

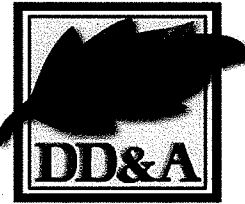
EXHIBIT 1-C

**PROPOSAL FOR
ENVIRONMENTAL SERVICES
FOR THE
SLEEPY HOLLOW STEELHEAD REARING FACILITY
PROJECT**

August 2011

Submitted to:
Kevan Urquhart
Senior Fisheries Biologist
MPWMD

Prepared by:
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**M.P.W.M.D.
PRELIMINARY DRAFT
SUBJECT TO REVISION**

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TABLE OF CONTENTS

SECTION A. INTRODUCTION.....1

SECTION B. SCOPE OF WORK.....5

SECTION C. BUDGET.....13

APPENDIX A. RESUMES

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SECTION A: INTRODUCTION

This scope details proposed environmental services for the Sleepy Hollow Steelhead Rearing Facility Project (Project) in compliance with the California Environmental Quality Act (CEQA), the federal Endangered Species Act (ESA), and other local state and federal laws and regulations. Denise Duffy & Associates, Inc., (DD&A) has reviewed Project materials and communicated with the Project proponent in order to provide a comprehensive and specific understanding of the Project and the primary issues of concern, as well as to develop an efficient approach to complete the environmental analysis and regulatory permitting.

The following information is presented to provide a clear understanding of the Project description, an introduction to DD&A team members, and our approach to accomplish the scope of services.

Project Understanding

The California American Water Company is under State of California instructions to change the way the San Clemente Dam is operated. The change in operation will lower the dam water level. With the reduced water level, there will be an increase in the amount of sand and silt released into the river below the dam. This additional sediment will have a negative impact on the water intake system at the Sleepy Hollow Steelhead Rearing Facility (SHSRF). In order to be prepared for the change in the river water quality, the Monterey Peninsula Water Management District (MPWMD) proposes to revise existing river intake and water delivery system components at the SHSRF.

Design goals for the Project are:

- Prevent silt from entering the rearing channel and contaminating the fish rearing environment,
- Reduce wear damage to pumps, and
- Improve the District's ability to maintain the river water pumps.

Two federally listed species, steelhead and the California red-legged frog, are known to occur within the Project area. In addition, proposed Project component upgrades are located within the jurisdiction of multiple regulatory agencies and will require a CEQA analysis and regulatory permits as identified below:

- Initial Study Mitigated Negative Declaration (IS/MND)
 - Monterey County (County)
- Section 404 of the Clean Water Act and Section 10 of the Rivers and harbors Act
 - U.S. Army Corps of Engineers (USACOE)
- Section 7 of the Endangered Species Act
 - U.S. Fish and Wildlife Service (USFWS)
- Section 7 of the Endangered Species Act
 - NOAA Fisheries (NOAA)

- Code Section 1600
 - California Department of Fish & Game (CDFG)
- Section 401 of the Clean Water Act
 - Regional Water Quality Control Board (RWQCB)
- Grading and Building
 - Monterey County (County)

Team Member Introduction

DD&A has placed great importance on the selection of a Project team to meet the needs of the Project. We have identified staff that understand the key issues that will need to be addressed and have extensive local expertise in the Project area. DD&A has a long project history within the Carmel River Watershed and along the river itself. The staff listed below have all worked on multiple projects within the vicinity of the Project which required addressing similar resource issues and impacts including federally listed wildlife species, wetland and riparian encroachment, and residential neighbors sensitive to traffic and noise impacts. Within the last year DD&A prepared the CEQA document and acquired all of the regulatory permits for the Carmel Hill and River Bicycle Trail Project and completed the CEQA documentation for the Big Sur Land Trust Carmel Valley Floodplain Restoration and Environmental Enhancement Project.

Josh Harwayne, Senior Project Manager

Mr. Harwayne serves as the Natural Resources Division project manager and in doing so is responsible for integrating the preparation of technical support documentation and regulatory permitting with project CEQA analyses. In addition, Mr. Harwayne is responsible for staff development, contracting, editing in-house documents for quality control, and maintaining project budgets and schedules. Mr. Harwayne currently holds a federal recovery permit for the California red-legged frog and California tiger salamander and has 15 years of experience dealing with all locally occurring state and federally listed plant and wildlife species. Mr. Harwayne has conducted many Section 7 consultations with USFWS and NOAA and has acquired 2081 Incidental Take Permits from the CDFG. Mr. Harwayne is well-acquainted with the policy and procedure related to the application and acquisition of state and federal regulatory permits including Section 404 and 401 and CDFG 1600 permits and has existing relationships with all of the regulatory staff assigned to the Project area. Mr. Harwayne is currently managing multiple projects which involve consultation with USFWS and NOAA and Section 404, Section 401, and 1602 permits, including the Garret Project along San José Creek and the Malcolm Project.

Erin Harwayne, Senior Project Manager

With over ten years at DD&A, Ms. Harwayne has managed and prepared numerous environmental documents in compliance with CEQA, the National Environmental Policy Act (NEPA), ESA, and the California Endangered Species Act (CESA) for a wide variety of projects involving water resources, residential development, education, natural resources, public works, and transportation. Ms. Harwayne specializes in the preparation of CEQA/NEPA documents where biological resources are the primary concern. As a result, her

understanding of federal, state and local regulatory policy and requirements in the context of CEQA is expert. Ms. Harwayne is currently contracted with the USFWS and the Fort Ord Reuse Authority (FORA) to prepare the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Fort Ord Habitat Conservation plan. In doing so she has attended weekly meetings with USFWS and CDFG staff for over 6 years and has excellent working relationships with regulatory staff assigned to the local area. Recently, Ms. Harwayne completed an amendment to the IS/MND for the Carmel Valley Bike Trail Project; key issues included biological resources and regulatory agency coordinating in addition to traffic and noise.

