

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Millerton Lake State Recreation Area California Department of Parks and Recreation South Shore Maintenance Yard Improvements Project

FONSI-10-090

Recommended by:



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Natural Resources Specialist
South-Central California Area Office

Date: 7/31/2012

Concurred by:



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Date: 8/1/12

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Date: 8/2/12

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Date: 8/3/12



Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an environmental impact statement (EIS) is not required for the approval and funding, through an existing 50/50 cost share financial assistance agreement, of the California Department of Parks and Recreation's (CDPR's) proposed Maintenance Yard improvements project. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA)-10-090, *Millerton Lake State Recreation Area California Department of Parks and Recreation South Shore Maintenance Yard Improvements Project*, which is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between June 28, 2012 and July 27, 2012. No comments were received.

Background

Millerton Lake was created as a result of construction of Friant Dam on the San Joaquin River, which is owned and operated by Reclamation. The Millerton Lake State Recreation Area (MLSRA) is maintained and operated by the CDPR on federal lands owned by Reclamation.

CDPR has proposed facility improvements to their South Shore Maintenance Yard (Maintenance Yard) in order to replace aging infrastructure, comply with the Americans with Disabilities Act (ADA), and meet current health and safety standards. CDPR filed a notice of exemption pursuant to the California Environmental Quality Act for their proposed project on December 31, 2010.

Proposed Action

Reclamation will approve and fund, through an existing \$600,000 50/50 cost share financial assistance agreement, CDPR's proposed Maintenance Yard improvements project. The proposed improvements will involve the following: demolition of seven existing shop buildings, construction of a new ADA compliant service yard building, construction of a new ADA-compliant storage building, construction of new covered boat storage "shell", construction of a multi-purpose water station with an evaporation pond, and modifications to existing utilities.

CDPR shall implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified will be fully implemented.

Table 1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Air Quality	CDPR will employ the following measures to reduce fugitive dust: <ul style="list-style-type: none"> • Spray exposed soil with water during construction • Suspend excavation and grading when sustained winds exceed 25 miles per hour (mph) or instantaneous winds exceed 35 mph • Cover all trucks hauling soil, sand, or other loose material if they do not have at least 2 feet of freeboard
Biological Resources	A qualified biologist will be on-site or on-call during all activities that could result in

Resource	Protection Measure
	the take of listed species. The qualifications of the biologist(s) will be presented to the U.S. Fish and Wildlife Service (USFWS) for review and approval at least 60 calendar days prior to any groundbreaking at the project site. The biologist will have oversight over implementation of all the measures described in the Terms and Conditions of the biological opinion issued for this project, and he/she will have the authority to stop project activities, through communication with the Project Manager, if any of the requirements associated with these measures are not being fulfilled. If the biologist(s) exercises this authority, the USFWS and the California Department of Fish and Game (DFG) will be notified by telephone and electronic mail within one (1) working day. The USFWS contact is Mr. Daniel Russell, Division Chief, Endangered Species Program, Sacramento Fish and Wildlife Office, Sacramento (telephone [916] 414-6600). The DFG contact is the State Dispatch at (916) 654-4262.
Biological Resources	Prior to initiation of any on-site preparation/construction activities, the USFWS - approved biologist will conduct an education and training session for all available individuals who will be involved in the site preparation or construction, including the project representative(s) responsible for reporting take to the USFWS and the DFG. Training sessions will be required for all new or additional personnel before they are allowed to access the project site. Attendance sheets identifying attendees and the contractor/company they represent will be provided to the USFWS with the post-construction compliance report. At a minimum, the training will include a description of the California tiger salamander and vernal pool habitats. Additional information will include the general measures, as they relate to the project, that are being implemented to conserve this species; the penalties for non-compliance with these measures; travel within the marked project site will be restricted to established roadbeds and the boundaries (work area) within which the project must be accomplished. To ensure that employees and contractors understand their roles and responsibilities, training may have to be conducted in languages other than English.
Biological Resources	The limits of the construction area will be flagged, if not already marked by other fencing, and all activity will be confined within the marked area. All access to and from the project area will be clearly marked in the field with appropriate flagging and signs. Prior to commencing construction activities, the contractor will determine construction vehicle parking sites and all access routes. All construction activity will be confined within the project site, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time will equipment or personnel be allowed to adversely affect habitat areas outside the project site without authorization from the USFWS.
Biological Resources	To the extent possible, nighttime and rainy-season construction must be minimized. Construction crews will be informed during the education program meeting that, to the extent possible, travel within the marked project site will be restricted to established roadbeds. Established roadbeds include all pre-existing and project-constructed unimproved, as well as improved roads.
Biological Resources	Permanent and temporary disturbances to habitats of the California tiger salamander will be minimized to the maximum extent practicable. To minimize temporary disturbances, all project-related vehicle traffic will be restricted to established roads and other designated areas. These areas also will be included in pre-construction surveys and, to the maximum extent possible, will be established in locations disturbed by previous activities to prevent further adverse effects.
Biological Resources	Project employees will exercise caution when commuting within California tiger salamander habitat. A 20-mile per hour speed limit will be required on unpaved roads within listed species habitats.
Biological Resources	To prevent harassment, injury or mortality of California tiger salamander or destruction of their refugia or burrows no pets of any kind will be permitted on construction sites.
Biological Resources	The onsite biological monitor will check for animals under all vehicles and equipment such as stored pipes before the start of work each morning. The biological monitor will check all excavated steep-walled holes or trenches greater than one foot (0.3 meters) deep for California tiger salamanders. California tiger

Resource	Protection Measure
	salamanders will only be removed by individuals that have a special permit issued by the USFWS allowing them to handle listed species.
Biological Resources	To prevent inadvertent entrapment of California tiger salamanders during construction, all excavated, steep-walled holes or trenches will be covered at the close of each working day with plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wood planks. Before such holes or trenches are filled, the on-site biologist will thoroughly inspect the opening for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape from the opening, or will contact the USFWS and/or DFG by telephone for guidance. The USFWS will be notified of the incident by telephone and electronic mail within one (1) working day.
Biological Resources	All equipment will be maintained in accordance with the manufacturer's directions so there will be no leaks of fluids such as gasoline, oils, or solvents.
Biological Resources	To eliminate an attraction to predators of the California tiger salamander, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers; these containers will be removed at least once every day from the entire project site.
Biological Resources	To minimize impacts to the central California tiger salamander, State Parks will install and maintain an exclusionary fence around the evaporation pond to exclude small mammals from burrowing under, and central California tiger salamanders from attempting to use the evaporation pond as a breeding location.
Biological Resources	<p>In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, Reclamation shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, Reclamation must immediately reinstitute formal consultation as per 50 CFR 402.16.</p> <ul style="list-style-type: none"> For those components of the action that will result in habitat degradation or modification whereby incidental take in the form of harm is anticipated, Reclamation will provide weekly updates to the Service with a precise accounting of the total acreage of habitat impacted. Updates shall also include any information about changes in project implementation that result in habitat disturbance not described in the <i>Project Description</i> and not analyzed in this biological opinion. For those components of the action that may result in direct encounters between listed species and project workers and their equipment whereby incidental take in the form of harassment, harm, injury, or death is anticipated, Reclamation shall immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6600 to report the encounter. If encounter occurs after normal working hours, Reclamation shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, Reclamation shall follow the steps outlined in the Salvage and Disposition of Individuals section below. Reclamation and agents representing Reclamation will continue monitoring the evaporation pond to ensure the effectiveness of the exclusionary fence. If the exclusionary fence fails and central California tiger salamanders are discovered within the evaporation pond enclosure, then Reclamation will contact the Service and CDFG to account for this additional take.
Pollution Prevention	CDPR will prepare a water pollution prevention control plan which will include best management practices (BMPs) to prevent soil erosion and sediment transportation. The plan will also include BMPs for managing stockpiles and preventing equipment fluid spills.

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

Findings

Water Resources

Under the Proposed Action, construction activities will be confined to the CDPR Maintenance Yard and existing paved access road. The Proposed Action will not impede operation of the reservoir nor will it interfere with the delivery of water. In addition, there will be no water quality impacts as no construction activities will occur within or near the shoreline of Millerton Lake or any other body of water. There will be no impact to water resources as a result of the Proposed Action.

Land Use

The Maintenance Yard improvements will not change the area's land use designation as construction activities will be confined within the existing CDPR Maintenance Yard and access road. There will be no impact to land use as a result of the Proposed Action.

Biological Resources

A total area of 49,054 square feet or 1.13 acres will be temporarily affected by the Proposed Action, as well as some rodent burrows within 50 feet of the area; however, the entire area is not grassland habitat. Most of the 1.13 acres is developed for a fenced Maintenance Yard with structures, parking and utilities, but around the edges and within 50 feet there are active rodent burrows that could potentially be damaged, and thus 0.01 acres of habitat will be impacted. California tiger salamanders could also be crushed by moving vehicles and equipment or killed as a result of predators being attracted to trash left behind by workers. The proposed evaporation pond could also attract salamanders who may attempt to use it for breeding and whose eggs or larvae will likely not successfully hatch/develop in the pond. These impacts will be avoided or minimized by the measures incorporated into the project description (Table 1). Reclamation sent a request for formal consultation to the USFWS on June 3, 2011. A final biological opinion was received on June 27, 2012 (see Appendix B in EA-10-090).

Cultural Resources

Reclamation determined that the Proposed Action will have no effect on historic properties as there are none within the APE. However, because the Proposed Action was determined to be the type of action that has the potential to affect historic properties, Reclamation entered into consultation with SHPO on a finding of no historic properties affected pursuant to the regulations at 36 CFR Part 800.4(d)(1). On March 3, 2011, SHPO concurred with Reclamation's determination (see Appendix A in EA-10-090).

Indian Sacred Sites

The Proposed Action will not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites. There will be no impacts to Indian Sacred Sites as a result of the Proposed Action.

Indian Trust Assets

The Proposed Action will not impact Indian Trust Assets as there are none in the Proposed Action area. The nearest Indian Trust Assets is Table Mountain Rancheria approximately three miles east of the Proposed Action area.

Environmental Justice

The Proposed Action will not cause dislocation, changes in employment, or increase flood, drought, or disease. In addition, there will be no increase in fees at the park that may affect recreational opportunities for disadvantaged populations. The Proposed Action will not disproportionately impact economically disadvantaged or minority populations.

Socioeconomic Resources

No jobs will be removed or created by the Proposed Action as construction will be done by CDPR personnel. No revenue will be generated by Maintenance Yard improvements. Therefore, there will be no impact to socioeconomic resources as a result of the Proposed Action.

Recreation

The Proposed Action will not impede recreational uses of the MLSRA as construction will be contained within an area that is currently restricted to the public; therefore, there will be no impact to recreation as a result of the Proposed Action.

Air Quality

Grading and other ground disturbing construction activities will temporarily increase dust within the action area. Operation of construction equipment will also temporarily produce additional exhaust emissions (PM₁₀ and PM_{2.5}). CDPR will employ best management practices as described in Table 1 to reduce these impacts. There will be no significant impacts to air quality as a result of the Proposed Action.

Global Climate

Under the Proposed Action, construction emissions will be temporary and will occur only during a short period of time which will not significantly impact global climate change. Global climate change is expected to have some effect on the snow pack of the Sierra Nevada and the runoff regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. Central Valley Project water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change will be addressed within Reclamation's operation flexibility and therefore surface water resource changes due to climate change will be the same under either alternative.

Cumulative Impacts

Past, current, and reasonably foreseeable actions in the area that could impact the California tiger salamander include predation by feral animals and hybridization with non-native tiger salamander species, which are sometimes introduced to ponds as fishermen cast off their left-over bait. These types of impacts could occur under either alternative and will not be exacerbated by the Proposed Action.

Impacts to air quality resulting from the Proposed Action will be temporary and minimized through best management practices; therefore, there will be no cumulative significant impacts as a result of the Proposed Action.

As the Proposed Action will not result in any direct or indirect impacts on land use, cultural resources, Indian Sacred Sites, Indian Trust Assets, economically disadvantage or minority populations, global climate, recreation, socioeconomic resources, and water resources, it will not contribute cumulatively to impacts on these resources.

