Denise Duffy & Associates, Inc.
PLANNING AND ENVIRONMENTAL CONSULTING

MEMORANDUM

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TO: Abby Ostovar, Ph.D., MONTGOMERY & ASSOCIATES

CC: Emily Gardner, Salinas Valley Basin Groundwater Sustainability Agency
Stephen Hundt, MONTGOMERY & ASSOCIATES
Tim Leo, MONTGOMERY & ASSOCIATES
Staffan Schorr, MONTGOMERY & ASSOCIATES
Travis Vasquez, PE, Wallace Group
Greg Hulburd, PE, Wallace Group

FROM: Tyler Potter, J.D., AICP, Project Director
Matt Johnson, Senior Environmental Scientist/Senior Project Manager
Oliviya Wyse, Project Manager

SUBJECT: Castroville and Eastside Canals and Alternatives Preliminary Feasibility Study – Permitting Analysis

I. Introduction

Denise Duffy and Associates ("DD&A") prepared this memorandum to provide a high-level evaluation of the regulatory approvals and potential permits that may be required to implement the project concepts under consideration for the Castroville and Eastside Canals and Alternatives Preliminary Feasibility Study (the "Project"). The memorandum is intended to support project planning and initial decision-making by identifying the applicable regulatory requirements and related resource agency permitting that could apply to the concepts currently under consideration.

The Project is being evaluated through a set of distinct project concepts, each of which may trigger different permitting requirements based on site-specific factors (e.g., location, construction methods, operational characteristics, resource impacts, jurisdictional boundaries, etc.). This memorandum does not constitute a final permit strategy or a final determination of permit applicability. Rather, this memorandum provides an overview of anticipated permitting needs based on the conceptual descriptions of the concepts available at this time.[1] Given the conceptual level of project-detail, it is generally assumed that each of the regulatory requirements identified in this permitting

[1] As project design and concept development continue to evolve, applicable permitting requirements may change, and additional approvals may ultimately be required.

memorandum could apply. However, the extent and complexity of associated permitting may vary significantly depending on final project design and anticipated environmental impacts.

The memorandum is organized as follows. *Section 2* summarizes the concepts evaluated for purposes of this analysis, including relevant assumptions used to inform the permitting discussion. *Section 3* describes the applicable regulatory background, including the primary federal and state statutory requirements.[2] *Section 4* presents a discussion of anticipated permitting requirements. *Section 5* provides concluding observations, including overarching permitting considerations and issues that may warrant further evaluation as the Project advances and a preferred concept is identified.

II. Description

This section summarizes the range of concepts evaluated for purposes of this memorandum. The descriptions provided below are intended to establish a preliminary baseline and project assumptions used to identify potentially applicable regulatory requirements. The level of detail is commensurate with the preliminary nature of the concepts and is not intended to reflect final design or engineering.

The Project concepts[3] represent different approaches to support the beneficial use of Water Right Permit 11043. Each concept varies with respect to factors such as site location, location of diversion, construction methods, operational characteristics, etc. Each concept is described below at a conceptual level. The summaries focus on features most relevant to permitting considerations. For a

[2] This memorandum is focused on federal and state regulatory requirements. A detailed evaluation of local permitting requirements is not included at this stage due to the conceptual level of design and siting information. Depending on the final location of improvements, additional discretionary and ministerial permits may be required from the City of Salinas and/or Monterey County (e.g., encroachment permits, use permits, etc.). Local permitting requirements would be evaluated in greater detail as project design advances and a preferred concept is identified.

[3] Each project concept evaluated in this memorandum consists of a new river intake diversion with associated infrastructure that would have direct permitting implications regarding compliance with applicable state and federal environmental regulations (e.g., Clean Water Act, Porter Cologne Water Quality Control Act, Cal. Fish and Game Code Section 1602, etc.). A new diversion is a surface diversion method utilizing a screened pump intake and pump station on the bank of the river without the use of a diversion dam or control structure across the river channel to manipulate water levels or create an impoundment. This type of diversion would result in less permitting complexity compared to an instream diversion structure (e.g., diversion dam) but would still result in the development of project infrastructure (i.e., fish screen, pump station forebay, low lift pump station, sedimentation basin, and transfer pump station) that could result in potential environmental effects subject to the review of state and federal resource agencies. While permitting would likely be less procedurally complex than a traditional surface diversion, any new diversion would warrant substantial regulatory oversight.

