# APPENDIX B – PROJECT DESCRIPTION FORMS

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# **B.1 INTRODUCTION**

As discussed in Section 4.2.1 of the West Slope SWRP, project description forms explain the project goals and objectives, the need for the project and problem to be addressed, potential pitfalls and challenges, approaches and execution methods, resource estimates, people and organizations involved, and other relevant information needed to explain the project and the amount of work planned for implementation. The project description forms are quick fact sheets that can be incorporated into future documents such as: environmental review documents, Water Quality Control Plans, applicable water quality control policies, water rights, IRWMPs, and monitoring plans. Below shows the template used for project description forms.

Project/Program Name					
Responsible Agency					
Partner Agency (ies)					
Net Yield	Normal Year:	Wet Y	ear:	Dry Year:	
Estimated Cost	Capital:				
Unit Cost					
Site Coordinates (Approximate)	Latitude:		Longitude:		
Description					
Component					
Potential Challenges					
Conceptual GIS Map of Site	9				
Purpose(s)			Key Stakeholde	rs	
□ Improve in-stream water	quality				
□ Improve health of local w					
□ Improve local water supply reliability					
□ Implement & monitor a reliable stormwater system					
Increase climate resilience					
□ Increase community awareness for sustainable water					

Stage of Development					
Conceptual     Plan		Planning		sign	
□ Design □ Con		struction	□ Other		
Expected Project Timeline					
Project Triggers					
Potentially Applicable Federal	and State	Programs for Technical	and Financ	cial Assistance	
Stormwater Multi-Benefits (pe	er SWRP G	uidelines Table 4):			
Primary Opportunity					
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/or	l/or	Nonpoint source pollution control	
while contributing to comp with applicable permit and TMDL requirements	lliance I/or	treatment of runoff		Reestablished natural water drainage and treatment	
Water Supply		Water supply reliability	,	Water conservation	
through groundwater man and/or runoff capture and	agement use	Conjunctive use			
Flood Management		Decrease flood risk by runoff rate and/or volu	reducing me	Reduced sanitary sewer overflows	
Environmental		Environmental and hal protection and improve including:	oitat ement	Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/creation -Riparian enhancemer	; ht; and/or	Reestablishment of the natural hydrograph	
		-Instream flow improve	ement		
		Increased urban greer	space	Water temperature improvements	
Community		Employment opportun provided	ties	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

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Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>□ No, explain</li> </ul>						
Project Benefits a DAC/EDA:1	□ Yes, which one	□ No					
CEQA Compliance:	□ Yes, explain	□ No, explain					
Contact Person(s):	Contact Person(s):						
Key References:							
Supplemental Information (e.g., Project Webpage or equivalent):							

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Project ID's were assigned for each identified project under the three components. Project ID's with 1XX format are categorized under Surface Water Storage, 2XX under Watershed Management, and 3XX under Stormwater Management. The following sections contain the project description forms for each component.

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# **B.2 SURFACE WATER STORAGE**

### B.2.1 100 Alder Reservoir

Project/Program Name	Alder Reservoir			
Responsible Agency	El Dorado County Water Agency			
Partner Agency (ies)	El Dorado Irrigation District, County of El Dorado, U.S. Department of the Interior, Bureau of Reclamation (Reclamation)			
Net Yield	Normal Year: ~23,480 AFY	Wet Year: NA		Dry Year: NA
Estimated Cost	Capital: \$909 Million			
Unit Cost	NA			
Site Coordinates	Latitude: 38.729700°		Longitude: -120.342875°	

#### Description

Alder Creek Dam and Reservoir is located in the headwater catchment of Alder Creek just 25 miles east of Placerville in El Dorado County, California at an elevation of 5,500 feet. Several Alder Reservoir concepts have been studied over the years. In 2004 the 108<sup>th</sup> Congress passed H.R. 3597, which authorized the Secretary of the Interior to conduct a feasibility study for construction of a water storage project on Alder Creek. Currently, Alder Reservoir is included in Reclamation's Sacramento-San Joaquin River Basin Study as a potential climate change adaptation measure. A wide range of Alder Reservoir scenarios have been studied over the last several decades: a 32,000 acre-foot (AF) water supply reservoir with a 10MW powerhouse and power generation of up to 56,000 MWh; a 60,000 AF water supply and seasonal pumped storage reservoir with a 14 MW powerhouses and power generation up to 81,000 MWh; and a 175,000 AF reservoir with 110 MW capacity at 3 powerhouses and power generation up to 470,000 MWh. This "Large Alder" project has been identified to provide the greatest public benefit.

The Alder Reservoir project, would divert water from the South Fork American and Silver Fork to Alder Reservoir through approximately 6.6 miles of pipelines and 8.8 miles of tunnels. In an average water year these diversions would total about 180,000 AF. At Alder Reservoir, this water, along with local Alder Creek runoff (23,480 AF per year on average), would be stored and then released as required for renewable energy generation, to meet water supply demands, and provide environmental flows. These releases would be conveyed through three powerhouses arranged in series, through approximately 18 miles of pipelines, tunnels and penstocks, with a total elevation drop of approximately 3,600 feet, back into the American River at the current site of the El Dorado Hydroelectric Project (FERC Project No. 184) El Dorado Powerhouse. To improve local supply reliability in dry years, water could be diverted from the project upstream of the EI Dorado Powerhouse into Jenkinson Lake and/or at EI Dorado Forebay and used to meet consumptive and irrigation demands. The project would also allow for coordinated operations with Reclamation for releases at Folsom Reservoir, similar to other large reservoirs in the American River watershed, for enhanced water supply reliability, temperature management for anadromous fish in the Lower American River and for broader CVP/SWP benefits including improvement to ecosystems, water quality, flood control, emergency response and recreation. The cost of the Alder Dam and Reservoir Project was estimated at \$250 million in 1978 (ENR CCI=2776). Adjusted to today's dollars, project costs are estimated to be about \$909 million (ENR CCI=10092).

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Component
Surface Water Storage
Potential Challenges

Funding reservoir construction

Conceptual GIS Map of Site

Can refer to the map that was obtained from the Alder Public Benefits Concept Paper that describes the location of the proposed reservoir location.



Purpose(s)				Key Stakeholders	
Improve in-stream water qua	ality		Water	Water Forum, local environmental interests,	
☑ Improve health of local watersheds				nento area water users, and state deral water contractors	
Improve local water supply re	eliability				
□ Implement & monitor a reliat	ole storm	water system			
Increase climate resilience					
□ Increase community awaren	ess for si	ustainable water			
Stage of Development					
Conceptual	X	Planning	] Pre-De	esign	
🗆 Design		Construction	Other		
Alder Reservoir has a feasibility	y study.				
Expected Project Timeline	Begin 2	2018: End 2040			
Project Triggers	Increas	ing water supply needs and r	eliability	concerns under climate change	
Potentially Applicable Federal a	and State	Programs for Technical and	Financia	al Assistance	
Congressional authorized cost- Basin Study (awarded and in pr Water Marketing Strategy Gra transfer opportunities as part of Stormwater Multi-Benefits (per	Congressional authorized cost-share feasibility study (with the MOU signed in 2017), Reclamation's American River Basin Study (awarded and in progress, covering early regional collaboration for coordinated actions), Reclamation's Water Marketing Strategy Grant (awarded with pending agreement with Reclamation, covering potential water transfer opportunities as part of the regional collaboration) Stormwater Multi-Benefits (per SWRP Guidelines Table 4):				
Primary Opportunity		1			1
Benefit Category		Main Benefit	ŀ	Additional Benefit	
Water Quality	2000	Increased filtration and/or treatment of runoff		Nonpoint source pollution control	
with applicable permit and/c requirements	or TMDL		C	drainage and treatment	
Water Supply		Water supply reliability	١	Nater conservation	
through groundwater manag and/or runoff capture and us	gement se	Conjunctive use			
Flood Management		Decrease flood risk by redu runoff rate and/or volume	cing F	Reduced sanitary sewer overflows	
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/creat -Riparian enhancement	t estion; F	Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural	
		-Instream flow improvement			
Community		Increased urban green space	ce V	Water temperature improvements	
Community		provided	C	community involvement	
		Public education	E	Enhance and/or create recreational and public use areas	

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Water Quality Benefit: Alder Reservoir would provide greater operational flexibility at Folsom Reservoir and the broader CVP/SWP to meet CVP water quality and Delta water quality requirements. Alder Reservoir is in a source area watershed and water quality is typically the best of any storage reservoir alternative because of the limited upstream runoff to dilute or contaminated the inflow to the reservoir the

*Water Supply Benefit:* Alder Reservoir would benefit the water supply needs of local, regional and statewide demands. Local water supply reliability in dry and critical dry years would be improved with Alder Reservoir storage. Regionally, lower American River water purveyors with current diversion limitations in dry years would benefit from: Folsom Reservoir cold-water pool augmentation provided by Alder Reservoir for fisheries temperature; and additional water supply for transfer or exchange, including groundwater banking in the Sacramento region.

*Flood Management Benefit:* Alder Reservoir's storage capacity upstream of Folsom Reservoir would provide measurable benefits to existing flood control operations for protection of the Sacramento region. Alder Reservoir could reduce the Folsom Reservoir flood space required to protect the Sacramento region, providing increased opportunity for Folsom Reservoir to store additional water to meet CVP contractor and environmental flow demands.

*Environmental Benefit:* Water supply from Alder Reservoir would provide significant downstream ecological and environmental benefits. The reservoir would contribute to the water supply necessary to support the CVP/SWP long-term operation related flow augmentation for: 1) temperature management in the Lower American River for fall-run Chinook salmon and steelhead trout; 2) Delta salinity standards by maintaining Delta outflow, X2, Rio Vista flows, chloride minimums and other water quality standards; 3) CVP Improvement Act B2 water deliveries for fisheries management; and 4) Cosumnes River flow augmentation for fisheries management and groundwater recharge, via Jenkinson Lake.

*Community Benefit:* The construction, operation and maintenance of Alder Reservoir would provide many employment opportunities. Alder Reservoir would be separate and independent from the CVP/SWP system. Its regulatory approvals, administrative oversight, contracting, and public/stakeholder input would be controlled by a single local agency. Alder Reservoir would offer a wide range of recreational and economic benefits to the communities within the Eldorado National Forest. Tourism would be promoted through the California Department of Parks and Recreation, El Dorado County, local chambers of commerce, and individual small business entrepreneurs providing significant new recreational opportunities in the Sacramento region and beyond. These promotions would represent a diversification and employment benefit to small communities in the area, like Kyburz and Pollock Pines.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain in future amendment (CABY)</li> </ul>		
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project falls under the 2010-2014 DAC Block Ground International Project falls under the 2010-2014 DAC Block Ground International Internat</u></li></ul>		
CEQA Compliance:	☐ Yes, explain federal feasibility study (on going)	⊠ No, explain <u>part of the</u>	

#### Appendix B Project Description Forms March 2018

Contact Person(s):

Ken Payne, General Manager of EDCWA, ken.payne@edcgov.us, (530) 621-5403

Key References:

https://cwc.ca.gov/Documents/2016/WSIP/EIDorado\_AlderReservoir.pdf

Public Law 101

Memorandum of Agreement

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# B.2.2 104 Silver Lake Dam Remediation

Project/Program Name	Silver Lake Dam Remediation				
Responsible Agency	El Dorado Irrigation District				
Partner Agency (ies)	El Dorado County Water Agency				
Net Yield	Normal Year: NA	Wet Year: NA		Dry Year: NA	
Estimated Cost	Capital: \$10,000,000				
Unit Cost	NA				
Site Coordinates	Latitude: 38.668568°		Longitude: -120.121642°		

#### Description

Silver Lake Dam was constructed in 1876 and has undergone multiple episodes of modifications. The dam outlet and spillway has insufficient capacity to pass the Probable Maximum Flood (PMF) without overtopping of the dam. The aged concrete spillway structure may be susceptible to damage during earthquake loading, compromising El Dorado Irrigation District's (EID) ability to draw down the reservoir during an emergency flood event. Other components of the dam also have reliability concerns including leakage, seepage driven internal erosion, voids, and loss of integrity of the earth fill due to degradation of the original timber cribbing.

EID has evaluated a rehabilitation/repair alternative or complete replacement of Silver Lake dam to resolve the identified safety deficiencies and ensure long-term reliability. Based on the evaluation, the Dam Replacement Alternative is recommended to meet EID's objectives. The reservoir storage capacity is 8,590 AF.

#### Component

Surface Water Storage

#### **Potential Challenges**

Funding

Federal Energy Regulatory Commission (FERC)/California Division of Safety of Dams (DSOD) review and approval, license amendment

Public/recreational considerations

#### **Conceptual GIS Map of Site**



Purpose(s)			Key Stakeholders	
□ Improve in-stream water qua	ality		El Dorado County	
□ Improve health of local wate	rsheds	El Dorado County Water Agency		
oxtimes Improve local water supply r	eliability		Amador County	
$\boxtimes$ Implement & monitor a reliab	ole storm	water system		
$\boxtimes$ Increase climate resilience				
□ Increase community awarene	ess for su	ustainable water		
Stage of Development				
Conceptual	$\boxtimes$	Planning 🛛	Pre-Design	
□ Design		Construction	Other	
Expected Project Timeline	Begin: 2	2023, End: 2024		
Project Triggers	Funding	g availability, additional floodir	ng	
Potentially Applicable Federal a	and State	Programs for Technical and	Financial Assistance	
Bureau of Reclamation WaterS U.S. Department of Agriculture Stormwater Multi-Benefits (per	SWRP G	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit	Additional Benefit	
Water Quality		Increased filtration and/or	Nonpoint source pollution control	
while contributing to complia with applicable permit and/o	ance or TMDL	treatment of runoff	Reestablished natural water drainage and treatment	
Water Supply		Water supply reliability	Water conservation	
through groundwater managed and/or runoff capture and us	gement se	Conjunctive use		
Flood Management		Decrease flood risk by reduc runoff rate and/or volume	ring Reduced sanitary sewer overflows	
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/crea	Reduced energy use, GHG emission, or provides a carbon sink tion; Reestablishment of the natural	
		-Riparian enhancement; and -Instream flow improvement	l/or hydrograph	
		Increased urban green spac	e Water temperature improvements	
Community		Employment opportunities provided	Community involvement	
		Public education	Enhance and/or create recreational and public use areas	

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The implementation of this project will help secure water supply reliability in the region, will help reduce the risk of flooding, improve the local environment, will reestablish the natural hydrograph, and will help improve the water temperature of the local environment that is helpful for sustaining aquatic life. Additionally, this project will create employment opportunities, contains a public education component, and will sustain and enhance the recreational area that is near Silver Lake.

Project Included in IRWM:	□ Yes, which one ⊠ No, explain <u>Project to be included in CABY IRWM</u>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Benefits DAC Block Groups 2010-2014 as identified by</u></li> <li><u>the CA Department of Water Resources</u></li> <li>□ No</li> </ul>
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>⊠ No, explain<u>To be completed</u></li> </ul>

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Contact Person(s):

Brian Mueller, Director of Engineering, El Dorado Irrigation District, bmueller@eid.org, (530) 642-4029

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# **B.3 WATERSHED MANAGEMENT**

### B.3.1 200 Biomass Plant – Union Mine

Project/Program Name	Biomass Plant-Union Mine			
Responsible Agency	El Dorado County Water Agency			
Partner Agency (ies)	County of El Dorado Environmental Management Department, County of El Dorado Chief Administrative Office			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA
Estimated Cost	Capital: \$30 Million			
Unit Cost	NA			
Site Coordinates	Latitude: 38.646674°		Longitude: -120.827	715°
Description	-		-	
This project would explore a way to save water by delving into the biomass industry. Biomass is anything organic burned or fermented (ex. Sludge) to create gas or fuel. The steam it produces can operate machine engines and when cooled is clean water that can be re-heated for continued use. El Dorado County operates a septage plant at their Union Mine Property. PJ Patton talked with the plant manager and learned that the water from human waste is cleaned and used in the sludge fields with the rest being released in Deer Creek for use by EID. The sludge from the plant is eventually dried and transported out of the county. The Union Mine Plant currently pays over \$100,000 annually for electricity. Consequently, an idea has been formulated to build a biomass plant on the County property by the Union Mine Plant. This plant would take in waste from the National Forest, the County Agriculture industry, current homeowners and the septage plant, produce electricity for the plant and sell the rest to either SMUD or PGE. One leg of this idea may be working with Sierra Pacific Industries to re-open the Camino Mill for the purpose of chipping forestry waste for the biomass plant. Another leg of this idea would be to work with the energy providers in Northern California to add infrastructure to receive the excess energy the biomass plant generates. It should also be stated that the Environmental Management Department of the County has a closed dump area in South Lake Tahoe that might also be a great location for a Biomass Plant.				
Component				
Watershed Management				
Potential Challenges				
Intergovernmental cooperation (Fed, State, County) Funding				
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> <li>Increase community awareness for sustainable water</li> </ul>		El Dorado County Water Agency, County of El Dorado Environmental Management Department, County of El Dorado Chief Administrative Office, El Dorado County, Pacific Gas and Electric Company, U.S. Forest Service, MERF	
Stage of Development			
⊠ Conceptual □ Design	□ Planning □ Construction	□ Pre-Design □ Other	
Expected Project Timeline	Begin: 2020, End: 2026		
Project Triggers	Flow Rate and/or funding opportunity		
Potentially Applicable Federal and State Programs for Technical and Financial Assistance			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program			

Stormwater Multi-Benefits (per SWRP Guidelines Table 4):			
Primary Opportunity (highlight applicable cells and provide justification below table)			
Benefit Category	Main Benefit	Additional Benefit	
Water Quality	Increased filtration and/or	Nonpoint source pollution control	
while contributing to compliance with applicable permit and/or TMDL requirements	treatment of runoff	Reestablished natural water drainage and treatment	
Water Supply	Water supply reliability	Water conservation	
through groundwater management and/or runoff capture and use	Conjunctive use		
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows	
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink	
	-Wetland enhancement/creation;		
	-Riparian enhancement; and/or		
	-Instream flow improvement	Reestablishment of the natural hydrograph	
	Increased urban green space	Water temperature improvements	
Community	Employment opportunities provided	Community involvement	
	Public education	Enhance and/or create recreational and public use areas	
The proposed project will increase water supply reliability and promote water conservation in addition to help reduce nonpoint source pollution. This project will ultimately engage the involvement of the community and create job opportunities with the creation of this facility. With the construction of the biomass plant this project will create job opportunities during the construction phase and will eventually need a group of people to run the facility.			
Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA:1	□ Yes, which one	⊠ No	

CEQA Compliance:	☐ Yes, explain stage, no environmental documentation is	☑ No, explain project is in conceptual s completed yet

# Appendix B Project Description Forms March 2018

Contact Person(s):

Ken Payne, General Manager of EDCWA, ken.payne@edcgov.us, (530) 621-5403

Key References:

IER Institute for Energy Research: Impact of EPA's Regulatory Assault on Power Plants: New Regulations to Take More than 72 GW of Electricity Generation Offline and the Plant Closing Announcements Keep Coming. 2016 Annual Technology Baseline (ATB) PowerPoint, September 2016

Supplemental Information (e.g., Project Webpage or equivalent):

Biomass for Electricity Generation, online article by the US Department of Energy, http://wbdg.org/resources/biomass-electricity-generation#intro https://www.wbdg.org/resources/biomass-electricity-generation http://ucanr.edu/sites/WoodyBiomass/files/78993.pdf

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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Appendix B Project Description Forms March 2018

# B.3.2 202 Slate Creek Monitoring Project

Project/Program Name	Slate Creek Monitoring Project			
Responsible Agency	El Dorado County - Community Development Services			
Partner Agency (ies)	California Department of Transportation			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	NA			
Site Coordinates	Latitude: 38.682407° Longitude: -120.850105°			
Description				
The proposed project was developed to conduct long-term monitoring of the water quality of Slate Creek near the town of El Dorado, specifically in Slate Creek and its tributaries after and within the Town of El Dorado. Slate Creek crosses a developed area of the Town of El Dorado that is set to undergo road and drainage improvements. The proposed project aims at monitoring pre and post construction activities that are planned to occur on Pleasant Valley Rd. as well as ongoing long-term monitoring. This monitoring project will aim at monitoring flow, sediment, nutrient loads, and constituents that may result from the pre and post construction activities. Overall, the project aims at preserving the integrity of Slate Creek. Approximately 25,765 ft of Slate Creek will be monitored-Google Earth				

Component

Estimate.

Watershed Management

**Potential Challenges** 

Climatological predictions may affect the sizing or effectiveness of this project.

Conceptual GIS Map of Site



Purpose(s)		Key Stakeholders	
☑ Improve in-stream water quality			
Improve health of local was	tersheds		
□ Improve local water supply	reliability	El Dorado County- Community Development	
Implement & monitor a reli	able stormwater system	Department of Transportation	
□ Increase climate resilience			
□ Increase community aware	eness for sustainable water		
Stage of Development			
⊠ Conceptual	Planning	Pre-Design	
□ Design	□ Construction	□ Other	
Expected Project Timeline	Begin: 2020, End: 2030		
Project Triggers	Funding opportunity		
Potentially Applicable Federal and State Programs for Technical and Financial Assistance			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program			
U.S. Army Corps of Engineers (USACE) - Aquatic Ecosystem Restoration (CAP Section 206)			
U.S. Army Corps of Engineers (USACE) - Snagging and Clearing for Flood Control (CAP Section 208)			

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Stormwater Multi-Benefits (per	r SWRP Guidelines Table 4):		
Primary Opportunity (highlight applicable cells and provide justification below table)			
Benefit Category	Additional Benefit		
Water Quality	Increased filtration and/or treatment	Nonpoint source pollution control	
while contributing to compliance with applicable permit and/or TMDL requirements	of runoff	Reestablished natural water drainage and treatment	
Water Supply	Water supply reliability	Water conservation	
through groundwater management and/or runoff capture and use	Conjunctive use		
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows	
Environmental	Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or	Reduced energy use, GHG emission, or provides a carbon sink	
	-Instream flow improvement	Reestablishment of the natural hydrograph	
	Increased urban green space	Water temperature improvements	
Community	Employment opportunities provided	Community involvement	
	Public education	Enhance and/or create recreational and public use areas	

This project aims at preserving the environmental integrity of Slate Creek. Ultimately, this project will monitor water quality, will enhance and protect the local habitats, and improve the in stream water quality conditions. The project will provide job opportunities as people will need to be hired to monitor the creek and/or establish a system to monitor it. To undergo the project it will require the engagement of the community. This project will have a public education component.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project falls under the 2010-2014 DAC Block Groups</u> identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet

Appendix B Project Description Forms March 2018

Contact Person(s):

Dave Spiegelberg, El Dorado County Department of Transportation, <u>dave.spiegelberg@edcgov.us</u>, (530) 621-6077

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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Appendix B Project Description Forms March 2018

## B.3.3 206 Carson Creek Restoration

Project/Program Name	Carson Creek Restoration				
Responsible Agency	El Dorado County- Co	El Dorado County- Community Development Services			
Partner Agency (ies)	NA	NA			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$653,305.70				
Unit Cost	\$129,135/river mile				
Site Coordinates	Latitude: 38.632329° Longitude: -121.06341°				
Description					
The proposed project aims to restore Carson Creek just South of Highway 50. To restore the creek to a stable condition the project will entail removing sediment loads, cleanout culverts, stabilizing the bank, headcutting,					

condition the project will entail removing sediment loads, cleanout culverts, stabilizing the bank, headcutting, controlling the number of invasive weeds present, managing the amount of beaver dams present, and do vector control to reduce the breeding grounds for mosquitos. Since there are impervious areas within the Carson Creek watershed, they can be routed away from the creek and to the El Dorado Irrigation District reclaimed water ponds (i.e., up-gradient apartments along Valley View Parkway) as another component of this project. Additionally, there are opportunities for impervious area disconnection from the creek. Swales will be added along the creek wherever there is a road nearby if possible, so stormwater runoff can be treated and not impact the water quality of the creek. Trees and other vegetation will be planted along the creek to stabilize the banks and prevent erosion, nutrient, and sediment inputs. Low impact development (LID) approaches will be applied for this project. Approximately 26,712 ft will be restored-Google Earth Approximation.

