MINUTE ITEM
This Calendar Item No. C42 was approved as Minute Item No. 42 by the California State Lands Commission by a vote of 3 to 0 at its 06-28-07 meeting.

Minute Item
C42

06/28/07
W 26215
N. Smith

UNITED STATES DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE (APPLICANT)

Calendar Item 42: The Commission listened to a staff report concerning an application for a new lease of sovereign lands located in Tomales Bay for the Giacomini Wetland Restoration Project. The item was approved as presented by a vote of 3-0.

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MINUTE PAGE

CALENDAR ITEM
C42

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PRC 8753

06/28/07
W 26215
N. Smith

GENERAL LEASE - PUBLIC AGENCY USE

APPLICANT:
United States Department of the Interior
National Park Service, Pacific West Region
1111 Jackson Street, Suite 700
Oakland, California 94607-4807

AREA, LAND TYPE, AND LOCATION:
Sovereign lands in Tomales Bay and Lagunitas Creek, near Point Reyes Station, Marin County.

AUTHORIZED USE:
Wetlands restoration.

LEASE TERM:
25 years, beginning June 28, 2007.

CONSIDERATION:
The public use and benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

OTHER PERTINENT INFORMATION:

1. Applicant owns the uplands adjoining the lease premises.

2. The proposed Project would restore natural hydrologic processes to a significant portion of the Project area as provided in Exhibit A, thereby promoting restoration of ecological processes and functions in south Tomales Bay.

3. The intent of the restoration Project is to remove levees that were constructed in the 1940's to reclaim tidelands for operation of a dairy. The National Park Service (NPS) has documented that removal of the levees

would actually reduce flooding impacts to many parcels adjacent to the project area. As part of the planning process, the NPS has documented that the levees themselves host a variety of non-native vegetation species and prevent natural processes from occurring within the project area. Removal of the levees would restore natural tidal and floodplain processes to the entirety of the project area. Best management practices to minimize potential for sediment fallback to the subtidal areas would be implemented adjacent to work areas. Revegetation and erosion control activities would be conducted in the sensitive work areas, including channel banks and areas adjacent to former levees.

4. Located just 30 miles northwest of San Francisco and the Golden Gate Bridge, Tomales Bay is recognized by the Ramsar Convention as a Wetland of International Importance. The Giacomini Wetlands are located at the confluence of Tomales Bay and its largest freshwater tributary, Lagunitas Creek. Both water bodies are recognized by the California Coastal Commission as Critical Coastal Areas. Lagunitas Creek and its tributaries contribute two-thirds of the freshwater inflow to Tomales Bay (Fisher, et. al. 1996). Tomales Bay and its watershed supports one of the largest populations of central California coast ESU coho salmon (Oncorhynchus kisutch). The region includes numerous protected areas, including: Point Reyes National Seashore, Gulf of the Farallones National Marine Sanctuary, Golden Gate National Recreation Area, State parks, and Marin County Parks and Open Space. Situated at a key junction of shorebird, waterfowl, anandromous fish, and neotropical songbird migration routes, these wetlands complement the internationally recognized habitat values of San Francisco Bay. Fee title to the Project site was acquired by the NPS in 2000 and future management of the restored acreage will guarantee conservation of wetlands in perpetuity. Leasing of the Lagunitas Creek subtidal parcel would ensure consolidated management for the entirety of the project area.

   More than 50% of the vegetated intertidal wetlands in Tomales Bay were lost in the 1940's with diking of a historic marsh for operation of the Giacomini dairy ranch. Lost wetlands in the Project area included 441 acres of nationally decreasing wetland types (Dahl, 2000), including estuarine emergent, palustrine emergent, and palustrine forested wetlands. Other wetland types that were negatively impacted by levee construction include estuarine subtidal unconsolidated bottom and estuarine intertidal unconsolidated shore, which are significantly

threatened within California. These wetland losses have limited the area's habitat value for endangered salmonids and rails, neotropical migrants, shorebirds, waterfowl, and other special status species. Through removal of levees and tide gates and re-establishment of tidal channels, this Project will restore functionality to this area. Acreage to be restored in the Project represents as much as 12 percent of the outer coastal wetlands along the central California coast (Parsons, 2006).

The Project will improve rearing and smolting habitat for Federally Endangered coho in Lagunitas Creek and address recommendations of the California Department of Fish and Game's Recovery Strategy for California Coho Salmon (CDFG, 2004). Similar habitat improvements, including greater abundance of available prey for juvenile fish and improved water quality in Tomales Bay, will benefit the federally threatened steelhead and Chinook, as well as California roach, sturgeon, Pacific lamprey and other important fishes such as Pacific herring. Expansion of marshes is also designed to support growth of a population of threatened Black Rails to sustainable numbers.

In addition to Endangered Species recovery, this Project will contribute to conservation goals outlined in the North American Waterfowl Conservation Plan, North American Waterbird Conservation Plan, Partners in Flight's North American Landbird Conservation Plan, and the US Shorebird Conservation Plan. This Project supports goals outlined in these plans to ensure sustainable distributions, diversity, and abundance of wetland-associated species in their historic range. Restoration at the Project location will be supported by the ecological integrity of adjacent lands and waters. Reducing habitat fragmentation stands to support at least 37 priority bird species outlined in the plans above, including both migratory and resident species.

The Project will contribute substantially to the protection and enhancement of water quality within Tomales Bay. In 2000, the San Francisco Regional Water Quality Control Board listed Tomales Bay and its two major tributaries, Walker Creek and Lagunitas Creek, as impaired by pathogens, sediment, and nutrients. Walker Creek and Tomales Bay were also listed as impaired by mercury. Currently, 67% of the freshwater runoff to Tomales Bay (Fischer et.al. 1996) is constrained to a narrow corridor between the levees of the current Giacomini Dairy. In addition to the restoration actions, the Project will result in the removal of an active dairy

operation and its 650 cattle from the historic wetlands. By restoring an active intertidal marsh at this key confluence, the Project will vastly improve sediment filtration, nutrient sequestration, and trapping of pathogens bound to sediment. By these means, the Project will prevent significant inputs of contaminants to Tomales Bay.

5. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15025), the staff has prepared an EIR identified as CSLC EIR No. 721, State Clearinghouse No. 2002114002. Such EIR was prepared and circulated for public review pursuant to the provisions of the CEQA. A Mitigation Monitoring Program has been prepared in conformance with the provisions of the CEQA (Public Resources Code section 21081.6) and is contained in Exhibit C.

6. Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15091) are contained in Exhibit D, attached hereto.

7. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS REQUIRED:

Regional Water Quality Control Board, US Army Corps of Engineers, National Marine Fisheries Service, California Department of Fish and Game, Gulf of Farallones National Marine Sanctuary and the California Coastal Commission

EXHIBITS:

A. Site Map
B. Land Description
C. Mitigation Monitoring Program
D. CEQA Findings

PERMIT STREAMLINING ACT DEADLINE:

September 26, 2007

RECOMMENDED ACTION:
IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

CERTIFY THAT CSLC EIR NO. 721, STATE CLEARINGHOUSE NO. 2002114002, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA, THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN AND THAT THE EIR REFLECTS THE COMMISSION'S INDEPENDENT JUDGMENT AND ANALYSIS.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

ADOPT THE FINDINGS, MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15091, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO.