With respect to subsurface diversions, these types of diversions may avoid certain direct instream structural impacts (e.g., physical barriers, fish passage constraints, channel modification), but they would still raise similar environmental issues (e.g., streamflow depletion, hydraulic connectivity, and potential effects on fisheries and riparian habitat) that would need to be addressed through the regulatory compliance process. In other words, the procedural process may differ in complexity and, in some cases, may be less controversial than an instream diversion structure; however, the relevant resource agencies would still evaluate potential impacts to surface flows and associated biological resources. As a result, the overall scope of environmental review is not inherently reduced. That said, from a comparative standpoint, subsurface systems are often viewed more favorably than new direct instream diversion structures because they may be environmentally superior from an impact perspective, depending on site-specific conditions.

complete description of each of the project concepts and related infrastructure, please refer to *Draft Summary Report for Castroville and Eastside Canals and Alternatives Preliminary Feasibility Study.*

- **Concept 1 – Eastside Basin Recharge:** The Eastside Recharge Basins concept would involve diversion of surface water from the Salinas River near the Castroville Canal Intake permitted location south of Salinas. Water would subsequently be conveyed to a series of surficial recharge basins located within the Eastside Subbasin. Four diversion flow scenarios are contemplated to evaluate a range of project scales and operational strategies, with diversion rates of 50, 100, 200, and 400 cubic feet per second (cfs). The diversion facility would consist of a river intake diversion system, including fish screens, a pump station forebay, low-lift pump station, sedimentation basin, and conveyance pump station. Diverted water would be conveyed via approximately 4 miles of transmission main (ranging from 48-inch to 132-inch diameter depending on diversion capacity) routed along private agricultural roads and public rights-of-way to distributed recharge basin sites. Depending on the diversion scenario and associated storage requirements, up to forty (40) 40-acre recharge basins could be developed within the Eastside Subbasin, for a total potential recharge footprint of approximately 1,600 acres. The basins would allow diverted water to percolate through native soils to augment groundwater storage and improve basin conditions.

- **Concept 2 – North Eastside Injection:** The North Eastside Injection concept would involve diversion of surface water from the Salinas River near the Castroville Canal Intake permitted location south of Salinas and conveyance to a new surface storage reservoir, followed by treatment and distribution to a network of groundwater injection wells within the northern Eastside Subbasin. Two diversion flow scenarios are contemplated to evaluate a range of project scales, with diversion rates of 50 and 100 cfs. The type of diversion facility and associated infrastructure would be the same as the Eastside Basin Recharge concept. Diverted water would be conveyed via transmission mains (approx. 7 miles for 100 cfs scenario and approx. 15 miles for 50 cfs scenario) to a surface storage reservoir, which could be located either at the Merritt Lake or within the Gabilan Range/Alisal Creek watershed, depending on final site selection. Stored water would be treated to meet groundwater recharge and injection standards prior to distribution through a pipeline network (approx. 25 miles) to multiple injection well sites. The injection wells would introduce treated water directly into the aquifer to augment groundwater storage, increase groundwater elevations, and improve basin conditions within the northern Eastside Subbasin.

- **Concept 3 – Coastal Injection:** The Coastal Injection concept would involve diversion of up to 50 cfs of surface water from the Salinas River near and upstream of the existing Salinas River Diversion Facility ("SRDF") location, conveyance to a surface storage reservoir at Merritt Lake (approximately 12,600 acre-feet capacity), treatment at a 6.5-mgd water treatment plant adjacent to the reservoir, and distribution of treated water to a network of injection wells located within the seawater intrusion area. This concept would include approximately 12 miles of distribution pipeline. The point of diversion for this concept is located further downstream

than the Eastside Recharge Basins and North Eastside Injection concepts and is situated within a more defined and perennial reach of the Salinas River. The type of diversion facility and associated infrastructure would be the same as the previous concepts. Following treatment, water would be delivered through transmission mains and a coastal distribution pipeline network to injection well sites to increase groundwater elevations along the coast and limit seawater intrusion.

- **Concept 4 – New Castroville Seawater Intrusion Project ("NSIP"):** The NSIP concept would involve diversion of up to 100 cfs of surface water from the Salinas River near and upstream of the existing SRDF using a river intake diversion. The type of diversion facility and associated infrastructure would be the same as the previous concepts. Diverted water would be conveyed via a 5.8-mile, 96-inch diameter transmission main to surface storage at Merritt Lake, followed by treatment at a proposed water treatment plant. Treated water would then be delivered through a proposed NSIP distribution system serving groundwater users within the seawater intrusion area east of the existing Castroville Seawater Intrusion Project ("CSIP") system. The transmission main would require two (2) crossings beneath drainage channels tributary to Tembladero Slough.

The descriptions above are provided solely for purposes of identifying potential permitting pathways and do not reflect a preferred concept. Refinements to the concepts, including changes to design, siting, or construction sequencing, may affect the applicability or scope of specific permits discussed below.

III. Regulatory Background

This section provides an overview of the key federal and state regulatory requirements that may be relevant from an environmental permitting perspective. The discussion is intended to identify the primary regulatory framework that could affect project implementation, and to provide general context regarding the type of regulatory approvals that may be required. The regulatory background is presented for informational purposes only and is not intended to constitute a comprehensive or exhaustive inventory of all potentially applicable regulatory requirements.

The regulatory frameworks summarized in this section apply broadly to projects of the type and scale contemplated under the concepts discussed above.

