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Subject: Interlake Tunnel and Spillway Modification Project (Project)
Draft Environmental Impact Report
State Clearinghouse No. 2016041085
Monterey and San Luis Obispo Counties

Dear Alex Henson:

The California Department of Fish and Wildlife (CDFW) received the Notice of Availability of a Draft Environmental Impact Report (DEIR) regarding the Interlake Tunnel and Spillway Modification Project (Project) from the Monterey County Water Resources Agency (MCWRA) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

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, CDFW appreciates 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 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 & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in the 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

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Lead Agency: MPWRA

Description: The Project is composed of two separate but interrelated components: a water conveyance tunnel from Nacimiento Reservoir to San Antonio Reservoir, and modifications to the existing spillway at San Antonio Reservoir. Project elements include the Interlake Tunnel (gravity flow), Tunnel Intake Structure at Nacimiento Reservoir, Energy Dissipation Structure at San Antonio Reservoir, San Antonio Dam Spillway Modification, and disposal of spoils. The proposed modifications of the spillway at San Antonio Reservoir would provide a seven-foot increase in the maximum reservoir elevation, effectively increasing the storage capacity of the reservoir by approximately 41,000 acre-feet.

Objectives: The Project is intended to meet the following objectives:

- Minimize flood control releases through the Nacimiento Dam Spillway and reduce associated downstream flood damage. Increase the overall surface water supply available from Nacimiento and San Antonio Reservoirs by maximizing the opportunity for water to be collectively stored in the reservoirs.
- Improve the hydrologic balance of the Salinas Valley Groundwater Basin (Basin) and reduce seawater intrusion.
- Continue to meet downstream environmental flow requirements for south-central California coast steelhead.
- Minimize the impact on existing hydroelectric production.
- Preserve recreational opportunities in the reservoirs.
- Protect agricultural viability and prime agricultural land.

Location: The Project is located at the Nacimiento and San Antonio Reservoirs, northwest of the City of Paso Robles. The Nacimiento Dam and Reservoir are located

in San Luis Obispo County approximately 12 miles upstream from the confluence of the Nacimiento and Salinas Rivers. The San Antonio Dam and Reservoir are primarily in southern Monterey County, approximately two miles north of the Nacimiento Reservoir and five miles upstream from the confluence of the San Antonio and Salinas Rivers. The Project would be constructed in the immediate vicinity of the Nacimiento and San Antonio Reservoirs.

COMMENTS AND RECOMMENDATIONS

Prior Comments: CDFW previously provided comments on the Notice of Preparation for the Project in a letter (NOP letter) dated June 7, 2016, and provided a protest of the Project-related water right change petitions in a letter dated March 21, 2022 (Protest letter). CDFW's protest letter addressed the Petitions for Change for Water Right License 7543 (Application 16124) and Permit 21089 (Application 30532); Petition for Time Extension for Permit 21089; and the Petition for Change for Water Right Licenses 7543 and 12624 (Applications 16124 and 16761) and Permit 21089 (Application 30532). CDFW's comments on the NOP and water right change petitions (enclosed) recommended that a comprehensive water operations model be developed that clearly outlines the assumptions and constraints used in its development, and that this model be developed in consultation with CDFW and NMFS. The DEIR does not include the flow study design, nor was the study design developed and vetted in consultation with CDFW. CDFW has concluded the DEIR did not address the prior CDFW comments and recommendations.

Species Comments: CDFW is also concerned regarding the adequacy of analysis and mitigation measures for special-status species, including but not limited to the federally threatened south central California coast Distinct Population Segment steelhead (*Oncorhynchus mykiss irideus*), the federally endangered tidewater goby (*Eucyclogobius newberryi*), the federally endangered and State species of special concern arroyo toad (*Anaxyrus californicus*), the federally threatened and State species of special concern California red-legged frog (*Rana draytonii*), the State endangered and federally proposed threatened pop. 4 – central coast Distinct Population Segment foothill yellow-legged frog (*Rana boylii*), the State candidate for listing Southern California/Central Coast evolutionarily significant unit of mountain lion (*Puma concolor*), the State endangered and fully protected bald eagle (*Haliaeetus leucocephalus*), the State fully protected golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*), the State threatened bank swallow (*Riparia riparia*), the federally and State endangered least Bell's vireo (*Vireo bellii pusillus*), the State threatened tricolored blackbird (*Agelaius tricolor*), the State Candidate for listing Crotch bumble bee and western bumble bee, and the State species of special concern Monterey hitch (*Lavinia exilcauda harengus*), Pacific lamprey (*Entosphenus tridentatus*), and western pond turtle (*Emys marmorata*),

CDFW maintains the same prior recommendations and has the following additional comments and recommendations regarding the analysis of Project impacts and specific mitigation measures for inclusion in the DEIR.

COMMENT 1 - Fisheries

- **Salinas Valley Water Project (SVWP) Flow Prescription for Steelhead Trout in the Salinas River and Salinas River Long-Term Management Plan (LTMP) (Pages ES 20 and 4.1-8).** The DEIR states that the United States Army Corps of Engineers initiated formal consultation in 2002 with the National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA) Section 7 for the SVWP. MCWRA developed the SVWP Flow Prescription in 2005 for management of steelhead in the Salinas River, defining flow requirements and operational targets for steelhead and establishing three main areas of monitoring (i.e., population monitoring, flow/migration monitoring, and water quality/habitat monitoring). These requirements were incorporated into the NMFS Biological Opinion (BO) for the SVWP and MCWRA's water rights for the reservoirs. NMFS subsequently withdrew the BO on February 20, 2019.

  The DEIR summarizes (Table 4.1-2) the SVWP Flow Prescription criteria and requirements for steelhead in the Salinas River (MCWRA 2005). Although this SVWP Flow Prescription is incorporated into the MCWRA water rights, the BO, and the development of the Habitat Conservation Plan (HCP) for the Salinas River Long Term Management Plan, the development of the prescribed flows for the SVWP has not undergone a flow study design vetting process in collaboration with CDFW. CDFW recommends that prior to certifying and approving the Interlake Tunnel EIR, MCWRA coordinate with CDFW Central Region to fully vet the flow design study and results, and ensure that established methodologies were used to determine adequate flow prescriptions for all life stages of steelhead and other native fish species in the Salinas River. Examples of established flow study methodologies can be found at the following CDFW Website: https://wildlife.ca.gov/Conservation/Watersheds/Instream-Flow.

- **Natural Communities Conservation Planning (NCCP) Process**: The DEIR states that since the withdrawal by NMFS of the BO, MCWRA has entered into a charter with NMFS and the United States Fish and Wildlife Service (USFWS) on consultation and coordination to secure a HCP under the Salinas River Long Term Management Plan. MCWRA intends to prepare a joint HCP Environmental Impact Statement and Environmental Impact Report (EIS/EIR) subsequent to the Interlake Tunnel EIR that will reflect any CEQA certification and approval of the Interlake Tunnel Project. The Long Term Management Plan would cover the Salinas River watershed and is intended to address MCWRA facilities operations while addressing issues that include flood risk reduction, water supply, water quality, natural resource conservation, threatened and endangered species management, and compliance with federal and state environmental laws.

Given the size and scope of the Project and the probability for take of State-listed and other special status species and loss of suitable habitat for these species, CDFW recommends that MCWRA consult with CDFW regarding the development of a NCCP process concurrently with the HCP process, to protect plants, animals, and their habitats within the Salinas River watershed, while allowing compatible Project activities. CDFW also recommends that the DEIR include analysis toward developing an NCCP with CDFW to address Project operations impacts on special status species and habitats.

- **Page 4.3-197:** The DEIR describes consultation with NMFS (NMFS 2007) and recommendations about flows by reach for specific minimum flow criteria. CDFW is a Trustee and Responsible Agency with a nexus through lake and streambed alteration regulatory authority, CESA, CEQA, Fish and Game Code section 711.7, and required water rights consultation pursuant to Water Code sections 1701.2, subdivision (c) and California Code of Regulations Title 23, section 794, subdivision (b); however, CDFW was not consulted regarding the operations flow study design in advance of issuance of the NOP, DEIR, or water right change petitions. Early consultation would allow CDFW to provide appropriate feedback on reservoir operation management and suitable flow release for steelhead and other fish, and for riparian habitat. The DEIR does not present information about the flow study design and results, making it difficult for CDFW to determine the Project's biological impacts to fisheries within the Nacimiento, San Antonio, and Salinas Rivers downstream of the reservoirs.

- **Impact BIO-9: Potential to Interfere with Fish or Wildlife Movement (page 4.3-206; Table 4.3.5 page 4.3-214):** This impact analysis concludes that operation of the reservoirs would not be expected to impede fish movement downstream of the reservoirs to the Salinas River Lagoon because flows in the rivers and outflow from the Salinas River lagoon would be sufficient to maintain fish passage when compared to existing conditions. The DEIR determined that a mitigation measure to address impediments to fisheries is not applicable.

  Fish and Game Code Section 5937 requires the owner of any dam to allow for sufficient flow downstream of the dam to keep fish in good condition. CDFW recommends that the DEIR specify how operations of the Nacimiento and San Antonio Reservoirs complies with Section 5937 of Fish and Game Code by providing "good conditions" for fisheries resources including adult steelhead spawning, adult steelhead in-migration and out-migration, smolt outmigration, and conditions suitable for juvenile steelhead rearing, in terms of survival and growth. CDFW also recommends that the flow regime design for reservoir operations incorporates a multi-(native) species ecological approach with emphasis on target species, including steelhead, tidewater goby, Monterey roach (*Lavinia symmetricus subditus*), Monterey hitch, Pacific lamprey, and additional native fish species. CDFW advises that the flow regime consider maintaining in good condition other special-status

aquatic species and habitats, such as California red-legged frog, foothill yellow-legged frog, western pond turtle, and riparian and wetland habitats.