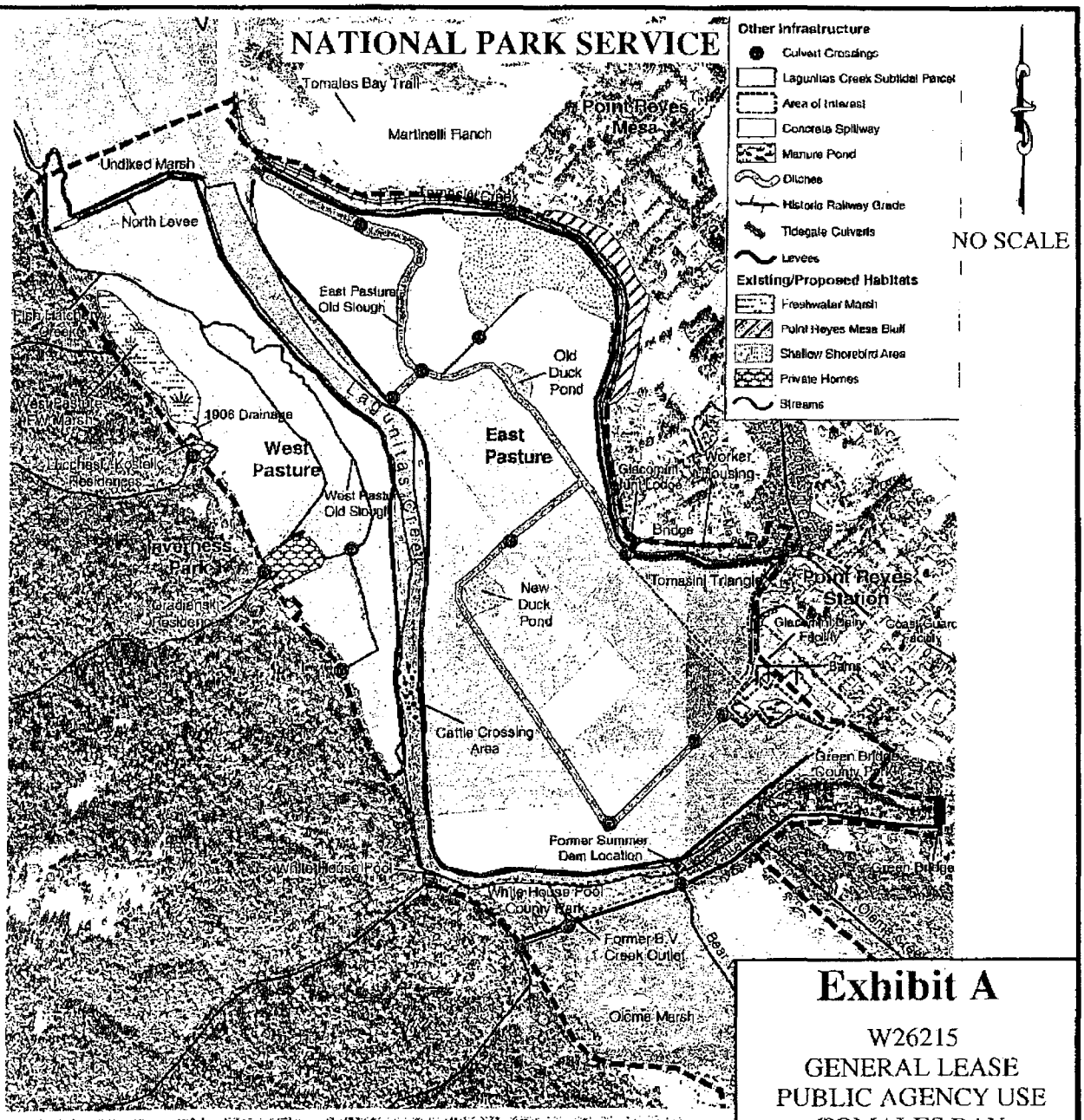
DETERMINE THAT THE PROJECT, AS APPROVED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.

SIGNIFICANT LANDS INVENTORY FINDING:

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

AUTHORIZATION:

AUTHORIZE ISSUANCE TO THE UNITED STATES DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE, OF A GENERAL LEASE - PUBLIC AGENCY USE, BEGINNING JUNE 28, 2007, FOR A TERM OF 25 YEARS, FOR WETLANDS RESTORATION AS SHOWN ON EXHIBIT A ATTACHED, AND DESCRIBED ON EXHIBIT B AND BY THIS REFERENCE MADE A PART HEREOF; CONSIDERATION BEING THE PUBLIC USE AND BENEFIT, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENT IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE' S BEST INTEREST.



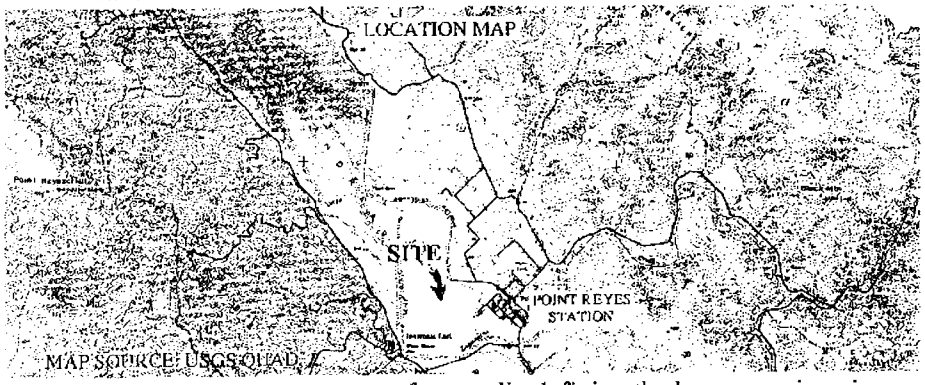


Exhibit A

W26215
GENERAL LEASE
PUBLIC AGENCY USE
TOMALES BAY
MARIN COUNTY

JAK 06/07

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

EXHIBIT B

W26215

LAND DESCRIPTION

All those sovereign public trust lands situate in Marin County, California, lying within the Giacomini Wetland Restoration Project boundaries as set forth on Figure 1 of the CSLC EIR #721, SCH #2002114002 , including those more particularly described as follows:

Parcel 1

All that sovereign public trust land lying within Lagunitas Creek as described in CSLC Boundary Line Agreement 22, recorded in Book 727, Page 61, Official Records of the County of Marin.

Parcel 2

All that sovereign public trust land lying within Tomales Bay and its arms, lying within that certain deed to the United States of America (National Park Service), as recorded in document number 2000-0014020 Official Records of the County of Marin.

END OF DESCRIPTION

Prepared 6/15/2007 by the California State Lands Commission Boundary Unit.

EXHIBIT C

MITIGATION MONITORING PROGRAM REPORT

GIACOMINI WETLAND RESTORATION PROJECT
NATIONAL PARK SERVICE
Point Reyes National Seashore/Golden Gate National Recreation Area

CALIFORNIA STATE LANDS COMMISSION

May 17, 2007

Mitigation Monitoring Program

Under the California Environmental Quality Act (CEQA), the lead agency is required to adopt a program for reporting or monitoring regarding the implementation of mitigation measures for the Project, if it is approved, to ensure that the adopted mitigation measures are implemented as defined in this EIS/EIR. The Lead Agency's responsibility originates in Public Resources Code §21081.6(a) (Findings) and the State CEQA Guidelines 14 CCR §15091(d) (Findings) and §15097 (Mitigation Monitoring or Reporting). The adopted mitigation measures and monitoring program would be included as part of the Notice of Determination (NOD) issued under CEQA, as well as, in this case, the Record of Decision (ROD) issued under the National Environmental Policy Act (NEPA). This mitigation monitoring program will also be used by the National Park Service (Park Service), the Point Reyes National Seashore Association (PRNSA), and their cooperators and contractors to track implementation of required mitigation measures within the Project Area.

Monitoring Authority

The purpose of a Mitigation Monitoring Plan (MMP) is to ensure that measures adopted to mitigate or avoid significant impacts are implemented and, once implemented, to evaluate their effectiveness. A MMP will be a working guide to facilitate not only the implementation of mitigation measures by the project proponent, but also the monitoring, compliance, and reporting activities of the Park Service, PRNSA, and monitors they designate.