RECLAMATION

Managing Water in the West

Final Environmental Assessment

**Millerton Lake State Recreation Area
California Department of Parks and
Recreation South Shore Maintenance
Yard Improvements Project**

EA-10-090



**U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
South-Central California Area Office
Fresno, California**

August 2012

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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List of Acronyms and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effect
BMPs	Best Management Practices
CAA	Clean Air Act
CDPR	California Department of Parks and Recreation
CFR	Code of Federal Regulations
CO	Carbon monoxide
CWA	Clean Water Act
DFG	California Department of Fish and Game
EA	Environmental Assessment
FWCA	Fish and Wildlife Coordination Act
ITA	Indian Trust Asset
Maintenance Yard	South Shore Maintenance Yard
MBTA	Migratory Bird Treaty Act
MLSRA	Millerton Lake State Recreation Area
mph	miles per hour
National Register	National Register of Historic Places
NHPA	National Historic Preservation Act
NO ₂	Nitrogen dioxide
O ₃	Ozone
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PM ₁₀	Particulate matter between 2.5 and 10 microns in diameter
Reclamation	Bureau of Reclamation
SIP	State Implementation Plan
SHPO	State Historic Preservation Officer
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO ₂	Sulfur dioxide
VOC	Volatile Organic Compounds

Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact (FONSI) and Draft Environmental Assessment (EA) between June 28, 2012 and July 27, 2012. Reclamation received no comments. Changes from the draft EA that are not minor editorial changes are indicated by vertical lines in the left margin of this document.

1.1 Background

Millerton Lake was created as a result of construction of Friant Dam on the San Joaquin River, which is owned and operated by Reclamation. The Millerton Lake State Recreation Area (MLSRA) is maintained and operated by the California Department of Parks and Recreation (CDPR) on federal lands owned by Reclamation. CDPR has proposed facility improvements to their South Shore Maintenance Yard (Maintenance Yard) in order to replace aging infrastructure, comply with the Americans with Disabilities Act (ADA), and meet current health and safety standards (Figure 1-1). CDPR filed a notice of exemption pursuant to the California Environmental Quality Act for their proposed project on December 31, 2010.

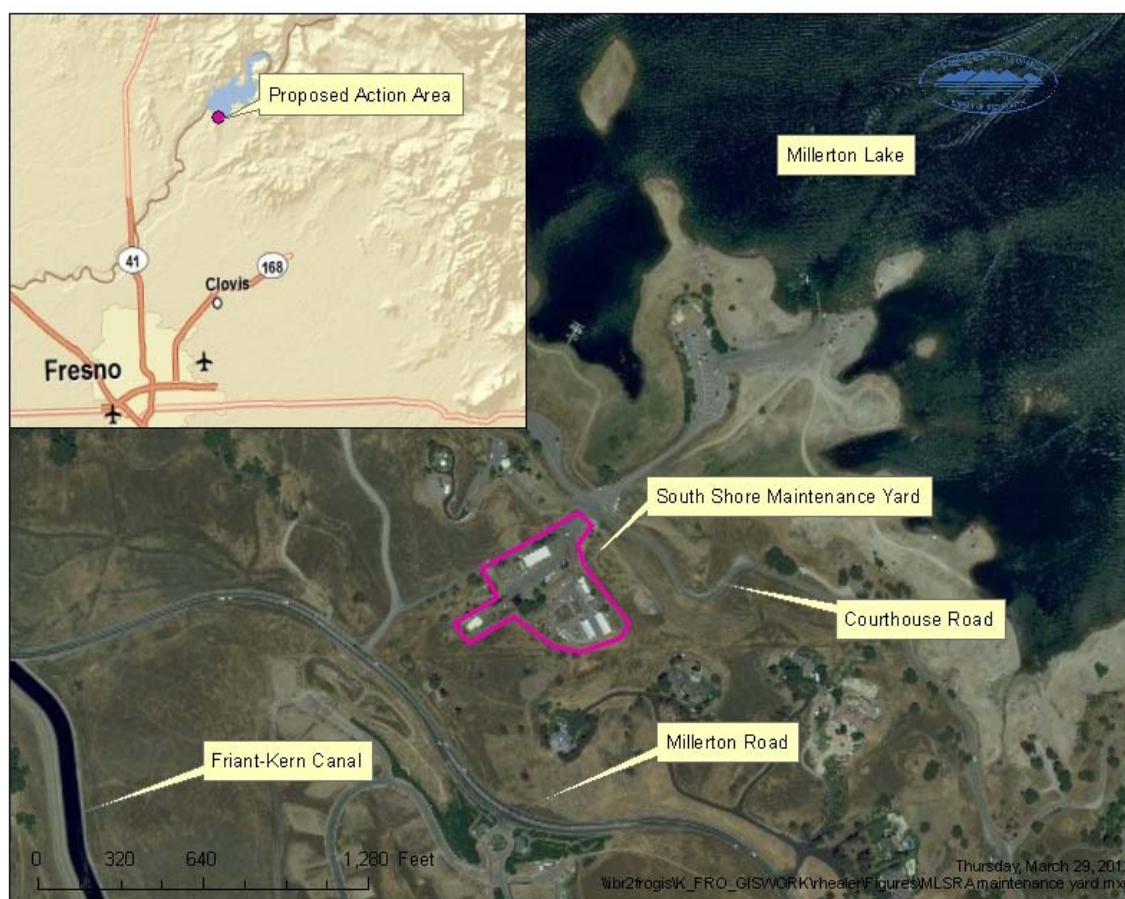


Figure 1-1 Millerton Lake South Shore Maintenance Yard

1.2 Purpose and Need

CDPR needs to replace aging infrastructure, comply with the ADA, and meet current health and safety standards within their Maintenance Yard. The purpose of the Proposed Action is to provide federal funding and approval for CDPR's Maintenance Yard improvements within the MLSRA.

1.3 Scope

This EA is being prepared to examine the possible impacts of funding and approving CDPR's Maintenance Yard improvements. This EA has also been prepared to examine the possible impacts of the No Action Alternative.

The Maintenance Yard is located within Section 8 of Township 11 South, Range 21 East, Mount Diablo Base and Meridian, Fresno County, California (Figure 1-1).

1.4 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment of the Proposed Action and No Action Alternative and has determined that there is no potential for direct, indirect, or cumulative effects to the following resources:

Environmental Justice

No impact to economically disadvantaged or minority populations would occur under the No Action alternative as conditions would remain the same as existing conditions. The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease. In addition, there would be no increase in fees at the park that may affect recreational opportunities for disadvantaged populations. The Proposed Action would not disproportionately impact economically disadvantaged or minority populations.

Global Climate

No impact to global climate change would occur under the No Action alternative as conditions would remain the same as existing conditions. Under the Proposed Action, construction emissions would be temporary and would occur only during a short period of time which would not impact global climate change. Global climate change is expected to have some effect on the snow pack of the Sierra Nevada and the runoff regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. Central Valley Project water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility and therefore surface water resource changes due to climate change would be the same with or without either alternative.

Indian Sacred Sites

No impact to Indian Sacred Sites would occur under the No Action alternative as conditions would remain the same as existing conditions. The Proposed Action would not limit access to and ceremonial use of Indian Sacred Sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites. There would be no impacts to Indian Sacred Sites as a result of the Proposed Action.

Indian Trust Assets

No impact to Indian Trust Assets (ITA) would occur under the No Action alternative as conditions would remain the same as existing conditions. The Proposed Action would not impact ITA as there are none in the Proposed Action area. The nearest ITA is Table Mountain Rancheria approximately three miles east of the Proposed Action area.

Land Use

No impact to land use would occur under the No Action alternative as conditions would remain the same as existing conditions. The Maintenance Yard improvements would not change the area's land use designation as construction activities would be confined within the existing CDPR Maintenance Yard and access road. There would be no impact to land use as a result of the Proposed Action.

Recreation

No impact to recreation would occur under the No Action alternative as conditions would remain the same as existing conditions. The Proposed Action would not impede recreational uses of the MLSRA as construction would be contained within an area that is currently restricted to the public; therefore, there would be no impact to recreation as a result of the Proposed Action.

Socioeconomic Resources

No impact to socioeconomic resources would occur under the No Action alternative as conditions would remain the same as existing conditions. No jobs would be removed or created by the Proposed Action as construction would be done by CDPR personnel. No revenue would be generated by Maintenance Yard improvements. Therefore, there would be no impact to socioeconomic resources as a result of the Proposed Action.

Water Resources

No impact to water resources would occur under the No Action alternative as conditions would remain the same as existing conditions. Under the Proposed Action, construction activities would be confined to the CDPR Maintenance Yard and existing paved access road. The Proposed Action would not impede operation of the reservoir nor would it interfere with the delivery of water. In addition, there would be no water quality impacts as no construction activities would occur within or near the shoreline of Millerton Lake or any other body of water. There would be no impact to water resources as a result of the Proposed Action.

As there would be no impact to the resources listed above as a result of the Proposed Action or the No Action alternative, they will not be considered further.

1.5 Resources Requiring Further Analysis

This EA will analyze the affected environment of the Proposed Action and No Action Alternative in order to determine the potential direct, indirect, and cumulative effects to the following resources:

- Biological Resources
- Cultural Resources
- Air Quality

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve or fund CDPR's Maintenance Yard improvements. CDPR's facilities would continue to not meet current health and safety standards and would not be compliant with ADA requirements.

2.2 Proposed Action

Reclamation proposes to approve and fund, through an existing \$600,000 50/50 cost share financial assistance agreement, CDPR's proposed Maintenance Yard improvements project. The proposed improvements would involve the following: demolition of seven existing shop buildings, construction of a new ADA compliant service yard building, construction of a new ADA-compliant storage building, construction of new covered boat storage "shell", construction of a multi-purpose water station with an evaporation pond, and modifications to existing utilities. Specific construction details would involve the following:

- Demolition of an existing 228 square foot building and excavation of up to 2 feet of the existing foundation.
- Demolition of an existing 400 square foot building with 360 feet of deck and excavation of up to 2 feet of the existing foundation.
- Demolition of an existing 945 square foot building and excavation of 2 feet of the existing foundation as well as 122 square feet of the surrounding asphalt/concrete perimeter.
- Demolition of an existing 1,134 square foot building and excavation of 2 feet of the existing foundation as well as 150 square feet of the surrounding asphalt/concrete perimeter.
- Demolition of an existing 900 square foot building and excavation of 2 feet of the existing foundation as well as 130 square feet of the surrounding asphalt/concrete perimeter.
- Demolition of an existing 234 square foot Tuff Shed.
- Demolition of an existing 1,254 square foot building and excavation of 2 feet of the existing foundation as well as 208 square feet of the surrounding wooden deck.
- Construction of a new 3,600 square foot service building which would include a 1,200 square foot pedestrian walkway around the perimeter of the building. The building would require 2 feet of excavation and placement of a 6 inch thick concrete slab. The affected construction area would be approximately 3,055 square feet.

- Installation of approximately 110 linear feet of 2-inch electrical conduit for the new service building. This would require a 2-foot wide by 2-foot deep trench for placement of the conduit underground.
- Installation of approximately 55 linear feet of 2-inch water line for the new service building. This would require a 2-foot wide by 2-foot deep trench for placement of the conduit underground.
- Installation of approximately 270 linear feet of 4-inch sewer line for the new service building. This would require a 2-foot by 6-foot deep trench for placement of the conduit.
- Removal of 360 square feet of asphalt and placement of 360 feet of new asphalt within the Service Yard to make parking and travel paths compliant with ADA.
- Construction of a new 1,590 square foot storage building which would include a 265 square foot pedestrian walkway around the perimeter of the building. The building would require 2 feet of excavation and placement of a 6 inch thick concrete slab. The affected construction area would be approximately 1,855 square feet.
- Installation of approximately 110 linear feet of 2-inch electrical conduit for the new storage building. This would require a 2-foot wide by 2-foot deep trench for placement of the conduit underground.
- Installation of approximately 196 linear feet of 2-inch water line for the new storage building. This would require a 2-foot wide by 2-foot deep trench for placement of the conduit underground. The existing truck filler would be relocated as part of the trenching.
- Construction of a new 5,000 square foot boat storage building shell which would include a 1,000 square foot pedestrian walkway around the perimeter of the building. The building would require 2 feet of excavation and placement of a 6 inch thick concrete slab. The affected construction area would be approximately 6,000 square feet.
- Construction of a new 600 square foot multi-purpose water station and 1,500 square foot evaporation pond. The water station would require 2 feet of excavation and placement of a 6 inch thick concrete slab. The evaporation pond would require 2 feet of excavation. A 12 inch diameter gray water storage tank would also be placed in the area. The affected construction area would be approximately 2,300 square feet.
- Installation of an approximately 25 linear feet of 2-inch electrical conduit for the new water station. This would require a 2-foot wide by 2-foot deep trench for placement of the conduit underground.
- Installation of an approximately 205 linear feet of 2-inch gray water transfer line for the new water station. This would require a 2-foot wide by 4-foot deep trench for placement of the conduit underground.

