

RECLAMATION

Managing Water in the West

Environmental Assessment

City of Yuba City – Irrigation Systems Upgrade Project

EA-17-13



**U.S. Department of the Interior
Bureau of Reclamation**

November 2017

RECLAMATION

Managing Water in the West

Finding of No Significant Impact

City of Yuba City – Irrigation Systems Upgrade Project

NCAO-17-13

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Background

In accordance with Section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), as amended, the Bureau of Reclamation (Reclamation) prepared an Environmental Assessment (EA) to analyze the potential direct, indirect, and cumulative impacts to the affected environment associated with Bureau of Reclamation (Reclamation) providing funding to support the City of Yuba City's (City) irrigation system upgrades project in Sutter County, CA.

Proposed Action

Reclamation's Proposed Action (Project) is to provide a WaterSMART Small-Scale Water Efficiency Project grant for the City to upgrade their timer operated/manual shut-off irrigation system to a WBIC system. The City will replace all existing irrigation controllers at 11 public City parks and 13 Land Management Districts.

System upgrades will include purchase and installation of 24-station controllers, 12-station controllers, 2-inch in-line plastic master valves, and 2-inch plastic flow sensors. The scope of work includes removing all existing equipment; installing new controllers, antennas, and related components; furnishing and installing new master gate valves; furnishing and installing flow sensors; and programming the system. Work activities at the majority of the project sites will not involve earth disturbance. The excavations at the two project sites that will require earth disturbance would be limited to 2 ft by 2 ft surface areas, to a depth of approximately 1 ft.

Construction activities would be performed by the City's landscape contractor over the course of approximately 15 months, beginning in September 2018. The City would manage and maintain the new infrastructure components following installation and monitor the new system for one year to provide a comparison of current water usage to historical usage.

Findings

The EA was prepared in accordance with the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR 1500-1508), and Department of the Interior Regulations (43 CFR Part 46). The EA found that any potential environmental impacts from the Proposed Action would be minor and temporary due to the limited disturbance from construction activities associated with the action. As a result, Reclamation has determined that implementing the Proposed Action is not a major Federal action that would significantly affect the quality of the human environment and therefore, does not require the preparation of an Environmental Impact Statement. Reclamation's determination is supported by the EA which describes the existing environmental resources in the Project area and evaluates the effects of the Proposed Action and No Action Alternative on those resources. The analysis provided in the EA is incorporated by reference and Reclamation's determination that the Proposed Action will not result in significant impacts is summarized in the following. References to sections of regulations, Executive Orders and agency policies defining "significant" are provided in parentheses, where applicable:

- The Proposed Action will not significantly affect public health or safety (40 CFR 1508.27(b)(3))
- The Proposed Action will not significantly impact natural resources and unique geographical characteristics such as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; Wild and Scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order (EO) 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (40 CFR 1508.27(b)(3) and 43 CFR 46.215(b)).
- The Proposed Action will not have possible effects on the human environment that are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)).
- The Proposed Action will neither establish a precedent for future actions with significant effects nor represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)).
- There is no potential for the effects to be considered highly controversial (40 CFR 1508.27(b)(4)).
- The Proposed Action will not have significant cumulative impacts (40 CFR 1508.27(b)(7)).
- The Proposed Action has no potential to affect historic properties (40 CFR 1508.27(b)(8)).
- The Proposed Action will have no effect on proposed or listed threatened or endangered species (40 CFR 1508.27(b)(9)).
- The Proposed Action will not violate Federal, state, tribal or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)).
- The Proposed Action will not affect any Indian Trust Assets (512 DM 2, Policy Memorandum dated December 15, 1993).
- Implementing the Proposed Action will not disproportionately affect minorities or low-income populations and communities (EO 12898).
- The Proposed Action will not limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007 and 512 DM 3).

Mission Statements

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated 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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Section 1 Introduction

This Environmental Assessment (EA) examines the potential direct, indirect, and cumulative impacts to the affected environment associated with Bureau of Reclamation (Reclamation) providing a WaterSMART Small-Scale Water Efficiency Project grant to support the City of Yuba City's (City) irrigation system upgrades project in Sutter County, CA (Figure 1). Under the grant, the City will replace all existing irrigation controllers at 11 City parks and 13 Land Management Districts (LMD) via a 50/50 cost share with Reclamation.

1.1 Background

The City of Yuba City provides water for residential, commercial, industrial and landscaping use for an approximate 15 square mile area through approximately 18,500 connections. The City receives its water from surface water rights and agreements with the State and other water districts which allow it to divert a total of approximately 30,000 AF of water per year from the Feather River.

Current water demand within the City's service area, according to 2015 statistics, is approximately 13,000 AF. Five percent of the usage is landscape irrigation; the 'water losses and other uses' category constitutes 10 percent of usage.

1.2 Need for the Proposed Action

The City projects for its service area's water demand to exceed its water availability by 2040, based on growth forecasts and variability in water availability associated with curtails during dry weather conditions. Improving the efficiency of irrigation system controls is an opportunity for the City to reduce unnecessary water losses and narrow the gap between water supply and demand within its service area.

The City's current timer operated/manual shut-off irrigation system does not account for adequate soil moisture due to changing weather and sudden storms. The City's proposal to upgrade the irrigation system controls to a Weather-Based Irrigation Controller (WBIC) system would improve water conservation by providing water only when needed by basing the watering schedule on in-situ conditions.