The Park Service and PRNSA may delegate duties and responsibilities for monitoring to the other environmental monitors or consultants as deemed necessary, and some monitoring responsibilities may be assumed by responsible agencies, such as affected jurisdictions. The number of construction monitors assigned to the project will depend on the number of concurrent construction activities and their locations. The Park Service, PRNSA, or their designee(s), however, will ensure that each person delegated any duties or responsibilities is qualified to monitor compliance. Monitoring identified in this plan will be integrated into the workplans of the site construction manager and environmental monitors, as assigned.

Any mitigation measure study or plan that requires the approval of the Lead Agencies (Park Service and CSLC) must allow for adequate review time. When a mitigation measure requires that a mitigation program be developed during the design phase of the project, the applicant must submit the final program to the Park Service, CSLC, and their designee(s) for review and approval before construction begins. Other involved agencies and jurisdictions may require additional review time. It is the responsibility of the assigned environmental monitor assigned to ensure that appropriate agency reviews and approvals are obtained.

The Park Service, CSLC, or their designee will also ensure that any deviation from the procedures identified under the monitoring program is approved by the Park Service or CSLC. Any deviation and its correction shall be reported immediately to the Park Service, CSLC, or their designee by the assigned environmental monitor.

Enforcement Responsibility

The Park Service and CSLC are responsible for enforcing the procedures adopted for monitoring through the environmental monitor assigned to the project construction. Any assigned environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals without any problems, and report the problems to the Park Service or CSLC or their designee.

Mitigation Compliance Responsibility

The Applicant is responsible for successfully implementing all the mitigation measures in the MMP, and is responsible for assuring that these requirements are met by all of its construction contractors and field personnel. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Other mitigation measures include detailed success criteria. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

General Monitoring Procedures

Environmental Monitors. Most of the monitoring procedures will be conducted during the construction phase of the Project. The CSLC, NPS, and the environmental monitor(s) are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with the applicant. To oversee the monitoring procedures and to ensure success, the assigned environmental monitor must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is require. The environmental monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

Construction Manager: The construction manager is a representative of the project proponent and interfaces directly with construction personnel. Many of these mitigation activities will be incorporated as part of the construction design and design detail documents. Environmental monitors should work with the construction manager to ensure compliance with the MMP.

Construction Personnel. A key feature contributing to the success of mitigation monitoring will be obtaining the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crew for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures, will be taken:

- Physical mitigation measures will be documented in the design drawings and specifications. Procedures to be followed by contractors will be written into contracts between the applicant and any construction contractors.
- One or more preconstruction meetings will be held to inform all and train construction personnel about the requirements of the monitoring program.
- A written summary of the mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures requiring their attention.

General Reporting Procedures. Site visits and specified monitoring procedures performed by other individuals (inspectors) will be reported to the environmental monitor assigned to the project. A monitoring record form will be submitted to the environmental monitor by the inspector so that details of the visit can be integrated by the environmental monitor. A checklist and record of mitigation measures will be developed and maintained by the environmental monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The environmental monitor will note any problems that may occur and take appropriate action to rectify the problems.

Evaluation of Effectiveness Mitigation. After implementation, the effectiveness of each mitigation measure in reducing or avoiding the intended impact will be evaluated. This evaluation will be performed by the environmental monitor based on the monitoring records, field observations, and other available evidence. This evaluation will be submitted to the Lead Agencies along with recommendations for improving the effectiveness of mitigation measures or monitoring and reporting procedures.

Public Access to Records. The public is allowed to access monitoring records and reports. Monitoring records and reports will be made available by the Park Service, CSLC, or their designees on request.

Mitigation Monitoring Table

The following section presents the mitigation monitoring tables for each environmental impact topic. Two tables – Mitigation Measure and Applicant-Proposed Protective Measures -- are presented on the following pages.

Table columns include the following information:

- Impact or Resource Area (for the Applicant's protective measures);
- Mitigation Measure (Short description of measures required to reduce potentially major or significant impacts to less than major or significant: these are discussed in Chapter 4 of the FEIS/EIR).
- Applicant-Proposed Protective Measures (Short description of measures proposed either in Chapter 2 or Chapter 4 to avoid or minimize impacts that either could have been major if not proposed as part of the Alternative through avoidance and minimization measures described in Chapter 2 or probably would have never been more than moderate in intensity) ;
- Location (where the impact occurs and the measure should be applied);
- Monitoring/reporting action (action to be taken by the monitor or Lead Agency);
- Effectiveness criteria (how the agency can know if the measure is effective);
- Agency responsible for monitoring; and
- Timing (prior to permit{ XE "permit" } approval; before, during, or after construction; during operation, etc.)

Monitoring Program for Mitigation Measures: Note measures are not numbered in FEIS/EIR.

Affected Resource Area	Mitigation Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
Air Resources – Air Quality and Noise						
Enhanced control measures to minimize NOx emissions and noise levels in Sensitive Construction Areas.	M-N-1. Construction Contractor shall be provided with information and map of Sensitive Construction Areas prior to start of construction.	Project Area	Environmental Monitor shall provide Construction Manager with map of Sensitive Construction Areas prior to start of construction. Construction Manager will provide to Construction Contractor and discuss constraints in these areas.		NPS/ PRNSA	During Construction – Both years
	M-N-2. Residents adjacent to Sensitive Construction Areas shall be notified in advance of construction starting in these areas.	Project Area	NPS and/or Construction Manager will notify residents or sensitive receptors adjacent to Sensitive Construction Areas at least 1 week prior to start of construction in these areas.	Minimal number of complaints from residents adjacent to Sensitive Construction Areas.	NPS/ PRNSA	During Construction-Both years (Noise)
	M-AQ/N-3. Construction Contractor shall maintain properly tuned equipment. All equipment should have sound control devices no less effective than original equipment and would have muffled exhaust.	Project Area	Construction Contractor shall maintain properly tuned construction equipment. Construction Manager or Environmental Monitor will take note and report to Construction Contractor on equipment that appears excessively loud or emits excessive amounts of emissions.	Observations of construction equipment by Construction Manager or Environmental Monitor.	NPS/ PRNSA	During Construction-Second year (Air Quality); Both years (Noise) – Sensitive Construction Areas
	M-AQ/N-4. Construction Contractor shall limit idling time of construction equipment to 5 minutes.	Project Area	Construction Contractor shall instruct employees to limit idling time of construction equipment o no more than 5 minutes. Equipment shall be turned off after 5 minutes.	Visual observations of construction practices by Construction Manager and/or Environmental Monitor.	NPS/ PRNSA	During Construction-Second year (Air Quality); Both years (Noise) – Sensitive Construction Areas

Monitoring Program for Mitigation Measures: Note measures are not numbered in FEIS/EIR.