- The DEIR (**page 2-68**) states that, "Modeled mean annual fish passage releases (as required by CDFW and NMFS to adhere to permit conditions) for the proposed project would be more than existing conditions (approximately 1,910 AFY), and modeled mean annual fish and wildlife habitat releases (as specified in the flow prescription to provide adequate spawning and rearing habitat in the Nacimiento River) for the proposed project would be approximately 5,000 AFY less than existing conditions for the combined reservoirs and all water years." CDFW recommends that the DEIR specify which permits and permit conditions are being referenced in this section, and how these criteria were developed.

- **Page 2-69:** Table 2-10 presents average releases in Acre Feet per Year (AFY). Presenting this information in cubic feet per second (cfs) and linking the results to specific flow studies developed and vetted in collaboration with CDFW would allow for a more thorough understanding and determination of environmental effects on fisheries and aquatic habitat.

- **Page 2-70:** Table 2-10 footnote b states, "Fish and wildlife habitat releases would be met more frequently through conservation releases under the proposed project…" The text suggests that fish and wildlife habitat releases have been evaluated but contains no reference to the study evaluating these specific releases. CDFW recommends the inclusion of this study and determination of the Project release frequency as an appendix to the DEIR.

- **Nacimiento River Fish Flows - Pages 4.3-165 and 4.3-166:** The text regarding the Nacimiento River states, "Across all years, flows would generally decrease in winter and increase in spring, summer, and early fall." CDFW recommends that for adult steelhead in-migration, out-migration, spawning, and smolt outmigration, sufficient flows greater in magnitude than that needed for rearing (which occurs year-round) will be provided from approximately December 1 through June 1. Additionally, flows need to be maintained with ramping rates that avoid stranding of migrating fish. The text also describes the steelhead spawning and egg incubation period as January through May, but doesn't describe the steelhead migration period beginning approximately December 1 that allows steelhead to access spawning grounds for spawning.

- **Upstream Fisheries Impacts - Pages ES-32; Impact BIO-8p, pages 4.3-164 and 4.3-165; 5-25; and 6-32:** The DEIR does not include sufficient information for how the Project will avoid impacting fish populations upstream of the reservoirs. CDFW recommends additional discussion of how release operations related to the Project will impact fish populations and movements upstream of each of the reservoirs, specifically rainbow trout (*O. mykiss*) in streams that drain into the Nacimiento and

San Antonio Reservoirs. CDFW recommends additional descriptions of avoidance measures taken to prevent fish stranding and provide passage at the delta created when surface water elevation is lowered. CDFW also recommends that the DEIR describe the quantity of trout habitat impacted in streams that drain into the San Antonio Reservoir by increased surface water levels in the San Antonio Reservoir.

- **Page 4.3-200:** Table t.e-29 describes timestep intervals that meet minimum fish passage flows per reach specific minimum flow criteria. In order to adequately evaluate the data in this table, CDFW recommends that the DEIR include the flow study design and results.

COMMENT 2: Arroyo Toad, California Red-Legged Frog (CRLF), and Foothill Yellow-Legged Frog (FYLF)

Arroyo toads utilize low gradient, perennial streams with sand bars or sandy banks; FYLF are primarily stream dwelling and require shallow, flowing water in streams and rivers with at least some cobble-sized substrate; and CRLF primarily inhabit ponds but can also be found in other waterways including marshes, streams, and lagoons, and the species will also breed in ephemeral waters (Thomson et al. 2016). FYLF and CRLF have been documented in the vicinity of the Project site (CDFW 2023). The DEIR (Impact BIO-8c) states that the Project site contains suitable species habitat within areas of inundation and construction. The description in Mitigation Measure BIO-8.4 for the relocation of amphibian species to suitable habitat outside the Project area would constitute take for any State-listed species.

Recommended Mitigation Measure 1: Surveys for Arroyo Toad, FYLF and CRLF
CDFW recommends that a qualified wildlife biologist conduct surveys for FYLF and CRLF in accordance with the USFWS (2005) *Revised Guidance on Site Assessment and Field Surveys for the California Red-legged Frog* to determine if FYLF or CRLF are within or adjacent to the Project area; while this survey is designed for CRLF, the survey may be used for FYLF with focus on stream/river habitat. CDFW recommends that a qualified biologist conduct surveys for arroyo toad in accordance with the *Survey Protocol for the Arroyo Toad* (USFWS 1999).

Recommended Mitigation Measure 2: Arroyo Toad, FYLF, and CRLF Avoidance
CDFW recommends that ground-disturbing activities be timed to avoid the period when FYLF and CRLF are most likely to be moving through upland areas (i.e., November 1 to March 31). When ground-disturbing activities must take place between November 1 and March 31, CDFW recommends that a qualified biologist survey work areas before starting Project activity each day and monitor construction activity for FYLF and CRLF. CDFW similarly recommends development of a monitoring and avoidance plan for areas of suitable aquatic habitat, focusing on any areas where Arroyo Toad, FYLF and CRLF were detected during surveys.

Recommended Mitigation Measure 3: FYLF Take Authorization
If through surveys or during Project activity it is determined that FYLF occupy or have the potential to occupy the Project site and take cannot be avoided, take authorization would be warranted prior to initiating or continuing ground-disturbing activities. Take authorization would occur through issuance of an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 3 - Mountain Lion

The DEIR states that significant impacts to mountain lion could result from construction and reservoir inundation, with habitat loss from vegetation removal, excavation, and other construction. Destruction of dens, noise and vibration impacts, and night time lighting effects on behaviors, in addition to direct injury or mortality from being crushed or buried by equipment could result. The mountain lion is a specially protected mammal in the State (Fish & G. Code, § 4800). In addition, on April 21, 2020, the California Fish and Game Commission accepted a petition to list an ESU of mountain lion in southern and central coastal California as threatened under CESA (CDFW 2020a) and determined that the petitioned action "may be warranted". As a candidate species, mountain lion within the proposed ESU now has all of the protections afforded to an endangered species under CESA.

Recommended Mitigation Measure 4: Mountain Lion Habitat Assessment
The DEIR identifies the potential for mountain lion to occur within the Project footprint, and Mitigation Measure BIO-8.15 proposes camera surveys within 2,000 feet of the Project and surveys of the site by a qualified biologist within 30 days prior to stating Project activity. CDFW recommends that the qualified biologist conduct a habitat assessment and suitable habitat mapping of Project areas in advance of Project implementation, to determine where in the Project area or its vicinity suitable habitat occurs as well as caves and other natural cavities and thickets of brush and timber that provide cover and can be used for denning.

Recommended Mitigation Measure 5: Mountain Lion - No Night Work
To minimize impacts to movement of mountain lion during construction, CDFW recommends that no night work occur in drainages and riparian areas of the Project.

Recommended Mitigation Measure 6: Mountain Lion - Avoiding Use of Rodenticides
CDFW discourages the use of rodenticides and second-generation anticoagulant rodenticides due to their harmful effects on the ecosystem and wildlife. CDFW recommends prohibiting the use of such materials during Project activities.

Recommended Mitigation Measure 7: Mountain Lion – Habitat Mitigation
The DEIR proposes compensation for loss of habitat. CDFW recommends that no net loss of suitable habitat for mountain lions occur as a result of the Project. CDFW also recommends that the DEIR identify opportunities for the Project to enhance nearby

areas and create or enhance movement opportunities such as wildlife corridor restoration as potential mitigation strategies. For any conservation areas that provide habitat characteristics important for denning or that form or enhance habitat connectivity in areas where linkages or corridors are reduced, CDFW recommends that mitigation lands be protected in perpetuity under a conservation easement dedicated to a local land conservancy or other appropriate entity that has been approved by CDFW to hold and manage mitigation lands.

Recommended Mitigation Measure 8: Mountain Lion – Avoidance and Take Authorization
In the event that a mountain lion or den is detected during surveys, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If avoidance is not feasible, consultation with CDFW is warranted and acquisition of an Incidental Take Permit for mountain lion may be warranted prior to Project implementation, to avoid unauthorized take, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 4: Nesting Bald Eagle (BAEA) and Golden Eagle (GOEA)

The DEIR (Impact BIO-8g) acknowledges that BAEA and GOEA occurrences have been documented within the vicinity of the Project boundary and potential suitable nesting habitat and foraging habitat occurs throughout the Project area, including potential areas of inundation. Without appropriate avoidance and minimization measures, potentially significant impacts associated with the Project's construction include loss of foraging and/or nesting habitat, nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Without appropriate survey methods, eagles nesting in the vicinity of a project can remain undetected, preventing avoidance and minimization measures from being applied. Human activity near nest sites can cause reduced provisioning rates of GOEA chicks by adults (Steidl et al. 1993). Depending on the timing of construction, Project activities including noise, vibration, odors, and movement of workers or equipment could affect nests and also have the potential to result in nest abandonment.

Recommended Mitigation Measure 9: Focused Surveys for Nesting Eagles
CDFW recommends that a qualified biologist conduct surveys for nesting eagles following the *Protocol for Golden Eagle Occupancy, Reproduction, and Prey Population Assessment* (Driscoll 2010), and the *Protocol for Evaluating Bald Eagle Habitat and Populations in California* (Jackman and Jenkins 2004). If ground-disturbing activities take place during the typical bird breeding season of February 1 through September 15, CDFW recommends that additional pre-construction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.

Recommended Mitigation Measure 10: Eagle Avoidance
If an active eagle nest is found, CDFW recommends implementation of a minimum ½-mile no-disturbance buffer 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 parental care for survival. If nesting eagles are detected and the ½-mile no-disturbance nest buffer is not feasible, consultation with CDFW is warranted to determine if the Project can avoid take.

COMMENT 5: White-Tailed Kite

The DEIR states (Impact BIO-8j) that suitable foraging and nesting habitat for white-tailed kite occurs in Project construction, inundation, and downstream riparian habitat, and that Project activities may significantly impact nesting white-tailed kites.

Recommended Mitigation Measure 11: White-Tailed Kite Surveys
To avoid potential Project-related impacts to the species, CDFW recommends that the DEIR require a qualified avian biologist to conduct surveys for nesting white-tailed kites prior to commencing Project-related activities, to reasonably assure that take of this species will not occur as a result of disturbance associated with Project implementation. CDFW recommends that surveys extend to a ¼ mile radius around all Project activities.