Federal[4]

Federal Clean Water Act ("CWA")

The CWA (1972) provides a framework for regulating discharge of pollutants into Waters of the United States ("WOTUS") and establishes water quality standards for pollutants in surface waters (EPA,

[4] In addition to the federal permitting requirements discussed in this memorandum, certain federal wildlife protection statutes may apply during Project implementation, including the Migratory Bird Treaty Act ("MBTA"). The MBTA prohibits the take of

2025). The CWA regulates discharges into WOTUS and surface waters through implementation of pollution control programs such as the National Pollutant Discharge Elimination System ("NPDES") permit program, which requires the State Water Resources Control Board ("SWRCB") and the applicable Regional Water Quality Control Board ("RWQCB") to issue NPDES permits for point-source discharges into navigable waters. In addition, activities that result in the discharge of dredged or fill material into wetlands or other waters of the United States are subject to regulation under Sections 401 and 404 of the CWA.

Section 404 requires that a project Applicant obtain a permit from U.S. Army Corps of Engineers ("USACE") for any discharge of dredged or fill material into WOTUS, including jurisdictional wetlands, streams, and other aquatic features. The USACE regulates discharges of dredged or fill material into WOTUS under Section 404 of the Clean Water Act. Section 401 requires that the Applicant also obtain a Water Quality Certification from the applicable RWQCB verifying that the proposed activity will comply with state water quality standards. Impacts regulated under the CWA generally include the placement of soil, concrete, rock, or other material into jurisdictional waters, as well as excavation, grading, or other modifications that alter the physical, chemical, or biological integrity of these features.

Federal Endangered Species Act ("ESA")

The ESA (1973) (16 United States Code ["USC"] 1532 et seq., as amended) protects federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The U.S. Fish and Wildlife Service ("USFWS") and NOAA's National Marine Fisheries Service ("NMFS") administers the ESA. In general, NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, such South-Central California Coast steelhead (*Oncorhynchus mykiss irideus*), whereas other listed species are under USFWS jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." Additionally, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the

protected migratory bird species but does not establish a project-specific permitting program comparable to those discussed in this analysis. Compliance with the MBTA is typically achieved through avoidance and minimization measures (e.g., seasonal work windows, pre-construction surveys, nest buffers) incorporated into project design and construction specifications. The potential applicability of such requirements, and the need for specific avoidance or mitigation measures, would be determined based on project-level design, construction timing, and site-specific biological conditions.

potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

National Environmental Policy Act ("NEPA")

NEPA was signed into law in 1970 to address growing public concern regarding human impacts on the environment. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. This law covers a broad range of actions that include permit applications, federal land management actions, and construction of publicly-owned facilities. NEPA requires federal agencies to incorporate environmental considerations in their planning and decision-making processes and disclose the environmental impacts associated with federal actions. NEPA also encourages an interdisciplinary approach to environmental review and requires public participation in the review and decision-making processes. Any action taken by a federal agency, receives federal funding, or occurs on federal lands is subject to NEPA.

National Historic Preservation Act (NHPA)

The NHPA (54 U.S.C. § 300101 et seq.) establishes the federal framework for the identification, evaluation, and consideration of historic properties in connection with federal undertakings. Section 106 requires federal agencies to consider the effects of their undertakings on properties listed in or eligible for listing in the National Register of Historic Places ("NRHP"). Historic properties include archaeological sites, historic-era structures, cultural landscapes, and traditional cultural properties that meet NRHP eligibility criteria.

Section 106 review is triggered when a project involves a federal undertaking, such as issuance of a permit, license, or approval by a federal agency (e.g., a CWA Section 404 permit issued by the USACE). In such cases, the lead federal agency is responsible for initiating consultation with the State Historic Preservation Officer ("SHPO"), federally recognized tribes, and other consulting parties, as appropriate. The Section 106 process includes identification of the Area of Potential Effects ("APE"), cultural resource investigations to identify historic properties within the APE, evaluation of NRHP eligibility, assessment of project effects, and, where necessary, development of measures to avoid, minimize, or mitigate adverse effects.

In the absence of a federal nexus, Section 106 does not apply. For project components that involve federal authorization, coordination with the appropriate federal agency would be required to define the APE, conduct cultural resource studies, and complete the Section 106 consultation process prior to permit issuance. The duration and complexity of Section 106 review depend on the presence of historic properties within the APE, the potential for adverse effects, and the extent of required tribal consultation and mitigation measures.

State[5,6]

California Endangered Species Act

The California Endangered Species Act ("CESA") (Fish and Game Code § 2050 et seq.) provides for the conservation, protection, and recovery of species that are listed as threatened or endangered under state law. CESA generally prohibits the "take" of any species listed as threatened or endangered, where "take" is defined to include actions that hunt, pursue, catch, capture, or kill, or attempt to do so. Courts have interpreted "take" under CESA to include habitat modification or degradation that results in the death or injury of a listed species.