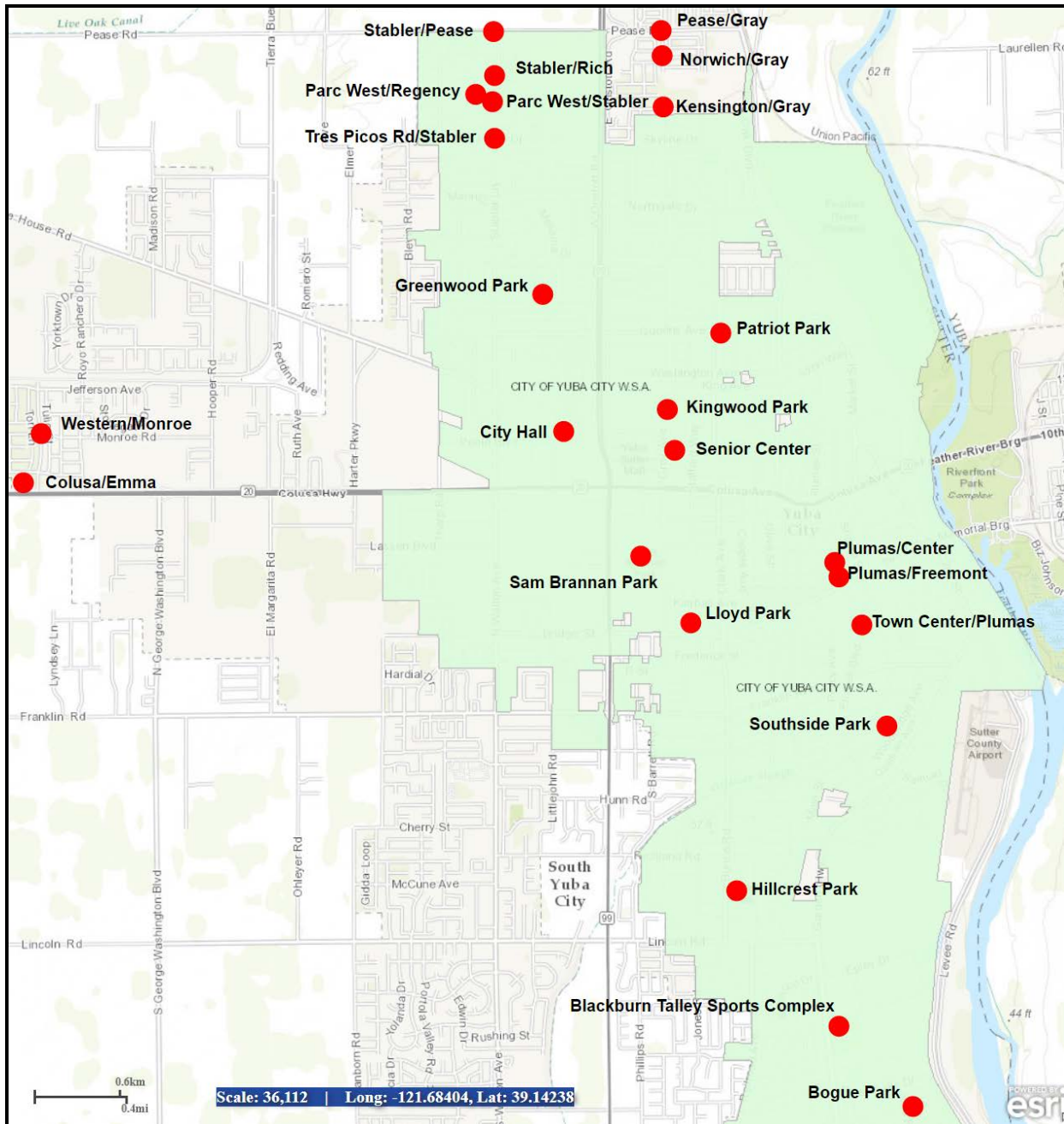


Figure 1. Project Location. Green denotes City's service area. Affected City parks and LMDs indicated by red dots.

Section 2 Alternatives Including the Proposed Action

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

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not provide the grant funding. The City would need to secure an alternative funding mechanism or forego the project.

2.2 Proposed Action

Under the Proposed Action, Reclamation would provide grant funding for the City to upgrade their timer operated/manual shut-off irrigation system to a WBIC system. The City will replace all existing irrigation controllers at 11 public City parks and 13 LMDs. Two of the included parks (Greenwood and Kingwood Parks) will only require the installation of a master valve and flow sensor. The irrigation controllers at these two parks have already been upgraded to WBIC systems. System upgrades will include purchase and installation of 24-station controllers, 12-station controllers, 2-inch in-line plastic master valves, and 2-inch plastic flow sensors. The scope of work includes removing all existing equipment; installing new controllers, antennas, and related components; furnishing and installing new master gate valves; furnishing and installing flow sensors; and programming the system. Work activities at the majority of the project sites will not involve earth disturbance. The excavations at the two project sites that will require earth disturbance would be limited to 2 ft by 2 ft surface areas, to a depth of approximately 1 ft.

Construction activities would be performed by the City's landscape contractor over the course of approximately 15 months, beginning in September 2018. The City would manage and maintain the new infrastructure components following installation and monitor the new system for one year to provide a comparison of current water usage to historical usage.

