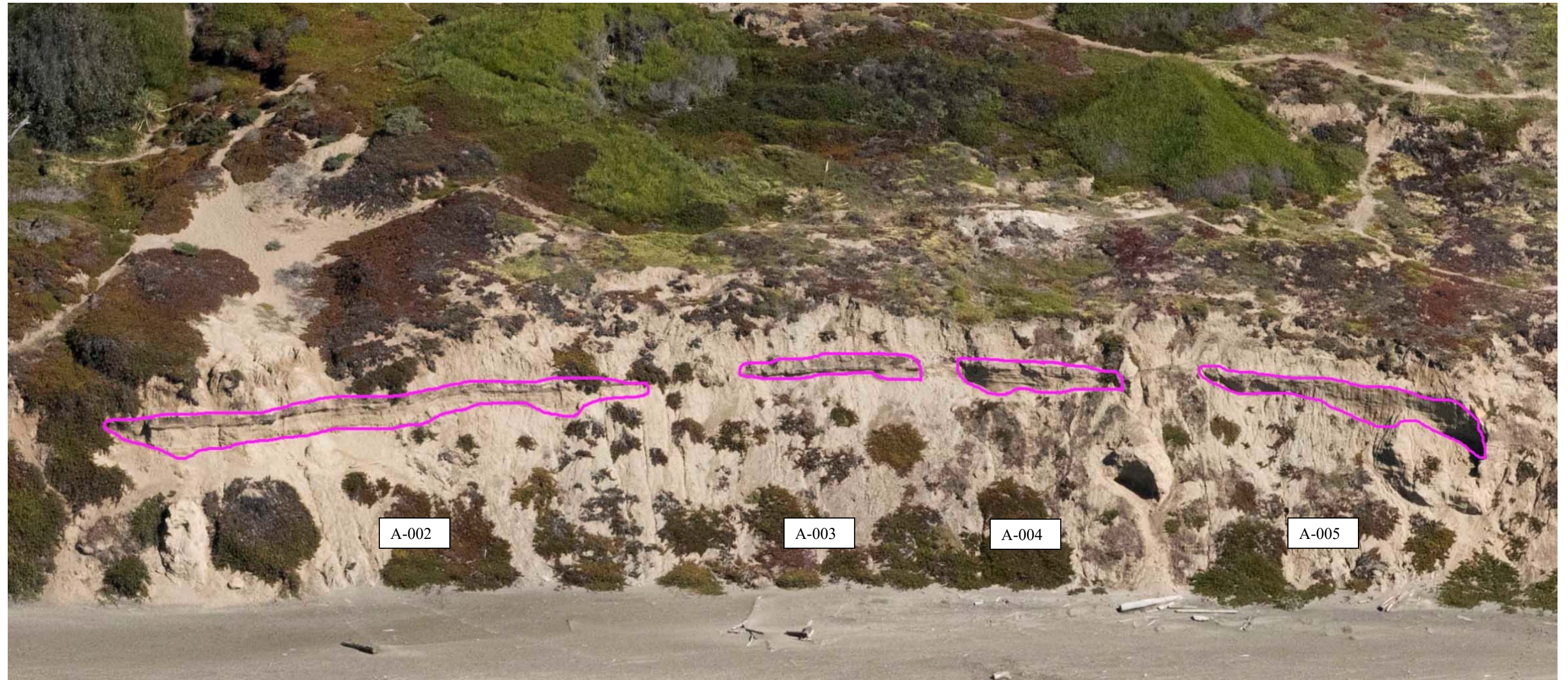
Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as “A-001”
 Historical BANS habitat areas denoted as “H-001”
 Potential BANS habitat areas denoted as “P-001”

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 29
 Active Bank Swallow Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906668, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 30
 Detail of Active Bank Swallow Habitat at Fort Funston in 2022. Most Nesting in Spring 2022 occurred in the Rightmost Polygon, with Limited Nesting Use of the Leftmost Polygons.
 California Coastal Records Project Photo Number 201906668



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 31
 Active Bank Swallow Nesting Habitat at Fort Funston
 California Coastal Records Project Photo Number 201906668, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 32
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906671, North Portion



Key:

Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 33
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906671, South Portion



Key:

Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Figure 34
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906674, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 35
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906674, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 36
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906677, North Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 37
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906677, South Portion



Key:
 Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

Source: ESA

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Figure 38
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906680, North Portion



Key:

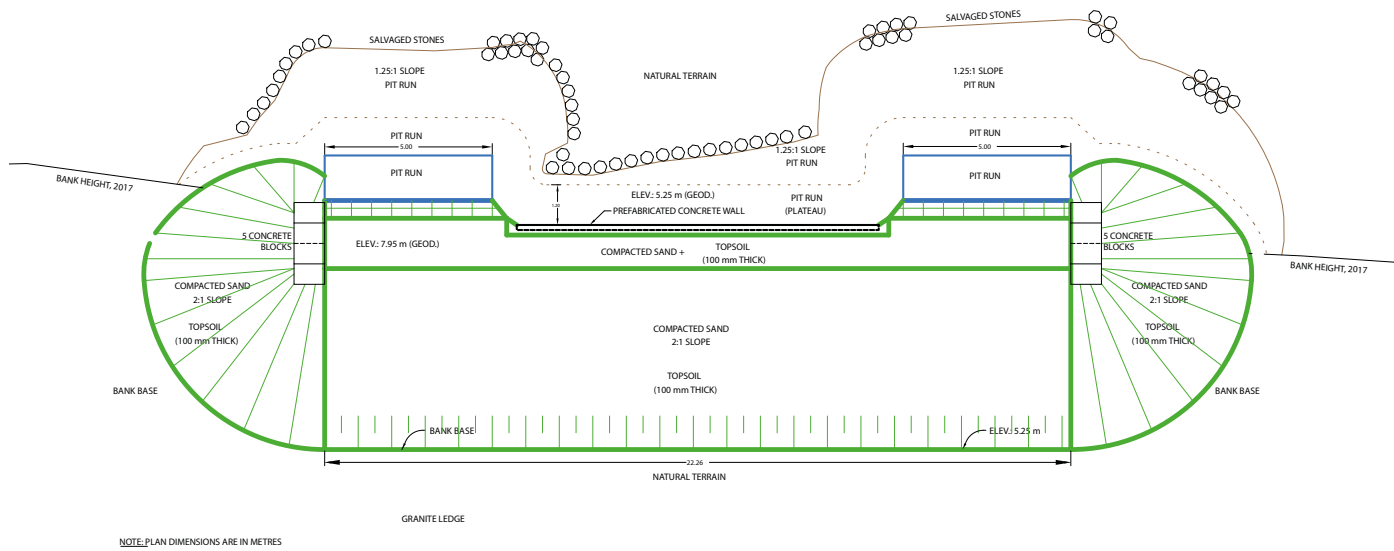
Pink = active; prior or current BANS use with viable burrows
 Green = historically occupied; no viable burrows
 Blue = potential habitat, no prior documented use

Active BANS habitat areas denoted as "A-001"
 Historical BANS habitat areas denoted as "H-001"
 Potential BANS habitat areas denoted as "P-001"

SFPUC Ocean Beach Bank Swallow Habitat Assessment. D130576.28

Source: ESA

Figure 39
 Potential Bank Swallow Nesting Habitat at Fort Funston (No Habitat in Image)
 California Coastal Records Project Photo Number 201906680, South Portion



201910130576.28 - Ocean Beach RTC and FEIR/05 Graphics-GIS-Modeling/04 Permitting

SOURCE: Québec Port Authority (QPA). 2018. Port Activity and Endangered Species: Possible Bank Swallow, Cohabitation Challenge Overcome (informational flier)

Ocean Beach Climate Change Adaptation Project

Figure 40
 Prefabricated Concrete BANS Habitat Wall at the Québec Port Authority Battures de Beauport Site and Plan View of the Québec Port Authority's 10-Meter-Wide Prefabricated Concrete Wall A-40



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

Bay Delta Region

2825 Cordelia Road, Suite 100

Fairfield, CA 94534

(707) 428-2002

www.wildlife.ca.gov**GAVIN NEWSOM, Governor****CHARLTON H. BONHAM, Director**

October 4, 2022

Julie Moore

City and County of San Francisco, Environmental Planning

49 South Van Ness Avenue #1400

San Francisco, CA 94103

Julie.Moore@sfgov.org

Subject: Fort Funston Bank Swallow Habitat Assessment Technical Memorandum for the Ocean Beach Climate Change Adaptation Project, Draft Environmental Impact Report, SCH No. 2020090171, City and County of San Francisco

Dear Ms. Moore:

Thank you for conducting a bank swallow (*Riparia riparia*) habitat assessment for the Ocean Beach Climate Change Adaptation Project (Project), as requested in the California Department of Fish and Wildlife (CDFW) CEQA Comment Letter dated January 21, 2022. CDFW also responded with comments to the Notice of Preparation for the Project on September 25, 2020. CDFW's comments in part identify that the Project will significantly impact bank swallows, a California Endangered Species Act (CESA) listed as a threatened species. CDFW requested the Fort Funston Bank Swallow Habitat Assessment Technical Memorandum (Technical Memo) be prepared to better understand the extent of Project impacts. CDFW has reviewed the Technical Memo and has the below comments and recommendations, including potential mitigation options to reduce Project impacts to bank swallows.

TECHNICAL MEMORANDUM SUMMARY

The Technical Memo objectives are to: 1) identify, describe, and delineate potentially suitable nesting habitat used by the Fort Funston bank swallow colony; 2) identify and delineate cliff sites that could be enhanced through vegetation management or other means to provide potentially suitable bank swallow nesting habitat; and 3) quantify potential bank swallow nesting areas to provide a baseline of available habitat in the Project vicinity.

Potential nesting habitat was defined in coordination with the Project proponent's consulting biologists, CDFW, and the National Park Service (NPS) as cliff faces with the following attributes:

- Vertical cliff face slope (90 degrees) to slightly inclined slope (minimum 70 degrees)
- Little or lack of vegetation on cliff face

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- Presence of friable soils suitable for burrowing (freshly exposed cliffs)
- Minimum cliff height of 3 meters above the ground (or less, if bank swallow activity is observed or present historically, which does occur at the Project site)

The Technical Memo uses a combination of 2019 oblique aerial imagery, field observations, and desktop GIS mapping technology to determine bank swallow habitat types and attributes. Through this process, the Technical Memo identified 33,743 square feet of bank swallow habitat in the 2.9-mile-long survey area, with an average slope of 72 degrees. The majority of this mapped habitat, 25,006 square feet (74%), is identified as potential habitat with no previously observed bank swallow use. The Technical Memo also describes existing recreational pressures at the site and provides recommendations for Project mitigation.

COMMENTS AND RECOMMENDATIONS

Bank Swallow Nesting Habitat Assessment

CDFW appreciates the effort and technique used to identify and map bank swallow habitat in the Fort Funston area. The Technical Memo provides context for determining the extent the proposed Project will affect nesting bank swallow habitat and also identifies limited opportunities for bank swallow nesting habitat enhancement. It is CDFW's assessment that the Technical Memo demonstrates significant impacts will occur to bank swallows from the Project due to a reduction in nesting habitat. However, key considerations are missing from the Technical Memo and further refinement is needed to accurately assess the Project impacts to bank swallows. Specifically, the terminology of active and historic habitat used in the Technical Memo does not incorporate all of the best available scientific information. In addition, the Technical Memo omits evaluation of impacts to bank swallow nesting habitat from beach nourishment and other activities within the Project footprint.

Proposed terminology of active, historic, and potential nesting habitat appear to overestimate potential and historic nesting habitat and underestimate active nesting habitat. CDFW recommends updating the Technical Memo to include formal definitions of nesting habitat based on the best available science including CDFW's *Statewide Bank Swallow Colony Inventory Survey Methods* (CDFW 2021, Survey Methods). Bank swallows typically do not occupy all suitable burrows or nesting habitat within a colony site every year, and there is considerable turnover of colony sites between years (Garrison 1989). CDFW therefore considers available burrows that have been used by bank swallows in the past to be active nesting habitat.

CDFW's Survey Methods describes inactive burrows as "rough or craggy and lack scrape marks and whitewash. They may appear grayish because they are shallow,

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incompletely dug or collapsed. Spiderwebs may crisscross burrows and should not be confused with root fringes which may occur at the edges of occupied burrows” (CDFW 2021). Therefore, CDFW recommends the Technical Memo be updated to include the below definitions:

Historic nesting habitat is any area with previous observations of bank swallow use that no longer contains viable burrows, such as collapsed or shallow burrows, or burrows with obstructions such as roots across the entry of the burrow.

Active nesting habitat is any area with previous or current observations of bank swallow use with viable burrows.

The Technical Memo should be updated using revised nesting habitat definitions to quantify if bank swallow burrows are active or historical, and where there may be potential nesting habitat within the assessment area. This information should be itemized in a new summary table as part of the bank swallow nesting habitat assessment.

CDFW agrees with the definition of potential nesting habitat included in the Technical Memo. However, the practical application of identifying potential nesting habitat did not include all the necessary habitat attributes. Specifically, the Technical Memo states that presence of friable soils could not be examined due to lack of data. CDFW is concerned that potential habitat is overestimated without incorporation of this important feature. CDFW recommends the Technical Memo include a strategy to measure friable soils in consultation with a geologist and conduct additional in-person surveys within the habitat assessment area.

The Technical Memo identifies inland (“off beach”) potential habitat may be less suitable for bank swallow occupancy than potential habitat identified at the beach. However, given the lack of evidence that bank swallows use the inland habitat, CDFW recommends removing the inland areas from the potential habitat estimate. In addition, the remaining potential nesting habitat identified in the Technical Memo has no documented use by bank swallows and does not include the friable soils attribute.

The Technical Memo should discuss beach nourishment (sand replenishment) potential to reduce bank swallow habitat and potential habitat, and recognize that recent sand nourishment activity is not captured in the 2019 imagery that was used to model habitat. CDFW recommends the effects of sand replenishment activities be evaluated in the assessment of habitat and potential habitat. CDFW conducted numerous site visits in 2022 and observed sand placed against the cliff face immediately below bank swallow habitat. Bank swallows typically require a minimum cliff height of 3 meters above the ground to protect themselves from predators (Humphrey and Garrison 1987). Additionally, for long-term tracking and modeling of bank swallow habitat CDFW

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recommends aerial oblique imagery be conducted once a year prior to bank swallow nesting season in February.

The Technical Memo should clearly describe and quantify bank swallow nesting habitat loss that will occur from Project activities. An additional table that identifies existing habitat amounts pre- and post-Project within the Project footprint should be included in the Technical Memo. In addition, a figure should be included showing the Project footprint in relation to the identified active, historic and potential bank swallow nesting habitat.

Mitigation Options

CDFW recommends researching and further detailing the mitigation options considered in the Technical Memo, as well as researching the new options identified below to protect and enhance bank swallow nesting habitat at the site and to mitigate impacts from the Project. **The Project impacts to bank swallow habitat will be significant.** A single mitigation option will likely not be adequate to fully mitigate impacts and a combination of activities will be needed. Successful implementation of mitigation options should be demonstrated prior to Project impacts. The following mitigation concepts, some of which are briefly described in the Technical Memo, are not ordered in priority and some may be more feasible and/or have higher conservation value than others.

1. Fund a dedicated full-time position with NPS, or another appropriate agency or organization, to act as interpretive staff and biological monitor along the Fort Funston and Phillip Burton Memorial Beach. This position would educate and inform beach goers about banks swallows and patrol the area to keep human disturbance at a minimum. They would remind beach goers to keep dogs on leash during the nesting period (February through early September), request people and their dogs not climb on bank swallow habitat, etc. They would also assist with monitoring the bank swallow colony through time.
2. Fund and conduct an experimental artificial nesting habitat enhancement and/or creation at the site and if successful, fund additional enhancement and/or creation and provide for the long-term maintenance of the nesting habitat.
3. Conduct or fund a study on bank swallow movement and nesting habitat use that would track individuals that use the Fort Funston area in order to determine whether they explore other locations or have the potential to use other coastal areas. Results could provide important data for future nesting habitat protection and/or enhancement.
4. Research existing protections, if any, at the Phillip Burton Memorial Beach (i.e., property owners and easements) and fund any conservation gaps. This could involve funding a conservation easement, or if one already exists, providing

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additional funding for long-term management planning and implementation at the site.

5. Remove iceplant (*Caprobrotus* spp.) where feasible. Even though only small areas are available for treatment, CDFW highly recommends this approach as iceplant restricts the natural erosion process that bank swallows require for nesting. Bank swallow nests are typically free of vegetation, both due to erosion and soil exposure needs and for reduced risk of predation (Garrison 1989).
6. Provide for the installation and removal of temporary signage and fencing during the bank swallow nesting season in perpetuity.
7. Revegetate with native plants and install permanent fencing and signage at the top of the bluff to prevent human disturbance to nesting bank swallows. Funding should be provided to maintain the fencing and manage the native plants in perpetuity.
8. Remove accumulated sand beneath bank swallow habitat. CDFW understands that this may not be feasible due to liability concerns.
9. Restore and enhance native dune plants to improve bank swallow foraging habitat near the Project. Restoration of foraging habitat should occur both on-site from Ocean Beach to Thornton State Beach, as well as off-site at Lake Merced.

CALIFORNIA ENDANGERED SPECIES ACT

Incidental Take Permit

CDFW has determined the Project as proposed will have significant impacts to bank swallow nesting habitat by reducing the carrying capacity of the bluffs to support bank swallow colonies. Bank swallows are protected under CESA as a threatened species and permanent removal of bank swallow nesting habitat could result in take of bank swallows through crushing, injuring, or entombing individuals, or through nest abandonment and mortality of young. Further, any loss of habitat at this site could lead to extirpation of this small and unique population. CDFW strongly recommends the Project obtain a CESA Incidental Take Permit for bank swallows pursuant to Fish and Game Code Section 2080 et seq. in advance of Project implementation.

CALIFORNIA COASTAL ACT

Coastal Development Permit

The Project is located within the Coastal Zone and is protected by the California Coastal Act. It is also within the City of San Francisco (City) Western Shoreline Area Plan, which

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is a portion of the City's certified local coastal program and guides land use planning within the Coastal Zone (City and County of San Francisco 2021). The Project will require a Coastal Development Permit, which will ensure consistency with the Coastal Act and the City's Western Shoreline Area Plan. CDFW supports requirements under the Coastal Act to protect environmentally sensitive habitat areas (ESHA), including bank swallow nesting habitat (Pub. Resources Code, § 30240). ESHA is defined as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Pub. Resources Code, § 30107.5). In this case, bank swallows are a rare species, as previously described they are listed as threatened under CESA, and their preferred nesting habitat near the Project area consists of rare eroding coastal bluffs that are highly susceptible to human disturbance and degradation. CDFW agrees with the conclusion in the Draft Environmental Impact Report that Project construction could conflict with the Coastal Act's ESHA policy due to the permanent removal of bank swallow nesting habitat. CDFW looks forward to working closely with the Project and the Coastal Commission to appropriately address the impact to bank swallow nesting habitat.

CONCLUSION

CDFW thanks you for your continued effort coordinating with state and federal agencies to address Project impacts to bank swallow habitat. CDFW looks forward to working with San Francisco Planning, the San Francisco Public Utilities Commission, and other partners as we work to reduce impacts to bank swallows. CDFW has concluded that the Project will have significant impacts to, and will likely result in take of, bank swallows. The Technical Memo, with recommended revisions, will help quantify those impacts in the context of the local bank swallow population and provide further details on potential mitigation options.

If you have any questions regarding this letter or for further coordination with CDFW, please contact Will Kanz, Environmental Scientist, at (707) 337-1187 or via email at Will.Kanz@wildlife.ca.gov; or Wesley Stokes, Senior Environmental Scientist (Supervisory), at (707) 339-6066 or via email at Wesley.Stokes@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erin Chappell
Erin Chappell
Region Manager
Bay Delta Region

Julie Moore
City and County of San Francisco
October 4, 2022
Page 7

ec:

Craig Weightman, CDFW Bay Delta Region – Craig.Weightman@wildlife.ca.gov
Wesley Stokes, CDFW Bay Delta Region – Wesley.Stokes@wildlife.ca.gov
Amanda Culpepper, CDFW Bay Delta Region – Amanda.Culpepper@wildlife.ca.gov
Will Kanz, CDFW Bay Delta Region – Will.Kanz@wildlife.ca.gov
William (Bill) Merkle, National Park Service – Bill.Merkle@nps.gov
Alison Forrestel, National Park Service – Alison.Forrestel@nps.gov
Peter Benham, California Coastal Commission – Peter.Benham@coastal.ca.gov

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United States Department of the Interior

NATIONAL PARK SERVICE
Golden Gate National Recreation Area
Fort Mason, San Francisco, California 94123

September 22, 2022

Memorandum

To: Julie Moore, Principal Environmental Planner
San Francisco Planning Department

From: Bill Merkle, Wildlife Ecologist, Golden Gate National Recreation Area

Subject: Comments on Fort Funston Bank Swallow Habitat Assessment Technical Memo

Background

The Fort Funston breeding colony of bank swallows (*Riparia riparia*) has been observed since the early 1900's. Habitat loss and other factors led to bank swallows being listed as a threatened species under the California Endangered Species Act in 1989. Habitat estimates indicate that the entire California bank swallow range has been reduced by as much as 50%. Habitat loss at bank swallow breeding colony sites may continue to impact the species throughout the state.

The Fort Funston breeding colony of bank swallows is one of only two remaining coastal breeding sites in California, with the other at Ano Nuevo State Park. The National Park Service has been the primary steward of the Fort Funston bank swallow colony since at least the late 1980's.

The National Park Service began systematically monitoring breeding bank swallows at Fort Funston each spring, beginning in 2000. The monitoring goals are to determine trends within the local breeding population, and to record potential disturbances to bank swallows and their nesting areas.

The total number of bank swallow burrows at the Fort Funston colony has been declining since 2000. The low number of nesting bank swallows in recent years puts this population at imminent risk of extirpation. Figure 1 below shows the trend in active bank swallow burrows at Fort Funston over the monitoring period of 2000 through 2021.



Figure 1. Total maximum bank swallow burrow counts by survey year; 2000-2021

Comments on the Fort Funston Bank Swallow Habitat Assessment

- Overall:** NPS wants to be clear that the ultimate determination of project impacts will be a separate process conducted by SF Planning and NPS CEQA/NEPA staff and consultants, which will be reviewed by CDFW as the state regulatory agency and NPS biologists.
- For all of the applicable tables reading "NPS Area ..." please add for clarification, whether the area is South Ocean Beach project area or Fort Funston; and similarly for maps in Attachment A, please add South Ocean Beach project area or Fort Funston, and add the boundary line for South Ocean Beach and Fort Funston for H-001 and H-002.
- "Project" in the Memo does not seem consistent with "project" in the Draft EIR. That is, "project" in the memo seems to include Fort Funston, which is outside the area of "project" in the D. EIR. It would be helpful to clarify the project boundaries in the Memo for accuracy and consistency.
- Background:** NPS recommends adding the background information and context on the Fort Funston bank swallow population trends described above into the technical memo.
- Overall habitat loss:** The loss of 1,271 sq ft. of bank swallow nesting habitat from seawall construction represents a significant loss of habitat, especially for a state threatened and declining population of bank swallows. The area of habitat loss was the preferred nesting location for the bank swallows from 2010-2019. The area that would be lost because of this project represents 14.5% of nesting areas that bank swallows have been known to use since 2000 (Active Habitat + Historical Habitat in Project Area + Other Historical Habitat).
- Memo, p. 8, H-001, reads, "Note that site H-001 above the revetments **is within** the Ocean Beach Climate Change Adaption Project area and **would** be removed by the project." Memo, p. 9, H-002, reads, "Note that site H-002 **is adjacent** to the Ocean Beach Climate Change Adaption Project area and **may be** removed by the project." Does the D.