Figure 2-1 illustrates existing conditions and the proposed improvements for the Maintenance Yard and Figure 2-2 illustrates proposed conditions within the Maintenance Yard after implementation of the project.

Equipment staging and vehicle parking would be sited on existing paved parking areas.

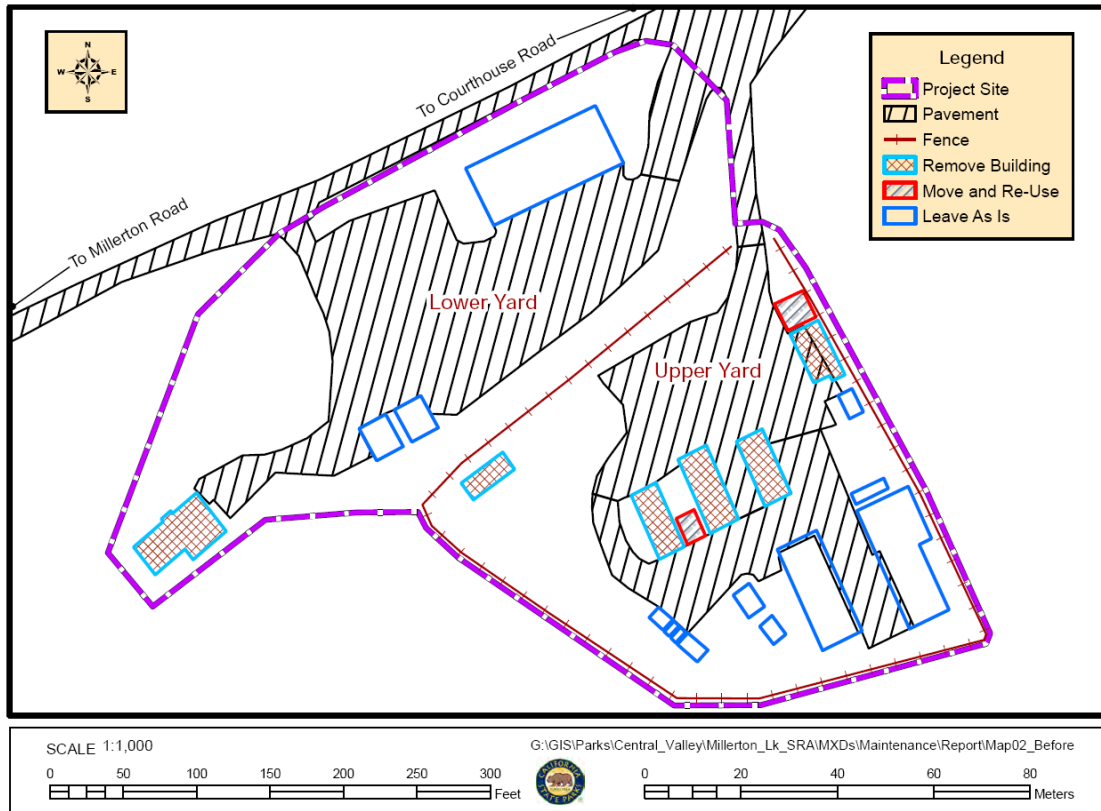


Figure 2-1 Existing Facilities and Proposed Improvements

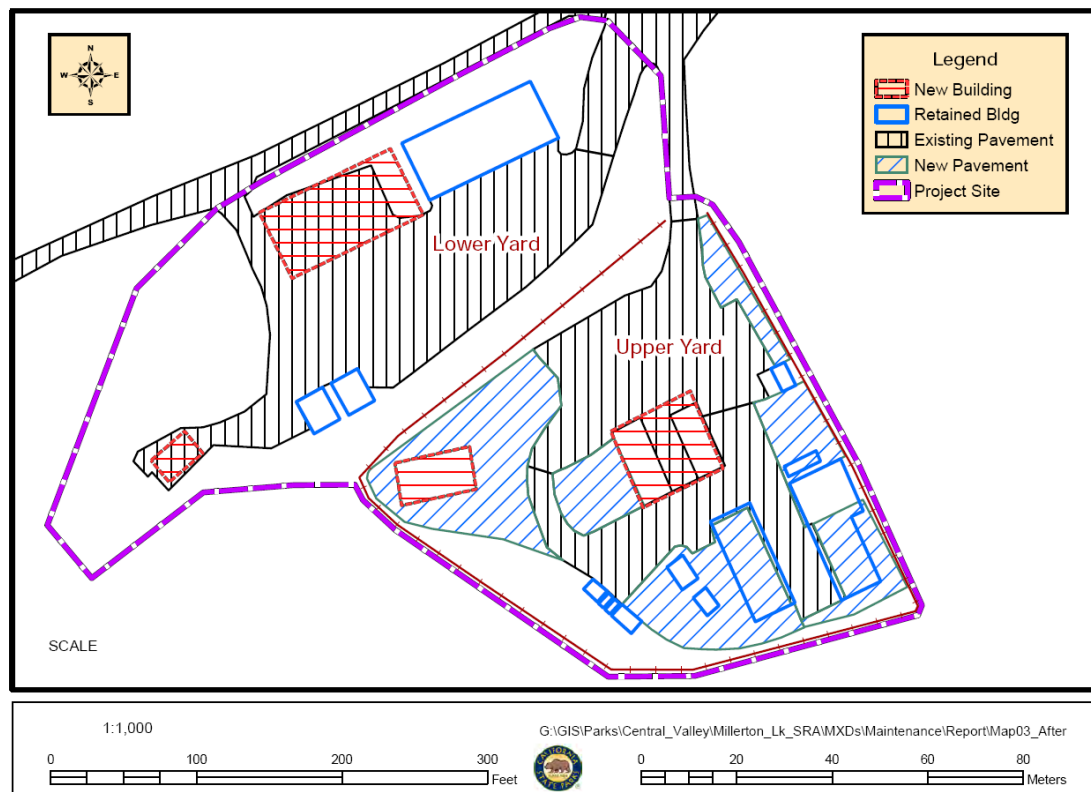


Figure 2-2 Proposed Conditions after Project Implementation

2.2.1 Environmental Commitments

CDPR shall implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 2-1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 2-1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Air Quality	CDPR would employ the following measures to reduce fugitive dust: <ul style="list-style-type: none"> • Spray exposed soil with water during construction • Suspend excavation and grading when sustained winds exceed 25 miles per hour (mph) or instantaneous winds exceed 35 mph • Cover all trucks hauling soil, sand, or other loose material if they do not have at least 2 feet of freeboard
Biological Resources	A qualified biologist will be on-site or on-call during all activities that could result in the take of listed species. The qualifications of the biologist(s) will be presented to the U.S. Fish and Wildlife Service (USFWS) for review and approval at least 60 calendar days prior to any groundbreaking at the project site. The biologist will have oversight over implementation of all the measures described in the Terms and Conditions of the biological opinion issued for this project, and he/she will have the authority to stop project activities, through communication with the Project Manager, if any of the requirements associated with these measures are not being fulfilled. If the biologist(s) exercises this authority, the USFWS and the California Department of Fish and Game (DFG) will be notified by telephone and electronic mail within one (1) working day. The USFWS contact is Mr. Daniel Russell, Division Chief, Endangered Species Program, Sacramento Fish and Wildlife Office, Sacramento (telephone [916] 414-6600). The DFG contact is the State Dispatch at (916) 654-4262.
Biological Resources	Prior to initiation of any on-site preparation/construction activities, the USFWS - approved biologist will conduct an education and training session for all available individuals who will be involved in the site preparation or construction, including the project representative(s) responsible for reporting take to the USFWS and the DFG. Training sessions will be required for all new or additional personnel before they are allowed to access the project site. Attendance sheets identifying attendees and the contractor/company they represent will be provided to the USFWS with the post-construction compliance report. At a minimum, the training will include a description of the California tiger salamander and vernal pool habitats. Additional information will include the general measures, as they relate to the project, that are being implemented to conserve this species; the penalties for non-compliance with these measures; travel within the marked project site will be restricted to established roadbeds and the boundaries (work area) within which the project must be accomplished. To ensure that employees and contractors understand their roles and responsibilities, training may have to be conducted in languages other than English.
Biological Resources	The limits of the construction area will be flagged, if not already marked by other fencing, and all activity will be confined within the marked area. All access to and from the project area will be clearly marked in the field with appropriate flagging and signs. Prior to commencing construction activities, the contractor will determine construction vehicle parking sites and all access routes. All construction activity will be confined within the project site, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time will equipment or personnel be allowed to adversely affect habitat areas outside the project site without authorization from the USFWS.
Biological Resources	To the extent possible, nighttime and rainy-season construction must be minimized. Construction crews will be informed during the education program meeting that, to the extent possible, travel within the marked project site will be restricted to established roadbeds. Established roadbeds include all pre-existing and project-constructed unimproved, as well as improved roads.
Biological Resources	Permanent and temporary disturbances to habitats of the California tiger salamander will be minimized to the maximum extent practicable. To minimize

Resource	Protection Measure
	temporary disturbances, all project-related vehicle traffic will be restricted to established roads and other designated areas. These areas also would be included in pre-construction surveys and, to the maximum extent possible, would be established in locations disturbed by previous activities to prevent further adverse effects.
Biological Resources	Project employees will exercise caution when commuting within California tiger salamander habitat. A 20-mile per hour speed limit will be required on unpaved roads within listed species habitats.
Biological Resources	To prevent harassment, injury or mortality of California tiger salamander or destruction of their refugia or burrows no pets of any kind will be permitted on construction sites.
Biological Resources	The onsite biological monitor will check for animals under all vehicles and equipment such as stored pipes before the start of work each morning. The biological monitor will check all excavated steep-walled holes or trenches greater than one foot (0.3 meters) deep for California tiger salamanders. California tiger salamanders will only be removed by individuals that have a special permit issued by the USFWS allowing them to handle listed species.
Biological Resources	To prevent inadvertent entrapment of California tiger salamanders during construction, all excavated, steep-walled holes or trenches will be covered at the close of each working day with plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wood planks. Before such holes or trenches are filled, the on-site biologist will thoroughly inspect the opening for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape from the opening, or will contact the USFWS and/or DFG by telephone for guidance. The USFWS will be notified of the incident by telephone and electronic mail within one (1) working day.
Biological Resources	All equipment will be maintained in accordance with the manufacturer's directions so there will be no leaks of fluids such as gasoline, oils, or solvents.
Biological Resources	To eliminate an attraction to predators of the California tiger salamander, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers; these containers will be removed at least once every day from the entire project site.
Biological Resources	To minimize impacts to the central California tiger salamander, State Parks will install and maintain an exclusionary fence around the evaporation pond to exclude small mammals from burrowing under, and central California tiger salamanders from attempting to use the evaporation pond as a breeding location.
Biological Resources	<p>In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, Reclamation shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, Reclamation must immediately reinstitute formal consultation as per 50 CFR 402.16.</p> <ul style="list-style-type: none"> For those components of the action that will result in habitat degradation or modification whereby incidental take in the form of harm is anticipated, Reclamation will provide weekly updates to the Service with a precise accounting of the total acreage of habitat impacted. Updates shall also include any information about changes in project implementation that result in habitat disturbance not described in the <i>Project Description</i> and not analyzed in this biological opinion. For those components of the action that may result in direct encounters between listed species and project workers and their equipment whereby incidental take in the form of harassment, harm, injury, or death is anticipated, Reclamation shall immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6600 to report the encounter. If encounter occurs after normal working hours, Reclamation shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, Reclamation shall follow the steps outlined in the Salvage and Disposition of Individuals section below. Reclamation and agents representing Reclamation will continue

Resource	Protection Measure
	monitoring the evaporation pond to ensure the effectiveness of the exclusionary fence. If the exclusionary fence fails and central California tiger salamanders are discovered within the evaporation pond enclosure, then Reclamation will contact the Service and CDFG to account for this additional take.
Pollution Prevention	CDPR would prepare a water pollution prevention control plan which would include best management practices (BMPs) to prevent soil erosion and sediment transportation. The plan would also include BMPs for managing stockpiles and preventing equipment fluid spills.

Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 Biological Resources

3.1.1 Affected Environment

A species list for the Friant U.S. Geological Survey 7.5 minute quadrangle was obtained from http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-form.cfm on March 3, 2011 (document number 110303055201). Table 3-1 below lists these species and summarizes their potential for occurrence and Reclamation's effects determinations.

Table 3-1 Special Status Species Potentially Occurring with the Action Area

<u>Species</u>	<u>Status¹</u>	<u>Effects²</u>	<u>Occurrence in the Study Area³</u>
Amphibians			
California red-legged frog (<i>Rana draytonii</i>)	T	NE	Absent. No riparian habitat in or near Proposed Action area.
California tiger salamander (<i>Ambystoma californiense</i>)	T, X	MAA	Present. There is both upland refugial habitat and critical habitat present in the Proposed Action area. Breeding has been documented within 1.3 miles.
Fish			
Central Valley Steelhead (<i>Oncorhynchus mykiss</i>)	T, NMFS	NE	Absent. No natural waterways within the species' range will be affected by the proposed action.
delta smelt (<i>Hypomesus transpacificus</i>)	T	NE	Absent. No natural waterways within the species' range will be affected by the proposed action.
Invertebrates			
Conservancy fairy shrimp (<i>Branchinecta conservatio</i>)	E	NE	Absent. No vernal pools in Proposed Action area.
valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	T	NE	Absent. Elderberry shrubs are not present within 100 feet of the Proposed Action area.
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	T, X	NE	Absent. No vernal pools in Proposed Action area; no critical habitat present.
Mammals			
Fresno kangaroo rat (<i>Dipodomys nigratoides exilis</i>)	E, X	NE	Absent. The Proposed Action area was examined for signs of kangaroo rats and no evidence of their occurrence was found. Additionally, the Proposed Action area is outside of the Fresno kangaroo rat's range and its critical habitat.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	E	NE	Absent. The foothill habitat at the site is marginal at best, and no sign of any kit foxes was detected in the Proposed Action area.
Plant			
Hartweg's golden sunburst (<i>Pseudobahia bahiifolia</i>)	E	NE	Absent. The Proposed Action area is disturbed and lacks the <i>mima</i> mound topography generally

<u>Species</u>	<u>Status</u> ¹	<u>Effects</u> ²	<u>Occurrence in the Study Area</u> ³
			associated with this species.
San Joaquin valley Orcutt grass (<i>Orcuttia inaequalis</i>)	T,X	NE	Absent. No vernal pools in Proposed Action area; no critical habitat present.
succulent owl's-clover (<i>Castilleja campestris</i> ssp. <i>succulenta</i>)	T,X	NE	Absent. No vernal pools in Proposed Action area; no critical habitat present.
Reptiles			
blunt-nosed leopard lizard (<i>Gambelia sila</i>)	E	NE	Absent. There is no arid grassland or saltbush scrub in the Proposed Action area; the area is outside the species' range.
giant garter snake (<i>Thamnophis gigas</i>)	T	NE	Absent. Wetland habitat that could support this species is lacking in the Proposed Action area.
¹ Status= Status of federally protected species protected under federal Endangered Species Act. E: Listed as Endangered under the federal Endangered Species Act. NFMS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. T: Listed as Threatened under the federal Endangered Species Act. X: Critical habitat designated under the federal Endangered Species Act. C: Candidate to become a proposed species. ² Effects = Endangered Species Act Effect determination NE: No Effect anticipated from the Proposed Action to federally listed species MAA: Proposed Action may adversely affect this species and its critical habitat ³ Definition Of Occurrence Indicators Present: Species observed in the area. Absent: Species not recorded in study area and/or habitat requirements not met			

The proposed project is in a developed area, encompassing portions of the Upper and Lower Maintenance Yard (Figures 2-1 and 2-2). Nearly the entire project area consists of numerous buildings/structures surrounded by asphalt or bare ground. There are very few natural resources in or adjacent to the project area. Vegetation bordering the site consists of scattered non-native ruderal plant species such as black mustard and Jimson weed with several scattered trees near the perimeter of the Maintenance Yard. Along the edges there are California ground squirrel and Botta's pocket gopher burrows. All of the action area lies within designated critical habitat for California tiger salamander, except a portion of Millerton Road that lies within the boundary.

Breeding California tiger salamander are found in vernal pools, vernal pool complexes, and seasonal ponds in associated annual grasslands, oak savannah, and coastal bay scrub plant communities of the Bay Area (Santa Clara Valley), Central Coast, Central Valley, and Southern San Joaquin Valley. The California tiger salamander also have adapted to using artificial water bodies, such as stock ponds during their aquatic phase. However, stock ponds are often not optimum breeding habitat because the hydroperiod is so short that there is not sufficient time for larvae to metamorphose, or it is so long that predatory fish and bullfrogs can colonize the pond. Permanent wetlands can support breeding California tiger salamander if fish are not present, but extirpation of the salamander is likely to occur if fish are introduced.

California tiger salamanders spend the majority of their lives in barrier-free upland habitats adjacent to breeding ponds. Within these upland habitats, adult California tiger salamander spend part of their lives in the underground burrows of mammals, especially the burrows of the California ground squirrel and valley pocket gopher, with depths ranging from approximately 8 inches to a little more than three feet beneath the ground surface. Small mammals are essential

in creating the underground habitat that adult California tiger salamander depend on for food, shelter, and protection from the elements and from predation.

A California tiger salamander was observed and reported to the California Natural Diversity Database (CNDDB 2012) less than 1/4 mile to the south of the project footprint, along the south side of Millerton Road. The nearest wetland habitat on the National Wetlands Inventory is less than a 1/3 mile from the site, south of Millerton Road. Other sightings have been made to the south of Millerton Road, but there are no occurrence records for the immediate area (Reclamation 2004). There are 14 known occurrences within 2.5 miles of the proposed project (CNDDB 2012). The action area consists of developed areas including a fenced Maintenance Yard with structures, parking and utilities, but around the edges and interspersed within are areas of annual grassland, which is the preferred plant community upland habitat for dispersal and migration of California tiger salamanders.

3.1.2 Environmental Consequences

No Action

Under the No Action Alternative, 0.01 acres of habitat for the California tiger salamander would not be impacted and individual salamanders would not be at risk from injury or death as a result of project activities. However, other small projects in the general area would likely proceed, and they could also impact the California tiger salamander, although Reclamation would consult with the U.S. Fish and Wildlife Service (USFWS) on such projects when they are on Reclamation-owned land.

Proposed Action

A total area of 49,054 square feet or 1.13 acres would be temporarily affected by the Proposed Action, as well as some rodent burrows within 50 feet of the area; however, the entire area is not grassland habitat. Most of the 1.13 acres is developed for a fenced Maintenance Yard with structures, parking and utilities, but around the edges and within 50 feet there are active rodent burrows that could potentially be damaged, and thus 0.01 acres of habitat would be impacted. California tiger salamanders could also be crushed by moving vehicles and equipment or killed as a result of predators being attracted to trash left behind by workers. The proposed evaporation pond could also attract salamanders who may attempt to use it for breeding and whose eggs or larvae would likely not successfully hatch/develop in the pond. These impacts would be avoided or minimized by the measures incorporated into the project description (Table 2-1). Reclamation sent a request for formal consultation to the USFWS on June 3, 2011. A final biological opinion was received on June 27, 2012 (see Appendix B).

Cumulative Impacts

Past, current, and reasonably foreseeable actions in the area that could impact the California tiger salamander include predation by feral animals and hybridization with non-native tiger salamander species, which are sometimes introduced to ponds as fishermen cast off their left-over bait. These types of impacts could occur under either alternative and would not be exacerbated by the Proposed Action.

3.2 Cultural Resources

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office (SHPO), to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

3.2.1 Affected Environment

Three cultural resources were identified within the APE: a shop building and a double-wide trailer at the lower maintenance yard and a district at the upper maintenance yard that consists of fourteen buildings and two carports. All three cultural resources were determined to be not eligible for inclusion in the National Register.

3.2.2 Environmental Consequences

No Action

There would be no impact to cultural resources as conditions would remain the same as existing conditions.

Proposed Action

Reclamation determined that the Proposed Action would have no effect on historic properties as there are none within the APE. However, because the Proposed Action was determined to be the type of action that has the potential to affect historic properties, Reclamation entered into consultation with SHPO on a finding of no historic properties affected pursuant to the regulations at 36 CFR Part 800.4(d)(1). On March 3, 2011, SHPO concurred with Reclamation's determination (Appendix A).

Cumulative Impacts

There would be no cumulative impacts to cultural resources as a result of either alternative as there are none in the action area.

3.3 Air Quality

3.3.1 Affected Environment

The Proposed Action area lies within the San Joaquin Valley Air Basin (SJVAB) under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The pollutants of greatest concern in the San Joaquin Valley are carbon monoxide (CO), ozone (O₃), O₃ precursors such as volatile organic compounds (VOC), inhalable particulate matter between 2.5 and 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}). The SJVAB has reached Federal and State attainment status for CO, nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). Although Federal attainment status has been reached for PM₁₀ the State has not and both are in non-attainment for O₃ and PM_{2.5} (Table 3-2). There are no established standards for nitrogen oxides; however, they do contribute to NO₂ standards (SJVAPCD 2012).

Table 3-2 San Joaquin Valley Attainment Status

Pollutant	California Attainment Status	National Attainment Status
O ₃	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment

Source: CARB 2012; SJVAPCD 2012; 40 CFR 93.153

3.3.2 Environmental Consequences

No Action

There would be no impact to air quality as conditions would remain the same as existing conditions.

Proposed Action

Grading and other ground disturbing construction activities would produce temporarily increase dust with the action area. Operation of construction equipment would also temporarily produce additional exhaust emissions (PM₁₀ and PM_{2.5}). CDPR would employ best management practices as described in Table 2-1 to reduce these impacts. There would be no substantial adverse impacts to air quality as a result of the Proposed Action.

Cumulative Impacts

There would be no cumulative impacts from the No Action alternative as no impacts to air quality would occur. Impacts resulting from the Proposed Action would be temporary and minimized through best management practices; therefore, there would be no substantial cumulative adverse impacts as a result of the Proposed Action.

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Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between June 28, 2012 and July 27, 2012. Reclamation received no comments.

4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The amendments enacted in 1946 require consultation with the Service and State fish and wildlife agencies “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license”. Consultation is to be undertaken for the purpose of “preventing the loss of and damage to wildlife resources”.

The Proposed Action does not involve any new impoundment or diversion of waters, channel deepening, or other control or modification of a stream or body of water as described in the statute, but the replacement of aging infrastructure within CPDR’s Maintenance Yard. The proposed evaporation pond would be a man-made structure that would not receive water from any stream or body of water. In addition, the surface area would be much less than 10 acres. Consequently, Reclamation has determined that FWCA does not apply.

4.3 Endangered Species Act (16 U.S.C. § 1531 et seq.)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

On June 3, 2011, Reclamation submitted a biological assessment to the USFWS with a request for formal consultation on the California tiger salamander and its critical habitat. On December 14, 2011, the USFWS sent a memorandum requesting more information before formal consultation could be initiated. Reclamation responded to the request on February 16, 2012. A final biological opinion was received on June 27, 2012 and shared with CDPR.

4.4 National Historic Preservation Act (16 U.S.C. § 470 et seq.)

The NHPA of 1966, as amended (16 U.S.C. 470 et seq.), requires that federal agencies give the Advisory Council on Historic Preservation an opportunity to comment on the effects of an

undertaking on historic properties, properties that are eligible for inclusion in the National Register. The 36 CFR Part 800 regulations implement Section 106 of the NHPA.