Jami Davis, Assistant Environmental Scientist

Ms. Davis has seven years of experience working in the environmental field. The majority of her work experience focuses on botanical field surveys, biological monitoring, wetland delineations, preparation of biological reports, Mitigation Monitoring and Restoration Plans, regulatory permits, Global Positioning System (GPS) data collection, and Geographic Information System (GIS) analysis. Ms. Davis recently completed the Mitigation and Monitoring Plan for the Carmel Hill and River Bicycle Trail, which included detailed restoration plans for wetland and riparian habitat. Additionally, Ms. Davis prepared the Biological Assessment (BA), Wetland Delineation, and all of the regulatory permit applications for the project.

The individuals on the DD&A Project Team have committed to dedicate the time necessary to complete the Project.

Project Approach

In order to accomplish Project objectives, the Project CEQA and permitting documentation must be based on a detailed, thorough, and legally defensible Project description. DD&A's approach is grounded in the precept that early and consistent communication with all interested and responsible agencies will facilitate an approach that satisfies local, state, and federal permitting requirements while still achieving Project objectives.

The DD&A team will conduct studies as needed, evaluate the proposed Project, and recommend measures as necessary in order to facilitate Project implementation. As a key to our approach, the DD&A team will evaluate existing environmental documentation and previous and existing permits including the 1994 ISMND, the USACOE Regional General Permit and the USFWS and NOAA Programmatic Biological Opinion(s) (BO) in an effort to reduce the current data collection and permitting complexity necessary to build the Project.

The unique skills of our team provide the client with both scientific and policy expertise. We have a solid grasp of the technical issues involved in this Project and will be proficient at translating those concerns into concise, defensible environmental documentation and regulatory permits.

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SECTION B: SCOPE OF SERVICES

Below is the scope of services proposed by DD&A to accomplish the work necessary to complete the environmental documentation and regulatory permitting required for the proposed Project.

Objectives

- Communicate and coordinate with the Project proponent in order to establish the preferred environmental documentation and permitting pathway;
- Communicate and coordinate with relevant regulatory staff to establish mitigation thresholds that are acceptable to the Project proponent and meet the Project goals and objectives;
- Adequately and accurately complete the CEQA documentation to be used as the basis of State regulatory analysis and requirements;
- Prepare in signature-ready format all of the necessary regulatory agency permit applications and documentation; and
- Communicate and coordinate final permit acquisition in a timely and cost effective manner.

Task Descriptions

Task 1: Project Initiation

The DD&A team will attend one kick-off meeting with MPWMD to finalize the scope of work, identify data needs, confirm deliverables, and establish schedules and protocols for communication. The IS/MND will build upon existing documentation wherever possible and supplement with new analysis to provide an up-to-date assessment of technical and environmental impacts associated with the Project. This scope of work assumes that the MPWMD will provide a preliminary draft Project Description to DD&A for review to determine adequacy for the CEQA analysis. DD&A will provide comments and submit a revised draft to the MPWMD for review and comment. DD&A will finalize the Project Description and submit it for approval by MPWMD staff prior to the preparation of the IS/MND. The Project Description will describe the characteristics of the proposed Project and construction details, including but not limited to, Project background, location, objectives, construction schedule and equipment, and graphics to illustrate the Project plans.

DD&A will work with MPWMD to define a project description and permitting pathway at this stage. A thorough and detailed project description is the critical first step in successfully permitting a project. Early definition of the permitting pathway helps avoid uncertainty for the Project proponent and resource agency staff during review, development, and operations, and also ensures completeness at an early stage. The

Project description also helps reduce cost; avoidable delays and related expenses are prevented by early identification of issues.

Task 2: Early Coordination with Responsible and Interested Resource Agencies

DD&A will contact responsible and regulatory agencies that have knowledge of affected resources, jurisdiction over the Project, or will be affected by the Project to ensure that potential environmental issues are adequately addressed as part of application submittal. We anticipate contacting and/or meeting with representatives of the following agencies:

- California Department of Fish & Game (CDFG)
- U.S. Army Corps of Engineers (USACOE)
- U.S. Fish and Wildlife Service (USFWS)
- Monterey County Planning Department (County)
- Regional Water Quality Control Board (RWQCB)

Task 3: Field Review and Technical Report Review

DD&A will visit the site to assess the environmental conditions of the site and its surroundings. DD&A will also review all existing technical reports relevant to the proposed Project to ensure that the information is sufficient for agency permitting requirements. Based upon DD&A's preliminary review of existing material, revisions and/or modifications may be necessary to ensure that sufficient information is provided to satisfy CEQA and other applicable permitting requirements. The preparation of final documentation in satisfaction with regulatory requirements is addressed in subsequent tasks.

Task 4: Agency Meetings and Coordination

A total of three (3) agency meetings are included through completion of the Biological Assessment (BA): one (1) Draft BA review meeting with MPWMD, one (1) technical meeting with the resource agencies, and one (1) Final BA review meeting with MPWMD. As with early coordination, DD&A will contact agencies and organizations throughout the duration of the Project that have knowledge of local biological resources and jurisdiction over resources potentially affected by the Project to ensure agency concurrence at the time of final document preparation.

