

CALIFORNIA COASTAL COMMISSION

ENERGY, OCEAN RESOURCES AND FEDERAL CONSISTENCY
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105
VOICE (415) 904-5260



W10b

August 28, 2026

To: Commissioners and Interested Parties

From: Dr. Kate Huckelbridge, Executive Director
Cassidy Teufel, Deputy Director
Kaylee Griffith, Ecologist

Subject: 2026–2028 Work Plan and Budget for
Channelside (formerly Poseidon) Carlsbad
Desalination Mitigation Independent Monitoring
Program

SUMMARY OF STAFF RECOMMENDATION

California Coastal Commission (Commission) staff recommends the Commission approve a 28-month work plan and a \$5,346,821 28-month budget paid by Channelside Water Resources LP (“Channelside”),¹ formerly known as Poseidon Resources LP, for the independent monitoring and technical oversight of Channelside’s Carlsbad Desalination Facility Mitigation Project, also known as the Otay River Estuary Restoration Project (“ORERP”). The mitigation project and the permittee-funded independent monitoring are required under Channelside’s coastal development permit (CDP No. E-06-013) for its Carlsbad Desalination Facility. The mitigation project itself was approved by the Commission in 2019 through CDP No. 9-14-0731.

Work Plan and Budget for 2026–2028

This proposed 2026–2028 work plan will cover the remaining months of the fourth, as well as the fifth and sixth years of work² required under the independent mitigation

¹ The Commission was notified on January 15, 2024, that the company formerly known as “Poseidon Resources (Channelside) LP” had officially changed its name to “Channelside Water Resources LP.”

² The 28 month term of the work plan and budget will allow future work plans and budgets to align with a calendar year cycle (January through December) rather than the current September through August cycle. This change will facilitate more efficient and effective project management.

monitoring program for ORERP as specified in CDP No. 9-14-0731. The proposed budget will fund the costs of the independent monitoring and technical oversight program, including the independent contract scientist, program staff, consultants, science advisory panel, administrative support, and operating expenses from September 2026 through December 2028. The staff proposed to be funded represent the minimum required to achieve the goals outlined in Special Condition 7 of CDP No. 9-14-0731 and to fulfill the tasks outlined in the Commission-approved Marine Life Mitigation Plan (MLMP) for September 2026 through December 2028. This MLMP is provided as Appendix A.

Coastal Act Violation

As described further below, and as noted in the previous staff report for the prior 2022–2023 and 2024–2026 work plans and budgets, Channelside failed to comply with the terms and conditions of CDP No. 9-14-0731. This CDP required Channelside to commence the creation/restoration of coastal wetlands authorized by the permit by October 30, 2021, but it instead began this work in the fall of 2022. The Commission's Enforcement Division initiated an investigation into this violation, issued a Notice of Violation letter on February 11, 2022 notifying Channelside of the violation, and is pursuing resolution of this violation as a separate matter. Approving the proposed work plan and budget will not resolve the outstanding violation nor interfere with the Enforcement Division's efforts to resolve it. At this time, Commission staff is not aware of any other permit compliance issues that have arisen and over the past two years, Channelside has repeatedly reinforced its commitment to meet its permit obligations and requirements.

TABLE OF CONTENTS

I. MOTION AND RESOLUTION..... 4

II. FINDINGS AND DECLARATIONS..... 4

 A. Channelside (formerly Poseidon) Carlsbad Desalination Permit Background..... 4

 B. Commission Oversight and Independent Monitoring..... 6

 C. Status of Wetland Mitigation and Monitoring..... 7

 D. Work Plan: 2026–2028..... 9

 E. Budget: 2026–2028..... 14

 F. Coastal Act Violation 16

EXHIBITS

[Exhibit 1 – Wetland Restoration Project Location](#)

[Exhibit 2 – 2026–2028 Detailed Budget](#)

APPENDICES

[Appendix A – 2008 Approved Marine Life Mitigation Plan](#)

[Appendix B – 2024–2026 Approved Work Plan and Budget](#)

I. MOTION AND RESOLUTION

Commission approval of the 2026–2028 work plan and budget requires the following motion:

I move that the Commission **approve** the 2026–2028 Work Plan and Budget for the Channelside Carlsbad Desalination Facility Mitigation Independent Monitoring Program as recommended by the staff.