Section 106 of the NHPA requires federal agencies to consider the effects of federal undertakings on historic properties, properties determined eligible for inclusion in the National Register. Compliance with Section 106 follows a series of steps that are designed to identify interested parties, determine the APE, conduct cultural resource inventories, determine if historic properties are present within the APE, and assess effects on any identified historic properties.

Reclamation entered into consultation with SHPO on a finding of no historic properties affected pursuant to the regulations at 36 CFR Part 800.4(d)(1). The consultation package was sent to SHPO on February 11, 2011. On March 3, 2011, SHPO concurred with Reclamation's determination (Appendix A).

4.5 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)

The Migratory Bird Treaty Act implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

Migratory birds may fly over the Proposed Action area; however, there is no nesting or perching habitat within the Proposed Action area, so none would be impacted by the Proposed Action.

4.6 Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The Proposed Action would not affect either concern as there are none in the Proposed Action area.

4.7 Clean Water Act (33 U.S.C. § 1251 et seq.)

Section 401 of the Clean Water Act [CWA] (33 U.S.C. § 1311) prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under sections 402 and 404 of the CWA (33 U.S.C. § 1342 and 1344). If new structures (e.g., treatment plants) are proposed, that would discharge effluent into navigable waters, relevant permits under the CWA would be required for the project applicant(s). Section 401 requires any applicant for an

individual U. S. Army Corps of Engineers dredge and fill discharge permit (Section 404) to first obtain certification from the state that the activity associated with dredging or filling will comply with applicable state effluent and water quality standards. This certification must be approved or waived prior to the issuance of a permit for dredging and filling.

No activities such as dredging or filling of wetlands or surface waters would be required for implementation of the Proposed Action; therefore, permits obtained in compliance with CWA are not required.

Section 5 List of Preparers and Reviewers

Rain Healer, Natural Resources Specialist, SCCAO

Shauna McDonald, Biologist, SCCAO

Patricia Rivera, Indian Trust Assets, MP- 400

BranDee Bruce, Architectural Historian, MP-153

Chuck Siek, Supervisory Natural Resources Specialist, SCCAO – reviewer

Section 6 References

Bureau of Reclamation (Reclamation). 2004. Proposed Project Description for Communication Facility at Millerton State Park, Environmental Analysis, and Items for Discussion, by electronic mail from Ned Gruenhagen, Reclamation, to Susan Jones, U.S. Fish and Wildlife Service. December 22, 2004.

California Air Resources Board. 2011. California Air Basins. Website:
<http://www.arb.ca.gov/knowzone/basin/basin.htm> Accessed: May 2012.

California Natural Diversity Database (CNDDB). 2012. California Department of Fish and Game. Government Version.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2011. Ambient Air Quality Standards and Valley Attainment Status. Website:
<http://www.valleyair.org/aqinfo/attainment.htm> Accessed: May 2012.

U.S. Fish and Wildlife Service (USFWS). 2011. Species List

FINAL ENVIRONMENTAL ASSESSMENT (10-090)

*MILLERTON LAKE STATE RECREATION AREA CALIFORNIA DEPARTMENT OF
PARKS AND RECREATION SOUTH SHORE MAINTENANCE YARD IMPROVEMENTS
PROJECT*

Appendix A

Concurrence Memo from the State Historic Preservation Officer

August 2012

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
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(916) 445-7000 Fax: (916) 445-7053
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BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED		
MAR 07 2011		
CODE	ACTION	SURNAME & DATE
150	✓	July 27/2011

March 03, 2011

In Reply Refer To: BUR110211B

Michael A. Chotkowski
Regional Environmental Officer
United States Department of the Interior
Bureau of Reclamation,
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

Re: South Shore Maintenance Yard Project at Millerton Lake State Recreation Area (MLSRA), Fresno County, California (Project No. 090SCAO-262).

10-

Dear Mr. Chotkowski:

Thank you for consulting with me regarding the above noted undertaking. Pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA), the Bureau of Reclamation Mid-Pacific Regional Office (BUR) is the lead Federal agency for this undertaking and is seeking my comments on the effects that the proposed project will have on historic properties. The BUR proposes to permit the California State Department of Parks and Recreation (DPR) to perform all of the required work proposed under this undertaking. The BUR owns Millerton Lake and the surrounding MLSRA, which is managed by DPR under a cooperative agreement, and has identified this proposed action on federal lands as an undertaking requiring compliance with Section 106 of the NHPA.

The undertaking will consist of modifications to buildings within both upper and lower portions of the South Shore Maintenance Yard including the removal/demolition of some buildings, the relocations of others, the construction of new buildings/facilities, and the installation of new utilities and drainage improvements. The BUR has determined that the Area of Potential Effects consists of an area of approximately 3.49 acres. Three built-environment properties were identified that, based on age, required evaluation under the criteria of eligibility for the National Register of Historic Places (NRHP). In addition to your letter of February 11, 2011, and attachment (map) you have submitted the following documents in support of your efforts to identify and evaluate historic properties in the project APE.

- *Archaeological Survey Report BOR Grant/Design and Construction at the South Shore Maintenance Yard Millerton Lake State Recreation Area, Fresno County, California* (Warren Wulzon, Acquisition & Development Division, Northern Service Center, State of California Department of Parks and Recreation: September 20, 2010)

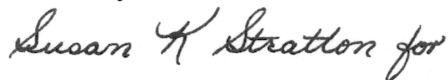
Classification	ENV 300
Project	214
Control No.	11018006
Folder I.D.	11-17982
Date Input & Initials	3-7-2011 [Signature]

- *Letter Report: Millerton State Recreation Area South Shore Maintenance Yard Project* (Dan Osana, State Historian II, Northern Service Center, State of California Department of Parks and Recreation: January 12, 2011).

The DPR (Osana 2011:13) has evaluated the buildings and structures in the APE under the four criteria of eligibility for the NRHP and has determined that the Shop Building and the Doublewide Mobile Home located in the Lower Maintenance Area are not eligible for the NRHP under any criteria. The DPR (Osana 2011:13-15) has also determined that the Millerton South Shore Upper Maintenance Yard District is not eligible for the NRHP under any criteria and that none of the component buildings and structures are individually eligible for the NRHP under any criteria. The BUR has stated their concurrence with these determinations (page 2 of your letter of February 11, 2011). Based on these determinations and the negative findings of the archaeological survey of the project APE, the BUR has concluded that a finding of No Historic Properties Affected is appropriate pursuant to 36 CFR Part 800.4(d)(1).

After reviewing your letter, and supporting documentation, I have no objection to your finding of No Historic Properties Affected. Be advised that under certain circumstances, such as unanticipated discovery or a change in project description, the BUR may have additional future responsibilities for this undertaking under 36 CFR Part 800. Thank you for seeking my comments and for considering historic properties in planning your project. If you require further information, please contact William Soule, Associate State Archeologist, at phone 916-654-4614 or email wsoule@parks.ca.gov and Tristan Tozer, State Historian, at phone 916-445-7027 and ttozer@parks.ca.gov.

Sincerely,

Handwritten signature of Susan H. Stratton in cursive script.

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

FINAL ENVIRONMENTAL ASSESSMENT (10-090)

*MILLERTON LAKE STATE RECREATION AREA CALIFORNIA DEPARTMENT OF
PARKS AND RECREATION SOUTH SHORE MAINTENANCE YARD IMPROVEMENTS
PROJECT*

Appendix B

Biological Opinion from the U.S. Fish and Wildlife Service

August 2012



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846




In Reply Refer To:
81420-2011-F-0622-2

JUN 27 2012

Memorandum

To: Chief, Resource Management Division, South-Central Area Office
Bureau of Reclamation

From: **Acting** Field Supervisor, Sacramento Fish and Wildlife Office, Sacramento, California 

Subject: Biological Opinion for the Millerton Lake State Recreation Area, California
Department of Parks and Recreation, South Shore Maintenance Yard
Improvements Project, Fresno County, California

This memorandum is in response to your request for formal consultation, pursuant to section 7(a)(2) of the Endangered Species Act, as amended (16 U.S.C. §1531 *et seq.*) (Act), on the proposed Millerton Lake State Recreation Area, California Department of Parks and Recreation (State Parks) South Shore Maintenance Yard Improvements Project (Proposed Project), which was dated and received by the U.S. Fish and Wildlife Service (Service) June 3, 2011. The consultation concerns the potential effects of the proposed project on the Federally-listed as threatened central California distinct population segment of the California tiger salamander (*Ambystoma californiense*) (central California tiger salamander) and designated critical habitat for the central California tiger salamander; Unit 2, Northeast Fresno Unit of the Southern San Joaquin Region. This response is based on the information provided in 1) the *Biological Assessment Millerton Lake State Recreation Area California Department of Parks and Recreation South Shore Maintenance Yard Improvements, Fresno County, California* (BA), dated April 2011; 2) the memorandum in response, dated February 16, 2012, received March 6, 2012, to our request for additional information, December 14, 2011; and 3) other information available to the Service.

Consultation History

May 27, 2009: Site visit to the proposed project; attended by the Service, California Department of Fish and Game (DFG), State Parks and U.S. Bureau of Reclamation (Reclamation).

February 10, 2011: State Parks, Reclamation, and DFG conduct an additional site visit.

March 8, 2011: The Service provided Reclamation with examples of conservation measures for avoiding and minimizing impacts to California tiger salamander and upland habitat. These measures became the basis for the proposed conservation measures.

June 3, 2011: The Service received the *Biological Assessment Millerton Lake State Recreation Area California Department of Parks and Recreation South Shore Maintenance Yard Improvements, Fresno County, California*, and the request for formal consultation from Reclamation.

December 14, 2011: The Service issued a memorandum to Reclamation requesting additional information for the consultation.

March 6, 2012: The Service received a memorandum from Reclamation in response to the request for additional information, dated February 16, 2012.

Project Description

The South Shore Maintenance Yard consists of two distinct areas, the Upper and Lower Yards. The Lower Yard is located in a relatively flat swale adjacent to Courthouse Road, south of Millerton Lake, in Fresno County. The Upper Yard sits on a graded area to the south and above the Lower Yard by as much as fifteen feet. The two areas are physically separated by an undeveloped steep slope. Both the Upper and Lower Yards are enclosed by cyclone fencing.

Demolition and Removal

State Parks proposes to demolish and remove five existing, deteriorated buildings along with their associated two-foot- deep foundations and a storage shed:

- 1) 12' x 19' Maintenance Office (Building B);
- 2) 40' x 10', Building F and its 40' x 9' deck;
- 3) 45' x 21', Building E and its asphalt/concrete perimeter;
- 4) 45' x 20', Building C and the asphalt/concrete perimeter;
- 5) 57' x 22', Building A and its 26' x 8' wooden deck; and
- 6) 13'x 18' Tuff Shed.

The contractor will disconnect all utilities from the buildings. Items to be reused will be removed from the building. Using backhoes and/or an excavator, the contractor will demolish the buildings and load onto dump trucks. A water truck will be on site for dust control. The contractor will dispose of the demolition debris at a landfill that is approved to receive this type of waste. Using a backhoe and/or excavator with a jack hammer attachment, the contractor will break up the concrete foundations of the buildings and load the pieces onto dump trucks. If possible, the pieces will be recycled at a licensed facility.

Construction

State Parks proposes to construct four new buildings: a 60' x 60' x 15' Service Yard Building, a 53' x 30' Storage Building, a 50' x 100' x 15' Boat Storage Building shell, and a 30' x 20' Multi-purpose Water Station to replace the demolished buildings and provide safe, code-compliant maintenance yard buildings for the Parks staff. Work for the Proposed Project will excavate up to two feet for building foundations with depth of concrete slab at 6"; and install two concrete pedestrian walkways, 60' x 5' x 4" around the Service Yard Building, 53' x 5' x 4" around the Storage Building and a 100' x 5' x 2" concrete/asphalt walkway around the Boat Storage Shell. Additional construction work will install a 50' x 30' x 2' evaporation pond with a sump pump and a 12' diameter gray water storage tank at the Multi-Purpose Water Station. The sump pump will be positioned in a low corner of the basin; the pump will discharge through a flexible hose that is connected to the underground piping to the gray water storage tank, which is comprised of a high density polyethylene tank on 6" of compacted aggregate base, and anchored into the ground with screw anchors.