Affected Resource Area	Mitigation Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
	M-AQ/N-5. Construction Contractor shall limit the number of hours of construction operation or the number of pieces of concurrently operating equipment	Project Area	Sound levels within Sensitive Construction Areas during construction may be monitored by Construction Manager or Environmental Monitor to better determine optimal number of pieces of construction equipment that can be operated.	Visual observations by Construction Manager and/or Environmental Monitor. Sound levels within Sensitive Construction Area during construction are estimated to be less than 75 dBA.	NPS/ PRNSA	During Construction-Second year (Air Quality); Both years (Noise) – Sensitive Construction Areas
	M-N-6. Construction Contractor shall limit hours of construction in Sensitive Construction Areas to 8 a.m. to 6 p.m. Monday through Friday, with weekends authorized only by permission from the NPS or CSLC.	Project Area	Construction Manager and Environmental Monitor will monitor hours of construction in Sensitive Construction Areas.	Minimal number of complaints from residents adjacent to Sensitive Construction Areas.	NPS/ PRNSA	During Construction-Both years (Noise) – Sensitive Construction Areas
Public Services – Municipal Water Supply						
Measures to avoid or minimize impacts to NMWD municipal groundwater supply operations	M-WS-1. Lead Agencies shall not implement major restoration actions in Olema Marsh until: 1) further study shows that increase in salinities in Lagunitas Creek would not have more than minor adverse effect on chloride concentrations in alluvial aquifer and NMWD operations; 2) further study shows that major restoration actions in Olema Marsh would not have more than a minor effect on salinities in upstream portions of Lagunitas Creek; or 3)	Project Area	NPS will work with NMWD and its consultants to further study the relationship between Lagunitas Creek and the alluvial aquifer and the potential effect that restoration of Olema Marsh might have on salinity dynamics in upstream portions of Lagunitas Creek. As it has already been doing, NPS would continue to meet with NMWD to update the agency on the results of studies and computer modeling efforts performed by its consultants. NPS would continue to support NMWD in its efforts to develop a more	Delay of major restoration actions in Olema Marsh should cause no change in salinity structure of upstream portions of Lagunitas Creek or NMWD operations relative to existing conditions.	NPS	Construction and Post-Construction

Monitoring Program for Mitigation Measures: Note measures are not numbered in FEIS/EIR.

Affected Resource Area	Mitigation Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
	NMWD establishes a well that can be used for off-tide pumping. Major restoration actions specifically refer to replacement of culverts at Levee and Bear Valley Roads.		reliable approach to water supply for West Marin			
	M-WS-2. Lead Agencies shall not pursue less intensive restoration actions for Olema Marsh unless additional study and hydrodynamic modeling efforts definitely suggest that these restoration actions would not have more than a minor adverse effect on salinities in upstream portions of Lagunitas Creek and/or NMWD operations. Less intensive restoration actions could include removal or breaching of berm or shallow excavation of Bear Valley Creek channel in Olema Marsh.	Project Area	NPS will work with its consultants to identify less intensive restoration actions that can be undertaken without causing more than a minor increase in salinities in Lagunitas Creek and/or minor adverse effect on NMWD operations. NPS will meet with NMWD staff to discuss restoration actions prior to implementation. NPS staff or designee will monitor salinities in Lagunitas Creek near confluence with Bear Valley Creek and up to Coast Guard wells to determine effect of these actions on salinity structure of upstream portions of Lagunitas Creek.	No more than a minor increase in salinities in upstream portions of Lagunitas Creek; or no more than a minor adverse effect on NMWD operations.	NPS	Construction and Post-Construction

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
Soil Resources						
Minimize potential for contamination of sediments by chemicals associated with construction	P-SR-1. An approved Spill Prevention and Response Plan will be developed by the construction contractor; approved by the lead agencies; and implemented by the contractor. Plan should include: 1) spill cleanup procedures; 2) worker training; and 3) impact avoidance measures, including those described below.	Project Area	Confirm approval of the Spill Prevention and Response Plan prior to construction activities. Monitor spill clean-up for compliance with all applicable plan procedures.	Copy of the Spill Prevention and Response Plan is readily accessible, and visual inspection indicates items are properly followed.	NPS/ PRNSA	Prior to start of construction and during construction-Both years.
	P-SR-2. Staging and storage areas for equipment and materials shall be 100 feet away from surface waters.	Project Area	Staging and storage areas will be designated during design phase. Construction Manager and Environmental Monitor will work with contractor to designate other appropriate areas, as needed.	Visual inspection	NPS/ PRNSA	Final Design; Construction-Both years.
	P-SR-3. No fueling or maintenance of vehicles below Ordinary High Water mark of creeks.	Project Area	See P-SR-2	Visual inspection	NPS/ PRNSA	Final Design; Construction-Both years.
	P-SR-4. No equipment is operated in flowing waters without installation of water diversion facilities.	Project Area	Prior to construction, implementation of construction elements will be discussed to determine whether equipment will need to operate in flowing waters and, if so, appropriate BMPs for avoiding impacts.	Visual inspection	NPS/ PRNSA	Prior to Construction and During Construction – Both years.
Air Quality						
Enhanced control measures to	P-AQ-1. Require trucks hauling materials to cover	Project Area	Construction Manager or Environmental Monitor shall	Visual inspection	NPS/ PRNSA	During construction-

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
***minimize dust and pollutant emissions*.**	trucks or require them to maintain at least 2 feet of freeboard.		inspect trucks to ensure loads are covered prior to leaving work site.			Both years.
	P-AQ/VR-2. Wash tires or tracks of trucks and equipment entering and leaving project sites to limit dust on roads.	Project Area	Establish wash station for trucks tires leaving and arriving at the Project Area. Random inspections by Construction Manager or Environmental Monitor	Visual inspection, operation of tire spray station.	NPS/ PRNSA	During construction-Both years.
	P-AQ-3. Sweep streets daily where visible soils are carried on to public streets.	Paved Roads adjacent to Project Area	Construction Manager or Environmental Monitor shall inspect adjacent roads, ensure excess soils are removed	Visual inspection	NPS/ PRNSA	During construction-Both years.
	P-AQ-4: Enclose, cover, water, or apply non-toxic soil stabilizers to stockpiles as necessary.	Project Area	Construction Manager work with contractor to determine fate and condition of stockpiles	Coordination and visual inspection	NPS/ PRNSA	During construction-Both years.
	P-AQ-5: Apply non-toxic soil stabilizers to inactive earthwork areas (inactive for 10 days or more)	Project Area	Environmental manager work with contract oversight to determine fate and condition of inactive work areas	Coordination and visual inspection	NPS/ PRNSA	During construction-Both years.
	P-AQ-6. Limit traffic speeds on unpaved roads to 10 mph	Project Area	Construction Manager shall observe speeds of trucks on unpaved roads and notify contractor of trucks exceeding speed limit.	Visual inspection	NPS/ PRNSA	During construction-Both years.
Water Resources - Water Quality						
Measures to minimize and avoid impacts to water quality	P-WQ-1. Conduct construction activities during the dry season	Project Area	Construction scheduling would be conducted to minimize potential for activities to occur during wet season.	Visual inspection	NPS/ PRNSA	Before and During construction-Both years.
	P-WQ-2. Prepare Stormwater Pollution Prevention Plan that details how construction would be	Project Area	Construction Contractor will prepare Stormwater Pollution Prevention Plan and submit to Park Service and PRNSA for	Document Review and Approval; Visual Inspection of construction activities	NPS/ PRNSA	Prior to Construction and During Construction-

