

# Attachment B Initial Study

# Del Puerto Canyon Reservoir

Prepared for: Del Puerto Water District

Prepared by:



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COMMITMENT & INTEGRITY DRIVE RESULTS

Del Puerto Water District June 2019



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## Acronym List

CCID	Central California Irrigation District
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
DMC	Delta-Mendota Canal
DPWD	Del Puerto Water District
EIR	Environmental Impact Report
GHG	Greenhouse gas
HCP	Habitat Conservation Plan
I-5	Interstate 5
IS	Initial Study
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OHV	Off-Highway Vehicle
PPV	Peak particle velocity
RWQCB	Regional Water Quality Control Board
SJRECWA	San Joaquin River Exchange Contractors Water Authority
SWPPP	Storm Water Pollution Prevention Plan
VMT	Vehicle miles traveled
WAPA	Western Area Power Administration



### 1. ENVIRONMENTAL CHECKLIST

1.	Project title:	Del Puerto Canyon Reservoir Project
2.	Lead agency name and address:	Del Puerto Water District 17840 Ward Ave/P.O. Box 1596 Patterson, CA 95363
Со	ntact person and phone number:	Anthea Hansen, General Manager – (209) 892-4470
4.	Project location:	Stanislaus County, in the vicinity of Patterson: Reservoir - facilities primarily along Del Puerto Canyon Road Conveyance – from the proposed dam east to Interstate 5, across the California Aqueduct then connecting to the Delta-Mendota Canal (DMC) near Zacharias Road
5.	Project sponsor's name and address:	Del Puerto Water District 17840 Ward Ave/P.O. Box 1596 Patterson, CA 95363
6.	General plan designation:	<ul> <li>Reservoir: Agriculture</li> <li>Conveyance: Agriculture, Mixed Use, Light Industrial and possibly Highway Service Commercial and General Commercial depending on alignment option</li> </ul>
7.	Zoning:	<ul> <li>Reservoir: General Agriculture 40 acre, General Agriculture 160 acre</li> <li>Conveyance – General Agriculture 40 acre and possibly General Commercial and West Patterson Light Industrial with Planned</li> </ul>

8. Description of project: Del Puerto Water District (DPWD), in partnership with the San Joaquin River Exchange Contractors Water Authority (SJRECWA), proposes to construct a reservoir located on Del Puerto Creek in the foothills of the Coast Range Mountains west of Patterson, California and Interstate-5. The proposed reservoir would provide 85,000 acre-feet (AF) of additional off-stream storage South of the Sacramento-San Joaquin Delta. The purpose of the proposed is to develop a feasible amount of South of Delta water storage, utilizing the water after it is moved through the Delta to maximize the management and efficient use of existing water supplies. Water would be conveyed from the DMC to be stored in the proposed reservoir. The water stored would serve agricultural users in both DPWD and the SJRECWA member entities service areas, and potentially other South of Delta water suppliers or environmental purposes, including, but not limited to, supply for wildlife refuges designated under the Central Valley Project Improvement Act. The project includes construction of a main dam, four (4) saddle dams, a spillway, inlet/outlet works, conveyance facilities (including a diversion facility on the DMC, a pumping plant, underground pipeline and energy dissipation facilities at the DMC outfall, along with related appurtenant components) and electrical facilities (power supply line and electrical substation). The project also includes relocating existing utilities that run north-south through the project area and Del Puerto Canyon Road, which runs east-west through the project area.

Development overlay depending on alignment option

9. Surrounding land uses and setting: The dam and reservoir would be located in an agricultural setting in Stanislaus County. The conveyance facilities connecting the DMC and reservoir would cross Interstate 5 and the



California Aqueduct and land currently used for agriculture on both sides of the freeway. Land east of Interstate 5 is currently used for agriculture but is designated for future development as a business park.

## 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

Potential permits include, but may not be limited to:

- Army Corps of Engineers: Clean Water Act Section 404 permit
- U.S. Bureau of Reclamation, approval of financing under Water Infrastructure Improvements for the Nation (WIIN) Act, permit for Installation, Maintenance and Operation of intake structure on DMC, exchange agreements to divert and discharge water into and out of DMC, possible agreement with Reclamation Refuge Water Supply Program.
- Completion of federal consultation requirements including consultation with U.S. Fish and Wildlife Service, National Marine Fisheries Service and State Historic Preservation Office
- California Department of Fish and Wildlife: Section 1602 Streambed Alteration Agreement and possibly Incidental Take Permit
- California Department of Transportation: Encroachment Permit for crossing of Interstate 5
- California Department of Water Resource: Encroachment Permit for crossing of California Aqueduct
- State Water Resources Control Board: Notice of Intent (NOI) for coverage under National Pollutant Discharge Elimination System (NPDES) Construction General Permit
- Regional Water Quality Control Board: Clean Water Act Section 401 Water Quality Certification or Waiver, and possible coverage of dewatering discharges under General Low-Threat Discharge Permit
- Stanislaus County: approval of road relocation
- San Joaquin Valley Air Pollution Control District: possible Voluntary Emissions Reduction Agreement
- 11. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 2180.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

To date no Native American tribes have requested consultation with DPWD.



#### Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

$\boxtimes$	Aesthetics	$\boxtimes$	Agriculture and Forestry Resources	$\boxtimes$	Air Quality
$\boxtimes$	Biological Resources	$\boxtimes$	Cultural Resources	$\boxtimes$	Energy
$\boxtimes$	Geology / Soils	$\boxtimes$	Greenhouse Gas Emissions	$\boxtimes$	Hazards & Hazardous Materials
$\boxtimes$	Hydrology / Water Quality	$\boxtimes$	Land Use / Planning		Mineral Resources
	Noise		Population / Housing		Public Services
	Recreation	$\boxtimes$	Transportation	$\boxtimes$	Tribal Cultural Resources
$\boxtimes$	Utilities / Service Systems		Wildfire	$\boxtimes$	Mandatory Findings of Significance

#### DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- i find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

le alansen

Signature

6/26/19

Anthea Hansen

Del Puerto Water District

Printed Name

For



#### 1.1 Aesthetics

Except as would the	s provided in Public Resources Code Section 21099, e Project:	Potentially Significant _Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
a)	Have a substantial adverse effect on a scenic vista?	$\boxtimes$			
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	$\boxtimes$			
с)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?				
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

#### **Discussion**

a-d) The project is located within an non-urbanized area. Interstate 5 in the project area is designated as a state scenic highway, and the reservoir embankment would be visible from Interstate 5. There are no historic buildings present, but a former almond orchard is visible from the freeway. The EIR will evaluate aesthetic impacts of the Project, including effects on scenic vistas, scenic resources and potential to degrade visual character. Some lighting may be needed for project facilities, and the EIR will evaluate whether this would result in substantial light or glare. The EIR will identify mitigation measures if needed to address aesthetic impacts.

#### 1.2 Agriculture and Forestry Resources

Would th	e Project:	Potentially Significant Impact	Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
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?				

Less Than

				SCORRA
b) W	Conflict with existing zoning for agricultural use, or a illiamson Act contract?	$\boxtimes$		
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))?			
d)	Result in the loss of forest land or conversion of forest land to non-forest use?			$\boxtimes$
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?

- a-b) Both the reservoir footprint and conveyance alignment contain Prime Farmland, Unique Farmland and Farmland of Statewide Importance (Farmland). The project would convert Farmland existing to a storage reservoir, and the EIR will evaluate the impacts on Farmland, conflicts with existing zoning, and the Williamson Act status of the reservoir site.
- c-d) The project area contains no forest land and would thus not result in loss of forest land or conflicts with zoning of forest land. There would be no impact and no mitigation is required.
- e) The project would serve water to existing agricultural users and would thus not involve changes that would result in conversion of farmland or forest land outside the reservoir to other uses (see item a-b for direct impacts of the project on farmland). The project is consistent with the Stanislaus County General Plan Agricultural Element Objective 3.2, Water Resources. Policy 3.4 encourages conservation of water for agricultural use, and Implementation Measure 4 under that policy specifically states that "The County shall work with local irrigation districts to preserve water rights and ensure that water saved through conservation may be stored and used locally, rather than 'appropriated' and moved to metropolitan areas outside of Stanislaus County."

#### 1.3 Air Quality

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>	
Would the	Would the Project:					
a)	Conflict with or obstruct implementation of the applicable air quality plan?	$\square$				
b)	Result in a cumulatively considerable net increase of any	$\boxtimes$				



criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard?

- c) Expose sensitive receptors to substantial pollutant concentrations?
- d) Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people?

	$\boxtimes$		
rs			$\boxtimes$

#### Discussion

- a-c) The project would result in substantial emissions during construction of facilities and limited emissions during operation related to use of maintenance vehicles and operation of pumps. The EIR will evaluate the extent of emissions and develop mitigation measures to minimize emissions.
- d) Construction and operation of the project would not generate odors that could affect substantial numbers of people. The reservoir would contain surface water, which is not typically the source of offensive odors.

#### 1.4 Biological Resources

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
Would th	ne 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?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
C)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
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?				

			WOODARD
Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			
Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat		$\boxtimes$	

e)

f)

conservation plan?