Component

Watershed Management

**Potential Challenges** 

Climatological predictions may affect the sizing or effectiveness of this project.

Conceptual GIS Map of Site


Purpose(s)		Key Stakeholders	
☑ Improve in-stream water quality			
Improve health of local wa	tersheds		
□ Improve local water supply	reliability	El Dorado County- Community Development	
Implement & monitor a reli	able stormwater system	Services	
□ Increase climate resilience			
□ Increase community aware	eness for sustainable water		
Stage of Development			
⊠ Conceptual	Planning	□ Pre-Design	
🗆 Design	□ Construction □ Other		
Expected Project Timeline	Begin: 2020, End: 2021		
Project Triggers	An increase in the degradation of water quality		
Potentially Applicable Federal and State Programs for Technical and Financial Assistance			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program			
U.S. Army Corps of Engineers (USACE) - Aquatic Ecosystem Restoration (CAP Section 206)			
U.S. Army Corps of Engineers (USACE) - Snagging and Clearing for Flood Control (CAP Section 208)			

Stormwater Multi-Benefits (per SWRP Guidelines Table 4):					
Primary Opportunity (high	Primary Opportunity (highlight applicable cells and provide justification below table)				
Benefit Category	ategory Main Benefit Additional Benefit				
Water Quality	Increased filtration and/or treatment	Nonpoint source pollution control			
while contributing to compliance with applicable permit and/or TMDL requirements	of runoff	Reestablished natural water drainage and treatment			
Water Supply	Water supply reliability	Water conservation			
through groundwater management and/or runoff capture and use	Conjunctive use				
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
	-Wetland enhancement/creation;				
	-Riparian enhancement; and/or				
	-Instream flow improvement	Reestablishment of the natural hydrograph			
	Increased urban green space	Water temperature improvements			
Community	Employment opportunities provided	Community involvement			
	Public education	Enhance and/or create recreational and public use areas			
This restoration project will restore portions of Carson Creek to satisfactory conditions. With less erosion, less sediment inputs, and less nutrient inputs water quality conditions will improve and the local environment and habitat of the aquatic species will be enhanced. Since Carson Creek will be restored this project will reestablish the natural hydrograph of the creek. Since swales will be constructed near roads, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. In addition this project will create job opportunities for people to clean up the creek in addition to providing opportunities for the community to get involved and learn about the restoration process and the significance it has. Once the creek has been restored, the area will be enhanced and will provide a recreational area for the community to enjoy.					
Project Included in IRW/M	□ Yes, which one	_			
	No, explain project is in conceptua	al stage, not added to IRWM currently			
Project Benefits a DAC/EDA:1	$\Box$ Yes, which one $\boxtimes$ No				
CEQA Compliance:	⊠ Yes, explain       ⊠ No, explain project is in conceptual         stage, no environmental documentation is completed yet				

Appendix B Project Description Forms March 2018

Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

Project webpage, as applicable NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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## B.3.4 207 New York Creek Restoration

Project/Program Name	New York Creek Restoration			
Responsible Agency	El Dorado County- Community Development Services			
Partner Agency (ies)	El Dorado Hills Comm	nunity Serv	ice District	
Net Yield	Normal Year: NA	Wet Year	: NA	Dry Year: NA
Estimated Cost	Capital: \$307,673.92			
Unit Cost	\$129,135/river mile			
Site Coordinates	Latitude: 38.708984°		Longitude: -121.076	)639°
Description	-		-	
This is a restoration project that is to take place on New York Creek, just North of highway 50. To restore portions of the creek to a stable condition the project will entail removing sediment loads, stabilizing the bank, headcutting, controlling the number of invasive weeds present, managing the number of beaver dams present (dam removal), and do vector control to reduce the breeding grounds for mosquitos. Additionally, impervious area disconnections and the cleaning of culverts will occur. Stormwater will be treated and captured at various locations along the creek with ecologically based stormwater treatment technologies. Oak Ridge High School, Jackson Elementary School, Art Weisberg Park, and El Dorado Hills Community Park and Ballfields are some locations where ecologically based stormwater treatment technologies could be found. At the listed locations and various spots along the creek, if possible, there will be bioretention and rain garden systems that will collect stormwater runoff, treat it, and then filtrate it back to the ground. Swales will be added along the creek wherever there is a road nearby or in close proximity to an urbanized area if possible, so stormwater runoff can be treated and not impact the water quality of the creek. Trees and other vegetation will be planted along the creek to stabilize the banks and prevent erosion, nutrient, and sediment inputs. Oak Ridge High School, Jackson Elementary School, Art Weisberg Park, and El Dorado Hills Community Park and Ballfields may create and oversee opportunities for the public to participate and allow them to plant vegetation along the creek to participate in the restoration efforts. Low impact development (LID) approaches will be applied for this project. Approximately12,580 ft will be restored-Google Earth Approximation.				
Component				
Watershed Management				
Potential Challenges				
Climatological predictions may affect the sizing or effectiveness of this project.				
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders	
☑ Improve in-stream water quality			
Improve health of local wa	tersheds		
□ Improve local water supply	reliability	El Dorado County- Community Development	
□ Implement & monitor a reli	able stormwater system	District	
□ Increase climate resilience			
□ Increase community aware	eness for sustainable water		
Stage of Development			
⊠ Conceptual	Planning	Pre-Design	
🗆 Design	□ Construction □ Other		
Expected Project Timeline	Begin: 2020, End: 2021		
Project Triggers	An increase in the degradation of water quality		
Potentially Applicable Federal and State Programs for Technical and Financial Assistance			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program			
U.S. Army Corps of Engineers (USACE) - Aquatic Ecosystem Restoration (CAP Section 206)			
U.S. Army Corps of Engineers (USACE) - Snagging and Clearing for Flood Control (CAP Section 208)			

Stormwater Multi-Benefits (per SWRP Guidelines Table 4):					
Primary Opportunity (highlight applicable cells and provide justification below table)					
Benefit Category Main Benefit Additional Benefit					
Water Quality	Increased filtration and/or treatment	Nonpoint source pollution control			
while contributing to compliance with applicable permit and/or TMDL requirements	of runoff	Reestablished natural water drainage and treatment			
Water Supply	Water supply reliability	Water conservation			
through groundwater management and/or runoff capture and use	Conjunctive use				
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental	Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or	Reduced energy use, GHG emission, or provides a carbon sink			
-Instream flow improvement		Reestablishment of the natural hydrograph			
	Increased urban green space	Water temperature improvements			
Community	Employment opportunities provided	Community involvement			
Public education         Enhance and/or create recreational and public use areas					
This restoration project will restore New York Creek to satisfactory conditions. The reduction of sediment loads, nutrient inputs, and erosion will improve water quality conditions and will improve the local environment and habitat of the aquatic species. Since swales will be constructed near roads, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. Since New York will be restored this project will reestablish the natural hydrograph of the creek. In addition this project will create job opportunities for people to clean up the creek in addition to providing opportunities for the community to get involved and learn about the restoration process and the significance it has. Once the creek has been restored, the area will be enhanced and will provide a recreational area for the community to enjoy.					

	⊠ No, explain project is in conceptual stage, not added to IRWM currently
Project Benefits a DAC/EDA:1	□ Yes, which one⊠ No

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CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet		
Contact Person(s):			
Brendan Ferry, El Dorado Count	y Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905		
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
NA			
1DAO D'as dans la sul Osmanni d'as			

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### B.3.5 208 Weber Creek Restoration

Project/Program Name	Weber Creek Restoration				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	El Dorado Hills Community Service District				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$883,767.66				
Unit Cost	\$129,135/river mile				
Site Coordinates	Latitude: On Weber Creek in between the following points 1) 38.706046° 2) 38.736014°		Longitude: On Weber Creek in between the following points 1) -120.765303° 2) -120.864891°		

#### Description

The proposed project aims to provide slope stabilization and identify and reduce sources of urban pollutants into Weber Creek between Cedar Ravine Rd. and the confluence of Hangtown Creek. Ultimately the project will aim to stabilize slopes and creek banks to reduce un-natural sediment loads and hydromodification as well as reduce the potential of urban pollutants from entering the creek or its tributaries. Bank stabilization will be accomplished by planting trees and native vegetation. The reduction of urban pollutants will be accomplished by placing swales along the creek and its tributaries in areas where it is urbanized or in proximity to a road, if possible. Low impact development (LID) approaches will be applied for this project. Approximately 36,135 ft of restoration-Google Earth Approximation.

Component

Watershed Management

**Potential Challenges** 

Climatological predictions may affect the sizing or effectiveness of this project.

Conceptual GIS Map of Site



Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality				
Improve health of local wa	tersheds	El Dorado County- Community Development		
□ Improve local water supply	/ reliability	Services, City of Placerville and California		
□ Implement & monitor a reli	able stormwater system	Department of Transportation, El Dorado Hills Community Service District		
Increase climate resilience	2			
□ Increase community aware	eness for sustainable water			
Stage of Development				
⊠ Conceptual	Planning	Pre-Design		
🗆 Design	□ Construction □ Other			
Expected Project Timeline	Begin: 2020, End: 2021			
Project Triggers	An increase in the degradation of water quality			
Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				
U.S. Army Corps of Engineers (USACE) - Aquatic Ecosystem Restoration (CAP Section 206)				
U.S. Army Corps of Engineers (USACE) - Snagging and Clearing for Flood Control (CAP Section 208)				

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Stormwater Multi-Benefits (per SWRP Guidelines Table 4):					
Primary Opportunity (highlight applicable cells and provide justification below table)					
Benefit Category Main Benefit Additional Benefit					
Water Quality	Increased filtration and/or treatment	Nonpoint source pollution control			
while contributing to compliance with applicable permit and/or TMDL requirements		Reestablished natural water drainage and treatment			
Water Supply	Water supply reliability	Water conservation			
through groundwater management and/or runoff capture and use	Conjunctive use				
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
-Wetland enhancement/creation;					
	-Riparian enhancement; and/or				
	-Instream flow improvement	Reestablishment of the natural hydrograph			
	Increased urban green space	Water temperature improvements			
Community	Employment opportunities provided	Community involvement			
	Public education	Enhance and/or create recreational and public use areas			

This restoration project will restore Weber Creek to satisfactory conditions. With less erosion, less sediment inputs, and less nutrient inputs the water quality conditions will improve and the local environment and habitat of the aquatic species will be enhanced. Since swales will be constructed near roads, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. Since Weber Creek will be restored this project will reestablish the natural hydrograph of the creek. In addition, this project will create job opportunities for people to clean up the creek in addition to providing opportunities for the community to get involved and learn about the restoration process and the significance it has. Once the creek has been restored, the area will be enhanced and will provide a recreational area for the community to enjoy.

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Project Included in IRWM:	□ Yes, which one ⊠ No, explain <u>project is in conceptual stage, not added to IRWM currently</u>			
Project Benefits a DAC/EDA:1	<ul> <li>☑ Yes, which oneProject falls under the 2010-2014 DAC Tracts as identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>			
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
Project webpage, as applicable NA				
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

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## B.3.6 209 King Fire Watershed Restoration & Reforestation Project

Project/Program Name	King Fire Watershed Restoration & Reforestation Project				
Responsible Agency	El Dorado County & Georgetown Divide Resource Conservation Districts				
Partner Agency (ies)	CALFIRE, Caltrans and Private Landowners				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$1,927,800				
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.809890° Longitude: -120.587890°				

Description

The overall objective of the King Fire Restoration and Reforestation Project is to begin the process of reversing the ecological, economic, environmental, aesthetic and social impacts of the King Fire. Specific objectives include: 1) treat private lands affected by the King Fire to reduce the potential for wild fire in the future by removing accumulated debris and dead trees; 2) conduct site preparation and planting to re-establish forest cover on the private lands; and 3) increase potential carbon sequestration and achieve greenhouse gas emissions reduction through the reforestation of the burned area. Ultimately, the goal is to restore the forest ecosystem that was destroyed by the King Fire.

Under this project only the private and nonindustrial land will be treated, covering approximately 1,400 acres.

Purpose/Need of Project:

Reduce risk from falling dead, dying and damaged trees that pose a significant safety concern to forest visitors and workers, and create a hazard to private property, infrastructure, and cultural resources

Remove dead trees in strategic fire management areas to improve the agency's ability to manage and control future fires

Actively manage severely burned areas to facilitate restoration and resilience

Balance active management with the retention of important attributes of post-fire habitat at the landscape scale and within treatment areas to support the diversity and abundance of species

Expeditiously recover timber killed by the fire commensurate with available markets for the purpose of generating funds to offset the cost of restoration activities and contribute to societal needs for wood products.

Promote scientific research to increase knowledge regarding the effects of large fires on the environment, how to reduce the risk of future fires, and how to restore resilient forests after fires.

#### Component

Watershed Management

**Potential Challenges** 

Proposed salvage harvest in California spotted owl (CSO) territories would impact CSO foraging habitat and lead to loss of occupancy.

Leaving large portions of the fire untreated results in a dangerously high fuel load in the form of snags and later brush growth and a high risk of future wildlife impacting private land, communities, and forest resources

The proposed action fails to remove sufficient dead trees to reduce carbon emissions and plant sufficient new ones to increase carbon absorption resulting in net carbon emissions to the atmosphere

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Tree planning and herbicides will adversely impact the composition of early successional shrub, forb, and grass species of the post-fire habitat, thereby impacting the many species which require complex early seral forest. The proposed action will adversely affect black-backed woodpeckers and secondary cavity nesters by removing important intensely burned habitat created by the fire.

The proposed action has insufficient protection for water quality and aquatic habitat by proposing herbicides within RCAs and permitting log skidding within 150 feet of perennial and intermittent streams.

There is no ecological or economic justification to salvage log areas that burned at mixed severity within the Natural Range of Variation (NRV).

Conceptual GIS Map of Site

Project would occur within the area that was impacted by the King Fire in the County of El Dorado (orange area in the map).



Purpose(s)			Key Stak	ceholders
☑ Improve in-stream water quality				
☑ Improve health of local watersheds				
⊠ Improve local water supply reliability			El Dorad	o County & Georgetown Divide
□ Implement & monitor a relia	able storm	nwater system	Private L	andowners, Caltrans
☑ Increase climate resilience				
□ Increase community aware	eness for s	sustainable water		
Stage of Development				
Conceptual	🗆 Pla	anning	□ Pre-De	sign
□ Design	⊠ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	017, End: 2019		
Project Triggers	Under cu	urrent implementation		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4): Wate	rshed resto	pration (post fire)
Primary Opportunity (hi	ighlight ar	policable cells and provide	iustificatio	n below table)
Benefit Category Main Benefit			Juotinoutio	Additional Benefit
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff capture and use		Conjunctive use		
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunities provided		Community involvement
		Public education		Enhance and/or create recreational and public use areas

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The methods used to estimate the GHG benefits of the project are contained within "Guidance on Methods for Evaluating GHG Emission Reductions for Programs in the CAL FIRE Greenhouse Gas Reduction Fund" dated March 4, 2015 (hereafter, Guidance). Specifically, the method employed for this project is described on p. 2-12 of that document. For a reforestation project the approach requires quantification of carbon stocks that will be removed during site preparation (emissions), estimates of emissions associated with equipment used in site preparation and projection of carbon stored in planted areas through use of the Carbon On Line Estimator (COLE). Net GHG benefits are obtained by subtracting emissions from future carbon storage. Water quality will be improved and the environment and local habitat will be enhanced with the restoration project. This project will create employment opportunities.

Project Included in IRWM:	□ Yes, which one ⊠ No, explain_ <u>CABY IRWM not</u> focused on post-fire restoration
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one_Project Falls under the 2010-2014 DAC Block Groups as identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	⊠ Yes, explain <u>Completed in 2017</u> □ No, explain

Contact Person(s):

Mark Egbert, District Manager at Georgetown Divide RCD, Mark.Egbert@ca.usda.gov, 530-295-5630

Key References:

King\_Fire Informational Handout

Supplemental Information (e.g., Project Webpage or equivalent):

NA

DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### B.3.7 210 Sand Fire Watershed Restoration & Reforestation Project

Project/Program Name	Sand Fire Watershed Restoration & Reforestation Project			
Responsible Agency	El Dorado County & Georgetown Divide Resource Conservation Districts			
Partner Agency (ies)	CALFIRE, Caltrans and Private Landowners			
Net Yield	Normal Year: NA	Wet Year: NA		Dry Year: NA
Estimated Cost	Capital: \$895,050			
Unit Cost	\$1,377/Acre			
Site Coordinates	Latitude: 38.567524 Longitude: -120.786782			782
	•			

Description

The overall objective of the Sand Fire Restoration and Reforestation Project is to begin the process of reversing the ecological, economic, environmental, aesthetic and social impacts of the Sand Fire. Specific objectives include: 1) treat private lands affected by the Sand Fire to reduce the potential for wild fire in the future by removing accumulated debris and dead trees; 2) conduct site preparation and planting to re-establish forest cover on the private lands; and 3) increase potential carbon sequestration and achieve greenhouse gas emissions reduction through the reforestation of the burned area. Ultimately, the goal is to restore the forest ecosystem that was destroyed by the Sand Fire.

Under this project only the private and nonindustrial land will be treated, covering approximately 650 acres. This project ties in with the Sand Ridge Rd paving project.

Component

Watershed Management

Potential Challenges

Leaving large portions of the fire untreated results in a dangerously high fuel load in the form of snags and later brush growth and a high risk of future wildlife impacting private land, communities, and forest resources

Conceptual GIS Map of Site

Project would occur within the area that was impacted by the Sand Fire (pink area in the County of El Dorado).



Purpose(s)		Key Stakeholders		
Improve in-stream water q	uality	El Dorado County & Georgetown Divide		
☑ Improve health of local was	tersheds	Private Landowners, Caltrans		
☑ Improve local water supply	reliability			
Implement & monitor a reli	able stormwater system			
☑ Increase climate resilience				
□ Increase community aware	eness for sustainable water			
Stage of Development				
Conceptual	Planning	Pre-Design		
🗆 Design	☑ Construction	Other		
Expected Project Timeline	Begin: 2017, End: 2019			
Project Triggers	Under current implementation			
Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				
California Environmental Pro State Revolving Fund Progra	rces Control Board (SWRCB) - Clean Water			

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Stormwater Multi-Benefits (per SWRP Guidelines Table 4): Watershed restoration (post fire)				
Primary Opportunity (highlight applicable cells and provide justification below table)				
Benefit Category Main Benefit Additional Benefit				
Water Quality	Increased filtration and/or	Nonpoint source pollution control		
while contributing to compliance with applicable permit and/or TMDL requirements	treatment of runoir	Reestablished natural water drainage and treatment		
Water Supply	Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use	Conjunctive use			
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
	Increased urban green space	Water temperature improvements		
Community	Employment opportunities provided	Community involvement		
	Public education	Enhance and/or create recreational and public use areas		

The methods used to estimate the GHG benefits of the project are contained within "Guidance on Methods for Evaluating GHG Emission Reductions for Programs in the CAL FIRE Greenhouse Gas Reduction Fund" dated March 4, 2015 (hereafter, Guidance). Specifically, the method employed for this project is described on p. 2-12 of that document. For a reforestation project the approach requires quantification of carbon stocks that will be removed during site preparation (emissions), estimates of emissions associated with equipment used in site preparation and projection of carbon stored in planted areas through use of the Carbon On Line Estimator (COLE). Net GHG benefits are obtained by subtracting emissions from future carbon storage. Water quality will be improved and the environment and local habitat will be enhanced with the restoration project. This project will create job opportunities.

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Project Included in IRWM:	□ Yes, which one ⊠ No, explain_ <u>CABY IRWM not</u> focused on post-fire restoration			
Project Benefits a DAC/EDA: <sup>1</sup>	□ Yes, which one ⊠ No			
CEQA Compliance:	⊠ Yes, explain_ <u>Completed 2017</u> □ No, explain			
Contact Person(s):				
Mark Egbert, District Manager of El Dorado County RCD, Mark.Egbert@ca.usda.gov, 530-295-5630				
Key References:				
Sand Fire Informational Handout				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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## B.3.8 212 Cosumnes River Water Quality Monitoring Program

Project/Program Name	Cosumnes River Water Quality Monitoring Program			
Responsible Agency	American River Conservancy (ARC)			
Partner Agency (ies)	U.S. Fish and Wildlife Service, UC Davis, UC Water			
Net Yield	Normal Year: N/A	A Wet Year: N/A		Dry Year: N/A
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	N/A			
Site Coordinates	Latitude: N/A, multiple areas county-wide		Longitude: N/A, mul	tiple areas county-wide

#### Description

The purpose of the ARC Cosumnes River Water Quality Monitoring Program is:

To conduct a long term monitoring program to assess and steward the Cosumnes River, to sustain its water supply, ecosystem, recreational, and cultural values.

To evaluate the effectiveness of restoration and management practices (adaptive management) in the long term. To identify trends in water quality and changes due to climate change.

To involve volunteers in a hands on process of monitoring and improving the watershed in their region.

ARC's CA Water Resources approved Cosumnes River Water Quality Monitoring Program was initiated in 2015. This proposal is to expand the program to include benthic macro invertebrate analysis to assess runoff impacts. The Program uses SWAMP protocols and is CEDEN compliant.

Program funding to date has been provided by a Trout Unlimited grant and private contributions. Over 50 trained Citizen Scientists participate in the monitoring effort, donating thousands of volunteer hours.