The staff recommends a **“YES”** vote on the foregoing motion, which will result in adoption by the Commission of the following resolution:

The Commission hereby determines that the 2026–2028 Work Plan and Budget for the Channelside Carlsbad Desalination Facility Mitigation Independent Monitoring Program that is recommended by staff carries out the intent of Special Condition 7 of Coastal Development Permit No. 9-14-0731 and Condition B, 2.0 of the Marine Life Mitigation Plan by requiring the permittee to provide reasonable and necessary funding for the Commission contract scientists’ technical oversight and independent monitoring responsibilities pursuant to the mitigation and lost resource compensation conditions.

II. FINDINGS AND DECLARATIONS

A. Channelside (formerly Poseidon) Carlsbad Desalination Permit Background

On November 15, 2007, the Commission approved the coastal development permit (CDP No. E-06-013) for Poseidon’s proposal to construct and operate a desalination facility in Carlsbad, San Diego County, subject to Channelside meeting several conditions prior to issuance of the permit. Special Condition 8 in CDP No. E-06-013 required Poseidon to submit a Marine Life Mitigation Plan (MLMP) for additional Commission review and approval. Poseidon and Commission staff worked together to develop the MLMP, which the Commission subsequently approved on August 8, 2008. The MLMP establishes the minimum standards and objectives to ensure sufficient mitigation for the marine life impacts caused by the facility’s use of estuarine water and entrainment of marine organisms. Specifically, it required the restoration of 66.4 acres of estuarine wetland habitat within the Southern California Bight. The MLMP also includes performance standards, timing restrictions, monitoring requirements, and other elements needed to ensure successful and adequate mitigation.

On November 3, 2009, after all prior to issuance conditions had been met, Commission staff issued CDP No. E-06-013 to Channelside. Within 10 months of receiving the CDP for the desalination facility, Channelside was required to submit its proposed restoration site(s) and preliminary wetland restoration plan for Commission review and approval.

The wetland performance and independent monitoring requirements included in the MLMP were modeled after those included in a separate CDP authorizing construction and operation of the San Onofre Nuclear Generating Station (SONGS) owned and operated by Southern California Edison (CDP No. 6-81-330-A, formerly 183-73). Thus, the independent monitoring for the restoration mitigation project is modeled after the SONGS Mitigation Monitoring Plan for the San Dieguito Wetland Restoration Project.

In 2011, the Commission approved a preliminary plan for the creation and restoration of coastal wetlands on two noncontiguous sites within the San Diego National Wildlife Refuge in South San Diego Bay (**Exhibit 1**). At that time, Channelside, in consultation with Commission staff, a Science Advisory Panel (SAP) formed by staff to provide scientific expertise to the Commission and staff, and representatives from several other state and federal agencies, began to develop restoration plans and alternatives for the approved mitigation site. From 2013 to 2018, Channelside undertook major project redesigns and completed technical studies and environmental review.

Subsequently, on May 9, 2019, the Commission approved Channelside's coastal development permit (CDP No. 9-14-0731) for the Otay River Estuary Restoration Project (ORERP). These restoration sites, totaling 34.6 acres for the Otay River Floodplain Site and 90.9 acres for the Pond 15 site, are also known as the Otay River Estuary Restoration Project (or "mitigation wetlands"). The Commission's approval of this coastal development permit was contingent upon compliance with all applicable conditions from CDP No. E-06-013 (i.e., the CDP for the desalination project). Prior to issuance of CDP No. 9-14-0731 for the wetland restoration project, the Commission provisionally approved the Final Wetland Restoration Plan for it. The Final Wetland Restoration Plan outlines the mitigation for all wetland impacts associated with the desalination facility and a draft monitoring plan for assessing that mitigation prepared by the SAP, subject to review by the Commission's Executive Director ("Executive Director"). On April 30, 2021, CDP No. 9-14-0731 was issued and on September 19, 2022, the Executive Director approved the final version of the Final Wetland Restoration Plan.

Special Condition 7 of CDP No. 9-14-0731 requires independent monitoring of the mitigation project pursuant to a monitoring plan developed by the independent scientist, Commission staff, and the SAP, in consultation with Channelside. Condition A, 5.0 (Wetland Monitoring, Management and Remediation) of the Channelside MLMP states that "Monitoring, management (including maintenance), and remediation shall be conducted over the 'full operating life' of Channelside's desalination facility, which shall be 30 years from the date "as-built" plans are submitted pursuant to subsection 4.1(l)." To ensure full compensation for the loss of coastal resources, the monitoring, management (including maintenance) and remediation of the wetland restoration will be carried out for 30 years after construction of the restoration project. If the restoration fails to meet the performance standards in some years, this may result in a monitoring period longer than 30 years.