CESA is administered by the California Department of Fish and Wildlife ("CDFW"). Project activities that have the potential to result in take of a CESA-listed species generally require authorization from CDFW prior to implementation, unless a statutory or regulatory exemption applies. The applicability of CESA and the need for authorization depend on the presence of listed species, the nature and location of project activities, and the potential for those activities to directly or indirectly result in take.

Section 2081 Incidental Take Permits

Fish and Game Code section 2081 authorizes CDFW to issue an Incidental Take Permit ("ITP") to allow the incidental take of a state-listed species resulting from an otherwise lawful activity. An ITP may be issued only if CDFW makes specific statutory findings, including that: 1) the take is incidental to an otherwise lawful activity; 2) the impacts of the authorized take are minimized and fully mitigated; 3) the mitigation measures are roughly proportional in extent to the impact of the take and are capable of successful implementation; 4) the issuance of the permit will not jeopardize the continued existence of

[5] In addition to the specific permitting requirements described in this analysis (e.g., California Endangered Species Act, Fish and Game Code Section 1602, etc.), various provisions of the California Fish and Game Code protect native birds and wildlife. For example, Fish and Game Code Section 3503 and 3503.5 prohibit the take, possession, or destruction of bird nests and birds-of-prey; Section 3511 provides additional protections for "Fully Protected" species; Section 3513 protects migratory nongame birds designated under the federal Migratory Bird Treaty Act; and Section 3800 prohibits take of nongame birds. "Fully Protected" species represent an early statutory classification intended to afford heightened protection to rare species, and such species generally may not be taken or possessed except under very limited circumstances (e.g., scientific research or specified relocation activities). These statutory requirements do not establish a separate discretionary permitting program for most routine development activities. Rather, compliance is typically achieved through project design, avoidance and minimization measures (e.g., seasonal work windows, pre-construction surveys, biological monitoring, and protective buffers), and incorporation of mitigation measures into environmental documentation prepared pursuant to CEQA. The applicability of these requirements and any associated avoidance or mitigation measures would be evaluated based on site-specific biological conditions.

[6] Certain native plant species are protected under the California Native Plant Protection Act. State-listed rare or endangered plant species may require authorization from the CDFW if project activities would result in take and impacts cannot be avoided. Other special-status plant species, while not formally listed under state law, are typically evaluated pursuant to CEQA and may require avoidance, minimization, or compensatory mitigation measures. These requirements do not generally involve a separate discretionary permit but would be addressed through project-level biological surveys and associated environmental review.

the species; and, 5) adequate funding is ensured for implementation of the mitigation measures and permit compliance.

ITPs typically require preparation of a mitigation and monitoring plan that identifies measures to avoid, minimize, and compensate for impacts to the listed species. Mitigation may include habitat restoration, preservation, enhancement, or the purchase of mitigation credits at an approved mitigation bank, depending on the species and nature of impacts. CDFW also typically requires reporting, monitoring, and adaptive management provisions as conditions of permit approval.

California Environmental Quality Act ("CEQA")

CEQA requires state and local agencies to identify and disclose significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. A public agency must comply with CEQA when it undertakes an activity requiring discretionary approval (i.e., the agency has authority to approve or deny the requested action), which may cause either a direct physical change, or a reasonably foreseeable indirect change, in the environment. If a lead agency determines that there is no potential for a significant environmental impact, then either an Initial Study Negative Declaration ("IS/ND") or an Initial Study Mitigated Negative Declaration ("IS/MND") may be appropriate. If a lead agency determines that a project would have a potentially significant impact on the environment and mitigation measures would not reduce potential impacts to less than significant, then a lead agency shall prepare an EIR.

California Fish and Game Code – 1602

Fish and Game Code section 1602 requires notification to the CDFW prior to undertaking any activity that may substantially divert or obstruct the natural flow of a river, stream, or lake; substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or deposit debris, waste, or other material where it may pass into a river, stream, or lake. These requirements apply to both perennial and intermittent watercourses, as well as to certain ephemeral features, depending on site-specific conditions and hydrologic function.

If CDFW determines that a proposed activity may substantially adversely affect existing fish and wildlife resources, CDFW may require the project proponent to enter into a Lake or Streambed Alteration Agreement ("LSAA"). An LSAA establishes conditions intended to protect fish and wildlife resources during project implementation and typically includes measures related to construction methods, timing restrictions, erosion and sediment control, habitat protection or restoration, monitoring, and reporting.

Activities that may trigger the need for an LSAA include, but are not limited to, channel modifications, bank stabilization, installation of crossings or culverts, diversion structures, grading within or adjacent to watercourses, or vegetation removal affecting riparian areas. The applicability of Section 1602 depends on the presence of a jurisdictional feature and the extent of proposed activities that could affect the bed, bank, or channel.

Porter-Cologne Water Quality Control Act ("Porter-Cologne Act")

The Porter-Cologne Act was enacted in 1969 to help protect California's surface and groundwater resources and maintain their beneficial uses for drinking water, recreation, and wildlife habitat. The Porter-Cologne Act established the SWRCB and nine (9) RWQCBs with primary responsibility for administration and enforcement of water quality regulation in California. The Porter-Cologne Act establishes statewide policies, requires development of regional water quality control plans ("Basin Plans"), and requires issuance of waste discharge permits to control discharge of pollutants into state waters, including both surface and groundwaters. Basin Plans must establish water quality objectives necessary for protection of surface and ocean waters.