The Program currently monitors eighteen sites in the upper watershed, and is coordinated with lower watershed monitoring by Fishery Foundation and UC Water. Both programs are part of a watershed scale Cosumnes River Science Program with the co-objectives of water supply and ecosystem health.

Component

Watershed Management

**Potential Challenges** 

Benthic Macro Invertebrate analysis cost

Conceptual GIS Map of Site



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Purpose(s)		Key Stakeholders	
☑ Improve in-stream water	quality		
Improve health of local watersheds		American River Conservancy, U.S. Fish and Wildlife	
Improve local water suppl	y reliability	NGO partners	
□ Implement & monitor a re	liable stormwater system		
☑ Increase climate resilience	e		
☑ Increase community awar	eness for sustainable water		
Stage of Development			
Conceptual	Planning	Pre-Design	
🗆 Design	□ Construction	⊠ Other	
ARC's CA Water Resources This application is to expand The Program uses SWAMP	approved Cosumnes River W I the program to include benth protocols and is CEDEN com	ater Quality Monitoring Program was initiated in 2015. ic macro invertebrate analysis to assess runoff impacts. pliant.	
Expected Project Timeline	Begin: 2015, End: 2030		
Project Triggers	pected Project Timeline         Begin: 2015, End: 2030           sject Triggers         The Cosumnes River provides water for municipal and agricultural uses for the communities of Placerville, Pollock Pines, Grizzly Flats, Somerset, Fairplay, Outingdale, Happy Valley, Sand Ridge, River Pines, Shenandoah Valley, Plymouth, Gold Beach, the Highway 16 corridor, Rancho Murieta, Omochumne Hartnell Water District, Sloughhouse, Wilton, Elk Grove, Galt, Clay and Galt Irrigation Districts, and the agricultural properties and ecosystems at the Cosumnes Preserve. It is the last live connection to the Delta, providing key nutrients and geomorphic inputs. It supports a number of threatened and endangered species, including giant garter snake, Swainson's Hawk, Great Gray Owl, Greater and Lesser Sandhill Crane, Chinook Salmon, Western Pond Turtle, to name just a few. It has a unique, wild beauty and has previously been nominated for wild and scenic status. It is home to recreational activities of hiking, angling, swimming, rock climbing, birding, and Class V kayaking, and connecting with nature. It is culturally rich. All of the resources provided by the Cosumnes River depend on good water quality and adequate flows. Good quality information is needed to understand changes in flow and water quality due to runoff, land use changes, road development, and climate change; to identify and monitor win/win, multi-benefit projects; and provide information for adaptive management.           The Program currently monitors eighteen sites in the upper watershed, and is coordinated with lower watershed monitoring by Fishery Foundation and UC Water. Both programs are part of a watershed scale Cosumnes River Science Program with the co-objectives of water supply and ecosystem health.		
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant			
Program			

California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)

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ormwater Multi-Benefits (per SWRP	Guidelines Table 4):			
Primary Opportunity (highlight applicable cells and provide justification below table)				
Benefit Category Main Benefit Additional Benefit				
Water Quality	Increased filtration and/or	Nonpoint source pollution control		
while contributing to compliance with applicable permit and/or TMDL requirements	treatment of runoff	Reestablished natural water drainage and treatment		
Water Supply	Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use	Conjunctive use			
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
	Increased urban green space	Water temperature improvements		
Community	Employment opportunities provided	Community involvement		
	Public education	Enhance and/or create recreational and public use areas		

This project aims at monitoring the Cosumnes River which will help provide ecosystem benefits in the longer term, support recreation, and enhance cultural values. This project will also benefit the community since it involves volunteers in a hands on process of monitoring and improving the watershed in their region. Through this hands on process, the public is being educated on issues that affect the integrity of water bodies while also learning about hydrology and watershed management. This project will be dependent on the volunteers.

Project Included in IRWM:	□ Yes, which one ⊠ No, explain the <u>CABY Plan is</u> currently being updated and is not yet at the stage for accepting new project proposals for inclusion in the Plan
Project Benefits a DAC/EDA: <sup>1</sup>	⊠ Yes, which one <u>Outingdale and Gold Beach</u> □ No
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>Not applicable</u>

Contact Person(s):

Elena DeLacy, Stewardship Director at the American River Conservancy, <u>elena@arconservancy.org</u>, (530) 621-1224

Melinda Frost-Hurzel, Cosumnes Coalition, Melinda@cosumnescoalition.org

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Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

http://www.cosumnescoalition.org/science.html

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# B.3.9 213 Anaerobic Digestion System at Union Mine WWTP

Project/Program Name	Anaerobic Digestion System at Union Mine WWTP			
Responsible Agency	El Dorado County Department of Environmental Management			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA	Wet Year	NA	Dry Year: NA
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature of	of project
Unit Cost	NA			
Site Coordinates	Latitude: 38.646996°		Longitude: -120.827	′371°
Description				
The proposed conceptual project includes constructing an anaerobic digestion system that will break down organic matter and sewage products. The proposed project will be found at the Union Mine Waste Water Treatment Plant or another unidentified location in the County of El Dorado where waste from the National Forest, the County Ag industry, commercial businesses, County residents, and the waste water treatment plant will be processed to generate compressed natural gas that can be used as a fuel, effluent that can be used for agricultural application, and biogas that can be converted to electricity. The generated electricity could be used on site or sold to PG&E or SMUD. Component				
Potential Challenges				
(List challenges in bullets) Site Location Funding Permitting Community disapproval				
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders		
🛛 Improve in-stream water q	uality	El Dorado County Department of Environmental		
Improve health of local wa	tersheds	Management		
□ Improve local water supply	y reliability			
□ Implement & monitor a reli	iable stormwater system			
☑ Increase climate resilience	9			
□ Increase community aware	eness for sustainable water			
Stage of Development				
⊠ Conceptual	Planning	□ Pre-Design		
🗆 Design	□ Construction	□ Other		
Expected Project Timeline	Begin: 2020, End: 2021 Environmental Management would like to see an anaerobic digestion system added to the County's organic waste processing infrastructure available within El Dorado County. We are pursuing possible leads and funding opportunities, but at this point, there is no projected project timeline.			
Project Triggers	High support in creating an anaerobic digestion system			
Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF).				

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Primary Opportunity (highlight a	pplicable cells and provide justification l	pelow table)
Benefit Category	Main Benefit	Additional Benefit
Water Quality while contributing to compliance with applicable permit and/or TMDL requirements	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
		Reestablished natural water drainage and treatment
Water Supply through groundwater management and/or runoff capture and use	Water supply reliability	Water conservation
	Conjunctive use	
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

Since the National Forest, the County Agriculture industry, commercial businesses, County residents, and the waste water treatment plants will be sending waste to an anaerobic digestion system, non-point source pollution will be reduced as the likelihood of the amount of debris, organic matter, and solid waste that makes its way into local water sources will be reduced. Creating an anaerobic digestion system will create employment opportunities. Additionally, this project will also encourage community involvement.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain <u>At this point, this project is conceptual</u></li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one_<u>Project found in 2010-2014 DAC Tracts as identified by the</u> <u>CA Department of Water Resources</u></li> <li>□ No</li> </ul>
CEQA Compliance:	□ Yes, explain ⊠ No, explain
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Contact Person(s):

Amy Velasco, County of El Dorado, Community Development Services, Environmental Management Department, Supervising Environmental Health Specialist, <u>amy.velasco@edcgov.us</u>, (530) 621-6665

Brendan Ferry, El Dorado County Principal Planner, <u>brendan.ferry@edcgov.us</u>, (530) 573-7905

Key References:

El Dorado County Solid Waste Management Plan:

-Strategy 3.6 - Plan for Conversion Technologies if Economically and Operationally Feasible

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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# B.3.10 214 In-Vessel Composting System at Union Mine Landfill or MRF

Project/Program Name	In-Vessel Composting System at Union Mine Landfill or MRF				
Responsible Agency	El Dorado County Department of Environmental Management				
Partner Agency (ies)	ΝΑ				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (El Dorado County Department of Environmental Management) Longitude: 120.829955° (El Dorado Count Department of Environmental Managemer			20.829955° (El Dorado County of Environmental Management)	

#### Description

The proposed conceptual project includes the construction of one or more in-vessel composting system(s). Proposed project locations include the EI Dorado Disposal and South Tahoe Refuses Material Recovery Facilities (MRF) and/or Union Mine Landfill where organic waste from commercial businesses and County residents will be processed to create compost. The compost that is created may then be used to build healthy soil that can be used on stormwater projects. The compost that will be generated can be used to create the grass swales and the grass filter stripes. Using healthy soil will contribute to having a clean and healthy environment. Healthy soil that is rich in organic matter, such as compost, will help prevent flooding, will help filter pollutants, will help store water, and help store nutrients for plants to use.

Component

Watershed Management

**Potential Challenges** 

Siting (limited space on proposed sites)

Funding

Permitting

Community disapproval

Conceptual GIS Map of Site

NA, no map is available as there is no determined location of the project at the moment

Purpose(s)	Key Stakeholders	
⊠ Improve in-stream water quality		
☑ Improve health of local watersheds	El Dorado County Department of Environmental	
□ Improve local water supply reliability	Tahoe Refuse	
□ Implement & monitor a reliable stormwater system		
⊠ Increase climate resilience		
Increase community awareness for sustainable water		

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Stage of Development					
⊠ Conceptual	Planning     Pre-Design		ign		
□ Design		onstruction			
Expected Project Timeline	Begin: 2	020, End: 2021			
Project Triggers	High sup	oport to create an in vessel compostin	g system		
Potentially Applicable Federa	al and Stat	e Programs for Technical and Financi	al Assistance		
California Environmental Pro Program California Environmental Pro State Revolving Fund Progra	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)				
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	oplicable cells and provide justification	below table)		
Benefit Category		Main Benefit	Additional Benefit		
Water Quality while contributing to com	pliance	Increased filtration and/or treatment of runoff	Nonpoint source pollution control		
with applicable permit and/or TMDL requirements			Reestablished natural water drainage and treatment		
Water Supply		Water supply reliability	Water conservation		
through groundwater management and/or runo capture and use	off	Conjunctive use			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
		Increased urban green space	Water temperature improvements		
Community		Employment opportunities provided	Community involvement		
		Public education	Enhance and/or create recreational and public use areas		

Since commercial businesses and County residential organic waste will be processed in an in-vessel composting system, non-point source pollution will be reduced as the likelihood of the amount of debris, organic matter, and solid waste that makes its way into local water sources will be reduced. The addition of compost into the soil that is used to create grass swales and grass filter stripes will contribute towards reducing flood risks, reducing non-point source pollution and increasing the filtration and treatment of the existing soil. Creating an in-vessel digestion system

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will provide opportunities for the public to learn more about composting. Constructing the in-vessel composting system(s) will also create employment opportunities and engage the community.				
Project Included in IRWM:	□ Yes, which one			
	⊠ No, explain project is in conceptual stage, not added to IRWM currently			
Project Benefits a DAC/EDA: <sup>1</sup>	⊠ Yes, which one⊠ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain			
Contact Person(s):				
Amy Velasco, County of El Dorado, Community Development Services, Environmental Management Department, Supervising Environmental Health Specialist, <u>amy.velasco@edcgov.us</u> , (530) 621-6665 Brendan Ferry, El Dorado County Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905				
Key References:				
El Dorado County Solid Waste Management Plan:				
Strategy 3.4 - Implement a County Composting Facility				
Strategy 3.6 - Plan for Conversion Technologies if Economically and Operationally Feasible				
Strategy 3.7 - Enhance County Composting Facility to Manage Diverted Food Waste and Other Organics				
Supplemental Information (e.g., Project Webpage or equivalent):				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# **B.3.11 215 Composting Facility within El Dorado County**

Project/Program Name	Compost Facility within El Dorado County				
Responsible Agency	El Dorado County Department of Environmental Management				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA	
Estimated Cost	Capital: Cost not calculate	d due to con	ceptual nature of	of project.	
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (El Dorado County Department of Environmental Management)			20.829955° (El Dorado County f Environmental Management)	
Description					
The proposed conceptual p This compost facility may homeowners.	roject would include the cons take in waste from the Nat	struction of a ional Forest	compost facility , the County A	within the County of El Dorado. griculture industry, and current	
Component					
Watershed Management					
Potential Challenges					
(List challenges in bullets)					
Siting					
Funding					
Community disapproval					
Conceptual GIS Map of Site	Conceptual GIS Map of Site				
No map available, project lo	ocation is unknown at the mo	oment			
Purpose(s) Key Stakeholders					
El Dorado County Department of Environm				y Department of Environmental	
Improve health of local w	atersheds	N	lanagement		
☐ Improve local water supr					
□ Implement & monitor a re	& monitor a reliable stormwater system				
□ Increase climate resilien	Ce				
$\Box$ Increase community awa	reness for sustainable water				
Stage of Development					
⊠ Conceptual	□ Planning		Pre-Design		

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□ Design		onstruction			
Expected Project Timeline	Near or long-term (approximate years to implement). Begin: 2020, End: 2025				
Project Triggers	High su	oport to create a compost facility in the	County		
Potentially Applicable Federal	and Stat	te Programs for Technical and Financia	I Assistance		
California Environmental Prote Program California Environmental Prote State Revolving Fund Progran	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)				
Stormwater Multi-Benefits (per	SWRP	Guidelines Table 4):			
Primary Opportunity (hig	jhlight ar	oplicable cells and provide justification l	oelow table)		
Benefit Category		Main Benefit	Additional Benefit		
Water Quality while contributing to comp	liance	Increased filtration and/or treatment of runoff	Nonpoint source pollution control		
with applicable permit and/or TMDL requirements			Reestablished natural water drainage and treatment		
Water Supply		Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use		Conjunctive use			
Flood Management         Decrease flood risk by reducing runoff rate and/or volume         Reduced sanitary sewer overflows			Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
Increased urban green space Water temperature improvements					
Community		Employment opportunities provided	Community involvement		
		Public education	Enhance and/or create recreational and public use areas		
Since the National Forest, the organics waste to a compostin debris, organic matter, and so composting facility will provic composting facility will also cre	County of g facility olid wast le an op ate emp	Agriculture industry, commercial busine , non-point source pollution will be redu te that makes its way into local water oportunity for the public to learn more ployment opportunities. Project will enga	e about composting. Constructing a age the community.		
Project Included in IRWM:	Project Included in IRWM:				
No, explain project is in conceptual stage, not added to IRWM currently					

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Project Benefits a DAC/EDA:1	□ Yes, which one⊠ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Amy Velasco, County of El Dorado, Community Development Services, Environmental Management Department, Supervising Environmental Health Specialist, <u>amy.velasco@edcgov.us</u> , (530) 621-6665 Brendan Ferry, El Dorado County Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905				
Key References:				
El Dorado County Solid Waste Management Plan: - Strategy 3.4 - Implement a County Composting Facility - Strategy 3.6 - Plan for Conversion Technologies if Economically and Operationally Feasible - Strategy 3.7 - Enhance County Composting Facility to Manage Diverted Food Waste and Other Organics				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# **B.3.12 217 Residual Lime Remediation near El Dorado Trail**

Project/Program Name	Residual Lime Remediation near El Dorado Trail				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	CVRWQCB	CVRWQCB			
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA	
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature of	of project.	
Unit Cost	NA				
Site Coordinates	Latitude: 38.700886° Longitude: -120.815622°				
Description					
This is a remediation and long-term water monitoring project set to occur near the El Dorado Trail that is next to the former Diamond Lime Plant. The piles of crushed lime rocks, lime kilns, and settling ponds were never cleaned up thoroughly. Consequently, there is high pH runoff that occurs along the trail that originates from the former Diamond Lime Plant. This project may be paired with the Diamond Springs Parkway Project.					
Component					
Watershed Management	Watershed Management				
Potential Challenges					
Funding					
Public Support					
Conceptual GIS Map of Site					

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Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality		El Dorado County- Community Development		
☑ Improve health of local was	tersheds	concerned citizens		
□ Improve local water supply	reliability			
Implement & monitor a reli	able stormwater system			
□ Increase climate resilience				
□ Increase community aware	eness for sustainable water			
Stage of Development				
⊠ Conceptual	Planning	Pre-Design		
🗆 Design	□ Construction	Other		
Expected Project Timeline	Begin: 2020, End: 2025			
Project Triggers	Increase in pH found in runoff			
Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)				

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Stormwater Multi-Benefits (per SWRP Guidelines Table 4):					
Primary Opportunity (highlight approximately approximat	Primary Opportunity (highlight applicable cells and provide justification below table)				
Benefit Category	Benefit Category Main Benefit Additional Benefit				
Water Quality	Increased filtration and/or	Nonpoint source pollution control			
while contributing to compliance with applicable permit and/or TMDL requirements	treatment of runoff	Reestablished natural water drainage and treatment			
Water Supply	Water supply reliability	Water conservation			
through groundwater management and/or runoff capture and use	Conjunctive use				
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
	Increased urban green space	Water temperature improvements			
Community	Employment opportunities provided	Community involvement			
	Public education	Enhance and/or create recreational and public use areas			

This is a remediation project that will ultimately help improve the water quality in the area where the major goal would be to reduce the pH of the runoff that is generated. If the pH is reduced and the source of contamination is contained, the local water systems, habitats and environment will be greatly improved. This remediation project can be used to educate the public on water contaminates and how they affect the ecosystem once present. Additionally, this project will have job opportunities and will help enhance the El Dorado Trail once the site has been remediated. The community will be engaged.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one Project found in 2010-2014 DAC Tracts as identified by the CA Department of Water Resources □ No
CEQA Compliance:	□ Yes, explain ⊠ No, explain

# Appendix B Project Description Forms March 2018

Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

Project webpage, as applicable

http://www.laketahoenews.net/2017/06/toxic-runoff-continues-percolate-edc/

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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Appendix B Project Description Forms March 2018

## **B.3.13 218 Countywide Water Quality Monitoring**

Project/Program Name	County Wide Water Quality Monitoring			
Responsible Agency	El Dorado County- Community Development Services			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	NA			
Site Coordinates	Latitude: 38.727779° (El Dorado County- Community Development Services)       Longitude: -120.829955° (El Dorado County- Community Development Services)			

#### Description

The primary focus of this project is to design a water quality monitoring data program for El Dorado County. The aim of this project will be to monitor the water quality of several creeks, specifically to monitor flow and constituent concentrations. This program would help monitor the impact of construction sites, existing developments and historical use analysis to determine the effects on local water bodies. The program will allow the development of baseline health condition of waterbodies throughout El Dorado County. With this baseline, the County can identify water quality problems and develop mitigation action plans to address those issues. The goals of water quality monitoring will depend on the type of project. For example:

Monitoring goals for watershed treatment may include the following:

To find out when and where management measures are implemented and operational

To determine whether management measures are working as planned

To determine the degree of pollutant control achieved by the management measures

To measure the pollutant contribution from areas where management measures are not implemented

To discover unplanned activities that could affect project success.

Trend analysis and watershed effectiveness monitoring goals may include the following:

To document pre-implementation water quality conditions

To measure changes in water quality due to implementation of management measures

To develop information to guide changes in the implementation plan if water quality goals are not achieved

To measure the pollutant removal efficiencies of specific management measures

To measure water quality changes in sub-watersheds

To document changes in pollutant load at the watershed outlet

Ultimately, this program aims to improve understanding of nonpoint source pollution and evaluate the effectiveness of watershed management projects designed to control nonpoint source pollution.

#### Component

Watershed Management

Potential Challenges

Climatological predictions may affect the sizing or effectiveness of this project.

Conceptual GIS Map of Site

### Appendix B Project Description Forms March 2018

No available map				
Purpose(s)		Key Stakeholders		
Improve in-stream water q	uality	El Dorado County- Community Development		
☑ Improve health of local wat	tersheds	Services		
□ Improve local water supply	reliability			
Implement & monitor a reli	able stormwater system			
□ Increase climate resilience				
□ Increase community aware	eness for sustainable water			
Stage of Development				
⊠ Conceptual	□ Planning	Pre-Design		
🗆 Design	□ Construction	□ Other		
Expected Project Timeline	Begin: 2020, End: 2030			
Project Triggers	Funding opportunity			
Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)				

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Benefit Category	Main Benefit	Additional Benefit
Water Quality while contributing to compliance	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
with applicable permit and/or TMDL requirements		Reestablished natural water drainage and treatment
Water Supply	Water supply reliability	Water conservation
through groundwater management and/or runoff capture and use	Conjunctive use	
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

Project Included in IRWM:	□ Yes, which one ⊠ No, explain <u>Projected was developed after</u> IRWM was published
Project Benefits a DAC/EDA <sup>1</sup>	□ Yes, which one⊠ No
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet

# Appendix B Project Description Forms March 2018

Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

# **B.3.14 219 Fire Adaptive along Highway 50-Fuels Reduction**

Project/Program Name	Fire Adaptive along Highway 50-Fuels Reduction			
Responsible Agency	U.S. Forest Service			
Partner Agency (ies)	CALFIRE, RCD, Mule Deer Foundation			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA
Estimated Cost	Capital: \$972,000.00			
Unit Cost	\$1,377/Acre			
Site Coordinates	Latitude: Three locations 1) Sly Park Phase: 38.728518° 2) Camino/Pollock Pines: 38.769653° 3) High 50 Corridor: 38.768761°		Longitude: Three locations 1) Sly Park Phase: -120.581972° 2) Camino/Pollock Pines: -120.657591° 3) High 50 Corridor: -120.365398°	

### Description

The Forest Service and CAL FIRE worked closely to develop the Fire Adapted 50 plan which focuses on the Fire Adapted Communities component of the Cohesive Strategy. Fire Adapted 50 includes a series of projects which will strengthen and expand existing fuel breaks in the most heavily developed part of the watershed along the Highway 50 corridor.

This project is divided into 3 phases:

Sly Park Phase -

Work in this area has been going on for 27 years.

The established shaded fuel break will be expanded to connect to Highway 50 and Forest Service land along Sly Park Road.

Camino/Pollock Pines Fuel Break Phase -

Work in this area will be from Slab Creek Dam to Pony Express Trail along the rim of the canyon.

This will improve and reinforce existing fuel breaks developed during the King Fire, and will tie into the existing Independence Fuel Break.

Highway 50 Roadside Fuel Reduction Corridor-

Work in this area will be roadside reduction for 300 feet on the north (uphill) side of Highway 50 from Pollock Pines to Strawberry

In July 2016, the Eldorado National Forest and CAL FIRE's parent agency, California Natural Resources Agency signed the first Good Neighbor Agreement in the Region, designed to start implementation of the Fire Adapted 50 plan. Under this agreement about 500 acres will be treated, a tracked chipper, an equipment trailer, and the environmental analysis required for additional fuel break construction will be provided. By implementing this plan, the habitat for aquatic and terrestrial species will be protected and enhanced. In addition, water quality and watershed function will be enhanced and the resiliency to catastrophic wildfire or pest outbreaks will be enhanced. The Participating Agreement with the Shingle Springs Band of Miwok Indians will contribute to the Fire Adaptive Communities goal by reducing hazardous fuels in 150 areas around the Wrights Lake and Dark Lake recreational areas. Similarly, the Forest entered into an agreement with the American Conservation Experience to do fuels reduction on 90 acres in the Caples project area and around the community of Strawberry. Overall this project will benefit an area that is greater than 1,100 acres.