EIR identify H-002 for removal? If not, then wouldn't the area of impact be 522 sq. ft., not 1,271 sq. Ft.?

- Figure 4 in the Memo seems to miss some historic nesting habitat on the vertical bluffs between H-001 and H-002 that would be permanently lost due to the project. A visual estimate of that historic nesting habitat is probably about 150 sq. ft. (based on comparison with the area contained in H-001). This would potentially increase estimates of nesting habitat that is being lost due to the project.
- **H-001:** NPS did observe activity at one burrow above the rock revetment in H-001 on numerous occasions during monitoring in 2022, though did not confirm breeding in that burrow. NPS would classify this bank swallow activity in the area above the rock revetment as active, as opposed to the historic classification in the assessment.
- **Historic versus Active Habitat:** Because bank swallows move year to year between different burrow areas, NPS Biologists consider any area that was historically used as habitat and still has intact burrows to be active habitat.
- **Potential Habitat:** A large amount of potential habitat (25,006 sq. ft.) was identified in the assessment based upon a qualitative assessment of habitat suitability. A quantitative assessment of soil friability and other geologic factors in habitat suitability was not done and bank swallows have not chosen to nest in these locations over the last 20 plus years. Thus, it is not clear that these areas have the same characteristics as the other active and historic areas that bank swallows have used for nesting. This raises doubt as to whether bank swallows would shift to nesting in these areas in the future. NPS would prefer to refer to these areas as Possible Habitat and requests language be added to the memo describing the uncertainty regarding the suitability of the Possible Habitat areas. NPS also requests that SFPUC do further investigation into quantitative measures of habitat suitability (e.g. geological strata, friability quantification) to further characterize potential habitat as a follow up action.
- **Mitigation Options:**
 - **Bluff face ice plant removal:** Bluff face ice plant removal is a beneficial action and should be included in the suite of mitigation actions. The amount of habitat that could be gained from ice plant removal is approximately 20 sq. ft.
 - **Mechanical improvements:** Mechanical improvements to bluff habitat are not a realistic option for impact mitigation because of the risk of cliff destabilization due to manipulation and because sand removal in habitat areas would not be long lasting enough to be meaningful and could not be maintained over time. A note about the feasibility challenges of this type of approach should be added to the memo or the discussion of this approach should be removed from the recommendations section of the memo.
 - **Reducing recreational pressure:** NPS recommends a joint effort to explore locations where fencing and signage to keep recreational users off cliff faces

would be both feasible and effective. We think that the best approach would be to target moveable fencing and signage in areas where the bank swallows are active. While reducing recreational pressure may have some limited success, we would like to note in the technical memo that the benefits of this approach are difficult to quantify and do not directly mitigate the habitat loss due to the project.

- **Upland habitat restoration:** NPS recommends efforts to remove invasive plants and restore native biodiversity in bluff-top habitat areas that bank swallows use for foraging. We have identified several key areas for targeted bluff-top restoration. However, we would like to note in the technical memo that the benefits of habitat restoration on bank swallows are difficult to quantify and do not directly mitigate the habitat loss due to the project.
- **Research:** NPS recommends a research project to augment existing monitoring data to improve our understanding of bank swallow population dynamics at both Fort Funston and Ano Nuevo. Specially, research would quantify survivorship and movement patterns of bank swallows in these two coastal colonies as well as identify key threats to these populations. Additionally, SFPUC would contract for research to conduct geological work to better determine what constitutes ideal nesting habitat in different geological strata on the Fort Funston bluffs.

Proposed Bank Swallow Mitigation Budget

BANS Mitigation Plan Budget				
Description	Justification	Annual Cost	Total Cost	Comments
5 year support for GGNRA BANS monitoring and management efforts. Programmed for FY24-28	GGNRA staff will conduct BANS monitoring and install and remove protective signage and fencing (see below), and conduct outreach. Tracking the BANS population will be increasingly important post project, and making sure the BANS nesting is protected.	\$104,000	\$520,000	Annual staffing: GS-07 Field lead; GS-09 supervisor 1 pp; GS-12 Ecologist 0.5 PP, 2 months of intern support.
Bank swallow outreach kiosk for bluff top. Design, production and installation.	Outreach about the rarity and sensitivity of the bank swallow population at Fort Funston will increase compliance with habitat protection signage and fencing		\$7,000	
Temporary signage. Design and production. 20 signs.	Based on NPS BANS monitoring, we would place temporary signage to protect BANS nesting areas from disturbance		\$6,000	
Temporary fencing. Eye post and cable. Possibly some barricade style sections.	Based on NPS BANS monitoring, we would place temporary fencing to protect BANS nesting areas from disturbance		\$6,000	
Revegetation and fencing of 2.04 bluff top acres just south of the rock revetment site at Fort Funston (see attached write up)	Stabilizing and protecting the top of the bluff in this area is important to protect the potential for BANS nesting, and prevent disturbance/erosion from people and dogs climbing down the bluff. BANS are known to forage over terrestrial habitat and enhancing the native dune habitat in this area could benefit BANS nesting nearby.		\$76,657	GGNRA has successfully restored dune habitat at Fort Funston, and nearby areas at Baker Beach, Crissy Field, and the Presidio. Our staff and the GGNPC nursery is skilled in these specific efforts; thus, this effort will be successful.
Bank swallow research on survivorship and movement patterns. Possible parallel work at Ano Nuevo to see if there is movement between colonies and/or to help determine patterns.	Research would help better assess project impacts and response to mitigations, and possibly help in developing other recovery actions.	\$32,000	\$160,000	GGNRA has several bird monitoring/research partners that may be possible leads for this work. Work with research partner would include better flushing out research project objectives and methods. Funding for five years of bank swallow research.
SFPUC contract for geologic work to better determine nesting habitat use along the bluff face in the different geologic strata.	Research would help better understand bank swallow nesting preferences, define suitable nesting habitat, and help determine habitat availability as bluffs erode.		\$50,000	
	Total		\$ 825,657	

ATTACHMENT E
BANK SWALLOW NESTING HABITAT
MITIGATION CONCEPTS MEMORANDUM



MEMORANDUM

DATE: January 30, 2023

TO: Julie Moore
Principal Environmental Planner, San Francisco Planning
Department

THROUGH Anna Roche
Project Manager

FROM: JT Mates-Muchin
Project Permitting Manager

SUBJECT: Bank Swallow Nesting Habitat Mitigation Concepts Evaluated
for the Ocean Beach Climate Change Adaptation Project

Background

The San Francisco Planning Department published a Draft Environmental Impact Report (DEIR) for the Ocean Beach Climate Change Adaptation Project on December 8, 2021. The DEIR identified a significant and unavoidable impact with mitigation on bank swallows due to removal of bank swallow habitat. Mitigation measures developed in consultation with the National Park Service (NPS) included implementation of a permanent educational kiosk, and semi-permanent educational signage and fencing that the NPS could install at its discretion during bank swallow nesting periods. At that time, no potentially feasible mitigation measures for bank swallow habitat were identified.

California Department of Fish and Wildlife (CDFW) comments on the DEIR recommended additional spatial analysis to quantify the amount of suitable nesting habitat in the project vicinity and to identify potential habitat that could be enhanced in nearby cliffs to provide mitigation for lost nesting habitat (CDFW, January 21, 2022). Additionally, the NPS requested the City collaborate with CDFW to determine what, if any, additional feasible mitigations may be possible (NPS, January 26, 2022). In response to these comments, the Planning Department asked its consultants (ESA) to prepare a scope of work for a bank swallow habitat assessment for agency review (ESA, March 29, 2022). The Planning Department, ESA, San Francisco Public Utilities Commission (SFPUC), CDFW and NPS met on April 4, 2022 to

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Vice President

Tim Paulson
Commissioner

Tony Rivera
Commissioner

Kate Stacy
Commissioner

Dennis J. Herrera
General Manager



discuss the objectives, approach, methodology, and reporting of the habitat assessment to ensure the proposed study would provide the appropriate data and analysis. Based on the feedback received, ESA finalized its proposed approach (ESA, May 11, 2022).

The Fort Funston Bank Swallow Habitat Assessment (ESA, August 15, 2022) inventoried a 2.9-mile waterfront study area between Sloat Boulevard and Thornton State Beach to identify, describe, and delineate nesting habitat used by the Fort Funston bank swallow colony, quantify potentially suitable bank swallow nesting habitat, and identify areas that could be enhanced to provide potentially suitable bank swallow nesting habitat as possible mitigation. ESA presented its findings to the agencies in a meeting on August 26, 2022 and potential mitigation measure concepts were discussed. In particular, CDFW shared an innovative, recent pilot project from the Quebec Port Authority that successfully created bank swallow nesting habitat. The agencies reviewed the habitat assessment and provided their comments to the Planning Department for consideration. NPS comments on the habitat assessment listed mitigation options including bluff face iceplant removal, reducing recreational pressure through moveable signage and fencing, upland habitat restoration, and additional research (NPS, September 22, 2022). CDFW comments recommended additional research of nine mitigation concepts (some of which are described above), with the understanding that some may be more feasible and/or have higher conservation value than others (CDFW, October 4, 2022). One of those concepts was to conduct an experimental artificial nesting habitat enhancement and/or creation at the site in light of the new Quebec pilot project findings.

Purpose of Memo

In response to the CDFW recommendation described above, the Planning Department requested that the SFPUC and its engineers (Moffatt&Nichol) evaluate the technical feasibility of creating artificial bank swallow nesting habitat at the site, using the Quebec Port Authority study as model with the understanding; however, that project setting at Ocean Beach would differ from the Port of Quebec site. The purpose of this memo is to describe the artificial bank swallow nesting habitat concepts evaluated and to discuss the feasibility and other considerations of each concept. In addition, this memo describes nesting habitat avoidance options that were considered and rejected at the inception of project design and environmental review.

Nesting Habitat Avoidance Options Considered

On September 25, 2019, the SFPUC and Planning Department met with CDFW (Randi Adair and Stephanie Holstege) and the California Coastal Commission

(CCC) staff (Sara Pfeifer and Lauren Garske-Garcia). The purpose of the meeting was to explain the project and ensure the agencies understood that to build the proposed low-profile wall, the bluff habitat that was at the time being used by the bank swallow would be removed. The bank swallow nesting habitat would be eliminated because the City and County of San Francisco (City) is required to remove the 2010 rock revetment that enables the habitat to persist. We discussed two options for maintaining the bank swallow habitat above the rock revetment: 1) preserving the rock revetment below the bank swallow nesting location; and 2) building a conventional sea wall (a shotcrete retaining wall with tie-backs as opposed to a low-profile buried wall) at this location (options 1 and 2, respectively, on Figure 1). Both agencies clearly stated that the City could not maintain the rock revetment or build a conventional seawall in order to save the bank swallow habitat; therefore, these options were not considered feasible and were not carried forward as part of the project. It was noted at that time that one possible solution would be to improve nesting habitat at Fort Funston.

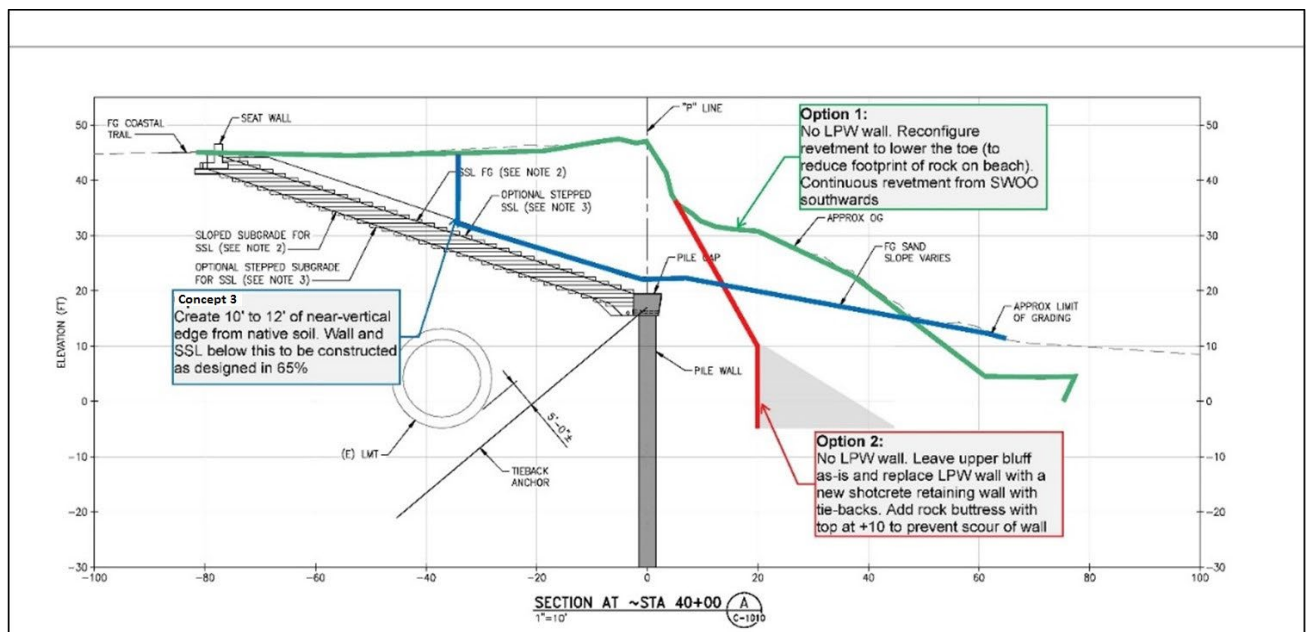


Figure 1 – Nesting avoidance options considered. Also included is potential mitigation considered as Concept 3 below.

Artificial Nesting Habitat Concepts Evaluated

In order to evaluate the technical feasibility of artificial nesting habitat as potential on-site mitigation for the loss of habitat, ESA's biologists developed specific criteria based on bank swallow literature and the Quebec Port Authority study that describe habitat requirements for nesting and quantified the amount

of habitat that would be removed as part of the project. The SFPUC's design engineers then used these criteria to evaluate the technical feasibility of various options, as described later in this memorandum. The bank swallow habitat criteria are described below:

Artificial Habitat Design Criteria

- General dimensions of the structure:
 - o Wall about 10 feet tall
 - o Backed by at least 5 feet of compacted sand or other material that would maintain burrow shape, topped with topsoil
 - o Wall length about 140 feet (based on replacement of approximately 1,400 sq feet of habitat) or, if multiple segments are constructed, at least 4 segments of about 35 feet
 - o Wall face – concrete or other substrate
- 26 holes per 1.8m linear feet
- Better in a location where less accessible to public/visible
- Reduce visual impact – staining concrete

The design engineers came up with more specific concepts as follows, and defined in more detail below:

Concept 1 – Deep Soil Mixing (DSM) Wall

Concept 2 - Concrete Wall and Compacted Sand Fill Under Concrete Stairs

Concept 3 - Mechanically Stabilized Wall

Some of these concepts meet the criteria above and some do not. One request of the NPS was to consider locations east of the new multi-use trail. There is no feasible location east of the multi-use trail that would meet the criteria. Bank swallow nests are seldom away from water (Audubon, 2023). A new artificial habitat east of the trail would be too far from the ocean. In addition, there would be frequent and significant disturbances for the bank swallows at this location, including pedestrians and traffic on the bike path and access road, which would be closer than 150 feet from the proposed habitat areas. Another suggestion was to consider locations at Lake Merced, where bank swallow may forage. The Lake Merced shoreline; however, would not provide suitable locations for a vertical wall due to space constraints, shoreline wetland habitat, and operations related to maintenance of lake levels.

Concept 1 - Deep Soil Mixing (DSM) Wall

This concept is a set of walls constructed out of deep soil mixing material (Figure 2) that would have two, five-foot high steps that would be drilled for bank swallow nesting habitat. Figure 3 shows a 3D image of these walls and

their relationship to the stairs. These DSM walls do not meet several of the design criteria, and their legal feasibility is uncertain, for the following reasons:

1. These walls would be partially or entirely on NPS land and NPS policies prohibit permanent structures.
2. These walls would be seaward of the proposed low-profile wall, which would likely be inconsistent with Coastal Act and Local Coastal Program (Western Shoreline Area Plan) policies regarding shoreline development.
3. These wall areas would only be five feet tall, and could not be made taller without major structural and seismic improvements.
4. Nesting bank (bluff) needs 150 feet (50m) of clear space in front of the bank face to enter and exit (Ministry of Natural Resources and Forestry, July 2015). This area would be too close to the proposed stairway.

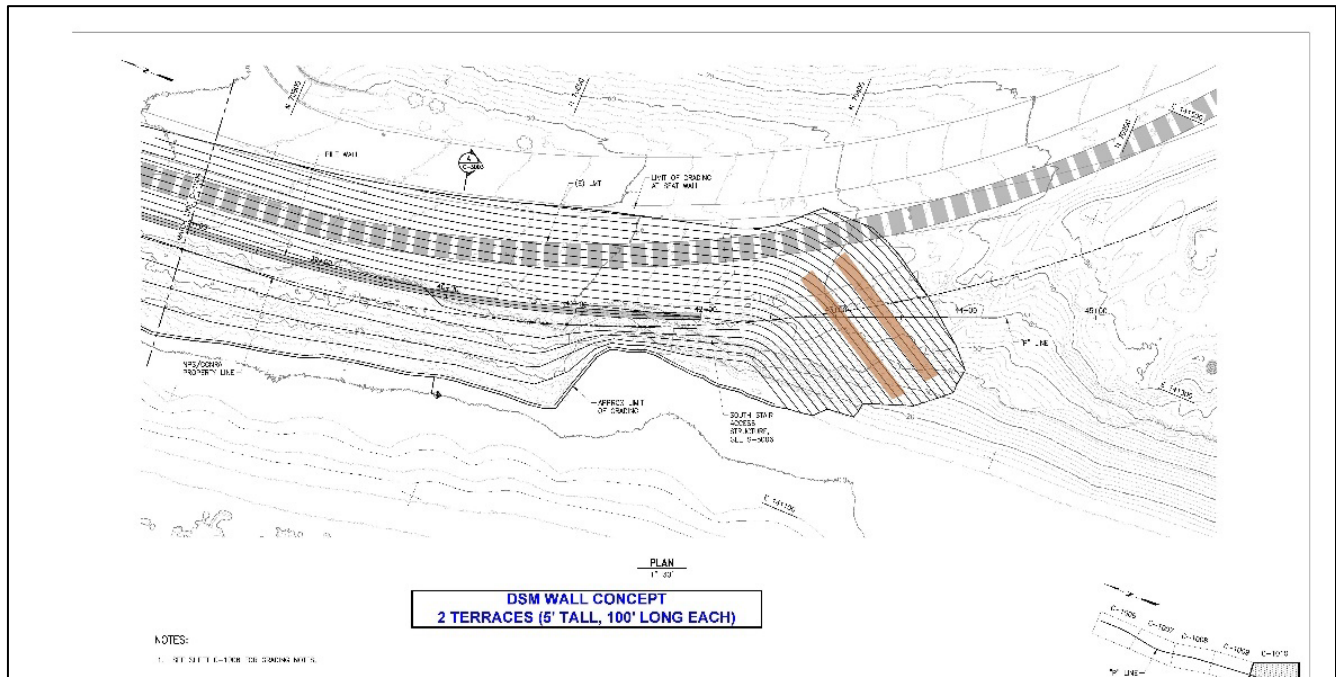


Figure 2 – DSM Walls at the South End of South Ocean Beach at the Border with Fort Funston

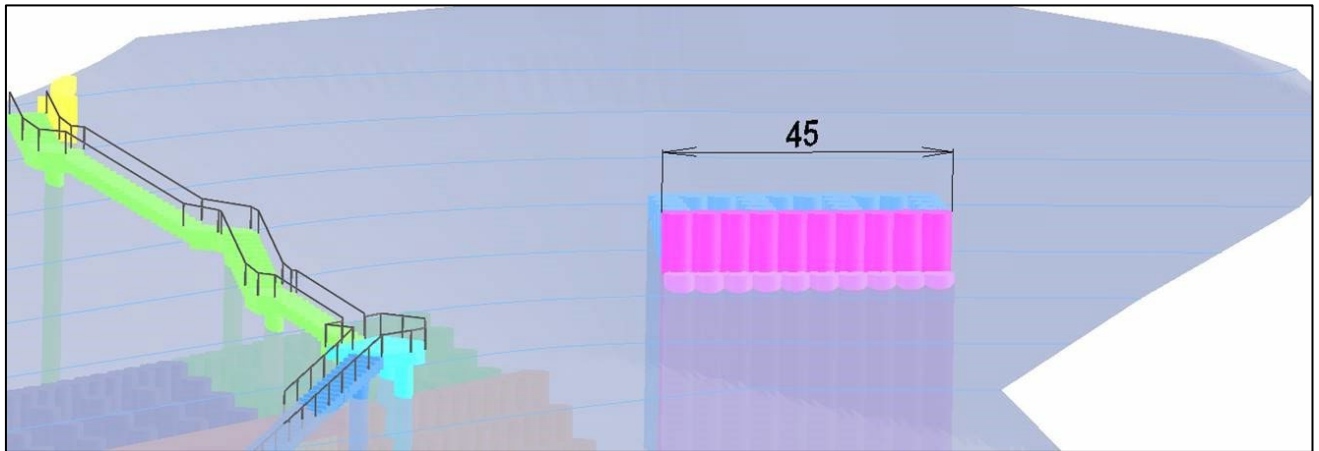


Figure 3 – 3D Model of Walls shown in Figure 2 with Stairs Shown for Scale

Concept 2 – Concrete Wall and Compacted Sand Fill Under Concrete Stairs

This concept would fill and wall off the space under the proposed project's access stairway as potential nesting habitat for bank swallow (Figure 4). There would be compacted sand above the slope stabilization layer (SSL) to the bottom of the stairs. Landings would be constructed on piles and the stair would be above (i.e. hover above) the SSL between the two landings. The concrete walls on the site would be approximately six inches thick and would be drilled with bank swallow nesting holes so the birds could access the sand underneath. This design does not meet several of the criteria for the following reasons:

1. This nesting habitat would be in close proximity to human (and animal) activity along the stairs.
2. The height of the walls for bank swallow nesting would be less than 10 feet because it is adjacent to the proposed dune establishment area. The adjacent dune habitat would reduce to the total wall height depending on the amount of available sand placed on the SSL (approximate finished sand elevation shown on Figure 4).
3. These side walls would require a major structural change to the stairway and the SSL.