IV. Discussion

This section discusses the potential permitting requirements applicable to the project concepts based on the regulatory framework summarized in *Section 3*. This discussion identifies how each regulatory requirement could apply, in concept, at a programmatic level given the conceptual detail available at the time DD&A prepared this analysis, rather than make definitive determinations regarding permit applicability or approval outcomes for each individual concept. Following the narrative discussion, **Table 1** provides a consolidated summary of anticipated permitting and approval requirements.

Federal

Clean Water Act

Activities that result in the discharge of dredged or fill material into wetlands or other waters of the United States are subject to regulation under Sections 401 and 404 of the CWA. Section 404 requires that a project Applicant obtain a permit from USACE for any discharge of dredged or fill material into WOTUS, including jurisdictional wetlands, streams, and other aquatic features. Section 401 requires that the Applicant also obtain a Water Quality Certification from the RWQCB verifying that the proposed activity will comply with state water quality standards. Impacts regulated under the CWA generally include the placement of soil, concrete, rock, or other material into jurisdictional waters, as well as excavation, grading, or other modifications that alter the physical, chemical, or biological integrity of these features.

The Project Area[7] includes potential wetlands and other jurisdictional features that may be regulated as WOTUS under the CWA. Each of the four (4) concepts could result in unavoidable fill of some jurisdictional wetlands or WOTUS depending on final design – especially in connection with the siting of the proposed river intake diversion. Any project-related activities that could result in the discharge of fill material into a jurisdictional feature would require a Section 404 permit from the USACE and a Section 401 Water Quality Certification from the RWQCB to ensure compliance with the CWA. Site-specific technical studies, including a formal wetland delineation conducted in accordance with USACE protocols, would be required to confirm the extent of jurisdictional features. Impacts that cause a loss of jurisdictional wetlands require an approved wetland mitigation and monitoring plan, accompanied by an adaptive management plan and long-term maintenance plan. A formal wetland delineation is recommended where each of the concepts could cross a potential wetland, and for those areas where ditches (potential WOTUS) occur. Wherever ground disturbing work would occur below the ordinary high-water mark of a stream crossing, a delineation and 404 permit would also be required.

Depending on the scope and federal nexus, such permitting could also trigger project-level review under NEPA. Early identification of jurisdictional resources and coordination with USACE will be essential to minimize impacts and streamline the permitting process. Moreover, as part of CWA permitting, the USACE and the Central Coast RWQCB may require project-specific mitigation measures, including pre-construction surveys, best management practices to avoid discharge, construction-phase monitoring, and compensatory mitigation such as habitat restoration or creation to offset impacts to jurisdictional waters. The requirements of the CWA would primarily be applicable to the construction of any new diversion facilities and construction-related activities occurring in or near jurisdictional features. Permitting associated with the CWA would generally take approximately twelve to eighteen months.

Endangered Species Act

Activities that may affect species listed as threatened or endangered under the ESA are subject to regulation under Sections 7 and 10 of the ESA. Section 7 applies to actions that involve a federal nexus — such as the issuance of a federal permit or the use of federal funding — and requires consultation with the USFWS and/or NMFS to determine whether the action may affect listed species or their designated critical habitat. This consultation process may result in the issuance of a Biological Opinion that includes required conservation measures. For actions without a federal nexus, or when a non-federal entity seeks authorization for incidental take of listed species, an Incidental Take Permit ("ITP") under Section 10(a) must be obtained, typically supported by a Habitat Conservation Plan ("HCP") that outlines avoidance, minimization, and mitigation strategies.

[7] For purposes of this memorandum, the “Project Area” is broadly defined to encompass the Salinas Valley, including the City of Salinas, the Salinas River corridor, and surrounding agricultural lands located primarily within unincorporated Monterey County. This broad geographic area reflects the regional nature of the project concepts and is intended to capture the range of potential siting locations and resource conditions that may influence permitting requirements. The Project Area description is conceptual and provided solely for purposes of evaluating potential regulatory requirements at a general level; final permitting would be based on the specific location and footprint of selected project improvements.

The Project Area includes potential habitat for one (1) or more federally listed species, including California tiger salamander (*Ambystoma californiense*) and South-Central California Coast steelhead (*Oncorhynchus mykiss irideus*). As such, implementation of each of the concepts would likely result in direct or indirect impacts to listed species or their habitats necessitating compliance with either Section 7 or Section 10 of the ESA. Where such activities require a federal permit (e.g., a CWA Section 404 permit), Section 7 consultation would be required to address potential effects. For projects without a federal nexus, compliance with ESA may still require a Section 10 ITP and preparation of an HCP. Because future improvements could affect federally listed species, project-specific technical analysis will be required to: 1) determine the presence or potential presence for listed species, and, 2) assess the level of impact.

