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July 1, 2021

Katie Nall
County of Santa Barbara
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Santa Barbara, CA 93101
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Subject: Comments on the Draft Mitigated Negative Declaration for the SoCal Gas Line 80 Abandonment Demolition and Reclamation Plan, SCH # 2021050410, Santa Barbara County

Dear Ms. Nall:

The California Department of Fish and Wildlife (CDFW) has reviewed the Draft Mitigated Negative Declaration (DMND) for the SoCal Gas Line 80 Abandonment Demolition and Reclamation Plan (Project). The County of Santa Barbara (County) is the lead agency preparing a DMND pursuant to the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et. seq.) with the purpose of informing decision-makers and the public regarding potential environmental effects related to the Project.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & Game Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; California Environmental Quality Act (CEQA) Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration regulatory authority (Fish & Game Code, § 1600 *et seq*.). Likewise, to the extent implementation of the Project as proposed may result in "take" (see Fish & Game Code, § 2050) of any species protected under the California Endangered Species Act (CESA; Fish & Game Code, § 2050 *et seq*.) or the Native Plant Protection Act (NPPA; Fish & Game Code, § 1900 *et*

seq.), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Project Location: The project site is primarily located southeast of California State Route 217, east of UC Santa Barbara (UCSB), and west of More Ranch Road in unincorporated Santa Barbara County The project site includes the pipeline alignment which runs through the Goleta Slough, along the Goleta Beach parking lot, and into the western part of UCSB's campus.

Project Description/Objectives: The proposed Project includes the removal and abandonment of Southern California Gas Company's (SoCalGas) Line 80. In total, approximately 2,000 linear feet of pipeline is to be removed and approximately 1,300 linear feet of pipeline is proposed to be abandoned in place. The project is made up of four segments along Line 80; Segments 1 and 3 include above and belowground pipeline removal and Segments 2 and 4 include below ground pipeline abandonment.

- Segment 1 includes above-ground removal of Line 80 and associated supports (approximately 23 supports) near the bank of Tecolotito Creek (505 linear feet; support structure depth is approximately 7.0 feet), and removal and replacement of the existing Line 159 creosote-coated span support. The replacement support would extend less than two feet above the ground surface and would be drilled to a depth of 40 feet below ground approximately 10 feet from the creek bank.

- Segment 2 of pipeline runs under Tecolotito Creek/Goleta Slough and State Route 217 and would be abandoned in place including removing residual hydrocarbons and filling the pipe with 37 cubic feet of grout (130 linear feet; depth is approximately between 2.0 and 5.0 feet), plates would be placed over the open ends of the abandoned pipeline.

- Segment 3 will include excavation and removal of underground pipeline south of Tecolotito Creek/Goleta Slough, through Goleta Beach County Park, and up to the eastern boundary of the bike path parallel to State Route 217 (1,565 linear feet; depth is approximately between 2.0 and 5.0 feet).

- Segment 4 which runs to the eastern wall of an existing paved SoCalGas facility is proposed to be abandoned in place and filled with 322 cubic feet of grout (1,141 linear feet; depth is approximately between 2.0 and 5.0 feet).

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Comment 1: Adequacy of CEQA-Evaluation for Rare Plants

Issue: The DMND relies on pre-construction surveys for the detection of CEQA-rare plants.

The DIER states several rare plants, including southern tarplant (*Centromadia parryi ssp. australis*) a 1B.1 species, Coulter's saltbush (*Atriplex coulteri*) a 1B.2 species, Davidson's saltscale (*Atriplex serenana var. davidsonii*) a 1B.2 species, and estuary seablite (*Suaeda*

esteroa) a 1B.2 species, have the potential to occur within the project area, but protocol surveys were not conducted to determine presence.

Specific impact: The Project may result in impacts to CEQA-rare plant species without including any specific disclosure or analysis in the DMND. Deferring impact assessment and disclosure to pre-construction botanical surveys does not allow adequate disclosure of impacts during the CEQA review period. Some occurrences of CEQA-rare species within the Project area are known. This information should be included in the DMND, including location (map), population/occurrence size estimates, and an assessment of specific impacts with avoidance and minimization measures. CDFW does not consider translocation of CEQA-rare species as adequate mitigation under CEQA.