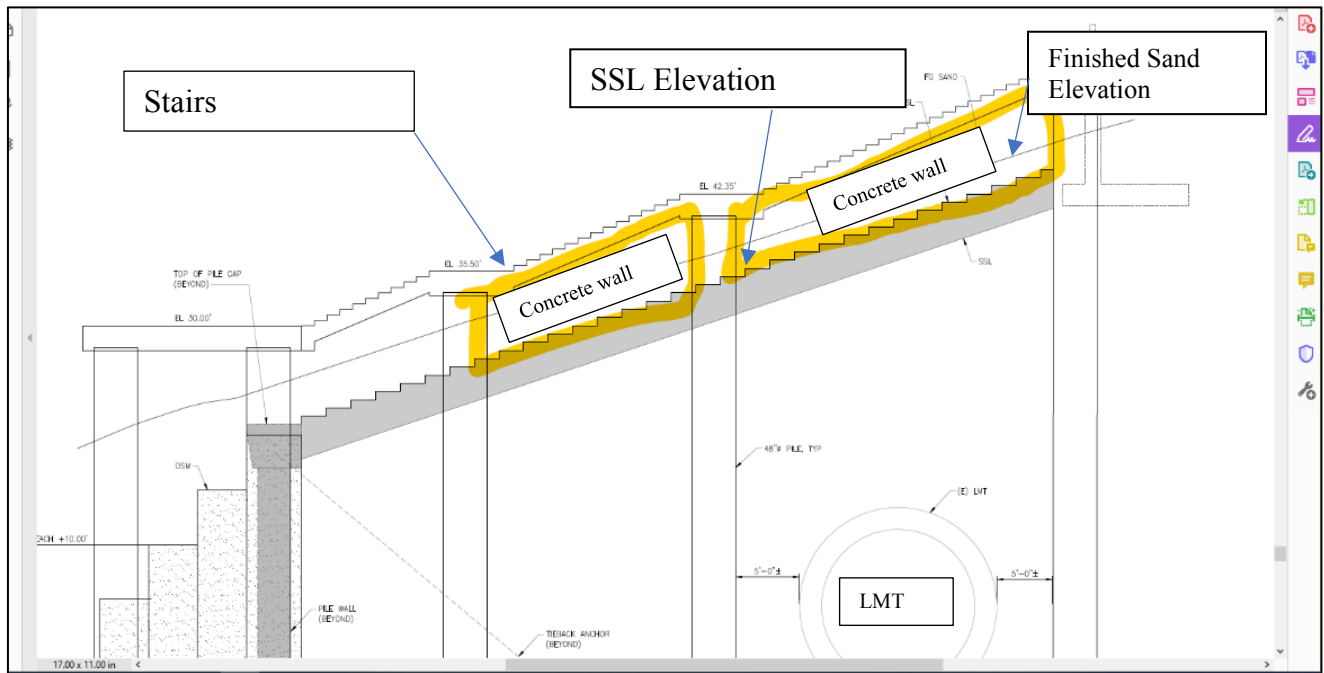


Figure 4 – Area for Nesting Habitat Between the Stairs and SSL Shown on Highlighted Side Panels

Concept 3 – Mechanically Stabilized Earth Wall

This concept would build a mechanically stabilized earth (MSE) wall or similar type of wall along 140 feet of the SSL approximately 30 feet from the top of the bluff and landward of the low-profile wall (Figure 1 [concept 3]; Figures 5 and 6). The wall would be 10 feet tall and would be backed with compacted sand or remnant Colma sands if possible. The 10-foot-high wall would require a fence at the top of the wall for safety. Nesting holes would be drilled toward the top three to four feet of the wall. This design would meet most of the technical criteria for the bank swallow habitat, except that the potential access to suitable substrate behind the wall is questionable at this stage of design. It is unclear whether the design of a permanent retaining wall in the coastal zone could be found consistent with the Coastal Act and the City's Local Coastal Program, and therefore permitted by the CCC.

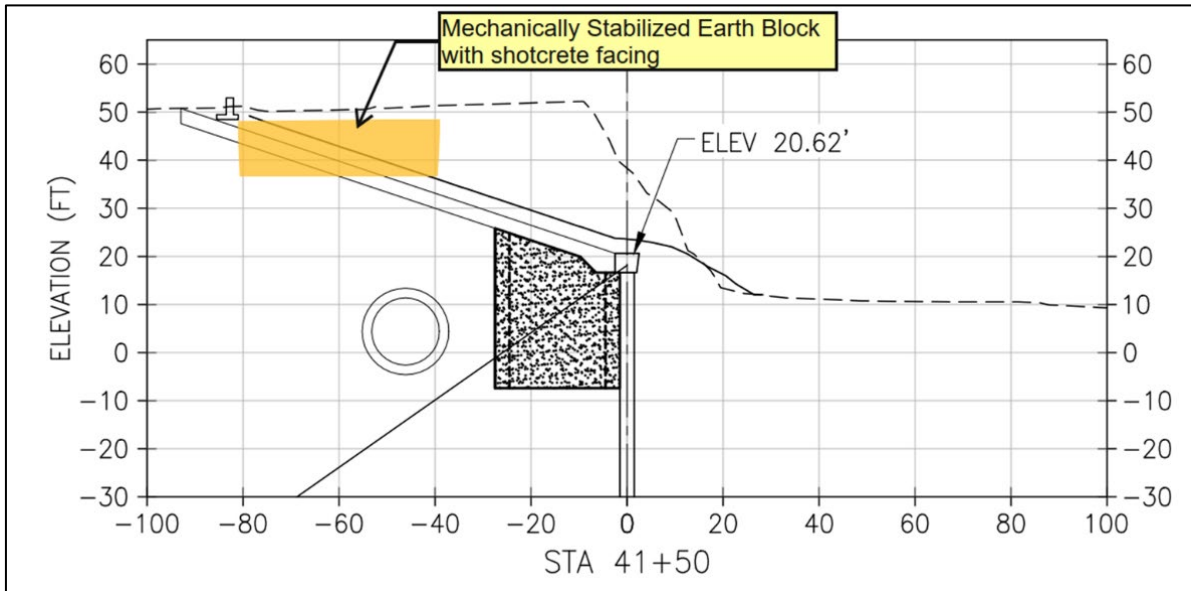


Figure 5 – Cross-Section of MSE (or Similar) Wall Location along the SSL in Relation to Low-Profile Wall and Top of Bluff (Park Area)

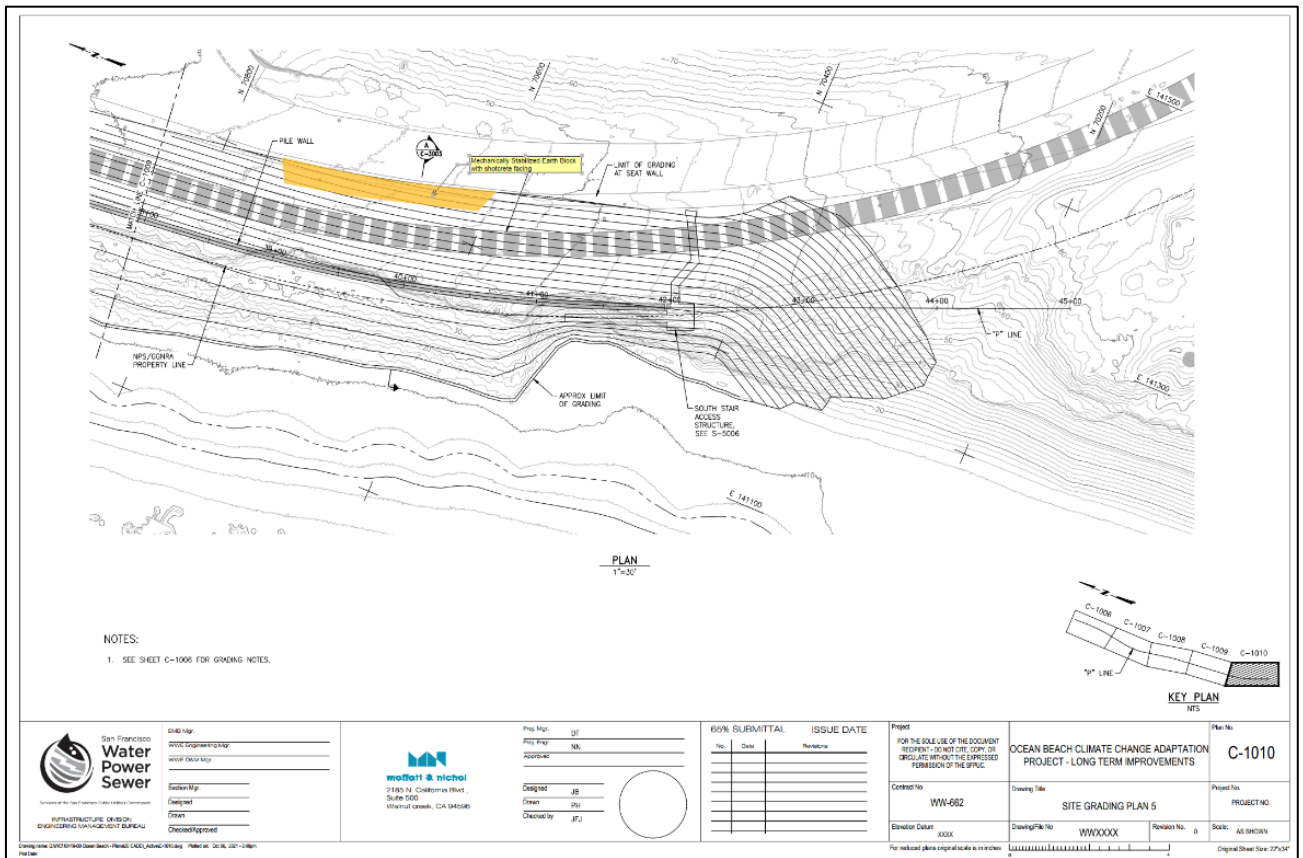


Figure 6 – Plan View of the MSE Wall (or Similar) Location

Conclusion

In summary, the SFPUC considered two bank swallow habitat avoidance options at the project outset. These options, retaining the rock revetment or constructing a conventional seawall to protect the bank swallow nesting habitat, would be considered technically feasible; however, they were rejected based on discussions with CDFW and CCC. Maintaining the rock revetment would be inconsistent with the Local Coastal Program, Ocean Beach Master Plan, and California Coastal Act. Additionally, the NPS would not allow the City to build a conventional seawall on their property.

The SFPUC evaluated three concepts for artificial bank swallow nesting habitat creation in the project vicinity. The first two concepts, a DSM wall on NPS property and a concrete wall beneath the access stairway, do not appear to meet the design or feasibility criteria.

The analysis identified one technically feasible concept (Concept 3 – Mechanically Stabilized Wall) that met most of the defined technical criteria within the project area. However, the legal feasibility of Concept 3 is uncertain: it may be inconsistent with the California Coastal Act, including Public Resources Code sections 30235 and 30251, as well as the City’s Local Coastal Program, including Policies 12.1a, 12.2, and 12.5. The City is seeking additional review and input from the CCC prior to further development of this potential artificial bank swallow habitat concept.

Another mitigation concept that GGNRA is evaluating may be promising. This concept involves drilling holes in the Fort Funston bluff itself (rather than in a concrete wall structure) to create nesting habitat. Further study regarding bluff stability would be necessary to determine the feasibility of this experimental concept. Similar to other artificial habitat concepts discussed above, this concept may be inconsistent with relevant policies, and CCC approval is uncertain.

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San Francisco Planning Department, Meeting Notes with CDFW, CCC, NPS, ESA, and SFPUC August 26, 2022

ATTACHMENT F

DUNE DELINEATION MEMORANDUM



memorandum

date December 28, 2022

to Julie Moore (San Francisco Planning Department)
JT Mates-Muchin, Karen Frye (SFPUC)

cc Jiemin Guo (ESA Wetland Ecologist) and Seth Kirby (ESA Botanist),

from Rachel Haines (Senior Biologist and Task Lead) and
Dr. Peter Baye (Coastal Plant Ecologist)

subject Ocean Beach Climate Change Adaptation Project –Dune Delineation

Introduction

This memorandum presents the methods and results of ESA+Orion’s delineation of coastal dunes within the Ocean Beach Climate Change Adaptation Project study area (study area). California Coastal Commission (CCC) staff has advised that dunes meet the definition of an environmentally sensitive habitat area (ESHA) and are therefore a protected resource under the California Coastal Act. ESA+Orion partnered with Peter Baye, Ph.D. (Coastal Plant Ecologist) to implement a field data collection protocol developed by Dr. Baye to identify, document, and distinguish coastal dunes from non-dune sand deposits (mounds) created by non-dune processes (such as mechanical placement of sand cleared from the Great Highway). The protocol relies on observable physical and biological characteristics to make this distinction, relying heavily on substrate characteristics that distinguish mechanical placement from dune sand deposition by wind. The protocol was presented to CCC staff for review and comment prior to implementation.

The following section provides background information on the natural and artificial processes generating the dune and dune-like sand deposits in the study area. The subsequent sections describe the coastal dune classification criteria, field data collection methodology, protocol developed for delineating boundaries of qualifying dunes, field implementation, and the results of the dune delineation. Following identification of coastal dunes in the study area, a subset of dunes is identified as potential ESHA and distinguished from non-ESHA dunes. This second step in evaluation of coastal dunes in the study area considers site-specific factors in identifying whether the delineated dune polygon is potential ESHA, such as substrate origins (e.g., beach sand or introduced fill), circumstances influencing the sample plot (e.g., influence of historical and ongoing sand removal maintenance on the feature), and landscape context and associated constraints on habitat evolution or connectivity (e.g., permanent asphalt "ecotones" that prevent or restrict dune evolution and growth).

Natural and Artificial Processes that Influence Sand Transport and Deposit in the Study Area

The purpose of this section is to provide necessary context for evaluating the dune and dune-like sand deposits sampled in the study area, and for interpretation of the sampling results. The dunes and dune-like sand deposits along the Great Highway originate from a combination of natural eolian (wind transport) processes and external sediment sources. Sources that supply local wind-blown sand within the study area are dominated by recent (beginning regularly in 2013) artificially placed sand deposits related to ongoing beach nourishment for shoreline erosion control. These sources include:

1. Trucked dry sand from North Ocean Beach,¹ referred to generally as the “sand backpass,” and sand removed from the Great Highway north of Sloat Boulevard. Sand collected from these sources is stockpiled on the bluff top west (upwind) of the Great Highway, and placed over the bluff edge as sacrificial sand berms.
2. Hydraulically placed dredged sand shaped into a sacrificial sand berm.²

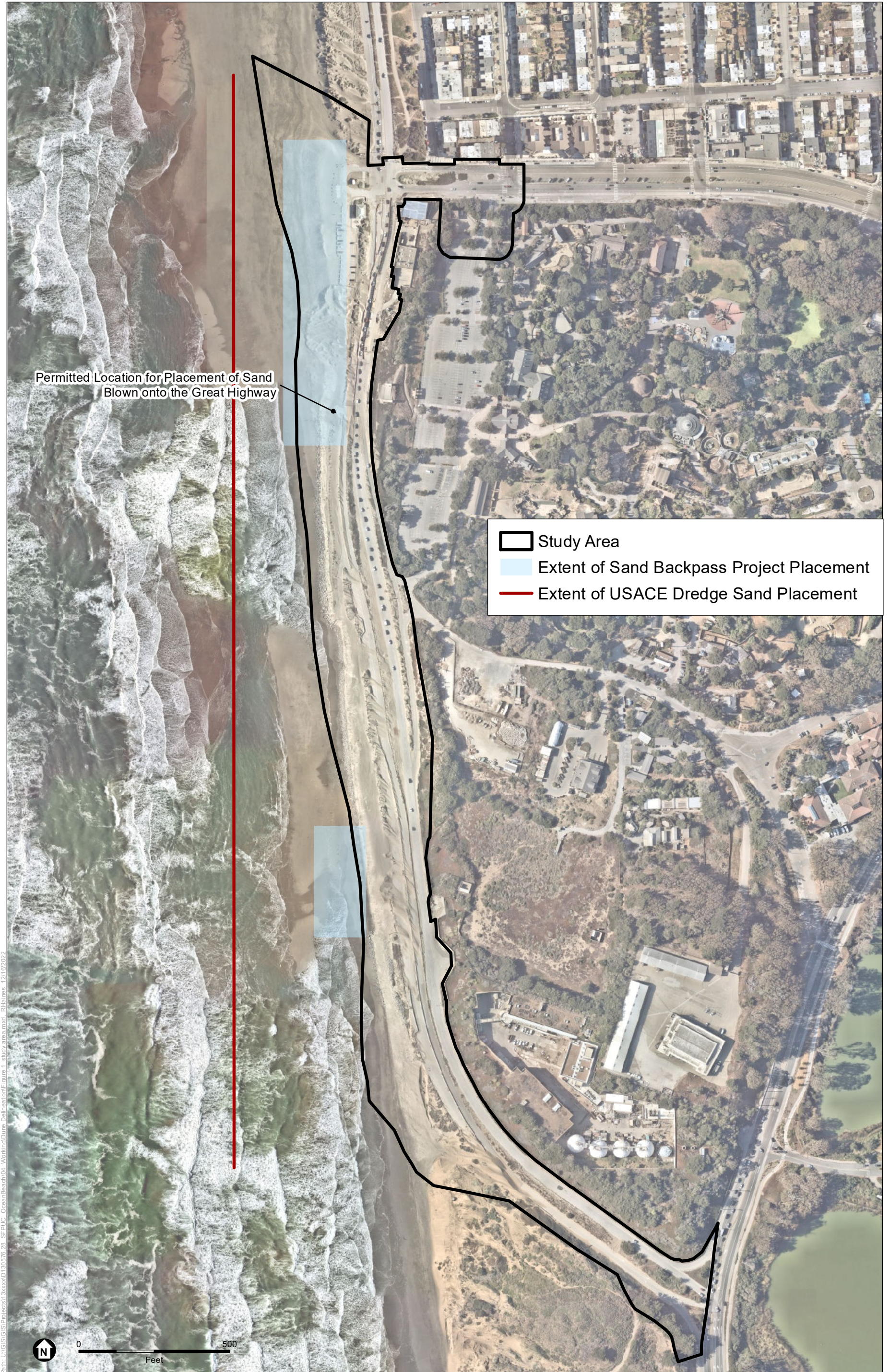
The locations and extent of placed sand originating from these sources is depicted on **Figure 1**. The sacrificial sand berms and trucked sand stockpile areas upwind of the Great Highway in the study area are generally not stabilized by vegetation or temporary surface stabilization measures to inhibit wind erosion (deflation) of sand deposits. These dry, high-relief unconsolidated, unstable sand deposits are now the primary source of dune sand transport into the study area. Prior to 2015 (the first year of prolonged, active wind-reworking of sacrificial sand backpass berm placement), there was limited dune sand accretion along the study area segment of the Great Highway, bordered by wet, eroded intertidal beachface upwind (**Figure 2 and Photos 1 and 2**).



SOURCE:
P.Baye, 2016.

Photos 1 and 2: Great Highway south of GGNRA Sloat parking lot (June 2016)
Photo taken prior to extensive sand berm placement upwind, and before trucking and stockpiling sand from North Ocean Beach was initiated. Note lack of sand dune transport from wet intertidal beach below armored bluff, and deficiency of sand shadow deposits downwind of concrete barriers.

-
- ¹ The San Francisco Public Utilities Commission’s (SFPUC) sand backpass placement projects involve placement of beach sand obtained from North Ocean Beach.
 - ² The U.S. Army Corps of Engineers (USACE) Beneficial Use of Sand Dredged from the San Francisco Main Ship Channel for Storm-Damage Reduction at Ocean Beach, or Ocean Beach Sand Nourishment Project, involved placement of sand dredged from the San Francisco Main Ship Channel. Vertical wave-cut scarps in the sand berm are subject to rapid wind erosion, contributing sand that builds roadside dunes and dune-like deposits.



SOURCE: ESA 2022

Ocean Beach Climate Change Adaptation Project

Figure 1
Study Area and Sand Management Activities in the Vicinity

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SOURCE: ESA, 2022, Google Earth, 2015

Ocean Beach Climate Change Adaptation Project

Figure 2
Conditions in 2015 – Minimal Sand Accretion
Downwind of the Artificial Sand Berm

During periods of high velocity, dry onshore winds, the dry exposed unprotected surface of the sacrificial sand berms erodes, and wind transports eroded fine to medium grain size sand across the Great Highway. Dune sand then deposits around obstacles, such as shore-parallel median barriers, K-rails, and guard rails along the Great Highway, as well as on vegetation of the study area, including pre-existing ice plant. Dune ramps deposit on the upwind side of barriers, and elongated tongue-like shadow dunes deposits extend downwind of barriers, often burying the road surface. These dune sand deposits encroach on the road surface until they are routinely removed by grading to permit vehicle use of the roadway. This necessary maintenance activity mixes the dune sand with roadside fill (e.g., gravel and soil), and incidentally re-deposits some of the mixed composite graded and dune sand from the margins of the graded roadside dunes elsewhere in the study area. **Figures 3 and 4** depict 2021 and 2022 conditions, respectively, where sand originating from the artificial berm has been transported and deposited in the study area among roadway barriers and vegetation. **Photos 3 and 4** depict extensive dune sand deposition on the Great Highway downwind of the artificial berm in 2022.



SOURCE:
P. Baye,
2022.

Photos 3 and 4: Sand deposition along the Great Highway downwind of sacrificial sand berm (March 2022)

Shadow dunes extend downwind of ice plant hummocks, encroach the road, and deposit around infrastructure, forming vegetated dune ridges nourished by multiple years of sacrificial sand berm placement and wind erosion.

Dunes encroaching on the Great Highway within the study area also originate from natural sources in some areas. At the south end of the study area, wind erosion of the exposed high bluffs of Fort Funston (Golden Gate National Recreation Area [GGNRA]) transports weathered (iron oxide-stained, yellowish brown) sand from ancient uplifted beach and dune deposits (paleodunes) of the Colma formation. In addition, the eroded, wet intertidal beach face seaward of the study area (exposed during low tide) at times still supplies some unweathered (gray-white) wind-blown sand during high onshore wind events. The absence of a dry above-tide backshore beach south of Sloat Boulevard in the highly erosional, armored shoreline in this reach of the coast restricts natural onshore sand transport from beach to interior dune zones. The Colma paleodune sands contain traces of fine sediment from chemical weathering, and organic matter from past vegetation and soil development, unlike recent (modern) dunes, which distinguish the Colma sand dunes from others in the study area.

Other sandy soils and fills in the study area are remnants of past road construction (road base fill) and earthen slopes graded during construction of the Oceanside Water Pollution Control Plant east of the Great Highway, and earlier. These differ from dune sands in visible content of gravel, silt, clay from imported fill sources.