Construction equipment is anticipated to be limited to shovels and other hand tools. There will be no on-site staging of equipment or materials. There will be no tree trimming or removal or vegetation grubbing performed in preparation of work activities.

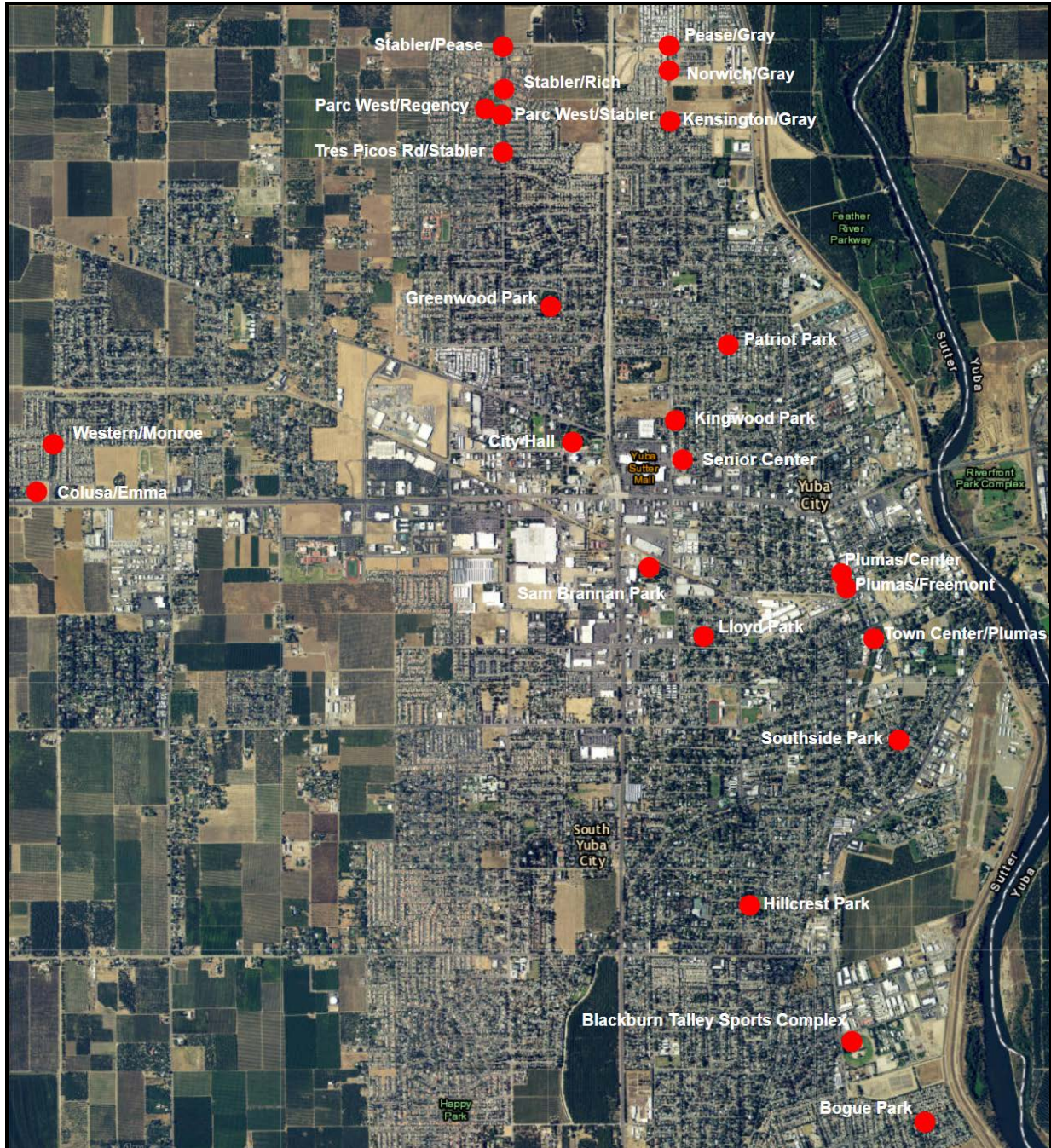


Figure 2. Approximate Locations of Irrigation System Upgrades

Figure 3. Photographs of Locations of Proposed Irrigation System Upgrades



Kensington at Gray Avenue



Norwich at Gray Avenue



Parc West Drive at Stabler Lane



Pease Road at Gray Avenue

Figure 3, Cont.



Southside Park



Patriot Park



Tres Picos Road at Stabler Lane



Blackburn-Tally Sports Complex



Western Parkway at Monroe Drive



Town Center and Plumas Boulevard



Plumas Boulevard at Center Street

Figure 3, Cont.



Sam Brannan Park



Sam Brannan Park



Parc West at Regency Park



Plumas Boulevard at Fremont Avenue

Figure 3, Cont.



Stabler Lane at Pease Avenue



Lloyd Park



Stabler Lane at Rich Drive



Bogue Park

Figure 3, Cont.



City Hall



Colusa at Emma Court



Senior Center



Kingwood Park

Figure 3, Cont.



Hillcrest Park



Blackburn-Talley Sports Complex.



Greenwood Park

Section 3 Affected Environment and Environmental Consequences

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

3.1 Project Setting

The City of Yuba City is located within the northern Sacramento Valley, approximately 40 miles north of Sacramento. The City is a mid-sized agricultural community with a population of approximately 65,500 and a moderate rate of growth. The majority of residential development is low-density single-family housing; commercial development is retail-related. The City's economy is primarily driven by agriculture and associated indirect revenues. The largest employers include fruit processors, government, retail outlets, and service providers.

