RECLAMATION
*Managing Water in the West*

## DRAFT FINDING OF NO SIGNIFICANT IMPACT

# Santa Clara Conduit Maintenance and Repairs

## FONSI-10-050

Recommended by:

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**U.S. Department of the Interior**
**Bureau of Reclamation**
**South-Central California Area Office**

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# 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 U.S. Bureau of Reclamation (Reclamation), has determined that the approval of the Santa Clara Conduit maintenance and repairs project is not a major federal action that will significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-10-050, *Santa Clara Conduit Maintenance and Repairs* and is hereby incorporated by reference.

## Background

Santa Clara Valley Water District (SCVWD) prepared the *Santa Clara Valley Water District Pipeline Maintenance Program Environmental Impact Report* (#2005101047, notice of determination dated 11/13/2007) that details the activities for their conveyance system. Reclamation prepared a draft environmental assessment (EA) and biological assessment for the *Pipeline Maintenance Program for the Pacheco and Santa Clara Conduits and Tunnels, Santa Clara Valley Water District* (PMP), Draft EA-06-110 that details the actions for the Pacheco and Santa Clara Conduit pipeline maintenance. Public comment period closed November 9, 2007. Finalization of the EA is pending the biological opinion from U.S. Fish and Wildlife Service (Service).

Routine and preventative maintenance on the Santa Clara Conduit is needed at this time. If delayed until the Pipeline Maintenance Program EA is finalized, there is a potential that the Santa Clara Conduit could degrade and the system would be compromised. SCVWD, on behalf of Reclamation, will drain, inspect, repair, and refill the Santa Clara Conduit, a Reclamation-owned facility in January 2011. Best management practices (BMPs) are included in the *Santa Clara Valley Water District Pipeline Maintenance Program Environmental Impact Report* and Draft EA-06-110 which are hereby incorporated by reference. Mitigation measures are included in EA-10-50 and are part of this FONSI, as detailed below.

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

### Surface Water Resources

Draining the pipeline will cause temporary increases in the rate and volume of runoff in receiving waters in the Proposed Action area. Discharge of pipeline water into local waterways, open fields, swales, or wetlands will be likely.

Turbidity in receiving water could increase. Turbidity, temperature, and pH will be monitored during discharges and water will be treated or discharge rates will be modified if Regional Water Quality Control Board objectives were exceeded.

Potential impacts to hydrology and water resources associated with the Proposed Action include potential to cause erosion, degrade water quality, and increase rates of runoff or flooding. Erosion during maintenance activities is minimized through the Erosion Control Plan, Bank Protection Work, and re-vegetation.

The Proposed Action has a potential to degrade water quality if exposed soils are flushed into waterways. Receiving water and discharge water will be monitored by a trained individual for turbidity prior to the discharge and periodically throughout the drainage operation. Silty or turbid water from project activities will not be discharged into streams, lakes or storm drains.

Additionally, a fast rise and fall in water levels could cause bank failures and deposition of soil in the channel. Flow rates can be manipulated to control discharges and avoid sudden changes in receiving water flows. Receiving waters and flow paths will be evaluated for erosion potential and observed for erosion at the time of discharge. Pipeline discharge rates will be modified as needed to avoid erosion. If necessary, flow velocities will be reduced through implementation of energy dissipation BMPs and mitigation measures such as small settling ponds which function to pond water prior to release. Soils and vegetation at discharge sites will be protected using a variety of conventional erosion control BMPs.

Bank protection work will occur prior to a planned discharge in areas where banks within 100 feet of the discharge point that appear to show signs of erosion or instability. Bank stabilization (hardscape methods) will be assessed before pipeline shutdown. Bank stabilization plans will be prepared prior to the work. Bank stabilization will minimize erosion effects.

### Groundwater Resources

Draining the pipeline will cause temporary increases in the rate and volume of runoff in receiving waters in the Proposed Action area. Discharge of pipeline water into local waterways, open fields, swales, or wetlands will be likely. As the quantity of water that will percolate to the basin is small, it will not have a substantial effect on groundwater quality or quantity.

### Land Use

The pipeline will be drained, inspected, repaired, and refilled. Approval of the Proposed Action will not lead to any land use changes.

### Biological Resources

Reclamation prepared a biological assessment for the PMP and submitted it along with a request for consultation with Service and National Marine Fisheries Service (NMFS). Informal consultation has been completed with NMFS on the PMP. The NFMS “not likely to adversely affect” letter covers the Proposed Action.