SOURCE: ESA, 2022, Google Earth, 2021

Ocean Beach Climate Change Adaptation Project

Figure 3
Conditions in 2021 – Enlarged Sand Accretion
Downwind of the Artificial Sand Berm



201311.D150576.28 - Ocean Beach RTC and FEIR05 Graphics-GIS-Modeling/RTC/Illustrator

SOURCE: ESA, 2022, Google Earth, 2021

Ocean Beach Climate Change Adaptation Project

Figure 4
Conditions in 2022 – Extensive Sand Accretion
Downwind of the Artificial Sand Berm

Coastal Dune Criteria

Attachment A provides detailed descriptions of dune characteristics based on the definitions of coastal dunes from the scientific literature. Coastal dunes are characterized by:

- **Physical Substrate (Primary Indicator)**
 - Medium to fine sand grain sizes transported and deposited by wind (surface and subsurface material). (Definition and necessary indicator).
 - Absence of significant (more than trace) proportion of clay and/or silt; absence of gravel-sized sediments in most or all of deposit (surface and subsurface). (Definition and necessary indicator).
 - Cross-bedding and other fine lamination structures in stratigraphic profile³ indicating sand accumulation over several seasons. (If present, positive identification; if not present, neutral attribute).
 - Rejection criteria for substrate:
 - More than trace proportion of clay and/or silt sediments in representative sand sample (sufficient to cause significant turbidity in aqueous suspension, relative to dune reference sample). Source material may explain presence of fines in the deposit (e.g., location downwind of placed dredge sand).
 - More than trace proportion of gravel or very coarse sand distributed in most of the deposit (not just surface deposits).
- **Vegetation (Secondary Indicator)**
 - While not necessary to be considered coastal dune, if the preceding physical substrate criteria are met, a prevalence of native dune vegetation is a strong positive indicator of coastal dune habitat, as psammophytes (sand dune plants) select for conditions with relatively homogeneous sandy substrate where silt, clay, and gravel content in the sediment are low.

**TABLE 1
BASIS OF HABITAT DETERMINATION**

Observed Condition of Criteria	Habitat Determination
Dune substrate indicators met but no dune vegetation	Coastal Dune
Dune substrate indicators strong and dune vegetation indicator is weak or ambiguous (e.g., ice plant)	Coastal Dune
Dune substrate indicator is mixed positive/negative and weaker but still met, and vegetation indicator is strong (e.g., prevalence of obligate dune and beach native species like beach-bur or yellow sand-verbena or beach wildrye)	Coastal Dune
Substrate is mixed external material (significant gravel, silt, or clay content) and dune sand (substrate indicator not met), native vegetation present	Not Coastal Dune
Dune substrate indicators are not met and there is no dune vegetation	Not Coastal Dune

SOURCE: Attachment B, Coastal Dune Delineation Protocol

ESHA Evaluation

Qualifying coastal dunes are then assessed for whether they should be considered potential ESHA. The assessment evaluates environmental sensitivity based on the following objective traits:

³ Subsurface cut or column depicting sediment deposits over time.

- **Likely origin of the sample plot substrate** (e.g., beach sand or trucked, placed sand transported by wind or asphalt graded, collected, and deposited during roadside clearing);
- **Circumstances influencing sample plot** (e.g., historical sand removal maintenance).
Is the plot influenced by sand backpass project or USACE dredge sand placements or routinely manipulated by necessary maintenance clearing the accumulated sand from the Great Highway?; and
- **Landscape context** (e.g., plot location and constraints).
Is the plot and associated polygon able to evolve or are there physical constraints (existing development or ongoing actions) that limit perennial growth and development as functioning dune habitat? Is the sample plot and associated polygon(s) connected to other dune habitat or is it isolated or constrained by existing development or ongoing actions?

Methodology

Desktop Review

Environmental Science Associates (ESA) and Dr. Baye conducted a desktop review of aerial oblique imagery from Google Earth to identify areas of potential dunes in the study area. Imagery review covered several years to observe sand movement (natural and artificially influenced) within the study area. Preliminary sampling zones within the study area were identified for the field survey based on conditions depicted in aerial imagery from May 18, 2022 (Nearmap Aerial Imagery; the date is the most recent date that aerial imagery was available for the study area at the time of the desktop review).

Field Survey

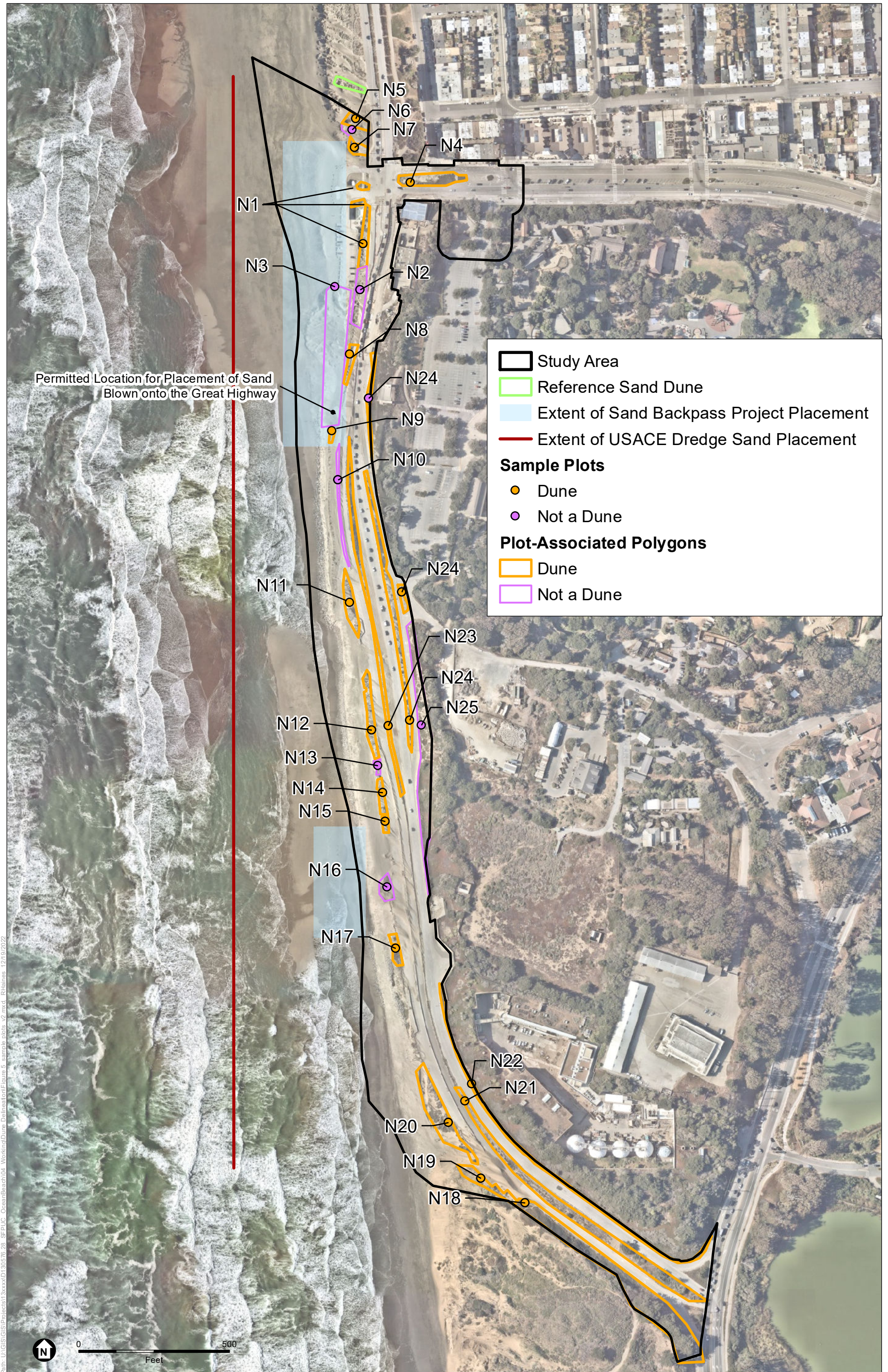
The dune delineation followed the protocol developed by Dr. Baye (**Attachment B**). On September 21, 2022, Dr. Baye provided field training for ESA staff Jiemin Guo (Wetland Ecologist) and Seth Kirby (Botanist). Dr. Baye walked the entirety of the study area with ESA staff to provide an overview of the study area and refine sampling zones (where individual sample plots would be located) identified during the desktop review.

Reference Dune

The field team established a reference site for local pure dune sand, classifying the sand grain size range typical of dunes at Ocean Beach for comparison with potential dunes that would be evaluated in the field survey. An aqueous suspension test (described below) was performed with the reference dune sand for comparison with potential dunes being evaluated within the study area. The reference site is located just north of the study area, shown on **Figure 5**.

Sampling Plots

On September 26 and 27, 2022, ESA staff Jiemin Guo and Seth Kirby conducted the dune delineation survey. Based on desktop review and field overview of the study area, 25 sampling plots were identified for field data collection to represent a complete sampling of the potential dunes in the study area. The sampling plots varied in size and encompassed areas that are disturbed by human activities to different degrees. ESA staff surveyed those sampling plots to assess all possible dunes in the study area and collected data to distinguish the qualifying dunes from surveyed areas that are not dunes.



SOURCE: ESA 2022

Ocean Beach Climate Change Adaptation Project

Figure 5
Sample Plots and Associated Polygons

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Figure 5 depicts the sample plot locations and corresponding polygons where conditions at the sample point were extrapolated to the boundaries of the associated polygon, and identifies whether each plot/polygon qualifies as a dune. The polygon boundaries represent observed breaks between consistent sand conditions (surface substrate and topography) and asphalt, such as change in sand feature topography from convex to flat or steeply sloped, or a conspicuous change in the homogeneity or heterogeneity of the sand.

As introduced above, Figures 1 and 5 depict the location of sand input and management areas on the beach which include the USACE’s Ocean Beach Sand Nourishment Project area and the San Francisco Public Utilities Commission’s sand backpass placement project areas. Also shown is the authorized location for deposition of sand collected and cleared from the Great Highway (extent of N3 polygon shown on Figure 5); however, Dr. Baye has observed placement of material cleared from the Great Highway north of this location. These deposits are visible on the aerial imagery in Figures 1 and 5. These ongoing sand management activities near the study area influence the type of material transported and deposited within the study area, to a varying degree.

Data Collection

Sample plot location data were collected in the field on a tablet (iPad) using a high accuracy global positioning system (GPS) and loaded with aerial images for the study area (Nearmap). Areas of sand dune formations, sand deposits, and sand veneer were investigated and boundaries mapped on the tablet using ArcMap. Photographs were taken of these areas and cataloged with sample data. Sand management activities were noted and photographed, where encountered.

The following attributes were examined and documented during the field survey:

- Sample plot height (maximum) above underlying ground surface.
- Presence/absence of surface sediment coarser than local pure reference dune sand (surface substrate particle size and type).
- Presence/absence of significant fine sediment (surface sample) compared with local pure reference dune sand (aqueous suspension test discussed below).
- Homogeneity of subsurface substrate to 30 centimeters (stratigraphic profile). If subsurface substrate grain size exceeded the reference dune sand grain size (which is fine to medium grain size), an aqueous suspension test of surface sand was not performed.
- Presence/absence of vegetation and documentation of all taxa present, absolute and relative cover, native and non-native species
- Boundaries of potential dune associated with the sample plot were mapped (Figure 5)

An aqueous suspension test was performed of surface substrate at sample plot locations where the physical substrate criteria of fine to medium grain size (surface and subsurface material) was met. The aqueous suspension test is a rapid assessment, qualitative version of a settling tube analysis for characterizing sediment particle size. This test consisted of combining 0.25 volume of surface substrate and 0.75 volume of clear water in a glass container, shaking it to distribute the sediment, and then ranking the hue and turbidity at timed intervals. Greater turbidity (indicated by greater opacity and therefore a darker color) for longer time periods indicated significant presence of fine sediment (silt and clay). Results were compared with the aqueous suspension test results for the local pure reference dune sand which was translucent after 1 minute.

Results

This dune delineation identified 2.12 acres of coastal dunes as potential ESHA and 2.11 acres of mixed composite (non-ESHA) coastal dunes, within the 31.42-acre study area (**Figure 6**). **Figure 7** depicts other surveyed areas characterized as non-dune sand deposits (1.72 acres). The remaining portions of the study area were beach, roadway or otherwise developed landcover.

Table 2 presents the area delineated of qualifying coastal dunes and other surveyed areas and summarizes which sample plots are included in each category.

TABLE 2
HABITAT TYPES IDENTIFIED AND MAPPED IN THE STUDY AREA AND ASSOCIATED SAMPLE PLOTS

Habitat Determination	Area (acres)	Sample Plot ID
Coastal Dunes (Potential ESHA)	2.12	N1, N4, N5, N7, N12, N17, N18, N19, N20
Mixed Composite Coastal Dunes (Not ESHA)	2.11	N8, N9, N11, N14, N15, N21, N22, N23, N24
Other Surveyed Areas (Not Dunes)	1.72	N2, N3, N6, N10, N13, N16, N25

NOTES: All potential coastal dunes within the 31.42-acre study area were assessed and associated with a sample plot. The rest of the study area is composed of other habitat types not discussed in this evaluation (e.g., developed areas).

Tables 3 and 4 provide the area of the associated polygon(s) for each sample plot. Table 3 includes the evaluation of each qualifying dune polygon as potential ESHA, considering the features’ substrate origins, ongoing processes, and landscape context (constraints on habitat evolution or connectivity).



Path: U:\GIS\Projects\3xxxx\30576_28_SFPUC_OceanBeach\04_Working\Dune Delineation\Figure 6_delineated_habitat_v2.mxd - K:\arcglobe - 12/27/2022

SOURCE: ESA 2022

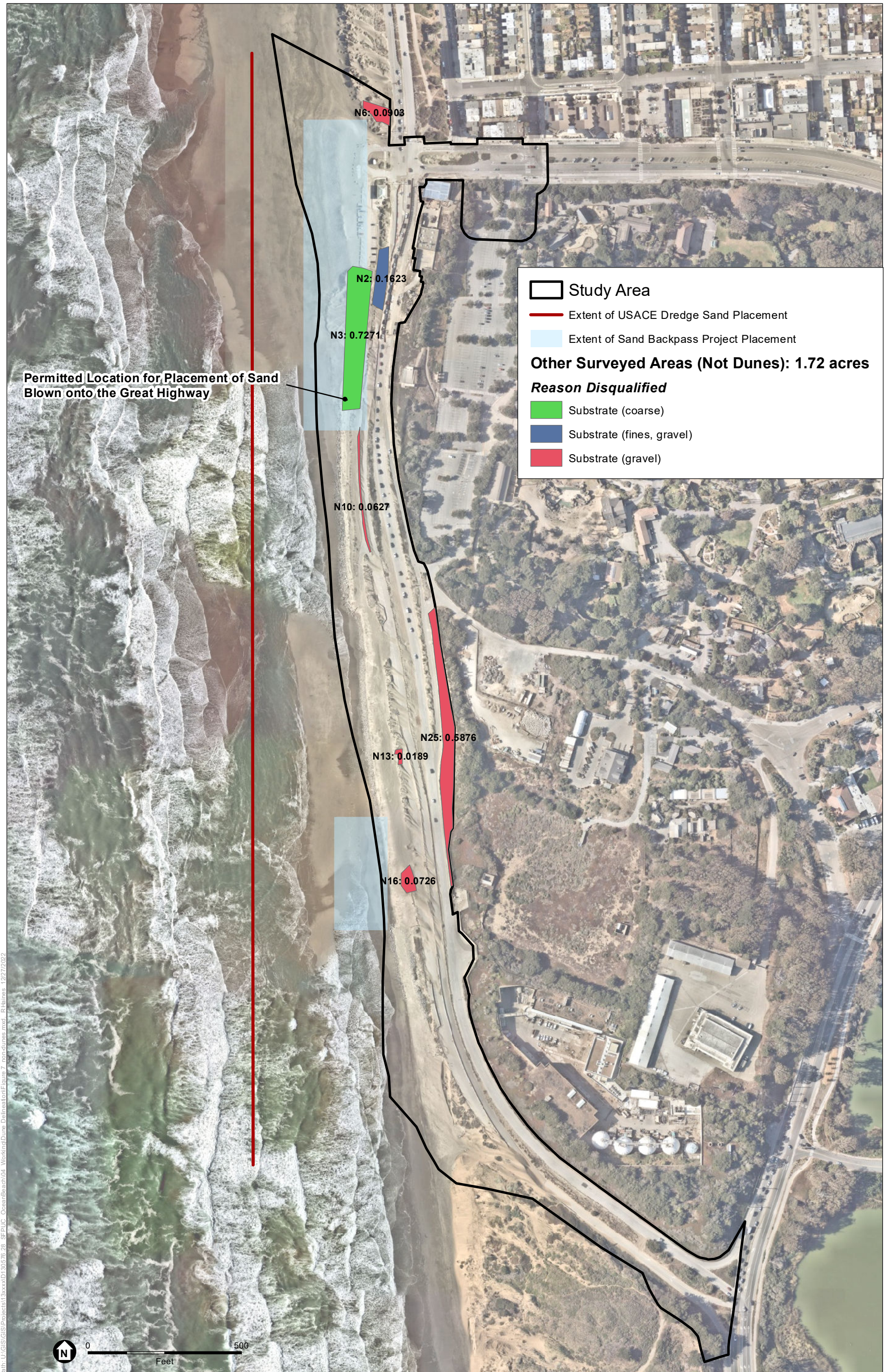
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Note: Sample plot number and associated polygon acreage shown.

Figure 6

Location and Extent of Coastal Dunes and Preliminary ESHA Evaluation





SOURCE: ESA 2022

Ocean Beach Climate Change Adaptation Project

Figure 7
Location and Extent of Other Surveyed Areas that did not Qualify as Coastal Dunes

**TABLE 3
COASTAL DUNE SAMPLE PLOTS, ASSOCIATED POLYGON ACREAGE, AND PRELIMINARY ESHA EVALUATION**

Sample Plot	Area of Associated Polygon (acres)	Qualifying Dunes as Potential ESHA			
		Substrate Origins	Circumstances Influencing Plot	Landscape Context	Potential ESHA
Coastal Dunes: 4.23 acres					
N1	0.0181 0.1067 0.0169	Dune sand (beach/placed sand)	Wind transport	Connected	Yes
N4	0.1841	Dune sand (beach/placed sand)	Wind transport	Isolated/constrained by development	Yes
N5	0.0675	Dune sand (beach/placed sand)	Wind transport	Connected	Yes
N7	0.0501	Dune sand (beach/placed sand)	Wind transport	Connected	Yes
N8	0.0567	Mixed composite: Dune sand/placed sand, silt, coarse material	Wind transport, roadside clearing, sand backpass	Connected	No
N9	0.0144	Mixed composite: Dune sand/placed sand, silt, shells	Wind transport, roadside clearing, sand backpass	Connected	No
N11	0.1312	Mixed composite: Dune sand/placed sand, silt, shells, gravel	Wind transport, roadside clearing,	Connected	No
N12	0.1402	Dune sand	Wind transport	Connected	Yes
N14	0.0546	Mixed composite: Dune sand, coarse sand, gravel	Wind transport, roadside clearing	Connected	No
N15	0.0249	Mixed composite: Dune sand, coarse sand, gravel	Wind transport, roadside clearing, sand backpass	Connected	No
N17	0.018 0.04	Dune sand	Wind transport	Connected	Yes
N18	0.9613	Dune sand	Wind transport	Connected	Yes
N19	0.1348	Dune sand	Wind transport	Connected	Yes
N20	0.3828	Dune sand (Colma formation)	Wind transport	Connected	Yes
N21	0.7715	Mixed composite: Dune sand, gravel	Wind transport, roadside clearing	Isolated/constrained by development	No
N22	0.2478	Mixed composite: Dune sand, gravel	Wind transport, roadside clearing	Isolated/constrained by development	No
N23	0.3372	Dune sand (beach/placed sand)	Wind transport, roadside clearing	Isolated/constrained by development	No
N24	0.3616 0.0366 0.0747	Dune sand (beach/placed sand)	Wind transport, roadside clearing	Isolated/constrained by development	No

**TABLE 4
NON-DUNE SAMPLE PLOTS AND ASSOCIATED POLYGON ACREAGE**

Non-Dunes: 1.72 acres	
N2	0.1623
N3	0.7271
N6	0.0903
N10	0.0627
N13	0.0189
N16	0.0726
N25	0.5876

Table C-1, Dune Delineation Results Index, (Attachment C) presents data collected from each sample plot and photo documentation.

Coastal Dunes

Substrate and Thickness

Coastal dunes exhibited the same sand grain size range as the local reference dune sand (identified as “dune sand” in Table C-1) and presented a homogenous surface and/or subsurface sand composition. The amount of fine sediment mixed in the dune surface sands was generally low, indicating sand originated from the beach and was transported by wind. The sample plots located downwind from sand management activities on the beach which introduce dredge sand fill (see Figure 1) contained a higher concentration of fine sediment mixed in the sand, (such as N8, N9, N14, and N15).⁴ The thickness (or height) of qualifying coastal dunes ranged from 0.4 meters to 10 meters, with an average height of 2.74 meters, indicative of persistent, sustained accretion over multiple seasons.

Vegetation

As a secondary indicator, the presence of dune vegetation would further support classification of a sample plot as a dune, as long as substrate indicators were met. The greater thickness of qualifying dunes is more supportive of perennial dune plant root establishment, in contrast to shallow sand accretion over roadbed. Absolute vegetation cover of coastal dunes ranged from 25 percent to 95 percent, with an average of 46 percent. Most species observed were perennial herbs or grasses. The dominant species was non-native, invasive ice plant (*Carpobrotus edulis*; perennial herb) and the most observed native species was silver beachweed (*Ambrosia chamissonis*; perennial herb). The relative native species cover ranged from 0 percent to 27 percent, with an average of 6.8 percent. The relatively less disturbed plots in the southern portion of the study area, such as N18 and N19, showed higher species richness, composed of mostly native species, even though the relative cover was low.

Other Surveyed Areas

Substrate and Thickness

For other surveyed areas, surface and/or subsurface substrate did not meet criteria either by exceeding the threshold of coarse sediment or fine sediment when compared with the local pure reference dune sand. In these areas with obvious coarse material, the surface sand was mixed with coarse sand (4.8-2.0 mm), medium sand

⁴ See Figures 1 and 5 for the location and extent of sand management activities near the study area.

(2.0-0.43 mm), or gravels. The amount of coarser material mixed in the sand was variable; however, all sample plots with coarse material on both the surface and subsurface that did not qualify as coastal dunes exceeded this criteria threshold when compared with the local reference dune sand. Compared to qualifying dunes, the sand accumulations in other surveyed areas were shorter, with heights ranging from 0.4 meters to 3 meters and averaging 1.27 meters.

Vegetation

Vegetation within the non-dune sand deposits was minimal and exclusively non-native species. Absolute vegetation cover ranged from 0 percent to 20 percent, with an average of 3.6 percent. The most common species was non-native sea rocket (*Cakile maritima*).

Evaluation of Coastal Dunes as Potential ESHA

The delineation revealed four categories of dune and non-dune sand deposits within the study area. The section that follows describes these categories and whether they qualify as potential ESHA, and identifies which sample plots and their associated polygons are included. The discussion considers the plot's substrate origins, circumstances influencing the plot, and landscape context in assessing whether it is potential ESHA.

Colma bluff perched dunes and naturally formed, homogeneous dune sand dunes: all ESHA.

Origin: Dunes located at the south end of the study area near Fort Funston with an ochre-tinged weathered, oxidized sand are derived from modern wind deflation of Pleistocene raised beaches and dunes (Colma formation dunes). These dunes are natural San Francisco dunes derived mostly from the same processes and source populations as their prehistoric counterparts. Sample plots N19 and N20 and associated polygons are the Colma formation dunes in the study area. Sample plots N17 and N18 and their associated polygons are located nearby, with homogeneous surface and subsurface dune sand consistent with reference dune sand. Dunes within these plots and polygons have accreted over many seasons, apparent by the thickness of the sand formations relative to adjacent grade (4-10 meters), and contain a mix of native and non-native dune plants.

