

Environmental Assessment/Initial Study

Tranquillity Irrigation District, East-West Intertie Water Conservation Project



**U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Regional Office
Sacramento, California**



**Tranquillity Irrigation District
Tranquillity, California**

January 2016

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

AF	Acre-feet
APN	Assessor Parcel Number
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CNDDDB	California Native Diversity Database
CO	Carbon Monoxide
CVP	Central Valley Project
District	Tranquillity Irrigation District
DOI	Department of the Interior
EA	Environmental Assessment
EDS	Eastern Distribution System
EJ	Environmental Justice
EPA	Environmental Protection Agency
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gases
LF	Linear Feet
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
O ₃	Ozone

Pb	Lead
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PM ₁₀	Particulate matter between 2.5 and 10 microns in diameter
ppm	Parts per million
Reclamation	Bureau of Reclamation
SCADA	Supervisory Control and Data Acquisition
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO ₂	Sulfur Dioxide
TID	Tranquillity Irrigation District
µg/m ³	Microgram per cubic meter
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service
WDS	Western Distribution System

Section 1 Introduction

1.1 Background

The Bureau of Reclamation (Reclamation) proposes to provide WaterSMART Water and Energy Efficiency Grant funds to the Tranquillity Irrigation District (District) for the implementation of the East-West Intertie project (Proposed Action/Project). Installation of the intertie would involve construction of a pump structure and turnout at the Western Distribution System's Towne Ditch. An approximately one-half mile 24-inch diameter PVC pipeline would be constructed to intertie with the Eastern Distribution System's South Canal. (Figures 1-1 and 1-2). The Proposed Action/Project would include installation of a flow-meter and Supervisory Control and Data Acquisition (SCADA) control system. The District would also construct a photovoltaic solar panel system on a portion of a nine acre parcel owned by the District located at the southeast corner of West Silveria Avenue and Colorado Road.

Under the WaterSMART program, Reclamation provides cost-shared funding on a competitive basis for on-the-ground water conservation and energy efficiency projects. The WaterSMART grant program is under the authority of Section 9504(a) of the Secure Water Act, Subtitle F of Title IX of the Omnibus Public Land Management Act of 2009, P.L. 111-11 (42 USC 10364).

The District's current conveyance system includes two major systems (an eastern and western system) which are largely isolated from each other (Figure 1-1). The overall system includes approximately 17.3 miles of two main canals (Towne Ditch and Slough Canal), approximately 10.7 miles of seven laterals originating from the two main canals, and "stub" canals (8.8 miles) and pipelines (2.3 miles) that convey water from the laterals to the growers. Two lift pumps along the Fresno Slough pump water up into the two main canals for delivery throughout the District. Generally the District uses this system to deliver surface water from the Mendota Pool to its growers; however the District also has four groundwater wells that discharge water into the Towne Ditch and Slough Canal.

The District delivers surface water to the southern part of the District through the Eastern Distribution System (EDS) (Figure 1-1). Even though District water deliveries are relatively small, District annual seepage losses during the winter months between October through March are high due to initial wetting each time the canal is used. During these winter periods, water is in demand in the south central portion of the District (same as the area to be served by the intertie, as shown on Figure 1-1, but not in the southeastern portion of the District). The two areas have different cropping patterns/water demands due to different soil types. The south central area has lighter soils that are better for agriculture. The southeastern area is closer to the trough of the San Joaquin Valley, and has soils with higher clay content that are less desirable for crops, especially permanent crops.

During the winter months, water is conveyed approximately 2.7 miles through the earthen canals for deliveries to the southern and eastern portions of the District. The proposed intertie pipeline

would provide an alternative route for water deliveries, while also reducing the existing water conveyance distance. The water would be delivered to the intertie through other District managed canals that are already wetted during the winter, thus reducing annual seepage losses.

In accordance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), this Environmental Assessment/Initial Study (EA/IS) discloses potential environmental impacts associated with the construction and operation of the intertie pipeline. For the purposes of NEPA, this project is referred to as the Proposed Action; for the purpose of CEQA, this project is referred to as the Proposed Project. This document was prepared as a joint NEPA/CEQA document because the Proposed Action/Project is a discretionary project for a local agency with federal involvement. The Bureau of Reclamation is the NEPA lead agency; the District is the CEQA lead agency.

1.2 Need for Proposal

Given the District's limited surface water supplies, the need for this project is to reduce the loss of water to seepage and to improve operational efficiency by providing redundant water infrastructure and increased operational flexibility to deliver surface and groundwater.

**FIGURE 1-1
DISTRICT LOCATION MAP**

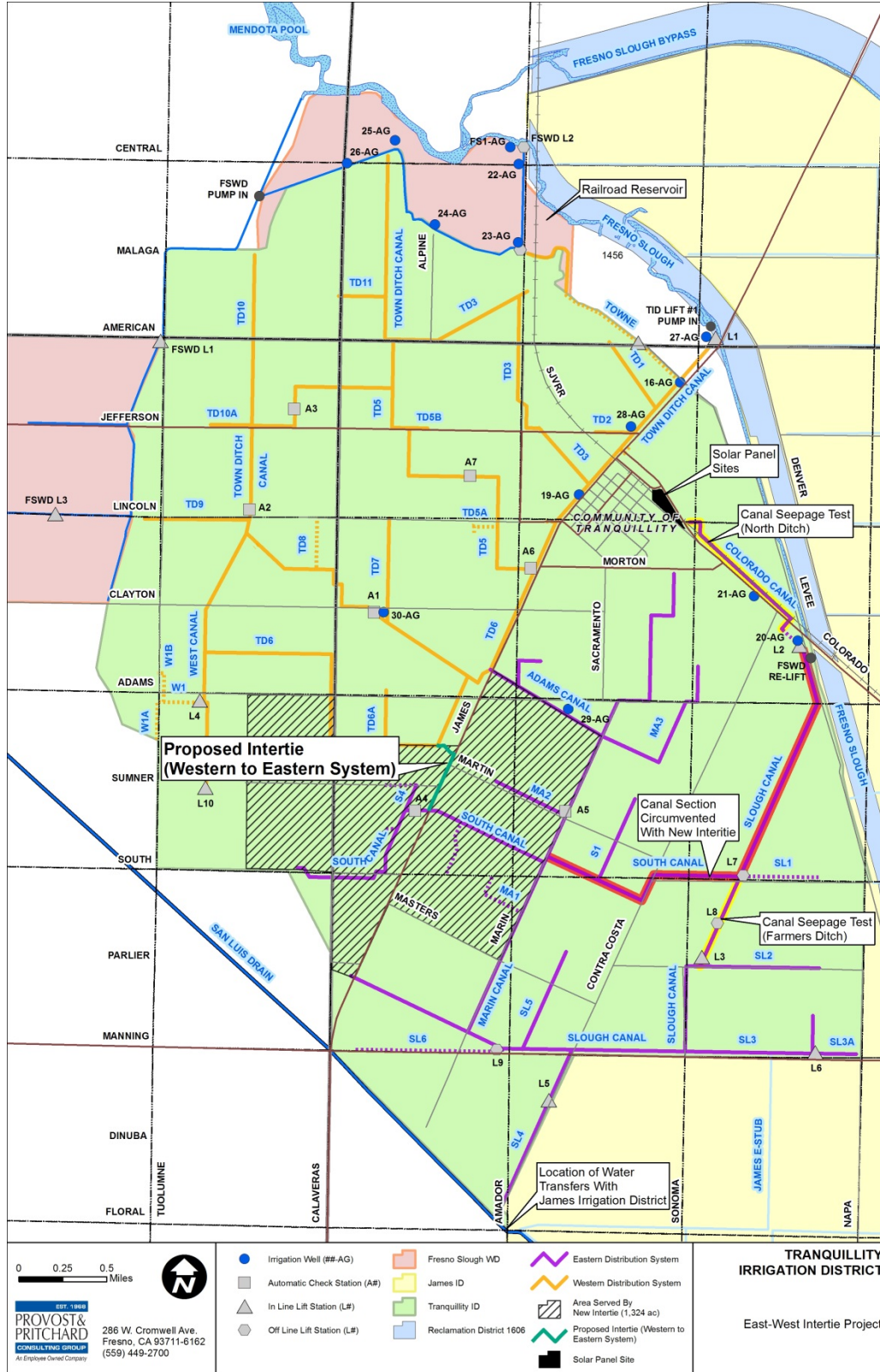
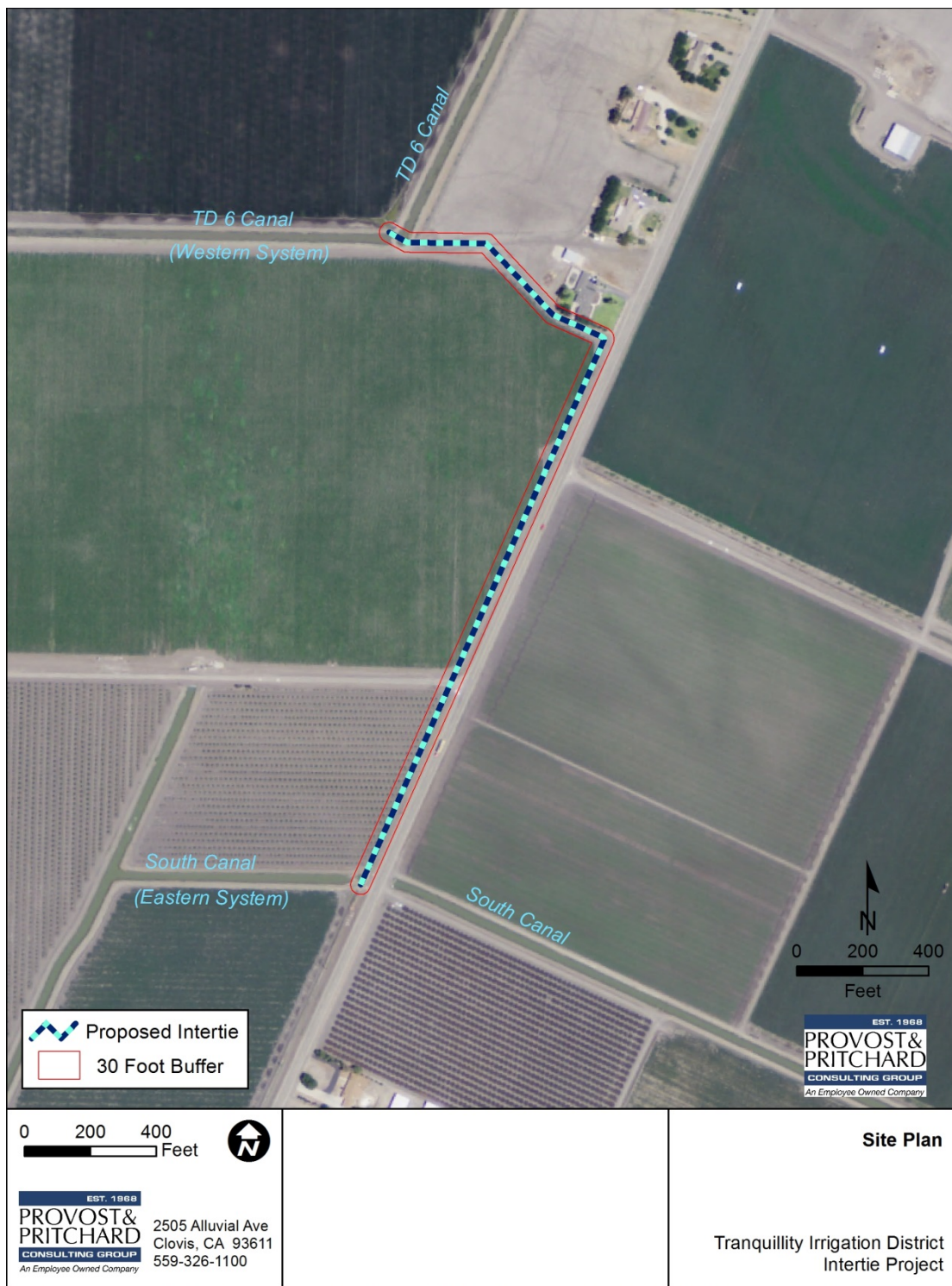