Early consultation with USFWS and NMFS is recommended to clarify permitting requirements and identify appropriate avoidance or mitigation measures. As part of Section 7 consultation or issuance of a Section 10 ITP, the USFWS and NMFS may require pre-construction surveys, biological monitoring during construction, and compensatory mitigation to avoid, minimize, and offset adverse effects on federally listed species or their critical habitat. Compliance with the requirements of the ESA would apply to all project-related activities that have the potential to directly or indirectly affect listed species and their associated habitat. Section 7 consultation typically takes approximately twelve to eighteen months whereas a Section 10 ITP can take at least two (2) years.

National Historic Preservation Act

As discussed above, Section 106 of the NHPA requires federal agencies to evaluate the effects of federal undertakings on historic properties listed in or eligible for listing in the NRHP and to complete consultation with the SHPO and federally recognized tribes prior to permit issuance. Section 106 review is triggered only where a federal nexus exists (e.g., issuance of a federal permit).

Implementation of the project concepts evaluated in this memorandum would involve substantial ground disturbance, including construction of diversion facilities, transmission pipelines, recharge basins, reservoirs, treatment infrastructure, and injection wells. Where a federal permit is required (e.g., Clean Water Act Section 404 authorization), Section 106 consultation would be triggered for those components of the undertaking within the APE. Cultural resource investigations would be required to identify and evaluate archaeological sites, historic-era resources, and tribal cultural resources that may be present within construction footprints and associated staging or access areas.

If historic properties are identified within the APE, the lead federal agency would assess whether the undertaking would result in an adverse effect. Avoidance and minimization measures may be required where feasible; otherwise, mitigation measures (e.g., data recovery, monitoring, or other treatment measures) may be formalized through a Memorandum of Agreement ("MOU"). In the absence of a federal nexus, Section 106 would not apply; however, cultural resource review would remain required under applicable state law.

State

California Endangered Species Act

Activities that may affect species listed as threatened or endangered under the CESA are subject to regulation by the CDFW. Projects that could result in the "take" of a state-listed species - defined to include actions such as killing, harming, or harassing - must obtain a state ITP pursuant to Section 2081(b) of the Fish and Game Code. Issuance of an ITP requires CDFW to determine that the take is incidental to an otherwise lawful activity, that impacts are minimized and fully mitigated, that mitigation is roughly proportional in extent to the impact of the take and capable of successful implementation, and that the permit will not jeopardize the continued existence of the species.

The Project Area includes habitat for species listed under CESA (e.g., California red-legged frog [*Rana draytonii*], California tiger salamander [*Ambystoma californiense*], etc.), some of which may also be listed under the federal ESA. Depending on the final siting, footprint, and construction methods, implementation could result in both direct impacts (e.g., ground disturbance resulting in mortality or injury) and indirect impacts (e.g., habitat modification, fragmentation, hydrologic alteration, or construction-related disturbance). Under CESA, habitat modification that results in death or injury to a listed species may constitute take. As a result, permanent or temporary loss of occupied or suitable habitat may require authorization under Section 2081 where such effects cannot be fully avoided.

Where habitat loss or degradation is anticipated, compensatory mitigation is typically required to offset impacts and to ensure that the impacts of take are fully mitigated. Compensatory mitigation may include, but is not limited to: 1) permanent preservation of suitable habitat through conservation easements; 2) restoration or enhancement of degraded habitat; 3) establishment of mitigation lands at specified ratios relative to the acreage or functional value of impacted habitat; or 4) purchase of credits at an approved conservation or mitigation bank, where available. Mitigation ratios and performance standards are generally determined based on species-specific considerations, habitat quality, level of impact (temporary vs. permanent), and the conservation status of the species. In addition to habitat-based mitigation, CDFW may require measures such as pre-construction surveys, worker environmental awareness training, biological monitoring during construction, seasonal work restrictions, and adaptive management provisions.

Because the concepts evaluated in this memorandum are conceptual in nature, project-specific biological surveys and habitat assessments will be necessary to determine the presence or absence of listed species, the extent and quality of suitable habitat, and the potential for take. Consultation with CDFW would be required to confirm the need for an ITP and to establish appropriate avoidance, minimization, and compensatory mitigation measures based on the characteristics of the selected alternative. Compliance with the requirements of the CESA would apply to all project-related activities that have the potential to directly or indirectly affect listed species and their associated habitat. A 2081 ITP generally takes approximately twelve to twenty-four months to obtain.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is the primary state law governing water quality in California. Under the Porter-Cologne Act, the SWRCB and nine (9) RWQCBs have broad authority to regulate discharges to "waters of the State," a term that includes wetlands, streams, and other surface waters — regardless of whether they fall under federal jurisdiction as WOTUS. For projects that involve dredge, fill, or other discharges to waters of the State, the applicable RWQCB (in this instance the Central Coast RWQCB) may require the issuance of Waste Discharge Requirements ("WDRs") to ensure that activities comply with state water quality objectives and beneficial use protections.