- a-e) The reservoir and associated facilities would affect potential habitat for a variety of terrestrial and aquatic species. The EIR will evaluate impacts on candidate, sensitive or special status species; effects on riparian habitat and other natural communities, effects on state and federally protected wetlands; impacts on movement of native wildlife and effects on nursery sites, and potential conflicts with local policies and ordinances protecting biological resources, and a listing of mitigation measures to help address impacts.
- f) The project is located within the boundaries of the PG&E San Joaquin Valley Operations & Maintenance Habitat Conservation Plan (HCP); however, the project partners are not bound to the requirements of this HCP as they are not a permittee, and the Project would not conflict with PG&E's conservation strategy for species covered by the HCP. The Project is not located within or adjacent to the boundaries of any other adopted HCP, adopted Natural Community Conservation Plan or other approved conservation agreement within the County. Therefore, there would be no conflicts with an adopted plan.

#### 1.5 Cultural Resources

Would the	Project	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
would the					
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	$\boxtimes$			
b)	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	$\boxtimes$			
C)	Disturb any human remains, including those interred outside of dedicated cemeteries?	e 🖂			

#### **Discussion**

a-c) Del Puerto Canyon is known to contain cultural resources, and the EIR will evaluate the potential for the project to cause a substantial adverse change to historical and archaeological resources or to disturb human remains and will identify mitigation measures to address potential impacts.



### 1.6 Energy

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
Would the	e Project:				
a)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	$\boxtimes$			

#### **Discussion**

a-b) The EIR will evaluate energy required for construction and operation of the project, including the measures that are proposed to ensure that energy consumption is not wasteful, inefficient or unnecessary. Consistency with state and local plans for renewable energy and energy efficiency will be addressed.

#### 1.7 Geology and Soils

Would th	e Pro	iect:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Dire effe	ctly or indirectly cause potential substantial adverse cts, including the risk of loss, injury, or death lving:				
	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.				
	ii)	Strong seismic ground shaking?	$\boxtimes$			
	iii)	Seismic-related ground failure, including liquefaction?	$\boxtimes$			
	iv)	Landslides?	$\boxtimes$			
b)	Res	ult in substantial soil erosion or the loss of topsoil?	$\boxtimes$			
c)	that and	ocated on a geologic unit or soil that is unstable, or would become unstable as a result of the Project, potentially result in on- or off-site landslide, lateral ading, subsidence, liquefaction, or collapse?				



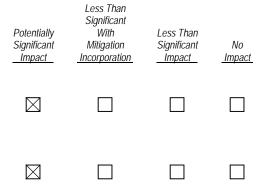
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	$\square$		

- a) i) No part of the project area is within an Alquist-Priolo Earthquake Fault Zone. There would be no impact and no mitigation is required.
- a) ii-d) There are other geotechnical risks factors in the project area, including the project's proximity to faults in the Coast Range-Sierran Block zone of faulting. The EIR will evaluate geotechnical hazards, including the potential for fault rupture, seismic ground shaking, liquefaction and landslides. Potential for erosion, instability and expansive soils will be addressed, and measures to ensure appropriate design of facilities to address geotechnical hazards will be identified.
- e) The project would not generate wastewater and would not require the installation of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impacts related to use of septic tanks or alternative wastewater disposal systems and no mitigation is required.
- f) The project area has been identified in the Stanislaus County General Plan EIR (Stanislaus County 2016) as having a high sensitivity for paleontological resources, so the potential for impacts will be evaluated in the EIR and measures to protect resources will be identified, as needed.

#### 1.8 Greenhouse Gas Emissions

#### Would the Project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?





Less Than

#### **Discussion**

a-b) The EIR will estimate greenhouse gas (GHG) emissions during construction and operation and will address consistency with applicable plans policies and regulations.

#### 1.9 Hazards and Hazardous Materials

		Potentially Significant Impact	Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
Would the	e Project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
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?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
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?	5			
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 or excessive noise for people residing or working in the Project area?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g)	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			$\boxtimes$	

#### **Discussion**

a) The project would not involve the routine transport, use or disposal of hazardous materials other than small amounts of materials such as lubricants that would be used for pump station maintenance during operation of the reservoir. Thus, the project would not create significant hazards to the public or environment.