Recommended Mitigation Measure 12: White-Tailed Kite Avoidance
CDFW recommends that a minimum no-disturbance buffer of ¼ mile be delineated around active nests of white-tailed kites 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 parental care for survival. CDFW advises that reductions in no-disturbance buffer not be allowed absent a compelling biological or ecological reason to do so.

COMMENT 6: Bank Swallow (BASW)

The DEIR acknowledges the potential for the Project to temporarily disturb and permanently alter suitable nesting habitat for bank swallows and to directly impact individuals if present during construction activities. Depending on the timing of construction, Project activities including noise, vibration, odors, visual disturbance, and movement of workers or equipment could affect nesting individuals and have the potential to result in nest abandonment or reduced nesting success, significantly impacting local nesting BASW.

Recommended Mitigation Measure 13: Focused BASW Surveys
To reduce potential Project-related impacts to BASW, CDFW recommends that a qualified biologist conduct focused surveys for BASW following standard survey methodology developed by the Bank Swallow Technical Advisory Committee (2017) prior to Project initiation, within the Project area and a 500-foot buffer around the Project area. In addition, if Project activities will take place during the typical avian breeding

season (February 1 through September 15), CDFW recommends that additional preconstruction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of construction.

Recommended Mitigation Measure 14: BASW Avoidance Buffers
If an active BASW nest, or nest colony, is found during protocol or preconstruction surveys, CDFW recommends implementing and maintaining a minimum 500-foot no-disturbance buffer 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 site or parental care for survival.

Recommended Mitigation Measure 15: BASW Take Authorization
If a 500-foot no-disturbance nest buffer is not feasible, consultation with CDFW is warranted and acquisition of an Incidental Take Permit for BASW may be necessary prior to project implementation to avoid unauthorized take, pursuant to Fish and Game Code section 2081, subdivision (b).

COMMENT 7: Least Bell's Vireo (LBV)

LBV occurrences have been documented within the Project area and suitable riparian habitat for nesting occurs in the Project vicinity (CDFW 2023). Suitable LBV habitat includes rivers and streams with dense riparian vegetation. Breeding habitat loss resulting from urban development, water diversion, and spread of agricultural is the primary threat to LBV, and the primary cause of decline for this species has been the loss and alteration of riparian woodland habitats (USFWS 2006). Fragmentation of their preferred habitat has also increased their exposure to brown-headed cowbird (*Molothrus ater*) parasitism (Kus and Whitfield 2005). Current threats to their preferred habitat include colonization by non-native plants and altered hydrology (diversion, channelization, etc.) (USFWS 2006). Review of aerial imagery indicates that suitable habitat for LBV occurs within the Project area. Without appropriate avoidance and minimization measures, potential significant impacts associated with Project activities may include nest abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Recommended Mitigation Measure 16: LBV Habitat Assessment
CDFW recommends that a qualified biologist conduct a habitat assessment in advance of Project implementation, to determine where the Project site or its immediate vicinity contains suitable habitat for LBV. Although LBV inhabit riparian woodlands, the species has also been found to benefit from non-riparian systems including brushy fields, second-growth forest or woodland, scrub oak, coastal chaparral, and mesquite brushlands (Kus et al. 1989).

Recommended Mitigation Measure 17: Focused LBV Surveys
CDFW recommends that a qualified wildlife biologist conduct surveys following the survey methodology developed by USFWS (2001) prior to Project initiation, within the

Project area and a 500-foot buffer around the Project area. In addition, if Project activities will take place during the species' nesting season of April 1 through August 31, CDFW recommends that additional preconstruction surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project activities such as construction or habitat removal.

Recommended Mitigation Measure 18: LBV Nest Avoidance Buffers
If an LBV nest is found during protocol or preconstruction surveys, CDFW recommends maintaining a minimum 500-foot no-disturbance buffer until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest site or parental care.

Recommended Mitigation Measure 19: LBV Habitat Mitigation
CDFW recommends that impacts to known nest trees be avoided at all times of year. Regardless of nesting status, if potential or known LBV nesting habitat is removed, CDFW recommends that it be replaced with appropriate native tree species, planted at a ratio of 3:1 (replaced to removed), in an area that will be protected in perpetuity, to offset the loss of nesting habitat.

Recommended Mitigation Measure 20: LBV Take Authorization
If a 500-foot no-disturbance nest buffer is not feasible, consultation with CDFW is warranted and acquisition of an Incidental Take Permit for LBV may be necessary prior to project implementation, to avoid unauthorized take, pursuant to Fish and Game Code section 2081, subdivision (b). Alternatively, the applicant may assume presence of LBV within the Project area and obtain an Incidental Take Permit.

COMMENT 8: Tricolored Blackbird (TRBL)

The DEIR acknowledges (Impact BIO-8k) that TRBL are known to occur in the Project area (CDFW 2023), and suitable habitat exists in areas of proposed inundation and construction areas. TRBL aggregate and nest colonially, forming colonies of up to 100,000 nests (Meese et al. 2014) and disturbance to nesting colonies can cause entire nest colony site abandonment and loss of all unfledged nests (Meese et al. 2014). Without appropriate avoidance and minimization measures for TRBL, potential significant impacts include nesting habitat loss, nest and/or colony abandonment, reduced reproductive success, and reduced health and vigor of eggs and/or young.

Recommended Mitigation Measure 21: TRBL Surveys
CDFW recommends that Project activities be timed to avoid the avian nesting season of February 1 through September 15. If Project activity that could disrupt nesting must take place during that time, CDFW recommends that a qualified biologist conduct surveys for nesting TRBL no more than 10 days prior to the start of implementation to evaluate presence or absence of TRBL nesting colonies in proximity to Project activities and to evaluate potential Project-related impacts.

Recommended Mitigation Measure 22: TRBL Colony Avoidance:
If an active TRBL nesting colony is found during surveys, CDFW recommends implementation of a minimum 300-foot no-disturbance buffer, in accordance with CDFW's (2015) *Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015*, until the breeding season has ended or until a qualified biologist has determined that nesting has ceased and the young have fledged and are no longer reliant upon the colony or parental care.

Recommended Mitigation Measure 23: TRBL Take Authorization
In the event that a TRBL nesting colony is detected during surveys and a 300-foot no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss whether the Project can avoid take and, if take avoidance is not feasible, to acquire an Incidental Take Permit pursuant to Fish and Game Code section 2081, subdivision (b), prior to any Project activities.

COMMENT 9: Crotch Bumble Bee and Western Bumble Bee

Issues and Impacts: The DEIR (Impact BIO-8a, MM BIO-8.1, 8.2, & 8.3) acknowledges that CBB and WBB have been documented within the Project area (CDFW 2023). Suitable habitat includes areas of grasslands and upland scrub that contain requisite habitat elements, such as small mammal burrows. These bumble bee species primarily nest in late February through late October underground in abandoned small mammal burrows but may also nest under perennial bunch grasses or thatched annual grasses, underneath brush piles, in old bird nests, and in dead trees or hollow logs (Williams et al. 2014, Hatfield et al. 2015). Overwintering sites utilized by mated queens include soft, disturbed soil (Goulson 2010), or under leaf litter or other debris (Williams et al. 2014). CBB and WBB have each experienced range-wide declines in abundance and range restrictions. Project-related ground disturbance, vegetation removal, and inundation could eliminate habitat features and significantly impact CBB and WBB populations. Without appropriate avoidance and minimization measures, specific effects include loss of foraging plants, changes in foraging behavior, burrow collapse, nest abandonment, reduced nest success, reduced health and vigor of eggs, young and/or queens, in addition to direct mortality.

Recommended Mitigation Measure 24: CBB and WBB Surveys and Avoidance
CDFW recommends that all small mammal burrows and thatched/bunch grasses be surveyed for the species and their nests during the optimal flight period of March 1 through July 31 during the peak blooming period of preferred plant species prior to Project implementation. CDFW recommends avoidance of detected queens and workers, and to allow CBB and WBB to leave the Project site of their own volition. Avoidance and protection of detected nests prior to or during Project implementation is recommended with delineation and observance of a 50-foot no-disturbance buffer.

Recommended Mitigation Measure 25: CBB and WBB Take Authorization
Any detection of CBB or WBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take. If take cannot be avoided, take authorization would be warranted through issuance of an Incidental Take Permit, pursuant to Fish and Game Code section 2081, subdivision (b).

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database that 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 (CNDDB). The CNDDB field survey form can be obtained at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, 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 (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist MCWRA in identifying and mitigating Project impacts on biological resources. If you have questions regarding this letter, please contact Annette Tenneboe, Senior Environmental Scientist (Specialist), at (559) 580-3202 or by email at Annette.Tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

Attachment
Enclosures: NOP letter, Protest letter

ec: William Stevens
NOAA Fisheries West Coast Region
william.stevens@noaa.gov

Arvin Chi
State Water Resources Control Board
arvin.chi@waterboards.ca.gov

Jonathon Mann
Kristine Atkinson
Annette Tenneboe
California Department of Fish and Wildlife

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Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PROJECT: Interlake Tunnel and Spillway Modification Project

STATE CLEARINGHOUSE No.: 2016041085

RECOMMENDED MITIGATION MEASURES	STATUS/DATE/INITIALS
Before Project Activity	
Recommended Mitigation Measure 1: Surveys for Arroyo Toad, FYLF, and CRLF	
Recommended Mitigation Measure 2: Arroyo Toad, FYLF, and CRLF Avoidance	
Recommended Mitigation Measure 3: FYLF Take Authorization	
Recommended Mitigation Measure 4: Mountain Lion Habitat Assessment	
Recommended Mitigation Measure 5: Mountain Lion - No Night Work	
Recommended Mitigation Measure 6: Mountain Lion – Avoiding Use of Rodenticides	
Recommended Mitigation Measure 7: Mountain Lion – Habitat Mitigation	
Recommended Mitigation Measure 8: Mountain Lion – Avoidance and Take Authorization	
Recommended Mitigation Measure 9: Focused Surveys for Nesting Eagles	
Recommended Mitigation Measure 10: Eagle Avoidance	
Recommended Mitigation Measure 11: White-Tailed Kite Surveys	
Recommended Mitigation Measure 12: White-Tailed Kite Avoidance	
Recommended Mitigation Measure 13: Focused BASW Surveys	
Recommended Mitigation Measure 14: BASW Avoidance Buffers	
Recommended Mitigation Measure 15: BASW Take Authorization	
Recommended Mitigation Measure 16: LBV Habitat Assessment	