N12 is located north of these four sample plots/polygons, has accreted over several seasons of wind transport and deposit of beach sand/placed sand (height of 2 meters) and contains homogeneous dune sand substrate similar to reference dune sand. This feature did not contain the silt content apparent in nearby plots/polygons (N14, N15) which were characterized as mixed composite dunes. N5 and N7, located at the north end of the study area, also contain homogeneous substrate consistent with reference dune sand. These dunes are smaller (2 meters and 1 meter, respectively) and contained exclusively non-native plant species, but still met the substrate criteria for coastal dunes. The N5 sample plot contained slightly higher silt content, likely associated with placed sand upwind of the plot. These features are minimally contaminated with coarse sand or gravel associated with material cleared from the roadway.

Circumstances Influencing Plot and Landscape Context: The Colma formation dunes (N19 and N20) are mostly located on National Park Service lands, but migrate via wind transport over the incline slope of the Great Highway where they may intergrade with more artificial and ephemeral dunes in the Great Highway median and roadsides, where they are routinely graded out by road maintenance. These dunes are rich in native dune plant species and are objectively indistinguishable from the rest of the Fort Funston dunes.

The other dunes in this category are influenced by placed sand on the beach dispersing and collecting on the west side of the Great Highway where they are generally connected to other dune habitat bordering the Great Highway infrastructure. The location of these features adjacent to the beach provide opportunity for natural evolution and progression over several seasons, and are minimally constrained by existing development.

Mixed composite dunes and dune-like landforms: not ESHA.

Origin: The sample plots and associated polygons in this category are complex, ambiguous, or contain mixed indicators because of the influence of routine sand management activities within the study area. These landforms are largely dependent on external sand input (beach nourishment) but are formed as a result of natural eolian wind transport.

Circumstances Influencing Plot and Landscape Context: Mixed composite dunes and dune-like landforms have limited habitat value because the surrounding built environment (surface and subsurface) prevents habitat connectivity. Their development is inhibited by routine sand management activities on the Great Highway (grading) which erodes the road base and results in a mixed composite dune sand with gravel and silt or soil picked up during grading. These landforms rapidly degrade because of the variability in upwind external sand supply and downwind maintenance grading of the road and roadsides. Individual sand deposits in this category have not been in place for more than a few years which makes them inherently unstable and unsustainable. They are bounded by asphalt and graded areas used for sand management operations that significantly limit habitat connectivity, physical processes that would shape the landform under normal circumstances, and overall value to dune associates that might otherwise occupy such landforms.

It is likely that the composite graded/dune mixed fill sand landforms originated as dunes deposited along artificial barriers on the Great Highway, and then were subject to cycles of grading by routine sand removal maintenance, followed by more wind-blown sand deposition, mixing dune sand with gravelly soil or mixed anthropogenic fill, in variable ratios. These composite origin deposits are truly “problem areas” of intermediate dune and mixed anthropogenic sand deposited mechanically. The most frequent location is along guard rails or barriers, where linear dune ridge (sand shadow) deposits and grading artifacts converge. They often are mostly mixed coarse and fine mechanically disturbed sand near road level, and increase in dune sand content and remnants of dune sand at higher elevations.

Sample plots N8, N9, N11, N14, N15, N21, N22, N23, and N24 and their associated polygons are included in this category. These dunes are located within the Great Highway median and along the east shoulder. The innate restrictions on natural development of these features because of their location and necessary, ongoing external sand management actions, precludes their inclusion in the ESHA dunes category.

Roadside sand deposits downwind of introduced material, dependent on external sand input and placement, or roadway maintenance grading: not ESHA.

Origin: These non-dune sand deposits are short-duration landforms repeatedly modified by road maintenance and dune grading, which would not be present but for the frequent mechanical manipulation of un-stabilized sand within and nearby (upwind of) the study area on Ocean Beach or placement of collected material removed from the Great Highway. The surface and subsurface substrate of these landforms are both heterogeneous, usually with gravel from the deteriorated roadway or coarse sand associated with introduced fill material.

Circumstances Influencing Plot and Landscape Context: Figure 1 depicts the location and extent of ongoing external sand placement activities on Ocean Beach and the deposition area for sand cleared from the Great Highway. Both of these activities influence sand transport and deposition within the study area. Although the location of some of these features west of the Great Highway may allow for natural evolution over time, the routine external influence of sand management activities overrides such development. Sample plots N2, N3, N6, N10, N13, N16, and N25 and their associated polygons are included in this category.

Persistent naturally formed dunes in artificial landscapes: mostly ESHA.

Origin: In contrast with the ephemeral, unstable sand deposits dependent entirely on external sand input or placement of graded material upwind, some of the dunes located in the north end of the study area (e.g., Sloat Boulevard median [N4] and north end parking lot [N1]) have accreted intact over many years, without removal or grading, and originate from mixed natural and external sand sources (e.g., beach and introduced, external sand berm inputs) upwind.

Circumstances Influencing Plot and Landscape Context: These features are vegetated with typical assemblages of mixed native and non-native dune vegetation and have persisted long enough (over a decade) to represent “normal circumstances” despite artificial surroundings (paved parking and roads). Even if their habitat functions are limited by their landscape context, they would be difficult to distinguish objectively from nearly identical natural dunes bordering parking lots throughout the state, where ESHA designations would normally apply.

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Attachment A

Coastal Dune Habitat (California): Proposed Working Definition and Criteria for Field Indicators and Identification



(415) 310-5109

Peter R. Baye, Ph.D.
Coastal Ecologist, Botanist
33660 Annapolis Road
Annapolis, California 95412



botanybaye@gmail.com

MEMORANDUM

To: Elijah Davidian, ESA, JT Mates-Muchin, SFPUC

Cc: Anna Roche, SFPUC

Date: August 4, 2022

SUBJECT: COASTAL DUNE HABITAT (CALIFORNIA): PROPOSED WORKING DEFINITION AND CRITERIA FOR FIELD INDICATORS AND IDENTIFICATION

The following is preliminary draft text providing technical support for a project-specific working definition of “coastal dune habitat” applicable to interpretation and mapping of ESHA coastal dune habitat at the Ocean Beach Climate Change Adaptation Project (South Ocean Beach, Great Highway area), relevant to identification of field indicators, evaluation, and mapping.

1. Review of coastal dune habitat definition in context of the California Coastal Act and relevant scientific literature.

Coastal dune habitat, within the meaning of ESHA (Environmentally Sensitive Habitat Area; California Coastal Act) has physical (geomorphic) and ecological (biotic) components, indicating a two-part working (operational) definition.

The coastal geomorphological literature covers both global coastal dunes and California coastal dunes specifically. The classic, comprehensive monograph on California coastal dunes (Cooper 1967) cited the classic desert “true dune” definition of Bagnold (Bagnold 1941) “A hill or mound piled up by the wind. A single dune may be defined as a mound or hill of sand which rises to a single summit. Dunes may exist alone or attached to one another in colonies or dune chains.” W.S. Cooper (1967) expanded this definition for California coastal dunes to include “undulating” and vegetated dune ridges. Cooper rejected a hard distinction between coastal and unvegetated desert dunes.

Carter (1988) also defined coastal dunes globally as “aeolian bedforms, developing where the transporting competence of the wind is impaired...[commonly by] surface vegetation”. Cooper’s definition expressly includes the mode of transport and deposition (wind), and implies internal stratigraphy (layered, laminated structure) of the bedform.

These basic California and global coastal dune definitions are basically consistent, and simple. Based on them, the following criteria for **coastal dune physical habitat components** can be derived:

- 1. Grain size distribution.** Only medium to fine sand grain sizes transported by wind compose dune sand landward of the beach. Smaller (silt or clay) particles transported by

wind remain in suspension and do not deposit with sand in coastal dunes. Exotic geographic exceptions like loess (inland silt dunes) and sabkha (arid gypsum and salt evaporite dusts) do not apply to the dune fields backing beaches along the California coast. Coarser gravel is not moved by wind and deposited in dunes, but concentrates as a lag armor surface by erosion of mobile sand (deflation lag) if present in the source sediments (beach or bluff) supplying dune sand. The presence of significant silt, clay, or pebbles, in poorly sorted sandy coastal deposits, indicates transport by natural or artificial processes other than wind, counter-indicating dune status.



Figure 1a. Dune sand deposited seaward of the O'Shaunessy Seawall at North Ocean Beach, San Francisco, millimeter scale. Lithology of dune sand grains includes granitic minerals: prevalent quartz, feldspar, and heavy minerals including magnetite, indicating Quaternary (Pleistocene) Sierran origins (Peterson *et al.* 2015).



Figure 1b. Ocean beach berm sand (granitic lithology) and heavy mineral sand (magnetite lag), inch scale. Thick magnetite deposits are found only on beachfaces, and are absent in dunes, except as thin, local laminations.

2. Stratigraphy. Dune sand deposits exhibit various internal layered (stratigraphic) structures corresponding with wind deposition of different mineral densities and types,

at different wind velocities. Cross-bedding and other fine lamination structures are strong indicators of dune sand deposition.

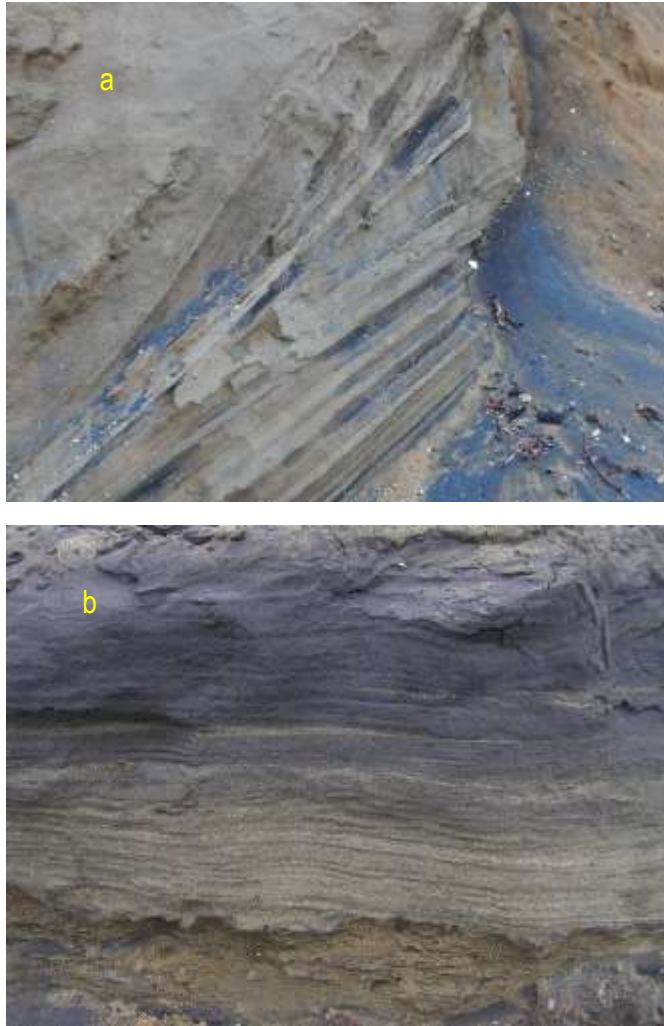


Figure 2. Contrasting dune and beach stratigraphy, San Francisco. (a) dune cross-bedding and heavy mineral (magnetite) laminations, delineated by recent magnetite sand deposition, Fort Funston paleodune bluffs south of Ocean Beach. January 2016. (b) horizontal beach laminations of magnetite and granitic (quartz-feldspar) beach sand, Ocean Beach, June 2008.

3. Morphology. Coastal dunes exhibit highly variable morphology and slopes, influenced by structures including vegetation, outcrops, or artificial structures. In addition, coastal dune habitats can be modified artificially to atypical remnant topographic forms. Therefore, no indicators or exclusion criteria based on dune morphology should be included, although some beach and dune forms (such as shadow dunes, hummocks, or mounds; Pickart and Barbour 2007) are strong indicators of California coastal dune morphology.



Figure 3. Modern backshore dune form variability in San Francisco. (a) trough blowout and lobe, U-shaped, at bluff top (Funston), June 2012. (b-c) Sand shadow dunes deposited in the lee of obstacles (concrete barrier K-rails), south of Sloat, Ocean Beach, June 2014. (d) Vegetated foredunes with undulating to hummocky topography, formed under native vegetation (beach wildrye, beach-bur), or non-native vegetation (marram grass, iceplant).

Related or similar sandy coastal substrates distinct from coastal dune sand include:

- **Beach** – wave-deposited coarse clastic sediment (sand, gravel)
- **Washover** – wave uprush and overwash (waves overtopping beaches)-deposited coarse clastic sediment (sand, gravel)
- **Coastal bluff** – wave-cut cliff in unconsolidated sediment, including paleodune and raised beach (ancient beaches or dunes from past sea level stands, weathered to soil), and marine terrace (ancient dune and beach, weakly cemented or lithified, not associated with contemporary sea level or shore processes]
- **Artificial sandy fill** – mechanically placed heterogeneous sandy fill, including grain size range larger or smaller than dune (silt, gravel), including sandy soils or excavated inland dune substrates.



Figure 1. Artificial sand fill, South Ocean Beach, June 2013. Sand sources include beach and dune sand mechanically harvested from North Ocean Beach, and deposited below the erosional scarp south of Sloat Blvd. Deposition by grading (a) and avalanche slope (b) processes eliminates internal bedding structure and can increase the range of grain sizes deposited.

The biotic component of a California coastal dune working definition should be based on plant community composition, but because California coastal dunes may and often are naturally unvegetated, existing established dune vegetation cannot be a necessary criterion for coastal dune habitat. The establishment of plant assemblages with high fidelity (frequency of association) to coastal dune vegetation, however, may be a sufficient criterion for dune habitat if physical dune criteria are met. Pickart and Barbour (2007) describe multiple types of Holocene (post-glacial) coastal dune vegetation, including non-native species that are well-established in dune vegetation. Since non-native vegetation can and often does dominate coastal dune habitats that are degraded circumstantially but occupy sensitive habitat areas, no exclusion criteria are proposed for coastal dune habitats based on native species composition. However, a prevalence of species that occur primarily or exclusively in coastal dune vegetation (Pickart and Barbour 2007) should be interpreted as a strong positive indicator of coastal dune habitats, if physical dune criteria are also met.

A **prevalence of native dune vegetation** can be inferred from a simple semi-quantitative rank abundance (visual cover-class estimate) assessment of dune vegetation, for a given plot, stand or releve (open plot), associated with a dune topographic unit (landform) or vegetation unit (stand of relatively homogeneous vegetation structure and composition).

Additional landscape-level criteria for coastal dunes, if physical criteria are met or supported by positive vegetation indicators, may include **minimum size thresholds (area, thickness of wind-blown sand deposits)**, or landscape position criteria, related to habitat. A minimum size or sand depositional thickness to support a root system of an annual dune plant above a non-dune substrate may vary with setting. A very thin dune deposit over a compatible non-dune substrate, such as beach, washover, lagoon, or bluff sediment, may be conducive to a viable small-scale dune habitat supporting dune species. The same size dune, embedded within highly artificial hard substrates (developed areas or impermeable engineered surfaces) may be less viable as

dune habitat. Therefore, environmental context and setting is a relevant interpretive factor for minimum dune habitat size, and is not generalized across all potential coastal settings.

Minimum temporal thresholds (minimum seasonal or sub-annual duration) of California coastal dune habitat may reasonably be set as a single growing season based on an annual plant life-cycle, spanning at least one wet season (seedling emergence and establishment) and portion of a dry season (spring-summer reproductive cycle; flowering and seed production), depending on the annual species present in the regional dune community. Transient, unstable wind-blown sand accumulations lasting less than an annual plant life-cycle may be physically dunes, but are unlikely to be meaningful as habitat (or sensitive habitat) if the duration is insufficient to support an annual plant life cycle.

Natural or artificial causes of wind-blown sand deposition are not essentially related to the nature or quality of dune habitat, since artificially initiated dunes (brush fences, wind-fences, artificial plantings) are commonly used to establish or restore coastal dune habitats worldwide. Therefore, no coastal dune habitat criteria are proposed for the spectrum of artificial to natural origins or causes of dune habitat formation, provided that wind-blown sand deposition is the primary process of formation.

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Attachment B

Coastal Dune Habitat Delineation Protocol

Ocean Beach Climate Change Adaptation Project, SFPUC COASTAL DUNE HABITAT DELINEATION PROTOCOL

(ESHA, Coastal Act consistent definition and criteria applied to field methods)

Prepared by Peter Baye for ESA (Rachel Haines, Eli Davidian, Karen Lancelle)

v 1 – for internal review [Sept 1, 2022; P.Baye]

v2 – for internal review [Sept 19, 2022; R.Haines]

4-Step Assessment:

1. Define landscape context using aerial imagery and topo maps. Identify location of sample zones and quantity of sample plots within the survey boundary.
2. Conduct vegetation patch assessment in sample plot, and relevé around plot.
3. Conduct surface and shallow substrate assessment.
4. Conduct subsurface substrate assessment.

1. STRATIFY SAMPLING ZONES AND SAMPLE PLOT LOCATION

Use aerial imagery to establish cross-shore zones for sampling locations, aligned with observed sand deposition and erosion patterns, vegetation patterns (current and recent trend). Note limits of artificial fill (roadbed) foundation materials where dunes are surficial.

Prior to survey:

- a) Review most recent available aerial imagery (e.g., Google Earth) and compare with last 10 years to understand the rate and pattern of change in surface cover types (i.e., ice plant mat and bare sand distribution).
- b) Review most recent available ground photos (constrain interpretation of recent aerial imagery).
- c) Establish preliminary zones based on:
 - i. erosion-deposition gradient from artificial sand bluffs and fills on the western Great Highway roadside
 - ii. deposition upwind and downwind of concrete barriers (i.e., windward dune ramps, shadow dunes)
 - iii. deposition within median vegetation (i.e., vegetated dune mounds [“nebkha”]) and bare ground, and on K-rails and roadside of downwind (East side).
 - iv. West side ramp and shadow dunes, bluff edge to west Great Highway roadside (mixed sand fill and dune)
 - v. Median vegetated dunes and shadow dunes
 - vi. East side ramp and shadow dunes, vegetated dunes
- d) Segment zones from north to south and identify preliminary sample plot locations to be adjusted in field as representative for each discrete landform or vegetation patch type observed in field.
 - i. Sample ___ plots per zone

2. PLOT-BASED DATA COLLECTION

2.1 Vegetation

- a) Relevé (set approximate radius): list all identifiable species in relevé; subjective rank frequency and abundance
- b) Vegetation patch type (dominant species)
 - i) number patches,
 - ii) size (max above-ground diameter) estimation (if many small or variable) or measure (if few, large);
 - iii) rank estimate percent cover bare sand
- c) Vegetation erosion/deposition status
 - i) erosion indicators: exposed crown, root;
 - ii) deposition indicators: partial or full burial of green leaves

2.2. Surface substrate particle size distribution and type

- a) Establish local upwind reference pure dune sand grain size class (upper beach)
- b) Digital photo of plot sand surface, with scale
- c) If ripples present, rank sand size (sand card) ripple crest and trough.
- d) Determine presence/absence of any surface sediment coarser than reference dune sand (lag or artificial deposit). Frequency or cover of coarser sand/gravel, soil aggregates, organic debris, other; size-class (sand card, gravel card, or direct measure up to 10 with digital photo + scale)
- e) Determine presence/absence of significant fine sediment (silt to clay) compared with local pure dune reference sample.
 - i. Aqueous suspension of sand sample and reference sample, 0.25 volume sand, 0.75 volume clear water, shaken; about 1 quart or pint clear bottle sample.
 - ii. Rank hue and turbidity at 5 sec (all sand precipitated), 1 minute (silt and clay suspension), 5 minutes (residual colloidal clay).
 - iii. Note presence, frequency of coarser sand or gravel at bottom of shaken sample.
- f) Internal structure (stratigraphy):
 - i. Note number of any visible laminations or rank abundance and thickness (contrasting grain size or lithology), orientation, angle (horizontal or above), and any cross-bedding; digital photo with scale.
 - ii. Note depth to any buried live or dead shoots, leaf litter layers.
- g) Surficial sand thickness assessment.
 - i. Excavate shallow pit 10-30 cm: determine homogeneity of surface sediment or depth to contact with distinct sand/substrate stratum (see next, subsurface, for > 30 cm).
 - ii. Note presence or rank number of roots, rhizomes, and distance to nearest aboveground vegetation observed.

2.3. Subsurface substrate: pit or core

- a) Insert soil core or dig pit (depending on thickness or coherence of surface sand; dry sand is likely not feasible to dig) to depth of contact with contrasting underlying substrate texture or type

deeper than 30 cm, usually roadbed or buried road surface substrate or artificial stony sandy fill (soil or non-soil).

- b) If contrasting non-soil artificial fill or other non-dune substrate is contacted, rank fractions of gravel, sand, silt, clay (rapid assessment – aqueous suspension shake method above)

2.4. Record plot data in zoned and segmented master map, with annotation for observations above plot sample scale, relationships between plots (e.g., corridor influences; continuity of dune landforms or vegetation at scale above plot

Interpretation:

Two indicators are sufficient for positive dune habitat criteria

1. Dune vegetation
2. Dune sand substrate

If the dune vegetation indicator is strong (e.g. obligate dune and beach native species like beach-bur or yellow sand-verbena or beach wildrye), but substrate indicator is mixed positive/negative and weaker (e.g. mixed sample, mostly dune sand, trace of fill mix or only shallow dune sand over fill), **a case-by-case determination should be made based on prevalence of dune sand**, but generally positive dune criteria weighted for native eo mostly native dune vegetation.

If dune vegetation indicator is weak or ambiguous (e.g. iceplant, found in many habitats including but hardly limited to dune), but dune substrate indicator is strong, **positive dune criteria are met**. Dune substrate is overriding 1 parameter, because it would tend to select for true dune vegetation over time (evolve to vegetated dune habitat)

If there is no dune vegetation, and dune sand indicators are prevalent, **dune habitat criteria are met even without vegetation indicators**. Vegetation indicators are not vegetation criteria. Unvegetated dunes are indeed ecologically important dune habitat (for invertebrates, wildlife, some of which depend on bare sand).

If there is no dune vegetation, and dune substrate criteria are not met, no dune habitat

Rarely, native dune vegetation may be prevalent where substrate is mixed artificial and dune sand occurs. If there are strong indicators of non-dune origin (silts, dirt, gravel, debris throughout profile), **it's not a dune substrate, but sandy fill with native vegetation**. Confirm approach with CCC. Not automatic interpretation (more like wetland delineation with all FAC and ambiguous hydrology indicators, weak soil indicators). Strictly speaking, it's not dune, but the "habitat" may be similar enough so that they will want it included. I think the objective criteria would support the stricter interpretation that it may be dune-like artificial bluff habitat, but it's not coastal dune habitat.

The other difficult cases will be where mixed dune and mechanically placed beach and dune sand with some dirty sand is piled up, with no or little vegetation. That's common on the west side. It's unstable and mostly artificial, with some natural dune derived from it.

Another marginal case will be pure dune landforms and sand deposits that are too shallow to support significant vegetation, but might accrete in the future - like in the Great Highway medians. This is where duration factors may matter, and where DPW maintenance may matter for "normal circumstances" (analogy with wetland delineation).