The City is bordered to the east by the Feather River and to the west by Sutter Buttes. Land use to the north, west and south of the City is primarily agricultural or undeveloped.

3.2 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that the Proposed Action did not have the potential to cause direct, indirect, or cumulative adverse effects to the resources listed in Table 2.

Table 1. Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Recreation	Although construction activities for the Proposed Action would occur in parks and other public areas, ground disturbances from controller installation and other project-related work would be minor and would not have an impact on recreation.
Environmental Justice	The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease nor would it disproportionately impact economically disadvantaged or minority populations.
Indian Sacred Sites	The Proposed Action is not located on Federal lands and would not limit access to ceremonial use of Indian Sacred Sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites. Therefore, there would be no impacts to Indian Sacred Sites as a result of the Proposed Action.
Indian Trust Assets	The Proposed Action would not impact Indian Trust Assets (ITA) as there are none in the Proposed Action area. The nearest ITA is located approximately 15.5 miles southeast of the Project location.
Cultural Resources	Reclamation determined that the Proposed Action will result in no impacts to historic properties or other cultural resources pursuant to 36 CFR § 800.3(a)(1). (See Appendix A).
Land Use	The Proposed Action would not change the area's land use designation, as the footprint for new infrastructure and facilities is sited within an area previously disturbed and used for public services and recreational use. There would be no impact to land use as a result

Resource	Reason Eliminated
Air Quality	of the Proposed Action. No equipment that would produce air quality emissions will be used in construction or pre-construction activities for the Proposed Action.
Climate Change	No equipment that would produce greenhouse gases will be used in construction or pre-construction activities for the Proposed Action.

3.3 Water Resources

3.3.1 Affected Environment

The Proposed Action is located in the Lower Feather River Watershed which is approximately 60 linear miles in length, from Oroville Dam in the north to the confluence of the Feather River with the Sacramento River in the south near Verona. The watershed encompasses an approximately 800 square mile surface area.

Annual precipitation is approximately 50 inches at a surface elevation of approximately 3,700 ft above mean sea level (AMSL) in the foothills in the eastern portion of the watershed and 20 inches per year along the Sacramento Valley (Valley) floor at a surface elevation of approximately 20 ft AMSL. Flows in the Lower Feather River watershed are regulated for water supply and flood control through Oroville Dam by the State Water Project. Local hydrology is influenced by releases from Oroville Dam and the Sutter Bypass, which directs water from the Sacramento River water through Butte Slough and into the Lower Feather River for flood control. Below Oroville Dam, daily river flows are maintained at about 300 cfs and the river is almost entirely contained within a series of levees as it flows through the Sacramento Valley.

In addition to releases from Oroville Dam and the Sutter Bypass, approximately 200 miles of major creeks and rivers, 700 miles of minor streams, and 1,300 miles of agricultural water delivery canals contribute to the hydrology of the Lower Feather River Watershed.

Recognized water management issues in the watershed include conversion of farmland to urban land associated with population growth, water supply availability, water quality, preservation of fish and wildlife habitat, and fire and flood management. (SRWP 2017)