FIGURE 1-2
EAST-WEST INTERTIE PIPELINE LOCATION MAP



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Section 2 Alternatives Including the Proposed Action

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

2.1 No Action Alternative

Under the No Action/Project Alternative, the Bureau of Reclamation would not award a WaterSMART: Water and Energy Efficient Grant to the District for construction and operation of the East-West Intertie Water Conservation Project. Without the assistance of federal funding resources, the intertie pipeline would not be constructed and the District's conditions would remain the same. The District would continue its water conveyance method between the East Distribution System to the West Distribution System through the existing 2.7 miles of earthen canals. The annual water loss related with the use of the earthen canals would continue and high levels of seepage loss, evaporation, and irrecoverable dead water storage would continue during winter months.

2.2 Proposed Action

Under the Proposed Action/Project, Reclamation would award grant funds to support the construction of the East-West Intertie Water Conservation Project. The Proposed Action/Project would allow water to move against gravity from the Western Distribution System (WDS) supplied by the existing lift station (TID Lift #1) to the Eastern Distribution System (EDS) supplied by the existing lift station (TID Lift #2), by physically connecting the two distribution systems within the District. (Figures 1-1 and 1-2). The proposed intertie pipeline would reduce the District's existing 2.7 mile conveyance path through earthen canals for water deliveries during annual winter periods, between the months of October through March.

The proposed intertie would be approximately 2,450 linear feet (LF) of 24-inch diameter PVC pipe. The Proposed Action/Project would include a pump structure and turnout at the WDS-Towne Ditch 6 that would pump 15 cfs through the intertie pipeline into the existing EDS (South Canal). Water quality from surface water and groundwater varies throughout the District area. Some groundwater wells have good groundwater quality. The new facilities would provide greater ability to blend water supplies delivered to District water users. The proposed connection would also include flow metering systems and a SCADA control system that would measure water flows through the pipeline.

The proposed pump station would be located on the east side of the WDS-Towne Ditch 6 approximately 3,000 feet east of South Calaveras Avenue. The proposed pipe alignment would extend east from the pump station approximately 680 (LF) towards South James Road within a District-owned 30-foot easement. The pipeline would not encroach into South James Road; however, it would run parallel to the west side of the road. The pipeline alignment would then

be installed in an easement approximately 1,770 LF heading south-southwest parallel to the county road where it would discharge into the EDS. Prior to ground disturbance, the District would acquire a 30 foot wide permanent easement along the entire pipeline alignment. A temporary construction easement may also be needed.

In order to partially offset the District's long-term electric energy usage for the pump station operation, the Proposed Action/Project would include placing photovoltaic solar panels on a portion of a nine acre triangular shaped parcel owned by the District located at the southeast corner of West Silveria Avenue and Colorado Road (Figure 2-1). The photovoltaic solar panel system would have an estimated generating capacity of 13.5 kilowatts, and an estimated annual generating capacity of 21,595 kilowatt-hours.

FIGURE 2-1
CONSTRUCTION MATERIAL STAGING AREA



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2.2.1 Construction Elements

Construction of the Proposed Action/Project is anticipated to take approximately five months. Construction would be undertaken between the months of October through February, outside of the Swainson's hawk nesting season, if possible. Construction materials and associated equipment would be staged onsite within the District-acquired 30 foot permanent easement and within close proximity to the planned pipeline path as shown on Figure 2-1. If necessary, the District anticipates that excess project materials, equipment, or machinery could be stored in a remote District managed storage yard and materials could be hauled into the project site if needed.

Site Preparation:

Prior to project commencement, the District would need to acquire easements along the entire pipeline alignment and obtain necessary encroachment permits for work performed within Fresno County public rights-of-way. The Proposed Action/Project would disturb a segment of adjacent properties on the west side of South James Road between West Adams Avenue and 650 LF south of West Sumner Avenue. Prior to construction, the District would purchase and acquire necessary entitlements for an easement acquisition approximately 30 feet wide and one-half mile in length for the pipeline connection pathway. The Proposed Action/Project would disturb grounds along Fresno County Assessor Parcel Numbers (APN): 030-420-018, 030-420-019 and a portion of 030-180-041.

During construction, West Sumner Avenue would need to be temporarily closed. Only one occupied residential property exists along West Sumner Avenue on APN 030-420-020 (26726 West Sumner Avenue); however 30 days prior to ground disturbance, the contractor would notify the property owner to coordinate schedules, property access, or temporary detours. The residential property could be accessed by alternative routes through construction.

Pump Station and Canal Turnout:

The pump station at WDS-Towne Ditch 6 and transmission pipeline are designed for conveyance of 15 cubic feet per second (cfs). The pump station structure footprint size would be approximately 20 feet by 70 feet wide, which includes turnout connection, pump structure, pump, and discharge pipeline. The pump station would be powered by Pacific Gas and Electric (PG&E), a power line connection would need to be introduced directly into the Proposed Action/Project site by the means of connecting to nearby utility power lines. Assuming a monthly pump station utilization factor of 85%, the maximum water transfer capacity would be approximately 765 AF/month.