Utilities

State Parks proposes to provide new utility lines for the new Service Yard Building, Storage Building, Boat Storage Building, and Multi-Purpose Water Station. All trenches will be 2' wide x 3' deep. Work at the Service Yard Building will include trenches for water, sewer, and electrical services. The trench connecting the existing water line with the new building's water system will be 10 feet long. The trench connecting the new building's sewer with the existing manhole near the yard entrance will be 350 feet long. The electrical line from the existing power pole near the yard entrance to the new building will be 430 feet long.

Work at the Storage Building will trench approximately 323 linear feet from the existing water line to the new Storage Building; this will include a connection to the truck filler and the fire water storage tanks. Approximately 403 linear feet of trench is required to run an electrical conduit from the existing power pole near the yard entrance to the Storage Building. Another 122-foot long trench will provide telephone lines between the Storage Building and the Service Yard Building.

Work at the Multi-Purpose Water Station will include a 200-foot long trench between the evaporation basin sump pump and the gray water storage tank, and a 305-foot long trench for an electrical conduit between the Storage Building and the evaporation basin sump pump. The wash

station will need to be used for washing off vehicles and other equipment year round. The pond will act as an evaporation basin most of the year. However, during a couple of months in the winter when the evaporation rates are too low, the excess water will be pumped to the new gray water storage tank on the upper terrace near the new shop building. This water could later be released back into the basin when the weather warms enough for evaporation to be effective.

Work at the Boat Storage Building requires a 185-foot long trench between the Fire Pump Room at the Storage Building and the Boat Storage Building for a fire water supply line. An electrical conduit will be installed in a 255-foot long trench from the existing power pole near the yard entrance to the Boat Storage Building. Another 220-foot long trench brings telephone lines from the Storage Building to the Boat Storage Building.

The Fire Hydrant at the upper terrace near the Service Yard and Storage Buildings requires a 115-foot long trench from the Fire Pump Room at the Storage Building. Additional work will remove and replace the existing 360 square feet of asphalt on the north side of the Service Yard Building to modify the parking and path of travel to comply with the Americans with Disabilities Act.

A total area of 49,054 square feet or 1.13 acres will be directly affected by the proposed action. Most of the 1.13 acres is developed for a fenced Park Maintenance Yard with structures, parking and utilities; around the edges and within 50 feet there are active rodent burrows in grassland habitat. This surrounding area is potential central California tiger salamander habitat and is within designated critical habitat for the species. The actual amount of this surrounding habitat that will be affected by the action will be 0.01 acre.

Proposed Conservation Measures

1. A qualified biologist will be on-site during all activities that could result in the take of listed species. The qualifications of the biologist(s) will be presented to the Service for review and approval at least 10 working days prior to any groundbreaking at the project site. The biologist will have oversight over implementation of all the measures described in the *Terms and Conditions* of the biological opinion issued for this project, and he/she will have the authority to stop project activities, through communication with the Project Manager, if any of the requirements associated with these measures are not being fulfilled. If the biologist(s) exercises this authority, the Service and the DFG will be notified by telephone and electronic mail within one (1) working day. The Service contact is Mr. Thomas Leeman, Chief, San Joaquin Valley Division, Sacramento Fish and Wildlife Office, Sacramento (telephone [916] 414-6600). The DFG contact is the State Dispatch at (916) 654-4262.
2. Prior to initiation of any on-site preparation/construction activities, the Service-approved biologist will conduct an education and training session for all available individuals who will be involved in the site preparation or construction, including the project representative(s) responsible for reporting take to the Service and the DFG. Training

sessions will be required for all new or additional personnel before they are allowed to access the project site. Attendance sheets identifying attendees and the contractor/company they represent will be provided to the Service with the post-construction compliance report. At a minimum, the training will include a description of the central California tiger salamander and vernal pool habitats. Additional information will include the general measures, as they relate to the project, that are being implemented to conserve this species; the penalties for non-compliance with these measures; travel within the marked project site will be restricted to established roadbeds and the boundaries (work area) within which the project must be accomplished. To ensure that employees and contractors understand their roles and responsibilities, training may have to be conducted in languages other than English.

3. The limits of the construction area will be flagged, if not already marked by other fencing, and all activity will be confined within the marked area. All access to and from the project area will be clearly marked in the field with appropriate flagging and signs. Prior to commencing construction activities, the contractor will determine construction vehicle parking sites and all access routes. All construction activity will be confined within the project site, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time will equipment or personnel be allowed to adversely affect habitat areas outside the project site without authorization from the Service. Equipment staging and vehicle parking will be sited on existing paved parking areas to avoid any compaction of small mammal burrows or potential burrow sites.
4. Construction crews will be informed during the education program meeting that, to the extent possible, travel within the marked project site will be restricted to established roadbeds. Established roadbeds include all pre-existing and project-constructed unimproved, as well as improved roads.
5. All project-related vehicle traffic will be restricted to established roads and other designated areas.
6. Project employees will exercise caution when commuting within California tiger salamander habitat. A 20-mile per hour speed limit will be required on unpaved roads within listed species habitats.
7. To prevent harassment, injury or mortality of central California tiger salamander or destruction of their refugia or burrows no pets of any kind will be permitted on construction sites.

8. The onsite, Service approved biological monitor will check for animals under all vehicles and equipment such as stored pipes before the start of work each morning. The biological monitor will check all excavated steep-walled holes or trenches greater than 3 inches (0.075 meter) deep for central California tiger salamanders. Before such holes or trenches are filled, the on-site biologist will thoroughly inspect the opening for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape from the opening, or will contact the Service and/or DFG by telephone for guidance. The Service will be notified of the incident by telephone and electronic mail within one (1) working day.
9. All equipment will be maintained in good working order (i.e., in accordance with the manufacturer's directions) to minimize leaks of fluids such as gasoline, oils, or solvents.
10. To eliminate an attraction to predators of the central California tiger salamander, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers; these containers will be removed at least once every day from the entire project site.
11. To minimize impacts to the central California tiger salamander, State Parks will install and maintain an exclusionary fence around the evaporation pond to exclude small mammals from burrowing under, and central California tiger salamanders from attempting to use the evaporation pond as a breeding location.

Action Area

An action area includes all areas to be directly or indirectly affected by the Federal action and not merely the immediate areas involved in the Proposed Action (50 C.F.R. §402.02). The action area includes the access route (Millerton Road and the State Parks Service Yard access road), paved staging areas, the proposed project footprint (both Upper and Lower Maintenance Yard work areas), and to the extent to which ground disturbance will occur.

Analytical Framework for the Jeopardy and Adverse Modification Determinations

Jeopardy Determination

In accordance with policy and regulation, the jeopardy analysis in this Biological Opinion relies on three components: (1) the *Status of the Species*, which evaluates the central California tiger salamander's range-wide condition, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, evaluates the condition of this listed species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of this species; (3) the *Effects of the Action*, which determines the direct and indirect effects of the proposed Federal action and the effects of any interrelated or

interdependent activities on these species; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the central California tiger salamander.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the species' current status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the species in the wild.

The jeopardy analysis in this Biological Opinion places an emphasis on consideration of the range-wide survival and recovery needs of the central California tiger salamander and the role of the action area in the survival and recovery of the species as the context for evaluating the significance of the effects on the proposed Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

Adverse Modification Determination

This Biological Opinion does not rely on the regulatory definition of “destruction or adverse modification” of critical habitat at 50 CFR 402.02. Instead, we have relied upon the statutory provisions of the Act to complete the following analysis with respect to critical habitat.

In accordance with policy and regulation, the adverse modification analysis in this Biological Opinion relies on four components: (1) the *Status of Critical Habitat*, which evaluates the range-wide condition of designated critical habitat for the central California tiger salamander in terms of primary constituent elements (PCEs), the factors responsible for that condition, and the intended recovery function of the critical habitat overall; (2) the *Environmental Baseline*, which evaluates the condition of the critical habitat in the action area, the factors responsible for that condition, and the recovery role of the critical habitat in the action area; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the PCEs and how that will influence the recovery role of affected critical habitat units; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the PCEs and how that will influence the recovery role of affected critical habitat units.

For purposes of the adverse modification determination, the effects of the proposed Federal action on central California tiger salamander critical habitat are evaluated in the context of the range-wide condition of the critical habitat, taking into account any cumulative effects, to determine if critical habitat range-wide would remain functional (or would retain the current ability for the PCEs to be functionally established in areas of currently unsuitable but capable habitat) to serve its intended recovery role for the central California tiger salamander.

The analysis in this Biological Opinion places an emphasis on using the intended range-wide recovery function of central California tiger salamander critical habitat and the role of the action area relative to that intended function as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the adverse modification determination.

Status of the Species and Critical Habitat

Central California Tiger Salamander

On May 23, 2003, we proposed to list the Central California Distinct Population Segment (DPS) of the California tiger salamander as threatened. At that time we also proposed reclassification of the Santa Barbara County DPS and Sonoma County DPS from endangered to threatened (68 FR 28647). In the same notice we also proposed a special rule under section 4(d) of the Act to exempt take for routine ranching operations for the Central California DPS and, if reclassified to threatened, for the Santa Barbara and Sonoma County DPSs (68 FR 28668). On August 4, 2004, we determined that the Central California DPS of the California tiger salamander was threatened (69 FR 47211) and that the Santa Barbara and Sonoma County populations were threatened as well, and reclassified the California tiger salamander as threatened throughout its range (69 FR 47211), removing the Santa Barbara and Sonoma County populations as separately listed DPSs (69 FR 47241). In the 2004 final rule, we also finalized the special rule to exempt take for routine ranching operations for the California tiger salamander throughout its range (69 FR 47248).

On August 18, 2005, as a result of litigation of the August 4, 2004, final rule on the reclassification of the California tiger salamander DPSs (*Center for Biological Diversity et al. v. United States Fish and Wildlife Service et al.*, C 04-04324 WHA (N.D. Cal. 2005), the District Court of Northern California sustained the portion of the 2004 rule pertaining to listing the Central California tiger salamander as threatened with a special rule, but vacated the portion of the 2004 rule that re-classified the Santa Barbara and Sonoma DPSs to threatened status thereby reinstating their status as endangered. On August 31, 2011, the List of Endangered and Threatened Wildlife in part 17, subchapter B of Chapter I, title 50 of the Code of Federal Regulations (CFR) was amended to reflect the vacatures contained in the 2005 court order, classifying the Santa Barbara DPS and the Sonoma DPS of the California tiger salamander as endangered, and the Central DPS of the California tiger salamander as threatened with a special rule to exempt routine ranching operations from take (76 FR 54346).

The California tiger salamander is a large, stocky, terrestrial salamander with a broad, rounded snout. Recorded adult measurements have been as much as 8.2 inches long (Petranka 1998; Stebbins 2003). California tiger salamanders exhibit sexual dimorphism (differences in body appearance based on gender) with males tending to be larger than females. The coloration of the adults generally consists of random white or yellowish markings against a black body. The markings tend to be more concentrated on the lateral sides of the body; whereas other salamander species tend to have brighter yellow spotting that is heaviest on the dorsal surface.

The California tiger salamander is endemic to California and historically inhabited the low-elevation grassland and oak savanna plant communities of the Central Valley, adjacent foothills, and Inner Coast Ranges (Jennings and Hayes 1994; Storer 1925; Shaffer *et al.* 1993). The species has been recorded from near sea level to approximately 3,900 feet in the Coast Ranges and to approximately 1,600 feet in the Sierra Nevada foothills (Shaffer and Trenham 2004). Along the Coast Ranges, the species occurred from the Santa Rosa area of Sonoma County, south to the vicinity of Buellton in Santa Barbara County. The historic distribution in the Central Valley and surrounding foothills included northern Yolo County southward to northwestern Kern County and northern Tulare County.

The Central California tiger salamander occupies the Bay Area (central and southern Alameda, Santa Clara, western Stanislaus, western Merced, and the majority of San Benito counties), Central Valley (Yolo, Sacramento, Solano, eastern Contra Costa, northeastern Alameda, San Joaquin, Stanislaus, Merced, and northwestern Madera counties), southern San Joaquin Valley (portions of Madera, central Fresno, and northern Tulare and Kings Counties), and the Central Coast Range (southern Santa Cruz, Monterey, northern San Luis Obispo, and portions of western San Benito, Fresno, and Kern counties).