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
	conducted in accordance with measures to decrease delivery of sediment to surface waters. Construction Contractor will adhere to measures outlined in approved SWPP, which should include measures outlined below.		approval. Construction Manager and Environmental Monitor will ensure that Construction Contractor adheres to SWPP.	around surface waters		Both years
	P-WQ-3. Ensure that concentrated run-off and concentrated discharge are diverted away from channel banks	Project Area	Construction Manager and Environmental Monitor will ensure that Construction Contractor adheres to SWPP.	Visual Inspection of construction activities around surface waters	NPS/ PRNSA	During construction-Both years.
	P-WQ-4. Install temporary construction fencing to identify areas that will be cleared, graded, recontoured, or revegetated.	Project Area	Construction Manager and Environmental Monitor will ensure that Construction Contractor adheres to SWPP.	Visual Inspection of construction activities around surface waters	NPS/ PRNSA	During construction-Both years.
	P-WQ-5. Grade and stabilize soils to minimize erosion and sediment input into adjacent surface waters	Project Area	Construction Manager and Environmental Monitor will ensure that Construction Contractor adheres to SWPP.	Visual Inspection of construction activities around surface waters	NPS/ PRNSA	During construction-Both years.
	P-WQ-6. Implement erosion control measures where appropriate to prevent sediment from entering surface waters, including silt fencing, fiber rolls, or erosion control blanket	Project Area	Construction Manager and Environmental Monitor will ensure that Construction Contractor adheres to SWPP.	Visual Inspection of construction activities around surface waters	NPS/ PRNSA	During construction-Both years.
	P-WQ-7. Avoid operating equipment in flowing waters by using temporary cofferdams or other water bypass procedures to divert flow around construction area.	Project Area	Construction Manager and Environmental Monitor will ensure that Construction Contractor adheres to SWPP.	Visual Inspection of construction activities around surface waters	NPS/ PRNSA	During construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
Vegetation Resources – Wetlands, Riparian, Special Status Species, and Invasives						
Measures to minimize and avoid impacts to vegetation – General and Invasives	P-VR-1. Use temporary construction fencing to delimit work areas. Exclude foot and vehicle traffic from sensitive areas using fencing and flagging.	Project Area	Ensure that construction contractor clearly delineates work areas with construction fencing and that work areas are identified correctly.	Visual inspection	NPS/ PRNSA	Final Design; Before and During Construction-Both years.
	P-AQ/VR-2. Wash tires or tracks of trucks and equipment entering and leaving project sites to prevent seed transport.	Project Area	Ensure clean equipment arrives at the site. Establish wash station for trucks tires leaving and arriving at the Project Area.	Visual inspection; Operation of tire spray station.	NPS/ PRNSA	Before and during construction activities.
	PR-VR-3. Removal or limbing of riparian vegetation should be avoided. No riparian vegetation shall be removed or limbed without express approval from the Environmental Monitor.	Project Area	Construction Contractor will work with Environmental Monitor to ensure that impacts to riparian vegetation are avoided or minimized to the extent possible. Environmental Monitor will work with Construction Contractor to clearly mark trees approved for removal or limbing.	Visual inspection	NPS/ PRNSA	During Construction-Both years.
Measures to minimize and avoid impacts to vegetation – Wetland and riparian resources	P-VR-4. Staging and stockpiling of equipment and materials shall be in upland and non-riparian areas whenever possible.	Project Area.	Lead agencies will review and approve staging areas identified in Final Design. Construction Manager and Environmental Monitor will inspect staging areas established by Construction Contractor. Contractor will request permission prior to establishing new staging and stockpile areas not identified in specifications.	Review construction specifications; Visual inspection of work areas and confirmation of staging and stockpile areas	NPS/ PRNSA	Final Design; Before and During Construction-Both years.
	If stockpiling and staging and access must occur in wetland or riparian areas, following measures should be implemented:	Project Area.	Lead agencies will review and approve staging areas identified in Final Design. Construction Manager and Environmental Monitor will inspect staging and	Review construction specifications; Visual inspection of flagged stockpile and staging and access road	NPS/ PRNSA	Final Design; Before, During, and After Construction-

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
	• P-VR-5. Temporary impacts should be minimized to the extent possible by minimizing work area and road width. • P-VR-6. Contractor will demarcate stockpiling and staging areas and access roads in wetlands and riparian areas with construction fencing and/or flagging. • P-VR-7. All temporary fill will be removed at the end of construction.		stockpile areas and access roads demarcated by flagging by Construction Contractor. Contractor will request permission prior to establishing new staging and stockpile areas and access roads not identified in specifications.	areas to ensure appropriate siting prior to initiation of earthmoving; Visual inspection throughout construction to ensure no new impacts and after construction to ensure that all temporary fill is removed.		Both years.
	P-VR-8. Construction access routes shall be flagged to ensure that construction equipment does not detour or widen access roads into wetlands or riparian habitat without prior permission.	Project Area.	Lead agencies will review and approve access routes identified in Final Design. Construction Manager and Environmental Monitor will inspect access roads demarcated by flagging by Construction Contractor. Contractor will request permission prior to establishing new access roads not identified in specifications.	1) Review construction specifications; 2) Visual inspection of flagged access roads to ensure appropriate siting prior to initiation of earthmoving; 3) Visual inspection to ensure that access does not deviate from approved routes.	NPS/ PRNSA	Final Design; Before and During Construction-Both years.
	P-VR-9. Where possible, construction equipment shall operate in upland locations	Project Area	Construction Manager and Environmental Monitor will work with Construction Contractor to identify most environmentally feasible construction approaches. Contractor will request permission prior to operating in wetland locations that were not previously approved.	Visual inspection of construction operations	NPS/ PRNSA	During Construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Measures to minimize and avoid impacts to vegetation – Special status species	P-VR-10. Construction in areas with special status plant species shall be delayed to avoid most of the season of reproduction, which, for most species, would be approximately July-August. Areas with special status plant species shall be flagged.	Project Area	Construction Manager and Environmental Monitor will work with Construction Contractor to identify scheduling of actions in areas with special status species. Environmental Monitor will flag areas with special status plant species prior to initiation of construction in these areas and will discuss flagging scheme with Construction Manager and Contractor. Contractor will request permission prior to operating in areas identified as having special status species.	Pre-construction meetings with contractor; Visual inspection of construction operations.	NPS/ PRNSA	Prior to and During Construction-Both years.
	P-VR-11. Construction Contractors shall excavate and stockpile topsoils in flagged areas with special status plant species. Topsoils should be replaced in designated areas after construction is completed. In affected areas where topsoil salvage is not possible, seeds would be collected and stored for dispersal after completion of construction activity.	Project Area	Lead agencies will review and approve plans for salvaging and stockpiling topsoils in areas with special status species in Final Design. Environmental Monitor will flag areas with special status species identified for salvage and will discuss flagging scheme with Construction Manager and Contractor. Where topsoil salvage not possible, Environmental Monitor or designee will collect seeds when ripe and store for dispersal once construction is completed. Construction Manager and/or Environmental Monitor will inspect salvage, stockpiling, and topsoil replacement operations to ensure performed properly.	Lead Agencies review and approve salvage and stockpiling elements of Final Design; Visual inspection of salvage, stockpiling, and topsoil replacement operations.	NPS/ PRNSA	Prior to and During Construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
Fish and Wildlife Resources – General Wildlife and Special Status Species						
Measures to minimize and avoid impacts to fish and wildlife resources – Breeding and migratory birds	P-FWR-1. Pre-construction surveys shall be conducted no more than 1 week prior to start of construction in specified construction areas. Pre-construction surveys required for work between March 1 and August 15.	Project Area	Qualified avian biologist designated by NPS or PRNSA will conduct pre-construction avian surveys no more than 1 week prior to start of construction in specified areas and will report results in memo format to Environmental Monitor.	Review of submitted memos to ensure that timing and areal extent of surveys sufficient to ensure compliance.	NPS/ PRNSA	Prior to Construction
	P-FWR-2. Construction Contractor shall stay at least 100 feet away from any area identified as having nesting or breeding migratory birds until August 15.	Project Area	Construction Manager will inform Construction Contractor of identified nesting areas and provide maps prepared by Environmental Monitor showing 100-foot boundary.	Visual inspection of construction operations to ensure compliance with 100-foot boundary.	NPS/ PRNSA	During Construction-Both years.
Measures to minimize and avoid impacts to fish and wildlife resources – Aquatic species	P-FWR-3. Before any construction or potential de-watering activities begin in any creeks within the Project Area, the Park Service and PRNSA shall ensure that native aquatic vertebrates and larger invertebrates are relocated out of the construction area by a qualified fisheries biologist.	Project Area	Qualified fisheries biologist will relocate aquatic species from open water areas subject to construction through seining and other appropriate measures to point at which it can be assumed that almost all individuals have been caught. Water levels may be lowered to improve efficiency of trapping. Individuals would be kept in buckets with aerators until relocated to flowing stream segments not subject to construction identified by the NPS in consultation with the appropriate agencies. Fisheries biologists would report findings to Environmental Monitor, who would oversee activities. Environmental Monitor would inform Construction Manager when areas are cleared.	1) Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance; 2) Inspection and clearance by Environmental Monitor prior to initiating construction or dewatering activities; 3) Visual inspection of construction operations to ensure that construction and dewatering are not initiated prior to clearance.	NPS/ PRNSA	Prior to Construction and During Construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
Fish and Wildlife Resources – General Wildlife and Special Status Species						
Measures to minimize and avoid impacts to fish and wildlife resources – California black rail and California clapper rail	P-FWR-4. Qualified avian biologist shall conduct pre-construction surveys in spring to locate active nests in suitable breeding habitat using survey methods approved by CDFG[1] and USFWS[2].	Project Area	Qualified avian biologist shall conduct surveys and report findings to Environmental Monitor. Environmental Monitor shall report findings to CDFG and USFWS.	Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance	NPS/ PRNSA	Prior to Construction-Both years.
	P-FWR-5. Construction Contractor shall stay at least 250 feet away from established rail breeding habitat between February 1 and August 31.	Project Area	Environmental Monitor will provide Construction Manager with maps showing extent of 250-foot boundary at least 1 month prior to start of construction. Construction Manager will provide maps to Construction Contractor prior to start of construction.	Visual observation of construction activities to ensure that 250-foot boundary is observed.	NPS/ PRNSA	Prior to and During Construction-Both years.
Measures to minimize and avoid impacts to fish and wildlife resources – California red-legged frog and Northwestern pond turtle	P-FWR-6. Qualified amphibian biologist shall conduct pre-construction surveys in spring to locate extent of breeding habitat using survey methods approved by USFWS[2].	Project Area	Qualified amphibian biologist shall conduct surveys and report findings to Environmental Monitor. Environmental Monitor shall report findings to CDFG and USFWS.	Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance	NPS/ PRNSA	Prior to Construction-Both years.
	P-FWR-7. Construction Contractor shall avoid construction in or directly adjacent to red-legged frog breeding habitat until after July 31.	Project Area	Environmental Monitor will provide Construction Manager with maps showing breeding areas off-limit to construction at least 1 month prior to start of construction. Construction Manager will provide maps to Construction Contractor prior to start of construction.	Visual observation of construction activities to ensure that specified breeding areas are avoided.	NPS/ PRNSA	Prior to and During Construction-Both years.