24-inch Diameter PVC pipeline:

The pipeline trench path would be excavated in a "V" shape using an excavator/backhoe approximately four foot wide at bottom by approximately six foot deep. The pipeline would be installed incrementally at 600-LF followed by backfilling. Excess soil materials would be spread within a reasonable area of the Proposed Action/Project area or stockpiled onsite for future use to repair earthen canal banks or areas with drainage pattern issues. The 24-inch diameter pipeline installation would extend from the WDS-Towne Ditch 6 proposed pump station site, approximately 680 LF generally east with one 45 degree and one 22.5 degree bend to approach

perpendicularly to South James Road. The pipeline would then continue approximately 1,770 LF south-southwest where it would connect with the South Canal. The proposed alignment would cross West Sumner Avenue, a Fresno County road south of the Proposed Action/Project site. A section of the Fresno public right-of-way at West Sumner is anticipated to be open-cut trenched to install the pipeline underneath the roadway. During construction, West Sumner Avenue may need to be temporarily closed. One occupied residential property exists along West Sumner Avenue on APN 030-420-020 (26726 West Sumner Avenue) between South James Road and South Calaveras Avenue. Prior to nearby ground disturbance, the contractor would notify the property owner within 30 days to coordinate schedules, site access, and temporary road detours.

The proposed Action/Project construction activities would comply with Fresno County Noise Ordinance, §8.40 Noise Control, as construction activities would take place after six a.m. and no later than nine p.m. between Monday through Friday, or after seven a.m. or before five p.m. on Saturday or Sunday¹. However, construction work is not expected to occur during weekends.

Flowmeter and SCADA Installation:

The installation of a flow meter and the SCADA equipment would include sensors, data controllers, and a 15 to 20 foot tall antenna for radio transmission. The SCADA equipment would be powered through a site connection to PG&E power lines. The system equipment would be housed adjacent to the proposed pump structure in order to monitor and control water movement flows between the WDS and EDS earthen canals. In addition, the onsite installation of the SCADA system would be integrated with the District's office for remote management capability.

Power Poles:

Construction of the Proposed Action/Project would occur in close proximity to existing PG&E overhead electrical lines located along the west side and parallel to South James Road. As such, the pump station would require the installation of approximately four to five new utility power poles and a transformer to provide electric service connection to the pump station. Electrical lines would need to extend approximately 700 LF to connect to existing overhead PG&E power lines along South James Road.

Since utility poles are often the highest and most prominent point in a landscape, birds perch on the poles to hunt or rest. All new utility power poles would be equipped with raptor protection perches at the top of each pole to provide raptors species a high spot to rest and survey the area for prey. Excavation activities associated with the installation of the new utility power poles are subject to Health and Safety Code (HSC) Section 7050.5 and Public Resource Code (PRC) Section 5097.98 in the event of inadvertent discovery of any human remains or cultural resources.

Photovoltaic Solar Panels:

¹Ordinance Code of Fresno County, California, Chapter 8.40 Noise Control Ordinance. Accessed June 6, 2014. <https://law.resource.org/pub/us/code/city/ca/Fresno%20County,%20CA%20Reformat%20with%20tab%20placeholders%20thru%20supp%20%237.pdf>

The District currently receives its electric power service from PG&E. A majority of the energy consumed by the District is to serve power to the lift pumps and well pumps throughout the District service area. The District would connect its existing District office SCADA system with the Proposed Action/Project site for remote site management capability. Although, the pump structure at Towne Ditch-6 and SCADA systems would primarily be powered by PG&E, the Proposed Action/Project would include photovoltaic solar panels to partially offset the District's long-term electric energy usage in order to operate the new pump station.

The photovoltaic solar panels would be located on a nine acre parcel owned by the District. The nine acre site is located at the southeast corner of West Silveria Avenue and Colorado Road in the northeast area of Tranquillity, APN 030-260-034. The property is designated as an agricultural land use by the Fresno Countywide General Plan Land Use Diagram and is zoned AL20 Limited Agricultural by Fresno County. The subject property is bounded by light manufacturing to the west, and agricultural lands to the north, east, and south.

The photovoltaic solar panel system would have an estimated generating capacity of 13.5 kilowatts, and an estimated annual generating capacity of 21,595 kilowatt-hours. The facility would be able to generate approximately 33% of the energy needed to operate the new pump station (21,595 kWh/yr versus 64,845 kWh/yr) for an estimated 25-year pump station lifespan.

FIGURE 2-2
SOLAR FACILITY



Section 3 Affected Environment & Environmental Consequences

To satisfy the need to consider environmental impacts of the action pursuant to both NEPA and CEQA, possible impacts to resources were analyzed using an initial study checklist adapted from the CEQA Guidelines Appendix G. Where there is a possibility for the Action/Project to affect a specific resource, there is a discussion of the direction and magnitude of the impact.

The District processes its CEQA documents through the Fresno County Association of Governments and the Recorder Office of the County of Fresno. The County processing rules and regulations require that written explanations be presented for each issue which is to be addressed.

3.1 Resources Not Analyzed in Detail

3.1.1 Indian Sacred Sites

The Proposed Action/Project does not involve Federal lands. Therefore there is no impact to Indian Sacred Sites as defined in EO 13007.

3.1.2 Indian Trust Assets

Indian Trust Assets are legal interests in assets that are held in trust by the United States government for federally recognized Indian tribes or individual Indians. There are no Indian reservations, Rancherias or allotments within 25 miles of the Proposed Action/Project area. (Appendix F).

3.1.3 Environmental Justice

Executive Order 12898, "Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations" requires federal agencies, to the greatest extent practicable, and as permitted by law, to achieve EJ by identifying and addressing disproportionately high and adverse human health and environmental effects, including interrelated social and economic effects, of their programs, policies and activities on minority populations and low-income populations.

The Proposed Action/Project, East-West Intertie Project would physically connect two separate distribution systems within the District. While the community of Tranquility is considered a disadvantaged community, the temporary effects of construction would not result in significant adverse human health and environmental effects, including interrelated social and economic effects on minority populations and low-income populations.

3.2 Resources Analyzed

I. AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista?

There are no scenic vistas near the Proposed Action/Project site and therefore, no impacts would occur to any scenic vistas in the County as a result of Action/Project implementation.

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No Impact

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b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Proposed Action/Project would not result in any substantial impact on existing scenic resources, such as the existing trees and agricultural landscapes near the Proposed Action/Project site/s. There are no identified historic buildings or scenic highways near the proposed Action/Project site. No impacts would occur.

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c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The Proposed Action/Project components would occur within District owned properties located in rural agricultural land. The proposed pipeline and pump station would occur in a District owned 30-foot easement. The 24-inch diameter pipeline installation would be underground and backfilled to its original ground level. The pipeline intertie alignment would be underground and cross West Sumner Avenue, a county road south of the proposed Action/Project site. A four foot wide section by six foot deep of the Fresno County road would be temporary demolished to install the pipeline underneath the West Sumner Avenue

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roadway. All disturbed and displaced earthen materials would be restored to its original state upon completion.

The photovoltaic solar panels would be low in height and set back from the edges of the site, limiting visibility of the facility from passing vehicles. No impacts to its surroundings or the site's character are anticipated as a result of the photovoltaic solar panels.

As such, the proposed Action/Project would not degrade Proposed Action/Project site's existing character or quality of its surroundings. No impacts would occur.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The Proposed Action/Project would occur in a rural agricultural setting within District owned property. The proposed pump station and pipeline intertie alignment would have minimal visual presence. All demolition, ground disturbance or displacement of materials would be restored to its original state at Action/Project completion. Additionally, the photovoltaic solar panels would be low in height and set back from the edges of the site, limiting visibility of the facility from passing vehicles. The solar panels would have an anti-reflective coating to reduce the reflectivity to less than that of water or glass surfaces. There are no Action/Project related components that would create substantial daytime or nighttime glare that would affect its surroundings.



II. AGRICULTURE AND FOREST RESOURCES

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Less than
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No Impact

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The Proposed Action/Project would occur on District owned easements that would span across two properties identified as Farmlands of Statewide of Importance by the California Department of Conservation, Farmland Mapping and Monitoring Program.

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The construction trenching would occur through APN's 030-420-019 and 030-418-041. At construction completion, the disturbed lands would be backfilled and restored to their original state. The

pre-construction and post-construction land uses would remain the same.

The photovoltaic solar panels would be placed on a nine acre parcel that is owned by the District (APN 030-260-034). Although the nine acre parcel is designated as Farmland of Statewide Importance, the use as a power generator for the District to supplement their energy needs is an allowed conditional use under the Fresno County AL20 zone district. Any impacts would be less than significant.