The California tiger salamander has an obligate biphasic life cycle (Shaffer *et al.* 2004). Although the larvae develop in the vernal pools and ponds in which they were born, the species is otherwise terrestrial and spend most of their post-metamorphic lives in widely dispersed underground retreats (Shaffer *et al.* 2004; Trenham *et al.* 2001). Because they spend most of their lives underground, the animals rarely are encountered even in areas where California tiger salamanders are abundant. Subadult and adult California tiger salamanders typically spend the dry summer and fall months in the burrows of small mammals, such as California ground squirrels and Botta's pocket gopher (Storer 1925; Loredó and Van Vuren 1996; Petranksa 1998; Trenham 1998a). Although ground squirrels have been known to eat these amphibians, the relationship with their burrowing hosts is primarily commensal (an association that benefits one member while the other is not affected) (Loredó *et al.* 1996; Semonsen 1998).

California tiger salamanders may also use landscape features such as leaf litter or desiccation cracks in the soil for upland refugia. Burrows often harbor camel crickets and other invertebrates that provide likely prey for the amphibians. Underground refugia also provide protection from the sun and wind associated with the dry California climate that can cause excessive drying of amphibian skin. Although California tiger salamanders are members of a family of "burrowing" salamanders, they are not known to create their own burrows. This may be due to the hardness of soils in the California ecosystems in which they are found. California tiger salamanders depend on persistent small mammal activity to create, maintain, and sustain sufficient underground refugia for the species. Burrows are short lived without continued small mammal activity and typically collapse within approximately 18 months (Loredó *et al.* 1996).

Upland burrows inhabited by California tiger salamanders have often been referred to as aestivation-sites. However, "aestivation" implies a state of inactivity, while most evidence suggests that the animals remain active in their underground dwellings. One study has found that salamanders move, feed, and remain active in their burrows (Van Hattem 2004). Because the adults arrive at breeding ponds in good condition and are heavier when entering the pond than when leaving, researchers have long inferred that they are feeding while underground. A number of direct observations have confirmed this (Trenham 2001; Van Hattem 2004). Thus, "upland habitat" is a more accurate description of the terrestrial areas used by California tiger salamanders.

California tiger salamanders typically emerge from their underground refugia at night during the fall or winter rainy season (November-May) to migrate to their breeding ponds (Stebbins 1985, 1989; Shaffer *et al.* 1993; Trenham *et al.* 2000). The breeding period is closely associated with the rainfall patterns in any given year with fewer adults migrating and breeding in drought years (Loredo and Van Vuren 1996; Trenham *et al.* 2000). Male California tiger salamander are typically first to arrive and generally remain in the ponds longer than females. Results from a 7-year study in Monterey County suggested that males remained in the breeding ponds for an average of 44.7 days while females remained for an average of only 11.8 days (Trenham *et al.* 2000). Historically, breeding ponds were likely limited to vernal pools, but now include livestock stock ponds. Ideal breeding ponds are typically fishless, free of non-native predators, and seasonal or semi-permanent (Barry and Shaffer 1994; Petranksa 1998).

While in the ponds, adult California tiger salamanders mate and then the females lay their eggs in the water (Twitty 1941; Shaffer *et al.* 1993; Petranksa 1998). Egg laying typically reaches a peak in January (Loredo and Van Vuren 1996; Trenham *et al.* 2000). Females attach their eggs singly, or in rare circumstances, in groups of two to four, to twigs, grass stems, vegetation, or debris (Storer 1925; Twitty 1941). Eggs are often attached to objects, such as rocks and boards in ponds with no or limited vegetation (Jennings and Hayes 1994). Clutch sizes from a Monterey County study had an average of 814 eggs (Trenham *et al.* 2000). Seasonal pools may not exhibit sufficient depth, persistence, or other necessary parameters for adult breeding during times of drought (Barry and Shaffer 1994). After breeding and egg laying is complete, adults leave the pool and return to their upland refugia (Loredo *et al.* 1996; Trenham 1998a). Adult California tiger salamanders often continue to emerge nightly for approximately the next two weeks to feed amongst their upland habitat (Shaffer *et al.* 1993).

California tiger salamander larvae typically hatch within 10 to 24 days after eggs are laid (Storer 1925). The peak emergence of these metamorphs is typically between mid-June and mid-July (Loredo and Van Vuren 1996; Trenham *et al.* 2000). The larvae are totally aquatic and range in length from approximately 0.45 to 0.56 inches (Petranksa 1998). They have yellowish gray bodies, broad flat heads, large, feathery external gills, and broad dorsal fins that extend well up their back. The larvae feed on zooplankton, small crustaceans, and aquatic insects for about six weeks after hatching, after which they switch to larger prey (J. Anderson 1968). Larger larvae have been known to consume the tadpoles of Pacific tree frogs, western spadefoot toads, and California red-legged frogs (J. Anderson 1968; P. Anderson 1968). California tiger salamander

larvae are among the top aquatic predators in seasonal pool ecosystems. When not feeding, they often rest on the bottom in shallow water but are also found throughout the water column in deeper water. Young California tiger salamanders are wary and typically escape into vegetation at the bottom of the pool when approached by potential predators (Storer 1925).

The California tiger salamander larval stage is typically completed in 3 to 6 months with most metamorphs entering upland habitat during the summer (Petranka 1998). In order to be successful, the aquatic phase of this species' life history must correspond with the persistence of its seasonal aquatic habitat. Most seasonal ponds and pools dry up completely during the summer. Amphibian larvae must grow to a critical minimum body size before they can metamorphose (change into a different physical form) to the terrestrial stage (Wilbur and Collins 1973). Larval development and metamorphosis can vary and is often site-dependent. Larvae collected near Stockton in the Central Valley during April varied between 1.88 to 2.32 inches in length (Storer 1925). Feaver (1971) found that larvae metamorphosed and left breeding pools 60 to 94 days after eggs had been laid, with larvae developing faster in smaller, more rapidly drying pools. Longer ponding duration typically results in larger larvae and metamorphosed juveniles that are more likely to survive and reproduce (Pechmann *et al.* 1989; Semlitsch *et al.* 1988; Morey 1998; Trenham 1998b). Larvae will perish if a breeding pond dries before metamorphosis is complete (P. Anderson 1968; Feaver 1971). Pechmann *et al.* (1989) found a strong positive correlation between ponding duration and total number of metamorphosing juveniles in five salamander species. In Madera County, Feaver (1971) found that only 11 of 30 sampled pools supported larval salamanders, and 5 of these dried before metamorphosis could occur. Therefore, out of the original 30 pools, only 6 (20 percent) provided suitable conditions for successful reproduction that year. Size at metamorphosis is positively correlated with stored body fat and survival of juvenile amphibians, and negatively correlated with age at first reproduction (Semlitsch *et al.* 1988; Scott 1994; Morey 1998).

Following metamorphosis, juvenile California tiger salamanders leave their pools and move to upland habitat. This emigration can occur in both wet and dry conditions (Loredo and Van Vuren 1996; Loredo *et al.* 1996). Wet conditions are more favorable for upland travel but summer rain events seldom occur as metamorphosis is completed and ponds begin to dry. As a result, juveniles may be forced to leave their ponds on rainless nights. Under dry conditions, juveniles may be limited to seeking upland refugia in close proximity to their aquatic larval pool. These individuals often wait until the next winter's rains to move further into more suitable upland refugia. Juveniles remain active in their upland habitat, emerging from underground refugia during rainfall events to disperse or forage (Trenham and Shaffer 2005). Depending on location and other development factors, metamorphs will not return as adults to aquatic breeding habitat for 2 to 5 years (Loredo and Van Vuren 1996; Trenham *et al.* 2000).

Lifetime reproductive success for the California tiger salamander is low. Results from one study suggest that the average female bred 1.4 times over their lifespan and produced 8.5 young per reproductive effort that survived to metamorphosis (Trenham *et al.* 2000). This resulted in the output of roughly 11 metamorphic offspring over a breeding female's lifetime. The primary reason for low reproductive success may be that this relatively short-lived species requires two or

more years to become sexually mature (Shaffer *et al.* 1993). Some individuals may not breed until they are four to six years old. While California tiger salamanders may survive for more than ten years, many breed only once, and in one study, less than 5 percent of marked juveniles survived to become breeding adults (Trenham 1998b). With such low recruitment, isolated populations are susceptible to unusual, randomly occurring natural events as well human-caused factors that reduce breeding success and individual survival. Factors that repeatedly lower breeding success in isolated pools can quickly extirpate a population.

Dispersal and migration movements made by California tiger salamanders can be grouped into two main categories: (1) breeding migration; and (2) interpond dispersal. Breeding migration is the movement of salamanders to and from a pond from the surrounding upland habitat. After metamorphosis, juveniles move away from breeding ponds into the surrounding uplands, where they live continuously for several years. At a study in Monterey County, it was found that upon reaching sexual maturity, most individuals returned to their natal/ birth pond to breed, while 20 percent dispersed to other ponds (Trenham *et al.* 2001). After breeding, adult California tiger salamanders return to upland habitats, where they may live for one or more years before attempting to breed again (Trenham *et al.* 2000).

California tiger salamanders are known to travel long distances between breeding ponds and their upland refugia. Generally it is difficult to establish the maximum distances traveled by any species, but salamanders in Santa Barbara County have been recorded dispersing up to 1.3 miles from their breeding ponds (Sweet 1998). As a result of a 5-year capture and relocation study in Contra Costa County, Orloff (2007) estimated that captured California tiger salamanders were traveling a minimum of 0.5 miles to the nearest breeding pond and that some individuals were likely traveling more than 1.3 miles to and from breeding ponds. California tiger salamanders are also known to travel between breeding ponds. One study found that 20 to 25 percent of the individuals captured at one pond were recaptured later at other ponds approximately 1,900 and 2,200 feet away (Trenham *et al.* 2001). In addition to traveling long distances during juvenile dispersal and adult migration, salamanders may reside in burrows far from their associated breeding ponds.

Although previously cited information indicates that California tiger salamanders can travel long distances, they typically remain close to their associated breeding ponds. A trapping study conducted in Solano County during the winter of 2002/2003 suggested that juveniles dispersed and used upland habitats further from breeding ponds than adults (Trenham and Shaffer 2005). More juvenile California tiger salamanders were captured at traps placed at 328, 656, and 1,312 feet from a breeding pond than at 164 feet. Approximately 20 percent of the captured juveniles were found at least 1,312 feet from the nearest breeding pond. The associated distribution curve suggested that 95 percent of juvenile California tiger salamanders were within 2,099 feet of the pond, with the remaining 5 percent being found at even greater distances. Preliminary results from the 2003-04 trapping efforts at the same study site detected juvenile California tiger salamanders at even further distances, with a large proportion of the captures at 2,297 feet from the breeding pond (Trenham 1998a). Surprisingly, most juveniles captured, even those at 2,100 feet, were still moving away from ponds. In Santa Barbara County, juvenile Santa Barbara

County DPS California tiger salamanders have been trapped approximately 1,200 feet away while dispersing from their natal pond (Science Applications International Corporation, unpublished data). These data show that many California tiger salamanders travel far while still in the juvenile stage. Post-breeding movements away from breeding ponds by adults appear to be much smaller. During post-breeding emigration from aquatic habitat, radio-equipped adult California tiger salamanders were tracked to burrows between 62 to 813 feet from their breeding ponds (Trenham 2001). These reduced movements may be due to adult California tiger salamanders exiting the ponds with depleted physical reserves, or drier weather conditions typically associated with the post-breeding upland migration period.

California tiger salamanders are also known to use several successive burrows at increasing distances from an associated breeding pond. Although previously cited studies provide information regarding linear movement from breeding ponds, upland habitat features appear to have some influence on movement. Trenham (2001) found that radio-tracked adults were more abundant in grasslands with scattered large oaks, than in more densely wooded areas. Based on radio-tracked adults, there is no indication that certain habitat types are favored as terrestrial movement corridors (Trenham 2001). In addition, captures of arriving adults and dispersing new metamorphs were evenly distributed around two ponds completely encircled by drift fences and pitfall traps. Thus, it appears that dispersal into the terrestrial habitat occurs randomly with respect to direction and habitat types.

Documented or potential Central California tiger salamanders predators include coyotes, raccoons, striped skunks, opossums, egrets, great blue herons, crows, ravens, garter snakes, bullfrogs, California red-legged frogs, mosquito fish, and crayfish.