RECOMMENDED MITIGATION MEASURES	**STATUS/DATE/INITIALS**
Recommended Mitigation Measure 17: Focused LBV Surveys	
Recommended Mitigation Measure 18: LBV Nest Avoidance Buffers	
Recommended Mitigation Measure 19: LBV Habitat Mitigation	
Recommended Mitigation Measure 20: LBV Take Authorization	
Recommended Mitigation Measure 21: TRBL Surveys	
Recommended Mitigation Measure 22: TRBL Colony Avoidance	
Recommended Mitigation Measure 23: TRBL Take Authorization	
Recommended Mitigation Measure 24: CBB and WBB Surveys and Avoidance	
Recommended Mitigation Measure 25: CBB and WBB Take Authorization	
During Project Activity	
Recommended Mitigation Measure 2: Arroyo Toad, FYLF, and CRLF Avoidance	
Recommended Mitigation Measure 5: Mountain Lion - No Night Work	
Recommended Mitigation Measure 6: Mountain Lion – Avoiding Use of Rodenticides	
Recommended Mitigation Measure 8: Mountain Lion – Avoidance and Take Authorization	
Recommended Mitigation Measure 10: Eagle Avoidance	
Recommended Mitigation Measure 12: White-Tailed Kite Avoidance	
Recommended Mitigation Measure 14: BASW Avoidance Buffers	
Recommended Mitigation Measure 18: LBV Nest Avoidance Buffers	
Recommended Mitigation Measure 22: TRBL Colony Avoidance	
Recommended Mitigation Measure 24: CBB and WBB Surveys and Avoidance	

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
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EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

June 7, 2016

Robert Johnson, Deputy General Manager
Monterey County Water Resources Agency
893 Blanco Circle
Salinas, California 93901-4455
E-mail: johnsonr@co.monterey.ca.us

Subject: Notice of Preparation, SCH No. 2016041085
Interlake Tunnel and Spillway Modification Project

Dear Mr. Johnson:

The California Department of Fish and Wildlife (CDFW) appreciate the opportunity to review the Notice of Preparation (NOP) for the Interlake Tunnel and Spillway Modification Project (Project) and provide the following comments.

Project Description

According to the NOP, the proposed Project is comprised of two separate but interrelated components, the construction of an approximately two mile water conveyance tunnel from Nacimiento Reservoir to San Antonio Reservoir and modifications to the existing spillway at San Antonio Reservoir. The Project description includes the following elements: interlake tunnel (gravity flow), tunnel intake facility at Nacimiento Reservoir, tunnel outlet facility at San Antonio Reservoir, San Antonio Dam spillway capacity increase, removal and replacement of infrastructure surrounding San Antonio Reservoir, and disposal of spoils. The proposed modifications of the spillway at the San Antonio Reservoir would provide a 10-foot increase in the maximum lake elevation, effectively increasing the storage capacity of the reservoir by approximately 59,000 acre-feet (af).

The proposed Project will be constructed within, between and adjacent to Nacimiento and San Antonio Reservoirs. These reservoirs are located in the Salinas River Basin, northwest of Paso Robles, in Monterey and San Luis Obispo Counties. Nacimiento Dam and its reservoir are located in northern San Luis Obispo County, approximately 20 miles inland from the coast and 10 miles upstream from the confluence of the Nacimiento and Salinas Rivers. San Antonio Dam and its reservoir are located in southern Monterey County, north of Nacimiento Reservoir and 5 miles upstream from the confluence of the San Antonio and Salinas Rivers.

Project Purpose and Need

According to the NOP, the purpose of the proposed Project is to develop a multi-benefit project for the Salinas River Basin to improve water supply sustainability, water quality and flood management. The proposed Project is intended to meet the following objectives:

- Minimize flood releases from Nacimiento Reservoir and reduce associated downstream flood damages;
- Increase the overall surface water supply available from Nacimiento and San Antonio Reservoirs by maximizing the opportunity for water to be collectively stored in the reservoirs;
- Improve the hydrologic balance of the groundwater basin in the Salinas Valley and reduce seawater intrusion;
- Continue to meet environmental flow requirements;
- Minimize impacts to existing hydroelectric production;
- Preserve recreational opportunities in the reservoirs; and
- Protect agricultural viability and prime agricultural land.

Recreational Fisheries, Introduction of White Bass to San Antonio Reservoir

The Salinas River is the Central Coast's largest river and has the fourth largest watershed in California, flowing 170 miles from the mountains in southern San Luis Obispo County northward to Monterey Bay. The Salinas River watershed, which includes the Nacimiento River, San Antonio River, Estrella River, and Arroyo Seco River, encompasses approximately 4,780 square miles. It supplies water for central coast cities from San Luis Obispo to Salinas as well as one of the most productive agricultural valleys in the United States, the Salinas Valley. The Salinas River flows into one of one of the world's most diverse marine ecosystems, the Monterey Bay National Marine Sanctuary. The Salinas River is designated by the State Water Resources Control Board (State Water Board) as one of the most critical watersheds in California due to degrading habitats, exportation, over-use and non-point pollution impacts on water quality. The Project may result in these conditions worsening unless its impacts are appropriately mitigated.

San Antonio Reservoir

San Antonio Reservoir is located in southern Monterey County on the San Antonio River and began operations in 1967. San Antonio Dam is located 5 miles west of Bradley and 3 miles north of Nacimiento Dam. At full pool, the reservoir has a volume of 335,000 af, surface elevation of 780 feet, and a maximum depth of 180 feet. San Antonio Reservoir yields on average about 13 percent of the total water in the Salinas River system. Average annual release is about 63,000 af but has been as high as 310,000 af.

The fish assemblage found in Lake San Antonio is a mixture of introduced sport fish, introduced forage fish and native fish. Unless the Project is designed to prevent or minimize to the greatest extent possible the transfer of fish from Nacimiento, an introduction of water from Nacimiento into San Antonio has the potential to change the fisheries composition of San Antonio to resemble that of Nacimiento. White bass, occurring in Nacimiento, could be introduced to San Antonio and hybridize with striped bass. Since white bass have not been detected in San Antonio, a CDFW approved monitoring program should be implemented to determine the presence of white bass in San Antonio reservoir. Further, a long-term CDFW approved monitoring program should be implemented following construction to evaluate species composition.

Raising the dam to increase maximum storage capacity, plus the diversion of water from Nacimiento into San Antonio, will result in increased fluctuations between maximum and minimum storage levels. Greater fluctuations in surface water elevation can impact fish species composition, as some species spawn in deeper waters and are less impacted by increased fluctuations in elevation than species which spawn in shallow waters. Spotted bass is another species that occurs in Nacimiento and not San Antonio. Spotted bass, which tend to spawn deeper than both largemouth bass and smallmouth bass, are more tolerant to fluctuating lake levels. Because of this, they may outcompete both other species leading to a population of smaller, less desirable largemouth bass and smallmouth bass. Therefore, over time the increased fluctuations in water level can also contribute to a change in the species composition for recreational fisheries.

The DEIR should discuss appropriate measures to prevent or minimize to the maximum extent possible the transfer of new fish species from Nacimiento into San Antonio Reservoir, and the impact to the fisheries should these measures fail. Additional impacts that can potentially change the species composition for fisheries should also be thoroughly discussed.

Nacimiento Reservoir

Nacimiento Reservoir is located on the Nacimiento River about 18 miles northwest of Paso Robles in San Luis Obispo County. It was created by the construction of the Nacimiento Dam, completed in 1957. At maximum pool, the reservoir's storage

capacity is 377,900 af with a surface elevation of 800 feet and a surface area of 5,400 acres. The maximum depth of the lake is 175 feet, with annual fluctuations usually ranging from 30 to 70 feet.

Largemouth bass are one of the primary sport species sought by anglers in Nacimiento Reservoir. White bass were introduced to Lake Nacimiento in 1965, and are voracious pelagic predators that compete with striped bass and other piscivorous fishes. CDFW currently regards the white bass as an undesirable non-native species due to its predation of desirable species including both native and protected species. White bass are currently classified as a "Detrimental Species" under the California Code of Regulations, Title 14, Section 671; Detrimental Species are so designated because they pose a threat to native wildlife, the agriculture interests of the State or to public health or safety.

CDFW is concerned that reservoir releases may result in white bass becoming established in the Salinas River, its tributaries, or the Salinas River lagoon, and prey on juvenile steelhead. White bass are already occasionally captured in the Salinas River during sampling events, and large numbers of reservoir fish species, including white bass, were seen in the Nacimiento River below Nacimiento Dam following reservoir flood control releases during the spring of 1996. The proposed Project would move water from Lake Nacimiento to Lake San Antonio, and therefore may result in the spread of white bass to yet another reservoir, and in so doing potentially increase the likelihood of white bass introduction to the Salinas River from the San Antonio watershed, where they would prey upon the vulnerable steelhead population.

Tunnel Placement and Design

Incorporating a deep water intake in Lake Nacimiento would provide a lower probability of white bass entering the tunnel. The lower probability would depend upon lake level fluctuations as the lower the lake level, the higher probability of white bass to the proximity of the intake. With higher lake levels it is expected the deep water intake will be located at a water elevation below the normal habitat of white bass and within a zone of typically low dissolved oxygen where fish and their eggs and larvae have a low probability of survival. Potential intake locations, designs, and mitigation measures are recommended to be thoroughly analyzed and discussed in the DEIR for the project, including a comprehensive risk assessment of introducing white bass into the San Antonio Reservoir, the Salinas River and its tributaries in the event any of the mitigation measures fail. It is also advised that Monterey County Water Resources Agency (MCWRA) consult with CDFW prior to the final determination of the location for the deep water intake. As an additional precaution to restrict white bass, the tunnel portal should be equipped with a conventional fish grate consisting of intersecting bars with openings of 1.75 mm or less.