B. Commission Oversight and Independent Monitoring

Condition B of the Commission-approved Marine Life Mitigation Plan (MLMP) establishes the administrative structure for the operation and funding of the independent monitoring and technical oversight of the mitigation project. MLMP Conditions A through C and CDP No. 9-14-0731 outline the financial responsibility of Channelside for oversight and monitoring functions, including providing “reasonable and necessary costs” for personnel with appropriate scientific or technical expertise, support personnel, equipment, overhead, consultants, contractors for identified studies, and expenses related to a SAP convened by the Executive Director. The MLMP and CDP also include requirements for periodic public review of project performance and the availability of scientific data through a publicly accessible database.

Pursuant to these conditions, the Commission has approved work programs and budgets to fund the independent monitoring program since 2022. The California Marine Science Foundation (CMSF) manages the funds for the oversight and monitoring program and assists Commission staff with administrative tasks. The Commission staff has contracted SAP members to provide scientific expertise, and CMSF and Commission staff hired an independent scientist, Dr. Laurie Koteen, to manage the monitoring program. As the program progresses, additional staff, consultants, and contractors will be required based on specific tasks and expertise. Commission staff also spends a portion of its time administering the work plan; therefore, costs associated with staff time and travel are also included in the proposed budget.

Monitoring Plan

Condition A of the MLMP requires monitoring, management (including maintenance), and remediation throughout the entire 30-year “full operating life” of Channelside’s desalination facility. This monitoring evaluates the wetland restoration’s success in achieving stated restoration goals and performance standards. As outlined in Condition B (Administrative Structure) of the MLMP, the SAP developed a draft Monitoring Plan focused on post-implementation monitoring, which assesses project compliance with the MLMP’s performance standards. Dr. Koteen prepared an updated Monitoring Plan on September 30, 2025. The methodology to be used for evaluating two remaining performance standards is currently being discussed by the SAP.

The performance standards that will be used to evaluate the success of the wetland restoration project can be categorized into two main types: long-term physical standards and biological performance standards. The long-term physical standards include topography, water quality, tidal prism integrity, and habitat areas. The biological performance standards include biological communities (e.g., fish, macroinvertebrates, and birds), vegetation, cordgrass (*Spartina sp.*) canopy architecture, reproductive success of specific plants, food chain support functions, and control of exotic species. Some of these are absolute standards that are measured at the mitigation site only, and others are relative standards that will be measured relative to four reference sites. The

final monitoring plan, which will be completed during the 2026–2028 work plan period, will specify the measure of similarity, such as a specified range or the 95% confidence interval, used to compare the biological performance standards for the mitigation and reference sites. On June 30, 2025, the Executive Director approved³ the following reference sites recommended by the independent scientist, SAP, and Commission staff: Sweetwater Marsh, Los Peñasquitos Lagoon, Mugu Lagoon, and Carpinteria Salt Marsh. The Executive Director determined that the reference sites meet the required criteria outlined in the MLMP as “relatively undisturbed, natural tidal wetlands within the Southern California Bight.”

Because of the rarity of coastal wetlands in Southern California and low number of sites appropriate for consideration and use as reference sites, three of these reference sites are also used as reference sites for the SONGS Mitigation Monitoring Program. At Commission staff’s suggestion, Channelside and Southern California Edison are piloting an arrangement between the two mitigation programs to avoid the impacts, habitat and wildlife disturbance and logistical challenges associated with of duplicative sampling of the same reference sites. This arrangement would involve the collection of a single set of biological monitoring data from the three reference sites that would then be shared between the programs. Costs associated with the collection of this data would also be shared. This arrangement is reflected in the current work plan and budget and is expected to be further refined over the budget and work plan term. If it proves effective at reducing adverse impacts to wildlife and habitat associated with reference site monitoring and contributes to operational efficiencies for the two mitigation programs, Commission staff expects it to be continued in future budgets and work plans.