The Central California tiger salamander is imperiled throughout its range due to a variety of human activities (Service 2004). Current factors associated with declining Central California tiger salamander populations include continued habitat loss and degradation due to agriculture and urbanization; hybridization with the non-native eastern salamander (Fitzpatrick and Shaffer 2004; Riley *et al.* 2003); and predation by introduced species. Central California tiger salamander populations are likely threatened by multiple factors but continued habitat fragmentation and colonization of non-native salamanders may represent the most significant current threats. Habitat isolation and fragmentation within many watersheds have precluded dispersal between sub-populations. Other threats include predation and competition from introduced exotic species; possible commercial over-utilization; diseases; various chemical contaminants; road kill; and certain mosquito and rodent control operations. Currently, these various primary and secondary threats are largely not being offset by existing Federal, State, or local regulatory mechanisms. The Central California tiger salamander is also prone to chance environmental or demographic events to which small populations are particularly vulnerable.

Central California Tiger Salamander Critical Habitat

Critical habitat was proposed for the Central population on August 10, 2004 (Service 2004b); critical habitat was finalized for the Central population of the California tiger salamander on August 23, 2005 (Service 2005). The Service divided the current range of the Central population into four regions: (1) Central Valley; (2) Southern San Joaquin Valley; (3) East Bay; and (4) Central Coast, which represent the unique genetic structure of the subspecies. The action area is located in the Southern San Joaquin Valley region.

The Service determined that conserving the California tiger salamander over the long-term requires a five-tiered approach: (1) Maintaining the current genetic structure across the species range; (2) maintaining the current geographical, elevational and ecological distribution; (3) protecting the hydrology and water quality of breeding pools and ponds; (4) retaining or providing for connectivity between locations for genetic exchange and recolonization; (5) protecting sufficient barrier-free upland habitat around each breeding location to allow for sufficient survival and recruitment to maintain a breeding population over the long-term.

The Service has concluded that areas designated as critical habitat require certain management considerations or protections due to the following threats: (1) Activities that introduce or promote the occurrence of bullfrogs and fish; (2) Activities that could disturb aquatic habitats during the breeding season; (3) Activities that impair the water quality of aquatic breeding habitats; (4) Activities that would reduce small mammal populations to the point that there is insufficient underground Central population refugia used for foraging, protection from predators, and shelter from the elements; (5) Activities that create barriers impassible for salamanders or road crossings that increase mortality in upland habitat between extant occurrences in breeding habitat; (6) Activities on adjacent uplands that disrupt vernal pool complexes' ability to support California tiger salamander breeding function; (7) Activities that introduce non-native tiger salamanders in areas where the California tiger salamander is threatened with hybridization (Service 2004b).

In determining which areas to designate as critical habitat, the Service considers those physical and biological features (primary constituent elements [PCEs]) that are essential to the conservation of the species, and that may require special management considerations and protection (50 CFR § 424.14).

The PCEs for the California tiger salamander are aquatic and upland areas, including vernal pool complexes, where suitable breeding and non-breeding habitats are interspersed throughout the landscape, and are interconnected by continuous dispersal habitat. All areas designated as critical habitat for the Central population contain one or more of the primary constituent elements (Service 2005). These primary constituent elements are:

- Breeding habitat (standing bodies of fresh water, including natural and man-made ponds, vernal pools, and other ephemeral or permanent water bodies that typically become

inundated during winter rains and hold water for a sufficient length of time necessary for the species to complete its life cycle).

- Non-breeding habitat (barrier-free upland habitats adjacent to breeding ponds).
- Dispersal and Migration (upland areas adjacent to essential aquatic habitats which are not isolated from other essential aquatic habitats by barriers that central California tiger salamander cannot cross) (Service 2004b).

Environmental Baseline

Central California tiger salamanders

Central California tiger salamanders are known to occur in the vicinity of the action area of the proposed project. The nearest wetland habitat on the National Wetlands Inventory that provides potential breeding habitat is less than 1/3 mile from the proposed project, south of Millerton Road. Rodent burrows occur within the action area and surrounding grassland habitat. A central California tiger salamander was observed and reported to the California Natural Diversity Database (CNDDB 2011) less than 0.25 mile to the south of the project footprint, along the south side of Millerton Road. Other sightings have been made to the south of Millerton Road; there are no occurrence records for the footprint of the project (Reclamation 2004). There are 14 known occurrences within 2.5 miles of the proposed project (CNDDB 2011). The action area consists of developed areas including a fenced Park Maintenance Yard with structures, parking and utilities, but around the edges and interspersed within the existing maintenance yard are areas of annual grassland that have small mammal burrows, which is upland habitat for central California tiger salamanders.

Central California tiger salamander critical habitat

The proposed project action area is within Unit 2, Northeast Fresno Unit of the Southern San Joaquin Region of critical habitat. Unit 2 is located northeast of Fresno, southwest of Millerton Lake, east of Friant Road and generally west of the small community of Academy (Service 2004b) and consists of approximately 4,961 acres. Unit 2 is essential for the conservation of the Central population of the California tiger salamander; it is needed to maintain the current geographic and ecological distribution of the species in the Southern San Joaquin Region. This Unit also represents the Southern Sierra Foothills vernal pool region in Fresno County, the northern end of the Southern San Joaquin Region, and the southern portion of the species' distribution in the San Joaquin Valley. It contains six extant occurrences of the salamander (CNDDB 2011).

The PCEs for the central California tiger salamander include both aquatic and upland areas; the primary constituent elements affected within the action area are entirely upland habitat. The action area is within annual grassland habitat and small mammal burrows are common providing upland non-breeding and dispersal/migration PCE's for central California tiger salamanders.

Effects of the Proposed Action

Central California Tiger Salamander

Construction activities, including grading and excavation, will have direct effects on the central California tiger salamander when they are present within the action area. Injury and /or mortality are reasonably likely to occur from trenching and grading in upland habitat. Construction activities that occur during the rainy season (October 15 through April 15), including fencing and excavation of linear trenches, will impede and alter the movement of adult salamanders between upland habitat and breeding sites, and also the dispersal of juvenile salamanders from breeding ponds to upland habitat. All temporarily affected areas will be allowed to return to fallow conditions, eventually providing habitat quality similar to the preconstruction conditions.

Central California Tiger Salamander Critical Habitat

The proposed project will result in temporary impact of 0.01 acre of Unit 2, Northeast Fresno Unit of the Southern San Joaquin Region. The portion of the Unit that is affected is very small and only represents upland refugia and not any potential breeding habitat. The PCEs affected only reflect the non-breeding portion of the central California tiger salamander's life cycle.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions unrelated to the proposed action are not considered in this section, because they require separate consultation pursuant to section 7 of the Act. The Service is unaware of any actions currently planned within the proposed project action area.

Conclusion

After reviewing the status of the central California tiger salamander, the environmental baseline for the action area, the effects of the proposed project and the cumulative effects, it is the Service's biological opinion that the proposed project, as described, is not likely to jeopardize the continued existence of the species, and is not likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the central California tiger salamander in the wild.

The Service determines that the impacts to critical habitat from the proposed project will not destroy or adversely modify critical habitat, nor reduce its ability to contribute to the recovery of the species

INCIDENTAL TAKE STATEMENT

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns including breeding, feeding, or sheltering. Harass is defined by the Service as an intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by Reclamation so that they become binding conditions of any grant or permit issued to State Parks, as appropriate, for the exemption in section 7(o)(2) to apply. Reclamation has a continuing duty to regulate the activity covered by this incidental take statement. If Reclamation (1) fails to assume and implement the terms and conditions or (2) fails to require State Parks to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Reclamation must report the progress of the action and its impact on the central California tiger salamander to the Service as specified in the incidental take statement. [50 CFR §402.14(i)(3)]

Amount or Extent of Take

The Service anticipates that incidental take of individual central California tiger salamanders cannot be quantified because of central California tiger salamander inhabits small mammal burrows, making detection difficult; central California tiger salamander occupy a large range and are primarily active above ground only at night and during the breeding season. In instances when the Service cannot quantify individuals taken, the Service may estimate take in terms of the number of acres of habitat permanently lost or degraded as a result of the proposed action. Due to the difficulty in quantifying the number of central California tiger salamanders that will be taken as a result of the proposed action, the Service is quantifying take incidental to a project as the amount of acres of habitat that will be affected for the species as a result of the action, this amounts to 1.13 acres of habitat. Upon implementation of the *Proposed Conservation Measures*, *Reasonable and Prudent Measures* and the *Terms and Conditions* considered herein, incidental take of central California tiger salamander within this acreage in the forms of harm and harassment due to the Proposed Project activities, leading to habitat loss and degradation will become exempt from the prohibitions described in section 9 of the Act.

Effect of the Take

The Service has determined that the level of anticipated take is not likely to result in jeopardy to the central California tiger salamander.

Reasonable and Prudent Measure

The Service has determined that the following reasonable and prudent measure is necessary and appropriate to minimize the effects of the proposed project on the central California tiger salamander.

1. All of the Conservation Measures proposed in the BA *Project Description* and in the response memorandum dated February 16, 2012, as restated or summarized in this biological opinion, must be fully implemented.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, Reclamation must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are non-discretionary.

The following Terms and Conditions implement the Reasonable and Prudent Measure (1):

1. Reclamation personnel, and all agents and contractors representing Reclamation, will implement all the described conservation measures included in this biological opinion.
2. In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, Reclamation shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, Reclamation must immediately reinstitute formal consultation as per 50 CFR 402.16.
 - a. For those components of the action that will result in habitat degradation or modification whereby incidental take in the form of harm is anticipated, Reclamation will provide weekly updates to the Service with a precise accounting of the total acreage of habitat impacted. Updates shall also include any information about changes in project implementation that result in habitat disturbance not described in the *Project Description* and not analyzed in this biological opinion.
 - b. For those components of the action that may result in direct encounters between listed species and project workers and their equipment whereby incidental take in the form of harassment, harm, injury, or death is anticipated, Reclamation shall

immediately contact the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6600 to report the encounter. If encounter occurs after normal working hours, Reclamation shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, Reclamation shall follow the steps outlined in the Salvage and Disposition of Individuals section below.

- c. Reclamation and agents representing Reclamation will continue monitoring the evaporation pond to ensure the effectiveness of the exclusionary fence. If the exclusionary fence fails and central California tiger salamanders are discovered within the evaporation pond enclosure, then Reclamation will contact the Service and CDFG to account for this additional take.

Disposition of Individuals Taken

In the event of injured and/or dead central California tiger salamander, the Service shall be notified within one day and the animals shall only be handled by a Service-approved, permitted biologist. Any injured central California tiger salamander shall be cared for by a licensed veterinarian or other qualified individual. In the case of a dead central California tiger salamander, the individual shall be preserved as appropriate, and held in a secure location until further instructions are received from the Service regarding the disposition of the specimen, or until the Service, or Service designee, is able to take custody of the specimen. Reclamation must report to the Service within one calendar day any information about take or suspected take of a federally-listed species not exempted in this BO. Notification must include date, time, and location of the incident, or of the finding of a dead individual. The Service contacts for such events are Daniel Russell, Deputy Assistant Field Supervisor, Endangered Species Program, Sacramento Fish and Wildlife Office, at (916) 414-6600, and Daniel Crum, Resident Agent-in-Charge, Law Enforcement Division, at (916) 414-6600.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purpose of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and databases.

In order that the Service be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations. We propose the following conservation recommendations to Reclamation:

1. Assist the Service in implementing recovery actions for the central California tiger salamander, or any other federally listed species, and their critical habitat areas.
2. Encourage or require the use of appropriate California native species in revegetation and habitat enhancement efforts associated with projects authorized or undertaken by Reclamation.
3. Sightings of any listed or sensitive animal species should be reported to the California Natural Diversity Database of the California Department of Fish and Game. A copy of the reporting form and a topographic map or adequate aerial photograph clearly marked with the location the animals were observed also should be provided to the Service.

REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the proposed project. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions or concerns about this consultation please contact Rocky Montgomery, Senior Biologist, or Thomas Leeman, Chief, San Joaquin Valley Division, at (916) 414-6600.

cc:

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Shauna McDonald, BOR, Fresno, California
Kent Gresham, Millerton Lake Rec. Area, Friant, California
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