#### Component

Watershed Management

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Stage of Development			
Conceptual	⊠ Planning □ Pre-Des		esign
🗆 Design	□ Construction □ Other		
Expected Project Timeline	Begin: 2020, End: 2026		
Project Triggers	High fire risk		
Potentially Applicable Federal	and State Programs for T	echnical and Finan	cial Assistance
California Environmental Prot Program	ection Agency - State Wat	er Resources Cont	rol Board (SWRCB) - Stormwater Grant
U.S. Department of the Interio	r (DOI) - Bureau of Reclar	mation - Cooperativ	e Watershed Management Program
California Environmental Prote State Revolving Fund Program	ection Agency - State Wat n (CWSRF)	er Resources Cont	rol Board (SWRCB) - Clean Water
Stormwater Multi-Benefits (pe	r SWRP Guidelines Table	4):	
Primary Opportunity			
Benefit Category	Main Benefit		Additional Benefit
Water Quality	Increased filtrat	Increased filtration and/or	Nonpoint source pollution control
while contributing to comp with applicable permit and TMDL requirements	liance treatment of fur Vor	1011	Reestablished natural water drainage and treatment
Water Supply	Water supply re	eliability	Water conservation
through groundwater management and/or runof capture and use	f Conjunctive use	9	
Flood Management	Decrease flood runoff rate and/	risk by reducing or volume	Reduced sanitary sewer overflows
Environmental	Environmental a protection and i including:	and habitat improvement	Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhar -Riparian enhar -Instream flow i	ncement/creation; ncement; and/or mprovement	Reestablishment of the natural hydrograph
	Increased urba	n green space	Water temperature improvements
Community	Employment op provided	portunities	Community involvement
	Public educatio	n	Enhance and/or create recreational and public use areas

This large fuel break project will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

# Appendix B Project Description Forms March 2018

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Block Groups 2010-2014</u>, DAC Places 2010-2014, DAC Tracts 2010-2014 as identified by the CA Department of Water Resources</li> <li>No</li> </ul>		
CEQA Compliance:	<ul> <li>Yes, explain <u>In the Implementation phase, with some NEPA/CEQA still being</u> <u>completed by Resource Conservation District</u></li> <li>No, explain</li> </ul>		
Contact Person(s):			
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259			
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
NA			
<sup>1</sup> DAC - Disadvantaged Communities			

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

## **B.3.15 220 Caples Watershed Improvement**

Project/Program Name	Caples Watershed Improvement			
Responsible Agency	U.S. Forest Service			
Partner Agency (ies)	Sierra Nevada Conservancy			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	\$1,377/Acre			
Site Coordinates	Latitude: 38.716897° Longitude: -120.073822°			822°
	-			

Description

This project involves forest management and restoration efforts in which prescribed fires will occur on 8,800 acres of the Caples Creek watershed, from downstream of Caples Lake to Silver Lake Road. Additionally, 25 acres of meadow and aspen stand restoration activities will occur.

This project is of importance because forest health and resilience has decreased as seen through the high number of trees that are diseased, dead, or downed. With the recent drought and insect infestations the forest conditions have gotten worse since the number of dead trees has increased.

Ultimately, the project will protect against wildfires and protect local water resources.

Component

Watershed Management

**Potential Challenges** 

This project is in a location of bark beetle infestation.

Conceptual GIS Map of Site

Appendix B Project Description Forms March 2018



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Expected Project Timeline	Begin: 2	Begin: 2025, End: 2030			
Project Triggers	Extreme Drought Conditions High Fire Risk				
Potentially Applicable Federa	al and Stat	te Programs for Technical and Finan	cial Assistance		
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Gran Program U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Program Sierra Nevada Conservancy Grant					
Stormwater Multi-Benefits (p	er SWRP	Guidelines Table 4):			
Primary Opportunity					
Benefit Category		Main Benefit	Additional Benefit		
Water Quality		Increased filtration and/or	Nonpoint source pollution control		
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff	Reestablished natural water drainage and treatment		
Water Supply		Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use		Conjunctive use			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
		Increased urban green space	Water temperature improvements		
Community		Employment opportunities provided	Community involvement		
		Public education	Enhance and/or create recreational and public use areas		

This project will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas. The air quality will also be improved with this project as 25 acres of meadow and aspen stand will be planted.

### Appendix B Project Description Forms March 2018

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one Project can be found in DAC Places 2010-2014 as identified by the CA Department of Water Resources</li> <li>No</li> </ul>			
CEQA Compliance:	<ul> <li>☑ Yes, explain <u>CEQA has been completed</u></li> <li>□ No, explain</li> </ul>			
Contact Person(s):				
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, kendalyoung@fs.fed.us, (530)-621-5259				
Key References:				
NA				

Supplemental Information (e.g., Project Webpage or equivalent):

http://www.eid.org/about-us/project-updates/caples-ecological-restoration-project

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

## **B.3.16 221 Camino Biomass Facility**

Project/Program Name	Camino Biomass Facility			
Responsible Agency	El Dorado County Air Quality Management District			
Partner Agency (ies)	El Dorado County Department of Environmental Management			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: \$30 Million			
Unit Cost	NA			
Site Coordinates (Approximate)	Latitude: 38.742637°	Longitude: -120.681668°		
Description				

This project would explore a way to save water by delving into the biomass industry. Biomass is anything organic burned or fermented (ex. Sludge) to create gas or fuel. The steam it produces can operate machine engines and when cooled is clean water that can be re-heated for continued use. An idea has been formulated to build a biomass plant on property owned by the Sierra Pacific Industries in Camino, CA. This plant would take in waste from the National Forest, the County Ag industry, current homeowners and the septage plant, produce electricity for the plant and sell the rest to either SMUD or PGE.

It will be assumed that the biomass plant will be sized at 7.5 MW and the installed costs will be \$4,000/kW, with a resulting estimated cost of \$30 Million.

Component

Watershed Management

**Potential Challenges** 

Intergovernmental cooperation (Fed, State, County) Funding

Conceptual GIS Map of Site

Appendix B Project Description Forms March 2018



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Purpose(s)		Key Stakeholders		
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> </ul>			El Dorad District a Environn	o County Air Quality Management nd El Dorado County Department of nental Management
□ Implement & monitor a relia	able storm	water system		
	eness ior :			
Stage of Development				
☑ Conceptual	🗆 Pl	anning	Pre-De	sign
🗆 Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	020, End: 2026		
Project Triggers	Funding	opportunity		
Potentially Applicable Federal	l and Stat	e Programs for Technical a	and Financ	cial Assistance
California Environmental Prote Program	ection Ag	ency - State Water Resour	rces Contro	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff capture and use		Conjunctive use		
Flood Management De		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or		Reduced energy use, GHG emission, or provides a carbon sink
				Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	S	Community involvement
		Public education		Enhance and/or create recreational and public use areas

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The proposed project will increase water supply reliability and promote water conservation in addition to help reduce nonpoint source pollution. This project will ultimately engage the involvement of the community and create job opportunities with the creation of this facility. With the construction of the biomass plant this project will create job opportunities during the construction phase and will eventually need a group of people to run the facility.			
Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA:1	□ Yes, which one	_ ⊠ No	
CEQA Compliance:	☐ Yes, explain stage, no environmental documentation	☑ No, explain project is in conceptual is completed yet	
Contact Person(s):			
Brian Veerkamp, El Dorado County, brian.veerkamp@edcgov.us, (530)621-5652			
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
https://www.wbdg.org/resources/biomass-electricity-generation http://ucanr.edu/sites/WoodyBiomass/files/78993.pdf			

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### **B.3.17 222 General Sherman Integrated Resource Timber Contract-Timber Sale**

Project/Program Name	General Sherman Integrated Resource Timber Contract-Timber Sale					
Responsible Agency	U.S. Forest Service					
Partner Agency (ies)	South Fork American River Cohesive Strategy					
Net Yield	Normal Year: NA	Wet Year: NA		Dry Year: NA		
Estimated Cost	Capital: \$4,131,000.00					
Unit Cost	\$1,377/Acre					
Site Coordinates (Approximate)	Latitude: 38.6972°		Longitude: -120.268522°			
Description						

This is a timber sale project that is set to occur South of Kyburz between Silver Fork Road and Mormon Emigrant Trail. This project is an integrated resource timber contract in which the value of the timber is much greater than the cost of the services used to sell the timber. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will encompass approximately 3,000 acres.

Component

Watershed Management

**Potential Challenges** 

**Competing Resources** 

Bark Beetle infestation due to prolonged drought

Increased fire risk due to drought

Conceptual GIS Map of Site

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### Appendix B Project Description Forms March 2018

Purpose(s)		Key Stakeholders			
⊠ Improve in-stream water q	juality	U.S. Forest Service, South Fork American River Cohesive Strategy			
$\boxtimes$ Improve health of local wa	tersheds				
□ Improve local water supply	/ reliability				
Implement & monitor a reli	able stormwater system				
□ Increase climate resilience	9				
□ Increase community aware	eness for sustainable water				
Stage of Development					
Conceptual	⊠ Planning	Pre-Design			
🖂 Design		Other			
Expected Project Timeline	Begin: 2019, End: 2024				
Project Triggers	High fire risk				
Potentially Applicable Federal and State Programs for Technical and Financial Assistance					
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program					
U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Program					

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Stormwater Multi-Benefits (per SWRP Guidelines Table 4):						
Primary Opportunity						
Benefit Category		Main Benefit	Additional Benefit			
Water Quality		Increased filtration and/or	Nonpoint source pollution control			
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff	Reestablished natural water drainage and treatment			
Water Supply		Water supply reliability	Water conservation			
through groundwater management and/or runoff capture and use		Conjunctive use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
		Increased urban green space	Water temperature improvements			
Community		Employment opportunities provided	Community involvement			
		Public education	Enhance and/or create recreational and public use areas			
Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.						
Project Included in IRWM:		Yes, which one				
⊠ No		o, explain project not added to IRWM currently				
Project Benefits a DAC/EDA:1		es, which one⊠ No				
CEQA Compliance:		Yes, explain No, explain <u>CEQA has not been completed</u>				
Appendix B Project Description Forms March 2018

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### B.3.18 223 Two-fer Integrated Resource Timber Contract-Timber Sale

Project/Program Name	Two-fer Integrated Resource Timber Contract-Timber Sale				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	South Fork American River Cohesive Strategy				
Net Yield	Normal Year: NA	mal Year: NA Wet Year: NA		Dry Year: NA	
Estimated Cost	Capital: \$14,287,752.00				
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.779893°		Longitude: -120.469	9544°	
Description	-		-		

\_\_\_\_\_

This is a timber sale project that is set to occur in the following location: North and South Side of Highway 50 (T12N, R 14E, T11N, R13, 14, 15, T10N R14 and 15E), east of Pollock Pines, where the Ice Fire and Cleveland Fire had previously occurred. This project is an integrated resource timber contract in which the value of the timber is much greater than the cost of the services used to sell the timber. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will encompass approximately 10,376 acres.

Component

Watershed Management

**Potential Challenges** 

**Competing Resources** 

Bark Beetle infestation due to prolonged drought

Increased fire risk due to drought

Conceptual GIS Map of Site



Purpose(s)			Key Stakeholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> </ul>			U.S. For Cohesive	est Service, South Fork American River
Improve local water supply reliability				
Implement & monitor a reliable stormwater system				
□ Increase climate resilience				
□ Increase community aware	eness for s	sustainable water		
Stage of Development				
		Pre-De	sign	
⊠ Design		onstruction	□ Other	
Expected Project Timeline	Begin: 2	020, End: 2025		
Project Triggers	High fire	risk		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance
California Environmental Pro Program U.S. Department of the Interio	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contr Cooperative	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/or treatment of runoff		Nonpoint source pollution control
while contributing to comp with applicable permit and TMDL requirements	oliance d/or			Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	through groundwater management and/or runoff capture and use			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas

# Appendix B Project Description Forms March 2018

Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one_<u>Project Falls under the 2010-2014 DAC Block Groups as</u> identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>⊠ No, explainCEQA has not been completed</li> </ul>
Contact Person(s):	
Kendal Young, Ph.D. , South Fo (530)-621-5259	rk American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> ,
Key References:	

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.3.19 224 Reservoir Thinning Integrated Resource Timber Contract**

Project/Program Name	Reservoir Thinning Integrated Resource Timber Contract			
Responsible Agency	U.S. Forest Service			
Partner Agency (ies)	South Fork American River Cohesive Strategy			
Net Yield	Normal Year: NA	: NA Wet Year: NA		Dry Year: NA
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			of project.
Unit Cost	\$1,377/Acre			
Site Coordinates (Approximate)	Latitude: 38.851116°		Longitude: -120.377492°	
Description				

This is a timber sale project that is set to occur between Ice House Reservoir and Union Valley Reservoir. This project is an integrated resource timber contract in which the value of the timber is much greater than the cost of the services used to sell the timber. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will also include pre-commercial thinning.

Component

Watershed Management

**Potential Challenges** 

**Competing Resources** 

Bark Beetle infestation due to prolonged drought

Increased fire risk due to drought

Conceptual GIS Map of Site



Purpose(s)			Key Stakeholders	
Improve in-stream water quality			U.S. Fore Cohesive	est Service, South Fork American River
	able storn	iwater system		
□ Increase climate resilience				
☐ Increase community aware	eness for s	sustainable water		
Stage of Development				
□ Conceptual		Pre-De	sign	
⊠ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	020, End: 2025		
Project Triggers	High fire	risk		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financ	cial Assistance
California Environmental Pro Program U.S. Department of the Interio	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contre Cooperative	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality	Water Quality		r	Nonpoint source pollution control
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	through groundwater management and/or runoff capture and use			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	S	Community involvement
		Public education		Enhance and/or create recreational and public use areas

# Appendix B Project Description Forms March 2018

Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Block Groups 2010-2014 as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>			
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>⊠ No, explainCEQA has not been completed</li> </ul>			
Contact Person(s):				
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259				
Key References:				

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

# B.3.20 225 Quintette Integrated Resource Timber Contract – Supplemental Information Report-Timber Sale

Project/Program Name	Quintette Integrated Resource Timber Contract – Supplemental Information Report- Timber Sale				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	South Fork American River Cohesive Strategy				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: N		Dry Year: NA		
Estimated Cost	Capital: \$2,754,000.00				
Unit Cost	\$1,377/Acre	\$1,377/Acre			
Site Coordinates (Approximate)	Latitude: 38.816083° Longitude: -120.595904°			5904°	
Description					
This is a timber sale project that will occur out of the King Fire area, located southeast of Georgetown, specifically in the Rock Creek Drainage on Georgetown RD. This project is an integrated resource timber contract in which the value of the timber is much greater than the cost of the services used to sell the timber. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will cover approximately 2,000 acres.					
Component					
Watershed Management	Watershed Management				
Potential Challenges					
Competing Resources Bark Beetle infestation due to prolonged drought Increased fire risk due to drought					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders		
☑ Improve in-stream water quality			U.S. For	U.S. Forest Service,	
☑ Improve health of local watersheds			South Fo	ork American River Cohesive Strategy	
□ Improve local water supply reliability					
□ Implement & monitor a reli	able storn	nwater system			
Increase climate resilience					
Increase community aware	eness for s	sustainable water			
Stage of Development					
Conceptual	⊠ Planning [		□ Pre-De	sign	
□ Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	020, End: 2025			
Project Triggers	High fire	risk			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance	
California Environmental Prot Program U.S. Department of the Interio	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contr Cooperative	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity					
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/or		Nonpoint source pollution control	
while contributing to comp with applicable permit and TMDL requirements	while contributing to compliance with applicable permit and/or TMDL requirements			Reestablished natural water drainage and treatment	
Water Supply		Water supply reliability		Water conservation	
through groundwater management and/or runo capture and use	through groundwater management and/or runoff capture and use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows	
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie provided	es	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

# Appendix B Project Description Forms March 2018

Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	□ Yes, which one				
	No, explain project not added to IRWM currently				
Project Benefits a DAC/EDA:1	☑ Yes, which one Project can be found in DAC Block Groups 2010-2014 as identified by the CA Department of Water Resources				
CEQA Compliance:	□ Yes, explain				
	⊠ No, explain <u>CEQA has not been completed</u>				
Contact Person(s):					
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259					
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

#### B.3.21 226 Western Georgetown Fuel Reduction Integrated Resource Timber Contract-Timber Sale

Project/Program Name	Western Georgetown Fuel Reduction Integrated Resource Timber Contract-Timber Sale				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	South Fork American River Cohesive Strategy				
Net Yield	Normal Year: NA	Wet Year: NA		Dry Year: NA	
Estimated Cost	Capital: \$2,065,500.00				
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.899026° Longitude: -120.888371°			3371°	
Description					
This is a timber sale project value of the timber is much	t near Georgetown. Th greater than the cost o	is project is f the servic	s an integrated resources used to sell the tim	rce timber contract in which the ber. Conducting this project will	

value of the timber is much greater than the cost of the services used to sell the timber. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. This project will specifically, remove and sale trees that are dying or were affected by beetle kill infestations. By removing the dead or affected trees, the project will help prevent the spread of beetle kill infestations. This project will cover approximately 1,500 acres.

Component

Watershed Management

Potential Challenges

**Competing Resources** 

Bark Beetle infestation due to prolonged drought Increased fire risk due to drought

Conceptual GIS Map of Site



			Key Stakeholders		
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> </ul>		U.S. Fore Cohesive	est Service, South Fork American River e Strategy		
□ Implement & monitor a reliable stormwater system					
□ Increase climate resilience					
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
☑ Conceptual	Planning		Pre-Des	Pre-Design	
□ Design	□ Co	onstruction	□ Other		
Expected Project Timeline	Begin: 2	020, End: 2025			
Project Triggers	High fire risk Spread of Bark Beetle infestation				
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financ	ial Assistance	
California Environmental Pro Program U.S. Department of the Interi	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contro Cooperative	ol Board (SWRCB) - Stormwater Grant	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity					
Primary Opportunity Benefit Category		Main Benefit		Additional Benefit	
Primary Opportunity Benefit Category Water Quality		Main Benefit Increased filtration and/o	r	Additional Benefit Nonpoint source pollution control	
Primary Opportunity Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements	oliance d/or	Main Benefit Increased filtration and/o treatment of runoff	r	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment	
Primary Opportunity Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply	bliance d/or	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability	r	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
Primary Opportunity Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use	pliance d/or ff	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use	r	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
<ul> <li>Primary Opportunity</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to composite and the contributing to contributing to composite and the contributing to contrine and the contributing to contrine and the contributing to con</li></ul>	oliance d/or ff	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume	r educing	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows	
<ul> <li>Primary Opportunity</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to composite of the contributing to contributing to composite of the contributing to contributing</li></ul>	oliance d/or ff	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including:	r educing eat lent	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink	
<ul> <li>Primary Opportunity</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to composite and the contributing the contrelevee and the contributing the contributing the contributing</li></ul>	oliance d/or ff	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	r educing eat ent creation; and/or ent	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink         Reestablishment of the natural         hydrograph	
<ul> <li>Primary Opportunity</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to composite permit and TMDL requirements</li> <li>Water Supply</li> <li>through groundwater management and/or rund capture and use</li> <li>Flood Management</li> <li>Environmental</li> </ul>	pliance d/or ff	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume Environmental and habits protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green s	educing educing at ient creation; and/or ent pace	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink         Reestablishment of the natural         hydrograph         Water temperature improvements	
Primary       Opportunity         Benefit Category         Water Quality         while contributing to composite permit and         TMDL requirements         Water Supply         through groundwater         management and/or rund         capture and use         Flood Management         Environmental         Community	oliance d/or ff	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie provided	r educing at ient creation; and/or ent pace es	Additional BenefitNonpoint source pollution controlReestablished natural water drainage and treatmentWater conservationReduced sanitary sewer overflowsReduced energy use, GHG emission, or provides a carbon sinkReestablishment of the natural hydrographWater temperature improvementsCommunity involvement	

# Appendix B Project Description Forms March 2018

This project will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Block Groups 2010-2014 as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>⊠ No, explainCEQA has not been completed</li> </ul>

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.3.22 227 Georgetown Divide Fuelbreak**

Project/Program Name	Georgetown Divide Fuelbreak						
Responsible Agency	U.S. Forest Service	U.S. Forest Service					
Partner Agency (ies)	South Fork American	River Coh	esive Strategy				
Net Yield	Normal Year: NA	Normal Year: NA Wet Year: NA Dry Year: NA					
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature	of project.			
Unit Cost	\$1,377/Acre						
Site Coordinates (Approximate)	Latitude: 38.875144°	Latitude: 38.875144° Longitude: -120.75		3907°			
Description							
This is a fuels reduction project that is set to occur near Highway 50, near the Community of Swansboro/Mosquito. The project that will span from Camino to Georgetown. Conducting this project will help suppress fires and protect natural resources by controlling the amount of vegetation, controlling the amount invasive species, improving the rangeland for livestock grazing, improving fish and wildlife habitat, enhancing and protecting riparian areas and wetlands, and improving water quality.							
Component	Component						
Watershed Management							
Potential Challenges							
Increased fire risk due to drought							
Conceptual GIS Map of Site							

Appendix B Project Description Forms March 2018



http://www.nfwf.org/pswfuels/Documents/Eldorado%20Georgetown%20Map%201%20Project%20Area.pdf

Purpose(s)			Key Stakeholders			
☑ Improve in-stream water quality			U.S. Forest Service, South Fork American River			
$\boxtimes$ Improve health of local watersheds			Cohesive	e Strategy		
□ Improve local water supply reliability						
□ Implement & monitor a reli	able storn	nwater system				
□ Increase climate resilience						
□ Increase community aware	eness for s	sustainable water				
Stage of Development						
⊠ Conceptual	🗆 Pla	anning	□ Pre-De	sign		
□ Design	□ Co	onstruction	□ Other			
Expected Project Timeline	Begin: 2	020, End: 2025				
Project Triggers	High fire	risk				
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance		
California Environmental Pro Program U.S. Department of the Interi	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contr Cooperative	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program		
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):				
Primary Opportunity						
Benefit Category		Main Benefit		Additional Benefit		
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control		
while contributing to com with applicable permit and TMDL requirements	oliance d/or	treatment of runoff		Reestablished natural water drainage and treatment		
Water Supply		Water supply reliability		Water conservation		
through groundwater management and/or runo capture and use	off	Conjunctive use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph		
		Increased urban green s	pace	Water temperature improvements		
Community		Employment opportunitie provided	S	Community involvement		
		Public education		Enhance and/or create recreational and public use areas		

# Appendix B Project Description Forms March 2018

This is a large fuels reduction project that will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:

	No, explain project not added to IRWM currently
Project Benefits a DAC/EDA:1	$\Box$ Yes, which one $\boxtimes$ No
CEQA Compliance:	<ul> <li>☐ Yes, explain</li> <li>⊠ No, explainCEQA has not been completed, but is anticipated</li> </ul>

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.3.23 228 Jenkinson Lake Fuels Reduction**

Project/Program Name	Jenkinson Lake Fuels Reduction				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	El Dorado County & Foundation	Georgetowr	n Divide Resource Co	nservation Districts, Mule Deer	
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$2,754,000.0	00			
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.722582°		Longitude: -120.542	2343°	
Description					
This is a fuels reduction project that will occur near Jenkinson Lake. Conducting this project will help suppress fires and protect natural resources by controlling the amount of vegetation, controlling the amount invasive species, improving the rangeland for livestock grazing, improving fish and wildlife habitat, enhancing and protecting riparian areas and wetlands, and improving water quality. This project will cover approximately 2,000 acres.					
Component					
Watershed Management					
Potential Challenges					
Competing Resources					
Bark Beetle infestation due to prolonged drought					
Increased fire risk due to drought					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> </ul>			U.S. Fore Georgeto Districts,	est Service, El Dorado County & own Divide Resource Conservation and Mule Deer Foundation
	able storm	water system		
		iwater system		
□ Increase community aware	eness for s	sustainable water		
Stage of Development				
Conceptual	⊠ Pla	anning	Pre-De	sign
⊠ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	020, End: 2025		
Project Triggers	High fire	risk		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance
California Environmental Pro Program U.S. Department of the Interio	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contre Cooperative	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/or treatment of runoff		Nonpoint source pollution control
while contributing to comp with applicable permit and TMDL requirements	oliance d/or			Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	ff	Conjunctive use		
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	s	Community involvement
		Public education		Enhance and/or create recreational and public use areas

# Appendix B Project Description Forms March 2018

This fuels reduction project will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.							
Project Included in IRWM:	□ Yes, which one						
	⊠ No, explain project not added to IRWM currently						
Project Benefits a DAC/EDA: <sup>1</sup> Yes, which one No							
CEQA Compliance:	□ Yes, explain						
	☑ No, explain <u>CEQA has not been completed, but is</u> anticipated						
Contact Person(s):							
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259							
Key References:							
NA							
Supplemental Information (e.g.,	Project Webpage or equivalent):						
NA							

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

## B.3.24 229 Cesar Fire Salvage Stewardship

Project/Program Name	Cesar Fire Salvage Stewardship				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet Year	: NA	Dry Year: NA	
Estimated Cost	Capital: \$1,891,998.0	00			
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.903528°		Longitude: -120.570	)911°	
Description					
This project will involve removing dead trees in the King Fire Area. This project will occur in 1,374 acres of the King Fire footprint.					
Component					
Watershed Management					
Potential Challenges					
Increased fire risk due to drought					
Conceptual GIS Map of Site					
Project would occur within the area that was impacted by the King Fire in the County of El Dorado (orange area in the map).					