Ocean Beach Climate Change Adaptation Project, SFPUC
 COASTAL DUNE HABITAT DELINEATION PROTOCOL

TABLE 1
BASIS OF HABITAT DETERMINATION

Observed Condition of Criteria	Habitat Determination
Dune substrate indicators met but no dune vegetation	Coastal Dune
Dune substrate indicators strong and dune vegetation indicator is weak or ambiguous (e.g., ice plant)	Coastal Dune
Dune substrate indicator is mixed positive/negative and weaker but still met, and vegetation indicator is strong (e.g., prevalence of obligate dune and beach native species like beach-bur or yellow sand-verbena or beach wildrye)	Coastal Dune
Substrate is mixed external material (significant gravel, silt, or clay content) and dune sand (substrate indicator not met), native vegetation present	Not Coastal Dune
Dune substrate indicators are not met and there is no dune vegetation	Not Coastal Dune

TOOLS:

Digital camera with GPS

Rulers or tape measures (short ruler for photo scale)

IR laser rangefinder

Clear plastic or glass bottles and tap water (aqueous suspension tests)

Sand card, gravel card (match grain size classes)

Munsell chart for soil colors

Tile spade

Soil core (over 40 cm; to determine depth to resistance)

Attachment C

Table C-1: Dune Delineation Results Index

**TABLE C-1
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune					
Sand Dune Reference	0.43 -0.08	2	45	55	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Homogeneous reference dune sand (surface and subsurface). • Sand grain size are fine sand (0.43 -0.08 mm). • Relatively flat top. • No significant amount of fine sediment mixed in the dune sand as indicated by the translucent aqueous layer after 1 minute. 			Native Species:	<ul style="list-style-type: none"> • Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	5%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) • Sea rocket (<i>Cakile maritima</i>) • European beachgrass ^P (<i>Ammophila arenaria</i>) 	80% 5% 10%

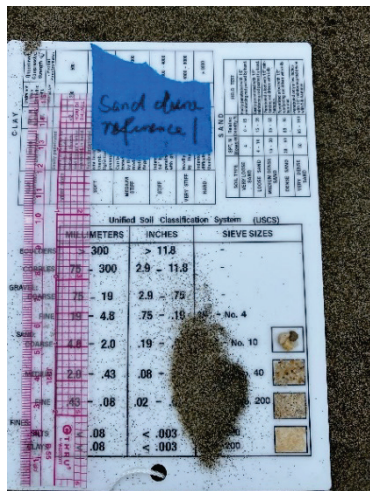
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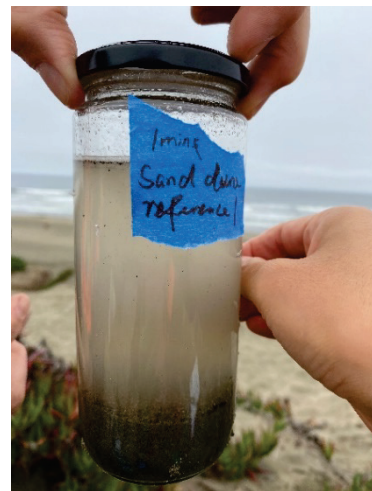
Landscape Context



Surface Substrate



Sand Grain Size



Reference Dune Sand Aqueous Suspension Test

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N1 – 0.0181 acre, 0.1067 acre, 0.0169 acre	0.43-0.08	4	60	40	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Homogeneous dune sand (surface and subsurface). • Relative flat top. • Some fine sediment mixed in the dune sand as indicated by the greenish gray aqueous layer after 1 minute. • Homogeneity of substrate, low sediment content, structure of the feature, apparent perennial growth and presence of perennial vegetation qualified this feature as a dune despite the higher silt content. 			Native Species:	<ul style="list-style-type: none"> • Silver beachweed ^P (<i>Ambrosia chamissonis</i>) • Beach sagewort ^P (<i>Artemisia pycnocephala</i>) 	5% 5%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) 	90%

Photo Documentation



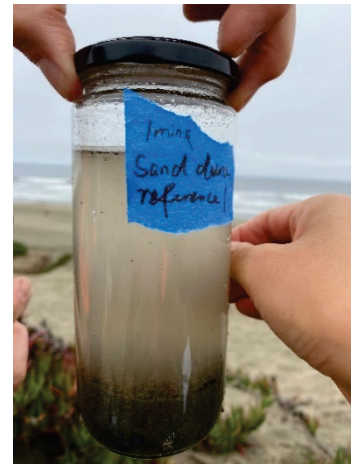
Landscape Context



Sand Grain Size Range



N1 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N2 – 0.1623 acre	0.43-0.08	2	99	1	No
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Heterogeneous sand with gravel lag (coarse surface). Homogeneous subsurface dune sand. Significant amount of fine sediment mixed in the surface dune sand as indicated by the brown and grayish aqueous layer after 1 minute. Presence of gravel on the surface substrate and significant fines in the subsurface substrate disqualify N2 as a dune. Sand accumulation influenced by road clearing. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Sea rocket (<i>Cakile maritima</i>) 	100%

Photo Documentation



Landscape Context



Sand Grain Size Range



N2 Aqueous Suspension Test



Dune Sand Reference Comparison

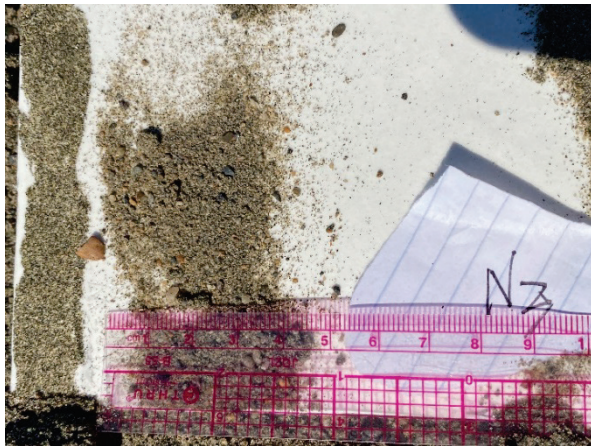
**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N3 – 0.7271 acre	0.43-0.08 4.8-2.0	<0.5	100	-	No
Substrate and Site Description			Vegetation Type	Plant Species	Relative Cover
<ul style="list-style-type: none"> Mechanically placed sand piles within the sand backpass project extent and USACE dredge sand placement extent on Ocean Beach. Two types of substrates present at this sand pile that are being placed at sampling plot N3: half of the area is coarse sand, and the other half is medium to fine sand (substrate does not qualify as a coastal dune). Aqueous suspension test not performed. Bulldozer was at work excavating the sand to the side. No vegetation was observed. 			Native Species:	-	-
			Non-Native / Invasive Species:	-	-

Photo Documentation



Landscape Context



Sand Grain Size



Mechanical Placement Observed

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N4 – 0.1841 acre	0.43-0.08	2	40	60	Yes
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Heterogeneous dune sand (surface). Homogeneous subsurface dune sand. Underlying substrate is roadbed covered with coarse gravel. No significant amount of fine sediment mixed with the dune sand as indicated by the translucent aqueous layer after 1 minute. Dune height decreases from ocean side to inland side, characteristic of sand accumulation by wind transport and deposit. Presence of perennial vegetation indicates feature has grown over several seasons. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	33%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) 	66%

Photo Documentation



Landscape Context



Sand Grain Size



N4 Aqueous Suspension Test



Dune Sand Reference Comparison

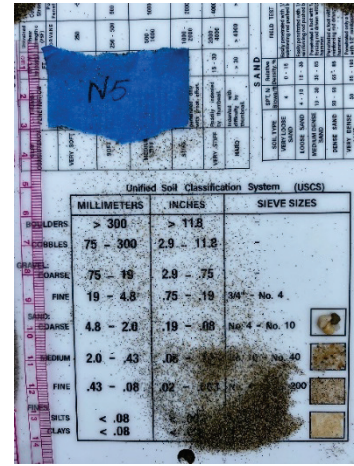
**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N5 – 0.0675 acre	0.43-0.08	2	55	45	No
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Homogenous dune sand (surface and subsurface). • Four sand mounds with some flat area in between. • Significant silt and clay mixed in the dune sand as indicated by the moderate brown aqueous layer after 1 minute. • Silt content may be associated with wind transport and deposit of dredge sand placed upwind of the sample plot. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) • Sea rocket (<i>Cakile maritima</i>) 	75% 25%

Photo Documentation



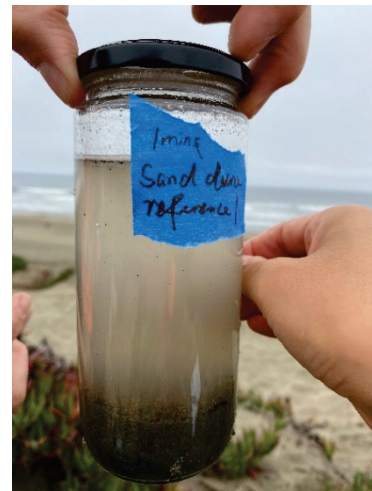
Landscape Context



Sand Grain Size



N5 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N6 – 0.0903 acre	0.43-0.08 4.8-2.0 19-4.8	1	99	1	No
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Dune sand in the middle, gravel at sides. Some big rocks on top indicating placement by other means than wind transport alone. Substrate does not qualify as a coastal dune. Aqueous suspension test not performed. Only 1% of the area was vegetated. Wooden piles buried in the middle, wire fence at the side. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) Sea rocket (<i>Cakile maritima</i>) European beachgrass ^P (<i>Ammophila arenaria</i>) 	10% 40% 50%

Photo Documentation



Landscape Context



Surface Substrate – Gravel



Surface Substrate – Coarse Sand

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N7 – 0.0501 acre	0.43-0.08	1	75	25	No
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Homogeneous dune sand (surface and subsurface). Small dune formations. No fine sediment mixed in the sand as indicated by translucent aqueous layer after 1 minute. Some gravel present at toe of the dunes, possibly influenced by pedestrian traffic onto the beach from Sloat Boulevard or mechanical movement of material associated with the sand backpass project west of the plot. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) Sea rocket (<i>Cakile maritima</i>) European beachgrass ^P (<i>Ammophila arenaria</i>) 	85% 12% 3%

Photo Documentation



Landscape Context



Sand Grain Size



N7 Aqueous Suspenseion Test



Dune Sand Reference Comparison

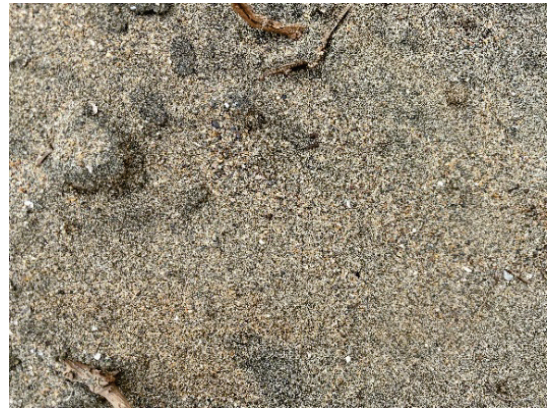
**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N8 – 0.0567 acre	0.43-0.08	1.2	75	25	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Heterogeneous surface sand, mostly dune sand. A few surface areas with medium-coarse sand on top, possibly deposited from roadside clearing or mechanical movement of material associated with the sand backpass project west of the sample plot. Homogenous dune sand at subsurface. Silt and clay mixed in the subsurface sand as indicated by brown aqueous layer after 1 minute. Location is adjacent to the extent of the USACE's dredge sand placement area which likely influences higher silt content within the sample plot substrate. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	15%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) 	85%

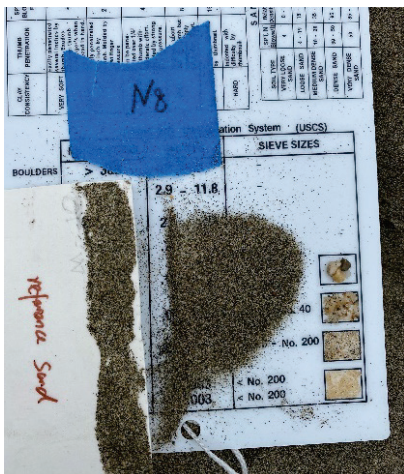
Photo Documentation



Landscape Context



Surface Substrate



Sand Grain Size



N8 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N9 – 0.0144 acre	0.43-0.08	1.2	65	35	No
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Dune sand mixed with fine sediments (surface and subsurface), and with scattered small shells on top. Aqueous layer was light olive gray after 1 minute indicating significant fine sediment. Located at the south extent of the sand backpass project sand management area and immediately south of the location where sands removed from the Great Highway are placed. Either of these external influences may contribute to presence of fine sediment in plot and be the source of surface shell fragments on top of the dune. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) Sea rocket (<i>Cakile maritima</i>) 	98% 2%

Photo Documentation



Landscape Context



Landscape Context



Sand Grain Size



N9 Aqueous Suspension Test



Dune Sand Reference Comparison

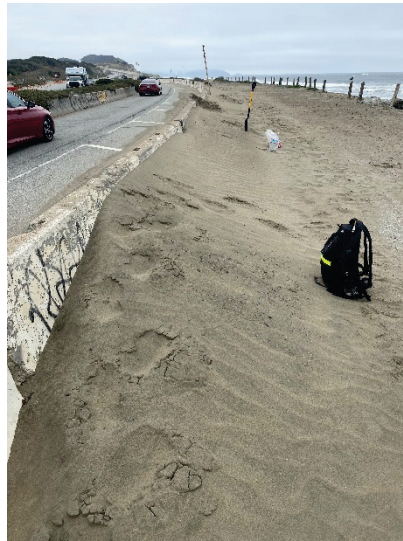
**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N10 – 0.0627 acre	0.43-0.08 19-4.8	1	100	-	-
Substrate and Site Description			Vegetation Type	Plant Species	Relative Cover
<ul style="list-style-type: none"> Mixed composite dune sand with gravels/rocks (surface and subsurface). Aqueous suspension test not performed. Shell pieces on top. Substrate does not qualify as a coastal dune. Sand accretion on K-rail bordering the west side of the Great Highway. Evidence of material wind transport and deposit within sample plot polygon, with heavy mechanical influence from roadside clearing. No live vegetation. Dead plants on top. 			Native Species:	-	-
			Non-Native / Invasive Species:	-	-

Photo Documentation



Landscape Context



Landscape Context



Surface Substrate

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N11 – 0.1312 acre	0.43-0.08	1.5	50	50	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Homogeneous dune sand mixed with fine sediments (surface and subsurface). Separate dune formations with shallow areas in between that are covered by medium sized sand. Some shell and gravel deposits on surface, potentially influenced by road clearing. Significant fine sediment mixed in the surface sand as indicated by light olive gray aqueous layer after 1 minute, likely associated with dredge sand placement on beach west of the sample plot. Material wind transport and deposit apparent within sample plot. Mixed composite substrate influenced by roadside clearing. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	5%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) 	95%

Photo Documentation



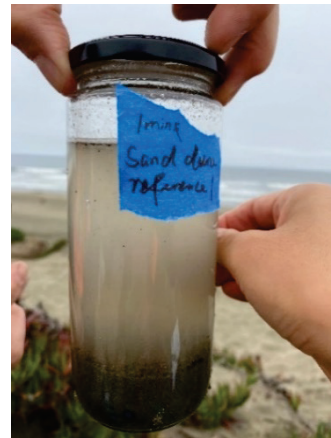
Landscape Context



Sand Grain Size



N11 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N12 – 0.1402 acre	0.43-0.08	2	60	40	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Homogeneous dune sand (surface and subsurface). Separate dune formations with shallow areas in between. Some areas closest to the roadway have surface gravel deposited from roadside clearing. Little fine sediment mixed in the subsurface sand as indicated by light brown aqueous layer after 1 minute. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	5%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) 	95%

Photo Documentation



Landscape Context



Landscape Context



Sand Grain Size



N12 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N13 – 0.0189 acre	0.43-0.08 4.8-2.0 19-4.8	1	80	20	Yes
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Two sand mounds, one with vegetation on top, one without vegetation. Surface was partially covered with coarse sand and gravels not deposited by wind transport. Substrate does not qualify as a coastal dune. Aqueous suspension test not performed because substrate does not qualify as dune. Sand mounds likely influenced by road clearing. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	5%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) 	95%

Photo Documentation



Landscape Context – Coarse sand and gravel present, likely associated with material cleared from the Great Highway.

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N14 – 0.0546 acre	0.43-0.08 4.8-2.0 19-4.8	1	65	35	No
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Three sand mounds with channels in between. The channels are covered with coarse sand and gravel likely originating from material cleared from the Great Highway and deposited within the sample plot. • Surface sand was mixed with fine sediment as indicated by dark brown aqueous layer was after 1 minute. • Vegetation cover mostly on ocean side of the dunes. • Hairy roots on surface indicating growth over several seasons. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) • Sea rocket (<i>Cakile maritima</i>) 	98% 2%

Photo Documentation



Landscape Context – Vegetation and Gravel present



Landscape Context – Vegetation and Gravel present



Sand Grain Size



N14 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N15 – 0.0249 acre	0.43-0.08	2	75	25	Yes
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Heterogenous dune sand with gravel and coarse sand on surface not deposited by wind transport alone. Homogeneous subsurface dune sand likely accumulated over several seasons given height of the feature. The coarse sand on surface might be from the sand piles placed on the beach associated with the sand backpass project management area just south of the sample plot, or associated with roadside clearing. Not flat top with vegetation. Some fine sediment in the surface sand as indicated by translucent aqueous layer after 1 minute. Adjacent sand backpass project management area. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	25%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) European beachgrass ^P (<i>Ammophila arenaria</i>) 	60% 15%

Photo Documentation



Landscape Context



Surface Substrate – gravel and vegetation present



Sand Grain Size



N15 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N16 – 0.0726 acre	0.43-0.08 4.8-2.0 19-4.8 75-19	3	100	<1	No
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Heterogenous sand mixed with gravel (surface and subsurface). Substrate does not qualify as a coastal dune. Sand mounds seem formed by mechanical means, not wind transport. Features most likely originate from sand cleared and deposited from the Great Highway over several seasons. Barely any vegetation. A few individuals of sea rocket (<i>Cakile maritima</i>) present. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Sea rocket (<i>Cakile maritima</i>) 	100%

Photo Documentation



Landscape Context – significant gravel and shell fragments present indicating material has been manipulated by forces other than wind transport and deposition alone.

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N17 – 0.018 acre, 0.04 acre	0.43-0.08	4	30	70	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Homogeneous dune sand (surface and subsurface). • No significant amount of fine sediment in the surface sand as indicated by translucent water after 1 minute. • Sand accumulation over several seasons apparent given the height of the feature. 			Native Species:	• Silver beachweed ^P (<i>Ambrosia chamissonis</i>)	7%
			Non-Native / Invasive Species:	• Ice plant ^P (<i>Carpobrotus edulis</i>)	93%

Photo Documentation



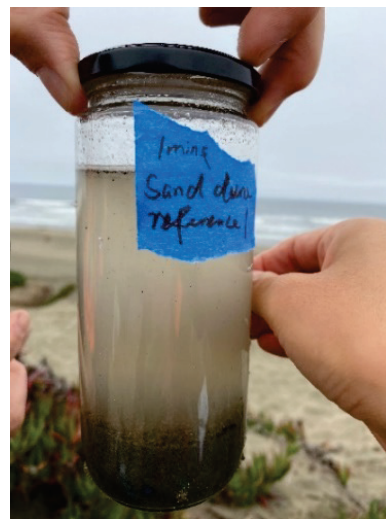
Landscape Context



Sand Grain Size



N17 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N18 – 0.9613 acre	0.43-0.08	10	10	90	Yes
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Homogeneous surface dune sand with vegetation. Steep slope on the roadside. • Homogeneous subsurface dune sand. • No significant amount of fine sediment exists in the surface sand as shown by translucent water layer after 1 minute. • Species richness is higher compared to other locations; includes native species. However, the relative percentage cover for the native species is low. • Recent ice plant removal was observed at a few places. 			Native Species:	<ul style="list-style-type: none"> • Coyote brush ^P (<i>Baccharis pilularis ssp. pilularis</i>) • Yellow sand verbena ^{P*} (<i>Abronia latifolia</i>) • Sea lettuce ^{P*} (<i>Dudleya farinosa</i>) • Beach strawberry ^{P*} (<i>Fragaria chiloensis</i>) • Beach sagewort ^{P*} (<i>Artemisia pycnocephala</i>) • Coast buckwheat ^{P*} (<i>Eriogonum latifolium</i>) • Beach evening primrose ^{P*} (<i>Camissoniopsis cheiranthifolia</i>) • Monterey cypress ^{P*} (<i>Cupressus macrocarpa</i>) 	3% *all other species combined are <1% relative cover
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) • Stinkbean ^P (<i>Paraserianthes lophantha</i>) • Hare's tail grass* (<i>Lagurus ovatus</i>) 	89% 7% *<1% relative cover

Photo Documentation



Landscape Context



Landscape Context



Sand Grain Size



N18 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Potential ESHA)					
N19 – 0.1348 acre	0.43-0.08	5	75	25	Yes
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Homogeneous surface dune sand with vegetation. • Homogeneous subsurface dune sand with many small roots. • No significant amount of fine sediment in surface sand as indicated by translucent water layer after 1 minute. • Significant amount of roots present. • Some ice plants were removed, and the remains were left on bare sand. • This polygon lies adjacent to an area the National Park Service has placed fencing and signage indicating sensitive dune habitat is present. • This polygon is probably the best-preserved coastal dune habitat within the study area. 			Native Species:	<ul style="list-style-type: none"> • Yellow sand verbena ^P (<i>Abronia latifolia</i>) • Sand dune blue grass ^P (<i>Poa douglasii</i>) • Beach evening primrose ^P (<i>Camissoniopsis cheiranthifolia</i>) • American dune grass ^P (<i>Elymus mollis</i>) 	10% <1% <1% 3%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) • Sea rocket (<i>Cakile maritima</i>) 	60% <1%

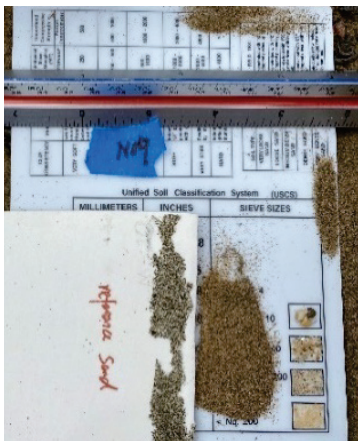
Photo Documentation



Landscape Context – Colma sand with vegetation.