Salinas River

Except for uncontrolled flows during winter storms, the river hydrology is regulated by the two main storage reservoirs (Lake Nacimiento and Lake San Antonio). Thus, changes to how water is stored and released in these reservoirs associated with Project implementation would result in substantial changes to the Salinas River and its associated natural resources without measures in place to avoid such changes. Flood control releases are made to maintain adequate storage capacity during runoff periods. In wet years, these releases can continue into the summer. During times when the Salinas River is dry, MCWRA makes releases from the reservoirs to keep water flowing downstream to the area between Chualar and Spreckels (7 to 13 miles downstream of Chualar Bridge). The objective of these releases is to recharge the groundwater aquifer. During wet years, 100,000 af may be released in this way; during dry years, as much as 230,000 af. When natural runoff is sufficient to maintain flow in the Salinas River, releases from the reservoirs are cut back to minimum levels, typically 3 cubic feet per second (cfs) (2 cfs per water right) from San Antonio and 25 cfs from Nacimiento. The purpose of these releases is to maintain fish in good condition that exist downstream of the dams (Fish and Game Code Section 5937). Per existing water rights, these minimum flows may be reduced under conditions of low reservoir storage, and during drought conditions (Nacimiento at or below 748 feet or 132,900 af storage) when minimum release required from Nacimiento Reservoir is reduced to 10 cfs. When the level of Nacimiento Reservoir falls below 689 feet (22,000 af storage), MCWRA is not required to make releases to the river.

Steelhead trout inhabiting the Salinas River Basin are a part of the South-Central California Coast Evolutionary Significant Unit (ESU) as defined by the National Marine Fisheries Service (NMFS). The NMFS listed steelhead trout in the South-Central California Coast ESU as a federally threatened species effective October 17, 1997 (Federal Register Vol. 62, No. 159). The South-Central California Coast ESU is considered by NMFS to be distinct from the Southern California ESU to its south and the Central California Coast ESU to its north. NMFS's recovery plan for South-Central California Coast Steelhead (SCCCS) identifies the Salinas River, including Nacimiento and San Antonio Rivers as a Core 1 recovery stream for the ESU. This designation identifies that the Salinas River is one of the highest priority watersheds for recovery of steelhead within this ESU. Critical recovery actions for this ESU include alleviating threats to instream flows and impediments to fish passage.

The South-Central California Coast ESU includes steelhead populations in streams from the Pajaro River (inclusive) to (but not including) the Santa Maria River. In the mid-1960s, CDFW estimated that the ESU was composed of 27,750 spawning steelhead of which an estimated 500 spawned in the Salinas Basin. Five major streams (Pajaro River, Salinas River, Carmel River, Little Sur River, and Big Sur River) supported 4,750 spawners in the mid-1960s but support fewer than 500 in

recent years with recent surveys in the Salinas River, primarily in the Arroyo Seco tributary, indicating that run averages may be much smaller. South-Central California Coast steelhead is regarded by the State as imperiled as it is vulnerable to extirpation and recovery of these populations is a high priority for steelhead management in the State.

Habitat conditions for steelhead in the Salinas Basin are distinct from most other streams in the South-Central California Coast ESU of winter steelhead. The Salinas River drains an inland valley separated from the ocean by the coastal mountains. The Salinas tributaries that support steelhead drain the eastern side of the coast range whereas most of the other streams are on the west side of the coast range and drain directly to the ocean. The geographic orientation of the Salinas Valley experiences a different micro-climate than other watersheds in the SCC ESU and influences steelhead habitat conditions, including stream temperature during the summer rearing periods and the duration and frequency of streamflow conditions suitable for migration. Therefore, steelhead in the Salinas River may experience a greater number of years when access to the ocean is not possible due to low streamflow in comparison to other coastal streams in the region. Migration of adults from the ocean may begin later in the season, and seaward migration of juveniles may be truncated in the spring as compared to the other coastal drainages.

Any changes to the Salinas river flow volumes and timing of releases associated with the proposed Project could worsen conditions for steelhead. Therefore, CDFW advises the DEIR to comprehensively evaluate the potential for impacts to this species, including its habitat, as a consequence of temporal differences in flow volumes as a result of the Project.

Water Rights, Current Flow Prescriptions, and Fish Passage

After construction, the Project will divert water from the Nacimiento Reservoir to San Antonio Reservoir that would have otherwise been spilled or released at Nacimiento Dam. By modifying the existing spillway at San Antonio Dam with a crest control device, San Antonio Reservoir's maximum lake elevation would effectively increase by 10 feet and water storage capacity increase by approximately 59,000 af. It is our understanding that for Water Right Application 16761 (A016761), MCWRA will need to file a petition for change for terms and conditions to modify the storage capacity at San Antonio Reservoir. They will need to file another petition for change to add a point of diversion to offstream storage on Nacimiento Reservoir under A016124 and/or A030532. Pursuant to Water Code Sections 1701.3 (b)(2) and 1703 MCWRA will be required to consult with CDFW.

The current flow prescriptions for habitat maintenance under Water Right Licenses 7543 (Nacimiento), and 12624 (San Antonio), are consistent with the 2007 Salinas Valley Water Project (SVWP) biological opinion (NMFS 2007) issued to the United

States Army Corps of Engineers (Corps) by the NMFS. The reservoir releases and resulting streamflow conditions developed for the Salinas Valley Water Project (SVWP) were designed to meet MCWRA's water supply goals and minimize impacts to federally listed threatened SCCCS DPS and their designated critical habitat. The *Salinas Valley Water Project Flow Prescription for Steelhead Trout in the Salinas River* (MCWRA 2005; flow prescription) relies on triggers primarily based on combined reservoir storage and mean daily stream flow to initiate releases from the reservoirs to maintain upstream passage conditions that are similar to conditions that existed historically. Under the SVWP, MCWRA is to achieve, on a 10-year average, the median number of upstream passage days (within a 10 percent variance, and based on water year type) that occurred historically.

Both the Spillway Modification Project and the Interlake Tunnel Project, individually and in combination, would allow MCWRA to manage reservoir levels differently than under existing conditions. These changes have the potential to significantly compromise fish passage for federally threatened steelhead in the Salinas River and contribute to the further decline of the watershed's population.

The CDFW recommends that a comprehensive water operations model be developed that clearly outlines assumptions and constraints used in its development. We further recommend that this model be developed in consultation with CDFW and the NMFS. This will ensure transparency and the elimination of unnecessary disputes regarding model outputs and subsequent analyses.

Under existing conditions, reservoir storage operations have significantly affected the magnitude and frequency of flows supporting steelhead migrations in the mainstem Salinas River, and have reduced peak discharges from the dams resulting in the aggradation of sediment and vegetation throughout the lower Salinas River. As the result of the combination of pumping and reservoir storage, the flow of the Salinas River to the lagoon and ocean has been reduced from 533,000 af per year (Simpson 1946) to approximately 238,000 af per year (EDAW 2001). The average annual controlled releases from MCWRA's reservoirs are approximately 200,000 af per year (MCWRA 2015). The proposed Project could exacerbate these two problems in the Salinas River by further reducing steelhead passage days and channel aggradation. Thus, the Project has the potential to impact downstream aggradation and SCCC steelhead in the Salinas River in a manner and to an extent not considered in either the SVWP biological opinion or existing water rights licenses.

The Project will result in diversion of water that would have otherwise been released from Nacimiento Reservoir. The DEIR should evaluate any effects of the Project on reservoir releases and spill events, and associated effects on river health and steelhead migration opportunities. It should also discuss how the Project will affect the flow prescriptions in Biological Opinion for the SVWP, conditions in the current Water Right Licenses, and other related agreements.

The DEIR should discuss whether the Project will have a cumulative effect on stream flow or flow prescriptions in the Salinas and Old Salinas River channels based on current diversions proposed by MCWRA for Water Right Application 32263 A.

Water Quality - Mercury Contamination

Methylmercury can be harmful to the human nervous system and affect human development. When mercury is present in the sediment of a reservoir, small aquatic organisms transform it into methylmercury in their bodies (methylation). When small fish or other small aquatic wildlife feed on these organisms they consume the methylmercury in the organisms. Methylmercury accumulates in the tissue and biomagnification occurs as the concentration level is consumed and transferred to other trophic levels. Predatory fish such as white and spotted bass that eat smaller fish consume all the methylmercury in their prey; therefore predatory fish have the highest levels of methylmercury in their tissue.

In many areas of the Nacimiento River and San Antonio watersheds, the natural mercury levels in soil tend to be relatively high, since the area has numerous naturally occurring cinnabar (mercuric sulfide) deposits and mine sites. Mercury, while it has a definable point source, also behaves as a nonpoint source as it is carried from the point source in sediment as it runs off in rain events. Estimates from the Central Coast Regional Water Quality Control Board (Regional Board) Lake Nacimiento Loading Model indicate that approximately 77 to 93 percent of the total mercury loading into the Nacimiento Reservoir enters from the Las Tablas Creek drainage area (Las Tablas Creek and Lake Nacimiento, TMDL, 2002).

The Buena Vista and Klau Mines are located upstream of Nacimiento Reservoir along the Las Tables River, which is a major tributary to the reservoir. The United States Environmental Protection Agency labeled the Klau/Buena Vista Mines a Superfund Site, and they were placed on the National Priority List on April 16, 2006. Though no longer active, these mines have been identified as the primary point and nonpoint source of mercury contamination in the Nacimiento River watershed. The extent of the mercury contamination from the mines includes: 1) the 320 acre mercury mine site property, 2) seven miles of Las Tablas Creek downstream from the mine which includes a man-made reservoir of 7 acres with a 15 foot depth, and 3) Lake Nacimiento reservoir at the end of Las Tablas Creek which covers 1,800 acres is 14 miles long and up to 180 feet deep and is used for irrigation and drinking water.