[1] CDFG=California Department of Fish and Game
[2] USFWS=U.S. Fish and Wildlife Service

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Fish and Wildlife Resources – General Wildlife and Special Status Species						
	P-FWR-8. No more than 1 week prior to start of construction or dewatering activities in open water areas, qualified biologist shall conduct pre-construction surveys to determine whether red-legged frogs and northwestern pond turtle are present. If present, frogs and turtles shall be trapped and relocated to non-construction areas approved in advance by Environmental Monitor in consultation with appropriate technical experts and/or agencies.	Project Area	Qualified biologist will capture and relocate red-legged frogs and northwestern pond turtle from open water areas subject to construction through appropriate trapping measures to point at which it can be assumed that almost all individuals have been caught. Water levels may be lowered to improve efficiency of trapping. Individuals would be kept in moist dark coolers until relocated to appropriate habitat not subject to construction identified by the NPS in consultation with the appropriate technical experts and/or agencies. Biologists will report findings to Environmental Monitor, who will oversee activities. Environmental Monitor will inform Construction Manager when areas are cleared.	1) Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance; 2) Inspection and clearance by Environmental Monitor prior to initiating construction or dewatering activities; 3) Visual inspection of construction operations to ensure that construction and dewatering are not initiated prior to clearance.	NPS/ PRNSA	Prior to Construction and During Construction-Both years.
Measures to minimize and avoid impacts to fish and wildlife resources – Tidewater goby	P-FWR-9. Qualified fisheries biologist shall conduct pre-construction surveys in spring to locate extent of tidewater goby habitat using survey methods approved by USFWS[2].	Project Area	Qualified fisheries biologist shall conduct surveys and report findings to Environmental Monitor. Environmental Monitor shall report findings to USFWS.	Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance	NPS/ PRNSA	Prior to Construction-Both years.
	P-FWR-10. Construction Contractor shall avoid construction in or directly adjacent to established tidewater goby habitat from	Project Area	Environmental Monitor will provide Construction Manager with maps showing established goby habitat off-limit to construction at least 1 month	Visual observation of construction activities to ensure that specified goby habitat	NPS/ PRNSA	Prior to and During Construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
	April through June.		prior to start of construction. Construction Manager will provide maps to Construction Contractor prior to construction.	areas are avoided.		
	P-FWR-11. No more than 1 week prior to start of construction or dewatering activities in open water areas, qualified fisheries biologist shall conduct pre-construction surveys to determine whether goby is present. If present, goby shall be trapped and relocated to non-construction areas approved in advance by Environmental Monitor in consultation with appropriate technical experts and/or agencies such as Tomasini Creek.	Project Area	Qualified fisheries biologist will capture and relocate goby from open water areas subject to construction through extensive seining, minnow trapping, and other appropriate trapping measures to point at which it can be assumed that almost all individuals have been caught. Water levels may be lowered to improve efficiency of trapping. Individuals would be kept in buckets with aerators until relocated to appropriate habitat not subject to construction identified by the NPS in consultation with appropriate experts and/or agencies. Fisheries biologists will report findings to Environmental Monitor, who will oversee activities. Environmental Monitor will inform Construction Manager when areas cleared.	1) Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance; 2) Inspection and clearance by Environmental Monitor prior to initiating construction or dewatering activities; 3) Visual inspection of construction operations to ensure that construction and dewatering are not initiated prior to clearance.	NPS/ PRNSA	Prior to Construction and During Construction-Both years.
Measures to minimize and avoid impacts to fish and wildlife resources – Salmonids	P-FWR-12. Construction Contractor shall avoid conducting construction activities in Lagunitas Creek and other known salmonid-supporting streams until after July 15.	Project Area	Environmental Monitor will provide Construction Manager with maps showing established salmonid habitat off-limit to construction at least 1 month prior to start of construction. Construction Manager will provide maps to Construction Contractor prior to construction.	Visual observation of construction activities to ensure that specified salmonid habitat areas are avoided.	NPS/ PRNSA	Prior to and During Construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
Fish and Wildlife Resources – General Wildlife and Special Status Species						
Measures to minimize and avoid impacts to fish and wildlife resources – California freshwater shrimp	P-FWR-13. Qualified biologist shall conduct pre-construction surveys in areas with appropriate habitat to determine whether shrimp are present using approved survey methods.	Project Area	Qualified biologist shall conduct surveys and report findings to Environmental Monitor. Environmental Monitor shall report findings to USFWS.	Review of submitted memos to ensure that timing and areal extent of relocation efforts sufficient to ensure compliance	NPS/ PRNSA	Prior to Construction-Both years.
Cultural Resources						
Measures to minimize and avoid impacts to undocumented cultural resources	P-CR-1. Lead Agencies shall ensure that NPS or Federated Indians of Graton Rancheria (FIGR) representative is on call during construction activities.	Project Area	Environmental Monitor should communicate cultural resource contacts to Construction Manager.	Appropriate response in case cultural resources are found on site.	NPS/ PRNSA	During Construction-Both years.
	P-CR-2. Construction Contractor shall stop construction activities and immediately notify Construction Manager should construction activities uncover potential cultural resource findings such as shells, pottery fragments, bones, or other historic or archaeological artifacts.	Project Area	Construction Contractor will communicate possible cultural resource findings immediately to Construction Manager, who will contact NPS or FIGR on-call representative.	Appropriate response in case cultural resources are found on site.	NPS/ PRNSA	During Construction-Both years.
Public Health and Safety – Disease and Disease Vectors						
Measures to minimize and avoid impacts to public health and safety from disease vectors	P-PH-1. Construction Contractor shall avoid temporary water impoundment or minimize the areal extent of water impoundment caused by construction activities to reduce breeding of mosquitoes.	Project Area	Construction Contractor will work with Construction Manager and Environmental Monitor prior to start of construction to determine the need and extent for water diversion and impoundment measures that could create temporary breeding habitat for mosquitoes.	Visual observation of construction activities to ensure that amount of temporary water impoundment does not exceed that discussed prior to construction.	NPS/ PRNSA	Prior to and During Construction-Both years.