Task 5: Preparation of Draft Technical Documents

This task includes identification of the potential environmental clearances and permits that are necessary for the proposed Project. A number of supporting technical documents will be required as part of the various permitting processes associated with the proposed restoration Project. Numerous existing technical documents have been prepared in support of the proposed restoration Project, and DD&A proposes that these documents be revised and finalized in a format that is acceptable to the various resource agencies. DD&A

will facilitate the preparation of final documents utilizing existing information and supplemented by additional information if necessary. The following documentation will be necessary in order to fulfill federal, state, and local permitting processes:

- Wetland Delineation
- Biological Assessment (federal)
- Biology Report (state)
- Biological Mitigation and Monitoring Plan

Task 6: Preparation of CEQA Documentation

Task 6A: Prepare Administrative Draft Initial Study/Mitigated Negative Declaration

DD&A will prepare an Administrative Draft IS/MND for review by MPWMD staff. The environmental document will be prepared in conformance with CEQA and will include all of the topics and sections identified below. Identified impacts will be differentiated between significant and less-than-significant effects. Mitigation measures will be described in detail.

The IS/MND will address all issue areas identified in the most current version of the CEQA Environmental Checklist, including: aesthetics, agricultural/forest resources, air quality, biological resources, cultural resources, geology/soils, greenhouse gas emissions, hazardous materials, hydrology/water quality, land use/planning, mineral resources, population/housing, public services, recreation, transportation, and utilities. The *primary* areas of analysis for the IS/MND are described below.

Biological Resources: DD&A shall incorporate the findings and conclusions determined by the BA into the IS/MND and shall attach the biological report as an appendix. This scope assumes that all potential impacts to biological resources will be found to be less-than-significant or less-than-significant with incorporation of mitigation measures.

Cultural Resources: Based on conversations with MPWMD staff, the proposed Project improvements will occur within the original Project footprint, which was surveyed for cultural resources. Therefore, DD&A does not anticipate the need for another cultural survey and report, and will use the previous report for the environmental analysis. DD&A will incorporate the findings and conclusions determined by the cultural report into the IS/MND and will attach the cultural report as an appendix. This scope assumes that all potential impacts to cultural resources will be found to be less-than-significant or less-than-significant with incorporation of mitigation measures.

Geology: The IS/MND will describe the geologic characteristics of the Project site and area. This section will identify the potential geologic hazards in the Project area, such as erosion, slope instability (near creeks), seismic effects, and soil hazards. Mitigation for avoiding impacts will be identified and included in the IS/MND.

Air Quality Analysis and Greenhouse Gas Emissions: Most of the air quality impacts associated with the proposed Project would occur during the construction phase, and would consist of fugitive dust emissions and other criteria pollutant emissions. In addition, emissions of greenhouse gases would result from vehicular emissions during construction. DD&A will prepare an air quality analysis for the proposed Project. The air quality analysis will describe the air quality setting of the area and identify sensitive receptors in the Project vicinity (i.e., existing residences). The analysis will assess short duration (i.e., construction) and long-term (i.e., operational) regional air pollutant emissions associated with the proposed Project. Greenhouse gas emissions of the Project will also be quantified and analyzed for potential effects related to climate change. Mitigation for avoiding impacts will be identified and included in the IS/MND, including a list of dust control measures identified to reduce construction-related air quality impacts. This scope assumes that all potential impacts to air quality will be found to be less-than-significant or less-than-significant with incorporation of mitigation measures.

Hydrology/Water Quality: The IS/MND will describe the flooding and drainage conditions in the Project area based on field study and review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate maps. The IS/MND will address potential flooding hazards, including increases in runoff, construction in the flood plain, and the continued operation of the facility within the flood plain. This section will evaluate the potential water quality impacts during and after the construction of the Project, primarily from increased erosion during construction. This section will also identify appropriate Best Management Practices in accordance with the RWQCB and the most current Stormwater C.3 Guidebook requirements. Mitigation will be identified for significant impacts.

Traffic: DD&A will retain Hexagon Transportation Consultants, Inc. to conduct a trip generation study and analysis of potential traffic impacts. The results and conclusions of this analysis shall be summarized in the IS/MND and provided as an appendix to the document. Hexagon Transportation Consultants, Inc. was founded in 1998 and provides services in transportation planning, traffic engineering, travel demand forecasting, signal design, and parking. Hexagon's staff members have prepared thousands of studies, both large and small, over their professional careers. Hexagon's public clients include city, county, and state agencies and regional planning organizations.

Noise: DD&A will retain Illingworth & Rodkin, Inc. to conduct a noise study and analysis of potential noise impacts. The results and conclusions of this analysis shall be summarized in the IS/MND and provided as an appendix to the document. Illingworth & Rodkin, Inc. was founded in 1987 as an Acoustical Engineering firm and expanded to include air quality studies. The firm's goal is to provide clients with the benefit of expertise and experience gained from completing over 3,800 studies in acoustics and air quality.

Deliverables: DD&A will submit one (1) electronic copy of the Administrative Draft IS/MND to MPWMD staff for review and comment.

Task 6B: Prepare Draft Initial Study/Mitigated Negative Declaration

Following MPWMD review of the Administrative Draft IS/MND, DD&A will incorporate the comments received and prepare a Screencheck Draft IS/MND for final review by the MPWMD prior to public release. DD&A will then prepare a Draft IS/MND for public distribution. This scope assumes one round of comments from MPWMD staff for the Screencheck Draft and Public Draft documents. Upon authorization of the document by the MPWMD, DD&A will submit copies of the document for the 30-day public review period. This includes delivery of ten (10) copies to the MPWMD and fifteen (15) copies to the State Clearinghouse for public circulation. DD&A will prepare all necessary notices and transmittals (including the State Office of Planning and Research transmittal), and post and distribute such notices and documents as required. The document will be circulated for a public review period of 30 days in accordance with State requirements.