- b) Project construction would require the use of diesel fuel and minor amounts lubricants, paints, solvents and glues. The construction contractor would be required to prepare a Hazardous Management Spill Prevention and Control Plan for hazardous materials management which would address spill control measures and notification and documentation requirements in the event of a spill. There is a PG&E gas pipeline located in the project area between the California Aqueduct and Interstate 5 and proposed pipelines from the dam to the DMC would need to cross this gas pipeline.<sup>1</sup> There is also a petroleum pipeline operated by Shell Pipeline Company that would be within the reservoir footprint.<sup>2</sup> The EIR would evaluate hazards associated with construction in the vicinity of these gas and petroleum pipelines, and the potential relocation of the petroleum pipeline, and would identify procedures and measures to minimize potential upset or accident conditions.
- c) The Project site is not located within one-quarter mile of an existing or proposed school. The closest school is Apricot Valley Elementary School in Patterson, which is located more than 2 miles from the point at which the project pipelines would connect to the DMC. There would be no impact and no mitigation is required.
- d) The project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Neither the State Water Resources Control Board Geotracker website<sup>3</sup> nor the Department of Toxic Substances Control Envirostor website<sup>4</sup> identify any hazardous waste clean-up sites or underground storage tanks in the project area. There would be no impact and no mitigation is required.
- e) The project is not within two miles of a public airport and is not within the airport influence area of either the Modesto or Oakdale Airports, which are the only public airports in Stanislaus County. There would be no impact and no mitigation is required.
- f) Due to the remote nature of the project site, implementation of the project would not affect any emergency response or evacuation plans. Emergency response planning in Stanislaus County centers around evacuation planning in the event of flooding along the San Joaquin River or its tributaries, and the project area is outside the Mid San Joaquin River Regional Flood Management Planning Area<sup>5</sup>. There would be no impact, and no mitigation is required.
- g) The project area is in a moderate to high fire hazard severity zone as mapped by CalFire.<sup>6</sup> During construction the contractor would be required to employ fire prevention measures. Once constructed, the reservoir would be filled with water and would not pose a risk of wildland fire. There would be no people or structures in the project area that would be exposed to wildland fire risks and the reservoir could serve as a source of water for firefighting in the event of a wildland fire.

<sup>&</sup>lt;sup>1</sup> <u>https://www.pge.com/en\_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page</u>

<sup>&</sup>lt;sup>2</sup> https://www.shell.us/business-customers/shell-pipeline/interactive-customer-map.html

<sup>&</sup>lt;sup>3</sup> https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=patterson%2C+CA

<sup>&</sup>lt;sup>4</sup> <u>https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=patterson%2C+CA</u>

<sup>&</sup>lt;sup>5</sup> http://midsjrfloodplan.org/sites/default/files/mid-sjr-region-2252.jpg

<sup>&</sup>lt;sup>6</sup> http://frap.fire.ca.gov/webdata/maps/stanislaus/fhszs\_map.50.pdf



## 1.10 Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
Would th	e Project:				
a)	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			$\boxtimes$	
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?				
c)	Substantially alter the existing drainage pattern of the site of area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	or			
	i) result in substantial erosion or siltation on- or off-site;			$\boxtimes$	
	<ul> <li>substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;</li> </ul>			$\boxtimes$	
	<ul> <li>create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or</li> </ul>				
	iv) impede or redirect flood flows?				$\boxtimes$
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	$\boxtimes$			
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

#### **Discussion**

a) The project would not involve direct discharges to surface water or groundwater. Potential for water quality impacts during construction would be minimized by compliance with the statewide *General Permit for Discharges of Storm Water Associated with Construction Activity*, NPDES Order No. CAS000002, Order No. 2009-009-DWQ (Construction General Permit), which requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) to protect surface waters from contaminated runoff from erosion or siltation generated during construction.



- b) Construction of the reservoir and associated facilities would not require groundwater supplies and would not interfere with groundwater recharge. By providing storage, the project would increase availability of surface water supplies for the project partners and would potentially decrease the need to pump groundwater during dry years when water allocations from the Central Valley Project are reduced. This is a beneficial impact of the project, so no mitigation is required.
- c) i) As noted in item a), during construction a SWPPP would be implemented to ensure that construction does not generate result in erosion or siltation.
- c) ii) The project would not create substantial amounts of new impervious surface. The reservoir would alter the drainage pattern of Del Puerto Creek and would capture runoff in the Del Puerto Creek watershed with downstream releases to address instream flow requirements and maintain existing natural groundwater recharge. However, downstream releases would not result in flooding on or off site. The relocated road would replace existing road surface with new roadway, but is not expected to substantially increase impervious surface, and the road would be designed to manage drainage in such a way that it would not result in off-site flooding.
- c) iii) The reservoir would capture runoff from the Del Puerto Canyon watershed and would release it in a more controlled fashion than occurs for existing flows on Del Puerto Creek. The project would thus not generate runoff that would exceed capacity of existing or planned stormwater drainage systems. Operation of the reservoir would not generate polluted runoff, and as noted in item a), during construction a SWPPP would be implemented to ensure that construction does not generate polluted runoff.
- c) iv) The project area is completely outside the 100-year flood plain for the San Joaquin River and its tributaries, so the project would not impede or redirect flood flows and would have no impact on areas that are currently subject to flood risk, and no mitigation is required.
- d) The project is not within an area that is currently subject to flooding, tsunami or seiche, but construction of a new dam has the potential to result in risk of flooding in the event of a dam failure. The EIR will evaluate the risk of flooding from inundation as a result of a rupture of the dam embankment.
- e) Because the project would not include discharge to surface waters and would not require groundwater it would not interfere with the implementation of a water quality control plan or sustainable groundwater management plan. As noted in item b), the project would provide storage for surface water that could reduce the need for groundwater pumping. There would be no impact and no mitigation is required.