If a project also requires a federal permit – such as a USACE Section 404 permit – the RWQCB will typically issue a Water Quality Certification under Section 401 of the CWA in lieu of separate WDRs for the dredge or fill discharge, provided the certification incorporates all necessary state requirements. However, in the absence of a federal nexus, the RWQCB retains independent authority under the Porter-Cologne Act to regulate discharges through the WDR process.

The Project Area includes wetlands and other aquatic features that may be regulated as waters of the State, including features that do not meet the federal definition of jurisdictional waters. Accordingly, any project-related activity that involves grading, excavation, fill placement, or other activities resulting in discharge of material to waters of the State may require WDRs or a Section 401 Water Quality Certification. Site-specific technical studies, including a formal wetland delineation prepared in accordance with applicable USACE and SWQCB wetland delineation procedures, would be necessary to confirm the extent and regulatory status of these features. Note, injection well facilities would require enrollment under the State Water Resources Control Board's Water Quality Order No. 2012-0010-DWQ (General Waste Discharge Requirements for Groundwater Recharge Projects). Coordination with the Central Coast RWQCB would be required to confirm the appropriate regulatory pathway and to establish avoidance, minimization, and compensatory mitigation measures for any unavoidable impacts to waters of the State. Permitting requirements would apply to all project-related activities that have the potential to affect waters of the state, including the construction of new diversion facilities. Permitting generally takes approximately twelve to eighteen months.

California Fish and Game Code – 1602

California Fish and Game Code Section 1602 requires that any person, public agency, or entity notify the CDFW before initiating any activity that may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake. This requirement applies to both perennial and ephemeral watercourses, including streams that support riparian vegetation or exhibit definable bed and bank features, regardless of federal jurisdictional status. If CDFW determines that the proposed activity may substantially affect fish or wildlife resources, the Applicant must enter into a Lake or Streambed Alteration Agreement ("LSAA") with CDFW before proceeding with the project.

The Project Area contains stream features and drainages that may be subject to regulation under Section 1602. As a result, the construction and operation of project-related improvements (e.g., proposed diversion facilities, pipelines, storage facilities, etc.) would likely result in modifications to streambeds or banks, triggering the requirement for an LSAA. Project-specific technical analysis would be required to map and characterize these features and determine whether proposed activities fall within CDFW's jurisdiction. Early coordination with CDFW is recommended to confirm notification requirements and ensure appropriate measures are developed to avoid or minimize impacts to aquatic and riparian resources where feasible.

An LSAA typically establishes conditions intended to protect fish and wildlife resources during project implementation. These conditions may include pre-construction biological surveys, worker environmental awareness training, biological monitoring during in-stream or near-stream work, seasonal timing restrictions, erosion and sediment control measures, and site restoration requirements. Where permanent impacts to streambeds, banks, or associated riparian habitat cannot be avoided, CDFW may require compensatory mitigation, which may include habitat restoration, riparian revegetation, or preservation of off-site habitat at ratios commensurate with the extent and functional value of impacted resources.

Because the concepts evaluated in this memorandum are conceptual in nature, the need for an LSAA and the scope of associated avoidance, minimization, and mitigation measures would depend on the final siting and design of project improvements. Permitting requirements would primarily apply to the construction and operation of new diversion facilities but may also apply to other project components that could affect the bed, channel, or bank of, any river, stream, or lake. LSAA permitting generally takes approximately twelve months.

V. Conclusion

As summarized in this memorandum, implementation of the concepts described above would be subject to a range of federal and state regulatory requirements (e.g., Clean Water Act, federal Endangered Species Act, California Endangered Species Act, etc.). While many of these requirements would apply broadly across all concepts, the extent of potential permitting requirements - and the scope and complexity of associated procedural requirements - would vary depending on more refined site design, including site-specific resource evaluations.

It is also important to recognize that several of the identified authorizations involve substantial agency review timelines. In particular, a Section 10 ITP under the federal Endangered Species Act can require preparation of a HCP, compliance with the NEPA, public review, and interagency coordination, often resulting in a multi-year process from application submittal to permit issuance. Other federal and state permits (e.g., Clean Water Act Section 404/401 authorizations, Section 2081 ITP, and LSAA) may also involve extended review periods. The timeframes typically associated with these permits reflect agency review periods following submission of a complete application and do not account for the time and effort necessary to conduct biological surveys, prepare technical studies, develop mitigation plans,

assemble application materials, or respond to agency comments. Accordingly, early coordination with resource agencies will be critical to inform realistic project scheduling assumptions.

The permitting considerations identified in this memorandum are based on conceptual descriptions of the project concepts. As project design advances and concepts are refined, additional regulatory requirements may be identified based on project-specific and site-specific technical analysis, and the applicability or level of effort associated with certain approval may change.