Deliverables: DD&A will submit ten (10) hard copies and one (1) CD pdf copy of the public review IS/MND. DD&A will submit fifteen (15) additional copies of the IS/MND to the State Clearinghouse for public review.

Task 6C: Prepare Responses to Comments & Final IS/MND

DD&A will consult with the MPWMD after the close of the comment period to review the comments received on the Draft IS/MND and determine the action plan for finalizing the document. Responses will be prepared for all written comments received. If changes to the Draft IS/MND are necessary, DD&A will prepare a brief "Response to Comments on the Draft IS/MND" document, which can be appended to the Draft IS/MND and serve as the Final IS/MND. This task includes submittal of one (1) electronic copy of the draft Response to Comments to the MPWMD staff for review. After updating the Draft Response to Comments based on comments from the MPWMD, DD&A will submit one (1) electronic copy (in Acrobat.pdf and Microsoft Word) of the Final IS/MND to the MPWMD for use in adopting the Mitigated Negative Declaration and approving the Project. The budget assumes that DD&A will spend no more than twenty (20) total staff hours on preparation of the Response to Comments and the Final IS/MND.

Deliverables: DD&A will submit one (1) electronic copy of the Draft Response to Comments for MPWMD review, and one (1) CD copy (pdf and Word formats) of the Final IS/MND to the MPWMD.

Task 6D: Prepare Mitigation Monitoring and Reporting Plan (MMRP)

DD&A shall prepare a draft MMRP in accordance with CEQA requirements, and submit to the MPWMD for review. The MMRP will identify the impacts addressed, compliance and monitoring actions to be performed, and responsible party and timing of compliance and monitoring activities. DD&A will incorporate the comments received and prepare a final MMRP. The final MMRP will be provided to the MPWMD as a stand-alone document with the Response to Comments and Final IS/MND.

Deliverables: DD&A will submit one (1) electronic copy of the draft MMRP to District staff for review. DD&A will submit one (1) pdf and Word copy of the final MMRP to the district.

Task 7: Preparation of Regulatory Permit Applications

DD&A will informally consult with environmental regulatory agency representatives and prepare permit application in signature-ready format. Upon MPWMD signature, DD&A will coordinate with the agencies to determine if the applications are complete, provide additional information, review Project measures to avoid or minimize impacts, and identify additional permit conditions recommended for permit approval. MPWMD will be responsible for agreeing to and finalizing the permit conditions, executing the permits, and paying permit application fees. Applications would be prepared by DD&A for the following:

- USACOE -Section 404 Clean Water Act (Regional General Permit)
- USFWS -ESA Section 7
- NOAA Fisheries -ESA Section 7
- CDFG -Streambed Alteration Agreement Fish and Game Code 1602
- RWQCB -Section 401 Clean Water Act

USACOE Section 404 Clean Water Act (Regional General Permit)

DD&A will assemble the notification package which will include the required form and Project information, Wetland Delineation, and BA. USACOE will review the notification package for completeness. DD&A will provide any additional information requested by the USACOE until they have determined the notification package complete.

CDFG Streambed Alteration Agreement Fish and Game Code 1602

Fish and Game Code section 1602 requires any person, state, or local governmental agency or public utility to notify CDFG before beginning any activity that will obstruct or divert the natural flow of a river, stream, or lake. Typically, CDFG requires an agreement for any work within riparian habitat. As this Project is proposing to impact riparian habitat, an agreement is likely necessary. DD&A will meet with CDFG staff to determine final jurisdiction and determine whether an agreement will be required.

If it is determined that a notification is necessary, DD&A will prepare and submit the document to CDFG. CDFG will determine whether the notification package is complete within 30 calendar days of receiving the notification package. If it is determined that the notification package is incomplete, CDFG will specify the information needed to make it complete. Once the notification package is complete, CDFG will proceed with processing the notification. After the Department receives a complete notification package, it has 60 days to submit a draft agreement. The draft agreement will include measures to protect fish and wildlife resources while conducting the Project. After receiving the draft agreement, we will have 30 calendar days to notify CDFG whether the measures in the draft agreement are acceptable. DD&A will review the measures to ensure they are compatible with Project goals and objectives. Once consensus is reached with CDFG as to the format and content of the measures, MPWMD will sign the agreement and submit it to the CDFG. After

the CDFG receives the signed draft agreement, it will make it final by signing it. However, the CDFG will not sign the agreement until it receives the notification fee and the CEQA document.

RWQCB Section 401

Projects involving discharges of dredged or fill material into waters of the United States, including wetlands and other water bodies, that require a Section 404 permit will also require a Section 401 permit.

Task 8: Facilitate Section 7 Consultation

As outlined above, the BA will be submitted to the USACOE, NOAA, and USFWS as a component of the notification package for the USACOE Regional General Permit (RGP). The USACOE will then request the initiation of formal consultation. During this process, DD&A will provide supporting information, including avoidance measures and adherence to standard protocols and programmatic procedures. In addition, DD&A's biologists will provide species-specific technical information to develop an approach to conserving the identified biological resources on the Project site that the regulatory and responsible agencies will support. This process will result in the issuance of a Biological Opinion (BO). The BO will include reasonable and prudent measures and conditions for the Project and an incidental take statement.