Landscape Context – Colma Sand



Sand Grain Size



N19 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Colma Formation) (Potential ESHA)					
N20 – 0.3828 acre	0.43-0.08	10	60	40	Yes
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Colma bluff formation with vegetation on top. Scattered surface rock from deteriorated road surface (not associated with material cleared from the Great Highway). Significant amount of roots present from perennial vegetation. An open path to the beach on one side of the sample plot. Steep slope at the ocean side of the sample plot dune. Significant sediment as indicated by murky opacity in aqueous water layer. The sediment is associated with well-developed soil organic matter and oxidation weathering of Colma formation bluffs. 			Native Species:	<ul style="list-style-type: none"> Beach evening primrose ^P (<i>Camissoniopsis cheiranthifolia</i>) 	<1%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) Sea rocket (<i>Cakile maritima</i>) 	99% <1%

Photo Documentation



Landscape Context



Landscape Context



Sand Grain Size



N20 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N21 – 0.7715 acre	0.43-0.08 4.8-2.0 19-4.8	<0.5	50	50	No
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • Shallow sand accumulation from wind transport and deposit of material onto the Great Highway median. • Mixed sand and gravel with vegetation on top. • Subsurface substrate is roadbed. • Mixed composite substrate and height attributes heavily influenced by ongoing roadside clearing. • Aqueous suspension test not performed. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) 	100%

Photo Documentation



Landscape Context

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N22 – 0.2478 acre	0.43-0.08 4.8-2.0 19-4.8	<0.5	30	70	No
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> • East shoulder of the Great Highway. • Shallow sand accumulation against roadside barrier from wind transport and deposit. • Subsurface substrate is roadbed. • Mixed composite sand and gravel with vegetation on top. • Substrate and height attributes heavily influenced by ongoing roadside clearing. • Aqueous suspension test not performed. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> • Ice plant ^P (<i>Carpobrotus edulis</i>) 	100%

Photo Documentation



Landscape Context

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N23 – 0.3372 acre	0.43-0.08	0.4	65	35	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Shallow sand accumulation in middle of the Great Highway from wind transport and deposit against roadway barrier. Homogeneous subsurface dune sand. Significant amount of fine sediment mixed in the surface sand as indicated by dark greenish gray water layer after 1 minute. Fine sediment source may be dredge sand placed on the beach and transported/deposited by wind. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	10%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) Sea rocket (<i>Cakile maritima</i>) 	90% <1%

Photo Documentation



Landscape Context



Sand Grain Size



N23 Aqueous Suspension Test



Dune Sand Reference Comparison

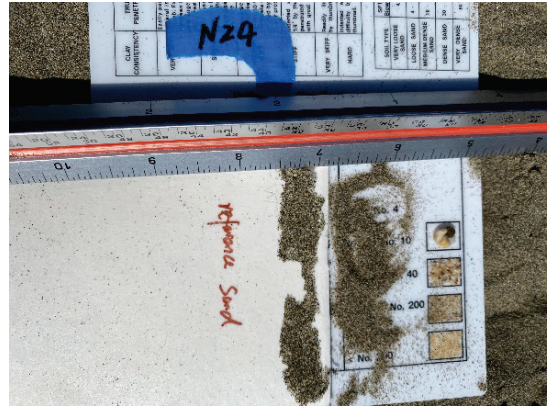
**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Dune (Not ESHA)					
N24 – 0.3616 acre, 0.0366 acre, 0.0747 acre	0.43-0.08	1	50	50	Yes
Substrate and Site Description			Vegetation Type	Plant Species (P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Long strip of sand accumulation on the east side of the Great Highway near the San Francisco Zoo. Significant amount of fine sediment mixed in the surface sand as indicated by brownish gray water layer after 1 minute. Fine sediment source may be dredge sand placed on the beach and transported/deposited by wind. Homogenous subsurface sand. Underlying substrate type is roadbed. 			Native Species:	<ul style="list-style-type: none"> Silver beachweed ^P (<i>Ambrosia chamissonis</i>) 	2%
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) European beachgrass ^P (<i>Ammophila arenaria</i>) Sea rocket (<i>Cakile maritima</i>) 	98% <1% <1%

Photo Documentation



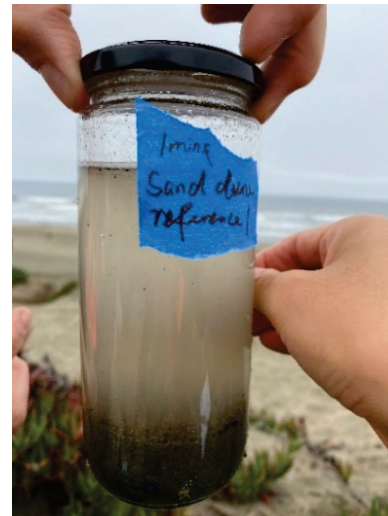
Landscape Context



Sand Grain Size



N24 Aqueous Suspension Test



Dune Sand Reference Comparison

**TABLE C-1 (CONTINUED)
DUNE DELINEATION RESULTS**

Sampling Plot / Alpha-numeric ID / Associated Polygon Area (ac)	Sand Grain Size Range (mm)	Approximate Height from Ground (m)	Absolute Cover (%)		Native Plant Species Present
			Bare Sand	Vegetation	
Not a Dune					
N25 – 0.5876 acre	0.43-0.08 4.8-2.0 19-4.8	0.4	65	35	No
Substrate and Site Description			Vegetation Type	Plant Species ^(P=Perennial)	Relative Cover
<ul style="list-style-type: none"> Sand mixed with gravels (surface and subsurface). Most of the substrate is not sand indicating the feature was formed through mechanical means and not wind transport and deposit alone. Substrate does not qualify as a coastal dune. Aqueous suspension test not performed. 			Native Species:	-	-
			Non-Native / Invasive Species:	<ul style="list-style-type: none"> Ice plant ^P (<i>Carpobrotus edulis</i>) 	100%

Photo Documentation



Landscape Context – Significant gravel and shell on surface substrate

ATTACHMENT G
GREAT HIGHWAY CLOSURE INCREASED
MILEAGE EMISSIONS - 2024

Ocean Beach Climate Change Adaption Project

Great Highway Closure Increased Mileage Emissions - 2024

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: San Francisco (SF)

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	NOx_RUNEX	PM2.5_RUNEX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	CO_RUNEX	SOx_RUNEX
San Francisco (SF)	2024	LDA	Aggregated	Aggregated	GAS	163734.1	5508577	773124.3	0.030194596	0.001568021	0.002000001	0.015750005	0.001705366	0.008000002	0.036750011	258.692471	0.002114125	0.00384612	0.007823913	0.58491445	0.00255997
San Francisco (SF)	2024	LDA	Aggregated	Aggregated	DSL	2245.9912	73372.39	10478.65	0.05472934	0.006078612	0.002000001	0.015750005	0.00635346	0.008000002	0.036750011	216.2359323	0.000867908	0.03398928	0.018685539	0.33395923	0.00204421
San Francisco (SF)	2024	LDA	Aggregated	Aggregated	ELEC	5004.4543	195338.1	24640.17	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2024	LDT1	Aggregated	Aggregated	GAS	18144.316	537839.9	84533.11	0.053247498	0.001796468	0.002000001	0.015750005	0.001953813	0.008000002	0.036750011	305.639806	0.003395873	0.00510728	0.014026058	0.78268429	0.00302455
San Francisco (SF)	2024	LDT1	Aggregated	Aggregated	DSL	10.520808	152.5494	36.09847	0.923345616	0.117468856	0.002000001	0.015750005	0.122780277	0.008000002	0.036750011	464.2877341	0.007523615	0.07297957	0.161978992	0.99536096	0.00438919
San Francisco (SF)	2024	LDT1	Aggregated	Aggregated	ELEC	202.31579	8273.533	1009.227	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2024	LDT2	Aggregated	Aggregated	GAS	56108.065	168464.1	263352.5	0.049930964	0.001591358	0.002000001	0.015750005	0.001730745	0.008000002	0.036750011	323.3360305	0.003073226	0.00488379	0.011923542	0.7281567	0.00319967
San Francisco (SF)	2024	LDT2	Aggregated	Aggregated	DSL	598.21415	18953.02	2869.618	0.04139856	0.004905258	0.002000001	0.015750005	0.005127052	0.008000002	0.036750011	304.3821378	0.001137637	0.04784463	0.024492649	0.24358191	0.00287751
San Francisco (SF)	2024	LDT2	Aggregated	Aggregated	ELEC	869.04077	25403.38	4340.461	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2024	MCY	Aggregated	Aggregated	GAS	10824.881	70626.1	21649.76	1.187092788	0.002230161	0.001	0.005040001	0.002384984	0.004000001	0.011760003	229.8481478	0.402255405	0.06758167	2.800348026	20.6318595	0.00227453

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Increased Mileage Emissions Estimates

Vehicle Category	Fuel	% total VMT	VMT	NOx_RUNEX	PM2.5_RUNEX	PM2.5_PMTW	PM2.5_PMBW	PM10_RUNEX	PM10_PMTW	PM10_PMBW	CO2_RUNEX	CH4_RUNEX	N2O_RUNEX	ROG_RUNEX	CO_RUNEX	SOx_RUNEX	
LDA	GAS	67.813%	4554.32666	0.30317258	0.015744	0.0200813	0.15814	0.017123	0.080325015	0.368993039	2597.433843	0.021227133	0.038617418	0.078556972	5.872906134	0.025703714	
LDA	DSL	0.903%	60.6620968	0.00731938	0.000813	0.0002675	0.002106	0.00085	0.001069902	0.004914863	28.91890266	0.000116072	0.004545649	0.002498962	0.04466295	0.000273388	
LDA	ELEC	2.405%	161.499705	0	0	0.0007121	0.005608	0	0.002848383	0.013084759	0	0	0	0	0		
LDT1	GAS	6.621%	444.669939	0.05220036	0.001761	0.0019607	0.01544	0.001915	0.007842678	0.036027304	299.6292553	0.003329091	0.005006838	0.013750229	0.767292436	0.002965074	
LDT1	DSL	0.002%	0.12612331	0.00025674	3.27E-05	5.561E-07	4.38E-06	3.41E-05	2.22445E-06	1.02186E-05	0.129097881	2.09198E-06	2.02924E-05	4.50392E-05	0.000276766	1.22044E-06	
LDT1	ELEC	0.102%	6.84030994	0	0	3.016E-05	0.000238	0	0.000120643	0.000554204	0	0	0	0	0		
LDT2	GAS	20.739%	1392.81108	0.15331996	0.004886	0.0061413	0.048363	0.005314	0.024565118	0.11284601	992.8481765	0.009436768	0.01499637	0.036612891	2.235906246	0.009825038	
LDT2	DSL	0.233%	15.6697917	0.00143016	0.000169	6.909E-05	0.000544	0.000177	0.000276369	0.001269572	10.51523336	3.9301E-05	0.001652848	0.000846127	0.008414819	9.94068E-05	
LDT2	ELEC	0.313%	21.0027544	0	0	9.261E-05	0.000729	0	0.000370427	0.00170165	0	0	0	0	0		
MCY	GAS	0.869%	58.3915452	0.15281682	0.000287	0.0001287	0.000649	0.000307	0.000514928	0.001513889	29.58881042	0.05178314	0.008699924	0.360494386	2.655980418	0.000292805	
Mileage Check				Total (pounds/day)	0.67	0.02	0.03	0.23	0.03	0.12	0.54	3,959.06	0.09	0.12	0.49	11.59	0.04
6,716.0				Total (tons/year)	0.12	0.00	0.01	0.04	0.00	0.02	0.10	722.53	0.02	0.01	0.09	2.11	0.01
				Total (metric tons/year)								655.47	0.01	0.01			
										GWP	1.00	23.00	296.00				

p.m. peak	ADT	73% of trips would increase VMT*	Daily VMT Added (0.46 miles/ trip)
1,800	20,000	14,600	6,716

CO2e	655.47	0.33	3.60
Total CO2e (MT/year)	659.41		
Total CO2e pounds/day)	3,982.81		

p.m. peak hour is 9% ADT

*Based on traffic contractor: Assume that 27 percent do not have a substantial change in VMT because the distance it took them to go to and from the Great Highway is probably the same as going to Sunset Boulevard or 19th Avenue. This is crudely shown on the

Google Earth measurements (miles)

GH	Reroute	Difference
0.79	1.25	0.46

	CO2 (pounds)		Miles
	GAS	Diesel	ELEC
	2597.433843	28.91890266	161.499705
	299.6292553	0.129097881	6.84030994
	992.8481765	10.51523336	21.0027544
	29.58881042		
Totals	3,919.50	39.56	189.34
Totals/year	1,430,617.53	14,440.58	69,110.11
kg CO2/gallon	8.78	10.21	
miles/kwh			3.00
Gallons	73,908.56	641.54	
kwh			23,036.70

kg/pound 0.45

*The Climate Registry, Default Emission Factors 2020.

** Kelley Blue Book

Total Fuel Use Due to Increased Mileage

Fuel Type	(av. gal/yr)	Gallons/kWh sold/used in	% Project gal/CCSF gal
Gasoline	73,909	120,000,000	0.062%
Diesel	642	10,000,000	0.006%
Electricity (kWh)	23,037	5,603,604,207	0.0004%

Ocean Beach Climate Change Adaption Project

Great Highway Closure Increased Mileage Emissions - 2025

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: San Francisco (SF)

Calendar Year: 2025

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	NOx RUNEX	PM2.5 RUNEX	PM2.5 PMTW	PM2.5 PMBW	PM10 RUNEX	PM10 PMTW	PM10 PMBW	CO2 RUNEX	CH4 RUNEX	N2O RUNEX	ROG RUNEX	CO RUNEX	SOx RUNEX
San Francisco (SF)	2025	LDA	Aggregated	Aggregated	GAS	166069.4	5515561.053	784195.6	0.027621092	0.001508815	0.002000001	0.015750005	0.001640974	0.008000002	0.036750011	250.8715249	0.001892389	0.003650585	0.006882881	0.55555869	0.00248258
San Francisco (SF)	2025	LDA	Aggregated	Aggregated	DSL	2266.025	72839.36203	10567.32	0.047214618	0.00536623	0.002000001	0.015750005	0.005608868	0.008000002	0.036750011	210.0107793	0.000798952	0.03301077	0.017200976	0.32302157	0.00198536
San Francisco (SF)	2025	LDA	Aggregated	Aggregated	ELEC	5661.556	225157.8337	27846.37	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2025	LDT1	Aggregated	Aggregated	GAS	18585.74	542643.1612	86545.25	0.047319317	0.001710731	0.002000001	0.015750005	0.001860576	0.008000002	0.036750011	297.5712141	0.002989521	0.004741148	0.012159111	0.72432777	0.00294471
San Francisco (SF)	2025	LDT1	Aggregated	Aggregated	DSL	9.763657	141.1558101	33.42049	0.855264613	0.108998205	0.002000001	0.015750005	0.11392662	0.008000002	0.036750011	454.5949273	0.007039292	0.071455992	0.151551818	0.93680955	0.00429756
San Francisco (SF)	2025	LDT1	Aggregated	Aggregated	ELEC	249.3252	10391.88301	1243.207	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2025	LDT2	Aggregated	Aggregated	GAS	57341.41	1694881.38	268855.1	0.044969771	0.001547645	0.002000001	0.015750005	0.001683205	0.008000002	0.036750011	312.5251278	0.002802783	0.004563496	0.010743848	0.69196965	0.00309269
San Francisco (SF)	2025	LDT2	Aggregated	Aggregated	DSL	619.1434	19067.45521	2955.138	0.040768389	0.004907565	0.002000001	0.015750005	0.005129463	0.008000002	0.036750011	296.452626	0.001139163	0.046598224	0.024525518	0.24699175	0.00280254
San Francisco (SF)	2025	LDT2	Aggregated	Aggregated	ELEC	1039.512	29746.75226	5178.3	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2025	MCY	Aggregated	Aggregated	GAS	10834.95	69268.73594	21669.9	1.186019715	0.002278895	0.001	0.005040001	0.002438223	0.004000001	0.011760003	229.7794275	0.400661433	0.067513135	2.783004922	20.3794407	0.00227385
							8179698.772	1209090													

Increased Mileage Emissions Estimates

Vehicle Category	Fuel	% total VMT	VMT	NOx RUNEX	PM2.5 RUNEX	PM2.5 PMTW	PM2.5 PMBW	PM10 RUNEX	PM10 PMTW	PM10 PMBW	CO2 RUNEX	CH4 RUNEX	N2O RUNEX	ROG RUNEX	CO RUNEX	SOx RUNEX	
LDA	GAS	67.430%	4528.59073	0.275766	0.015064	0.019968	0.157246245	0.016383	0.079871109	0.366907906	2504.672638	0.018893398	0.036447019	0.068717899	5.546634516	0.024785766	
LDA	DSL	0.890%	59.8052776	0.006225	0.000708	0.000264	0.002076619	0.00074	0.00105479	0.004845443	27.68966015	0.000105341	0.004352429	0.002267927	0.042589992	0.000261767	
LDA	ELEC	2.753%	184.867445	0	0	0.000815	0.006419152	0	0.003260522	0.014978021	0	0	0	0	0		
LDT1	GAS	6.634%	445.541037	0.04648	0.00168	0.001965	0.01547052	0.001828	0.007858042	0.036097881	292.2908071	0.002936472	0.004657016	0.011943348	0.711474559	0.002892454	
LDT1	DSL	0.002%	0.11589698	0.000219	2.79E-05	5.11E-07	4.02429E-06	2.91E-05	2.04408E-06	9.39001E-06	0.116153754	1.79861E-06	1.82578E-05	3.87231E-05	0.000239365	1.09807E-06	
LDT1	ELEC	0.127%	8.53232964	0	0	3.76E-05	0.000296268	0	0.000150485	0.000691292	0	0	0	0	0		
LDT2	GAS	20.721%	1391.59444	0.137965	0.004748	0.006136	0.048320331	0.005164	0.02454366	0.112747438	958.8135338	0.008598816	0.014000607	0.032961659	2.122932879	0.009488237	
LDT2	DSL	0.233%	15.6554701	0.001407	0.000169	6.9E-05	0.000543605	0.000177	0.000276117	0.001268411	10.231939	3.93178E-05	0.001608318	0.000846488	0.008524817	9.67286E-05	
LDT2	ELEC	0.364%	24.423783	0	0	0.000108	0.000848067	0	0.000430764	0.001978823	0	0	0	0	0		
MCY	GAS	0.847%	56.8735895	0.14871	0.000286	0.000125	0.000631943	0.000306	0.000501542	0.001474533	28.81099858	0.050237117	0.008465165	0.348948345	2.555285484	0.000285108	
Mileage Check				Total (pounds/day)	0.62	0.02	0.03	0.23	0.02	0.12	0.54	3,822.63	0.08	0.07	0.47	10.99	0.04
6,716.0				Total (tons/year)	0.11	0.00	0.01	0.04	0.00	0.02	0.10	697.63	0.01	0.01	0.08	2.01	0.01
				Total (metric tons/year)							632.89	0.01	0.01				
										GWP	1.00	23.00	296.00				

p.m. peak	ADT	73% of trips would increase VMT*	Daily VMT Added (0.46 miles/ trip)
1,800	20,000	14,600	6,716

CO2e	CO2e (MT/year)	CO2e pounds/day
632.89	636.60	3,845.07

p.m. peak hour is 9% ADT

*Based on traffic contractor: Assume that 27 percent do not have a substantial change in VMT because the distance it took them to go to and from the Great Highway is probably the same as going to Sunset Boulevard or 19th Avenue. This is crudely

Google Earth measurements (miles)

GH	Reroute	Difference
0.79	1.25	0.46

	CO2 (pounds)		Miles
	GAS	Diesel	ELEC
	2,504.67	27.69	184.87
	292.29	0.12	8.53
	958.81	10.23	24.42
	28.81		
Totals	3,784.59	38.04	217.82
Totals/year	1,381,374.61	13,883.78	79,505.60
kg CO2/gallon	8.78	10.21	
miles/kwh			3.00
Gallons	71,364.58	616.80	
kwh			26,501.87

kg/pound 0.45

*The Climate Registry, Default Emission Factors 2020.

** Kelley Blue Book

Total Fuel Use Due to Increased Mileage

Fuel Type	(av. gal/yr)	Gallons/kWh sold/used in CCSF in 2018/2019	% Project gal/CCSF gal
Gasoline	71,365	120,000,000	0.059%
Diesel	617	10,000,000	0.006%
Electricity (kWh)	26,502	5,603,604,207	0.0005%

Ocean Beach Climate Change Adaption Project
Great Highway Closure Increased Mileage Emissions - 2026

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: San Francisco (SF)

Calendar Year: 2026

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	NOx RUNEX	PM2.5 RUNEX	PM2.5 PMTW	PM2.5 PMBW	PM10 RUNEX	PM10 PMTW	PM10 PMBW	CO2 RUNEX	CH4 RUNEX	N2O RUNEX	ROG RUNEX	CO RUNEX	SOx RUNEX
San Francisco (SF)	2026	LDA	Aggregated	Aggregated	GAS	168430.873	5512785.174	795306.0292	0.025606988	0.001440826	0.002000001	0.015750005	0.00156703	0.008000002	0.036750011	243.86235	0.001708155	0.003496528	0.006112303	0.53145195	0.002413216
San Francisco (SF)	2026	LDA	Aggregated	Aggregated	DSL	2275.85338	72196.44447	10625.83866	0.040280157	0.004613869	0.002000001	0.015750005	0.004822487	0.008000002	0.036750011	204.18622	0.000729793	0.03209523	0.015712011	0.31222798	0.001930294
San Francisco (SF)	2026	LDA	Aggregated	Aggregated	ELEC	6310.08952	246343.4024	30989.21605	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2026	LDT1	Aggregated	Aggregated	GAS	19016.7987	546044.7219	88494.3011	0.042512103	0.001624009	0.002000001	0.015750005	0.001766258	0.008000002	0.036750011	290.2484	0.002650228	0.004443122	0.010609079	0.6757095	0.002872243
San Francisco (SF)	2026	LDT1	Aggregated	Aggregated	DSL	8.89350319	130.1085117	30.56373853	0.778210965	0.098594223	0.002000001	0.015750005	0.103052216	0.008000002	0.036750011	444.02327	0.006448832	0.069794275	0.138839566	0.87393456	0.004197617
San Francisco (SF)	2026	LDT1	Aggregated	Aggregated	ELEC	296.200444	12099.55644	1475.127948	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2026	LDT2	Aggregated	Aggregated	GAS	58551.4636	1701555.593	274224.6446	0.040884867	0.001493314	0.002000001	0.015750005	0.001624115	0.008000002	0.036750011	302.73898	0.002569029	0.004298816	0.009729697	0.66160662	0.002995848
San Francisco (SF)	2026	LDT2	Aggregated	Aggregated	DSL	637.085888	19090.00502	3027.595788	0.040069665	0.004873892	0.002000001	0.015750005	0.005094267	0.008000002	0.036750011	288.90896	0.001138501	0.045412465	0.024511246	0.24966812	0.002731229
San Francisco (SF)	2026	LDT2	Aggregated	Aggregated	ELEC	1209.32969	33863.08344	6005.187646	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2026	MCY	Aggregated	Aggregated	GAS	10833.5259	68130.75502	21667.05182	1.184957923	0.00231991	0.001	0.005040001	0.002483186	0.004000001	0.011760003	229.71476	0.399199124	0.067449898	2.766988046	20.1455989	0.002273214
							8212238.844	1231845.557													

Increased Mileage Emissions Estimates

Vehicle Category	Fuel	% total VMT	VMT	Nox (lbs)	PM2.5 (lbs)	PM2.5 PMT W (lbs)	PM2.5 PMB W (lbs)	PM10 (lbs)	PM10 PMT W (lbs)	PM10 PMBW (lbs)	CO2 (lbs)	CH4 (lbs)	N2O (lbs)	ROG (lbs)	CO (lbs)	SOx (lbs)	
LDA	GAS	67.129%	4508.37657	0.2545161	0.01432083	0.01987865	0.156544349	0.015575211	0.07951459	0.365270148	2423.826163	0.016977905	0.034753116	0.060752142	5.282271495	0.0239857	
LDA	DSL	0.879%	59.0425255	0.0052432	0.00060057	0.00026033	0.002050133	0.00062773	0.001041338	0.004783645	26.57834159	9.49951E-05	0.004177745	0.002045188	0.040641832	0.0002513	
LDA	ELEC	3.000%	201.460567	0	0	0.00088829	0.006995315	0	0.003553176	0.016322401	0	0	0	0	0	0	
LDT1	GAS	6.649%	446.55744	0.041853	0.00159883	0.00196899	0.015505813	0.001738874	0.007875968	0.03618023	285.7483248	0.002609138	0.004374235	0.010444594	0.66523315	0.0028277	
LDT1	DSL	0.002%	0.10640323	0.0001826	2.3128E-05	4.6916E-07	3.69464E-06	2.4174E-05	1.87664E-06	8.62082E-06	0.104159068	1.51277E-06	1.63724E-05	3.2569E-05	0.000205008	9.847E-07	
LDT1	ELEC	0.147%	9.89506304	0	0	4.363E-05	0.000343586	0	0.00017452	0.000801701	0	0	0	0	0	0	
LDT2	GAS	20.720%	1391.5386	0.125428	0.00458124	0.00613567	0.048318392	0.004982514	0.024542675	0.112742914	928.7528025	0.007881354	0.013188052	0.02984909	2.029698969	0.0091908	
LDT2	DSL	0.232%	15.6118783	0.0013791	0.00016775	6.8837E-05	0.000542091	0.000175337	0.000275348	0.00126488	9.943807314	3.91855E-05	0.001563028	0.00084364	0.008593197	9.4E-05	
LDT2	ELEC	0.412%	27.6933578	0	0	0.00012211	0.000961596	0	0.00048843	0.002243725	0	0	0	0	0	0	
MCY	GAS	0.830%	55.7175893	0.1455566	0.00028497	0.00012284	0.000619098	0.000305027	0.000491348	0.001444562	28.21744946	0.049036383	0.008285336	0.339888233	2.474622913	0.0002792	
Total (pounds/day)				0.57	0.02	0.03	0.23	0.02	0.12	0.54	3,703.17	0.08	0.07	0.44	10.50	0.04	
Total (tons/year)				0.10	0.00	0.01	0.04	0.00	0.02	0.10	675.83	0.01	0.01	0.08	1.92	0.01	
Total (metric tons/year)											613.11	0.01	0.01				
											GWP	1.00	23.00	296.00			

p.m. peak	ADT	73% of trips would increase VMT*	Daily VMT Added (0.46 miles/trip)
1,800	20,000	14,600	6,716

CO2e	Total CO2e (MT/year)	Total CO2e pounds/day
613.11	616.65	3,724.58

p.m. peak hour is 9% ADT

*Based on traffic contractor: Assume that 27 percent do not have a substantial change in VMT because the distance it took them to go to and from the Great Highway is probably the same as going to Sunset Boulevard or 19th Avenue. This is crudely shown on the attached markup. Planning would have to OK this, but I think it is reasonable.