Why impact would occur: CDFW is concerned the DMND does not contain sufficient information regarding existing, known biological resources on the proposed Project to allow for a meaningful discussion of impacts and alternatives analysis.

Mitigation Measure BIO-2 states focused botanical surveys shall be conducted in pickleweed mats during the blooming season, prior to start of construction and references Coulter's goldfields, a species not included in the DMND as a species potentially present in the Project area. This mitigation measure specifically excludes conducting botanical surveys on most of the Project site that is not considered pickleweed mats, and would result in all rare plants occurring outside of pickleweed mats not being detected.

CEQA Guidelines §15070 and §15071 require the document to analyze if the Project may have a significant effect on the environment as well as review if the Project will 'avoid the effect or mitigate to a point where clearly no significant effects would occur'. Relying on future surveys, the preparation of future management plans, moving out of harm's way, or mitigating by obtaining permits from CDFW are considered deferred mitigation under CEQA. In order to analyze if a project may have a significant effect on the environment, the Project related impacts, including survey results for species that occur in the entire Project footprint, need to be disclosed during the public comment period. This information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well as to assess the significance of the specific impact relative to the species (e.g., current range, distribution, population trends, and connectivity).

Evidence impact would be significant: Impacts to CEQA-rare plant species should be considered significant under CEQA unless they are clearly mitigated below a level of significance. Inadequate avoidance, minimization, and mitigation measures for impacts to these sensitive species will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or United States Fish and Wildlife Service.

CDFW is unable to determine the extent of impacts based on the biological analysis conducted for the DMND. Absent survey data, CDFW is unable to provide meaningful avoidance, minimization, or mitigation measures related to special status plant resources.

Mitigation Measure #1: Appropriate surveys, including protocol botanical surveys, should be conducted to document the presence/absence of CEQA-rare species prior to finalizing the

DMND. Based on the survey results, the final CEQA document should propose avoidance and specific mitigation for Project impacts to CEQA-rare species. Surveys should be timed during the appropriate season for maximum detection of sensitive species. For botanical species, CDFW's Updated protocols (CDFW, 2018) should be utilized.

Mitigation Measure #2: Given the current status of these rare plants, CDFW recommends the Project be redesigned to avoid impacts to these rare plant species. If avoidance cannot be achieved, CDFW recommends conserving a currently unprotected occurrence of these plant species, including a conservation easement and funding to manage the species in perpetuity. CDFW recommends due to the limited number of recent occurrences of these 1B plants found in coastal estuarine habitat, a minimum of 5:1 ratio for preservation of habitat containing these species be considered.

Recommendation #1: Any mitigation for CEQA-rare plant impacts should include specific, measurable criteria for success. Monitoring for CEQA-rare vegetation communities should occur for a sufficient period to allow trends to be analyzed and demonstrate the occurrence is stable over time. No negative trend in CEQA-rare plant individuals (counted separately as flowering, seed set and non-flowering individuals), and no positive trend in non-native plant cover should occur over the monitoring period.

Recommendation #2: When considering mitigation options, CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant.

Transplantation is rarely successful in establishing rare plants at new locations. A study by CDFW (Fiedler, 1991) found that, even under optimum conditions with ample time for planning, transplantation was effective in only 15% of cases studied. Other reviews (e.g. Allen, 1994; Howald, 1996) have found similar problems digging up, transporting, and replanting plants, bulbs, rhizomes or seeds imposes a tremendous stress on a plant. They can easily die in the process. Scientifically-tested, reliable methods for salvage, propagation, translocation or transplantation are not available for many rare species. Transplantation can also cause problems at the target site. Genetic contamination can occur if the plant being transplanted can exchange genetic material with local taxa. Disturbance at the target site may facilitate invasion by non-native invasive species (CNPS, 1991).

Recommendation #3: CDFW recommends a Documented Conservation Seed Collection of the impacted rare plant species be made and deposited at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). A Documented Conservation Seed Collection is when seed from CNPS ranked 1-4 plants, CEQA-rare, and/or CESA-listed plant species is collected and stored as part of a permanent genetic collection in a protected location. This collection preserves the genome, and any unique alleles that are present in any given occurrence, for future study and reintroduction projects.