While the USACOE is the action agency and legally responsible for conducting consultation with the USFWS and NOAA, it is expected that they will defer any request for additional information and preparation of necessary documentation and review to DD&A. Subsequent to receiving a request for the initiation of formal consultation, USFWS and NOAA have 30 days to notify the USACOE if the information is complete. Once USFWS and NOAA determine that all the information is complete they have 90 days to formulate a DRAFT BO and incidental take statement in conjunction with the applicant for review. A FINAL BO must be completed within 45 days of the DRAFT.

Task 9: Monterey County Permitting

DD&A will confer with the Monterey County Planning Department (County) to determine entitlement application processing requirements for this Project. As part of the Monterey County application process, the County will determine the appropriate type of permit depending on the information provided as part of the preliminary application submittal. At that time the County will make an official determination regarding the type of permit required for the proposed Project. Please note that although this task is identified subsequent to other tasks, Monterey County permitting can occur concurrently with prior tasks, and it is generally recommended that the County process be initiated as early as possible

DD&A will submit a pre-application request form to the County of Monterey to initiate the Monterey County permitting process. As part of this process the County will identify technical reports and/or other information that will be required as part of the formal application submittal. After the County has conducted their initial

review, which takes approximately 2 weeks, a formal application will be provided by the County planner at a formal application meeting.

DD&A will finalize application requirements, gather the application materials, and meet with the County to submit the application package. After the formal submittal of the Project application, the County, as part of their interdepartmental review process, will have 30-days to determine whether the application is considered "complete." If the application is deemed incomplete, the County will identify additional information required to deem the Project complete. DD&A will assist in all elements of application completeness and will coordinate requests for additional information by the County.

If necessary, DD&A will prepare and coordinate hearing materials and also meet with County staff to review the Project staff report and conditions of approval. As needed, DD&A will be available to meet with representatives of nearby property owners and other groups who may be concerned about the Project. It is assumed that the Project will be administratively approved; therefore, a public hearing would not be required. If, however, it is determined that a public hearing is required, DD&A will attend the hearing and present the Project on behalf of the Project team. Team members and select subconsultants may be asked to attend in order to adequately address potential concerns/questions.

Task 10: Project Management

DD&A will provide Project management services which include client communication, subconsultant management, scheduling, contract management, and administration. The technical nature of the analyses, high level of agency review, potential challenges, and probably unforeseen issues require considerable coordination and liaison effort.

SECTION C: BUDGET

The following budget has been prepared based on DD&A's understanding of the Project, previous experience preparing environmental documentation and regulatory permits on projects that are similar in size and scope.

DENISE DUFFY & ASSOCIATES						
TASKS #	Task Description	Senior Project Manager	Associate Planner/Scientist	Assistant Planner/Scientist	Graphics/GIS	Task Total
		Rate \$	135 \$	95 \$	85 \$	90
1	Project Initiation	8	8	8	6	\$3,060
2	Early Agency Coordination	6	6	4		\$1,720
3	Field and Document Review	4	6	40	12	\$5,590
4	Agency Meetings	8	16			\$2,600
5	Preparation of Technical Docs	8	16	70	12	\$9,630
6A	Prepare Administrative Draft IS/MND	8	16	60	6	\$8,240
6B	Prepare Public Draft IS/MND	6	12	24	4	\$4,350
6C	Prepare Final IS/MND (responses to comments)	6	4	8	1	\$1,960
6D	Prepare Mitigation Monitoring and Reporting Program	1	4	6	1	\$1,115
7	Preparation of Regulatory Permit Applications	4	16	16	8	\$4,140
8	Section 7 Consultation	4	16	16		\$3,420
9	Monterey County Permitting	8	16	16	4	\$4,320
10	Project Management	32	16			\$5,840
Total DDA hours by person		103	152	268	54	
Total DDA cost by person		\$ 13,905	\$ 14,440	\$ 22,780	\$ 4,860	\$55,985

TOTAL COST \$69,125.00

Expenses	
Phone and Fax	\$40.00
Document Production	\$850.00
Materials	\$500.00
Mileage	\$250.00
Subconsultants	
Noise	\$3,500.00
Traffic	\$6,500.00
Administrative Fee (15%)	\$1,500.00
Total Expenses	\$13,140.00

M.P.W.M.D.
PRELIMINARY DRAFT
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APPENDIX A

RESUMES



Josh Harwayne

Senior Project Manager

Education

Master of Arts, Ecology and Systematic Biology (Wetland Science), San Francisco State University, 1999 (course work)

Bachelor of Science, Botany, San Francisco State University, 1997

Work Experience

Senior Project Manager, DD&A

Environmental Consultant,
Wetland Research Associates,
Inc.

Laboratory and Field Manager,
Romberg Tiburon Center for
Environmental Studies -
Laboratory for Wetland and
Estuarine Biology

Professional Affiliations

Association of Environmental
Professionals
California Botanical Society
California Native Plant Society
Society of Wetland Scientists
Friends of the Jepson Herbarium
Society for Ecological Restoration

Registrations/Certificates

40-hour ACOE Wetland
Delineation Training (co-taught
course)
40-hour ACOE Advanced Wetland
Delineation Training
Native Grass Identification
(California Native Grass
Association)
Wetland Plant Identification
(Jepson Herbarium)
Vernal Pool Ecology (Jepson
Herbarium)
CEQA/NEPA Documentation
(UC Davis Extension)
Streambed Alteration Agreements
(UC Davis Extension)
USFWS Federal Recovery Permit
TE-091857-0 - California tiger
salamander and California red-
legged frog
CDFG Scientific Collection permit
801129-04 -

Mr. Harwayne serves as the Natural Resources Division project manager and in doing so is responsible for the development and management of new projects, editing in-house documents for quality control, staff development, marketing development, contracting, and maintaining project budgets and schedules. With over 14 years of consulting experience, he brings to the firm the highest level of technical, analytical and management skills.