Reclamation received a “not likely to adversely affect” letter from NMFS on the PMP.

Formal consultation on the Proposed Action was initiated with the Service January 6, 2011. Reclamation will not proceed with the Proposed Action until consultation is complete.

## Cultural Resources

The Proposed Action will result in Reclamation approving the draining, inspection, maintenance, and refilling of the Santa Cara Conduit. As this feature is not yet 50 years old, it is not considered a historic property as defined by the regulations at 36 CFR Part 60.4. When the Santa Clara Conduit was constructed, grounds in which it was constructed were significantly disturbed. Barring any new excavation into intact subsurface deposits, the Proposed Action needed to maintain and enhance the water conveyance feature have no potential to cause effects on historic properties pursuant to the regulations at 36 CFR Part800.3(a)(1).

## Indian Trust Assets

There are no tribes possessing legal property interests held in trust by the United States in the water involved with this action, nor is there such a property interest in the lands designated to receive the water proposed in this action. This action will have no adverse effect on Indian Trust Assets.

## Environmental Justice

The Proposed Action will not disproportionately affect minority or low-income populations and communities.

## Socioeconomic Resources

Maintenance of existing facilities does not include provision of additional capacity for growth. No new water conveyance facilities, roads, or other infrastructure will be included as part of the Proposed Action. There will be no growth inducing impacts associated with implementing corrective maintenance defined under the Proposed Action.

The maintenance labor will be sourced from the existing SCVWD mechanical, engineering, and field staff. The maintenance work has been performed on pipelines since initial installation in the 1960s on an as needed basis. The Proposed Action will not result in substantial increased demands for labor that could lead to population growth within the Proposed Action area.

## Air Quality

Traffic is a main generator of particulate matter and precursors to ozone; however, activities will require relatively small maintenance fleets. The contribution of pollutants from maintenance vehicles relative to the contribution from the existing traffic in the Proposed Action area will be indiscernible.

Most pipeline repair work will occur within a pipeline. Repair could involve some welding, soldering, and cementing of joints and pipeline components; however, the scale and size of repair work will be limited to a few areas. Repair work emissions will not interfere with implementation of the Basin Air Plan.

## Global Climate

Estimated emissions from the Proposed Action will be approximately 5 metric tons per year of $CO_2$ which is negligible compared to the EPA's 25,000 metric tons per year threshold for annually reporting green house gas emissions (EPA 2009). Therefore, there will be no adverse impacts to the global climate due to the Proposed Action.

## Cumulative Impacts

Activities that have the potential to degrade water quality will be temporary and will not be expected to contribute to overall cumulative impacts. Discharge of pipeline water into local waterways, open fields, swales, or wetlands will be likely. As the quantity of water that will percolate to the basin is small (approximately 78 acre-feet or less would be diverted to waterways) it will not have a substantial effect on groundwater quality or quantity.

Cumulative impacts could occur as a result of geologic and soil-effects related to seismicity, including rupture along faults, subsidence, and liquefaction associated with the Proposed Action activities in combination with impacts associated with any of the other programs at the SCVWD. However, SCVWD will deploy BMPs to ensure stability.

All impacts will be temporary and are not be expected to contribute to overall cumulative impacts. While some areas may support Special-Status species, the areas of temporary impact will be relatively small, and like-kind habitats surround the work areas. Thus, it can be anticipated that any species temporarily displaced by maintenance activities will be able to find other suitable habitat close by.

The Proposed Action will result in no cumulative impacts to cultural resources. When the water conveyance features of the San Felipe Division of the CVP reach 50 years or older, however, Reclamation may have to consider future maintenance activities for their potential to cause adverse effect to these resources.

There will be no cumulative impacts to ITA when added to other past, present, and future Proposed Actions are there are none.

When considered with the potential effects of other projects and programs, the Proposed Action will still not contribute to adverse effects to low-income and minority populations or socioeconomic resources.

The potential to cause cumulative air impacts with other SCVWD or local projects could only occur if other construction projects were occurring incidental to the Proposed Action activities. The District Operations Planning and Analysis Unit (OPAU) will determine any conflicting uses of resources or conflicting scopes of work within SCVWD and among other jurisdictions. If the OPAU allowed a construction project alongside another project, implementation of BMP Air Quality-2 will minimize any cumulative effects. BMP Air Quality-2 incorporates the San Francisco Bay Area Air Quality Management District guidelines for controlling construction-related emissions for $PM_{10}$ so as to minimize any individual project's contribution to an overall cumulative effect.