Funding should be provided to maintain the collection, as well as conduct periodic germination and viability tests, in perpetuity. Documented conservation collections (long-term storage) are important for conserving rare, gene pool representative germplasm designated for long-term

storage to provide protection against extinction and as a source material for future restoration and recovery.

Recommendation #4: A weed management plan should be developed for the Project area and implemented during the duration of this Project. On-going soil disturbance promotes establishment and growth of non-native weeds. As part of the Project, non-native weeds should be prevented from becoming established. The Project area should be monitored via mapping for new introductions and expansions of non-native weeds.

Comment #2: Impacts to Shorebirds and Rookery Trees

Issue: CDFW is concerned that the Project may impact California Endangered Species Act (CESA)-listed Belding's savannah sparrow (*Passerculus sandwichensis alaudinus*), California least tern (*Sternula antillarum browni*), and species of special concern western snowy plover (*Charadrius nivosus*), and White-tailed Kite (*Elanus leucurus*), through vegetation clearing, crushing, and construction disturbance in and adjacent to areas occupied by the above species.

Specific survey data was not disclosed in the DMND to determine presence/absence of these species in the Project area.

CDFW is concerned the Project may indirectly affect the known heron and cormorant rookery adjacent to the Project. This resource was not mentioned in the DMND.

Specific Impact: Grading, vegetation removal, and other ground disturbances could crush and bury listed or sensitive plants and animals, resulting in direct mortality. The Project may also affect adjacent habitat by loud noises, lighting, increased human presence and activity, fugitive dust, and spreading invasive weeds, resulting in stress, displacement, and mortality of these species.

Why impact would occur: The Project would result in direct and indirect impacts through grading, habitat conversion, noise, lighting, dust, and habitat fragmentation.

Site construction and operations may result in a substantial amount of noise through road use, equipment, and other project-related activities. Increase visual disturbance, from the current low-use baseline, is also a potential impact to listed species.

Evidence impact would be significant: Project implementation would result in a substantial adverse effect, either directly via removal of habitat, or through habitat modifications caused by alteration of existing public use, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations or by the Wildlife Agencies (CDFW or U.S. Fish and Wildlife Service). It is unclear how Project impacts would be reduced to less than significant without appropriate avoidance, minimization, or mitigation measures.

Anthropogenic noise can disrupt the communication of many wildlife species including birds (Sun and Narins 2005, Patricelli and Blickley 2006, Gillam and McCracken 2007, Slabbekoorn and Ripmeester 2008). Additionally, many prey species increase their vigilance behavior when exposed to noise because they need to rely more on visual detection of predators when auditory cues may be masked by noise (Rabin et al. 2006, Quinn et al. 2017). Noise has also been shown to reduce the density of nesting birds (Francis et al. 2009) and cause increased stress that results in decreased immune responses (Kight and Swaddle 2011). Without assessing

noise disruptions or providing appropriate minimization or mitigation measures, the Project may result in substantial impacts to sensitive wildlife species.

Recommended potentially feasible mitigation measure(s):

Mitigation Measure #1: CDFW recommends Project construction be limited to outside of the western snowy plover, least tern, heron and cormorant breeding season (1 March – 30 September) to minimize effects on breeding birds and the adjacent rookery.

Mitigation Measure #2: CDFW recommends the Project restrict use of equipment and lighting to hours least likely to disrupt wildlife (e.g., not at night or in early morning before 9am). Generators should not be used except for temporary use in emergencies. CDFW recommends use of noise suppression devices such as mufflers or enclosure for generators. Sounds generated from any means should be below the 55-60 dB range within 50 feet from the source.

Mitigation Measure #3: CDFW recommends pile driving not be used during construction of the Project. Alternative methods to construct Project features, that produce less noise and vibration, should be utilized if technically possible.

Mitigation Measure 4: Parking, driving, lay-down, stockpiling, and vehicle and equipment storage should be limited to previously compacted and developed areas. No off-road vehicle use should be permitted beyond the Project site and designated access routes. Disturbances to the adjacent native vegetation should be minimized. CDFW recommends a minimum 250-meter buffer between Project operations and listed species habitat.