C. Status of Wetland Mitigation and Monitoring

In the fall of 2022, Channelside began construction on the Otay River Estuary Restoration Project. Construction finished at the Otay River Floodplain Site at the end of 2024 and at the Pond 15 site in February 2025⁴. Performance monitoring for certain standards (e.g. birds and water quality) began in 2025 at the mitigation wetlands and the reference wetlands. Earthwork and the years that followed presented significant challenges, including an unexpected need for imported fill and selection of fill inappropriate for wetland surface soils that needed to be buried and replaced with soils

³ Section 5.4 of the Commission-approved MLMP states that “The Executive Director shall select the reference sites.” and they shall be “relatively undisturbed, natural tidal wetlands within the Southern California Bight.”

⁴ It should be noted that Channelside has stated that it disagrees with this determination that construction has been completed and communicated its position that planting of the sites needs to occur before construction can be complete. Commission staff disagrees with this position but is working collaboratively with Channelside on a strategy to move past this disagreement and towards the mutual goal of advancing the mitigation project.

from the mitigation sites in order to achieve the target site topography and configuration. At the completion of construction in early 2025, the two mitigation wetlands had areas of high salinity in surface soils that Channelside was concerned may present a challenge for plant survivorship. As such, installation of plants was delayed to allow for further assessment of the extent and level of the elevated soil salinity at the two sites.

Channelside is now planning to move forward with partial planting of the sites in the fall of 2026, targeting areas in the Otay River Floodplain Site where soil sampling has demonstrated lower soil salinities. Barring unexpected challenges, the remaining planting would be carried out in 2027 and 2028. The budget and work plan reflects this status of planting activities on the mitigation sites and does not include full assessment of vegetation cover and other vegetation-specific metrics at the mitigation or reference sites. Carrying out this type of monitoring is not necessary to determine compliance with relevant vegetation standards until further progress on planting at the mitigation sites occurs. Citing the status of vegetation planting, Channelside has also requested an extension of the MLMP requirement for biological monitoring standards to be achieved within four years of construction. Under Section 4.2 of the MLMP, the Executive Director has discretion to extend this time limit for good cause, and plans to approve a one year extension of the MLMP requirement. Consideration of Channelside's request for a further extension beyond that would be based on an assessment of progress achieved over the coming year.

Starting in 2025, the independent monitoring program began piloting monitoring the mitigation wetlands and one reference wetland, Sweetwater Marsh in San Diego Bay for compliance with several performance measures. This proposed work plan builds directly off the most recently approved work plan and budget for 2024–2026 (**Appendix B**) that the Commission approved in August 2024, which provided detailed tasks and cost estimates for independent monitoring and monitoring program development. That work plan covered activities during the period from September 2024 to August 2026, and that approved budget totaled \$3,111,314. During 2024–2026, the independent scientist, working with the SAP and Commission staff, completed and made significant progress toward the completion of several tasks included in the work plan. As detailed in Task 1 (Construction Monitoring) of the 2024–2026 work plan and budget, the independent scientist managed and analyzed data collected during construction monitoring, and conducted photogrammetric monitoring of topography, surveyed bathymetry, and installed water elevation and quality sensors to evaluate whether restoration work is being conducted according to approved final design plans. Task 2 (Evaluate and select reference sites) was completed. The independent scientist also researched and led discussions with the SAP and Commission staff to nearly complete Task 3 (Determine method of assessing permit compliance). Task 4 (Develop monitoring methods and prepare monitoring plan) was also nearly completed, with finalization of tidal prism and topography standards remaining. Statistical analyses for the monitoring that has occurred is left for Task 5 (Conduct post-construction monitoring, data analyses, and lab work), and Task 6 (Develop a data management system) was delayed so it could better align with the start of full reference and mitigation site data collection efforts. Task 7

(manage consultants and contracts) is ongoing and Task 8 (Establish a workspace and procure equipment) and Task 9 (Hire staff in San Diego) are being arranged at the time of writing this staff report. It is important to note that, due to the delays described above associated with soil and planting, much of the previous budget was not spent as planned, and several payments from Channelside to CMSF were never requested. This resulted in fewer funds being transferred to CMSF and reduced spending from the account.

Commission staff, the independent scientist, and the SAP, in consultation with Channelside, developed the proposed Work Plan and Budget for 2026–2028 that is the subject of this report and recommendation.