Green house gas impacts are considered to be cumulative impacts. The Proposed Action, when added to other existing and proposed actions, will not contribute to cumulative impacts to global climate change owing to the *de minimis* magnitude of annual GHG emissions.

Approval will not have highly controversial or uncertain environmental effects or involve unique or unknown risks. Impacts associated with the Proposed Action are minor, short-term, localized and temporary in nature; therefore, there are no significant cumulative impacts associated with this project.

## Mitigation Measures

Before the SCVWD begins draining, staff will deploy BMPs, mitigation measures (MMs) and minimization measures for the discharge of raw water into the creeks. These practices/measures will be in accordance with various documents including, but not limited to, SCVWD's 10-year Program Environmental Impact Report (adopted November 2007), the Service Biological Opinion (file number 81420-2009-F-0245), nd National Marine Fisheries Not Likely to Adversely Affect letter (file number 2007/05948) that addresses the SCVWD's 10-year program. The referenced opinion from the Service is not specific to the currently Proposed Action, but does address a different portion of the same pipeline and includes some of the same dewatering locations.

Baseline readings will be established for turbidity, temperature, and other water quality parameters. These parameters will be monitored and tracked during the period of the discharge to confirm they are within the targeted range. The frequency of the monitoring will be conducted according to the programmatic environmental impact report. If the parameters are outside of the recommended range, adjustments to the discharge will be made such as implementing more BMPs, decreasing the flow rate, or suspending the discharge. Similar monitoring procedures were used on previous pipeline rehabilitation projects on the San Felipe Division.

The applicant proposes to minimize and offset effects to wildlife including, but not limited to, the tiger salamander and red-legged frog by implementing the following conservation measures.

1. Vehicles shall access the work areas via local streets, highways, and the existing access roads, except for vault 16, in which the access route will be clearly demarcated by a Service-approved biologist. The routes will be limited a width of 15 feet or less. Personnel will be required to adhere to marked paths. No other off-road travel will be allowed. If any burrows potentially occupied by red-legged frogs or tiger salamanders cannot be avoided, the Service-approved biologist will excavate the burrow and move any animal outside the work area.

2. Unpaved roadway traffic speed will be limited to 10 miles per hour.

3. An individual trained in monitoring water levels will observe flows in receiving waters. If it appears that discharges are approaching channel capacity, discharge rates will be reduced. If erosion is evident, flow rates will be reduced. If erosion continues to occur, discharges will be terminated until appropriate erosion control measures are installed. Monitoring will be conducted prior to the start of discharge and regularly during the discharge, frequency dependent on the nature of the discharge and the erosion in the area.

Woody material (including live leaning trees, dead trees, tree trunks, large limbs, and stumps) will be retained unless it is threatening a structure or impedes reasonable access, in which case it will be retained on site but moved to a less threatening position.

5. No fueling, repair, cleaning, maintenance, or vehicle washing shall be performed at job sites or within 65 feet of a wetland or riparian area.

6. All chemicals stored in staging areas will be stored in secondary containment with no less than 110% capacity. Proper storage and security will be implemented to ensure that chemicals are not spilled or vandalized during non-working hours.

7. No firearms shall be allowed on-site, except for Federal, State, local law enforcement, or security guards.

8. No pets will be allowed at the Proposed Action site.

9. During pipeline draining, wedge wire screens will be placed over the discharge openings of gravity drain gates and on the suction and discharge piping of any submersible pumps used for pipeline discharge to minimize discharge of non-native species.

10. A survey for red-legged frog and tiger salamander would be conducted in the receiving water body by a Service-approved biologist one week prior to water release. If a red-legged frog or tiger salamander or their larvae are not found within 500 feet upstream or downstream of the release point, absence will be re-verified within 24 hours of the commencement of release. Release can commence if no adults, eggs, or larvae are found 500 feet upstream or downstream of the release point during the second survey. If adults, eggs, or larvae are found within 100 feet downstream of a release point, the discharge point will not be utilized. If found within 200-500 feet of the release point, velocity reduction, accomplished by either slowing release, decreasing release volume, and/or applying dissipation, will be utilized to minimize affects to red-legged frogs and tiger salamander.