Mitigation Measure #5: Non-native plants, including noxious weeds (as listed by the California Invasive Plant Council), should be prevented from establishing in temporarily disturbed areas, either by hand-weeding or selective application of herbicide. A weed monitoring program with regular inspection, mapping, and removal should be implemented.

Recommendation #1: Focused surveys should be conducted for the above referenced shorebird species with potential to be nesting or foraging in the Project area or within 500 feet of the Project footprint. Results of these surveys should be disclosed in the DMND and also be clearly marked on a map included in the DNMD so CDFW can comment on avoidance and minimization measures of any species present.

Recommendation #2: The DMND should include a map of all known adjacent nesting and foraging sites for the sensitive shorebirds mentioned above to help with indirect affect analysis.

Comment 3: Mitigation for Sensitive Vegetation Communities

Issue: The DMND states an undisclosed impact to five CDFW sensitive vegetation community habitats would occur due to construction. Mitigation BIO-4 only refers to restoration of pickleweed mats, presumably due to this habitat being under the jurisdiction of Section 1600 of the Fish and Game Code.

Eriogonum fasciculatum is not the buckwheat species that occurs in the Project site. The vegetation community identified as California sagebrush-California buckwheat scrub should be identified using the correct species.

Sensitive vegetation communities are a defined by their dominant plant species, such as the Encelia californica – Eriogonum cinereum (California Brittle Bush –Ashy Buckwheat Scrub) Alliance and have a separate ranking system than that of individual rare plants, which are covered in Comment 1, above.

Specific Impact: Project implementation includes grading, vegetation clearing, trail/access road construction, soil compaction, utilities construction, road maintenance, and other activities that may result in direct mortality, population declines, or local extirpation of vegetation communities.

Why Impact Would Occur: CDFW considers the Sarcocornia pacifica (Salicornia depressa) Alliance (*Pickleweed mats)*, ranked S3, a sensitive vegetation community. The Artemisia Californica Alliance, Atriplex lentiformis Shrubland (Quailbush Scrub) Alliance, and the Quercus agrifolia Alliance are ranked S4 communities by CDFW. Given the loss of these vegetation community in the coastal Goleta area, CDFW considers these S4 species as a locally sensitive vegetation community. *Baccharis pilularis* (Coyote brush scrub) Alliance is ranked S5 by CDFW but given the local losses of this vegetation community in the coastal Goleta area, CDFW considers this a locally sensitive vegetation community.

Sensitive vegetation communities are defined and have membership requirements, as defined in the Manual of California Vegetation. The DMND should consider the vegetation as present, even if it was planted as part of mitigation for another project. The presence of these vegetation communities should be acknowledged if they meet the membership requirements. The quality of the vegetation community is considered when mitigation ratios are considered, but the vegetation either meets the membership criteria, or it doesn't. If it meets the membership criteria, the vegetation communities should be mitigated to ensure no net loss of these locally important vegetation communities.

CEQA Guidelines sections 15070 and 15071 require the DEIR to analyze if the Project may have a significant effect on the environment as well as review if the Project will "avoid the effect or mitigate to a point where clearly no significant effects would occur."

In order to analyze if a project may have a significant effect on the environment, the location, acreage, species composition, and success criteria of proposed mitigation information is necessary to allow CDFW to comment on alternatives to avoid impacts, as well assess the adequacy of the mitigation proposed.

Evidence Impact would be significant: Inadequate avoidance, minimization, and mitigation measures for impacts to these CEQA locally sensitive vegetation communities will result in the Project continuing to have a substantial adverse direct, indirect, and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS.

Mitigation Measure #1: CDFW recommends avoiding any sensitive natural communities found on the Project. If avoidance is not feasible, the Project proponent should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. CDFW recommends following the Coastal Commission's Environmentally Sensitive Habitat Area ratio of 4:1 for impacts to the five listed sensitive vegetation communities found onsite due to their location within Goleta Slough.

All revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).

Mitigation Measure #2: Success criteria should be based on the specific composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in Manual of California Vegetation, ensuring one species or layer does not disproportionally dominate a site but conditions mimic the reference site and meets the alliance membership requirements.

CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant.

Recommendation #1: The DMND should include a table of impacts by vegetation community along with a map showing the Project impact areas. Impact areas should including staging and access ramp locations and impacts.