D. Work Plan: 2026–2028

Implementation Structure and Staffing Levels

The ORERP independent monitoring program entered the early stages of the performance monitoring phase in early 2026, which resulted in significant increases in staffing and equipment needs. In 2025, the independent monitoring program hired sub-contractors for the first year of monitoring. In mid-2026, the program hired a full-time field supervisor. Monitoring during this work plan will entail sampling for a suite of parameters at two mitigation wetland sites and one reference wetland site, Sweetwater Marsh. For this work plan (and potentially into the future), Los Peñasquitos Lagoon, Mugu Lagoon, and Carpinteria Salt Marsh will be monitored by the SONGS mitigation monitoring program with the data and associated costs shared with ORERP. Many of the monitoring tasks require field crews of 4-6 people (depending on the level of training of the staff) and significant time in the lab to process samples. Additionally, the scientific staff will need to procure additional field and lab equipment and establish office and lab space during this period. Several line-items related to equipment, data management, and facilities in the budget for 2024–2026 were not purchased, so changes in this budget largely reflect line-items previously approved and any inflation-related cost increases and equipment not anticipated during the last work plan.

The independent scientist will continue to lead the implementation of the mitigation monitoring program and provide scientific expertise to the Commission. Additionally, a SAP consisting of prominent experts in the field will continue to provide guidance to Commission staff and the independent scientist on various aspects of the mitigation project. The current SAP members include Dr. Richard Ambrose, a Research Professor Emeritus in the Department of Environmental Health Sciences at the University of California Los Angeles; Dr. Peter Raimondi, a Professor in the Department of Ecology and Evolutionary Biology at the University of California, Santa Cruz; and Dr. Brett Sanders, a Professor of Civil and Environmental Engineering, Urban Planning and Public Policy at the University of California, Irvine.

To meet the goals specified in the MLMP, the independent scientist will be supported by staff scientists and/or temporary staff. In addition, the independent scientist, working with Commission staff and the SAP, will establish a data management system to store and process monitoring data collected from the independent monitoring program over time.

Staff has determined the staffing levels for the wetland monitoring tasks based on a consideration of the effort and time estimated to be involved in the completion of each task, the location of the task (field sites, laboratory), the frequency with which each task will be performed, and the expertise required to complete the tasks. As mentioned above, proposed staff numbers increase during this budget period because performance monitoring at the two restoration sites and one reference site will commence during this time. As the details of the monitoring plan are still being determined, anticipated monitoring tasks and staffing levels for each task were estimated based on those for the independent monitoring program for the SONGS wetland restoration project, namely the SONGS two-year budget and work plan for 2026–2027⁵. In addition, Commission staff referred to estimates provided by vendors and consultants as well as sampling work that was performed for the ORERP independent monitoring program in 2025–2026.

Staff equating to 7 person-years⁶ are proposed to be maintained and/or hired over the course of the two-year work plan to support the independent scientist in performance monitoring and other tasks required to establish the program. An assistant restoration scientist/field and lab manager would serve as a second field lead (an office manager for the San Diego office) and would support the independent scientist in tasks including, for example, preparing access agreements, developing sampling methods, and writing monitoring reports. One field and lab managerial assistant and one full-time staff research associate would be responsible for supporting the independent scientist and assistant restoration scientist in field monitoring, and for processing invertebrate samples in the laboratory. Part-time and seasonal staff research associates (likely 4 people representing 2 person years) would provide additional support for field collection during the busy fall sampling season. Finally, an IT professional would develop data management/data storage solutions, including potentially exploring solutions for integrating ORERP's data storage and management into the existing SONGS system.

ORERP and SONGS share three reference sites, with comparable monitoring needs at each of those reference sites. Given the overlap in monitoring program activities and three shared reference wetlands, there are opportunities for reducing duplicative efforts in monitoring and data management, which would result in cost savings for both Southern California Edison and Channelside. Preliminary talks between the two programs focused on finding efficiencies and cost savings, with an estimate of shared

⁵ <https://documents.coastal.ca.gov/reports/2025/6/w8d/w8d-6-2025-report.pdf>

⁶ Person-years is defined as the effort, or amount of time, worked in a year by one full time staff person. For the purposes of this budget, one person-year equates to 2080 hours.

costs for monitoring the three shared reference sites for this work plan. The degree of collaboration between the ORERP and SONGS wetland monitoring programs is expected to evolve throughout the 2026–2028 work plan, and future shared reference site monitoring costs will be informed by actual expenditures.