TABLE 1 ANTICIPATED PERMITS AND APPROVALS		
Agency or Department	**Approval or Permit**	**Discussion**
Federal Regulatory Requirements		
U.S. Army Corp of Engineers ("USACE")	Permit under Section 404 of the Clean Water Act (33 U.S. Code Section 1344).	▪ Projects that would discharge dredged or fill material into waters of the United States, including wetlands, require a USACE permit pursuant to the Clean Water Act Section 404.
U.S. Fish and Wildlife Service ("USFWS")/National Marine Fisheries Service ("NMFS")	Federal Agency Consultation pursuant to Endangered Species Act Section 7 (16 U.S. Code Section 1537).	▪ The Endangered Species Act requires federal agencies to consult with USFWS and NMFS before implementing actions that may affect a federally listed species under their jurisdiction or may adversely modify designated critical habitat. Federal agencies must consult with USFWS and NMFS to determine whether the proposed action of issuing permits and authorizations for a proposed project is likely to adversely affect a federally listed terrestrial or freshwater animal or plant species under USFWS' jurisdiction, or that species' designated critical habitat; is likely to adversely affect a federally listed marine species under NMFS's jurisdiction, or that species' designated critical habitat; jeopardize the continued existence of species that are proposed for listing under the Endangered Species Act; or adversely modify proposed critical habitat. To support USFWS' and NMFS' determination, a federal agency must prepare a Biological Assessment to initiate "formal consultation." USFWS and NMFS will issue a Biological Opinion concerning the effects of a project. If USFWS and NMFS find that a project may jeopardize the species or destroy or modify critical habitat, reasonable and prudent alternatives to the action must be considered.
U.S. Fish and Wildlife Service ("USFWS")	Incidental Take Permit ("ITP") under the Endangered Species Act Section 10 (16 U.S. Code Section 1539).	▪ A project may apply for an ITP pursuant to the Endangered Species Act Section 10(a)(1)(B) when a non-federal entity believes their otherwise lawful activities may cause the take of an endangered or threatened species. A project must provide a Habitat Conservation Plan ("HCP") along with the application for an ITP.
State Historic Preservation Office and the National Historic Preservation Act ("NHPA")	Consultation with State Historic Preservation Officer ("SHPO") or Tribal Historic Preservation Officer ("THPO") under Section 106 of the NHPA (16 USC Section 470 et seq.).	▪ The NHPA requires federal permitting agencies to "take into account" the effects of a federal undertaking, or a proposed project, on properties included in the National Register of Historic Places or that meet National Register criteria, and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment.

TABLE 1 ANTICIPATED PERMITS AND APPROVALS		
Agency or Department	**Approval or Permit**	**Discussion**
State Regulatory Requirements		
California Department of Fish and Wildlife ("CDFW")	Incidental Take Permit under the California Endangered Species Act (California Fish and Game Code Section 2081).	▪ CDFW may permit the take of any endangered, threatened, or candidate species if said take is incidental to an otherwise lawful activity and if the impacts of the authorized take are minimized and fully mitigated. No permit may be issued if the activity would jeopardize the continued existence of the species. Permittees must implement species-specific minimization and avoidance measures, and fully mitigate the potential impacts of the Project pursuant to California Fish and Game Code Section 2081(b) and California Code of Regulations Title 14 Sections 783.2-783.8).
California Department of Fish and Wildlife ("CDFW")	Streambed Alteration Agreement (California Fish and Game Code Section 1602).	▪ California Fish and Game Code Section 1602 requires project proponents to notify CDFW prior to engaging in activities that may divert or obstruct the natural flow of a river, stream, or lake; change the bed, channel, or bank of a river, stream, or lake, use material from any river, stream or lake; or deposit or dispose of material into a reiver, stream, or lake. Rivers, streams, and lakes that are dry for periods of time may also be subject to Section 1602. CDFW and a project proponent will agree to a Lake or Streambed Alteration Agreement
State Water Resources Control Board ("SWRCB")/Central Coast Regional Water Quality Control Board ("Central Coast RWQCB")	Waste Discharge Requirements pursuant to Section 401 of the Clean Water Act (40 Code of Federal Regulations 121) and the Porter Cologne Water Quality Control Act (California Water Code, Division 7, Section 13000 et seq.).	▪ Clean Water Act Section 401 certification verifying compliance with the California's water quality standards for activities requiring a federal permit (i.e., actions resulting in potential discharge into waters of the United States). ▪ SWRCB and the Central Coast RWQCB issue waste discharge requirements for discharges of dredged or fill material into waters of the state under the Porter Cologne Water Quality Control Act.
Note: This table is not intended to provide an exhaustive list of all permits, approvals, or authorizations that may be required to construct, operate, or maintain potential water supply facilities. Rather, it identifies anticipated resource agency permitting requirements related specifically to environmental resource considerations and compliance with applicable state and federal environmental regulations. The permits identified in this table are based on conceptual-level information. As project design, siting, and operational details are refined, additional permits or approvals may be identified, and the regulatory pathways described may change accordingly.		