General Comments and Recommendations

Goleta Slough State Marine Conservation Area: In 1999 the California Legislature passed the Marine Life Protection Act directing the Department and the Fish and Game Commission to redesign California's existing system of marine protected areas (MPAs). The Goleta Slough Marine Conservation Area (SMCA) was established on January 1, 2012, through the Southern California MPA planning process. The Project footprint that include above and below ground level removal or abandonment are located within and adjacent to the Goleta Slough Marine Conservation Area (SMCA). The DMND did not identify the Marine Protected Area (MPA) where potential construction impacts will occur. Through review of the DMND and discussions with the lead agency the Department has determined that the proposed project is an allowable activity under California Code of Regulations Title 14 Section 632 (b)(100)(D), however, it did not clearly identify work below the mean high tide. Without this information the Department cannot determine if the Project would have significant marine habitat or species impacts. More information on the Goleta Slough SMCA can be found at: (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=98200&inline).

Recommendation #1: CDFW recommends the Final MND include the following to avoid and minimize direct and indirect significant impacts to the Goleta Slough SMCA: The DMND should clearly describe Goleta Slough and Atascadero Creek areas within the Project footprint as occurring within an MPA (Goleta Slough SMCA).

Recommendation #2: All construction work and staging for the Project should be identified and described as occurring either above the mean high tide (outside the MPA boundary) or below the mean high tide (inside the MPA boundary).

Recommendation #3: Equipment, vehicles, and workers should travel and set up outside the MPA boundaries such that impacts will be avoided.

Recommendation #4: The Project should be geo-referenced in relation to the MPA boundaries showing potential areas of impact. More information can be found on CDFW's website, (https://wildlife.ca.gov/Conservation/Marine/MPAs/Network/Southern-California).

Filing Fees

The Project, as proposed, would have an impact on fish and/or wildlife resources, and assessment of filing fees is necessary. 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. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (California Code of Regulations, tit. 14, § 753.5; Fish and Game Code, § 711.4; Public Resources Code, § 21089).

Conclusion

CDFW appreciates the opportunity to comment on the DMND to assist the County of Santa Barbara in identifying and mitigating Project impacts on biological resources. If you have any questions or comments regarding this letter, please contact Kelly Schmoker, Senior Environmental Scientist, at (626) 335-9092 or by email at Kelly.Schmoker@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Erinn Wilson-Olgin
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References:

Allen, W. H. 1994. Reintroduction of endangered plants: biologists worry that mitigation may be considered an easy option in the political and legal frameworks of conservation. Bioscience 44(2): 65-8.

California Native Plant Society Rare Plant Scientific Advisory Committee. 1991. Mitigation Guidelines Regarding Impacts to Rare, Threatened and Endangered Plants. California Native Plant Society, Sacramento, CA.

Dixon, P. 2018. Assessment of Topsoil Salvage and Seed Augmentation in the Restoration of Coastal Sage Scrub on Santa Catalina Island, California. Western North American Naturalist, 78(4), 711-721.

Fiedler, P. 1991. Mitigation related transplantation, translocation and reintroduction projects involving endangered and threatened and rare plant species in California. California Department of Fish and Game, Sacramento, CA. 82 pp.

Hinshaw, J., Holmstead, G., Cypher, B., & Anderson, D. (1998). Effects of simulated oil field disturbance and topsoil salvage on Eriastrum hooveri (Polemoniaceae). Madroño, 45(4), 290-294. Retrieved May 19, 2020, from www.jstor.org/stable/41425279

Howald, A.M. Translocation as a mitigation strategy: lessons from California. In: D.A. Falk, C.I. Millar, and M. Olwell eds. Restoring Diversity: Strategies for Reintroduction of Endangered Plants. Island Press, Washington, DC.

CDFW recommends the following language to be incorporated into a future environmental document for the Project.