Google Earth measurements (miles)		
GH	Reroute	Difference
0.79	1.25	0.46

	CO2 (pounds)		Miles
	GAS	Diesel	ELEC
	2,423.83	26.58	201.46
	285.75	0.10	9.90
	928.75	9.94	27.69
	28.22		
Totals	3,666.54	36.63	239.05
Totals/year	1,338,288.83	13,368.60	87,252.88
kg CO2/gallon	8.78	10.21	
miles/kwh			3.00
Gallons	69,138.68	593.92	
kwh			29,084.29

kg/pound 0.45

*The Climate Registry, Default Emission Factors 2020.

** Kelley Blue Book

Total Fuel Use Due to Increased Mileage

Fuel Type	(av. gal/yr)	Gallons/kWh sold/used in	% Project gal/CCSF
Gasoline	69,139	120,000,000	0.058%
Diesel	594	10,000,000	0.006%
Electricity (kWh)	29,084	5,603,604,207	0.0005%

Ocean Beach Climate Change Adaption Project

Re-routed Vehicle Split and Daily Vehicular Mileage Increase During Construction by Vehicle Category

Vehicle Category	Fuel	Vehicle Split			Daily Vehicular Mileage Increase		
		2024	2025	2026	2024	2025	2026
Passenger Cars	Gasoline	67.81%	67.43%	67.13%	4,554.3	4,528.6	4,508.4
	Diesel	0.90%	0.89%	0.88%	60.7	59.8	59.0
	Electric	2.40%	2.75%	3.00%	161.5	184.9	201.5
Light-duty Trucks (less than 3,750 pounds)	Gasoline	6.62%	6.63%	6.65%	444.7	445.5	446.6
	Diesel	0.00%	0.00%	0.00%	0.1	0.1	0.1
	Electric	0.10%	0.13%	0.15%	6.8	8.5	9.9
Light-duty Trucks (3,750 to 5,750 pounds)	Gasoline	20.74%	20.72%	20.72%	1,392.8	1,391.6	1,391.5
	Diesel	0.23%	0.23%	0.23%	15.7	15.7	15.6
	Electric	0.31%	0.36%	0.41%	21.0	24.4	27.7
Motorcycle	Gasoline	0.87%	0.85%	0.83%	58.4	56.9	55.7

Year	ROG	NO _x	PM ₁₀	PM ₁₀	Total PM ₁₀	PM _{2.5}	PM _{2.5}	Total PM _{2.5}
			Exhaust	Non-Exhaust ^a		Exhaust	Non-Exhaust ^a	
Average Daily Emissions (pounds/day)								
2024	0.49	0.67	0.03	0.66	0.68	0.02	0.26	0.28
2025	0.47	0.62	0.02	0.66	0.68	0.02	0.26	0.28
2026	0.44	0.57	0.02	0.66	0.68	0.02	0.26	0.28

Ocean Beach Climate Change Adaption Project

Great Highway Closure Increased Mileage Emissions

EMFAC2017 (v1.0.2) Emission Rates

Region Type: Sub-Area

Region: San Francisco (SF)

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	NOx RUNEX	PM2.5 RUNE	PM2.5 PMTW	PM2.5 PMBW	PM10 RUN	PM10 PMTW	PM10 PMBW	CO2 RUN	CH4 RUN	N2O RUNEX	ROG RUN	CO RUNE	SOx RUNEX
San Francisco (SF)	2027	LDA	Aggregated	Aggregated	GAS	170758.35	5524284.03	806162.2899	0.023990528	0.001358239	0.002000001	0.015750005	0.001477	0.008000002	0.036750011	237.6469	0.001553	0.003374906	0.005467	0.511406	0.002351709
San Francisco (SF)	2027	LDA	Aggregated	Aggregated	DSL	2274.4843	71726.1207	10649.88735	0.033689199	0.003811545	0.002000001	0.015750005	0.003984	0.008000002	0.036750011	198.78	0.00066	0.031245451	0.014199	0.301374	0.001879186
San Francisco (SF)	2027	LDA	Aggregated	Aggregated	ELEC	6934.8178	266379.103	33992.3105	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2027	LDT1	Aggregated	Aggregated	GAS	19433.89	550400.489	90362.74453	0.038513919	0.001530884	0.002000001	0.015750005	0.001665	0.008000002	0.036750011	283.5591	0.002363	0.0041972	0.009304	0.634601	0.002806047
San Francisco (SF)	2027	LDT1	Aggregated	Aggregated	DSL	6.3491106	108.664942	23.44784721	0.588245129	0.063234674	0.002000001	0.015750005	0.066094	0.008000002	0.036750011	427.6186	0.0045	0.067215687	0.096877	0.734942	0.004042533
San Francisco (SF)	2027	LDT1	Aggregated	Aggregated	ELEC	343.15676	13738.6551	1704.013127	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2027	LDT2	Aggregated	Aggregated	GAS	59710.24	1711483.25	279333.5295	0.037388157	0.001424787	0.002000001	0.015750005	0.00155	0.008000002	0.036750011	293.826	0.002362	0.004074614	0.008834	0.635359	0.002907647
San Francisco (SF)	2027	LDT2	Aggregated	Aggregated	DSL	652.03198	19110.5442	3087.067428	0.039337906	0.004809878	0.002000001	0.015750005	0.005027	0.008000002	0.036750011	281.7161	0.001136	0.044281855	0.024455	0.251595	0.002663231
San Francisco (SF)	2027	LDT2	Aggregated	Aggregated	ELEC	1377.7178	37736.8674	6816.674487	0	0	0.002000001	0.015750005	0	0.008000002	0.036750011	0	0	0	0	0	0
San Francisco (SF)	2027	MCY	Aggregated	Aggregated	GAS	10846.647	67193.1475	21693.29391	1.184043781	0.002357784	0.001	0.005040001	0.002525	0.004000001	0.011760003	229.6543	0.397908	0.067393667	2.752936	19.94099	0.002272616
							Total	8262160.87	1253825.259												

Increased Mileage Emissions Estimates

Vehicle Category	Fuel	% total VMT	VMT	Nox (lbs)	PM2.5 (lbs)	PM2.5 PM TW (lbs)	PM2.5 PMB W (lbs)	PM10 (lbs)	PM10 PMTW (lbs)	PM10 PMB W (lbs)	CO2 (lbs)	CH4 (lbs)	N2O (lbs)	ROG (lbs)	CO (lbs)	SOx (lbs)	
LDA	GAS	66.86%	4,490.5	0.2375032	0.013446392	0.0197998	0.15592303	0.01462417	0.079198994	0.363820396	2352.674145	0.015376035	0.033411	0.054124114	5.062854449	0.023282	
LDA	DSL	0.87%	58.3	0.0043303	0.000489928	0.0002571	0.00202447	0.00051208	0.001028303	0.004723766	25.55074915	8.47716E-05	0.004016	0.001825083	0.038737992	0.000242	
LDA	ELEC	3.22%	216.5	0	0	0.0009547	0.00751856	0	0.003818949	0.017543296	0	0	0	0	0		
LDT1	GAS	6.66%	447.4	0.0379883	0.001509992	0.0019727	0.01553507	0.001642254	0.007890826	0.036248484	279.689403	0.002331241	0.00414	0.009176942	0.625941068	0.002768	
LDT1	DSL	0.00%	0.1	0.0001146	1.2314E-05	3.895E-07	3.0671E-06	1.28708E-05	1.55788E-06	7.1565E-06	0.083272115	8.76258E-07	1.31E-05	1.88653E-05	0.000143119	7.87E-07	
LDT1	ELEC	0.17%	11.2	0	0	4.924E-05	0.00038777	0	0.000196964	0.000904806	0	0	0	0	0		
LDT2	GAS	20.71%	1,391.2	0.1146728	0.004369947	0.0061342	0.04830665	0.004752716	0.024536709	0.112715514	901.1901836	0.007245523	0.012497	0.027094133	1.948703334	0.008918	
LDT2	DSL	0.23%	15.5	0.0013472	0.000164725	6.849E-05	0.0005394	0.000172174	0.000273979	0.001258589	9.648023714	3.89009E-05	0.001517	0.000837514	0.008616438	9.12E-05	
LDT2	ELEC	0.46%	30.7	0	0	0.0001353	0.00106512	0	0.000541015	0.002485289	0	0	0	0	0		
MCY	GAS	0.81%	54.6	0.142576	0.000283911	0.0001204	0.00060689	0.000304005	0.000481658	0.001416074	27.65369625	0.047913814	0.008115	0.331493239	2.401182809	0.000274	
Total (pounds/day)				0.54	0.02	0.03	0.23	0.02	0.12	0.54	3,596.49	0.07	0.06	0.42	10.09	0.04	
Total (tons/year)				0.10	0.00	0.01	0.04	0.00	0.02	0.10	656.36	0.01	0.01	0.08	1.84	0.01	
Total (metric tons/year)											595.45	0.01	0.01				
											GWP	1.00	23.00	296.00			

Mileage Check
6,716.0

		73% of trips would increase mileage*	Daily mileage Added (0.46 miles/ trip)
p.m. peak	ADT		
1,800	20,000	14,600	6,716

CO2e	595.45	0.28	3.12
Total CO2e (MT/year)	598.85		
Total CO2e pounds/day)	3,617.03		

p.m. peak hour is 9% ADT

*Based on traffic contractor: Assume that 27 percent do not have a substantial change in VMT because the distance it took them to go to and from the Great Highway is probably the same as going to Sunset Boulevard or 19th Avenue. This is crudely shown on the attached markup. Planning would have to OK this, but I think it is reasonable.

Google Earth measurements (miles)

GH	Reroute	Difference
0.79	1.25	0.46

	CO2 (pounds)		Miles
	GAS	Diesel	ELEC
	2352.674145	25.55074915	216.5
	279.689403	0.083272115	11.16763633
	901.1901836	9.648023714	30.67488101
	27.65369625		
Totals/day	3,561.21	35.28	258.37
Totals/year	1,299,840.71	12,877.95	94,305.81
kg CO2/gallon*	8.78	10.21	
miles/kwh**			3.00
Gallons	67,152.37	572.12	
kwh			31,435.27

kg/pound 0.45

*The Climate Registry, Default Emission Factors 2020.

** Kelley Blue Book

Total Fuel Use Due to Increased Mileage

Fuel Type	(av. gal/yr)	Gallons/kwh sold/used in CCSF in 2018/2019	% Project gal/CCSF gal
Gasoline	67,152	120,000,000	0.056%
Diesel	572	10,000,000	0.006%
Electricity (kWh)	31,435	5,603,604,207	0.0006%

Construction Entrained Dust Calculation

South Ocean Beach
San Francisco, CA

Road Dust Equation

$$E \text{ [lb/VMT]} = k \cdot (sL)^{0.91} \cdot (W)^{1.02} \cdot (1-P/4N)$$

Where:

E = the particulate emission factor in units of pounds of particulate matter per VMT

k = the U.S. EPA AP-42 particle size multiplier (PM10 = 0.0022 lb/VMT),[1]

sL = the roadway-specific silt loading in grams/square meter (g/m2),[2,3,4,5]

W = the average weight of vehicles traveling the road (California statewide default = 2.4 tons),[5]

P = number of “wet” days, when at least one site per county received at least 0.01 inch of precipitation during the annual averaging period,[9] and

N = the number of days in the annual averaging period (default = 365)

Source: California Air Resources Board (CARB), Miscellaneous Process Methodology 7.9 — Entrained Road Travel, Paved Road Dust. Revised and updated March 2018, https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-9_2018.pdf.

Silt Loading Factor

Source: CARB, 2018.

Table 3: California Default Statewide and Local Silt Loading Values

Silt Loadings (g/m2)			
Freeway	Major	Collector	Local
0.015	0.032	0.032	0.32

Table 6: 2008 Roadway Travel Fractions and VMT (1) Estimates for California Entrained Paved Road Dust

County	2008 HPMS Travel Fractions			
	Freeway	Major	Collector	Local
San Francisco	0.360	0.520	0.068	0.053

Re-entrained PAVED Road Dust Emission Factors

Methodology

Calculation Methodology: USEPA AP-42, Paved Roads, Section 13.2.1, Revised January 2011:

<http://www.epa.gov/ttn/chief/ap42/ch13/final/c13s0201.pdf>

K-value from CARB, 2018.

Pollutant	Variables					E _{ext} (g/mi)	Re-route VMT Increase	pounds/	
	k	sL	W	P	N			day	tons/ year
PM10	1.00	0.032	2.4	67	365	0.10165	6,716	1.50503	0.274668
PM2.5	0.15	0.032	2.4	67	365	0.01525	6,716	0.225754	0.0412

Where:

E = particulate emission factor (grams of particulate matter/VMT)

k = particle size multiplier (g/VMT)

sL = local roadway silt loading (g/m²)

W = average weight of vehicles on the road (tons)

P = number of wet days with at least 0.254mm of precipitation

N = number of days in the averaging period

Source

calculation

Table 13.2.1-1 Particle Size Multipliers for Paved Road Equation of USEPA, 2011.

CARB, 2018.

CARB, 2018.

Table 8 of CARB, 2018.

annual days (365)

ATTACHMENT H
SUPPLEMENT TO DRAFT EIR APPENDIX D,
TRANSPORTATION ANALYSIS SUPPORTING
DOCUMENTATION

MEMORANDUM

Date: January 12, 2023
To: EIR Transportation Appendix Addendum
From: Luba Wyznyckyj, LCW Consulting
Subject: Ocean Beach Climate Change Adaptation Project – Overlap of Sand Placement Travel Demand during Construction Activities

The attached chart presenting construction truck and worker overlap during project construction includes the additional trucks that would be associated with sand placement from North Ocean Beach. The sand deliveries from North Ocean Beach to the project site would occur over a four to six-week period during the 24-month duration of phase 3. Deliveries of sand from North Ocean Beach to the South Ocean Beach work site would result in an additional 94 to 135 import trucks per day during the sand placement event.

If deliveries of North Ocean Beach sand occur during the peak six months of construction activities when project construction phases 2, 3 and 4 overlap, the number of trucks traveling to and from the project site during the four to six weeks of sand import would increase from 53 trucks per day (i.e., for conditions without sand placement) to between 147 and 188 trucks per day during the sand placement event.

Deliveries of North Ocean Beach sand to the South Ocean Beach project site would be via the Great Highway between Lincoln Way and Sloat Boulevard. During the four- to six-week period when sand from North Ocean Beach is delivered to the project site, the Great Highway between Sloat Boulevard and Lincoln Way would be temporarily closed to vehicular traffic and would be subject to permitting and a traffic control plan. Therefore, traffic volumes on the Great Highway north of Sloat Boulevard would only include the 94 to 135 trucks per day during the sand placement event

Ocean Beach Climate Change Adaption Project EIR
Average Daily Construction Trucks and Workers
October 5, 2020, revised September 2022 for shifting out project construction start to first quarter of 2024 and sand placements from North Ocean Beach

	Jan 24 1 1	Feb 24 2 2	Mar 24 3 3	Apr 24 4 4	May 24 5 5	June 24 6 6	July 24 7 7	Aug 24 8 8	Sept 24 9 9	Oct 24 10 10	Nov 24 11 11	Dec 24 12 12	Jan 25 13 13	Feb 25 14 14	Mar 25 15 15	Apr 25 16 16	May 25 17 17	June 25 18 18	July 25 19 19
Overall Project Schedule																			
Mobilization	[Shaded]																		
Phase 1			[Shaded]																
Phase 2																			
Phase 3																			
Phase 4																			
Phase 5																			
Truck Hauls																			
Mobilization	[Shaded]																		
Phase 1																			
Hauling Export				3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Hauling Import				17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Vendor				2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Phase 2																			
Hauling Export																	15	15	15
Hauling Import																	0	0	0
Vendor																	13	13	13
Phase 3																			
Hauling Export																			
Hauling Import																			
Vendor																			
Phase 4																			
Hauling Export																			
Hauling Import																			
Vendor																			
Phase 5																			
Hauling Export																			
Hauling Import																			
Vendor																			
Total Construction Trucks																			
Hauling Export	0	0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Hauling Import	0	0	0	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
Vendor	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Construction Workers																			
Mobilization	10	10	10																
Phase 1				50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Phase 2																			
Phase 3																			
Phase 4																			
Phase 5																			

Sand placements from North Ocean Beach would occur over a four- to six-week period during the 24-month duration of phase 3. The number of sand import trucks from North Ocean Beach would be between 94 trucks per day if conducted over six weeks and 135 trucks per day if conducted over four weeks. The overlap assessment includes the higher number of sand import trucks (i.e., 135 trucks per day).

**Ocean Beach Climate Change Adaption
Average Daily Construction Trucks and
October 5, 2020, revised September 21**

	Aug 25 20 20	Sept 25 21 21	Oct 25 22 22	Nov 25 23 23	Dec 25 24 24	Jan 26 25 25	Feb 26 26 26	Mar 26 27 27	Apr 26 28 28	May 26 29 29	June 26 30 30	July 26 31 31	Aug 26 32 32	Sept 26 33 33	Oct 26 34 34	Nov 26 35 35	Dec 26 36 36	Jan 27 37 37	Feb 27 38 38
Overall Project Schedule																			
Mobilization																			
Phase 1																			
Phase 2																			
Phase 3																			
Phase 4																			
Phase 5																			
Truck Hauls																			
Mobilization																			
Delivery of Equipment																			
Phase 1																			
Hauling Export																			
Hauling Import																			
Vendor																			
Phase 2																			
Hauling Export	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15
Hauling Import	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Vendor	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13
Phase 3																			
Hauling Export				14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14	14 14
Hauling Import				135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135
Vendor				0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
Phase 4																			
Hauling Export																4 4	4 4	4 4	4 4
Hauling Import																1 1	1 1	1 1	1 1
Vendor																6 6	6 6	6 6	6 6
Phase 5																			
Hauling Export																			
Hauling Import																			
Vendor																			
Total Construction Trucks																			
Hauling Export	15 15	15 15	15 15	29 29	29 29	29 29	29 29	29 29	29 29	29 29	29 29	29 29	29 29	29 29	29 29	33 33	33 33	33 33	33 33
Hauling Import	0 0	0 0	0 0	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	135 135	136 136	136 136	136 136	136 136
Vendor	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	13 13	19 19	19 19	19 19	19 19
Construction Workers																			
Mobilization																			
Phase 1																			
Phase 2	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60
Phase 3				20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20	20 20
Phase 4																50 50	50 50	50 50	50 50
Phase 5																			

**Ocean Beach Climate Change Adaption
Average Daily Construction Trucks and
October 5, 2020, revised September 20**

	Mar 27	Apr 27	May 27	June 27	July 27	Aug 27	Sept 27	Oct 27	Nov 27	Dec 27	Jan 28
	39 39	40 40	41 41	42 42	43 43	44 44	45 45	46 46	47 47	48 48	49 49
Overall Project Schedule											
Mobilization											
Phase 1											
Phase 2											
Phase 3											
Phase 4											
Phase 5											
Truck Hauls											
Mobilization											
Phase 1											
Hauling Export											
Hauling Import											
Vendor											
Phase 2											
Hauling Export	15 15	15 15									
Hauling Import	0 0	0 0									
Vendor	13 13	13 13									
Phase 3											
Hauling Export	14 14	14 14									
Hauling Import	135 135	135 135									
Vendor	0 0	0 0									
Phase 4											
Hauling Export	4 4	4 4	4 4	4 4	4 4						
Hauling Import	1 1	1 1	1 1	1 1	1 1						
Vendor	6 6	6 6	6 6	6 6	6 6						
Phase 5											
Hauling Export						0 0	0 0	0 0	0 0	0 0	0
Hauling Import						1 1	1 1	1 1	1 1	1 1	1
Vendor						9 9	9 9	9 9	9 9	9 9	9
Total Construction Trucks											
Hauling Export	33 33	33 33	4 4	4 4	4 4	0 0	0 0	0 0	0 0	0 0	0
Hauling Import	136 136	136 136	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1 1	1
Vendor	19 19	19 19	6 6	6 6	6 6	9 9	9 9	9 9	9 9	9 9	9
Construction Workers											
Mobilization											
Phase 1											
Phase 2	60 60	60 60									
Phase 3	20 20	20 20									
Phase 4	50 50	50 50	50 50	50 50	50 50						
Phase 5						50 50	50 50	50 50	50 50	50 50	50