- His technical experience includes preparing biological reports for a broad range of environmental documentation in accordance with CEQA and NEPA requirements and local, State, and federal policies and regulations, including:
 - Initial Studies/Mitigated Negative Declarations (IS/MND)
 - Environmental Assessments/Finding of No Significant Impact (EA/FONSI)
 - Environmental Impact Reports (EIR)
 - Environmental Impact Statements (EIS)
 - Biological Assessments (BA)
 - Natural Environment Studies (NES)
 - Wetland Delineation Reports
 - Wetland Banking Documents
 - Mitigation Monitoring and Reporting Programs (MMRP)
 - Habitat Conservation Plans (HCP)
- Expert botany, wildlife, and wetland science experience gained working on a wide variety of projects involving special-status species and sensitive habitats.
- Proficiency in conducting biological surveys, including protocol-level surveys for special-status wildlife and plant species such as the California tiger salamander, California red-legged frog, sand gilia, Monterey spineflower, and seaside bird's beak.
- Experience working closely with resource and regulatory agencies in permitting projects of varying size and complexity, including:
 - California Department of Fish and Game
 - U.S. Fish and Wildlife Service
 - California Department of Transportation
 - Regional Water Quality Control Board
 - Army Corps of Engineers
 - California Coastal Commission
- Adept at managing projects with complex permitting processes, including Clean Water Act Sections 401 and 404, CDFG 1602, federal Endangered Species Act Section 7 and 10 consultation and permit processes, State Endangered Species Act Section 2081 Incidental Take Permit, and fully protected species.
- Wetland delineations per ACOE and Coastal Act criteria and the design of wetland mitigation and restoration projects.
- Expertise in preparing scopes, managing subconsultants, and keeping projects within established budgets and timeframes.
- Regularly guest lectures on vernal pool ecology, wetland ecology, environmental regulatory requirements, and native plant identification at California State University Monterey Bay and Monterey Peninsula Community College.

Josh Harwayne

Senior Environmental Scientist / Project Manager

Work Experience

Senior Environmental Scientist/
Project Manager, DD&A

Environmental Subconsultant,
Wetland Research Associates,
Inc.

Laboratory and Field Manager,
Romberg Tiburon Center for
Environmental Studies -
Laboratory for Wetland and
Estuarine Biology

Water Resources Projects:

- *Storm Drain Improvements Project IS, City of Carmel-by-the-Sea*
- *Salinas River Vegetation Maintenance Project, Monterey County Water Resources Agency*
- *Castroville Storm Drain Master Plan Improvements Project, Monterey County Department of Public Works*

ESA Section 10 Permits and Section 7 Consultation Projects:

- *Santa Lucia Preserve Habitat Conservation Plan*
- *Malcolm Ranch Habitat Conservation Plan,*
- *Fort Ord Habitat Conservation Plan Species Distribution and Impact Analysis*
- *ALBA Wetland Restoration Section 7 and State Safe Harbors Agreement*
- *Carmel Hill Bike Trail Section 7*
- *Garrett Road Rehabilitation and California Red-legged Frog Pond Restoration Section 7*

Educational Projects:

- *Endangered Species Act Workshop, MCWD*
- *Guest Lecture on vernal Pool Ecology and Wetland Ecology and Regulatory Environment, CSUMB*
- *Quest Lecture on California Native Plant Identification, MPC*

Biological and Wetland Assessment Projects:

- *The First Tee EIR, City of Seaside*
- *Biological Report and Wetland Delineation, City of Seaside*
- *Biological Assessment for General Plan Update, City of Monterey*
- *Snowcreek Biological Assessment Town of Mammoth Lakes, Chadmar, Inc.*
- *Thorne Road Bridge NES, Monterey County Department of Public Works*
- *National Refractory Wetland Assessment*

Permitting and Condition Compliance Monitoring Projects:

- *Bridge Improvement Projects, San Benito County Public Works*
- *Highway 25, Quincy Engineering*
- *Stone Creek Shopping Village, City of Del Rey Oaks*
- *Seaside Highlands Housing Development, City of Seaside*
- *Bayer Tank Demolition and Inertia Project, Marina Coast Water District*



Erin Harwayne

Senior Environmental Scientist/Planner/Project Manager

Education

Bachelor of Science, Earth Systems
Science & Policy (Marine and
Coastal Ecology), California
State University Monterey Bay,
2000

Continuing Education, Land
Use/Natural Resources, through
University of California
Extension Program

Professional Affiliations

Board, Monterey Dunes Natural
History Association
Member, Friends of Moss Landing
Marine Labs
Member, Association for
Environmental Professionals
Member, California Native Plant
Society
Member, California Native Grass
Association

Registrations/Certifications

CEQA and NEPA Intensive
Workshop Certifications
Fairy and Tadpole Shrimp
Identification Class and USFWS
Test Certification
PADI Certified SCUBA Diver
USFWS Federal Recovery Permit
No. TE-091857-0 - California
tiger salamander
CDFG Research Permit for Listed
Plant Species No. 04-08-RP -
Sand gilia
CDFG Scientific Collection Permit
No. CS-007722 - Aquatic
invertebrates