Mercury levels are a concern from fish taken out of both Nacimiento and San Antonio Reservoirs. Fish sampling conducted in Lake Nacimiento has resulted in fish consumption advisories due to the mercury content of fish tissue exceeding United States Food and Drug Administration guidelines (Rice et al., 1994, p. 1; Rasmussen and Blethrow, 1990, p. L-12, L-13). Results of sampling in 2015 indicate that fish sampled from Nacimiento Reservoir were found to contain over double the amount of

mercury from those sampled in San Antonio Reservoir (CDFW 2015, http://www.mywaterquality.ca.gov/safe_to_eat/data_and_trends/). Only two species that are found in both reservoirs were tested. They are black bass and common carp. Black bass taken from San Antonio Reservoir were found to contain 0.40 parts per million (ppm) mercury while black bass taken from Nacimiento Reservoir contained 1.0 ppm mercury. Common carp taken from San Antonio Reservoir were found to contain 0.23 ppm mercury while common carp taken from Nacimiento Reservoir were found to contain 0.48 ppm mercury. In summary, fish sampled from Nacimiento Reservoir were found to contain twice the level of mercury as San Antonio Reservoir.

Fish tissue levels of mercury that cause a fish consumption advisory are considered an impact to the Commercial and Sport Fishing beneficial use designated for Lake Nacimiento (Las Tablas Creek and Lake Nacimiento, TMDL, 2002). An unscreened tunnel would allow for the mixing of fish species. Because of this, mercury advisory warnings that pertain to the fish in Nacimiento Reservoir would be required to pertain to all fish species found in San Antonio Reservoir as well, and would similarly impact any Commercial and Sport Fishing beneficial use designation for the lake.

Contaminated sediment and fines, and aquatic species could be transferred from Nacimiento into San Antonio via an unscreened tunnel possibly increasing the mercury loading of San Antonio Reservoir.

Project-related reservoir drawdown and construction could also result in the release of contaminated sediment and aquatic species downstream of the reservoirs and ultimately into the Salinas River. Mitigating these effects should be a part of the DEIR's analysis of measures to prevent or minimize to the maximum extent possible the transfer of new fish species into San Antonio Reservoir as commented above.

Water Quality – Dissolved Oxygen and Temperature

The placement of the tunnel could result in impacts to dissolved oxygen and temperature within the reservoirs. Building the tunnel entrance near the bottom of Nacimiento could divert water into San Antonio with lower temperature than surface water, but also low dissolved oxygen levels. Water released from near the surface would be higher in temperature, but also have a higher concentration of dissolved oxygen. The DEIR should thoroughly discuss how the tunnel placement will affect temperature, dissolved oxygen, lake stratification, and impacts to the fisheries. This is in addition to the discussion above of tunnel placement to restrict transfer of white bass into San Antonio.

Introduction of Quagga and Zebra mussels

Quagga (*Driessena bugensis*) and zebra (*Dreissena polymorpha*) mussels are highly invasive species and CDFW has devoted numerous resources to educate the public and prevent their further introduction into California's streams and lakes. Currently there is no known screen design to prevent the passage of the veliger (pelagic microscopic larvae) form of quagga or zebra mussel. Introduction of either species into Nacimiento would result in the scenario of dispersal of veligers into San Antonio via the proposed tunnel. Even though current monitoring efforts by CDFW have not detected these species within Nacimiento or San Antonio Reservoirs, the impacts for the potential introduction and spread of quagga and zebra mussels should be analyzed in the DEIR.

Special Status Species

Based on a review of the California Natural Diversity Database (CNDDB) and other CDFW resources, Project-related activities including, but not limited to, construction, downstream releases, changes to water quality, disturbance to serpentine soils, and surface water elevation increases to San Antonio Reservoir could impact the following special status plant and wildlife species and habitats known to occur in the area:

Valley oak woodland, vernal pool habitat, State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), State endangered and State fully-protected bald eagle (*Haliaeetus leucocephalus*), State fully-protected golden eagle (*Aquilla chrysaetos*), State and federally endangered least Bell's vireo (*Vireo belli pusillus*), State Candidate tricolored blackbird (*Agelaius tricolor*), State and federally threatened and State Species of Special Concern (SSSC) California red-legged frog (*Rana draytonii*), federally endangered and SSSC arroyo toad (*Bufo californicus*), State and federally threatened California tiger salamander (*Ambystoma californiense*), federally threatened vernal pool fairy shrimp (*Branchinecta lynchi*); the following SSSC: American badger (*Taxidea taxus*), prairie falcon (*Falco mexicanus*), foothill yellow-legged frog (*Rana boylii*), burrowing owl (*Athene cunicularia*), western pond turtle (*Emys marmorata*), San Joaquin whipsnake (*Masticophis flagellum ruddocki*), western spadefoot (*Spea hammondii*), and silvery legless lizard (*Anniella pulchra*).

State threatened and California Rare Plant Rank (CRPR) 1B.1: Santa Lucia purple amole (*Chloragalu purpureum* var. *purpureum*).

CRPR 1B.1: dwarf calycadenia (*Calycadenia villosa*), Mason's neststraw (*Stylocline masonii*), prostrate vernal pool navarretia (*Navarretia prostrata*), pale-yellow layia (*Layia heterotricha*).

CRPR 1B.2: Lemmon's jewelflower (*Caulanthus lemmonii*), yellow-flowered eriastrum (*Eriastrum luteum*), Jolon clarkia (*Clarkia jolonensis*), San Antonio collinsia (*Collinsia Antonia*), Davidson's bush-mallow (*Malacothamnus davidsonii*), Robbins' nemacladus (*Nemacladus secundiflorus* var. *robbinsii*), round-leaved filaree (*California macrophylla*), hooked popcornflower (*Plagiobothrys uncinatus*).

CDFW Jurisdiction

Trustee Agency Authority: CDFW is a Trustee Agency with responsibility under CEQA for commenting on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, CDFW is responsible for providing, as available, biological expertise to review and comment upon environmental documents and impacts arising from project activities, as those terms are used under CEQA (Division 13 [commencing with Section 21000] of the Public Resources Code).

California Endangered Species Act: CDFW is responsible for administering the California Endangered Species Act (CESA) (Fish and Game Code Section 2050, et seq.). "Take" of any species that is listed, or a candidate to be listed, under CESA is prohibited unless authorized by CDFW. If the Project could result in the take of any listed or candidate species, CDFW would need to issue an Incidental Take Permit for the Project to authorize that activity.

Lake and Streambed Alteration Agreement: CDFW has regulatory authority over certain activities occurring in streams and/or lakes that could substantially adversely affect any fish or wildlife resource, pursuant to Fish and Game Code sections 1600 *et seq*. If a Project would substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or deposit or dispose of debris, waste, sediment, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, notification to CDFW is required.

Notification to CDFW for this Project would be required for the proposed surface water diversion and rediversion, in addition to stream crossings and other jurisdictional features. For projects of this nature, consultation with CDFW is recommended well in advance of Project implementation. A substantial diversion of water from a river, stream, or lake is subject to Fish and Game Code (Code) sections 1600 et seq., and failure to notify is a violation of the Code. It is important to note that CDFW is required to comply with CEQA in the issuance of a lake and streambed alteration agreement (LSAA). The LSAA process is administered through the Central Region Office in Fresno and can be initiated by contacting the Lake and Streambed Alteration Program at (559) 243-4593.

Fish Placement, Transport or Possession of White Bass: Pursuant to Fish and Game Code Section 6400, it is unlawful to place, plant, or cause to be placed or planted, in any of the waters of the State, any live fish, any fresh or salt water animal, or any aquatic plant, whether taken without or within the State, without first submitting it for inspection to, and securing the written permission of CDFW.

In addition to Section 6400, it is unlawful to transport or possess any live white bass (*Marone chrysops*), whether taken within or without the state, unless it is first submitted for inspection to, and written permission is obtained from CDFW (Fish and Game Code Section 6400.5)

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited. The State fully protected golden eagle and the State endangered and fully protected bald eagle are known to occur in the vicinity of the site. Projects within occupied territories have the potential to significantly impact the species. CDFW recommends that focused surveys be conducted by experienced biologists prior to Project implementation. To avoid impact to the species, surveys should be conducted following survey methodology developed by CDFW (CDFG, 2010). In the event that the species is found within ½-mile of the site, implementation of avoidance measures are warranted. CDFW recommends that a qualified wildlife biologist be on-site during all ground disturbing/construction related activities and that a 0.5-mile no-disturbance buffer be put into effect. If the 0.5-mile no-disturbance buffer cannot feasibly be implemented, CDFW should be contacted to assist with providing and implementing additional avoidance measures. Mitigation measures for fully protected raptor species should be fully addressed in the CEQA document prepared for the Project.

Bird Protection: CDFW has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). In the event that Project-related vegetation removal will occur, it is advised that appropriate avoidance and minimization measures for raptors and other nesting birds potentially present in the Project site vicinity be addressed in the DEIR.

Water Rights: Adding a point of diversion (Nacimiento) to offstream storage (San Antonio) will likely require approval of the State Water Resources Control Board (SWRCB) under a change petition pursuant to Water Code Section 1701. A change for terms and conditions to modify the storage capacity at San Antonio will also likely require approval of the SWRCB under a change petition pursuant to Cal. Code Regs,

Title 23, Section 791(e). CDFW, as Trustee Agency, is consulted by the SWRCB during the water rights change petition process to provide terms and conditions designed to protect fish and wildlife prior to appropriation of the State's water resources. Certain fish and wildlife are reliant upon aquatic ecosystems, which in turn are reliant upon adequate flows of water. CDFW therefore has a material interest in assuring that adequate water flows within streams for the protection, maintenance and proper stewardship of those resources. CDFW provides, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities.