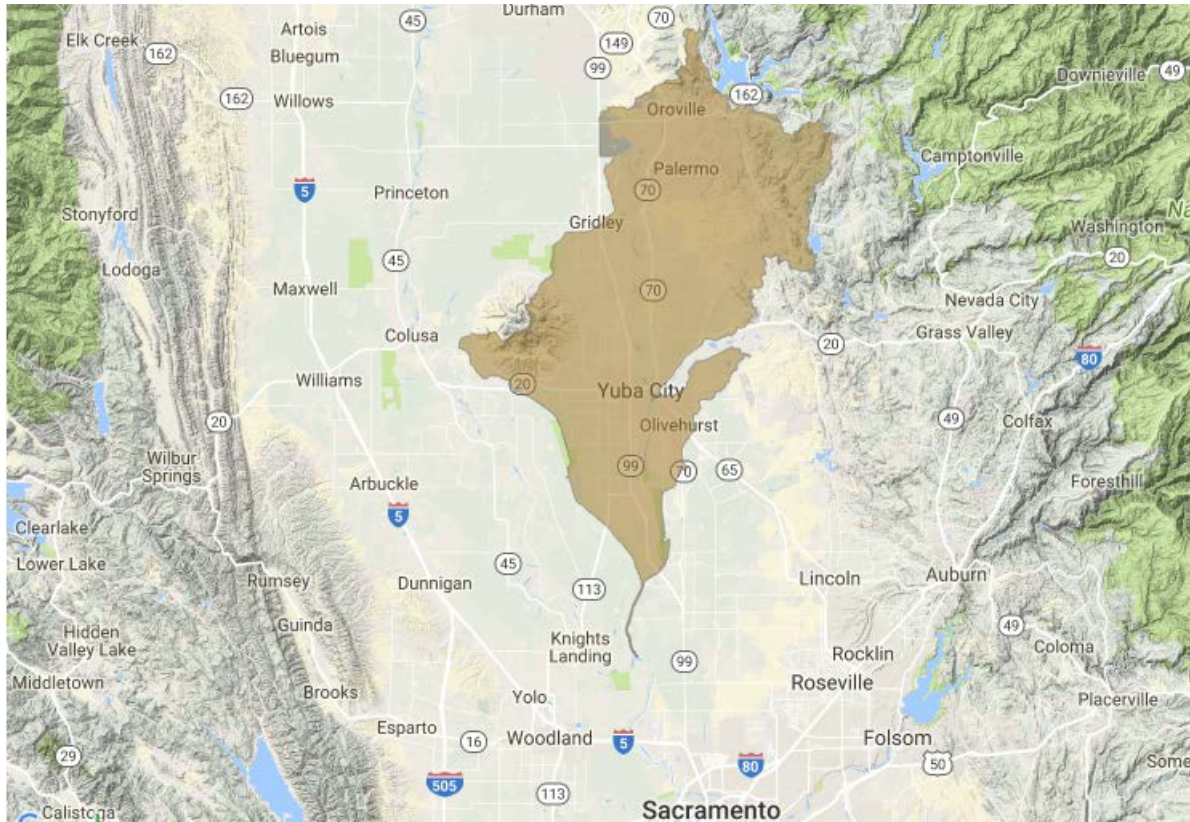


Figure 4. Lower Feather River Watershed (indicated in brown). Image courtesy SRWP 2017.

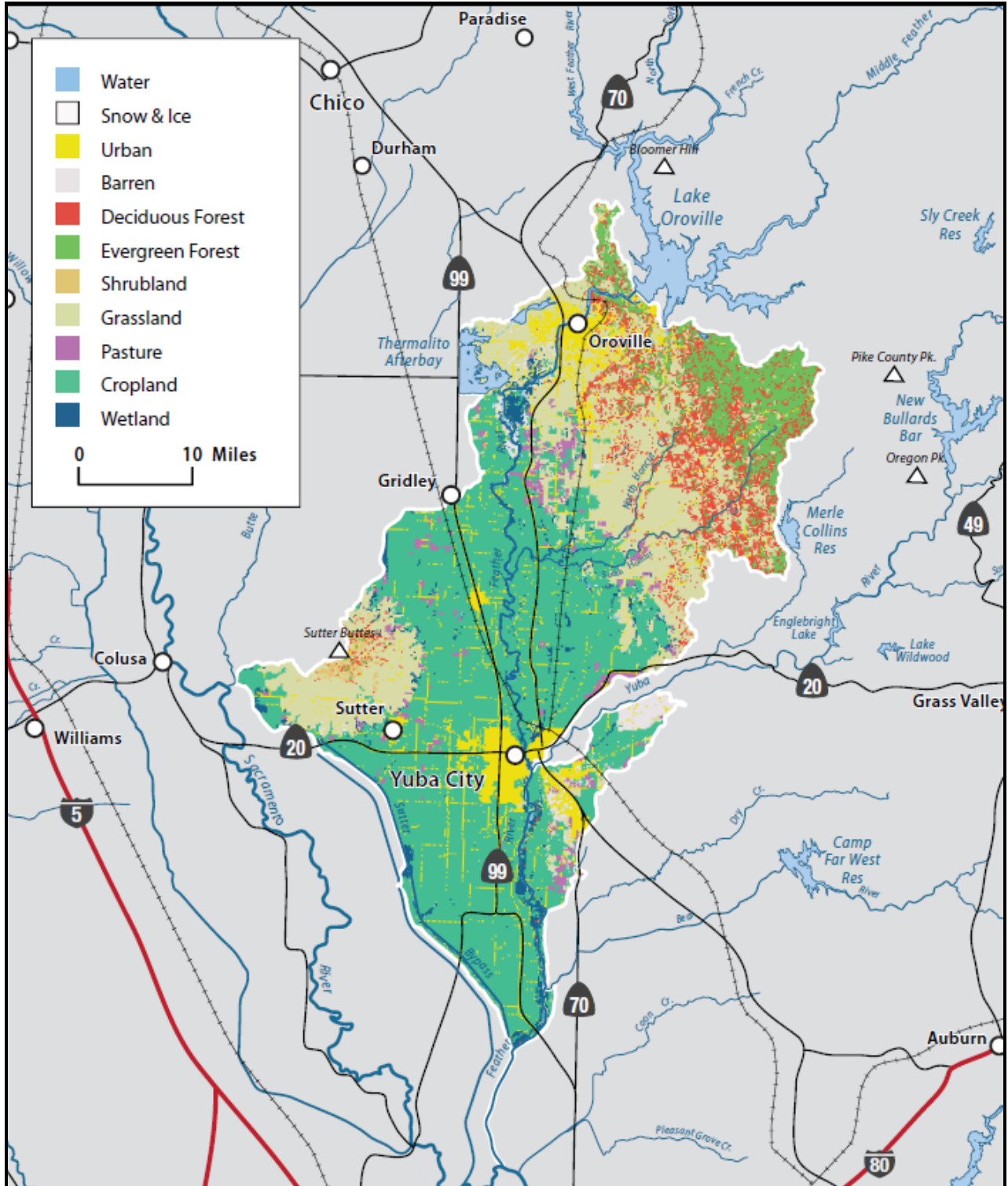


Figure 5. Land Use in Lower Feather River Watershed

3.2.2 Environmental Consequences

No Action

The City currently estimates it uses 70,000 cubic feet (523,636 gallons) of water per year to irrigate the 11 parks and 13 LMDs. Under the No Action Alternative, this water use is expected to remain consistent with no savings that could be applied to other uses or result in reduced draws from the Feather River.