U.S. Department of Agriculture Eldorado National Forest South Fork America Cohesive Strategy F	n River project Vinicity	<complex-block></complex-block>				
		Kay Stakahaldara				
M Improve in-stream water of	uality	ILS Forest Service				
$\boxtimes$ Improve health of local wa	tersheds					
	v reliability					
□ Implement & monitor a reli	able stormwater system					
□ Increase climate resilience						
$\square$ Increase community aware	eness for sustainable water					
Stage of Development						
Conceptual	⊠ Planning	□ Pre-Desian				
	$\Box$ Construction	□ Other				
Project Implementation Unde	rway					
Expected Project Timeline	Begin: 2018, End: 2020					

Pr	oject Triggers	Igers Extreme climate conditions					
Po	Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
Ca Pr U.	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Program						
St	Stormwater Multi-Benefits (per SWRP Guidelines Table 4):						
	Primary Opportunity						
	Benefit Category		Main Benefit	Additional Benefit			
	Water Quality		Increased filtration and/or	Nonpoint source pollution control			
	while contributing to comp with applicable permit and TMDL requirements	oliance I/or	treatment of runoff	Reestablished natural water drainage and treatment			
	Water Supply		Water supply reliability	Water conservation			
	through groundwater management and/or runo capture and use	ff	Conjunctive use				
	Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
	Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
			-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
			Increased urban green space	Water temperature improvements			
	Community		Employment opportunities provided	Community involvement			
			Public education	Enhance and/or create recreational and public use areas			
Tr ma be op re	This large fuel break project will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.						
Pr	oject Included in IRWM:		es, which one				
⊠ No,			, explain project not added to IRWM currently				
Pr	oject Benefits a DAC/EDA:	1 🗆 Y	es, which one $\boxtimes$ No				
CEQA Compliance:          □ Yes, explain ⊠ No, explainCEQA will not be completed			npleted				

Appendix B Project Description Forms March 2018

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

## B.3.25 230 2-Chaix Fire Thinning

Project/Program Name	2-Chaix Fire Thinning				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet `	Year: NA	Dry Year: NA	
Estimated Cost	Capital: \$1,721,250.00				
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.839482°		Longitude: -120.572	2369	
Description					
This is a pre-commercial thinning project that will occur in the King Fire affected area. The pre-commercial thinning will help suppress the risk of wildfires. In conducting this project slower-growing or trees that are defective will generate more space for the trees that remain. In thinning the forest, more water and soil nutrients will be available for the trees that remain which will help them grow larger and healthier in a shorter time period. This project will cover approximately 1,250 acres.					
Watershed Management					
Potential Challenges					
Competing Resources Bark Beetle infestation due to prolonged drought Increased fire risk due to drought Conceptual GIS Map of Site					
Project would occur within the area that was impacted by the King Fire in the County of El Dorado (orange area in the map).					

U.S. Department of Agriculture Eldorado National Forest South Fork America Cohesive Strategy F	n River Project Vinicity	<complex-block></complex-block>
Purpose(s)		Key Stakeholders
Improve in-stream water q	uality	U.S. Forest Service
Improve health of local wa	tersheds	
□ Improve local water supply	reliability	
□ Implement & monitor a reli	able stormwater system	
□ Increase climate resilience	)	
□ Increase community aware	eness for sustainable water	
Stage of Development		
Conceptual	⊠ Planning	Pre-Desian
□ Design		□ Other
Project Implementation Unde	rway	
	<b>_</b>	
Expected Project Timeline	Begin: 2018, End: 2020	

Pi	oject Triggers	Extreme Climate Conditions						
P	Potentially Applicable Federal and State Programs for Technical and Financial Assistance							
Ci Pi U	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Program							
St	Stormwater Multi-Benefits (per SWRP Guidelines Table 4):							
	Primary Opportunity							
	Benefit Category		Main Benefit	Additional Benefit				
	Water Quality		Increased filtration and/or	Nonpoint source pollution control				
	while contributing to comp with applicable permit and TMDL requirements	oliance d/or	treatment of runoff	Reestablished natural water drainage and treatment				
	Water Supply		Water supply reliability	Water conservation				
	through groundwater management and/or runo capture and use	ff	Conjunctive use					
	Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows				
	Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink				
			-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph				
			Increased urban green space	Water temperature improvements				
	Community		Employment opportunities provided	Community involvement				
			Public education	Enhance and/or create recreational and public use areas				
G er ar	Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.							
Pi	oject Included in IRWM:		es, which one					
⊠ No, explain project not added to IRWM currently								
Project Benefits a DAC/EDA:1 Xes, which one Project can be found in DAC Block Groups 2010-2014 as identified by the CA Department of Water Resources				DAC Block Groups 2010-2014 as Resources				
CEQA Compliance:          □ Yes, explain         □ Yes, explain         □ No, explainCEQA will not be completed         □			eted					

Appendix B Project Description Forms March 2018

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### B.3.26 231 Pompeii Fire Salvage Stewardship

Project/Program Name	Pompeii Fire Salvage Stewardship				
Responsible Agency	U.S. Forest Service				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA	
Estimated Cost	Capital: \$1,377,000.00				
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.819795°		Longitude: -120.550343°		
Description					
Within the King Fire footprint, this project will remove 937 acres of commercially valuable dead trees. The stewardship component will use some of the sales revenue to remove other small diameter biomass for fuel reduction and to prepare for reforestation. Snag patches will be left in the project area for wildlife, especially woodpeckers who thrive on the insects that inhabit dead trees.					
Watershed Management					
Potential Challenges					
Competing Resources					
Bark Beetle infestation due to prolonged drought					
Increased fire risk due to drought					
Conceptual GIS Map of Site					
Project would occur within the area that was impacted by the King Fire in the County of El Dorado (orange area in the map).					

Image: construction of the set of t							
Purpose(s)		Key Stakeholders					
🛛 Improve in-stream water q	uality	U.S. Forest Service					
$\boxtimes$ Improve health of local wa	tersheds						
□ Improve local water supply	reliability						
Implement & monitor a reliable stormwater system							
□ Increase climate resilience							
□ Increase community aware	eness for sustainable water						
Stage of Development							
Conceptual	⊠ Planning	□ Pre-Design					
□ Design		□ Other					
Project Implementation Underway							
Expected Project Timeline	Begin: 2018, End: 2020						
Pr	Project Triggers Extreme Climate Conditions						
--	---	-----------------	--	---	--	--	--
Po	Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
Ca	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant						
U.	S. Department of the Interio	or (DOI) -	Bureau of Reclamation - Cooperative	e Watershed Management Program			
St	ormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):				
	Primary Opportunity						
	Benefit Category		Main Benefit	Additional Benefit			
	Water Quality		Increased filtration and/or	Nonpoint source pollution control			
	while contributing to comp with applicable permit and TMDL requirements	oliance I/or	treatment of runoff	Reestablished natural water drainage and treatment			
	Water Supply		Water supply reliability	Water conservation			
	through groundwater management and/or runof capture and use	ff	Conjunctive use				
	Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
	Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
			-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
			Increased urban green space	Water temperature improvements			
	Community		Employment opportunities provided	Community involvement			
			Public education	Enhance and/or create recreational and public use areas			
Gi Co Th re	Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas. This project will help reduce non-points source pollution.						
Pr	oject Included in IRWM:	□ Ye	□ Yes, which one				
		⊠ No	No, explain project not added to IRWM currently				
Project Benefits a DAC/EDA: <sup>1</sup> X Yeident			Yes, which one Project can be found in DAC Block Groups 2010-2014 as ntified by the CA Department of Water Resources				
CEQA Compliance:          □ Yes, explain         □ No, explainCEQA will not be completed							

Appendix B Project Description Forms March 2018

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, kendalyoung@fs.fed.us, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

## B.3.27 232 Quidazoic Fire Salvage Stewardship

Project/Program Name	Quidazoic Fire Salvage Stewardship						
Responsible Agency	U.S. Forest Service						
Partner Agency (ies)	NA						
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA			
Estimated Cost	Capital: \$1,377,000.0	0					
Unit Cost	\$1,377/Acre						
Site Coordinates	Latitude: 38.769698°		Longitude: -120.563	883°			
Description							
The Quidazoic Fire Salvage Stewardship Project is located on the Pacific Ranger District, Eldorado National Forest where the King Fire occurred. Under this project, mastication, biomass cutting and piling on 584 acres will occur. Additionally, there will be biomass cutting and decking on 920 acres, 45 miles of road maintenance, road construction, and the removal of approximately 10 million board feet of timber. This project will benefit approximately 1,000 acres.							
Watershed Management							
Potential Challenges							
Competing Resources Bark Beetle infestation due to prolonged drought Increased fire risk due to drought Conceptual GIS Map of Site Project would occur within the area that was impacted by the King Fire in the County of El Dorado (orange area in the map).							

U.S. Department of Agriculture Eldorado National Forest South Fork America Cohesive Strategy F	<figure></figure>	<complex-block></complex-block>
Purpose(s)		Key Stakeholders
Improve in-stream water q	uality	U.S. Forest Service
$\boxtimes$ Improve health of local wa	tersheds	
Improve local water supply	reliability	
□ Implement & monitor a reli	able stormwater system	
Increase climate resilience		
□ Increase community aware	eness for sustainable water	
Stage of Development		
Conceptual	⊠ Planning	Pre-Design
□ Design		□ Other
Project Implementation Unde	rway	
Expected Project Timeline	Begin: 2018, End: 2020	

Project Triggers Extreme Climate Conditions							
Po	Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
Ca Pr U.	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Program						
St	Stormwater Multi-Benefits (per SWRP Guidelines Table 4):						
	Primary Opportunity						
	Benefit Category		Main Benefit	Additional Benefit			
	Water Quality		Increased filtration and/or	Nonpoint source pollution control			
	while contributing to comp with applicable permit and TMDL requirements	oliance d/or	treatment of runoff	Reestablished natural water drainage and treatment			
	Water Supply		Water supply reliability	Water conservation			
	through groundwater management and/or runo capture and use	ff	Conjunctive use				
	Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
	Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
			-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
			Increased urban green space	Water temperature improvements			
	Community		Employment opportunities provided	Community involvement			
			Public education	Enhance and/or create recreational and public use areas			
Gi Co Th re	Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas. This project will help reduce non-points source pollution.						
Pr	oject Included in IRWM:	□ Ye	□ Yes, which one				
		⊠ No	☑ No, explain project not added to IRWM currently				
Project Benefits a DAC/EDA: <sup>1</sup>			Yes, which one Project can be found in DAC Places 2010-2014 as identified the CA Department of Water Resources No				
CEQA Compliance:          □ Yes, explain         □ Yes, explain         □ CEQA will not be completed         □				leted			

Appendix B Project Description Forms March 2018

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.3.28 233 Fred's Noxious Weed Treatment-Vegetation Management**

Project/Program Name	Fred's Noxious Weed Treatment-Vegetation Management							
Responsible Agency	U.S. Forest Service							
Partner Agency (ies)	NA							
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA							
Estimated Cost	Capital: \$688,500.00							
Unit Cost	\$1,377/Acre							
Site Coordinates	Latitude: 38.814296°		Longitude: -120.512	972°				
Description	-		-					
This is project is set to occu amount of noxious weeds p Approximately 500 acres wi	r within the Fred's Fire resented in the area af Il be treated.	Footprint, r fected by F	north of Kyburz. By im red's Fire will be mana	plementing this project, the aged and controlled.				
Component								
Watershed Management								
Potential Challenges								
Increased fire risk due to dr	ought							
Conceptual GIS Map of Site	)							
Project will occur in the Free	d's Fire affected area.							
Predis Fire Perimeter Video Routes Video Rou								
https://www.fs.usda.gov/Inte	https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev7_018928.pdf							

Purpose(s)				Key Stakeholders			
☑ Improve in-stream water quality				U.S. Forest Service			
Improve health of local was	tersheds						
Improve local water supply	/ reliability	,					
Implement & monitor a reli	able storn	nwater system					
Increase climate resilience	)						
□ Increase community aware	eness for s	sustainable water					
Stage of Development							
Conceptual	⊠ PI	anning	□ Pre-De	sign			
□ Design		onstruction	□ Other				
Project Implementation							
Expected Project Timeline	Begin: 2	2015, End: 2019					
Project Triggers	Extreme	Climate Conditions					
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance			
California Environmental Pro Program	tection Ag	gency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant			
Stormwater Multi-Benefits (p	er SWRP	Guidelines Table 4):					
Primary Opportunity							
Benefit Category		Main Benefit		Additional Benefit			
Water Quality		Main Benefit Increased filtration and/o	or	Additional Benefit Nonpoint source pollution control			
Benefit Category Water Quality while contributing to com with applicable permit and TMDL requirements	pliance d/or	Main Benefit Increased filtration and/o treatment of runoff	Dr	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment			
Benefit Category Water Quality while contributing to com with applicable permit and TMDL requirements Water Supply	pliance d/or	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability	Dr.	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation			
Benefit Category Water Quality while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or runc capture and use	pliance d/or	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use	or	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation			
Benefit CategoryWater Quality while contributing to complicable permit and TMDL requirementsWater Supply through groundwater management and/or rund capture and useFlood Management	pliance d/or off	Main Benefit         Increased filtration and/or         treatment of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by runoff rate and/or volum	educing	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows			
Benefit Category         Water Quality         while contributing to complicable permit and the second secon	pliance d/or	Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volum Environmental and habit protection and improven including:	educing e at nent	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink			
Benefit Category         Water Quality         while contributing to complicable permit and the transmission of transmissin of transmission of transmission of transmis	pliance d/or	Main Benefit         Increased filtration and/or         treatment of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by regrunoff rate and/or volum         Environmental and habits         protection and improven         including:         -Wetland enhancement/         -Riparian enhancement;         -Instream flow improven	educing e at nent creation; and/or nent	Additional Benefit         Nonpoint source pollution control       Reestablished natural water         drainage and treatment       Water conservation         Water conservation       Reduced sanitary sewer         overflows       Reduced energy use, GHG         emission, or provides a carbon       sink         Reestablishment of the natural       hydrograph			
Benefit Category         Water Quality         while contributing to complicable permit and the second secon	pliance d/or off	Main Benefit Increased filtration and/or treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volum Environmental and habit protection and improven including: -Wetland enhancement/ -Riparian enhancement; -Instream flow improven Increased urban green s	educing e at nent creation; and/or nent space	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink         Reestablishment of the natural         hydrograph         Water temperature improvements			
Benefit Category         Water Quality         while contributing to complicable permit and the transfer of	pliance d/or	Main Benefit         Increased filtration and/o         treatment of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by regrunoff rate and/or volum         Environmental and habits         protection and improven         including:         -Wetland enhancement/         -Riparian enhancement;         -Instream flow improven         Increased urban green s         Employment opportunitie         provided	educing e at nent creation; and/or nent space es	Additional BenefitNonpoint source pollution controlReestablished natural waterdrainage and treatmentWater conservationReduced sanitary seweroverflowsReduced energy use, GHGemission, or provides a carbonsinkReestablishment of the naturalhydrographWater temperature improvementsCommunity involvement			

#### Appendix B Project Description Forms March 2018

Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:       □ Yes, which one         ⊠ No, explain project not added to IRWM currently					
Project Benefits a          \Box Yes, which one Project can be found in DAC Block Groups 2010-20         identified by the CA Department of Water Resources         \Box No					
CEQA Compliance:          □ Yes, explain         □ No, explain         □ CEQA will not be completed         □					
Contact Person(s):					
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259					
Key References:					
NA					
Supplemental Information (e.g.,	Project Webpage or equivalent):				

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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Appendix B Project Description Forms March 2018

## B.3.29 234 King Fire Pile Burning

Project/Program Name	King Fire Pile Burning					
Responsible Agency	U.S. Forest Service					
Partner Agency (ies)	NA					
Net Yield	Normal Year: NA	Wet	Year: NA	Dry Year: NA		
Estimated Cost	Capital: \$4,131,000.00					
Unit Cost	\$1,377/Acre					
Site Coordinates	Latitude: 38.809822°		Longitude: -120.558	3089°		
Description						
Within the King Fire footprin trees. This project will clear This project will encompass	t, dead trees will be removed the affected King Fire area in a 3,000 acres.	d in w n orde	hich it will include burn or to get it ready for re	ning piles of removed dead planting trees and vegetation.		
Component						
Watershed Management						
Potential Challenges						
Increased fire risk due to drought						
Conceptual GIS Map of Site						
Project would occur within the area that was impacted by the King Fire in the County of El Dorado (orange area in the map).						

https://www.fs.usda.gov/Internet/FSE_MEDIA/fseprd528765.jpg	<complex-block></complex-block>						
Purpose(s)	Key Stakeholders						
☐ Improve in-stream water quality	U.S. Forest Service						
☑ Improve health of local watersheds							
Improve local water supply reliability							
□ Implement & monitor a reliable stormwater system							
□ Increase climate resilience							
Increase community awareness for sustainable water							
Stage of Development							
Conceptual     Zeptual	Pre-Design						
□ Design □ Construction	□ Other						
Project Implementation							
Expected Project Timeline Begin: 2015, End: 2018							

Pi	Project Triggers Extreme Climate Conditions						
P	Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
Ca Pi U	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Program						
St	ormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):				
	Primary Opportunity						
	Benefit Category		Main Benefit	Additional Benefit			
	Water Quality		Increased filtration and/or	Nonpoint source pollution control			
	while contributing to comp with applicable permit and TMDL requirements	oliance I/or	treatment of runoff	Reestablished natural water drainage and treatment			
	Water Supply		Water supply reliability	Water conservation			
	through groundwater management and/or runor capture and use	ff	Conjunctive use				
	Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
	Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
			-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
			Increased urban green space	Water temperature improvements			
	Community		Employment opportunities provided	Community involvement			
			Public education	Enhance and/or create recreational and public use areas			
G Ce Tł be	Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas. This project will also be able to reduce nonpoint source pollution.						
Pi	oject Included in IRWM:	□ Ye	] Yes, which one				
		⊠ No	No, explain project not added to IRWM currently				
Project Benefits a DAC/EDA: <sup>1</sup> Xes, which one_ <u>Project Falls under the 2010-2014 DAC Block (identified by the CA Department of Water Resources</u>			2010-2014 DAC Block Groups as Resources				
C	CEQA Compliance:          □ Yes, explain         □ Yes, explain         □ No, explainCEQA will not be completed         □						

Appendix B Project Description Forms March 2018

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

# B.3.30 235 Tobacco Gulch Integrated Resource Timber Contract-Timber Sale & Thinning Project

Project/Program Name		Tobacco Gulch Integrated Resource Timber Contract-Timber Sale & Thinning Project					
Responsible Agency		U.S. Forest Service					
Partner Agency (ie	s)	South Fork American	River Cohe	esive Strategy, Tahoe	e-Central Sierra Initiative		
Net Yield	Normal	Year: NA	Wet Year:	et Year: NA Dry Year: NA			
Estimated Cost	Capital	\$1,652,400.00					
Unit Cost	\$1,377/	Acre					
Site Coordinates	Latitude	e: 38.882891°		Longitude: -120.839	)662°		
Description							
south of Georgeto integrated resource used to sell the tim sun filled spaces w timber projects like affected by disease better conditions for cover approximate	Inis project will occur near Darling Ridge, Mace Mill, and Traverse Creek on the Georgetown Ranger District, just south of Georgetown. This is a timber sale project that also involves pre-commercial thinning. The project is an integrated resource timber contract in which the value of the timber is much greater than the cost of the services used to sell the timber. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will cover approximately 1,200 acres.						
Component							
Watershed Manag	ement						
Potential Challenge	Potential Challenges						
Competing Resources Bark Beetle infestation due to prolonged drought Increased fire risk due to drought							
Conceptual GIS Ma	Conceptual GIS Map of Site						