Federally Listed Species: CDFW also recommends consulting with the United States Fish and Wildlife Service (USFWS) on potential impacts to federally listed species including, but not limited to San Joaquin kit fox, least Bell's vireo, California red-legged frog, California tiger salamander. Similarly, for potential effects to SCCCS DPS and its critical habitat, CDFW recommends consultation with the NMFS. Consultation with the USFWS and NMFS in order to comply with FESA is advised well in advance of Project implementation.

The following provides additional comments and recommendations regarding the NOP and DEIR.

1. The DEIR should provide an analysis of impacts to State- and federally listed species, including but not limited to those species listed above.

2. Surveys for special status plant and wildlife species should be conducted using appropriate survey methodologies and during appropriate time of year. Soil and habitat type should be mapped to locate serpentine, vernal pool, and other endemic plant and animal species.

3. The DEIR should discuss how Project-related reservoir releases will be implemented so as to avoid and minimize impacts to downstream habitat, including but not limited to transport of suspended sediment, lateral and downcutting scour, introduction of contaminants such as mercury, or introduction of non-native aquatic species.

4. The DEIR should provide environmental impact avoidance and minimization measures related to sediment removal and disposal during Project-related activities.

5. The DEIR should provide a plan to monitor for sediment and contaminants, including mercury, that may be present in downstream reservoir releases, and to monitor contaminants in the water diverted from Nacimiento Reservoir into San Antonio Reservoir. This should include a plan to monitor for sediment (NTU's), total dissolved solids (TDS), and total suspended

sediment (TSS) in the water column. The plan should include measures to comply with Regional Board total daily maximum loads.

6. Reservoir drawdown for Project-related construction should occur after obtaining all pertinent permits and authorizations from CDFW and other appropriate regulatory agencies.

7. The DEIR should provide a plan to avoid or minimize transfer of mercury from Nacimiento Reservoir into San Antonio Reservoir.

8. The DEIR should include measures to prevent transfer of white bass and other fish from Nacimiento Reservoir into San Antonio Reservoir.

9. The DEIR should evaluate cumulative impacts the Project will have on the Salinas River watershed, including the lagoon. Cumulative impacts should include an analysis of the relationship of all flow prescriptions, and surface and ground water diversions that the project may affect, including existing water right applications. The CDFW recommends that a comprehensive water operations model be developed that clearly outlines assumptions and constraints used in its development. We further recommend that this model be developed in consultation with CDFW and the NMFS. This will ensure transparency and the elimination of unnecessary disputes regarding model outputs and subsequent analyses.

10. The DEIR should include a discussion of all Memorandums of Understanding, formal and informal state and local agreements, federal biological opinions, and water rights affected by the Project. The discussion should evaluate impacts to flow prescriptions and related potential impacts to the Nacimiento, San Antonio, and Salinas watersheds.

Depending upon the information provided in the DEIR, CDFW may have additional comments and recommendations regarding potential Project-related impacts and avoidance, minimization, and mitigation measures. If you have any questions regarding these comments, please contact Annette Tenneboe, Senior Environmental Scientist (Specialist) by telephone at (559) 243-4014, extension 231; by electronic mail at annette.tenneboe@wildlife.ca.gov, or by writing to the California Department of Fish and Wildlife at 1234 East Shaw Avenue, Fresno, California 93710.

Sincerely,

Julie A. Vance
Regional Manager

ec: Office of Planning and Research
State Clearinghouse

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Annette Tenneboe
Julie Vance
California Department of Fish and Wildlife

Citations

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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

March 28, 2022

Arvin Chi
State Water Resources Control Board
Division of Water Rights
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Subject: Protest of Petitions for Change for Water Right License 7543 (Application 16124) and Permit 21089 (Application 30532), and Petition for Time Extension for Permit 21089 of Monterey County Water Resources Agency.

Protest of Petitions for Change for Water Right Licenses 7543 and 12624 (Applications 16124 and 16761) and Permit 21089 (Application 30532) of Monterey County Water Resources Agency

Dear Mr Chi:

The California Department of Fish and Wildlife (CDFW) respectfully submits this protest to the above-referenced petitions, and requests the State Water Resources Control Board (SWRCB) to accept this protest based on the information provided herein. CDFW is filing this protest in its capacity as a trustee agency for the State's fish and wildlife resources under Fish and Game Code section 1802 and the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21070; Cal. Code Regulations, Tit. 14, § 15386). Also, CDFW could be required to act as a responsible agency under CEQA if a Lake or Streambed Alteration Agreement is required pursuant to Fish and Game Code section 1600 et seq. and/or incidental take authorization pursuant to the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.).

SWRCB has an obligation to address public trust resources and to balance the potential value of a project against the impact on trust resources. Certain fish and wildlife resources are reliant upon aquatic ecosystems, which in turn are reliant upon adequate flows of water. CDFW therefore has a material interest in assuring that adequate water flows are maintained within streams for the protection, maintenance, and proper stewardship of those resources. CDFW's right to protest is based on Water Code section 1703.1 and section 1330; Title 23, CCR, Section 843 and other provisions of law.

Required Consultation: Consultation with CDFW did not occur prior to the petition submittal to SWRCB, pursuant to Water Code section 1701.2, subdivision (c) and

California Code of Regulations Title 23, section 794, subdivision (b), which requires the petitioner to provide: 1) preliminary information and map(s) required by subdivision (a) to, and 2) request consultation with CDFW prior to submitting a change petition. California Code of Regulations Title 23 section 794, subdivision (c) requires a petitioner to provide to SWRCB all CDFW and Regional Water Quality Control Board comments in response to the request for consultation required by subdivision (b). The intent is to require petitioners to provide information to and exchange meaningful dialogue with CDFW during development of the petition, and when the petition packet is finally submitted, it includes information on the potential impacts to fish and wildlife that SWRCB can use to make its determination under Water Code section 1736 of whether the proposed long-term change would unreasonably affect fish, wildlife, or other beneficial uses. CDFW recommends that requests for consultation within the Central Region be sent to the Regional Water Rights Coordinator Annette Tenneboe (Annette.Tenneboe@wildlife.ca.gov) and that petitions to SWRCB include the consultation history with CDFW.

Project Description Summary

Monterey County Water Resources Agency (MCWRA) is petitioning to add San Antonio Dam and Reservoir as an additional point of rediversion and place of storage under its license 7543 and permit 21089, to facilitate MCWRA's Interlake Tunnel Project (Project), which would connect Nacimiento Reservoir to San Antonio Reservoir by constructing an underground gravity flow tunnel, to optimize the use of existing storage capacity. With the Project, under license 7543 up to 350,000 acre-feet (af) of water can be stored annually in Nacimiento Reservoir, and under permit 21089, up to 27,900 af can be stored annually.

MCWRA is also petitioning to remove the acreage limitations from License 7543 (Permit 10137, Application 16124) and Permit 21089 (Application 305232) for water use within San Luis Obispo County. Specifically, MCWRA requests removal of the current net area limit of 7,000 acres for urban/suburban use and 500 acres for agricultural use. The current gross area limit consisting of the San Luis Obispo County boundary would remain as the authorized place of use. This change allows the San Luis Obispo County Flood Control and Water Conservation District flexibility in use of water supply from the Nacimiento Reservoir.

The purpose for the petition for time extension for permit 21089 is to request additional time from the time previously allowed under permit 21089 to complete beneficial use of the diverted water.

CDFW Basis for Protest

Salinas River and Adequate Flows for Steelhead: Except for uncontrolled flows during winter storms, Salinas River hydrology is regulated by the Nacimiento and San Antonio Reservoirs. Changes to how water is stored and released in these reservoirs associated with petition approval and related implementation of the Project would result

in substantial changes to the Salinas River and its associated natural resources without measures in place to avoid such changes. Flood control releases maintain adequate storage capacity during runoff periods. In wet years, releases of up to 100,000 af can continue into the summer, and during times when the Salinas River is dry, MCWRA makes releases up to 230,000 af from the reservoirs to keep water flowing downstream to the area between Chualar and Spreckels approximately 7 to 13 miles downstream of Chualar Bridge, to recharge the groundwater aquifer. When natural runoff is sufficient to maintain flow in the Salinas River, releases from the reservoirs are cut back to minimum levels, typically 3 cubic feet per second (cfs) (2 cfs per water right) from San Antonio Reservoir and 25 cfs from Nacimiento Reservoir. The purpose of these releases is to maintain fish in good condition that exist downstream of the dams, pursuant to Fish and Game Code section 5937. Per existing water rights, these minimum flows may be reduced under conditions of low reservoir storage, and during drought conditions (Nacimiento Reservoir at or below 748 feet or 132,900 af storage) when minimum release required from Nacimiento Reservoir is reduced to 10 cfs. When the level of Nacimiento Reservoir falls below 689 feet (i.e., 22,000 af storage), MCWRA is not required to make releases to the river.

Steelhead inhabiting the Salinas River Basin are a part of the South-Central California Coast Evolutionary Significant Unit (ESU) and are federally listed as threatened. The National Marine Fisheries Service (NMFS) recovery plan for South-Central California Coast Steelhead identifies the Salinas River, including Nacimiento and San Antonio Rivers, as a Core 1 recovery stream. This designation identifies that the Salinas River is one of the highest priority watersheds for recovery of steelhead within this ESU, and critical recovery actions include alleviating threats to instream flows and impediments to fish passage.

The South-Central California Coast ESU includes steelhead populations in streams from the Pajaro River (inclusive) to (but not including) the Santa Maria River. In the mid-1960s, CDFW estimated that the ESU included 27,750 spawning steelhead, of which an estimated 500 spawned in the Salinas Basin. Five major streams (Pajaro River, Salinas River, Carmel River, Little Sur River, and Big Sur River) supported 4,750 spawners in the mid-1960s but support fewer than 500 in recent years with recent surveys in the Salinas River, primarily in the Arroyo Seco tributary, indicating that run averages may be much smaller. South-Central California Coast steelhead is regarded by the State as imperiled as it is vulnerable to extirpation and recovery of these populations is a high priority for steelhead management.