- b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The Proposed Action/Project would occur on District owned easements through two parcels and a third nine acre parcel that is also owned by the District. The properties that would contain the pipeline are identified within the Exclusive Agriculture (AE-20) zone district on the Fresno County Zone Map, and the nine acre parcel is identified within the Agriculture Limited (AL20) zone district on the Fresno County Zone Map. Construction of the proposed pipeline would disturb lands under Williamson Act Contract numbers AP-2587 and 1227; however there is no proposed land use policy change or cancellation or non-renewal of a Williamson Act Contract. There are no anticipated conflicts with agricultural land uses as a result of Proposed Action/Project implementation.

- c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

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There are no forest lands within the boundary of the Proposed Action/Project.

All disturbed and displaced lands as a result of the proposed Action/ Project implementation would be located within District owned easements. No impacts would occur.

- d) Result in the loss of forest land or conversion of forest land to non-forest use?

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See remarks under the response to Resource II.c.

- e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

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Construction of a new pump station and the interconnection of two canals would benefit the continuation of farmable lands within the District. No substantial changes in the existing environment would occur as a result of the Proposed Project/Action implementation. No impacts would occur.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

- a) Conflict with or obstruct implementation of the applicable air quality plan?

The Proposed Project/Action would not conflict with any applicable air quality plan within the region. During construction, the selected contractors would be required to comply with the San Joaquin Valley Air Pollution Control District's dust generation and control regulations. Due to a portion of the Proposed Project/Action disturbing land in a linear fashion, the Road Construction Emission Model Version 7.1.5.1 (RCM) created by the Sacramento Metropolitan Air Quality Management District (SMAQMD) was utilized to calculate air quality emissions. The RCM is typically used for linear construction projects such as new roadway, road widening, road overpass, levees, or pipeline type of Projects. In addition to the RCM, the California Emissions Estimator Model (CalEEMod), Version 2011.1.1, was utilized to generate potential criteria pollutants emissions at the solar site. The air quality calculations from both models have been completed and are contained in **Appendix B**. Combined levels of ROG, NO_x and PM₁₀ would be at 2.38 tons/year, 4.59 tons/year and 0.29 tons/year which are all below the 10 ton/year significance threshold, as seen in **Appendix B**. Any impacts to regional air quality plans or standards as a result of potential emissions would be less than significant

- b) Violate any air quality standard or contribute substantially to an

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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existing or projected air quality violation?

See remarks under the response to Resource III. c).

- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

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The Proposed Project/Action, when added to other existing and proposed actions, would not contribute to cumulative impacts to air quality since construction activities are short-term and operations would not result in cumulative adverse air quality impacts.

- d) Expose sensitive receptors to substantial pollutant concentrations?

See remarks under response to Resource III.c) The Proposed Project/ Action is located within a half mile distance of approximately five to seven rural residential homes along South James Road and one home along West Sumner Avenue (pipeline portion), and 185 feet from a rural residential neighborhood (solar portion) the Proposed Project/Action would not expose sensitive receptors to substantial pollutant concentration. Therefore, no impacts would occur.

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- e) Create objectionable odors affecting a substantial number of people?

The Proposed Action/Project would not create objectionable odors. Proposed Action/Project construction may have the potential to result in diesel fuel combustion odors from construction equipment; however, the construction period would be short-term. Diesel-type

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construction odors are not typically detectable off-site and therefore are not considered a “nuisance” by the general public. The operation of the Proposed Action/Project would not be a source of odors.

IV. BIOLOGICAL RESOURCES

Would the project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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A search of the California Department Fish & Wildlife's CNDDDB for the Tranquillity and Cantua Creek 7.5 minute quadrangle maps and the surrounding ten quadrangles maps that include Firebaugh, Mendota Dam, Gravelly Ford, Coit Ranch, Jamesan, Levis, San Joaquin, Lillis Ranch, Tres Pecos Farms, and Westside was conducted to review records of sensitive species, and habitats in the Proposed Action/Project area. These sensitive species and habitat records are listed in Appendix C- Biological Reconnaissance Survey Report. A list of potential sensitive wildlife, plants, and associated habitats was developed and used to focus the biological and habitat surveys. Other sensitive species known to occur in the general region of the project site were reviewed, searched for, and considered in the field surveys.



A reconnaissance-level field survey of the Proposed Action/Project sites was conducted on October 7, 2013, October 9, 2013, July 28, 2014 and August 9, 2014 by Halstead & Associates Environmental and Biological Consultants.

Wildlife species which inhabit the Proposed Action/Project area are typical of the Valley floor agriculture lands including orchards, row crops, irrigation canals, and farm residences. Coyote, gray

fox, domestic dog and cat, striped skunk, and Virginia opossum are the predominant large mammals in the area. Game species such as the California Quail and Mourning Dove along with other species like the California ground squirrel, Audubon Cottontail, and pocket gopher occur in the Proposed Action/Project area. A variety of other birds use the area during migration seasons. Common reptiles include the western fence lizard, side blotch lizard, and gofer snakes. Amphibians along irrigation canals include tree frog, western toad, and bullfrogs.

Habitats for sensitive species (e.g. vernal pools, ponds, creeks, rivers, marshes, swamps, sloughs, sandy washes, tidal estuaries, cliffs, caves, riparian, meadows, woodlands, savannahs, playas, alkali sink habitat, chenopod scrub habitat, juniper-sage flats, grasslands with rolling hills) were not observed on or adjacent to the Proposed Action/Project area.

The plant species that inhabit the Proposed Action/Project area are typical of the Valley floor agricultural lands. Lands surrounding the proposed pipeline and in the general vicinity are leveled, irrigated, and actively farmed agricultural lands including row crop, orchards, disked fields, and the urban Community of Tranquillity. The almond orchard is clean farmed with little to no vegetation growing in or along the proposed pipeline. The existing irrigation canals and their banks where the proposed pipeline would interconnect have species such as cattail, burhead, sedge, water primrose, cheese weed, puncture vine, Russian thistle, brome grass, and bermuda grass. Vegetation growing on surrounding agriculture lands and in the general vicinity includes weedy and annual species such as black mustard, johnson grass, seaside heliotrope, annual sunflower, and prickly lettuce. Habitats or microhabitats for sensitive plant

species were not found to be present on the proposed pipeline path or the nine acre parcel but do occur in the greater Project vicinity.

A variety of sensitive wildlife, plants, and habitats occur in the general region of the Proposed Action/Project. Potential issues involve nesting bird raptors and birds and their nests. The CDFW's CNDDDB shows that several Swainson's Hawk records occur in the general region of the Proposed Action/Project site. A complete list of potentially present sensitive species and habitats in the Action/Project area and adjacent ten quadrangles is included in **Appendix C**. With the implementation of the following mitigation measures the Proposed Action/Project would have a less than significant impact:

IV.a-1) If construction occurs during the nesting period, a protocol Swainson's Hawk survey shall be conducted in accordance with the California Department of Fish and Wildlife's *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*. The CDFW requires surveys and considers impacts up to 0.5 miles away for nests and 10 miles away from foraging habitat for the Swainson's Hawk.

IV.a-2) Prior to any construction activities in the bird nesting season of February through August, a preconstruction (one-day) survey shall be conducted by a qualified biologist for nesting birds and their nests. Results of the preconstruction survey shall be prepared in a letter and given to Provost and Pritchard Engineering Group, Tranquillity Irrigation District, and CDFW prior to any construction activities.

IV.a-3) Because the State threatened Swainson's Hawk is known to nest in the general vicinity of the Proposed

Action/Project, and some large Eucalyptus trees occur near the site, construction activities should occur during the non-nesting season of birds (September thru January) if possible.

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

At Project construction completion, the proposed Project would restore affected riparian habitat and the natural environment to its original or similar conditions. Potential impacts to riparian habitat or other sensitive natural communities would be mitigated as described in the response to Resource IV-a). Impacts are anticipated to be less than significant with mitigation measures incorporated.

- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Habitats for sensitive species such as vernal pools, ponds, creeks, rivers, or marshes were not observed on or located adjacent to the proposed solar site and pipeline. Therefore, jurisdictional waters are considered absent from the Proposed Action/Project site. There would be no impact

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Proposed Action/Project would not

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install anything that would affect wildlife or fishery movement, migratory corridors or nursery sites.

The Proposed Action/Project does not threaten to impact or eliminate any known animal communities; however mitigation measures included for response to Resource IV.a) to ensure construction activities of the Proposed Action/Project does not inadvertently encroach any potential habitat sites. Therefore there would be no impact.

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Proposed Action/Project is not in conflict with District Policies or Fresno County General Plan policies relevant to natural resources protection; therefore, mitigation measures are not warranted for this resource checklist item. The Proposed Action/Project would have no impact associated with this checklist item.

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Proposed Action/Project would not conflict with any local ordinances or policies protecting biological resources, conflict with a habitat or natural community conservation plans.