Consultation with Permittee

Commission staff consulted with Channelside on the 2026–2028 proposed work plan and budget over the course of several draft budget and budget justification transmittals and meetings in June, July, and August 2026. Feedback from Channelside focused on refinements to work plan tasks and cost estimates as well as requests for further explanation of the source of budget estimates. In response, Commission staff and the independent scientist provided the requested explanations and/or adjusted the work plan and budget, as needed. Some key items that were discussed included necessity of certain lab and field supplies, clarification of items purchased by the monitoring program that may be covered by contractor costs, cost of IT and database services, annual adjustments for staff benefit costs, and inclusion of costs that were in the prior work plan budget but not incurred. Channelside and Commission staff discussed the opportunity for savings by cost-sharing with SONGS wetland monitoring program for monitoring three reference wetlands and came to an agreement on the value for this work plan. The process was collaborative and concluded with a budget which Channelside and Commission staff broadly agree is appropriate to carry out years five and six of the ORERP independent monitoring program. Both parties will also continue to collaborate over the course of these years to explore and seek further refinements and efficiencies, particularly around implementation of the final monitoring plan.

2026–2028 Work Plan Tasks

The work program and budget presented in this report represent the best efforts of the independent scientist, Commission staff, Channelside, and the SAP to provide detailed tasks and cost estimates for September 2026 through December 2028. It includes a 5% contingency amount, and unforeseen but necessary expenditures may be authorized at the discretion of the Commission Executive Director, with consultation from Channelside to promote cost-effective implementation. If additional staff or funds are necessary to carry out the identified tasks, Commission staff will work with Channelside to bring an amendment to this work plan and budget to the Commission for consideration. This work plan is four months longer than the prior work plan, which allows this work plan schedule to synchronize with calendar years 2026, 2027, and 2028. Future work plans and budgets would continue to follow the calendar year timeframe.

The following tasks are proposed to be completed during the 2026–2028 work period. Tasks will be carried out by the independent scientist under the direction of Commission staff and the SAP. Commission staff, SAP, and the independent scientist will consult with Channelside on the elements of the work plan and will keep Channelside informed of progress.

1) Performance monitoring (September 2026-August 2028)

The independent scientist, in consultation with the SAP and Commission staff, will execute performance monitoring to 1) evaluate compliance with the biological and physical standards detailed in the plan, 2) ascertain, if necessary, why performance standards are out of compliance with the permit, and 3) to diagnose and recommend remedial measures when necessary. The specific monitoring tasks are described below:

- a. Conduct photogrammetric and bathymetric surveys to determine the topography and bathymetry of the mitigation wetlands. In 2028, conduct algal and vegetation cover surveys.
- b. Measure tidal prism and tidal elevation at the mitigation wetlands. Maintain water elevation sensors.
- c. Collect water quality and additional explanatory data with environmental sensors to assess compliance with the water quality performance standard.
- d. Survey fish and macro-invertebrates in main channel and tidal creek habitats to evaluate compliance with the fish and invertebrate density and species richness performance standards.
- e. Survey bird species three times annually to evaluate compliance with the performance standards that apply to the density and species richness of birds and the performance standard for food chain support.
- f. Survey *Spartina* canopy architecture due to the importance of the plant species *Spartina foliosa* as nesting habitat for the endangered bird species, Ridgway's Rail.
- g. Sample seeds of select common salt marsh species to evaluate the reproductive success of salt marsh vegetation.
- h. Evaluate the presence of and functional impact of non-native invasive species on wetland function.

2) Quantification and Species Identification of Invertebrate Species in the Laboratory (Winter- Spring annually)

On an annual basis, staff with expertise in invertebrate species identification will process the macro-invertebrate cores obtained through fall sampling efforts in the lab. Each core will be sieved to remove surrounding soil, and the species observed under microscopes are counted to determine species density and identified to the lowest taxonomic group feasible. The findings from this investigation will contribute to assessment of the invertebrate performance standards.

3) Conduct data analyses and reporting (ongoing)

The independent scientist, supporting staff, and consultants where applicable, will analyze all data collected and processed during Tasks 1 and 2 above to evaluate the performance of the mitigation wetland against the performance

standards and to assess overall permit compliance. In addition, ORERP staff will compile an annual report each year detailing findings.