Purpose(s)		Key Stakeholders		
<ul> <li>☑ Improve in-stream water quality</li> <li>☑ Improve health of local watersheds</li> <li>□ Improve local water supply reliability</li> </ul>				est Service, South Fork American River Strategy, and Tahoe-Central Sierra
□ Implement & monitor a relia	able storm	nwater system		
□ Increase climate resilience				
Increase community aware	eness for s	sustainable water		
Stage of Development				
Conceptual	⊠ Pla	anning	Pre-De	sign
Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	019, End: 2024		
Project Triggers	Extreme	Climate Conditions		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwat Program U.S. Department of the Interior (DOI) - Bureau of Reclamation - Cooperative Watershed Management Pro				
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/or treatment of runoff		Nonpoint source pollution control
while contributing to comp with applicable permit and TMDL requirements	oliance d/or			Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	ff	Conjunctive use		
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas

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Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:				
	⊠ No, explain project not added to IRWM currently			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Block Groups 2010-2014 as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>			
CEQA Compliance:	□ Yes, explain			
	⊠ No, explain <u>CEQA will be completed</u>			
Contact Person(s):				
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.3.31 236 John Don't Fuels Reduction**

Project/Program Name	John Don't Fuels Reduction				
Responsible Agency	U.S. Forest Service	U.S. Forest Service			
Partner Agency (ies)	South Fork American Rive	er Coh	esive Strategy		
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA	
Estimated Cost	Capital: \$5,852,250.00				
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.841659°		Longitude: -120.254	126°	
Description	•				
This is a commercial and pre-commercial thinning project that will occur in the County of El Dorado, Pacific RD, and the Crystal Basin Recreation Area near Wright's Lake (north of Kyburz). Conducting this project will help suppress fires and protect natural resources by controlling the amount of vegetation, controlling the amount invasive species, improving the rangeland for livestock grazing, improving fish and wildlife habitat, enhancing and protecting riparian areas and wetlands, and improving water quality. This project will cover approximately 4,250 acres.					
Component					
Watershed Management					
Potential Challenges					
Competing Resources Bark Beetle infestation due to prolonged drought Increased fire risk due to drought					
Conceptual GIS Map of Site					



Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality			U.S. Forest Service and South Fork American	
$\boxtimes$ Improve health of local watersheds			River Col	hesive Strategy
□ Improve local water supply reliability				
□ Implement & monitor a reli	able storn	nwater system		
□ Increase climate resilience				
□ Increase community aware	eness for s	sustainable water		
Stage of Development				
Conceptual	⊠ Pla	anning	□ Pre-Des	sign
□ Design		onstruction	□ Other	
Expected Project Timeline	Begin: 2	019, End: 2024		
Project Triggers	High fire	e risk		
	Spread	of Bark Beetle infestation		
Potentially Applicable Federa	I and Stat	e Programs for Technical a	and Financ	cial Assistance
California Environmental Pro Program	tection Ag	ency - State Water Resour	rces Contro	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/or treatment of runoff		Nonpoint source pollution control
while contributing to com with applicable permit and TMDL requirements	oliance d/or			Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff		Conjunctive use		
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green space		Water temperature improvements
Community		Employment opportunitie provided	S	Community involvement
		Public education		Enhance and/or create recreational and public use areas

# Appendix B Project Description Forms March 2018

This project will help reduce non-point source pollution as the amount of organic matter that may make its way to local water bodies will be reduced. Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project not added to IRWM currently</li> </ul>	
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Block Groups 2010-2014 as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>	
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>⊠ No, explainCEQA has not been completed</li> </ul>	

Contact Person(s):

Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u>, (530)-621-5259

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

#### B.3.32 237 O'leary Cow Integrated Resource Service Contract/ Integrated Resource Timber Contract-Timber Sale & Thinning Project

Project/Program Name	O'leary Cow Integrated Resource Service Contract/ Integrated Resource Timber Contract-Timber Sale & Thinning Project			
Responsible Agency	U.S. Forest Service			
Partner Agency (ies)	South Fork American River Cohesive Strategy			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA
Estimated Cost	Capital: \$564,570.00			
Unit Cost	\$1,377/Acre			
Site Coordinates	Latitude: 38.836207° Longitude: -120.24107°			07°
Description	-		-	

Description

This project will occur in the County of El Dorado, Pacific RD, and the Crystal Basin Recreation Area near Wright's Lake (north of Kyburz). This is ultimately a timber sale project that will also involve commercial and pre-commercial thinning. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will cover approximately 410 acres.

Component

Watershed Management

**Potential Challenges** 

**Competing Resources** 

Bark Beetle infestation due to prolonged drought

Increased fire risk due to drought

Conceptual GIS Map of Site



Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality			U.S. Forest Service and South Fork American	
☑ Improve health of local watersheds			River Co	hesive Strategy
□ Improve local water supply	reliability			
Implement & monitor a reli	able storm	nwater system		
□ Increase climate resilience	•			
□ Increase community aware	eness for s	sustainable water		
Stage of Development				
Conceptual	⊠ Pla	anning	□ Pre-De	sign
□ Design	□ Co	onstruction	⊠ Other	
Planning Complete - awaiting	, impleme	ntation		
Expected Project Timeline	Begin: 2	019, End: 2024		
Project Triggers	High fire Spread o	risk of Bark Beetle infestation		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financ	cial Assistance
California Environmental Pro Program U.S. Department of the Interi	tection Ag or (DOI) -	ency - State Water Resou Bureau of Reclamation - C	rces Contre Cooperative	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control
while contributing to com with applicable permit and	bliance d/or	treatment of runoff		Reestablished natural water
TMDL requirements				
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff capture and use		Conjunctive use		
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas

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Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Block Groups 2010-2014 as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>		
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>☑ No, explainCEQA has not been completed</li> </ul>		
Contact Person(s):			
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259			
Key References:			

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.3.33 238 Trestle Integrated Resource Timber Contract-Timber Sale**

Project/Program Name	Trestle Integrated Resource Timber Contract-Timber Sale				
Responsible Agency	U.S. Forest Service	U.S. Forest Service			
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: \$5,508,000.0	00			
Unit Cost	\$1,377/Acre				
Site Coordinates	Latitude: 38.645591°		Longitude: -120.473	3589°	
Description					
spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will also include commercial and non-commercial fuels reduction. This project will cover approximately 4,000 acres.					
Watershed Management					
Potential Challenges					
Competing Resources Bark Beetle infestation due to prolonged drought Increased fire risk due to drought					
Conceptual GIS Map of Site					



Purpose(s)		Key Stakeholders		
⊠ Improve in-stream water quality			U.S. For	est Service
☑ Improve health of local watersheds				
□ Improve local water supply	/ reliability	,		
Implement & monitor a reli	able storn	nwater system		
Increase climate resilience	)			
□ Increase community aware	eness for a	sustainable water		
Stage of Development				
Conceptual	⊠ PI	anning	□ Pre-De	sign
□ Design		onstruction	⊠ Other	
Planning Complete - awaiting	g impleme	ntation		
Expected Project Timeline	Begin: 2	2019, End: 2024		
Project Triggers	High fire	e risk		
	Spread	of Bark Beetle infestation		
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance
California Environmental Pro Program U.S. Department of the Interi	tection Ag	gency - State Water Resou Bureau of Reclamation - (	rces Contr	ol Board (SWRCB) - Stormwater Grant e Watershed Management Program
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):	-	
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/o	or	Nonpoint source pollution control
while contributing to com	pliance d/or	treatment of runoff		Reestablished natural water
TMDL requirements	u/0/			drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater	off	Conjunctive use		
capture and use				
Flood Management Decrea runoff r		Decrease flood risk by re runoff rate and/or volume	educing Reduced sanitary sewer	
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/creation:		Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural
		-Riparian enhancement; and/or -Instream flow improvement		hydrograph
Community		Increased urban green s	pace	Water temperature improvements
Community		provided	35	Community involvement
		Public education		Enhance and/or create
		•		

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Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.				
Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA:1	□ Yes, which one ⊠ No			
CEQA Compliance:          □ Yes, explain         □ No, explainCEQA has not been completed         □				
Contact Person(s):				
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA	NA			
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

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### B.3.34 239 Georgetown Insect Salvage Timber Sale

Project/Program Name	Georgetown Insect Salvage Timber Sale			
Responsible Agency	U.S. Forest Service			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA
Estimated Cost	Capital: \$413,100.00			
Unit Cost	\$1,377/Acre			
Site Coordinates	Latitude: 38.915613°		Longitude: -120.844	-399°
Description	-		-	
Several trees near Georgetown were affected with beetle kill. As a result this project is a salvage timber sale project that is set to occur in the following locations: LEGAL - T11N R11E S12; T11N R12E S5-7; T12N R11E S4,9-10,15,16; T13N R11E S10,14, 15,27,28,32,33 or within or adjacent to high use areas. Conducting this project will help maintain a healthy forest such that it will help remove trees that have become affected by beetle kill. This project will cover approximately 300 acres.				
Component				
Watershed Management				
Potential Challenges				
Competing Resources				
Bark Beetle infestation due to prolonged drought				
Increased fire risk due to drought				
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality			U.S. For	est Service
☑ Improve health of local watersheds				
□ Improve local water supply reliability				
Implement & monitor a reli	able storn	nwater system		
Increase climate resilience	•			
□ Increase community aware	eness for s	sustainable water		
Stage of Development			·	
Conceptual	⊠ PI	anning	□ Pre-De	sign
□ Design		onstruction	□ Other	
Expected Project Timeline	Begin: 2	2019, End: 2024		
Project Triggers	High fire	e risk		
	Spread	of Bark Beetle infestation		
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance
California Environmental Pro Program U.S. Department of the Interi	tection Ag or (DOI) -	jency - State Water Resou Bureau of Reclamation - C	rces Contr Cooperative	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/or		Nonpoint source pollution control
while contributing to com with applicable permit and TMDL requirements	pliance d/or	treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff capture and use		Conjunctive use		
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunities provided		Community involvement
		p		

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Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short –term and long-term. This project will engage the community and enhance local recreational and public use areas.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project can be found in DAC Places 2010-2014 as identified</u> by the CA Department of Water Resources</li> <li>No</li> </ul>			
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>□ No, explainCEQA has not been completed</li> </ul>			
Contact Person(s):				
Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, <u>kendalyoung@fs.fed.us</u> , (530)-621-5259				
Key References:				
NA				

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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#### B.3.35 240 Middle Creek Integrated Resource Timber Contract-Timber Sale & Fuels Reduction Project

Project/Program Name	Middle Creek Integrated Resource Timber Contract-Timber Sale & Fuels Reduction Project			
Responsible Agency	U.S. Forest Service			
Partner Agency (ies)	South Fork American River Cohesive Strategy			
Net Yield	Normal Year: NA	Wet Year: NA	Dry Year: NA	
Estimated Cost	Capital: \$930,852.00			
Unit Cost	\$1,377/Acre			
Site Coordinates	Latitude: 38.726808°	Longitude: -120.17	Longitude: -120.171679°	
Description	-	-		

This is a commercial timber sale project, non-commercial timber sale project, and fuels reduction project that is set to occur South of Highway 50 and east of Silver Fork road. Conducting this project will enhance local wildlife conditions such that wildlife that enjoy open sun filled spaces will be provided with more open sun filled spaces after trees have been cleared out. Additionally, timber projects like these will help maintain a healthy forest such that it will help remove trees that may have become affected by disease or pests. In other cases, removing trees can help prevent the spread of disease or simply provide better conditions for healthy trees to grow as they will receive access to more sunlight and space. This project will cover approximately 676 acres.

Component

Watershed Management

**Potential Challenges** 

**Competing Resources** 

Bark Beetle infestation due to prolonged drought

Increased fire risk due to drought

Conceptual GIS Map of Site


Purpose(s)			Key Stakeholders			
☑ Improve in-stream water quality				U.S. Forest Service, South Fork American River		
$\boxtimes$ Improve health of local watersheds				Strategy		
□ Improve local water supply reliability						
□ Implement & monitor a relia	able storm	nwater system				
□ Increase climate resilience						
□ Increase community aware	eness for s	sustainable water				
Stage of Development						
Conceptual	🛛 Pla	anning	Pre-De	sign		
□ Design	□ Co	onstruction	⊠ Other			
Expected Project Timeline	Begin: 2	019, End: 2024				
Project Triggers	High fire	risk				
	Spread	of Bark Beetle infestation				
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance		
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant		
U.S. Department of the Interio	or (DOI) -	Bureau of Reclamation - C	Cooperative	e Watershed Management Program		
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):				
Primary Opportunity						
Benefit Category		Main Benefit		Additional Benefit		
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control		
while contributing to comp with applicable permit and	oliance d/or	treatment of runoff		Reestablished natural water drainage and treatment		
Mater Supply		Water supply reliability		Water concentration		
through groundwater	ff	Water supply reliability           Conjunctive use				
capture and use						
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph		
		Increased urban green s	pace	Water temperature improvements		
Community		Employment opportunitie provided	S	Community involvement		
		Public education		Enhance and/or create recreational and public use areas		

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Given the large area that this project will cover this project will be able to enhance and protect the local environment. Consequently, this project will be able to create employment opportunities that are both short -term and long-term. This project will engage the community and enhance local recreational and public use areas. Project Included in IRWM: □ Yes, which one No, explain project not added to IRWM currently Project Benefits a DAC/EDA:1  $\Box$  Yes, which one\_\_\_\_  $\boxtimes$  No\_ **CEQA** Compliance: Yes, explain\_\_\_ ⊠ No, explain \_\_\_\_ CEQA has not been completed Contact Person(s): Kendal Young, Ph.D., South Fork American River Cohesive Strategy Forest Service, kendalyoung@fs.fed.us, (530)-621-5259 Key References: NA Supplemental Information (e.g., Project Webpage or equivalent): NA <sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### **B.4 STORMWATER MANAGEMENT**

# B.4.1 300 Urban Roadway Improvement Project – Western Placerville Interchange

Project/Program Name	Urban Roadway Improvement Project - Western Placerville Interchange					
Responsible Agency	City of Placerville					
Partner Agency (ies)	Caltrans					
Net Yield	Normal Year: NA	Wet	Year: NA	Dry Year: NA		
Estimated Cost	Capital: \$11,600,000					
Unit Cost	NA					
Site Coordinates	Latitude: 38.727047°		Longitude: -120.82	23319°		
Description						
This project entails the cons ride facility, new Class I ar waterline. This project is p Improvement Program (ST California Department of Tra of Transportation's Surfac Transportation's Congestion	This project entails the construction of a new eastbound Highway 50 off-ramp at Ray Lawyer Drive, a new park and ride facility, new Class I and Class II pedestrian/bike facilities, realignment of Forni Road and relocation of EID waterline. This project is partially funded through California Department of Transportation's State Transportation Improvement Program (STEP), EI Dorado County Transit Authority funds, EI Dorado Irrigation District funds, California Department of Transportation State Highway Operation and Protection Program funds, U.S. Department of Transportation's Surface Transportation Block Grant Program (STBG) and the U.S. Department of Transportation's Congestion Mitigation and Air Quality Improvement Program project-specific funds.					
Component						
Stormwater Management	Stormwater Management					
Potential Challenges						
Drivers may be unhappy if there are traffic delays during the construction period of this project.						
Conceptual GIS Map of Site						



Purpose(s)			Key Stakeholders		
☑ Improve in-stream water quality ☐ Improve health of local watersheds			City of PI Transpor	City of Placerville, California Department of Transportation, El Dorado Irrigation District,	
□ Improve local water supply	v reliability		U.S. Dep	artment of Transportation	
$\Box$ Implement & monitor a reli	able storm	water system			
□ Increase climate resilience					
$\Box$ Increase community aware	eness for s	sustainable water			
Stage of Dovelopment			ļ		
Stage of Development					
Conceptual	🗆 Pla	anning	Pre-Des	sign	
⊠ Design	□ Co	onstruction	□ Other		
Expected Project Timeline	Begin: 2	017, End: 2018			
Project Triggers	Severe r	oad failures.			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financ	sial Assistance	
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of Transportation (DOT) - Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program					nt
Stormwater Multi-Benefits (pe	er SWRP (	Guidelines Table 4):			
Stormwater Multi-Benefits (pe	er SWRP (	Guidelines Table 4):	justification	n below table)	
Stormwater Multi-Benefits (pe Primary Opportunity (h Benefit Category	er SWRP	Guidelines Table 4): pplicable cells and provide Main Benefit	justification	n below table) Additional Benefit	
Stormwater Multi-Benefits (pe Primary Opportunity (h Benefit Category Water Quality	er SWRP	Guidelines Table 4): oplicable cells and provide Main Benefit Increased filtration and/o	justification	n below table) Additional Benefit Nonpoint source pollution control	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements	er SWRP ighlight ap pliance d/or	Guidelines Table 4): oplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff	justification or	n below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply	er SWRP ighlight ap pliance d/or	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability	justification r	n below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use	er SWRP ighlight ap pliance d/or ff	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use	justification or	n below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management	er SWRP ighlight ap oliance d/or	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume	justification or educing	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habit protection and improvem including:	justification or educing eat ient	Additional Benefit Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o- -Riparian enhancement; -Instream flow improvem	justification or educing eat at nent creation; and/or nent	Additional Benefit Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habit: protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	justification or educing eat at ent creation; and/or eent pace	Additional Benefit Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements	
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP	Guidelines Table 4): pplicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habit: protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie provided	justification or educing eat ent creation; and/or eent pace es	Additional Benefit Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements Community involvement	

## Appendix B Project Description Forms March 2018

This project would will have road improvements that will prevent erosion, in addition to including delineated wetlands and full-capture trash devices that will ultimately improve the water quality of the region and help reduce nonpoint source pollution. This project will create job opportunities. This project will enhance public use areas as bike facilities will be constructed. This project will engage the community and have a public education component.				
Project Included in IRWM:	□ Yes, which one ⊠ No, explain			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project falls within the 2010-2014 DAC Places as identified</u> by CA Department of Water Resources</li></ul>			
CEQA Compliance:	<ul> <li>☑ Yes, explain <u>CEQA has been completed</u></li> <li>□ No, explain <u></u></li> </ul>			
Contact Person(s):				
Rebecca Neves, City Engineer/F	PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250			
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
edctc.org				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### B.4.2 301 Placerville Station II-Park and Ride Facility Improvements

Project/Program Name	Placerville Station II-Park and Ride Facility Improvements				
Responsible Agency	City of Placerville				
Partner Agency (ies)	Caltrans				
Net Yield	Normal Year: NA	Wet Ye	ar: NA	Dry Year: NA	
Estimated Cost	Capital: \$1,190,000				
Unit Cost	NA				
Site Coordinates	Latitude: 38.732286°		Longitude: -12	0.789439°	
Description			*		
This project includes park a Street). This project is parti Transportation's Surface Tra	nd ride site improvements, and Mosc ally funded by Federal Transit Admir ansportation Block Grant Program (S	quito Road histration STBG) fun	d improvements Grant and U.S. D ids.	(Broadway/Main to Clay Department of	
Component	t				
Stormwater Management					
Potential Challenges					
Drivers may be unhappy if there are traffic delays during the construction period of this project.					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders		
☑ Improve in-stream water quality			City of Placerville, U.S. Department of		
□ Improve health of local watersheds				rtation, Caltrans	
Improve local water supply	reliability	,			
□ Implement & monitor a reli	able storn	nwater system			
□ Increase climate resilience	•				
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
Conceptual	🗆 Pl	anning	□ Pre-De	sign	
⊠ Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	2017, End: 2018			
Project Triggers	Road fa	ilures			
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Financ	cial Assistance	
California Environmental Pro Program U.S. Department of Transpor Discretionary Grant Program	tection Ag	gency - State Water Resour	rces Contr ment Gene	ol Board (SWRCB) - Stormwater Grant erating Economic Recovery (TIGER)	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justificatio	n below table)	
Benefit Categories Identif	ied in SW	RP Guidelines			
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/or		Nonpoint source pollution control	
while contributing to comp	pliance d/or	treatment of runoff		Reestablished natural water	
TMDL requirements	u/01			drainage and treatment	
Water Supply		Water supply reliability		Water conservation	
through groundwater	off	Conjunctive use			
capture and use					
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows	
Environmental		Environmental and habit	at	Reduced energy use, GHG	
		including:	ient	emission, or provides a carbon	
		-Wetland enhancement/c	creation;	Reestablishment of the natural	
		-Riparian enhancement;	and/or	hydrograph	
		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie	es	Community involvement	
		Public education		Enhance and/or create	
				recreational and public use areas	

## Appendix B Project Description Forms March 2018

This project will provide short term employment opportunities, engage the community, and provide a public education component.						
Project Included in IRWM:	□ Yes, which one ⊠ No, explain					
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one <u>Project falls within the 2010-2014 DAC Places as identified</u> by CA Department of Water Resources <u>Project falls within the 2010-2014 DAC Places as identified</u> by CA Department of Water Resources					
CEQA Compliance:	<ul> <li>☑ Yes, explain <u>CEQA has been completed</u></li> <li>□ No, explain</li> </ul>					
Contact Person(s):						
Rebecca Neves, City Engineer/F	PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250					
Key References:	Key References:					
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
edctc.org						
DAG Disationtend Communities						

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### B.4.3 302 Canal Street LID Projects

Project/Program Name	Canal Street LID Projects				
Responsible Agency	City of Placerville				
Partner Agency (ies)	NA				
Net Yield	Normal Year: 150 AF/y	Wet Ye	ar: 206 AF/y	Dry Year: 105 AF/y	
Estimated Cost	Capital: \$5,454,000				
Unit Cost	NA				
Site Coordinates	Latitude: 38.731086°		Longitude: -12	0.809825°	
Description			-		
Project includes road, sewer and water improvements which will include LID designs, if possible (i.e. bioretention, impervious area removal, land compatible design, infrastructure upgrades to repair deteriorating pipes contributing to water quality impairments).					
Component	Component				
Stormwater Management					
Potential Challenges					
Residents near project site may not like the noise related to the construction that will result from the project.					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders		
Improve in-stream water quality			City of Pl	acerville	
□ Improve health of local watersheds					
□ Improve local water supply	reliability	,			
□ Implement & monitor a reli	able storn	nwater svstem			
□ Increase climate resilience	•	,			
$\Box$ Increase community aware	eness for a	sustainable water			
Stage of Development					
⊠ Conceptual	🗆 Pl	anning	□ Pre-Des	sign	
🗆 Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	2018, End: 2019			
Project Triggers	Fundino	1			
i lojoot inggolo	Sewer c	or road failures			
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Financ	ial Assistance	
California Environmental Pro Program	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				
U.S. Department of Transpor Discretionary Grant Program	tation (DC	DT) - Transportation Invest	ment Gene	rating Economic Recovery (TIGER)	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ar	oplicable cells and provide	justificatior	n below table)	
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control	
while contributing to com	pliance	treatment of runoff		Reestablished natural water	
With applicable permit and TMDL requirements	d/or			drainage and treatment	
Water Supply		Water supply reliability		Water conservation	
through groundwater		Conjunctive use			
management and/or runo	off				
Flood Management		Decrease flood risk by re	ducing	Reduced sanitary sewer	
		runoff rate and/or volume	e j	overflows	
Environmental		Environmental and habita	at	Reduced energy use, GHG	
		including:	lent	sink	
		-Wetland enhancement/c	creation;	Reestablishment of the natural	
		-Riparian enhancement;	and/or	hydrograph	
		Increased urban green s	nace	Water temperature improvements	
Community		Employment opportunitie	est of the second secon	Community involvement	
		DIOVICEO	Enhance and/or create		
Public education				Enhance and/or create	

## Appendix B Project Description Forms March 2018

This project will provide road and sanitary sewer improvements that will prevent erosion and prevent sewer overflows. Project will include short term employment opportunities. Overall, this project has the potential to treat and infiltrate runoff, reduce nonpoint source pollution, reestablish the natural water drainage and treatment, decrease flood risk, reestablish the natural hydrograph, increase urban green space, engage the community and provide a public education component.					
Project Included in IRWM:	□ Yes, which one ⊠ No, explain				
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one<u>Project falls within the 2010-2014 DAC Places as identified</u> by CA Department of Water Resources</li> <li>□ No</li> </ul>				
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>CEQA not</u> <u>completed</u>				
Contact Person(s):					
Rebecca Neves, City Engineer/PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250					
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					
DAC = Disadvantaged Communities					

EDA = Economically Distressed Area

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Appendix B Project Description Forms March 2018

#### B.4.4 303 Urban Roadway Improvement Project - Mosquito Road Stabilization, Grind & Overlay Project

Project/Program Name	Urban Roadway Improvement Project - Mosquito Road Stabilization, Grind & Overlay Project				
Responsible Agency	City of Placerville				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$240,000				
Unit Cost	NA				
Site Coordinates	Latitude: 38.735833° Longitude: -120.784878°				

Description

Roadway improvements include grind, partial reconstruction, and overlay. Project will occur from Dimity Lane to the City Limits. LID designs will be included if possible (i.e. porous pavement and filter strips).