Biological Resources			
	Mitigation Measure	**Timing**	**Responsible Party**
MM-Bio-1-CEQA-Rare Plants	Appropriate surveys, including protocol botanical surveys, should be conducted to document the presence/absence of CEQA-rare species prior to finalizing the DMND. Based on the survey results, the final CEQA document should propose avoidance and specific mitigation for Project impacts to CEQA-rare species. Surveys should be timed during the appropriate season for maximum detection of sensitive species. For botanical species, CDFW's Updated protocols (CDFW, 2018) should be utilized.		
MM-Bio-2-CEQA-Rare Plants	Given the current status of these rare plants, CDFW recommends the Project be redesigned to avoid impacts to these rare plant species. If avoidance cannot be achieved, CDFW recommends conserving a currently unprotected occurrence of these plant species, including a conservation easement and funding to manage the species in perpetuity. CDFW recommends due to the limited number of recent occurrences of these 1B plants found in coastal estuarine habitat, a minimum of 5:1 ratio for preservation of habitat containing these species be considered.		
REC-Bio-1-CEQA-Rare Plants	Any mitigation for CEQA-rare plant impacts should include specific, measurable criteria for success. Monitoring for CEQA-rare vegetation communities should occur for a sufficient period to allow trends to be analyzed and demonstrate the occurrence is stable over time. No negative trend in CEQA-rare plant individuals (counted separately as flowering, seed set and non-flowering individuals), and no positive trend in non-native plant cover should occur over the monitoring period.		
REC-Bio-2-CEQA- Rare Plants	When considering mitigation options, CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant. Transplantation is rarely successful in establishing rare plants at new locations. A study by CDFW (Fiedler, 1991) found that, even under optimum conditions with ample time for planning,		

	transplantation was effective in only 15% of cases studied. Other reviews (e.g. Allen, 1994; Howald, 1996) have found similar problems digging up, transporting, and replanting plants, bulbs, rhizomes or seeds imposes a tremendous stress on a plant. They can easily die in the process. Scientifically-tested, reliable methods for salvage, propagation, translocation or transplantation are not available for many rare species. Transplantation can also cause problems at the target site. Genetic contamination can occur if the plant being transplanted can exchange genetic material with local taxa. Disturbance at the target site may facilitate invasion by non-native invasive species (CNPS, 1991).		
REC-Bio-3-CEQA-Rare Plants	CDFW recommends a Documented Conservation Seed Collection of the impacted rare plant species be made and deposited at either Santa Barbara Botanic Garden or the California Botanic Garden (formerly known as Rancho Santa Ana Botanic Garden). A Documented Conservation Seed Collection is when seed from CNPS ranked 1-4 plants, CEQA-rare, and/or CESA-listed plant species is collected and stored as part of a permanent genetic collection in a protected location. This collection preserves the genome, and any unique alleles that are present in any given occurrence, for future study and reintroduction projects. Funding should be provided to maintain the collection, as well as conduct periodic germination and viability tests, in perpetuity. Documented conservation collections (long-term storage) are important for conserving rare, gene pool representative germplasm designated for long-term storage to provide protection against extinction and as a source material for future restoration and recovery.		
REC-Bio-4-CEQA-Rare Plants	A weed management plan should be developed for the Project area and implemented during the duration of this Project. On-going soil disturbance promotes establishment and growth of non-native weeds. As part of the Project, non-native weeds should be prevented from becoming established. The Project area should be monitored via mapping for new introductions and expansions of non-native weeds.		
MM-Bio-3-CEQA-Shorebirds	Project construction shall be limited to outside of the western snowy plover breeding season (1 March – 30 September) to minimize effects on breeding plovers.		
MM-Bio-4-CEQA-Shorebirds	The Project shall restrict use of equipment and lighting to hours least likely to disrupt wildlife (e.g., not at night or in early morning before 9am). Generators should not be used except for temporary		