If the City would identify an alternate funding source for the project, the effects on water resources would be the same as those of the Proposed Action.

Proposed Action

Based on manufacturer projections and industry standards, the Project is anticipated to result in a 25% to 50% reduction in landscape irrigation water usage. Based on the City's current usage, this reduction would result in a minimal potential savings of approximately 17,500 cubic feet of water per year for the City and would marginally increase the availability of water in the City for other uses such as potable water supplies.

Table 2. Current V. Projected Water Use by Park/ Facility or Landscape Management Districts (LMD)

NAME	ADDRESS	ACREAGE	CURRENT WATER USAGE Cu/Ft PER YEAR	PROJECTED WATER SAVINGS Cu/Ft PER YEAR*
Parks/Facilities				
Blackburn-Talley Sports Complex	300 Burns Drive	12.76	8,555	2,138
Bouge Park	Bogue Road and Crystal Creek Lane	.90	1,049	262
City Hall	1201 Civic Center Boulevard	5.06	5,364	1,341
Greenwood Park	1565 Greenwood Way	5.42	4,897	1,224
Hillcrest Park	900 McCall Avenue	6.67	7,942	1,985
Kingwood Park	Gray Avenue (between Butte House Rd. and Charlotte Ave.)	4.21	4,306	1,076
Lloyd Park	Bridge Avenue (between Fippins Ave. and Hughes Ave.)	1.64	2,250	637
Patriot Park	1488 Upland Drive	.26	450	112
Sam Brannon Park	806 Gray Avenue	8.51	6,080	1,520
Senior Center	777 Ainsley Avenue	1.30	492	123
Southside Park	Wilbur Avenue (between Moore Ave. and Wilson Ave.)	.64	782	195
Landscape Management Districts				
Colusa @ Emma	Colusa Highway/Emma Court		3,939	984
Kensington @ Gray	Kensington Way/Gray Avenue		733	183
Monroe @ Western Parkway	Monroe Drive/Western Parkway		1,819	454
Norwich @ Gray	Norwich Way/Gray Avenue		1,433	358
Parc West @ Regency	Parc West Drive/Regency Way		1,138	284
Parc West @ Stabler	Parc West Drive/Stabler Lane		963	240
Pease @ Gray	Pease Road/Gray Avenue		1,840	460
Plumas @ Center	Plumas Street/Center Street		2,869	717
Plumas @ Fremont	Plumas Street/Fremont Medical		3,282	820
Stabler @ Pease	Stabler Lane/Pease Road		2,131	532
Stabler @ Richland	Stabler Lane/Richland Road		1,345	336
Stabler @ Tres Picos	Stabler Lane/Tres Picos Drive		1,121	280
Town Square	Plume Street		4,801	1,200
LMDs Totals		6.12		
Totals		53.49	69,581	17,461

*Savings based upon TORO Sentinel Central Control System's low-end estimate of 25% water savings annually.

The manufacturer's estimate of the controller's 'useful life' is 20 years. In consideration of the minimum (25%) and maximum (50%) projected annual water savings from the controllers, the Proposed Action would result in a water savings of approximately 350,000 to 700,000 cubic feet for the City over this 20-year time period.

Disturbances related to the system upgrades will be minor, short term, temporary and located in previously-disturbed areas. These disturbances would not be large enough to generate erosion and sedimentation in runoff that could impact surface water quality.

3.4 Biological Resources

3.4.1 Affected Environment

Common fish species in the Lower Feather River Watershed include green sturgeon, Chinook salmon, Central Valley steelhead, Sacramento pike minnow, Sacramento splittail, catfish, carp, and six species of bass (SRWP 2017). No aquatic habitat is located on or immediately adjacent to the work locations for the Proposed Action.

Terrestrial and avian species found commonly in Sutter County include the San Joaquin pocket mouse, Western pond turtle, pallid bat, California linderiella, tri-colored blackbird, bank swallow, burrowing owl, Swainson’s hawk, Canada goose, Greater Sandhill crane and California black rail (CNND 2017). Terrestrial habitat within the parks is previously-disturbed, landscaped urban land.

Reclamation obtained an official list of species protected under the Federal Endangered Species Act (ESA) Section 7 for the Proposed Action area from the US Fish and Wildlife Service’s (Service 2017) Information for Planning and Consultation (IPaC) website on September 14, 2017. Additional information on the listed species’ habitat and range was obtained elsewhere on the Service’s Environmental Conservation Online System (ECOS) website and in the California Department of Fish and Wildlife’s (CDFW) California Natural Diversity Database (CNDDDB 2017). Reclamation researched the CNDDDB, and its Biographic Information and Observation System (BIOS) mapping complement, for recorded sitings of Federally-listed species in the vicinity of the Project. The information obtained from the Service and CDFW websites was supplemented with other information in Reclamation files to complete Table 3 below.

Table 3. Federally Listed Species and Critical Habitat

Common Name	Scientific Name	Status	Effects	Potential for Species Occurrence
				In Action Area and Habitat Requirements and Availability
Amphibians / Reptiles				
California red-legged frog	<i>Rana draytonii</i>	T, X	NE (No Effect)	Absent. Species believed extirpated from Sacramento River Valley floor/vicinity of the Proposed Action area. Requires riparian and upland dispersal habitats with breeding ponds or pools. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.