The EIR will also evaluate operational impacts of the reservoir to determine potential changes in flows in Del Puerto Creek downstream of the proposed reservoir and into the San Joaquin River. Project operations will be designed to maintain flows required for beneficial uses in Del Puerto Creek and the San Joaquin River.

The Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region, Fifth Edition, Revised May 2018, The Sacramento River Basin and the San Joaquin River Basin identifies existing and potential beneficial uses for the San Joaquin River and DMC. Existing beneficial uses of the San Joaquin River in the project area, from the mouth of the Merced River to Vernalis, are: irrigation, stock watering, industrial process water, contact and non-contact recreation, warmwater habitat, warmwater and coldwater fish migration, warmwater spawning and wildlife habitat; municipal and domestic supply is identified as a potential beneficial use. The existing beneficial uses of the DMC are: municipal and domestic supply, irrigation ,stock watering, contact and other non-contact recreation, and wildlife habitat. Del Puerto Creek does not have a specific beneficial use designation identified in the Basin Plan, and thus by default is considered to be suitable for beneficial use for municipal and



Less Than

domestic supply; other beneficial uses can be identified on a case-by-case basis. The EIR will address any measures needed to maintain beneficial uses in the DMC, Del Puerto Creek, and San Joaquin River.

#### 1.11 Land Use and Planning

Would th	e Project:	Potentially Significant Impact	Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
a)	Physically divide an established community?				$\bowtie$
b)	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	$\boxtimes$			

#### Discussion

- a) The closest communities to the project area are Patterson, which is east of the reservoir site, and Diablo Grande, an unincorporated, private gated community located south-west of the reservoir site. The project would not physically divide either community. There would be no impact and no mitigation is required.
- b) The reservoir area is zoned for agricultural use. The pipeline from the reservoir to the DMC would cross lands on the west side of the City of Patterson. Alignment options both outside and within the city limits are being evaluated. Depending on the alignment the pipeline might cross land designated as mixed use, light industrial, highway service commercial, and general commercial. The EIR will evaluate project consistency with existing land use plans, policies and regulations and identify mitigation measures, if needed.

#### 1.12 Mineral Resources

Would	l the	e Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
;	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?				$\boxtimes$
	b)	Result in the loss of availability of a locally-important minerar resource recovery site delineated on a local general plan, specific plan or other land use plan?	I 🗌			$\boxtimes$



a, b) According to the Stanislaus County General Plan<sup>1</sup> there are no identified mineral resources or aggregate areas in the project area. There would be no impact and no mitigation is required.

#### 1.13 Noise

Would the	e Project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable				
	standards of other agencies?			$\boxtimes$	
b)	Generation of excessive groundborne vibration or groundborne noise levels?				
c)	For a Project located within the vicinity of a private airstrip or 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?				$\boxtimes$

#### **Discussion**

- a) The project would be constructed and operated in an agricultural area. The sensitive receptors closest to project facilities are
  - a rural residence near the west end of roadway realignment alternative 2; the residence is located about 190 feet from the existing Del Puerto Canyon Road and would be a similar distance from the realigned roadway.
  - a rural residence east of the DMC (within the area proposed for future development as the West Patterson Business Park); this residence is about 4,900 feet from the southernmost conveyance alignment and pump station at the connection point to the DMC.

<sup>&</sup>lt;sup>1</sup> The General Plan references California Geological Survey Appendix III-A – Special Report 173