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Public Health and Safety – Disease and Disease Vectors						
Measures to minimize and avoid impacts to public health and safety from disease vectors	P-PH-2. NPS or designee shall monitor temporary impounded areas during construction for evidence of excessive mosquitoes or mosquito breeding and, if necessary, treat with NPS-approved IPM[3] management and treatment methods.	Project Area and Vicinity	Environmental Monitor will work with NPS or designee on monitoring of temporary impounded areas for evidence of excessive mosquitoes or mosquito breeding. Environmental Monitor will notify Construction Manager and Contractor if management or treatment is required.	Re-testing of impounded areas after implementation of management or treatment shows absence or highly reduced numbers of mosquitoes. Minimal number of complaints from surrounding residents and/or visitors.	NPS/ PRNSA	During Construction-Both years.
Public Services – Municipal Water Supply Distribution and Other Services						
Measures to minimize and avoid impacts to public services from interruption of public services	P-PS-1. NPS and Construction Manager shall provide advance notification to affected residents of any utility interruptions at least 1 week prior to occurrence.	Project Area and Vicinity	NPS shall prepare mailing for affected residents in consultation with Construction Manager and Contractor at least 1 week prior to planned interruption in utility.	Minimal number of complaints from affected residents.	NPS/ PRNSA	During Construction-Both years.
Public Services – Traffic and Transportation						
Measures to minimize and avoid impacts to transportation	P-TR-1. Engineer and Construction Contractor shall be required to develop and implement traffic safety plan that would include limits on vehicle size; approved access and hauling routes; approved traffic control procedures for road or lane closures, traffic stoppages, detours, flag-person requirements, and turnout needs.	Project Area and adjacent areas	Project Engineer shall include approved access and hauling routes on construction specifications and include information on minimum or suggested traffic control measures as part of specifications. Construction Contractor shall incorporate information from Engineer into Traffic Safety Plan, which will be submitted to Construction Manager and Environmental	1) Review and approval of proposed access and hauling routes and traffic control measures in construction specifications. 2) Review and approval of Traffic Safety Plan. 3) Visual observation of access, hauling, and traffic control	NPS/ PRNSA	Before and During Construction-Both years.

[3] IPM=Integrated Pest Management

Monitoring Program for Applicant-Proposed Protective Measures

Affected Resource Area	Applicant-Proposed Protective Measures	Location	Monitoring / Reporting Action	Effectiveness Criteria	Respons-ible Agency	Timing
			Monitor for review and approval prior to start of construction. Traffic control measures will be submitted to County of Marin Public Works for approval. Construction Contractor shall adhere to the approved Traffic Safety Plan during entire construction period.	procedures.		
	P-TR-2. Construction Contractor shall observe weight limits suggested for County of Marin Roads to limit wear and tear on County, state, and NPS roads. Construction Contractor shall not use hauling trucks whose capacity exceeds weight limit of County of Marin roads.	Project Area and adjacent areas	Construction Contractor will have equipment on hauling trucks that allows load weight of hauling trucks to be checked on random basis by Construction Manager or designee. Construction Manager will maintain records of all such checks. In addition, Construction Manager or designee may perform video-monitoring of selected portions of roads to document condition prior to initiation of hauling.	Random checks by Construction Manager show that hauling vehicles within approved weight limits. Video-monitoring, if performed, shows that condition of roads does not decrease substantially after hauling is completed relative to existing conditions.	NPS/ PRNSA	Before and During Construction-Both years.
Public Access Resources						
Measures to minimize and avoid impacts to public access resources	P-PA-1. NPS and Construction Manager shall provide advance notification regarding any trail and road closures or detours to visitors and residents.	Project Area and Vicinity	NPS shall post information on trail and road closures and detours that could affect access to public access resources on 1) the park website, 2) at the Bear Valley Visitor Center, and 3) at the construction site.	Minimal number of complaints from affected residents.	NPS/ PRNSA	During Construction-Both years.

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CEQA FINDINGS

INTRODUCTION

These Findings on the Giacomini Wetland Restoration Project (proposed Project) proposed by National Park Service (NPS)Point Reyes National Seashore are made by the California State Lands Commission (CSLC), pursuant to the Guidelines for the California Environmental Quality Act (the CEQA) (California Code of Regulations, Title 14, section 15091). All significant adverse impacts of the project in California identified in the Draft Environmental Impact Report (Draft EIR) are included herein and organized according to the resource affected.

The CEQA Findings are numbered in accordance with the impact and mitigation numbers identified in the Mitigation Monitoring Program table as provided in Appendix B of the Final EIR. The CEQA Finding numbers are not numbered sequentially because some of the impacts were less than significant before mitigation (Class III) or a beneficial impact (Class IV).

For discussion of impacts, significance is classified according to the following definitions:

- Class I (significant adverse impact that remains significant after mitigation);
- Class II (significant adverse impact that can be eliminated or reduced below an issue's significance criteria);
- Class III (adverse impact that does not meet or exceed an issue's significance criteria); or
- Class IV (beneficial impact).

Class III and Class IV impacts require neither mitigation nor findings.

For each significant impact (i.e., Class I or II) a finding has been made as to one or more of the following, as appropriate:

a) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the Draft EIS/EIR.

b) Such changes or alterations are within the responsibility and jurisdiction of

another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

c) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Draft EIR and/or Finalizing Addendum.

A discussion of the facts supporting them follows the findings.

Whenever Finding (b) occurs, the agencies with jurisdiction have been specified. These agencies, within their respective spheres of influence, have the ultimate responsibility to adopt, implement, and enforce the mitigation discussed within each type of impact that could result from project implementation. However, under the CEQA (Public Resources Code section 21081.6), the CSLC, as the CEQA Lead Agency, has the responsibility to ensure that the mitigation measures contained are effectively implemented. Other specified State, local, regional, and Federal public agencies include, but are not necessarily limited to the following:

- Bay Area Air Quality Management District (BAAQMD);
- California Coastal Commission (CCC);
- California Department of Fish and Game (CDFG);
- California Department of Transportation (Caltrans);
- California Office of the State Fire Marshal (CSFM);
- California Regional Water Quality Control Board (RWQCB);
- National Park Service (NPS);
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries);
- North Marin Water District (NMWD);
- Marin County Department of Public Works (MCDPW);

- Marin County Parks and Open Space District (MCOSD);
- U.S. Army Corps of Engineers (ACE, or ACOE);
- U.S. Fish and Wildlife Service (FWS);
- Gulf of the Farallones National Marine Sanctuary (GFNMS); and
- Other local districts or jurisdictions.

Whenever Finding (c) is made, the CSLC has determined that sufficient mitigation is not practicable to reduce the impact to a less than significant level and, even after implementation of all feasible mitigation measures, there will or could be an unavoidable significant adverse impact due to the Project. The Statement of Overriding Considerations applies to all such unavoidable impacts as required by the CEQA Guidelines sections 15092 and 15093. No Class I impacts requiring Finding (c) were identified in the Final EIS/EIR.