Filter strips: slow runoff velocities and filter out sediment and other pollutants and provide some infiltration into underlying soils.

Porous pavement: permeable pavement surface built with underlying stone reservoir that temporarily stores surface runoff before it infiltrates into the subsoil. Porous pavements allow stormwater to infiltrate directly and receive water quality treatment. Various types of porous surfaces exist: asphalt, concrete, and grass. Porous pavement would be suited for utility and access roads. Porous pavement can be maintained with vacuum street sweepers and inspection for signs of deterioration.

Component

Stormwater Management

**Potential Challenges** 

Residents near project site may not like the noise related to the construction that will result from the project.

Conceptual GIS Map of Site



Purpose(s)			Key Stakeholders		
Improve in-stream water quality			City of PI	acerville	
□ Improve health of local watersheds					
□ Improve local water supply	reliabilitv	,			
□ Implement & monitor a reli	able storn	owater system			
□ Increase climate resilience					
	noce for	sustainable water			
Stage of Development					
Conceptual	⊠ PI	anning	Pre-De	sign	
🗆 Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	017, End: 2018			
Project Triggers	Fundino	1			
i loject iliggels	Road fa	ilures			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance	
California Environmental Prot	tection Ag	ency - State Water Resou	rces Contro	ol Board (SWRCB) - Stormwater Grant	
U.S. Department of Transpor	tation (DC	)T) - Transportation Invest	ment Gene	erating Economic Recovery (TIGER)	
Discretionary Grant Program					
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justificatio	n below table)	
Benefit Category		Main Benefit	-	Additional Benefit	
Water Quality		Increased filtration and/or		Nonpoint source pollution control	
while contributing to comp	oliance	treatment of runoff		Reestablished natural water	
with applicable permit and	d/or			drainage and treatment	
Water Supply		Water supply reliability		Water conservation	
through groundwater		Conjunctive use			
management and/or runo	off	,			
capture and use		Description of the set of state because		De due ed e en item e europ	
Flood Management		runoff rate and/or volume	aucing	overflows	
Environmental		Environmental and habit	at	Reduced energy use, GHG	
		protection and improvem	ient	emission, or provides a carbon	
		including:		sink	
		-Wetland enhancement/	creation;	Reestablishment of the natural	
		-Instream flow improvem	ent	nydrograph	
		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie	es es	Community involvement	
		Public education		Enhance and/or create	
				recreational and public use areas	

## Appendix B Project Description Forms March 2018

Project will provide road improvements, prevent erosion, and improve storm water runoff quality. Ultimately, the project will help reduce nonpoint source pollution, generate short employment opportunities, engage the community, and provide a public education component.						
Project Included in IRWM:	□ Yes, which one	⊠ No, explain				
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one Project falls within the 2010-2014 DAC Places as identified by CA Department of Water Resources</li> <li>□ No</li> </ul>					
CEQA Compliance:	□ Yes, explain completed	⊠ No, explain <u>CEQA not</u>				
Contact Person(s):						
Steve Herrera, PE, <u>steve@herreraengineering.net,</u> 530-677-1854 Rebecca Neves, City Engineer/PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250						
Key References:	Key References:					
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						
Contact Person(s): Steve Herrera, PE, <u>steve@herrer</u> Rebecca Neves, City Engineer/F Key References: NA Supplemental Information (e.g., NA	Project Webpage or equivalent):	530-642-5250				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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Appendix B Project Description Forms March 2018

### B.4.5 304 Mosquito Road Sewer Main Replacement

Project/Program Name	Mosquito Road Sewer Main Replacement				
Responsible Agency	City of Placerville				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet Ye	ear: NA	Dry Year: NA	
Estimated Cost	Capital: \$184,500				
Unit Cost	NA				
Site Coordinates	Latitude: 38.732614°		Longitude: -12	0.789278	
Description			-		
<ul> <li>Project includes road, sewer and water improvements. Project will replace approximately 1,000 linear feet of existing cast iron sewer pipe from Broadway Court/Randolph Creek to Mosquito Road. Project will include LID designs if possible (i.e., Swales and filter strips).</li> <li>Filter strips: can be incorporated to treat runoff from roads and pervious surfaces. Filter strips slow runoff and filter out sediment and other pollutants, and provide some infiltration into underlying soils.</li> <li>Swales (grassed channels, dry swale, wet swale, biofilter or bioswale): are vegetated, open-channel management practices designed to treat and attenuate stormwater runoff for a specified water quality volume. Vegetation slows the water to allow sedimentation, filtering through a subsoil matrix and/or infiltration into the underlying soils.</li> </ul>					
Component					
Stormwater Management					
Potential Challenges					
Residents near project site may not like the noise related to the construction that will result from the project.					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders		
☑ Improve in-stream water quality			City of Placerville		
□ Improve health of local watersheds					
□ Improve local water supply reliability					
□ Implement & monitor a reli	able storn	nwater system			
□ Increase climate resilience	1				
$\Box$ Increase community aware	ness for a	sustainable water			
			<u> </u>		
Stage of Development					
Conceptual	⊠ PI	anning	Pre-De	sign	
🗆 Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	017, End: 2018			
Project Triggers	Funding				
0000	Sewer o	r road failures			
Detentially Applicable Federa			and Finance	iel Accieter es	
	and Star	e Programs for Technicar			
California Environmental Pro	tection Ag	ency - State Water Resou	rces Contro	ol Board (SWRCB) - Stormwater Grant	
U.S. Department of Transpor	tation (DC	DT) - Transportation Invest	ment Gene	erating Economic Recovery (TIGER)	
Discretionary Grant Program					
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ar	oplicable cells and provide	justificatio	n below table)	
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/or		Nonpoint source pollution control	
while contributing to com	pliance	treatment of runoff		Reestablished natural water	
with applicable permit and	d/or			drainage and treatment	
Water Supply		Water supply reliability	Water conservation		
through groundwater		Conjunctive use			
management and/or runo	off				
Flood Management		Decrease flood risk by re	educina	Reduced sanitary sewer	
		runoff rate and/or volume	Э	overflows	
Environmental		Environmental and habit	at	Reduced energy use, GHG	
		including.	ient	sink	
		-Wetland enhancement/	creation;	Reestablishment of the natural	
		-Riparian enhancement;	and/or hydrograph		
		-Instream flow improvem	ient	Water temperature improvements	
Community		Employment opportunitie	es	Community involvement	
		provided			
		Public education		Enhance and/or create	

## Appendix B Project Description Forms March 2018

Project will provide road and sanitary sewer improvements that will prevent sewer overflows which will help reduce the occurrence of non-point source pollution. This project will ultimately provide short term employment opportunities, engage the community and provide a public education component.						
Project Included in IRWM:	Yes, which one	_ 🛛 No, explain				
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one Project falls within the 2010-2014 DAC Places as identified by CA Department of Water Resources</li> <li>□ No</li> </ul>					
CEQA Compliance:	□ Yes, explain completed	⊠ No, explain <u>CEQA not</u>				
Contact Person(s):						
Steve Herrera, PE, <u>steve@herreraengineering.net,</u> 530-677-1854 Rebecca Neves, City Engineer/PE/QSD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250						
Key References:						
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						
DAC - Disadventeged Communities						

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### B.4.6 305 Urban Roadway Improvement Project - Woodridge Court, Grind & Overlay Project

Project/Program Name	Urban Roadway Improvement Project - Woodridge Court, Grind & Overlay Project					
Responsible Agency	City of Placerville					
Partner Agency (ies)	NA					
Net Yield	Normal Year: NA	Wet Ye	ar: NA	Dry Year: NA		
Estimated Cost	Capital: \$150,000					
Unit Cost	NA					
Site Coordinates	Latitude: 38.738531°		Longitude: -120	D.828681°		
Description			-			
<ul> <li>Project includes road improvements: address pavement failure at various locations, grind and overlay, and partial reconstruction as needed. Project will include LID designs if possible (ei. Filter strips and porous media).</li> <li>Filter strips: can slow runoff velocities and filter out sediment and other pollutants and provide some infiltration into underlying soils.</li> <li>Porous pavement: permeable pavement surface built with underlying stone reservoir that temporarily stores surface runoff before it infiltrates into the subsoil. Porous pavements allow stormwater to infiltrate directly and receive water quality treatment. Various types of porous surfaces exist: asphalt, concrete, and grass. Porous pavement would be suited for utility and access roads. Porous pavement can be maintained with vacuum street sweepers and inspection for signs of deterioration.</li> <li>Coordinating with Veerkamp for quote following site review. PW verified segment of sewer pipe will need to be replaced as part of the project. Coordinating with EID on any potential water main improvements needed as well. Original estimate does not include utility improvements, additional funds likely needed. May design in house to put out for public bidding.</li> </ul>						
Component						
Stormwater Management	Stormwater Management					
Potential Challenges						
Residents near project site	may not like the noise related to the o	constructi	on that will result	t from the project.		
Conceptual GIS Map of Site	•					



Purpose(s)			Key Stakeholders		
Improve in-stream water quality			City of Placerville		
□ Improve health of local watersheds					
Implove local water supply     Imploment 8 menitor a roli		awatar avatam			
	able storn	Iwater system			
	)				
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
Conceptual	⊠ Pl	anning	□ Pre-Des	sign	
□ Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	017, End: 2018			
Project Triggers	Funding				
	Sewer o	r road failures			
Potentially Applicable Federa	l and Stat	e Programs for Technical	and Financ	ial Assistance	
California Environmental Pro	tection Ag	ency - State Water Resou	rces Contro	ol Board (SWRCB) - Stormwater Grant	
Program	tation (DC	T) Transportation Invest	mont Conc	rating Economic Decovery (TICED)	
Discretionary Grant Program	tation (DC	) - Hansportation invest	ment Gene	rating Economic Recovery (TIGER)	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justificatio	n below table)	
Main Benefit		Additional Benefit		Additional Benefit	
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control	
while contributing to com	pliance	treatment of runoff		Reestablished natural water	
with applicable permit and	d/or			drainage and treatment	
Water Supply		Water supply reliability	Water conservation		
through groundwater		Conjunctive use			
management and/or runo	management and/or runoff				
Capture and use					
Flood Management	011	Decrease flood risk by re	educina	Reduced sanitary sewer	
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing	Reduced sanitary sewer overflows	
Flood Management Environmental	911 	Decrease flood risk by re runoff rate and/or volume Environmental and habit	educing e at	Reduced sanitary sewer overflows Reduced energy use, GHG	
Flood Management Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem	educing e at ent	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink	
Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o	educing e at ent creation;	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural	
Flood Management Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement;	educing eat lent creation; and/or	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph	
Flood Management		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/or -Riparian enhancement; -Instream flow improvem	educing at lent creation; and/or ent	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph	
Flood Management Environmental Community		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/ -Riparian enhancement; -Instream flow improvem Increased urban green s	educing at lent creation; and/or ent pace	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements	
Flood Management Environmental Community		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie provided	educing eat at creation; and/or ent pace es	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements Community involvement	
Environmental Community		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/or -Riparian enhancement/or -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie provided Public education	educing at lent creation; and/or ent pace es	Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink         Reestablishment of the natural         hydrograph         Water temperature improvements         Community involvement         Enhance and/or create	

# Appendix B Project Description Forms March 2018

This project will improve road conditions which will improve stormwater runoff quality. Non-point source pollution will be reduced, short term employment opportunities will be generated, sewer overflows will be prevented, the community will be engaged and a public education component will exist.						
Project Included in IRWM:	in IRWM:					
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one Project falls within the 2010-2014 DAC Places as identified by CA Department of Water Resources</li> <li>□ No</li> </ul>					
CEQA Compliance:	□ Yes, explain completed	⊠ No, explain <u>CEQA not</u>				
Contact Person(s):						
Steve Herrera, PE, <u>steve@herreraengineering.net.</u> 530-677-1854 Rebecca Neves, City Engineer/PE/QSD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250						
Key References:						
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

#### B.4.7 306 Urban Roadway Improvement Project - Martin Lane, Grind & Overlay Project

Project/Program Name	Urban Roadway Improvement Project - Martin Lane, Grind & Overlay Project				
Responsible Agency	City of Placerville				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$43,000				
Unit Cost	NA				
Site Coordinates	Latitude: 38.730969° Longitude: -120.780511°				
Description	•				

Project includes road improvements. Project will address pavement damage at the California Department of Transportation yard access gate with 5" grind, recompact base, and overlay, est. \$5/SF. Project will include LID designs if possible (ei. Filter strips and porous media).

Filter strips: can slow runoff velocities and filter out sediment and other pollutants and provide some infiltration into underlying soils.

Porous pavement: permeable pavement surface built with underlying stone reservoir that temporarily stores surface runoff before it infiltrates into the subsoil. Porous pavements allow stormwater to infiltrate directly and receive water quality treatment. Various types of porous surfaces exist: asphalt, concrete, and grass. Porous pavement would be suited for utility and access roads. Porous pavement can be maintained with vacuum street sweepers and inspection for signs of deterioration.

#### Component

Stormwater Management

#### **Potential Challenges**

Residents near project site may not like the noise related to the construction that will result from the project.

#### **Conceptual GIS Map of Site**



Purpose(s)			Key Stakeholders		
⊠ Improve in-stream water quality			City of Placerville		
□ Improve health of local watersheds					
□ Improve local water supply	reliability	,			
□ Implement & monitor a reli	able storn	nwater system			
Increase climate resilience	•				
□ Increase community aware	eness for a	sustainable water			
Stage of Development					
Conceptual	⊠ PI	anning	□ Pre-De	sign	
□ Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	2017, End: 2018			
Project Triggers	Funding Road fa	ilures			
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance	
California Environmental Pro Program U.S. Department of Transpor Discretionary Grant Program	tection Ag	jency - State Water Resou DT) - Transportation Invest	rces Contr ment Gene	ol Board (SWRCB) - Stormwater Grant erating Economic Recovery (TIGER)	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justificatio	n below table)	
Benefit Categories Identif	ied in SW	RP Guidelines			
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/c	or	Nonpoint source pollution control	
while contributing to comp with applicable permit and	ollance d/or	treatment of runoff		drainage and treatment	
TMDL requirements					
Water Supply		Water supply reliability		Water conservation	
management and/or runo	off				
capture and use		Decrease fleed rick by re	ducing	Deduced conitary cover	
Flood Management		runoff rate and/or volume	educing Ə	overflows	
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph	
Community		Increased urban green s	pace	Water temperature improvements	
		provided	<del>2</del> 5	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

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This project will improve road conditions which will improve stormwater runoff quality. Non-point source pollution will be reduced. In addition, this project will generate short term employment opportunities, engage the community and provide a public education component.						
Project Included in IRWM:	Yes, which one	⊠ No, explain				
Project Benefits a DAC/EDA: <sup>1</sup>	DA:1 ⊠ Yes, which one <u>Project falls within the 2010-2014 DAC Places as identified</u> by CA Department of Water Resources □ No					
CEQA Compliance:	□ Yes, explain completed	⊠ No, explain <u>CEQA not</u>				
Contact Person(s):						
Steve Herrera, PE, <u>steve@herreraengineering.net</u> , 530-677-1854 Rebecca Neves, City Engineer/PE/QSD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250						
Key References:						
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.4.8 307 Town of El Dorado Drainage Improvements**

Project/Program Name	Town of El Dorado Drainage Improvements					
Responsible Agency	El Dorado County De	El Dorado County Department of Transportation				
Partner Agency (ies)	El Dorado County					
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA		
Estimated Cost	Capital: Cost not calc	ulated due	o conceptual nature o	of project.		
Unit Cost	NA					
Site Coordinates	Latitude: 38.682615°		Longitude: -120.849	813°		
Description						
Slate Creek and its tributaries go under and along the road and occasionally floods; jeopardizing the surrounding areas. The surrounding area is mostly commercial and contains establishments such as auto repair shops that have the potential to be exposed to the occasional flooding events. The flooding also jeopardizes the integrity of the road and drainage infrastructure and poses a safety hazard for passing motorists. The flooding that occurs is of great concern and needs to be addressed. This project will focus on flood control and thus help reduce the risk of road and drainage infrastructure failure and creating situations in which the local water supplies could be deteriorated from the items that are found in the local establishments. The proposed project will mitigate flood risks by diverting stormwater runoff to wetlands found in close proximity. By using wetlands, stormwater runoff will be captured, treated and infiltrated into the ground. Additionally, grass swales will be placed along Pleasant Valley Rd for stormwater conveyance that will treat and filtrate runoff into the ground before it reaches the surrounding water bodies. Low impact development (LID) approaches will be applied for this project if possible.						
Component						
Stormwater Management	Stormwater Management					
Potential Challenges						
Construction activities may disrupt residents.						
Conceptual GIS Map of Site	9					



Purpose(s)			Key Stakeholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> </ul>			El Dorado Transporta Departmen County	County Department of tion, Town of El Dorado, California it of Transportation, El Dorado
	able storn	nwater system		
□ Increase climate resilience	•			
Increase community aware	eness for s	sustainable water		
Stage of Development				
⊠ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	gn
🗆 Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin 20	020; End 2022		
Project Triggers	High risł	k flood event.		
Potentially Applicable Federa	al and Stat	e Programs for Technical	and Financia	Il Assistance
California Environmental Pro Program U.S. Department of Transpor Discretionary Grant Program	tection Ag	ency - State Water Resour	rces Control ment Genera	Board (SWRCB) - Stormwater Grant ating Economic Recovery (TIGER)
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justification I	below table)
Benefit Category		Main Benefit		Additional Benefit
Water Quality	u lia u a a	Increased filtration and/or treatment of runoff		Nonpoint source pollution
while contributing to comp with applicable permit and	ollance d/or			Reestablished natural water
TMDL requirements	.,			drainage and treatment
Water Supply through groundwater management and/or runoff capture and use		Water supply reliability Conjunctive use		Water conservation
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie	s provided	Community involvement
		Public education		Enhance and/or create recreational and public use areas

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The proposed project will ultimately help improve the water quality in the area, specifically in Slate Creek. By providing flood control measures, nonpoint source pollution that arises as a result of the flooding events will be mitigated. A flood control measure will be to divert the generated runoff and flood water from Slate Creek, into wetlands for the water to be treated and infiltrated. In diverting flood water from Slate Creek, the hydrograph will be improved. The proposed drainage improvements set to occur will reduce the flood risk while also protecting and enhancing the environment and local habitats. Since swales will be constructed, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. This project will also generate short term employment opportunities, engage the community and provide a public education component.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project found under 2010-2014 DAC Block Groups as</u> identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet

Contact Person(s):

Brian Mullens, El Dorado County Department of Transportation Highway Superintendent, brian.mullens@edcgov.us, (530) 642-4924

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### B.4.9 308 Town of El Dorado Green Street Project

Project/Program Name	Town of El Dorado Green Street Project				
Responsible Agency	El Dorado County Department of Transportation				
Partner Agency (ies)	El Dorado County- Community Development Services, California Department of Transportation				
Net Yield	Normal Year: 48 AF/y	Wet Year: 67 AF/y		Dry Year: 34 AF/y	
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: 38.682531°		Longitude: -120.848509°		
Description					

The proposed project in the Town of El Dorado will occur on Pleasant Valley Rd. Part of the project work would be in Caltrans ROW (small section of Hwy 49, if the Green project were to not start around this area then the Green St project would start at the southern intersection of Pleasant Valley and Hwy 49 and extend to the Slate Creek bridge crossing on the western end of the project).

The project revolves around the concept of a Green Street that will help improve water quality and reduce flooding to residents. A Green Street is a street that uses vegetated facilities to manage runoff from stormwater. A project of this kind is a reliable stormwater strategy that can effectively be used to meet regulatory compliance as well as being capable of protecting natural resources. A developed Green Street has the ability to manage stormwater runoff, reduce flows, improve water quality and improve watershed health.

Green street projects may involve any of the following items:

Reducing the amount of polluted stormwater that is discharged into a water body

Divert stormwater from the sewer system, sewer backups and combined sewer overflows

Reduce impervious surface so stormwater can infiltrate to recharge groundwater and surface water

Increase urban green space

Improve air quality and reduce air temperatures

Reduce demand on sewer or septic collection systems and the cost of constructing expensive pipe systems

Address requirements of federal and state regulations to protect public health and restore and protect watershed health

Increase opportunities for industry professionals.

For this project flood risks will be mitigated by diverting stormwater runoff to wetlands found in close proximity, if possible. By using wetlands, stormwater runoff will be captured, treated and infiltrated into the ground. Additionally, grass swales will be placed along Pleasant Valley Rd, if possible, for stormwater conveyance that will treat and filtrate runoff into the ground before it reaches the surrounding water bodies. Vegetation and trees will be planted as well. Low impact development (LID) approaches will be applied for this project.