- A rural residence on Raines road east of the DMC located about 2,000 feet from the northernmost conveyance alignment and pump station connection point to the DMC.
- a hotel and RV park located along Rogers Road in Patterson, both of which are more than a mile away from the closest possible connection point to the DMC.
- b) The Stanislaus County Noise Ordinance establishes exterior noise levels standards for noise sensitive zones, residential, commercial and industrial areas, but project facilities would not be located in any of these areas and the noise ordinance exempts construction or maintenance activities performed by or at the direction of any public entity or utility. The noise ordinance has limits for construction equipment during nighttime hours (7 p.m. to 7 a.m.). Even though some fairly noisy activities such as pile driving and blasting may be required for construction of the reservoir and conveyance facilities, construction noise would not be considered a significant impact, because no nighttime construction is proposed and there are no sensitive receptors located near the construction area for those facilities; noise from construction of the dam, conveyance and pump station would not be perceptible at any sensitive receptors. There is one residence located near the construction area for roadway alignment alternative 2, but grading and paving activities for the roadway in the immediate vicinity of the house would be short-term and would comply with the Stanislaus County Noise Ordinance. Operational noise from the road would be similar to the existing traffic noise on Del Puerto Canyon Road. Operational noise from the pump station that would pump water from the DMC to the reservoir would also be less than significant because noise levels at the nearest sensitive receptor would not exceed ambient noise levels. Pump sizing has not been finalized, so precise noise levels are not available. However, assuming that the project would require five 2,000-horsepower pumps, noise from the pumping plant would be 97 dBA at 5 feet from the pumps, without an enclosure, so the pump noise level at the nearest sensitive receptors would be attenuated to less than 45 dBA at the closest residence on Raines Road and below 38 dBA at the rural residence east of the DMC, which is well below the ambient noise level. Pump noise would thus not be perceptible to receptors along Rogers Road.
- b) Project operations would not generate groundborne vibration. Construction activities would generate groundborne vibration, with the greatest potential vibration resulting from pile driving, if needed for construction of any of the project facilities. The Stanislaus County General Plan EIR identifies the lowest possible vibration threshold as a peak particle velocity (PPV) of 0.01 inches/second, which would be barely perceptible for continuous or intermittent frequent vibration sources. The estimated PPV for pile driving would be below the perception threshold for any sensitive receptors more than 1,112 feet from the pile driving activity. There are no sensitive receptors that are within 1,112 feet of potential construction areas, so vibration from construction would not be perceptible at any receptor locations.
- c) The project is not within two miles of a private or public airport and is not within the airport influence area of either the Modesto or Oakdale Airports, which are the only public airports in Stanislaus County. There would be no impact and no mitigation is required.



#### **Population and Housing**

Would	d the	e Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
	a)	Induce substantial unplanned 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)?				
	b)	Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				$\boxtimes$

#### **Discussion**

- a) The project does not include new homes or businesses in the project area, and therefore would not directly induce growth. The project partners provide irrigation water to existing agricultural users so the ability to store water would not increase existing potable water supplies and thus would not indirectly accommodate additional development in Stanislaus County. There would be no impact and no mitigation is required.
- b) There are no people or homes within the areas where project facilities would be constructed so the project would not necessitate construction of replacement housing. There would be no impact and no mitigation is required.

#### 1.14 Public Services

		Potentially Significant Impact	Less Than Significant With Mitigation <u>Incorporation</u>	Less Than Significant Impact	No Impact
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:				
	Fire protection?				$\boxtimes$
	Police protection?				$\boxtimes$
	Schools?				$\boxtimes$
	Parks?				$\bowtie$
	Other public facilities?				$\boxtimes$



a) The project includes water storage and conveyance facilities and does not include residential or commercial development that would directly induce population growth and require new or expanded fire and police protection, schools, parks or other facilities. In addition, the project would not indirectly induce unplanned population growth that would place new demands on public service providers because the project will serve existing irrigators. Thus, the project would not require new or expanded governmental facilities. The project would not affect the ability of local providers to maintain acceptable service ratios, response times or other performance objectives for services. There would be no impact and no mitigation is required.

#### 1.15 Recreation

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
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?				
b)	Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				$\boxtimes$

#### Discussion

a) Because the project would not increase population in the project area (see item 3.14a under Population and Housing), the project would not increase use of existing neighborhood or regional parks or recreational facilities.

The closest park to the project area is Frank Raines Regional Park, which is operated by Stanislaus County Parks & Recreation. The park provides campgrounds and a day use area with picnic tables and shelter, barbecues, playground, sports field, volleyball court and horseshoe pit, restrooms, a recreation hall, over 800 acres for off-highway vehicle (OHV) recreation, and over 1000 acres for non-motorized recreation including biking, hiking and hunting. Access to Frank Raines OHV Park is provided by Del Puerto Canyon Road. The park is about 16 miles west of Interstate 5, and Del Puerto Canyon road from its intersection with Diablo Grande Parkway (less than ¼ mile west of Interstate 5) would be abandoned, and a new road would be constructed to connect Diablo Grande Parkway with the existing Del Puerto Canyon Road. The new road would be staged so as to ensure that the new road is completed before the existing road must be closed for construction of the reservoir. Access to the park would thus not be interrupted. Recreational cyclists use the road, and opportunities for cycling would remain after realignment of Del Puerto Canyon Road, as would public roadway access to all legally recognized recreation areas currently in existence.

b) The project does not include recreational facilities and would not include construction or expansion of existing recreational facilities. There would be no impact and no mitigation is required.