11. Access and staging in areas with no pre-established areas will be surveyed to avoid serpentine areas and special status plants. A 100-foot buffer zone would be temporarily marked for avoidance. Upon Proposed Action completion, all temporary markers would be removed and properly disposed of.

12. Forty-eight hours prior to the start of construction activities, the site will be surveyed by a Service-approved biologist for red-legged frogs, tiger salamanders, kit fox, and least Bell's vireo. If any life stage of these animals is observed, the Service-approved biologist will immediately be notified and will follow protocol outlined in Measure 14.

13. Prior to the start of construction activities, a Service-approved biologist will conduct a training session for all construction personnel. Training will include a description of red-legged frogs, tiger salamander, kit fox, and least Bell's vireo and their habitats as well as proper procedures for staff if any individuals are detected within the Proposed Action area. Photographs of red-legged frogs and kit foxes will be distributed to all workers and contractors as a part of this training.

14. The Service-approved biologist will survey for tiger salamander, red-legged frog, and kit

fox morning before the start of construction. If a tiger salamander, red-legged frog, or kit fox, or any animal that construction personnel believes may be one of these species, is encountered during Proposed Action construction, the following protocol shall be followed:

i. All work that could result in direct injury, disturbance, or harassment of the individual animal shall immediately cease.

ii. The foreman and on-site biologist shall be immediately notified.

iii. The on-site biologist shall immediately notify the Service via telephone or electronic mail when a tiger salamander, whipsnake, red-legged frog, or kit fox is encountered that may be in harm's way.

a. The on-site biologist shall move the tiger salamander or red-legged frog to a safe nearby location and monitor it until he/she determines that the animal(s) are not imperiled by predators, or other dangers. A kit fox encountered on the site would be allowed to leave the site on its own. In the case of trapped animals (e.g. in a ditch or trench), escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for advice.

b. If at any time a tiger salamander or red-legged frog is discovered in the construction area by the on-site biologist or anyone else (including during pre-construction surveys), the on-site biologist shall move the animal to a safe location outside the exclusion barrier in an area that will remain undisturbed throughout the Proposed Action. If a kit fox is discovered in the construction area, it will be allowed to leave the site on its own. The biologist will monitor any translocated animal until it is determined that it is not imperiled by predators or other dangers. Tiger salamanders, whipsnakes, and red-legged frogs will be translocated to appropriate habitat for their life cycle. Tiger salamanders found in burrows will be translocated to burrows, not a pond or creek.

15. All litter and construction debris will be disposed of off site in accordance with State and local regulations. All trash and debris within the work area will be placed in containers with secure lids before the end of each work day in order reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left on-site. If containers meeting these criteria are not available, all rubbish will be removed from the Proposed Action site at the end of each work day.

16. The introduction and/or spread of invasive animal and plant species will be avoided to the maximum extent practicable.

17. Animal exclusion fencing will be erected and maintained around all construction areas. Installation of the fence will be performed under the supervision of a Service-approved biologist. Fencing will be made of reinforced plastic or plywood and will be buried a minimum of six inches into the ground. Animal exclusion fencing will be checked once per week by construction personnel trained by a Service-approved biologist to identify weaknesses and all compromised portions will be repaired and/or replaced immediately. No plastic netting or

monofilament shall be used at the site because red-legged frogs, tiger salamanders, and other species may become entangled or trapped in it.

18. Tightly woven fiber netting or similar material shall be used for erosion control or other purposes at the Proposed Action area to ensure that the red-legged frog and tiger salamander do not get trapped. This limitation will be communicated to the contractor through use of Special Provisions included in the bid solicitation package. Plastic mono-filament netting (erosion control matting), rolled erosion control products or similar material shall not be used at the Proposed Action site because red-legged frogs, tiger salamanders, and other species may become entangled or trapped in it.

19. Because tiger salamanders and red-legged frogs may take refuge in cavity-like and den-like structures such as pipes and may enter stored pipes and become trapped, all construction pipes, culverts, or similar structures that are stored at a construction site for one or more overnight periods will be either securely capped prior to storage or thoroughly inspected by the on-site biologist and/or the construction foreman/manager for these animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a tiger salamander or red-legged frog is discovered inside a pipe by the on-site biologist or anyone else, the protocol outlined in conservation measure 15 will be followed and the Service-approved biologist shall move the animal to a safe nearby location (or, in the case of a kit fox, allow it to leave on its own) and monitor it until it is determined that it is not imperiled by predators or other dangers.