Common Name	Scientific Name	Status	Effects	Potential for Species Occurrence
				In Action Area and Habitat Requirements and Availability
Amphibians / Reptiles				
California tiger salamander (Central CA DPS)	<i>Ambystoma californiense</i>	T, X	NE	Possible. Known or believed to occur in Sutter County. Requires burrows in grassland, savanna or open woodland habitats with breeding pond or pools. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.
giant garter snake	<i>Thamnophis gigas</i>	T	NE	Absent. Occurs in Sutter County. Habitat consists of rice fields or managed marshes with emergent wetland vegetation for cover and foraging, grassy banks for basking and upland burrows for refuge in inactive season. No Critical Habitat established. No suitable habitat is located at the sites of the system upgrades.
Birds				
yellow-billed cuckoo (YBCU)	<i>Coccyzus americanus</i>	T, XP	NE	Possible. Known to occur in vicinity of Proposed Action. Habitat consists of largely unsegmented tracts of riparian forest with willows for nesting and Cottonwoods for foraging. Designated Critical Habitat is outside the action area. Work activities for the Proposed Action would not create a disturbance that could impact the species or habitat.
least Bell's vireo	<i>Vireo bellii pusillus</i>	E, X	NE	Possible. Known to occur in vicinity of Proposed Action. Habitat consists of dense brush, mesquite, willow-cottonwood forest, streamside thickets, and scrub oak, in arid regions near water. Designated Critical Habitat is outside the action area. Work activities for the Proposed Action would not create a disturbance that could impact the species or habitat.
Fish				
Delta smelt	<i>Hypomesus transpacificus</i>	T, X	NE	Absent. Current species range and designated Critical Habitat exclude Action Area, according to ECOS. Habitat consists of open waters of bays, tidal rivers, channels, and sloughs, with salinity of about 2 ppt, adequate freshwater flow to transport young to, and maintain, rearing habitat, and dense zooplankton. Post-breeding populations are concentrated in the lower Delta and upper Suisun Bay. No suitable habitat is located at the sites of the system upgrades.
Central Valley steelhead	<i>Oncorhynchus mykiss</i>	NMFS T, X	NE	Absent. Known to occur in vicinity of Proposed Action. Habitat consists of coastal marine waters, estuaries, and large rivers, including the Feather River. Species ascends rivers to spawn. Designated Critical Habitat is outside the Action Area. No suitable habitat is located at the sites of the system upgrades.

Common Name	Scientific Name	Status	Effects	Potential for Species Occurrence
				In Action Area and Habitat Requirements and Availability
Fish				
Chinook salmon - Various Populations	<i>Oncorhynchus tshawytscha</i>	T, X	NE	Absent. Known to occur in vicinity of Proposed Action. Habitat consists of coastal marine waters, estuaries, and large rivers, including the Feather River. Species ascends rivers to spawn. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.
Eulachon Southern DPS	<i>Thaleichthys pacificus</i>	T, X	NE	Absent. Known to occur in Sutter County, but not in Feather River. Habitat consists of nearshore coastal marine waters. Species ascends lower reaches of coastal rivers to spawn. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.
longfin smelt (San Francisco Bay Delta DPS)	<i>Spirinchus thaleichthys</i>	C	NE	Absent. Known to occur in Sutter County. Current species range excludes Action Area, according to ECOS. Habitat includes a wide range of temperature and salinity conditions in coastal waters near shore, bays, estuaries, and rivers. No critical habitat established. No suitable habitat is located at the sites of the system upgrades.
Invertebrates				
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E, X	NE	Possible. Known or believed to occur in Sutter County. Habitat consists of large, clay-bottomed vernal pool playas and lakes (in grasslands) with deep, turbid, slightly alkaline water. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.
vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T, X	NE	Possible. Known or believed to occur in Sutter County. Habitat consists of vernal pools and similar ephemeral wetlands, most commonly grassed or mud bottomed pools or basalt flow depression pools in unplowed grasslands. May also inhabit alkali pools, ephemeral drainages, stock ponds, roadside ditches, vernal swales, and rock outcrop pools. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T, X	NE	Possible. Known to occur in vicinity of Proposed Action. Habitat consists of red or blue elderberry trees and shrubs, with stems greater than one-inch diameter at ground level, along riparian woodlands and upland terraces. Designated Critical Habitat is outside the action area. Work activities for the Proposed Action would not create a disturbance that could impact the species or habitat (elderberry trees and shrubs), if present at the sites of the system upgrades.

Common Name	Scientific Name	Status	Effects	Potential for Species Occurrence
				In Action Area and Habitat Requirements and Availability
Invertebrates				
vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E, X	NE	Possible. Known or believed to occur in Sutter County. Habitat consists of vernal pools, swales, ephemeral drainages, stock ponds, reservoirs, ditches, backhoe pits, and ruts caused by vehicular activities. Designated Critical Habitat is outside the action area. No suitable habitat is located at the sites of the system upgrades.
Plants				
Hartwig's golden sunburst	<i>Pseudobahia bahiifolia</i>	E	NE	Possible. Known to occur in vicinity of Proposed Action. Habitat consists of non-native grasslands and occasionally grassland-blue oak woodland community ecotones in the Central Valley of California. May occur along shady creeks or the margins of vernal pools. Work activities for the Proposed Action would be conducted in previously-disturbed areas and would not create a disturbance that could impact the species or habitat, if present at the sites of the system upgrades.
Key: (E) Endangered - Listed as being in danger of extinction (T) Threatened - Listed as likely to become endangered within the foreseeable future (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration (NOAA) - National Marine Fisheries Service. (C) Candidate - Candidate to become a proposed species (X) Critical Habitat designated for this species (XP) Critical Habitat is proposed for this species (DPS) Distinct-population segment, designate by the Service (ESU) Evolutionary Significant Unit, designated by NOAA				

No Critical Habitat has been designated by the Service for any species in the area of the Proposed Action. Documented occurrences of species listed in Table 3 that have been recorded in the CNDDDB or BIOS in the vicinity of the site/within the City’s service area are limited to steelhead, Chinook salmon, YBCU, least Bell’s vireo, VELB and Hartweg’s golden sunburst. Suitable habitat for these species is not present in the locations of the system upgrades or on immediately adjacent land.