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#### 1.16 Transportation

Would the	• Project·	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	$\boxtimes$			
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	$\boxtimes$			
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d)	Result in inadequate emergency access?			$\boxtimes$	

#### **Discussion**

- a) Del Puerto Canyon Road is defined in the Stanislaus General Plan Circulation Element as a "Major Collector" and provides access to Frank Raines Regional Park and Adobe Springs (the source of Noah's Spring Water) and is used by recreational hikers to access Del Puerto Canyon. The road provides alternate access to Santa Clara and Alameda Counties. No transit routes use Del Puerto Canyon Road, but the road is used as a recreational bicycle and motorcycle route. The portion of the road to be inundated by the reservoir would be abandoned the EIR will consider two options for the road relocation (see Figure 4 in Notice of Preparation). The EIR will develop mitigation for management of construction traffic.
- b) The EIR will evaluate changes in vehicle miles travelled (VMT) associated with the two options for the Del Puerto Canyon Road relocation in comparison to VMT of current users of the road.
- c) The EIR will evaluate options for relocation of Del Puerto Canyon Road and will consider hazards due to geometric design features. Mitigation measures will be considered if needed.
- d) Project construction would be phased so as to maintain adequate emergency access at all times. The existing roadway would not be closed until the road relocation is complete.



#### 1.17 Tribal Cultural Resources

			Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
a)	in th Put feat defi sac	uld the Project cause a substantial adverse change ne significance of a tribal cultural resource, defined in plic Resources Code section 21074 as either a site, ture, place, cultural landscape that is geographically ined in terms of the size and scope of the landscape, red place, or object with cultural value to a California ive American tribe, and that is:				
	i)	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
	ii)	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section				

#### **Discussion**

a) The EIR will evaluate the potential for the project to affect tribal cultural resources that are eligible for the California Register of Historical Resources or meet the criteria for inclusion in the register. The analysis will consider significance of the resource to Native American tribal groups.

5024.1, the lead agency shall consider the significance of the resource to a California Native

American tribe.



#### 1.18 Utilities and Service Systems

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No <u>Impact</u>
Would the	e Project:				
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	t 🗌			
c)	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?				
d)	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				$\boxtimes$

#### **Discussion**

- a) The project would require relocation of existing utilities that cross the reservoir site, including four highvoltage power lines owned by PG&E, a natural gas transmission line owned by PG&E, a petroleum pipeline owned by Shell Pipeline, and a telephone line owned by Frontier Communications Corporation. In addition to existing utilities, the proposed San Luis Transmission Project, which includes a 500 kV transmission line that would be owned and operated by Western Area Power Administration, also crosses the project area.
- b) The project would store existing available water supplies and would not have any adverse impacts associated with availability of supplies. There would be no impact and no mitigation is required.
- c) The project would not generate any wastewater and would not affect local wastewater treatment providers. There would be no impact and no mitigation is required.
- d) Because the project area is undeveloped, construction would generate a minimal amount of solid waste that would require disposal at a landfill, primarily from demolition of structures (small agricultural outbuildings)



within the reservoir footprint or relocation of utilities. Construction debris from demolition would be transported and disposed of at suitable landfills; Fink Road Sanitary Landfill is the closest solid waste facility and as of March 2017, had a remaining capacity of 7,184,701 cubic yards<sup>1</sup>. Wood, metal, and other materials would be recycled. Adequate landfill capacity exists in the project area to accommodate the construction debris that would be generated. Therefore, the project would not impair attainment of solid waste reduction goals.

e) The project would comply with all applicable regulations regarding solid waste. There would be no impact and no mitigation is required.

#### 1.19 Wildfire

Less Than Significant Potentially With Less Than Significant Mitigation Significant No Impact Incorporation Impact Impact If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:							
a)	Substantially impair an adopted emergency response plan or emergency evacuation plan?				$\boxtimes$		
b)	Due to slope, prevailing winds, and other factors, exacerbat wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	te 🗌					
c)	Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts the environment?						
d)	Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?						