Work Experience

Environmental Scientist/Planner/
Project Manager, DD&A

Research Assistant, Monterey Bay
National Marine Sanctuary

With over ten years at DD&A, Ms. Harwayne has managed and prepared numerous environmental documents in compliance with CEQA and NEPA for a wide variety of projects involving water resources, education, natural resources, public works, and transportation. She has experience preparing all types and levels of environmental documents, including:

- Initial Studies/Mitigated Negative Declarations (IS/MND)
- Environmental Assessments/Finding of No Significant Impact (EA/FONSI)
- Environmental Impact Reports (EIR)
- Environmental Impact Statements (EIS)
- Biological Assessments (BA)
- Natural Environment Studies (NES)
- Wetland Delineation Reports
- Mitigation Monitoring and Reporting Programs (MMRPs)

Integrating her extensive background in ecology with land use planning, Ms. Harwayne utilizes an innovative approach toward solving complex environmental issues. Her technical capabilities include:

- Adeptness in regulatory permitting processes, including Clean Water Act Section 401 and 404, CDFG 1602 Lake and Stream Alteration Program, Federal Endangered Species Act Section 7 consultation and Section 10 permit processes, and State Endangered Species Act Section 2081 Incidental Take Permits
- Management and preparation of environmental documents in accordance with CEQA and NEPA requirements and local, state, and federal policies and regulations, including the Clean Water Act and the federal and State Endangered Species Acts
- Proficiency in conducting biological surveys, including protocol-level surveys for special-status wildlife and plant species such as the San Joaquin kit fox, California tiger salamander, black legless lizard, California red-legged frog, vernal pool crustaceans (fairy and tadpole shrimp), sand gilia, Monterey spineflower, and seaside bird's beak
- Experience in conducting wetland delineations per ACOE and California Coastal Act criteria
- Service as the environmental consultant for California State University, Monterey Bay, managing the 2007 Master Plan EIR process and ongoing specific campus projects
- Excellent communication and presentation skills
- Skill in technical writing and editing
- Expertise in preparing scopes, managing subconsultants, and keeping projects within established budgets and timeframes

ESA Section 10 Permits and Section 7 Consultation Projects:

- Santa Lucia Preserve Habitat Conservation Plan EA, Rancho San Carlos Partnerships and the U.S. Fish and Wildlife Service
- Fort Ord Habitat Conservation Plan EIR and EIS, Fort Ord Reuse Authority and the U.S. Fish and Wildlife Service
- Recycled Water Project, MCWD and U.S. Bureau of Reclamation

Educational Facility Projects:

- 2007 Master Plan EIR, CSUMB
- North Quad Student Housing IS/MND, CSUMB
- Outdoor Pool IS/MND, CSUMB
- North Campus Housing EIR, CSUMB

Erin Harwayne

Senior Environmental Scientist/Planner/Project Manager

- *Land Exchange Addendum to Master Plan EIR, CSUMB*
- *Environmental Analysis for CSUMB's Master Plan Near-Term Projects: Building Demolition Pilot Project, Library Project, Visitor's Center Project, Sports Complex Project, Co-Generation Plant, and Telecommunications Infrastructure Upgrade Project*

Biological and Wetland Assessment Projects:

- *Recycled Water Project EA, MCWD*
- *Haskell's Landing, City of Goleta, The Chadmar Group*
- *Regional Water Augmentation EIR, MCWD*
- *Marina Station EIR, City of Marina*
- *Seaside Main Gate EIR, City of Seaside*
- *LaTourette Subdivision EIR, County of Monterey*
- *General Plan Update EIR, City of Gilroy*
- *Regency Center EIR, City of Gilroy*
- *KPIG Generator Project, Mapleton Communications*
- *Chili's Restaurant IS/MND – Biological Report and Wetland Delineation, City of Seaside*
- *Biological Assessment for General Plan Update, City of Monterey*
- *Snowcreek Biological Assessment Town of Mammoth Lakes, Snowcreek Investments, Inc.*
- *Bay Avenue Outfall IS/MND, City of Seaside*
- *Laguna Seca Raceway Ticket Booth EA/IS, U.S. Army Corps of Engineers and Monterey County Parks*
- *Arroyo Seco Road Guardrail NES, Monterey County Department of Public Works*
- *Thorne Road Bridge NES, Monterey County Department of Public Works*
- *Highway 25 Safety Improvement NES, Caltrans District 4*

Water Resources Projects:

- *Storm Drain Improvements Project IS/MND, City of Carmel-by-the-Sea*
- *Tank Design and Improvements Project EA/IS, MCWD*
- *Water Master Plan EIR, MCWD*
- *Castroville Storm Drain Master Plan Improvements Project, Monterey County Department of Public Works*
- *Pond A-4 Sediment Storage Environmental Analysis, Santa Clara Valley Water District*

Permitting and Condition Compliance Monitoring Projects:

- *Marina Heights CDFG Incidental Take Permit, The Chadmar Group.*
- *Bridge Improvement Projects, San Benito County Department of Public Works*
- *Highway 25 Safety Improvement Project, San Benito COG*
- *Bayer Tank Demolition and Intertie Project, MCWD*
- *Endangered Species Act Educational Workshop, MCWD*

Linear Projects:

- *Uvas Creek Park Preserve Trail Improvements IS/MND, City of Gilroy*
- *Carmel Valley Class I Bicycle Trail IS/MND, Monterey County Department of Public Works*
- *Carmel Valley Road Improvements IS/MND, Monterey County Department of Public Works*



Jami Davis

Assistant Environmental Scientist

Education

Bachelor of Science, Earth Systems
Science and Policy (Marine &
Coastal Ecology), California
State University of Monterey
Bay, 2005