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V. CULTURAL RESOURCES

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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A Class III inventory was conducted for the East-West Intertie Water Conservation Project (13-MPRO-189), Tranquillity Irrigation District, Fresno County, California. Two separate areas were surveyed in the vicinity of Tranquillity, Fresno County, California. The first, a roughly 2.5 acres study area, is located on private land in Section 18, Township 15 South (T15S), Range 16 East (R16E), Mount Diablo Base Meridian (MDBM), approximately 2 miles southwest of the urban limits of the “census designated place” (CDP) of Tranquillity. The second, an approximately 9 acre block, is located in Sections 5 and 8 (T15S/R16E; MDBM) on the eastern edge of the Tranquillity CDP.

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This study was conducted by Petra Resource Management, with David S. Whitley, Ph.D., RPA, serving as principal investigator. Background studies and fieldwork for the survey were completed in September and October 2013 and August 2014. The study was undertaken to provide compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.

A records search of site files and maps was conducted at the Southern San Joaquin Valley Information Center (IC), California State University, Bakersfield. It was determined that no previous archaeological surveys had been conducted and no cultural resources had been recorded within a 0.5-mile radius of the APE. Based on the results of the records search, the archaeological

sensitivity of the current Action/Project area is unknown.

No newly identified cultural resources of any kind, or previously recorded sites were found to be present within the APE. Based on the absence of historical properties or resources within the project area, a determination of no effect for any future use or development within this area is recommended.

The proposed Project location is not a historic resource for the purpose of CEQA review. Furthermore, Project construction specifications would include specific “stop work” provisions and follow up instructions should identifiable resources or human remains be inadvertently encountered.

In the unlikely event that buried archaeological deposits are encountered during construction, excavation, trenching, grading, leveling, or development related activities, work in the immediate vicinity of the discovery must cease until the finds have been evaluated by a qualified archaeologist pursuant to California Health and Safety Code (HSC) §7050.5 and Public Resource Code (PRC) §5097.98 regulations related to inadvertent discoveries of any human remains or cultural resources. Should human remains be encountered during development, the County Coroner must be contacted immediately; if the remains are determined to be Native American, then the Native American Heritage Commission must be contacted. Impacts to historical resources would be less than significant.

- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

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On October 2013 and August, 2014, a cultural resource inventory of the Proposed Action/Project area was

conducted by Associate Archaeologist, Colin Rambo, BA and Jena Rizzi, BA. The field method included an intensive pedestrian examination of the ground surface for evidence of archaeologist sites, in the form of artifacts, surface features, or other archaeological indicators. The APE was examined by walking two parallel transects across the project area, spaced approximately 15-m apart.

The site survey results determined that the site has been previously disturbed for agricultural use. The current APE consists of a graded dirt access road for an almond orchard, and is adjacent to paved roads. Ground surface visibility, as a result, was excellent. No new cultural resources of any kind were identified within the study area. Impacts are anticipated as less than significant.

- c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

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See remarks under response to Resource V.a and Resource V.b.

- d) Disturb any human remains, including those interred outside of formal cemeteries?

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See remarks under response to Resource V.a and Resource V.d.

VI. GEOLOGY AND SOILS

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

The Proposed Action/Project would occur on property managed by the District and would not be accessible to the general public. Operation and management of the Proposed Action/Project would generally occur at a remote location. Only qualified individuals and District staff would have access to control or provide on-site general maintenance service on an as-need basis.

- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

According to Table 4 in Special Publications 42, prepared by the California Divisions of Mines and Geology, the nearest earthquake fault zones are Nunez Fault located approximately 28 miles south-southwest, Ortigalita Fault approximately 33 miles west-northwest, and the San Andreas Fault approximately 39 miles southwest of the Proposed Action/Project site. The Proposed Action/Project is not listed as an area to be affected by earthquake fault zones. As this Project does not involve the construction of residential development, or new facilities accessible to general public; the risk to people or structures by earthquake, ground shaking, ground failure, liquefaction or landslides is negligible and would be

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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considered as less than significant.

ii) Strong seismic ground shaking?

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See remarks under response to Resource

IV.a.i.

iii) Seismic-related ground failure,
including liquefaction?

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See remarks under response to Resource

IV.a.i.

iv) Landslides?

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See remarks under response to Resource

IV.a.i.

b) Result in substantial soil erosion or
the loss of topsoil?

The Proposed Action/Project would not
create substantial soil erosion or loss of
topsoil. Once construction of the pipeline
and project components is completed, all
disturbed areas, trench path, and
construction staging areas would be
backfilled if necessary and restored to its
original condition. Impacts would be less
than significant.

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c) Be located on a geologic unit or
soil that is unstable, or that would
become unstable as a result of the
project, and potentially result in on-
or off-site landslide, lateral
spreading, subsidence, liquefaction
or collapse?

The Proposed Action/Project area is
located on stable ground surface. The
slope of the land on the various portions
of the Proposed Action/Project parcels
are both fairly mild with 0 to 2 percent
slopes. According to the U.S.D.A.
Natural Resource Conservation Service
the Proposed Action/Project location
contains two soil types: Gepford clay, 0
to 1 percent slope, and Atlaslough clay
loam, 0 to 1 percent slopes (see
Appendix D). Any potential occurrences
of on-or-off site landslide, lateral
spreading, subsidence, liquefaction or
collapse are less than significant. Impacts
would be less than significant.

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d) Be located on expansive soil, as

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defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

The Proposed Action/Project does not include the construction of residential habitable or commercial structures. Therefore, the Proposed Action/Project would not create substantial risk to human life or properties. No Impacts would occur.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The Proposed Action/Project does not involve the construction of residential habitable structures. As such, the Proposed Action/Project does not include installation of septic tanks or wastewater disposal systems therefore this provision does not apply. There would be no impact.

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VII. GREENHOUSE GAS EMISSIONS

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

The Proposed Action/Project is estimated to generate 467.7 metric tons of Carbon Dioxide equivalent, which is well below the 25,000 metric tons action threshold for greenhouse gas emissions. Furthermore, as described in Section III, Air Quality, the ROG, NO_x and PM₁₀ would be at 2.38 tons/year, 4.59 tons/year and 0.29 tons/year, respectively. The Air District's threshold is 10 tons/year; therefore the impact would be less than significant. Refer to **Appendix B** for computations and basis for conclusion. Impacts would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The Proposed Action/Project would not conflict with any applicable plan, policy or regulation adopted for reducing the emissions of greenhouse gases, because the Proposed Action/Project is estimated to generate emissions well below the metric tons action threshold of 25,000. Refer to **Appendix B**. Impacts would be less than significant

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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VIII. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

. The Proposed Action/Project does not involve or require the management of hazardous materials, transportation of hazardous materials, use hazardous materials, or dispose hazardous materials outside of standard material need for project construction.

The photovoltaic solar panels would not create a significant hazard to the public health or become a hazard to the environment. No impacts would occur as a result of project implementation.

- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The operation of the Proposed Action/Project would not require or involve the long term use of any hazardous materials as defined by California Department of Toxic Substances Control². No impacts would occur as a result of Project implementation.

- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The Proposed Action/Project would not emit hazardous emissions or handle hazardous materials or produce hazardous waste within one-quarter mile

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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² California Department of Toxic Substances Control, Defining Hazard Waste, http://www.dtsc.ca.gov/HazardousWaste/upload/HWMP_DefiningHW111.pdf

distance of a school or planned school facility. No impacts would occur as a result of Proposed Action/Project implementation.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Pursuant to Government Code Section 65962.5, the DTSC – ENVIROSTOR database does not identify any active hazardous site locations within the Proposed Action/Project areas. The Proposed Action/Project sites are not listed as a hazardous materials sites and the sites are not listed in the “Cortese list”. As such, there would be no impact.

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- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The Proposed Action/Project does not propose to build any dwelling units or require onsite personnel near an airport that would result in a safety hazards. The Proposed Action/Project site is located approximately 2.8 miles southwest of a private crop duster air strip- Western AC Aviation. The San Joaquin Airport is located 2.8 miles south southeast project site. Fresno Yosemite International Airport is located approximately 31 miles north northeast of the proposed project site. The project site is not located within an adopted airport land use plan nor would result in a safety hazard for people residing or working in or near the subject Project area. No impact would occur as a result of Action/Project implementation.

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- f) For a project within the vicinity of

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a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

A review of an aerial map dated September 13, 2013, indicated one private air strip is located within the 2.8 miles to the east-northeast of the Proposed Action/Project. The Proposed Action/Project does not include the construction of any dwelling units or would require daily onsite staff to monitor the pump station or solar panels. Therefore no impact would occur related to this checklist item

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The Proposed Action/Project would not interfere or disturb emergency access areas or plans. Furthermore, there are no adopted emergency response plans or emergency evacuation plans for this general area. No impact would occur associated with this checklist item.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

There are no structures or residential dwelling units included in the Proposed Action/Project. The Project would not expose people or structures to risk of loss, injury, or death involving wildland fires. There is no impact anticipated.