Habitat conditions for steelhead in the Salinas Basin are distinct from most other streams in the South-Central California Coast ESU of winter steelhead. The Salinas River drains an inland valley separated from the ocean by the coastal mountains. The Salinas tributaries that support steelhead drain the eastern side of the coast range, whereas most of the other streams are on the west side of the coast range and drain directly to the ocean. The geographic orientation of the Salinas Valley experiences a different micro-climate than other watersheds in the ESU and influences steelhead habitat conditions, including stream temperature during the summer rearing periods and the duration and

frequency of streamflow conditions suitable for migration. Steelhead in the Salinas River may experience a greater number of years when access to the ocean is not possible due to low streamflow in comparison to other coastal streams in the region. Migration of adults from the ocean may begin later in the season, and seaward migration of juveniles may be truncated in the spring as compared to the other coastal drainages. Any changes to the Salinas River flow volumes and timing of releases associated with the proposed petitions and Project could worsen conditions for steelhead.

Current Flow Prescriptions and Fish Passage: The Project will divert water from the Nacimiento Reservoir to San Antonio Reservoir that would have otherwise been spilled or released at Nacimiento Dam. By modifying the existing spillway at San Antonio Dam with a crest control device, San Antonio Reservoir's maximum lake elevation would effectively increase by 10 feet and water storage capacity increase by approximately 59,000 af.

The current flow prescriptions for habitat maintenance under Water Right Licenses 7543 (Nacimiento), and 12624 (San Antonio), are consistent with the 2007 Salinas Valley Water Project (SVWP) Biological Opinion (NMFS 2007) issued to the United States Army Corps of Engineers (Corps) by NMFS. The reservoir releases and resulting streamflow conditions developed for the SVWP were designed to meet MCWRA's water supply goals and minimize impacts to steelhead and its designated critical habitat. The *Salinas Valley Water Project Flow Prescription for Steelhead Trout in the Salinas River* (MCWRA 2005; flow prescription) relies on triggers primarily based on combined reservoir storage and mean daily stream flow to initiate releases from the reservoirs to maintain upstream passage conditions that are similar to conditions that existed historically. Under the SVWP, MCWRA is to achieve, on a 10-year average, the median number of upstream passage days (within a 10 percent variance, and based on water year type) that occurred historically.

Both the Spillway Modification Project and the Interlake Tunnel Project, individually and in combination, would allow MCWRA to manage reservoir levels differently than under existing conditions. These changes have the potential to significantly compromise fish passage for steelhead in the Salinas River and contribute to the further decline of the watershed's population.

Under existing conditions, reservoir storage operations have significantly affected the magnitude and frequency of flows supporting steelhead migrations in the mainstem Salinas River, and have reduced peak discharges from the dams resulting in the aggradation of sediment and vegetation throughout the lower Salinas River. As the result of the combination of pumping and reservoir storage, the flow of the Salinas River to the lagoon and ocean has been reduced from 533,000 af per year (Simpson 1946) to approximately 238,000 af per year (EDAW 2001). The average annual controlled releases from MCWRA's reservoirs are approximately 200,000 af per year (MCWRA 2015). The proposed Project could exacerbate these two problems in the Salinas River by further reducing steelhead passage days and channel aggradation. Thus, the Project has the potential to impact downstream aggradation and steelhead in the Salinas River in

a manner and to an extent not considered in either the SVWP Biological Opinion or existing water rights licenses.

Water Quality - Mercury Contamination: Methylmercury can be harmful to the human nervous system and affect human development. When mercury is present in the sediment of a reservoir, small aquatic organisms transform it into methylmercury in their bodies (methylation). When small fish or other small aquatic wildlife feed on these organisms they consume the methylmercury in the organisms. Methylmercury accumulates in the tissue and biomagnification occurs as the concentration level is consumed and transferred to other trophic levels. In many areas of the Nacimiento River and San Antonio watersheds, the natural mercury levels in soil tend to be relatively high since the area has numerous naturally occurring cinnabar (mercuric sulfide) deposits and mine sites. The Buena Vista and Klau Mines are located upstream of Nacimiento Reservoir along the Las Tables River, which is a major tributary to the reservoir. Though no longer active, these mines have been identified as the primary point and nonpoint source of mercury contamination in the Nacimiento River watershed.

While screening of the tunnel from San Antonio Reservoir would prevent movements of fish with high mercury content in their tissues into San Antonio Reservoir, contaminated sediment and fines could be transferred from Nacimiento Reservoir into San Antonio Reservoir, possibly increasing the mercury loading of San Antonio Reservoir. Project-related reservoir drawdown and construction could also result in the release of contaminated sediment and aquatic species downstream of the reservoirs and ultimately into the Salinas River.

Water Quality – Dissolved Oxygen and Temperature: The placement of the tunnel could result in impacts to dissolved oxygen and temperature within the reservoirs. Building the tunnel entrance near the bottom of Nacimiento Reservoir could divert water into San Antonio Reservoir with lower temperature than surface water, but also low dissolved oxygen levels. Water released from near the surface would be higher in temperature, but also have a higher concentration of dissolved oxygen.

Recommendations and Protest Dismissal Terms

Protest dismissal terms, if adopted as enforceable conditions of the water right permit, are intended to mitigate adverse impacts to fisheries and wildlife resources. Based on the information provided in the petitions, additional site-specific studies for the purpose of determining appropriate terms and conditions are needed. CDFW recommends that the following studies and other requirements be included as enforceable conditions of the permit to provide clarity and reduce Project impacts.

1. A study of how Project-related reservoir releases will be implemented to avoid and minimize impacts from transport of suspended sediment or introduction of contaminants such as mercury.

2. Development of a plan to monitor for sediment and contaminants, including mercury, that may be present in downstream reservoir releases, and to monitor contaminants in the water diverted from Nacimiento Reservoir into San Antonio Reservoir. This should include a plan to monitor for sediment (NTUs), total dissolved solids (TDS), and total suspended sediment (TSS) in the water column. The plan should include measures to comply with Regional Water Quality Control Board total daily maximum loads.

3. A study to determine bypass flows around the Nacimiento and San Antonio Reservoirs that are of sufficient quantity and quality to protect all life stages of steelhead in the Salinas River. Determination of bypass flows must be based on site-specific biological studies approved by CDFW and NMFS. Bypass flows must be established prior to diverting flows.

4. Development of an Operations Plan for the Interlake Tunnel Project to be approved by CDFW and NMFS, to monitor flow and diversion rates and to prescribe annual monitoring reporting of flow data collected in a manner that clearly demonstrates whether the flow and diversion rate conditions of the Operation Plan are adequate.

5. A study analyzing the effects of flow releases on steelhead as a consequence of temporal differences in flow volumes as a result of the surface flow diversion, This includes impacts to habitat and to steelhead passage from the mouth of the Salinas River to spawning and rearing habitat in the upper watershed, including how the Project could affect the opening and closure of the sandbar at the mouth of the Salinas River to allow migration of steelhead during the adult and smolt migration season.

6. Development of an adequate steelhead monitoring plan to be approved by CDFW and NMFS, to evaluate steelhead movements and use of habitats.

7. MCWRA must install and maintain devices satisfactory to SWRCB to measure the instantaneous rate of diversion and cumulative quantity of water diverted under these permits and licenses. A record of such measurements shall be maintained by MCWRA and made available to CDFW and other interested parties upon request. A copy of the records shall be submitted to the SWRCB with the electronic report of water diversion and use.

8. MCWRA must cease or curtail diversion, even within the allowable diversion season, if CDFW determines that the measure of flow being bypassed around any point of diversion is not of sufficient quantity and quality to allow upstream and downstream fish passage, and maintain in good condition any aquatic resources that would exist in downstream reaches under unimpaired flows.

All or some of these terms may be subject to modification or cancellation should facts warranting such action come to light at a later date. CDFW will dismiss this protest if the above terms or any additional items that subsequently come to light are met.

The issuance of this letter by CDFW does not constitute a valid water right. SWRCB must first issue a valid Certificate before any diversion of water. Under Water Code section 1052, the diversion and use of water without a valid basis of right is a trespass against the State of California and is subject to enforcement action by SWRCB. Determination of whether or not protective Terms and Conditions are required for any diversion of appropriated water is evaluated on a case-by-case basis following a site visit by CDFW staff.

Note to Petitioner:

CDFW has regulatory authority over certain activities occurring in streams and/or lakes that could substantially adversely affect any fish or wildlife resource, pursuant to Fish and Game Code section 1600 et seq. If a Project would substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or deposit or dispose of debris, waste, sediment, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, notification to CDFW is required. Notification to CDFW for this Project would be required for the proposed surface water diversion and rediversion, in addition to stream crossings and other jurisdictional projects. The Lake and Streambed Alteration Program in the Central Region can be contacted at (559) 243-4593 and R4LSA@wildlife.ca.gov, and information is available on the LSA Program website: https://wildlife.ca.gov/Conservation/LSA.

It is not clear whether CEQA documents have been approved for the current petitions and related Project. The petitions reference the 2003 Nacimiento Water Project EIR and subsequent addenda, as well as the Salinas Valley Water Project EIR. The petitions do not include analysis of impacts to fish and wildlife from the diversion of surface flow to from Nacimiento Reservoir to San Antonio Reservoir or the construction of a connecting conveyance structure or tunnel (i.e., the Interlake Tunnel Project). CDFW provided comments to MCWRA in a letter dated June 7, 2016, regarding the Notice of Preparation for the Interlake Tunnel and Spillway Modification Project (State Clearinghouse No. 2016041085). A draft Environmental Impact Report (DEIR) has not yet been circulated for public comments. State-listed species, including those that were not listed at the time of the prior EIRs, have the potential to occur in the Project vicinity. CDFW is required to comply with CEQA for the issuance of a Lake or Streambed Alteration (LSA) Agreement or for an Incidental Take Permit authorizing the take of State-listed species; therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts, a subsequent CEQA analysis may become necessary.

If you have questions regarding this matter, please contact Annette Tenneboe, Senior Environmental Scientist (Specialist), at (559) 580-3202 or by email at Annette.Tenneboe@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie Vance
Regional Manager

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References

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