Registrations/Certificates

California Red-legged Frog
Workshop (Elkhorn Slough
Coastal Training Program)
Rare Pond Species Workshop (The
Laguna Foundation)
Arctostaphylos Workshop (Jepson
Herbarium)
Basic Botany Workshop (Jepson
Herbarium)
Poaceae Workshop (Jepson
Herbarium)
CEQA Basics Workshop (AEP)
Federal Recovery Permit TE-
091857-0 - California tiger
salamander (authorized individual
statewide)
State Scientific Collection permit
801136-04 - Mammals, Reptiles,
Amphibians,
Freshwater/terrestrial
invertebrates

Work Experience

Assistant Environmental Scientist,
DD&A
2006-present

Staff Biologist, Zander Associates
2006-2007

*Field Ecologist/Supervisor for the
Parker Flats Burn Project, Lars
Pierce/Fort Ord Reuse
Authority*
2004-2007

Ms. Davis has six years of experience working in the environmental field. The majority of her work experience focuses on botanical field surveys, biological monitoring, wetland delineations, preparation of biological reports, Mitigation Monitoring and Restoration Plans, and regulatory permits, GPS data collection, and GIS analysis. At DD&A Ms. Davis serves as Assistant Environmental Scientist.

Her technical capabilities include:

- Proficiency in conducting biological surveys, including protocol-level surveys for special-status wildlife and plant species such as the California tiger salamander, western burrowing owl, sand gilia, Monterey spineflower, and seaside bird's beak.
- Preparing biological reports in accordance with CEQA and NEPA requirements and local, State, and federal policies and regulations, including the federal and State Endangered Species Act:
 - Biological Assessments (BA)
 - Natural Environment Studies (NES)
 - Initial Studies (IS)
 - Environmental Impact Reports (EIR)
 - Mitigation Monitoring and Restoration Plans
 - Wetland Delineations
 - USFWS and CDFG Protocol Level Survey Reports
- Botanical and wildlife science experience gained working on a variety of projects involving special-status species and sensitive habitats.
- Experience working closely with resource and regulatory agencies in permitting projects of varying size and complexity, including:
 - California Department of Fish and Game
 - U.S. Fish and Wildlife Service
 - National Marine Fisheries Service
 - Army Corps of Engineers
 - California Department of Transportation
 - Regional Water Quality Control Board
 - Natural Resources Conservation Service
- Proficiency with GPS/GIS technology including:
 - Data collection and creation using Trimble Pathfinder ProXR & ProXH GPS equipment
 - Data analysis using ESRI products (ArcMap, ArcCatalog, ArcGIS)

Biological and Wetland Assessment Projects:

- *Ferrini Ranch, Bollenbacker & Kelton, Inc.*
- *SPCA of Monterey County Facility Renovation Project, SPCA of Monterey County.*
- *OU-1 Special Status Plant and Habitat Surveys at the Fort Ord Nature Reserve, Hydrogeologic, Inc.*
- *Carmel Hill Trail Project, Whitson Engineers.*
- *Fort Ord Wildlife Surveys, Shaw Environmental, Inc.*
- *Mazda Raceway/Laguna Seca Recreation Area Protocol-level CTS Surveys, Monterey County Department of Parks and Recreation.*
- *Carmel Valley Class I Bicycle Trail Project, Monterey County Public Works.*

Jami Davis

Assistant Environmental Scientist

- *ALBA Triple M Ranch Restoration Project, Agriculture and Land Based Training Association.*
- *Tahoe Donner Equestrian Center Wetland Delineation, GHH Engineering Inc.*
- *Hartnell Gulch Pedestrian Path Project, City of Monterey.*
- *Malcolm Property Biological Assessment, Denise Malcolm.*
- *MST FJL Center – Monterey Salinas Transit.*
- *Armstrong Ranch Annexation Project, Marina Coast Water District.*
- *Monterey Peninsula Light Rail Transit Project, Parsons Corporation.*
- *San Jose/Santa Clara Water Pollution Control Plant Project Monitoring, City of San Jose and Santa Clara Valley Water Pollution Control Plant*
- *Laurel-Natividad Campus Biological Constraints Analysis, County of Monterey*
- *Haskell's Landing, City of Goleta, The Chadmar Group*

Permitting and Condition Compliance Monitoring Projects:

- *Monterey Regional Water Pollution Control Agency's 1MW Solar Power Project, SolarCity.*
- *San Jerardo Water System Project, Monterey County Public Works.*
- *Aptos Transmission Main Relocation Project, HDR, Inc.*
- *Big Sur Emergency Erosion Control Projects, Monterey County Public Works.*
- *ALBA Triple M Ranch Restoration Project, Agriculture and Land Based Training Association.*
- *Carmel Hill Trail Project, Whitson Engineers.*
- *Thorne Road Bridge Replacement Project, Monterey County Public Works.*
- *Hollister Highway 25 Bypass Project, Quincy Engineering.*

Restoration Projects:

- *Coastal Conservancy Victorine Ranch Restoration, Coastal Conservancy.*
- *Carmel Hill Trail Project, Whitson Engineers.*

ESA Section 10 Permits and Section 7 Consultation Projects:

- *Santa Lucia Preserve Habitat Conservation Plan, Rancho San Carlos Partnerships and the U.S. Fish and Wildlife Service*

Water Resources Projects:

- *Coastal Water Project, CalAm Water.*
- *Segunda Tank II, RBF Consulting.*
- *Seaside Basin Monitoring Wells Project, CA State Parks.*
- *Eastern Distribution System Project, Marina Coast Water District.*
- *Ambler Oaks Tanks Project, RBF Consulting.*