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IX. HYDROLOGY AND WATER QUALITY

Would the project:

- a) Violate any water quality standards or waste discharge requirements?

The operation of the Proposed Action/Project area is subject to a Storm Water Pollution Prevention Plan based on Section 401 and Section 402 requirements. A draft Storm Water Pollution Prevention Plan and application would be prepared and submitted to the Regional Water Quality Control Board for review and approval. A copy of the approved SWPPP would be on-site at all times, and would be available for review, reference, and operation compliance. There would be no impact.

- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The Proposed Action/Project would not deplete groundwater supplies nor substantially interfere with groundwater recharge operations. There would be no impact.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The Proposed Action/Project would not substantially alter the existing drainage pattern of the District's EDS or WDS.

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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Construction of the pump station would minimally change drainage patterns as the pump station structure footprint size would be approximately 20 feet by 70 feet wide.

The solar portion of the Proposed Action/Project would minimally change drainage patterns as a result of Project build-out. As less than 0.25 acre of the 9-acre area would be covered in impermeable surfaces, runoff patterns would not significantly change.

Potential impacts are anticipated to be less than significant.

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As noted in response to Resource IX. c), the completion of the Proposed Action/Project would not substantially alter the site's existing drainage patterns. During construction, however, a Stormwater Pollution Prevention Plan would be completed. The selected general contractor would be required to submit a Notice of Intent to comply with the General Permit order to discharge storm water associated with construction activities (WQ Order No. 2009-0009 DWQ) with the State Water Resources Control Board. The Proposed Action/Project would be accomplished with minimal modification of site drainage patterns or change to drainage pathways or disturb the channel's volume. As such, potential impacts are anticipated to be less than significant

- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of

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polluted runoff?

See remarks under response to Resource
IX. d).

- f) Otherwise substantially degrade water quality?

The Proposed Action/Project would not lead to degraded water quality. Compliance with SWPPP conditions would avoid any adverse water quality discharge events. The impact would be less than significant.

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- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

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The Proposed Action/Project does not propose the construction of any residential dwelling units. Therefore, no impacts would occur as a result of the Proposed Action/Project implementation.

- h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The Proposed Action/Project does not include the construction of any dwelling units or necessitate onsite staffing. The proposed pump station and intertie pipeline project are located within the Friant Dam Failure Inundation zone. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs), the majority of the proposed Action/Project is identified within FEMA Zone X and a minor portion of the pipeline is located in the Zone A, as noted in **Appendix E** (FIRM# 06019C2025H)³. The FEMA Zone X is considered moderate to low risk areas with minimal flood occurrences, usually in the 100 year and 500 year flood zones. The small portion of the Proposed Action/Project site near the EDS is identified as Zone A. FEMA

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³ Federal Emergency Management Agency, On-line Map Service Center, Map ID #06019C2025H, <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=91114935&IFIT=1>

Zone A is considered a high risk area with a 1% annual chance of flooding and 26% chance of flooding over a standard 30-year mortgage. As such, due to the Proposed Action/Projects intent to regulate and distribute water, any impacts associated with this checklist item are considered to be less than significant.

- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The Proposed Action/Project would not construct any dwelling units or necessitate permanent onsite staffing. The proposed pump station and intertie pipeline are located within the Friant Dam Failure Inundation zone. Thus, the proposed pump station, intertie pipeline, and canals are designed to optimize water control and to reduce the risk of canals from overtopping in the event of dam failure to occur which could result in the premature discharge of water to areas downstream. The Proposed Action/Project would be designed to provide conveyance efficiency and to reduce seepage loss due to utilizing earthen canals. As such, impacts would be less than significant.

- j) Inundation by seiche, tsunami, or mudflow?

The Proposed Action/Project area is located over 85 miles east from the Pacific Ocean and is not subject to inundation by tsunami. The existing canals, which would convey waters to the Proposed Action/Project area, are not located in an enclosed body of water, which indicates that inundation by seiche would not occur. The Proposed Action/Project is located on level ground. Therefore, a mudflow emergency is less than likely to occur. There would be no impact.

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X. LAND USE AND PLANNING

Would the project:

- a) Physically divide an established community?

The Proposed Action/Project area would be located within an easement and property managed by the District. The pump station and pipeline would be introduced at a specific site in a rural agricultural setting approximately 1-mile south of the Census Designated Place of Tranquillity, and the photovoltaic solar panels would be located on a District owned property just east of the Census Designated Place of Tranquillity, as illustrated in Figure 1-1. Therefore, no impact would occur as a result of Proposed Action/Project implementation.

- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The Proposed Action/Project is consistent with the long term plan policies of the District and Fresno County General Plan. The Proposed Action/ Project would provide a steadier, efficient, and more reliable water supply for local growers. The Proposed Action/Project is consistent with District and Fresno County land use policies. There would be no impact.

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The Proposed Action/Project would transfer water supplies between two canals within the District jurisdiction, the WDS and the EDS. Since no natural stream course alteration would occur, the proposed action would not conflict with any applicable habitat conservation plan or natural community conservation plan.

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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There are no impacts anticipated.

XI. MINERAL RESOURCES

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

The Proposed Action/Project site is not designated by the State Department of Mines and Geology as a site with known rock and sand resources and requiring protection from development. The Proposed Action/Project does not bring about the loss of any known mineral resources, nor would it result in the loss of access to known mineral resources of value to the region. Such designation has not been conferred on the sites and the Proposed Action/Project does not restrict access to the sites for any purpose in the future. There would be no impact related to this checklist item.

- b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

The Proposed Action/Project would not result in the loss of a locally-important mineral resource recovery site which has been designated as such by an applicable agency of jurisdiction. According to the Fresno County General Plan Background Report, there are no mineral resource recovery sites delineated near the Proposed Action/Project⁴. Such designation has not been conferred on the sites and the Proposed Action/Project would not restrict access to the site for any purpose in the future. There would be no impacts associated with this checklist item.

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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⁴ Fresno County General Plan Background Report, Sec.7.9 Mineral Resources

XII. NOISE
Would the project:

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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- a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The Proposed Project/Action is located in the rural agricultural environment in Fresno County. Approximately five rural residential homes are located east and north of the Proposed Action/Project, along South James Road. The photovoltaic solar panel component of the Proposed Action/Project would occur in the urbanized areas in Tranquillity, within a nine acre District property. Average daytime noise levels near the project site range between low-to-mid 50's dBA. Peak agricultural community noise levels in western Fresno County range between high 60's to 70 dBA. Furthermore, agriculture activities [in the vicinity] could have more important influence on the noise environment [near] agriculture communities during peak summer months⁵. The long-term operation of the pump station would be aboveground, but would not generate noise which would expose people to noise levels that would exceed the local noise standards. Similarly, the long term photovoltaic solar panel operation would not generate noise levels that would exceed the local noise standards.

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During construction, the selected contractor would be required, according to the construction specifications, to abide with all applicable noise standards set forth by the General Plan and the Fresno Noise Ordinance as follows: Fresno County General Plan: Policy HS-G.6 The County shall

⁵ Fresno County General Plan Background Report, Sec. 10.5 Community Noise Survey

regulate construction-related noise to reduce impacts on adjacent uses in accordance with the County's Noise Control Ordinance.

Fresno County Noise Ordinance:

Noise sources associated with construction are exempt from the noise standards, provided such activities do not take place before six a.m. or after nine p.m. on any day except Saturday or Sunday, or before seven a.m. or after five p.m. on Saturday or Sunday;

Any noise created by construction activities would not adversely impact adjacent residents as the construction activities will be restricted to daytime hours and will be short-term in nature. Impacts are anticipated to be less than significant.

- b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

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See remarks under response to Resource XII.a.

- c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

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See remarks under response to Resource XII.a.

- d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

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See remarks under response to Resource XII.a.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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This resource item does not apply to the Proposed Action/Project, as it is not located within an adopted or planned

airport land use plan. There would be no impact related to this resource item.

- f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

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See remarks under response to Resource XII.e.

XIII. POPULATION AND HOUSING

Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

The Proposed Action/Project would intertie two neighboring canals within the Tranquillity Irrigation District and would generate a portion of the power needed to operate the pump station. The District anticipates the Proposed Action/Project would increase water conservation by 630 AF/year. The District would continue to provide water service to local growers and domestic customers. The water that would be conserved by the Proposed Action/Project would reduce groundwater pumping or be available to the existing growers. The Proposed Action/Project's scope of work does not include construction of residential or population growth inducing development. As such, the Proposed Action/Project would have no significant impact related to this checklist item.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

The pump station and pipeline would be located on a District owned and managed easement. The solar panels would also be placed on a District owned nine acre lot. As such, the Proposed Action/Project would not displace housing or need to replace existing housing as a result of constructing the pipeline or the solar panels. No impacts would occur related to this checklist item.

- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

See remarks for response to Resource XII.b.

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. PUBLIC SERVICES

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

The Proposed Project/Action would not require additional governmental services to be created or provided as a result of implementation. The Proposed Action/Project would be managed and operated from a remote location by the District. The Proposed Action/Project would have no impact.

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
Fire protection?				
<u>See remarks under response to Resource XIV.a.</u> Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>See remarks under response to Resource XIV.a.</u> Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>See remarks under response to Resource XIV.a.</u> Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>See remarks under response to Resource XIV.a.</u> Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>See remarks under response to Resource XIV.a.</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XV. RECREATION

Would the project:

- a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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The Proposed Action/Project is located on lands owned and operated by the District. Public access would not be allowed. The Proposed Action/Project would not increase need for recreational facilities within the community, therefore there would be no impact associated to this checklist item.

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**XVI.
TRANSPORTATION/TRAFFIC**

Would the project:

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

The Proposed Action/Project does not include dwelling units or structures that would increase traffic volume or conflict with the performance of the circulation system.

It is anticipated that construction activities would temporarily generate an average of 20 daily trips, however; the construction of the Proposed Action/Project would not create a significant change to existing traffic volumes that would conflict with a transportation plan, ordinance or policy establishing transportation measures of effectiveness. Construction activities would be performed on land managed by the District. The proposed pipeline alignment would cross West Sumner Avenue, located south-southeast of Towne Ditch 6. This Fresno County road is planned to be temporarily closed, as surface pavement would be demolished to install the intertie pipeline. Prior to road demolition, the general contractor would obtain an encroachment permit from Fresno County. Furthermore, the contractor would notify the property owner located on West Sumner Avenue within 30 days prior to trenching activities across West Sumner Avenue to coordinate resident schedules, site

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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access, and temporary road detours if needed. During construction, West Sumner Avenue would be closed to east-west traffic near the intersection of S. James Road and W. Sumner Avenue. Traffic traveling along S. James Road would not be affected during construction. A traffic control plan would be in place during this phase of the project that would detour traffic to alternative routes.

During Proposed Action/Project operation, there would be approximately 24 traffic trips annually for solar panel maintenance, and twice yearly panel washing.

The Proposed Action/Project would not affect mass transit or non-motorized modes of transportation currently in operation near the project location. There would be no increase in aircraft transportation as a result of the Project and the Project would not conflict with any adopted transportation management plan. The impacts would be less than significant as a result of this Proposed Action/Project.

- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

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The Proposed Action/Project would not conflict with an applicable congestion management program. Refer to the response to Resource XVI-a. As such, there would be a less than significant impact.

- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

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The San Joaquin Airport is approximately 2.8 miles southwest of the site while Fresno Yosemite Airport is approximately 31 northeast of the Proposed Action /Project site. The Proposed Action/Project does not include any components that would result in a substantial change in air traffic patterns or create safety hazards. There would be no impact.

- d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Proposed Action/Project does not include components planned to provide means of transportations. Furthermore, the Proposed Action/Project does not include design features that would result in the construction of dangerous roadways, multi-modal pathways, intersection or incompatible uses. The East-West Intertie Project design would not be accessible to the public. For this reason, the Proposed Action/Project would not create substantial emergency hazards due to project design. No impacts would occur that are applicable to this checklist item.

- e) Result in inadequate emergency access?

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As noted in response to Resource XVI a) the Proposed Action/Project would occur primarily on District owned property. The Proposed Action/Project would temporarily trench a section of West Sumner Avenue in order to underground the pipeline across the south side of West Sumner Avenue. A traffic control plan would be included with the encroachment permit during this phase of the Action/Project. The general contractor would notify nearby residents 30 days prior to road disturbance to facilitate emergency access near the project site. The traffic control plan would identify the detour routes that could be used while construction occurs

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along West Sumner Avenue. At project completion the Proposed Action/Project would provide adequate emergency access to the pump stations and photovoltaic solar panels. There would be no impacts to emergency access.

- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The Proposed Action/Project is located on lands managed by the District. The Proposed Action/Project does not propose dwelling units or structures that would create an increase need for public transportation, bicycle pathways, or pedestrian facilities. The Proposed Action/Project would not decrease the performance or safety of existing transportation facilities. No impacts would occur associated with this checklist item.

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XVII. UTILITIES AND SERVICE SYSTEMS

Would the project:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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Not applicable to the Proposed Action/Project. The Proposed Action/Project does not include any residential dwelling structures or commercial structures that would need connection to local wastewater treatment center. No impacts would result related to this checklist item.

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- b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Not applicable to the Proposed Action/Project. The Proposed Action/Project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. There are no impacts to this checklist item.

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- c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

See response to Resource XVII a) and b). The resource item is not applicable to the Proposed Action/Project. There are no impacts anticipated.

- d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded

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entitlements needed?

The District has rights to 13,800 AF of Federal agricultural CVP water, and 20,200 AF of Schedule 2 CVP water, which are delivered from the Sacramento-San Joaquin River Delta. The Proposed Action/Project would conserve approximately 630 AF/year by introducing the East-West Intertie pipeline. The Proposed Action/Project would enable the District to distribute water more efficiently by shortening the 2.7 miles conveyance distance down to approximately one-half mile to transfer water from the EDS to WDS. The photovoltaic solar panels would require approximately 0.05 AF per year for twice yearly panel washing. This water would be provided from the District and is well under the amount of water that would be saved by the pipeline portion of the Project. The Proposed Action/Project does not include construction of residential dwelling units or structures that would require connection to District services. The District would have sufficient water supplies available to serve its existing and future customers. There would be no impact.

- e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

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Not applicable to the Proposed Action/Project. See response to Resource XVII. a), b), and d). No impacts would occur.

- f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

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Not applicable to the operation of the Proposed Action/Project as there would be no significant amounts of solid waste generated by the proposed

Action/Project. Construction generated waste products would be transported from the site to the local landfill. The American Avenue Landfill is the nearest landfill approximately 7.3 miles northeast of the Action/Project site. There would be no impact.

- g) Comply with federal, state, and local statutes and regulations related to solid waste?

As noted in response to Resource XVII. f), this checklist item is not applicable to the Proposed Action/Project. The Proposed Action/Project operation would not generate substantial solid waste. The Proposed Action/Project would generate temporary construction related waste and debris, therefore the selected project general contractor would be required to properly dispose all construction debris, solid or liquid wastes in compliance with all federal, state, and local statutes. There would be no impact to this resource checklist item as a result of Action/Project implementation.

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***XVIII. MANDATORY
FINDINGS OF
SIGNIFICANCE***

Would the project:

- a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The analysis conducted in this EA/IS results in a determination that the Proposed Action/Project as mitigated would have a less than significant effect on the existing local environment. The Proposed Action/Project would not involve potential for significant impacts through the degradation of the quality of the environments, the reduction in the habitat or population of fish or wildlife, including endangered plants or animals, the elimination of a plant or animal community or eliminate important samples of California history or prehistory. As indicated within the analysis for each impact area within Section 3, the Proposed Action/Project would not contribute to any cumulatively considerable impacts to the environment, nor would it result in substantial adverse effects to human beings, either directly or indirectly. The Propose Action/Project would have a less than significant impact.

The District would be responsible for implementing the mitigation measures described throughout this EA/IS.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable”

Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
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means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)

The Proposed Action/Project is not part of a tiered or serial project. There are no elements of other projects which rely on the completion of the subject Proposed Action/Project. Therefore, the individual issues and their described potential impacts do not have other project(s) issues and related impacts which need to be collectively analyzed. As for the individual Proposed Action/Project impacts, there are no cumulative, collective assemblages of impacts which exceed the "less than significant impact" level. The effort to group Proposed Action/Project issues together to accomplish the cumulative impacts perspective, in fact, leads to the conclusion that the Proposed Action/Project has net positive cumulative effects, particularly as they apply to water conservation and provide the District ability to transfer water between East Distribution System to the West Distribution System. The Proposed Action/Project would have a less than significant impact.

- c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

The Proposed Action/Project objectives are such that, when implemented, they have the potential to provide a net positive gain on the environment, and therefore, on the human population. No adverse effects on the human population have been identified as being associated with the Proposed Action/Project other than short-term potential construction related impacts which have had specific mitigation measures developed to reduce potential impacts to a less than significant level.