- a. Analyze all data collected and processed to evaluate the performance of the mitigation wetland against the performance standards and to assess overall permit compliance.
- b. Prepare annual reports and hold a public workshop on the previous year's activities, and report on the overall status of the mitigation project.

4) Develop data management system (Ongoing)

The independent scientist, with help from the SAP, and potentially with collaboration from the SONGS mitigation monitoring program, will develop a data management system.

- a. The independent scientist will manage the storage of physical variables monitored at the restoration sites, and document methods for data collection to ensure data quality control, storage, and curation.
- b. The independent scientist, with help from the SAP and in consultation with Channelside, will explore different methods of longer-term data storage associated with monitoring of restoration and reference sites.
- c. Explore the most suitable approach for database management and begin implementation. Continue to develop data management structure and methods.
- d. Leverage modern technology to support data entry efficiencies and data storage security that allows for the restoration and/or audit of data from any previous point in time.
- e. Enter, organize, and manage data collected during the monitoring studies.

5) Manage consultants and contracts and Office Management (Ongoing)

The wetland monitoring tasks described in this work plan may require the involvement of contractors or the establishment of contractual relationships. The independent scientist, in collaboration with Commission staff, and with administrative support from CMSF will manage contracts, consultancy agreements, and budget tracking.

6) Experimental or Observational Studies to Inform Remedial Activities (ongoing)

As monitoring for ORERP progresses, the need for studies to inform potential remedial activities, or to elucidate the best course of adaptive management actions will arise. The need and nature of such activities may not be clear at the time of work plan preparation. The investigation into soil salinity, the proposed small-scale planting across a salinity gradient at the Otay River Floodplain Site, and a prior year proposed irrigation experiment are examples of these types of

investigations. ORERP monitoring program staff anticipates the need to implement similar types of smaller-scale studies over the course of the work plan.

7) Initiate Mitigation Monitoring Digital Catalog (ongoing)

To facilitate outside requests for data, sampling and analysis methods, and to make the data and metadata more readily available and usable to the public, the ORERP Monitoring Program will upload an assortment of data packages annually into the publicly accessible Environmental Data Initiative (EDI) Data Portal electronic repository.

8) Establish a shared workspace in San Diego and procure equipment (September 2026– Spring 2027)

To facilitate the monitoring program, the independent scientist, in consultation with the SAP, will implement the following tasks to establish a workspace in San Diego.

- a. Secure office space and lab space in San Diego, including potential modification of office to accommodate a lab. Alternatively, secure a separate laboratory space.
- b. Purchase field and laboratory equipment needed to execute monitoring tasks.

9) Hire staff based in San Diego (September 2026 and ongoing)

To facilitate the monitoring program, the independent scientist, in consultation with the SAP, will hire staff to fulfill monitoring and data requirements.

- a. Hire permanent and seasonal staff based in San Diego to aid in the execution of sampling of restored and reference sites, conduct laboratory assays, service data sondes, and potential additional tasks as they arise.
- b. Hire staff based in San Diego to establish an internal office network, to establish data processing and storage protocols, and install data infrastructure.

E. Budget: 2026–2028

CDP No. 9-14-0731 and the MLMP require Channelside to fund the Commission staff's oversight of the mitigation and independent monitoring functions outlined in the MLMP. The permittee must provide "reasonable and necessary costs" for retaining personnel with appropriate scientific or technical expertise, as well as providing adequate funding for support staff, equipment, overhead, consultants, contractors, and the SAP. CMSF will manage the funds for the oversight and monitoring program.

The total budget to implement the work plan is intended as a "not-to-exceed" amount. The permittee provides funds periodically throughout the budget period rather than as a

lump sum payment, to minimize the advance outlay of cash. Any unspent funds at the end of the budget period will either be carried over to the next period or returned to Channelside.

Proposed Budget for 2026–2028

The proposed budget for September 2026 through December 2028 covers the costs for the fifth and sixth years of the Channelside independent mitigation monitoring and oversight program. It covers various costs, including for an independent scientist, additional monitoring program staff, IT and data management, SAP, consultants, contract administrative support, cost-sharing for reference site monitoring with the SONGS mitigation monitoring program, and operating expense throughout the two-year budget period. CMSF, as the independent accounting entity, will handle financial administration duties, and the overhead cost in the budget represents the current rates charged by CMSF for this service.