Final EIS/EIR FINDINGS

CEQA FINDING

NOISE AND SOUNDSCAPES

Impact: **Construction Related Noise Effects to Sensitive Noise Receptors**

Class: II

Finding(s): a) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

FACTS SUPPORTING THE FINDING(S)

Most of the effects of construction on sensitive noise receptors or residences in the vicinity of the East Pasture would be attenuated either through distance or natural barriers such as road embankments, elevation differences, or thick, dense vegetation. There are at least two areas identified as sensitive construction zones (southeastern portion of East Pasture and Sir Francis Drake Boulevard corridor) where sounds would not naturally be attenuated to the degree needed to keep noise levels below 75 dBA during daytime hours. Because earthmoving and other construction activities would generate noise at levels that may exceed 75 dBA for nearby sensitive receptors, impacts under the selected alternative would be characterized as major under NEPA

and substantial and significant under the CEQA. These impacts would be localized and very short term and would be mitigated to less than significant under CEQA using noise-reducing Best Management Practices, including:

- M-N-1. Construction contractor shall be provided with information and map of Sensitive Construction Areas prior to start of construction.
- M-N-2. Residents adjacent to Sensitive Construction Areas shall be notified in advance of construction starting in these areas.
- M-N-6. Construction Contractor shall limit hours of construction in Sensitive Construction Areas to 8 a.m. to 6 p.m. Monday through Friday, with weekends authorized only by permission from the NPS or the CSLC.

In addition, other practices conducted to limit air quality impacts (below) would help mitigate potential noise impacts described in the document.

- M-AQ/N-3: maintain properly tuned equipment;
- M-AQ/N-4: minimize idling time to 5 minutes; and
- M-AQ/N-5: limit the hours of operation of heavy duty equipment or the number of pieces of equipment operating simultaneously.

The proposed mitigation and protection measures are standard recommendations implemented in many similar projects. As documented in the Mitigation Monitoring Plan, these measures will be conducted for the duration of the project construction activities, with contractor oversight conducted by the NPS and their cooperators.

Summary. This impact is found to be less than significant following mitigation.

CEQA FINDING – AIR QUALITY

AIR QUALITY

Impact: **Impact Air Quality: Increase in Emissions during Construction Operations**

Class: II

Finding(s): b) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant

environmental effect as identified in the Final EIR.

FACTS SUPPORTING THE FINDING(S)

The proposed Project could potentially result in increased emissions during the construction period. Calculations for generation of air quality pollutants, specifically NOx, were conducted based on estimated volume of earthmoving and estimated number of construction days. The Project EIS/EIR concludes that the construction-related intensity of effects for most air pollutants range from negligible to minor. However, NOx emissions during Year 2 of construction could increase in intensity to major or substantial based on the approximately 85 lbs per day of NOx generated during construction. Project NOx loading in Year 2 of construction is 5 lbs per day greater than the 80 lb per day BAAQMD NOx Threshold of Significance.

While the scope of earthmoving could be reduced to below the significance threshold, the proposed extent of restoration actions was strongly supported during the public scoping period on the EIS/EIR.

Construction activities during the second construction year would potentially generate major or substantial amounts of nitrogen dioxide (NOX) from emissions of earthmoving equipment. This would be considered a significant impact under the CEQA based on BAAQMD CEQA guidelines (1999). The NPS and the CSLC propose to mitigate this impact to a less-than-significant level under the CEQA and to a moderate impact under NEPA by instituting the following Best Management Practices advocated by BAAQMD (1999). Specifically, contractors would be required to implement a series of mitigation measures including:

- M-AQ/N-3: maintain properly tuned equipment;
- M-AQ/N-4: minimize idling time to 5 minutes; and
- M-AQ/N-5: limit the hours of operation of heavy duty equipment or the number of pieces of equipment operating simultaneously.

In addition, PM10 emissions would be minimized through implementation of protective measures including:

- P-AQ/VR-2: wash tires or tracks of trucks and equipment prior to entering and leaving the project site to limit dust on roads.

- P-AQ-6: limit traffic speeds on unpaved roads to 10 mph.

The proposed mitigation and protection measures are standard recommendations by the lead regulatory agency, the Bay Area Air Quality Management District. As documented in the Mitigation Monitoring Plan, these measures will be conducted for the duration of the project construction activities, with contractor oversight conducted by the NPS and their cooperators.

Summary. This impact is found to be less than significant following mitigation.

CEQA FINDING – Public Services – Municipal Water Supply

PUBLIC SERVICES

Impact: **Impact on Municipal Water Supply: Potential increase in salinity levels within groundwater supply wells**

Class: II

Finding(s): b) Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

FACTS SUPPORTING THE FINDING(S)

The proposed Project has the potential for a significant impact under the CEQA on municipal water supply operations. Potential impacts to municipal water supply operations would be mitigated to less-than-significant under CEQA.

Modeling results suggest that, under the Selected Alternative, average chloride concentrations in this reach of Lagunitas Creek would increase by 121 percent over baseline conditions during spring or high tide conditions (>5.5 feet MLLW) under normal-year flows and 118 percent under dry-year streamflow conditions (KHE 2006a). As they do currently, NMWD's practice of off-tide pumping would avoid these higher chloride concentrations during tides greater than 5.9 to 6.0 feet MLLW. Therefore, these impacts would not be expected to alter the quality of the municipal groundwater supply, but rather to affect municipal water supply operations in that it could increase the need for, if not the frequency of, off-tide pumping and the time and freshwater recharge needed to reduce creek-derived chlorides within the aquifer.

Potential impacts to municipal water supply operations would be mitigated by not implementing adaptive restoration elements in Olema Marsh until the Park Service can reliably conclude that restoration of Olema Marsh would have no more than a minor adverse potential for affecting municipal water supply operations. While the Olema Marsh only increases the tidal prism -- one of the major factors driving the volume of saltwater in upstream reaches -- by eight percent, the proximity of the Bear Valley Creek outlet and Olema Marsh to the Coast Guard well site (~1 mile) likely magnifies its effect on salinity structure on upstream reaches. Most of the tidal exchange between Lagunitas Creek/Tomales Bay and the Giacomini Ranch would continue to occur within the northern portions of the ranch, almost 2 to 2.75 miles downstream of the Coast Guard wells.

- M-WS-1: To mitigate the potential impacts to NMWD operations and the quality of the groundwater supply from restoration of Olema Marsh, large-scale adaptive restoration elements in Olema Marsh would not be implemented unless: 1) monitoring and further investigation of the relationship between Lagunitas Creek and the alluvial aquifer suggest that increased surface water salinities would not pose a threat to the quality of the municipal water supply; 2) there is new information suggesting that restoration of Olema Marsh would not increase salinities or otherwise pose a threat to the quality of the municipal water supply; or 3) NMWD receives funding and moves ahead with construction of a pipeline to the Gallagher Well for use during off-tide pumping conditions.

Large-scale adaptive restoration actions include replacement of the Levee Road and Bear Valley Road culverts, which were identified as later-stage restoration elements such that they would only be implemented if initial stage restoration elements did not achieve the desired degree of hydraulic connectivity between Olema Marsh and Lagunitas Creek.

- M-WS-2: Through iterative hydrodynamic modeling runs, the Park Service, ACR, and CSLC would work with its hydrologic consultants to identify limited restoration actions that could be implemented without causing major or substantial impacts to upstream Lagunitas Creek salinities. This limited restoration actions could include excavation of a "notch" in the grade-control berm and shallow excavation of a flow path through Olema Marsh. The Park Service will continue to work cooperatively with NMWD to ensure that there are

no more than minor adverse impacts to municipal water supply operations from implementation of the proposed Project and to support NMWD in its efforts to develop increased water supply reliability through development of the Gallagher well.

The NPS will implement these mitigation measures and will continue to work actively with the NMWD to better understand the hydrologic and salinity regime in the lower portions of Lagunitas Creek. NPS will also support NMWD to identify funding sources for the Gallagher well development, necessary for long-term water supply reliability.

Summary. This impact is found to be less than significant following mitigation.