Section 4 Consultation and Coordination

4.1 Public Review Period

The EA/IS is available for a thirty-day review period. The Bureau of Reclamation (Reclamation) intends to sign a Finding of No Significant Impact (FONSI) for this Proposed Action/Project. All comments would be addressed in response form in the FONSI. Additional analysis would be prepared if substantive comments identify impacts that were not previously analyzed or considered. The District intends to provide the public with an opportunity to comment on the Draft EA/IS and proposed Findings of Negative Significant Impacts/ Negative Declaration as required by CEQA and its implementing Guidelines.

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

The National Historic Preservation Act (NHPA) of 1966, as amended, is the primary legislation that outlines the Federal government's responsibility to cultural resources. Cultural resources include both archaeological and built environment resources. Section 106 of the NHPA requires that Federal agencies take into consideration the effects of their undertakings on historic properties. Historic properties are cultural resources that are included in, or eligible for inclusion in, the National Register. The 36 CFR Part 800 regulations implement Section 106 of the NHPA and outline the procedures necessary for compliance with the NHPA. Compliance with the Section 106 process follows a series of steps that are designed to identify if cultural resources are present and to what level they would be affected by the proposed Federal undertaking. Reclamation determined that the action to provide funding constitutes an undertaking as defined in 36 CFR § 800.16(y) and involves the type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a).

Based upon the efforts to identify historic properties within the APE Reclamation made a determination of no historic properties affected by the proposed undertaking. Reclamation initiated consultation with the California State Preservation Office (SHPO) by letter dated June 16, 2015 requesting concurrence with a finding of no historic properties affected for the project. SHPO concurred with the determination in a letter dated July, 23, 2015. (See Appendix G).

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

Section 404

Section 404 of the CWA authorizes the U. S. Army Corps of Engineers to issue permits to regulate the discharge of "dredged or fill materials into waters of the United States" (33 U.S.C. § 1344). Habitats for sensitive species such as vernal pools, ponds, creeks, rivers, or marshes were not observed on or located adjacent to the Proposed Action/Project site and

pipeline. Therefore, jurisdictional waters are considered absent from the Proposed Action/Project site. Therefore, the District would not be required to obtain permits in compliance with CWA section 404 from the United States Army Corps of Engineers, Sacramento District office.

Section 5 References

Senate Bill 194, Amended April 13, 2009, http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb_0151-0200/sb_194_bill_20090413_amended_sen_v98.html

California's Governor's Office of Planning and Research, SB 244: Technical Advisory Report: Land Use, General Plans, and Disadvantaged Communities, http://www.opr.ca.gov/docs/SB244_technical_advisory.pdf

U.S. Department of Commerce, Census Bureau- American Factfinder- CDP Tranquillity, Ca, http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP03

California Department of Toxic Substances Control, Defining Hazard Waste, http://www.dtsc.ca.gov/HazardousWaste/upload/HWMP_DefiningHW111.pdf

Fresno County General Plan Background Report, Adopted Oct 3, 2000

Fresno County General Plan, Policy Document Adopted October 3, 2000 by FC, BOS Resolution 00-534

Federal Emergency Management Agency, On-line Map Service Center, Map ID #06019C2025H, <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=91114935&IFIT=1>

Federal Registers, Indian Sacred Sites, Executive Order 13007 - <http://www.gpo.gov/fdsys/pkg/FR-1996-05-29/pdf/96-13597.pdf>

Endangered Species Recovery Program. Unpublished data on Program. Website (<http://esrp.csustan.edu/>) accessed September 30, 2013.

Environmental Protection Agency (EPA). 2011a. Climate Change, Basic Information. Website: <http://www.epa.gov/climatechange/basicinfo.html>. Accessed September 2013.

Environmental Protection Agency (EPA). 2011b. Climate Change, Science. Website: <http://www.epa.gov/climatechange/science/index.html>. Accessed September 2013.

United States Department of Agriculture, Natural Resources Conservation Service. 2011. Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

Appendix A

District's Calculated Water Seepage

This appendix is not included but is available upon request from the District

Appendix B

Air Quality Model

This appendix is not included but is available upon request from the District

Appendix C

Biological Reconnaissance Survey Report

This appendix is not included but is available upon request from the District

Appendix D

Custom Soils Report

This appendix is not included but is available upon request from the District

Appendix E

Flood Insurance Rate Map

This appendix is not included but is available upon request from the District

Appendix F

Indian Trust Assets Evaluation

2/24/2015 DEPARTMENT OF THE INTERIOR Mail - Re: ITA request for Tranquillity Irrigation District, East-West Intertie Water Conservation Project



Kleinsmith, Douglas <dkleinsmith@usbr.gov>

Re: ITA request for Tranquillity Irrigation District, East-West Intertie Water Conservation Project

Johnson, Charles <cjohnson@usbr.gov>
To: Douglas Kleinsmith <dkleinsmith@usbr.gov>
Cc: RICHARD STEVENSON <rstevenson@usbr.gov>

Mon, Feb 23, 2015 at 4:32 PM

Doug,

There are no known Indian lands within 25 miles of the proposed activities in the southeastern portion of Tranquillity ID. Based on the information provided by your map and the project description, the locations do not appear to be in areas that would impact Indian hunting or fishing resources. It is reasonable to assume that the proposed action will not have any impacts on ITAs.

Chuck Johnson

Chuck Johnson, CPSS
Chief, Land Resources
Regional GIS Program Manager
Regional Realty Officer
Regional Soil Scientist
Regional Fire Management Officer
US Bureau of Reclamation voice 916-978-5266
2800 Cottage Way (MP-450) FAX 916-978-5290
Sacramento, CA 95825-1898 cjohnson@usbr.gov

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Appendix G

Cultural Resource Compliance

CULTURAL RESOURCE COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch

MP-153 Tracking Number: 13-MPRO-189

Project Name: East-West Intertie Water Conservation Project

MP 153 Cultural Resources Reviewer: Mark Carper

NEPA Doc: EA/IS

NEPA Contact: Douglas Kleinsmith

Determination: No historic properties affected

This proposed undertaking by Reclamation to award a WaterSMART grant to TID to construct an approximately 2,400-foot-long water pipeline to connect two existing modern irrigation channels and to construct a solar panel site to power Tranquility Irrigation District (TID) facilities. Reclamation determined that the action to provide funding constitutes an undertaking as defined in 36 CFR § 800.16(y) and involves the type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a).

The proposed pipeline component of the project will be located on private property in Fresno County, California, approximately 2 miles southwest of the community of Tranquillity. The project will consist of the placement of a 24-inch pipe (approximately 2,400 feet long) in a 6-foot-deep trench. The pipe will connect two modern TID water systems reducing the conveyance path for water delivery resulting in reduced seepage rates and evaporation losses. Components included in the project, aside from the pipeline itself, are a surface mounted pump structure, flowmeter, and flow control system. A solar panel site will be located on private land currently used for agriculture. The site encompasses approximately 9 acres of undeveloped agricultural land. Construction of the solar site will require minimal site preparation consisting of grading and digging several trenches, 2 feet deep, for utility connection.

In an effort to identify historic properties TID contracted with Petra Resource Management (Petra) to conduct a cultural resource inventory of the APE. In addition, Reclamation conducted a review of *A Geoarchaeological Overview and Assessment of Caltrans Districts 6 and 9* (Meyer et al. 2009) for potential subsurface cultural deposits. The records search by Petra resulted in no previously recorded resources identified within 0.5 mile of the APE.

CULTURAL RESOURCE COMPLIANCE
Mid-Pacific Region
Division of Environmental Affairs
Cultural Resources Branch

The pedestrian survey by Petra resulted in no identified cultural resources and characterized the landscape as graded and disturbed.

Pursuant to 36 CFR § 800.4(a)(4), Reclamation contacted the California Valley Miwok Tribe, the Ione Band of Miwok Indians, and the Santa Rosa Rancheria, via letters in March 2014, inviting their participation in the Section 106 process and seeking their assistance in identifying properties of religious or cultural significance in the project. The inclusion of the solar field into the project occurred after the letter submission. Reclamation attempted to contact the tribes by phone in February 2015 regarding the solar field. Voicemails were left and, to date, there have been no responses. Reclamation will work with these tribes and organizations to address any concerns that arise and will notify your office as appropriate.

Reclamation initiated consultation with the California State Preservation Office (SHPO) by letter dated June 16, 2015 requesting concurrence with a finding of no historic properties affected for the project. SHPO concurred with the determination in a letter dated July, 23, 2015.

After reviewing the EA/IS for the proposed program Reclamation finds that this action would not have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places.

This memorandum is intended to convey the completion of the NHPA Section 106 process for this undertaking. Please retain a copy in the administrative record for this action. Should changes be made to this project, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be necessary. Thank you for providing the opportunity to comment.