The total funding requested to implement the monitoring and oversight program for two years is \$5,346,821, as shown below. As additionally demonstrated in the detailed budget that is included in **Exhibit 2**, this funding would cover the independent monitoring and oversight-related work to be performed by various staff (as well as their related expenses) for the tasks in the 2026–2028 work plan.

PROPOSED WORK PLAN BUDGET 2026–2028

	Sept 2026- Dec 2026	2027	2028	WORK PLAN TOTAL
Personnel				
Restoration Scientist	\$61,067	\$190,528	\$200,054	\$451,649
Field and Lab Manager	\$37,938	\$125,102	\$132,372	\$295,411
IT Professional	\$48,640	\$146,302	\$154,632	\$349,573
Field and Lab Managerial Assistant (FT)	\$33,657	\$101,782	\$107,886	\$243,324
Staff Research Associate (FT)	\$26,630	\$80,902	\$85,962	\$193,493
Staff Research Associate (1/2 T)	\$24,005	\$36,551	\$38,886	\$99,442
Staff Research Associate (1/2 T)	\$24,005	\$36,551	\$38,886	\$99,442
Staff Research Associate (1/2 T)	\$24,005	\$36,551	\$38,886	\$99,442
Staff Research Associate (1/2 T)	\$24,005	\$36,551	\$38,886	\$99,442
Personnel Total	\$303,950	\$790,818	\$836,450	\$1,931,218
Scientific Advisory Panel				
Dr. Raimondi	\$14,820	\$48,472	\$49,650	\$112,942
Dr. Ambrose	\$14,820	\$48,472	\$49,650	\$112,942
Dr. Sanders	\$14,560	\$48,472	\$49,650	\$112,682
SAP Total	\$44,200	\$145,415	\$148,950	\$338,566
Coastal Commission Staff				
Commission Staff Total	\$12,155	\$31,298	\$32,237	\$75,689
Travel				

Channelside Carlsbad Desalination Mitigation Work Plan and Budget

	Sept 2026- Dec 2026	2027	2028	WORK PLAN TOTAL
Restoration Scientist Travel	\$5,971	\$19,471	\$20,500	\$45,943
Raimondi Travel	\$2,811	\$4,504	\$4,817	\$12,132
Ambrose Travel	\$2,811	\$4,504	\$4,817	\$12,132
Sanders Travel	\$2,811	\$4,504	\$4,817	\$12,132
Commission Staff Travel	\$1,405	\$3,003	\$3,211	\$7,620
Travel Total	\$15,808	\$35,987	\$38,163	\$89,958
Operating Expenses				
Facilities	\$204,965	\$143,484	\$127,311	\$475,760
General Operating	\$15,500	\$12,945	\$12,921	\$41,366
Office/Field and Lab Supplies	\$69,220	\$23,763	\$11,586	\$104,569
Vehicles	\$59,833	\$7,605	\$7,833	\$75,271
Contractors	\$0	\$101,200	\$140,250	\$241,450
Operational Expenses Total	\$349,518	\$288,997	\$299,901	\$938,416
Reference Sites Shared Cost				
Reference Sites Shared Cost Total	\$0	\$479,430	\$493,731	\$973,161
DIRECT COST TOTAL	\$725,631	\$1,771,945	\$1,849,433	\$4,347,009
Contingency (5%)	\$36,282	\$88,597	\$92,472	\$217,350
CMSF Overhead (18%)	\$130,614	\$318,950	\$322,898	\$782,462
GRAND COST TOTAL	\$892,526	\$2,179,492	\$2,274,802	\$5,346,821

F. Coastal Act Violation

A violation of the Coastal Act exists with respect to Channelside's failure to comply with the terms and conditions of CDP No. 9-14-0731. That permit required that restoration work commence by October 30, 2021; work began in fall of 2022 but is not yet completed. On February 11, 2022, Commission staff notified Channelside of the violation through issuance of a Notice of Violation letter, and Commission staff is pursuing resolution of that violation as a separate matter. Approval of the proposed Work Plan and Budget will not resolve the outstanding violation. Although a violation of CDP No. 9-14-0731 exists, consideration of this Work Plan and Budget by the Commission has been based solely upon the requirements for a permittee-funded independent mitigation monitoring program outlined in CDP Nos. E-06-013 and 9-14-0731.