3.4.2 Environmental Consequences

No Action

Under the No Action Alternative, current conditions would not change. Therefore, there would be no impact to biological resources from the No Action Alternative.

If the City would identify an alternate funding source for the project, the effects on biological resources would be the same as those of the Proposed Action.

Proposed Action

Neither general nor critical habitat for Federally-listed species is present in the action area or immediate vicinity. The potential for impact to species from the Proposed Action is further limited by the following project conditions:

- The siting of the disturbances in public areas with a high level of human activity and within the built environment/locations previously-disturbed
- The limited, short-term and temporary nature of the physical disturbances associated with the Proposed Action
- The absence of the use of heavy equipment that could cause a visual or noise disturbance to protected species
- Therefore, the Proposed Action would not impact Federally-listed species or their habitat.

3.5 Cumulative Effects

According to Council on Environmental Quality's regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

No individual impact was identified when evaluating the Proposed Action or No Action Alternative that would incrementally contribute to any cumulative effect on resources comprising the human environment.

Section 4 Consultation and Coordination

4.1 Endangered Species Act (16 USC § 1531 et seq.)

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

Reclamation determined that there would be no effect to species Federally-listed as endangered or threatened from the Proposed Action; therefore, the US Fish and Wildlife Service was not consulted.

Section 5 Preparers and Reviewers

Megan Simon, Natural Resources Specialist, NCAO - preparer

Mark Carper, Archaeologist, MP-153

Paul Zedonis, Supervisory Natural Resources Specialist, NCAO – reviewer

Section 6 References

City (City of Yuba City). 2017. Grant Proposal: Yuba City Irrigation Systems Upgrade Project – WaterSMART Grants Small-Scale Water Efficiency. Prepared for Reclamation Financial Assistance Operations. Denver, Colorado. May.

CNDDDB (California Natural Diversity Database). 2017. California Natural Diversity Database, Government Version. California Department of Fish and Wildlife. Last Updated October 2017.

SRWP (Sacramento River Watershed Program). 2017. Feather River Subregion – Lower Feather River Watershed webpage:

<http://www.sacriver.org/aboutwatershed/roadmap/watersheds/feather/lower-feather-river-watershed>.

Service (U.S. Fish and Wildlife Service). 2017. Official Species List obtained on September 14, 2017. Website: <http://ecos.fws.gov/ipac/>.

Appendix A: Cultural Resources Determination**CULTURAL RESOURCES COMPLIANCE
Division of Environmental Affairs
Cultural Resources Branch (MP-153)**

MP-153 Tracking Number: 17-NCAO-198.001

Project Name: Yuba City Irrigation Systems Upgrade

NEPA Document: TBD

NEPA Contact: Megan Simon, Natural Resources Specialist

MP 153 Cultural Resources Reviewer: Joanne Goodsell, Archaeologist

Date: September 27, 2017

JOANNE GOODSSELL Digitally signed by JOANNE GOODSSELL
Date: 2017.09.27 14:28:48 -07'00'

Reclamation proposes to provide grant funding to Yuba City (City) to partially fund the replacement of existing manual irrigation system controllers with weather-based irrigation controllers, valves, flow sensors and related components within 11 city-owned public parks and 13 other areas known as landscape management districts. The City estimates that the proposed project has the potential to result in a savings of approximately 17,461 cubic feet, or 147,848 gallons, of water annually. The proposed project would involve upgrades to the existing system controllers; ground disturbance, if any, would be limited to re-exposing controllers that have become obscured by top soil over time.

Reclamation determined the proposed action constitutes a Federal undertaking that has no potential to cause effects to historic properties, pursuant to the 36 CFR § 800.3(a)(1). As such, Reclamation has no further obligations under 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act. The proposed action will result in no impacts to historic properties or other cultural resources.

This document conveys the completion of the NHPA Section 106 process and cultural resources review for this undertaking. Please retain a copy in the administrative record for this action. Should there be any changes to the proposed action, additional NHPA Section 106 review, possibly including consultation with the State Historic Preservation Officer, may be required.

Appendix B: Indian Trust Asset Determination



Simon, Megan <msimon@usbr.gov>

ITA Review - City of Yuba City Irrigation Systems Upgrade Project

Simon, Megan <msimon@usbr.gov>
To: "Zedonis, Paul" <pzedonis@usbr.gov>

Fri, Sep 29, 2017 at 4:09 PM

I have examined the referenced proposal and have determined that the facilities are located at least 15.5 miles from the closest Indian Trust Asset.

I have determined that there is no likelihood that this action will adversely impact Indian Trust Assets.

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Megan K. Simon

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