#### **Discussion**

a) The project is within a state responsibility area<sup>2</sup>, but is not located in or near a very high fire hazard severity zone<sup>3</sup>. Portions of the site burned in June 2019 in a grass fire, known as the Rock Fire. As noted in item 3.9 f), due to the remote nature of the project site, implementation of the project would not affect any emergency response or evacuation plans. The existing Del Puerto Canyon Road would be relocated so access to the

<sup>&</sup>lt;sup>1</sup> <u>https://www2.calrecycle.ca.gov/swfacilities/Directory/50-AA-0001/</u>

<sup>&</sup>lt;sup>2</sup> http://frap.fire.ca.gov/data/frapgismaps/sra11\_2/sramap.50.pdf

<sup>&</sup>lt;sup>3</sup> http://frap.fire.ca.gov/webdata/maps/stanislaus/fhszs\_map.50.pdf



area around the reservoir would not be impaired, but the road is not part of an adopted evacuation plan. There would be no impact and no mitigation is required.

- b) Operation of a reservoir would not exacerbate wildfire risk, and would provide a source of water for firefighting, if needed. During construction of the project, the construction contractor shall require staging areas, welding areas, or areas slated for construction be cleared of dried vegetation or other materials that could ignite. Construction equipment that includes a spark arrestor shall be maintained in good working order. In addition, construction crews shall have a spotter during welding activities to look out for potentially dangerous situations, such as accidental sparks. Other construction equipment shall be kept in good working order and used only within cleared construction zones. During construction of the proposed project, contractors shall require vehicles and crews working at the project site to have access to functional fire extinguishers. There would be no impact and no mitigation is required.
- c) The project would require the relocation of Del Puerto Canyon Road, but the new road location is not expected to exacerbate fire risk as compared to the existing road or result in an increase in ongoing wildfire impacts. Utilities would be relocated from their existing alignment through the proposed reservoir footprint to a new alignment east of the reservoir. Both the existing and proposed alignments cross grassland with very few trees near the transmission facilities, so hazards associated with trees along the alignment would not be increased. Construction safety measures described above in item b) would be followed for road construction.
- d) Because the project would not increase wildfire risk, it would not pose a risk from downstream flooding or landslides related to post-fire instability or drainage changes. There would be no impact and no mitigation is required.

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#### 1.20 Mandatory Findings of Significance

		Potentially Significant Impact	Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
a)	Does the Project have the potential to substantially 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, substantially 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?				
b)	Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" 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)?				



c)	Does the Project have environmental effects which will	$\boxtimes$		
	cause substantial adverse effects on human beings,			
	either directly or indirectly?			

- a) The project has the potential to adversely affect biological and cultural resources, and these impacts will be addressed in detail in the EIR, and mitigation measures will be developed to protect sensitive species and historical resources.
- b) Cumulative impacts will be evaluated in the EIR.
- c) Potential short-term air quality impacts of construction will be addressed, and inundation risks associated with construction of a dam will be evaluated.



## 2. REPORT PREPARATION

#### 2.1 Report Authors

This report was prepared by Del Puerto Water District, the San Joaquin River Exchange Contractors Authority and Woodard & Curran. Staff from these agencies and companies that were involved include:

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#### 2.2 References

- CalFire. 2007. *Fire and Resource Assessment Program, Stanislaus County Fire Hazard Severity Zones.* Available at: <u>http://frap.fire.ca.gov/webdata/maps/stanislaus/fhszs\_map.50.pdf</u>, Accessed May 6, 2019
- CalFire. 2019. *Fire Resource Assessment Program, Stanislaus County State Responsibility Area Map.* Available at: <a href="http://frap.fire.ca.gov/data/frapgismaps/sra11\_2/sramap.50.pdf">http://frap.fire.ca.gov/data/frapgismaps/sra11\_2/sramap.50.pdf</a>. Accessed May 6, 2019.
- CalRecycle. 2017. Solid Waste Information System Facility Detail for Fink Road Landfill. Available at: <u>https://www2.calrecycle.ca.gov/swfacilities/Directory/50-AA-0001/</u>. Accessed May 6, 2019.
- Department of Toxic Substances Control. 2019. EnviroStor Map, Patterson, CA. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=patterson%2C+CA. Accessed May 6, 2019.
- PG&E. 2007. Natural Gas Transmission Pipeline Map. Available at: <u>https://www.pge.com/en\_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page</u>, Accessed May 6, 2019.
- Shell Pipeline Company LP. 2019. Shell Pipeline Interactive Customer Map. Available at: https://www.shell.us/business-customers/shell-pipeline/interactive-customer-map.html, Accessed May 6, 2019
- Stanislaus County. 2016. Stanislaus County General Plan and Airport Land Use Compatibility Plan Update Draft Program EIR. April 2016.
- Stanislaus County. 2019. Mid-San Joaquin River Flood Zones. Available at: <u>http://midsjrfloodplan.org/sites/default/files/mid-sjr-region-2252.jpg</u>. Accessed May 6, 2019.
- State Water Resources Control Board. 2019. Geotracker Map, Patterson, CA. Available at: <u>https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=patterson%2C+CA</u>, Accessed May 6, 2019