	use in emergencies. CDFW recommends use of noise suppression devices such as mufflers or enclosure for generators. Sounds generated from any means should be below the 55-60 dB range within 50 feet from the source.		
MM-Bio-5-CEQA-Shorebirds	CDFW recommends pile driving not be used during construction of the Project. Alternative methods to construct Project features, that produce less noise and vibration, should be utilized if technically possible.		
MM-Bio-6-CEQA-Shorebirds	Parking, driving, lay-down, stockpiling, and vehicle and equipment storage should be limited to previously compacted and developed areas. No off-road vehicle use should be permitted beyond the Project site and designated access routes. Disturbances to the adjacent native vegetation should be minimized. CDFW recommends a minimum 250-meter buffer between Project operations and listed species habitat.		
MM-Bio-7-CEQA-Shorebirds	Non-native plants, including noxious weeds (as listed by the California Invasive Plant Council), should be prevented from establishing in temporarily disturbed areas, either by hand-weeding or selective application of herbicide. A weed monitoring program with regular inspection, mapping, and removal should be implemented.		
REC-Bio-5-CEQA-Shorebirds	Focused surveys should be conducted for the above referenced shorebird species. Results of these surveys should be disclosed in the DMND and also be clearly marked on a map included in the DNMD.		
REC-Bio-6-CEQA-Shorebirds	The DMND should include a map of all known adjacent nesting and foraging sites for the sensitive shorebirds mentioned above to help with indirect affect analysis.		
MM-Bio-8-CEQA- Sensitive Vegetation Communities	The Project should avoid any sensitive natural communities found on the Project. If avoidance is not feasible, the Project proponent should mitigate at a ratio sufficient to achieve a no-net loss for impacts to special status plant species and their associated habitat. CDFW recommends following the Coastal Commission's Environmentally Sensitive Habitat Area ratio of 4:1 for impacts to the five listed sensitive vegetation communities found onsite. All revegetation/restoration areas that will serve as mitigation should include preparation of a restoration plan, to be approved by CDFW prior to any ground disturbance. The restoration plan should include restoration and monitoring methods; annual		

	success criteria; contingency actions should success criteria not be met; long-term management and maintenance goals; and a funding mechanism for long-term management. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands (AB 1094; Government Code, §§ 65965-65968).		
MM-Bio-8-CEQA- Sensitive Vegetation Communities	Success criteria should be based on the specific composition of the vegetation communities being impacted. Success should not be determined until the site has been irrigation-free for at least 5 years and the metrics for success have remained stable (no negative trend for richness/diversity/abundance/cover and no positive trend for invasive/non-native cover for each vegetation layer) for at least 5 years. In the revegetation plan, the success criteria should be compared against an appropriate reference site, with the same vegetation alliance, with as good or better-quality habitat. The success criteria shall include percent cover (both basal and vegetative), species diversity, density, abundance, and any other measures of success deemed appropriate by CDFW. Success criteria shall be separated into vegetative layers (tree, shrub, grass, and forb) for each alliance being mitigated, and each layer shall be compared to the success criteria of the reference site, as well as the alliance criteria in Manual of California Vegetation, ensuring one species or layer does not disproportionally dominate a site but conditions mimic the reference site and meets the alliance membership requirements. CDFW does not recommend topsoil salvage or transplantation as viable mitigation options. Several studies have documented topsoil salvage had no effect on the recolonization of the target plant species (Hinshaw, 1998, Dixon, 2018). Based on the scientific literature available, relying on topsoil salvage alone to mitigate impacts to CEQA-rare plant species does not appear to provide any value to mitigate impacts to the plant.		
REC-Bio-7-CEQA- Sensitive Vegetation Communities	The DMND should include a table of impacts by vegetation community along with a map showing the Project impact areas. Impact areas should including staging and access ramp locations and impacts.		
REC-Bio-8-CEQA- State Marine Conservation Area	CDFW recommends the Final MND include the following to avoid and minimize direct and indirect significant impacts to the Goleta Slough SMCA.		

REC-Bio-9-CEQA- State Marine Conservation Area	Through review of the DMND and discussions with the lead agency the Department has determined that the proposed project is an allowable activity under California Code of Regulations Title 14 Section 632 (b)(100)(D). The Department recommends the DMND clearly describe Goleta Slough and Atascadero Creek areas along gas line Segment 1 and 2 as being part of a MPA (Goleta Slough SMCA). All construction work and staging along gas line Segment 1 and 2 should be identified and described either above the mean high tide (outside the MPA boundary) or below the mean high tide (inside the MPA boundary). Additionally, equipment, vehicles, and workers should travel and set up outside the MPA boundaries such that impacts will be avoided. All gas line segments should be geo-referenced in relation to the MPA boundaries showing potential areas of impact. More information can be found on CDFW's website, (https://wildlife.ca.gov/Conservation/Marine/MPAs/Network/Southern-California).		