Component

Stormwater Management

Potential Challenges

Traffic delays during construction period.

Conceptual GIS Map of Site


Purpose(s)			Key Stakeholders		
<ul> <li>☑ Improve in-stream water quality</li> <li>☑ Improve health of local watersheds</li> </ul>			El Dorado Transporta Transporta	County Department of tion, California Department of tion, El Dorado County- Community	
□ Improve local water supply	reliability	,	Developme	ent Services, and Town of El Dorado	
Implement & monitor a relia	able storn	nwater system			
□ Increase climate resilience					
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
☑ Conceptual	🗆 Pl	anning	🗆 Pre-Desig	ŋn	
🗆 Design	□ Co	onstruction	□ Other		
Expected Project Timeline	Begin: 2	2019, End: 2021			
Project Triggers	Road fa	ilure			
Potentially Applicable Federa	I and Stat	te Programs for Technical	and Financia	Il Assistance	
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of Transportation (DOT) - Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program					
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (highlight applicable cells and provide justification below table)					
Benefit Category Main Benefit Additional Benefit					
Water Quality I		Increased filtration and/o	r treatment	Nonpoint source pollution	
while contributing to comp with applicable permit and	oliance d/or	of runoff		control Reestablished patural water	
TMDL requirements				drainage and treatment	
Water Supply		Water supply reliability		Water conservation	
through groundwater management and/or runo	ff	Conjunctive use			
capture and use					
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows	
Environmental		Environmental and habitat protection and improvement		Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature	
Community		Employment opportunitie	s provided	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

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A Green Street Project in the community of El Dorado will generate a multitude of benefits. This project has the potential to create areas along Pleasant Valley Rd that will be used to infiltrate storm runoff, reduce nonpoint source pollution, reduce the amount of runoff generated after a storm event, and reduce sanitary sewer overflows by using a series of stormwater management efforts. This project will ultimately help improve the water quality conditions in the area through the use of various ecologically based stormwater treatment technologies, including the use of wetlands and grass swales. Since swales will be constructed, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. This project will provide a great opportunity to educate the public on Green Streets and the benefits that they can provide. It will also provide an opportunity for local contractors to learn about this project and will provide some employment opportunities. By planting vegetation and trees, there will be an introduction of urban green space along Pleasant Valley Road.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project found under 2010-2014 DAC Block Groups as</u> identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	□ Yes, explain

Contact Person(s):

Brian Mullens, El Dorado County Department of Transportation Highway Superintendent, brian.mullens@edcgov.us, (530) 642-4924

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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## **B.4.10 309 Headington Yard Wash Rack**

Project/Program Name	Headington Yard Wash Rack					
Responsible Agency	El Dorado County- Community Development Services					
Partner Agency (ies)	NA	NA				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA					
Estimated Cost	Capital: \$650,000					
Unit Cost	NA					
Site Coordinates	Latitude: 38.715862° Longitude: -120.841663°					
Description	-					

The Headington Wash Rack Facility Project is a project to construct a wash and maintenance facility for the County of El Dorado to use for maintaining the county's vehicles and equipment. The project consists of constructing an enclosed building that houses a contained wash system that automatically treats and reuses the wash water for vehicle and equipment cleaning and maintenance. The project proposes to greatly reduce the use of potable water provided by EID through both the reuse of the treated cleaning water and utilizing rain tanks for rainwater storage through the dry months. The project also proposes to disconnect the facility from the sewer. Finally, the project proposes to increase effective water quality and storm water management at the facility by enclosing and containing pollutant sources and pollutant generating activities (i.e. washing and stored materials) from potential contact with storm water and by reducing site runoff through the implementation of water conservation activities (i.e. use of rain tanks).

Component

Stormwater Management

**Potential Challenges** 

Funding

Coordination with all involved parties and schedule sensitivity

Conceptual GIS Map of Site

A map is attached from the following presentation:

http://www.water.ca.gov/waterenergygrant/2014Applications/County%20of%20El%20Dorado%20(201418760090)/ Attachment%203%20-%203\_WE14\_EDC\_Work%20Plan\_2ofTotal2.pdf



Purpose(s)		Key Stakeholders			
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> <li>Increase community awareness for sustainable water</li> </ul>			El Dorado Services, Transporta	County- Community Development County of El Dorado Department of ation	
Stage of Development					
□ Conceptual ⊠ Design	□ Plar ⊠ Cor	nning nstruction	□ Pre-De □ Other	sign	
Project is currently designed	and shelf re	eady for advertisement to	bid. Pendi	ng funding approval for construction.	
Expected Project Timeline	Begin: 20	18, End: 2020			
Project Triggers	The project currently has an approved CEQA document and holds approved building permits with sign off by the applicable utility agencies and fire department of the necessary funding approvals do not occur in 2017 for final construction in 2018, the project is at risk of needing to go back through the sign off process and attain new building permits. This process is both very costly and greatly increase schedule.				
Potentially Applicable Federa	I and State	Programs for Technical a	and Financi	al Assistance	
California Environmental Prot Program	tection Age	ncy - State Water Resour	ces Contro	I Board (SWRCB) - Stormwater Grant	
Stormwater Multi-Benefits (pe	er SWRP G	uidelines Table 4):			
Primary Opportunity (h	ighlight app	blicable cells and provide	justification	below table)	
Benefit Category		Main Benefit		Additional Benefit	
Water Quality while contributing to comp with applicable permit and TMDL requirements	oliance d/or	Increased filtration and/ treatment of runoff	or	Nonpoint source pollution control Reestablished natural water drainage and treatment	
Water Supply through groundwater mar and/or runoff capture and	nagement Luse	Water supply reliability Conjunctive use		Water conservation	
Flood Management		Decrease flood risk by r runoff rate and/or volum	reducing ne	Reduced sanitary sewer overflows	
Environmental		Environmental and habi protection and improver including: -Wetland enhancement -Riparian enhancement -Instream flow improver Increased urban green	tat nent /creation; ; and/or nent space	Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature	
Community		Employment opportuniti provided	es	improvements Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

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This project will achieve the listed benefits since it will eliminate sewer discharges and nearly eliminate domestic water needs. Overall, this project was created to replace and improve the existing uncovered wash rack for County fleet vehicles, thereby eliminating runoff and sewer discharges, decreasing use of domestic water for equipment maintenance and greatly improving water quality and environmental benefits. Water supply reliability will be accomplished in this project because the rain storage tank will be used for water needs on site, an effort geared towards promoting water conservation. The project will also provide job opportunities during the construction phase. Additionally, the project has the potential to improve the natural hydrograph of Weber Creek, engage the community and has a public education component.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain Not added to IRWM currently</li> </ul>				
Project Benefits a DAC/EDA:	<ul> <li>Yes, which one <u>Project found under 2010-2014 DAC Block Groups as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>				
CEQA Compliance:	<ul> <li>☑ Yes, explain <u>CEQA has been completed</u></li> <li>□ No, explain</li> </ul>				
Contact Person(s):					
Jon Balzer, Senior Civil Engineer, jon.balzer@edcgov.us					
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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## **B.4.11 310 Fairgrounds Water Quality Improvements**

Project/Program Name	Fairgrounds Water Quality Improvements				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	NA				
Net Yield	Normal Year: 56 AF/y	Wet `	Year: 77 AF/y	Dry Year: 39 AF/y	
Estimated Cost	Capital: Cost not calculat	ed due	to conceptual nature	of project.	
Unit Cost	NA				
Site Coordinates	Latitude: 38.725317°		Longitude: -120.833	752°	
Description					
Under this project, water quality improvements will take place in the El Dorado County Fairgrounds. The water quality improvements that will be done will reduce the occurrence of erosion. Under this project, technology can be incorporated in the fairgrounds that captures and reuses stormwater on site, treats impervious runoff, provides groundwater infiltration, includes drainage ditch enhancements, reduces runoff, and prevents non-point source pollution. A rooftop rainwater capture system will be incorporated for non-potable water use on site. Near the roads (if possible), grass swales will be added for stormwater conveyance that will treat and filtrate runoff into the ground. Additionally, surrounding the paved areas of the Fairgrounds, grass filter strips will be added if possible to treat surface flow from the adjacent impervious areas. Ditches will be added to divert stormwater runoff to the swales and grass filter stripes. The implementation of this project will provide an opportunity for public outreach and an opportunity to demonstrate to the public the technology that was used to treat, capture and reuse stormwater runoff. Low impact development (LID) approaches will be applied for this project.					
Component					
Stormwater Management					
Potential Challenges					
Improvements may interfere with fair events.					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders		
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> </ul>			El Dorado Services, C County Fai	County- Community Development City of Placerville, and El Dorado r Association	
□ Improve local water supply	reliability	water eveter			
	able storm	iwater system			
	eness for s	sustainable water			
Stage of Development			ļ		
Clage of Development					
☑ Conceptual	🗆 Pla	anning	Pre-Designation	gn	
□ Design	□ Co	onstruction	□ Other		
Expected Project Timeline	Begin: 2	019, End: 2019			
Project Triggers	Local wa Funding	ater quality worsens			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	I Assistance	
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	pplicable cells and provide	justification I	pelow table)	
Benefit Category		Main Benefit	-	Additional Benefit	
Water Quality					
with applicable permit and	d/or			Reestablished natural water	
Water Supply		Water supply reliability		drainage and treatment	
through groundwater	~	Conjunctive use			
management and/or runo	ff				
Flood Management		Decrease flood risk by re	educing	Reduced sanitary sewer	
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or		Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature	
Community		Employment opportunitie	es provided	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	
Water quality improvements will be achieved on site after implementing a series of technology that will be used to treat or infiltrate stormwater runoff. The technology that will be used on site will help reduce non-point source					

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pollution and ultimately help improve the environment and local habitats. By implementing this project the flood risk in the area can be mitigated and short term employment opportunities will be generated. The land will be enhanced for the public to enjoy, the work done at the fairgrounds will be used to provide an opportunity for public outreach, and an opportunity to demonstrate to the public the technology that was used to treat, capture and reuse stormwater runoff on site will be created. Since the project will include the capturing of rainwater and the use of it on site, the project will help improve water supply reliability at a local scale on site, which will help towards water conservation efforts. Since grass swales and grass filter stripes will be constructed, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. Flood risk will be reduced as ditches will be used to divert stormwater into the swales and grass filter stripes.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one Project Found under 2010-2014 DAC Block Groups as identified by the CA Department of Water Resources.</li> <li>No</li> </ul>
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet

Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### B.4.12 311 Maintenance Material Storage Buildings at Missouri Flat Rd and Somerset Sand Mine

Project/Program Name	Maintenance Material Storage Buildings at Missouri Flat Rd and Somerset Sand Mine				
Responsible Agency	El Dorado County Department of Transportation				
Partner Agency (ies)	NA	NA			
Net Yield	Normal Year: NA	Wet Year: NA		Dry Year: NA	
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: Missouri Flat Rd: 38.718037° Somerset Sand Mine: 38.644863°		Longitude: Missouri Flat Rd: -120.850461° Somerset Sand Mine: -120.692577°		

#### Description

The Somerset Sand Mine site is used by the El Dorado County, Department of Transportation (EDCDOT) to extract decomposed granitic sand. The extraction portion of the operation is seasonal (August to December), with processed material used each year for snow and ice control on county roads, and for emergency services by the Office of Emergency Services for sand bags and flood hazard control. The material is ripped by a dozer and pushed down the east-northeast-facing hillside and stockpiled, and then loaded into dump trucks for distribution as needed. The mine area includes a maintenance/storage building, equipment staging area, sediment retention structures, stockpiled product and imported material for blending, imported topsoil/overburden stockpile in the southwestern portion of the site, and a revegetation test plot. The site entrance is immediately east of Sand Ridge Road. The working face includes south, west, and northwest-facing cut slopes situated in the east-central portion of the site. Under the proposed project, the maintenance/storage building would be updated so that the building can continue to enclose materials and equipment. A new covered structure would be constructed to enclose any fine material and stockpiled sand that is generated at the site. Enclosing and containing pollutant sources such as sand and silt will increase effective water quality and storm water management. At the Headington Corporation Yard Facility, a new covered structure is being proposed to enclose materials used for the operation and maintenance of County roads. In undergoing this project, a rooftop rainwater capture system may be incorporated for non-potable water use. The rainwater that is captured may be used for dust control, may be used by the street sweepers, or may be used for landscape water.

By undergoing the proposed project, water quality will be improved and the project will meet MS4 compliance.

Component

Stormwater Management

**Potential Challenges** 

Construction may interfere with current operations

Conceptual GIS Map of Site





Purpose(s)			Key Stakeholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> <li>Increase community awareness for sustainable water</li> </ul>			El Dorado ( Services, C Transporta	County- Community Development County of El Dorado Department of tion
Stage of Development				
⊠ Conceptual □ Design	□ Pla □ Co	anning onstruction	□ Pre-Desi □ Other	gn
Expected Project Timeline	Begin: 2	019, End: 2019		
Project Triggers	Extreme	weather conditions		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	I Assistance
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary       Opportunity (highlight applicable cells and provide justification below table)         Benefit Category       Main Benefit         Water Quality       Increased filtration and/or treatment         while contributing to compliance       of runoff				
with applicable permit and/or TMDL requirements				Reestablished natural water drainage and treatment
Water Supply through groundwater management and/or runoff capture and use		Water supply reliability Conjunctive use		Water conservation
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie Public education	es provided	Community involvement Enhance and/or create recreational and public use areas

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Under this project nonpoint source pollution will be reduced as the material/storage buildings will contain and prevent constituents such as sand and silt loads to be discharged into the local water bodies. Since the project will include the capturing of rainwater and the use of it on site, the project will help improve water supply reliable at a local scale, which will help towards water conservation efforts. This project will generate short term employment opportunities and engage the community as well as help reduce greenhouse gas emissions.					
Project Included in IRWM:	□ Yes, which one				
	No, explain project is in conceptual stage, not added to IRWM currently				
Project Benefits a DAC/EDA:1	□ Yes, which one⊠ No				
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet				
Contact Person(s):					
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905					
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					
DAG Disa tractore d Garage Strat					

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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## **B.4.13 312 Future Bass Lake Maintenance Station**

Project/Program Name	Future Bass Lake Maintenance Station				
Responsible Agency	El Dorado County Departm	El Dorado County Department of Transportation			
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA	
Estimated Cost	Capital: Cost not calculated	due to con	ceptual nature of proje	ect.	
Unit Cost	NA				
Site Coordinates	Latitude: 38.670132°		Longitude: -121.031	049°	
Description					
Inis project was developed to provide a new maintenance facility at Bass Lake Rd. There is currently no maintenance facility that serves the heavily populated area found in that region of El Dorado County. The proposed facility is to be a place where street sweepers can unload and store the swept contents before it is disposed of elsewhere. Ultimately, this project was developed to enhance the street sweeping and vactoring program infrastructure maintenance, MS4 compliance, and for helping improve the water quality. In implementing the project, greenhouse gas emissions will be reduced, the amount of fuel used by the street sweepers and vactor trucks will be reduced, and the amount of travel the employees will have to do for maintenance will be reduced. With the construction of this facility, a rooftop rainwater collection system can be added for non-potable water use. The water obtained from the rainwater capture system may be used for dust control, as water for the street sweepers, and for irrigation needs. Grass swales will be placed near Bass Lake Rd if possible for stormwater conveyance which will treat and filtrate runoff into local water bodies. Low impact development (LID) approaches will be applied for this project.					
Component					
Stormwater Management					
Potential Challenges					
Construction interference or disturbances to locals					
Conceptual GIS Map of Site					



Purpose(s)			Key Stakeholders		
☑ Improve in-stream water quality			El Dorado	El Dorado County Department of Transportation	
☑ Improve health of local watersheds					
□ Improve local water supply	reliability				
Implement & monitor a reli	able storn	nwater system			
Increase climate resilience					
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
⊠ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	ŋn	
□ Design	□ Co	onstruction	□ Other		
Expected Project Timeline	Begin: 2	019, End: 2019			
Project Triggers	Funding				
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	I Assistance	
California Environmental Pro Program	tection Ag	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	iahliaht ar	policable cells and provide	iustification I	pelow table)	
Benefit Category Main Benefit Additional Benefit					
Water Quality		Increased filtration and/or treatment of runoff		Nonpoint source pollution	
with applicable permit and TMDL requirements	d/or			Reestablished natural water	
Water Supply		Water supply reliability		Water conservation	
through groundwater management and/or runo	off	Conjunctive use			
capture and use					
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows	
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph	
Increased urban greer		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie	es provided	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

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The proposed project was developed to protect the integrity of the local water quality. The construction of this facility will prevent the discharge of unwanted material or constituents into local water bodies because Street Sweepers will be unloaded in a contained area. Since this facility will be located in close proximity to a heavily populated area, the street sweepers will not have to travel far to unload the swept contents, this in turn will help reduce carbon emissions. Without the construction of this facility, street sweepers need to travel to a further location to unload their contents. This project will create short term employment opportunities and will improve water supply reliability on site as a stormwater capture system will be installed on site. The installation of the rainwater capture system will help promote water conservation efforts. Additionally, because grass swales will be constructed, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA:1	□ Yes, which one ⊠ No
CEQA Compliance:	□ Yes, explain

Contact Person(s):

Brian Mullens, El Dorado County Department of Transportation Highway Superintendent, brian.mullens@edcgov.us, (530) 642-4924

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# B.4.14 313 Forni Road Slope Stabilization

Project/Program Name	Forni Road Slope Stabilization			
Responsible Agency	El Dorado County- Community Development Services			
Partner Agency (ies)	City of Placerville			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA		Dry Year: NA	
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	NA			
Site Coordinates	Latitude: 38.720466°		Longitude: -120.833	685°
Description	-		-	
<ul> <li>Description</li> <li>The proposed project, Forni Road Slope Stabilization and ditching, is a water quality project set to occur on Forni Road from Ray Lawyer Drive to Main Street in Placerville in the County of El Dorado. This project was developed to control erosion and convey stormwater to Hangtown Creek with a decreased sediment load. Bank stabilization will be accomplished by planting trees and native vegetation. The reduction of pollutants will be accomplished by placing swales along Forni Road. If possible, low impact development (LID) approaches will be applied for this project.</li> <li>Examples of LID implementation:</li> <li>Natural drainage patterns, native vegetation, and stabilization of soil are important in preventing flooding and degradation of water quality.</li> <li>Natural landscaping will be used to preserve and restore natural plant to protect natural resources and habitat, prevention of flooding and erosion, and the enhancement of the quality and quantity of water resources.</li> <li>Filter strips will be installed to treat runoff from roads and highways.</li> <li>Grass swales are used to treat highway or residential road runoff. The vegetation slows the stormwater runoff to allow sedimentation, filtering through a subsoil matrix and infiltration into the underlying soils.</li> </ul>				
Component				
Watershed Management				
Potential Challenges				
Construction disturbances to locals				
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders			
☑ Improve in-stream water quality			El Dorado	El Dorado County- Community Development	
☑ Improve health of local watersheds			Services, lo	ocal residents, City of Placerville	
□ Improve local water supply reliability					
Implement & monitor a reli	able storn	nwater system			
Increase climate resilience	•				
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
⊠ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	gn	
□ Design		onstruction	□ Other		
Expected Project Timeline	Begin: 2	019, End: 2020			
Project Triggers	Road fai	ilures			
Potentially Applicable Federa	al and Stat	e Programs for Technical	and Financia	I Assistance	
California Environmental Pro Program U.S. Department of Transpor Discretionary Grant Program	tection Ag	jency - State Water Resou DT) - Transportation Invest	rces Control ment Genera	Board (SWRCB) - Stormwater Grant ating Economic Recovery (TIGER)	
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justification I	below table)	
Benefit Category		Main Benefit		Additional Benefit	
Water Quality Increased filtration an		Increased filtration and/o	r treatment	Nonpoint source pollution	
while contributing to com with applicable permit an	pliance d/or	of runoff		Control Reestablished natural water	
TMDL requirements	u, e,			drainage and treatment	
Water Supply     Water supply reliability       through groundwater     Conjunctive use       management and/or runoff     Conjunctive use			Water conservation		
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows	
Environmental		Environmental and habit protection and improvem including:	at ient	Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie	es provided	Community involvement	
		Public education		Ennance and/or create recreational and public use areas	

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The proposed project on Fonri Road will help address the erosion problems that are observed. With the completion of this project nonpoint source pollution will be mitigated because the erosion in the area will be under control. This project will provide short term employment opportunities, the community will be engaged, and will provide an education component. Since swales will be constructed, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project found under 2010-2014 DAC Places as identified by</u> the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet

Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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# B.4.15 314 Street Sweeping Program

Project/Program Name	Street Sweeping Program				
Responsible Agency	El Dorado County Department of Transportation				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Drv Year: NA	
Estimated Cost	Copital: \$500.000 (\$250.000 per street sweeper v 2)				
		230,000 per siree			
	NA				
Site Coordinates	Latitude: 38.727779° (El Dorado County Department of Transportation) Longitude: -120.829955° (El Dorado Cour Department of Transportation)			0.829955° (El Dorado County Transportation)	
Description					
El Dorado County does not more street sweeper to swe up in the local water bodies	have many street swe ep the streets and thus on a daily basis or dur	epers. Under the s reduce the quar ing a storm event	proposed projec ntity of sediment t.	ct the County would purchase , trash and debris that may end	
BMP Examples for Street S	weeping:				
Objectives: Soil Stabilization	n, Sediment Control, a	nd Tracking Cont	rol		
Definition/Purpose: Practice watercourse.	es to remove tracked se	ediment to prever	nt the sediment f	rom entering a storm drain or	
Appropriate Applications: The paved roads.	hese practices are imp	lemented anywhe	ere sediment is t	racked on public or private	
Limitations: Sweeping and vacuuming may not be effective when soil is wet or muddy					
Standards and Specifications:					
Kick broom or sweeper atta	chments shall not be u	sed			
Visible sediment tracking st	nacking locations daily	cuumed daily			
Maintenance and Inspection	n:	counted daily			
Be careful not to sweep up	any unknown substand	e or any object th	hat may be poter	ntially hazardous	
Adjust brooms frequently; n	naximize efficiency of s	weeping operatio	ins	,	
After sweeping is finished, p	properly dispose of swe	eeper wastes at a	n approved dum	npsite.	
Outcomes: Project implementation will reach the objectives of erosion control, sediment control and tracking control					
Component					
Stormwater Management					
Potential Challenges					
Funding					
Conceptual GIS Map of Site					
No available map					

ruipuse(s)	Purpose(s)			Key Stakeholders		
Improve in-stream water quality			El Dorado	County Department of Transportation		
Improve health of local was	tersheds					
Improve local water supply	/ reliability					
Implement & monitor a reli	iable storm	water system				
□ Increase climate resilience	;					
□ Increase community aware	eness for s	ustainable water				
Stage of Development						
☑ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	ŋn		
🗆 Design	□ Co	nstruction	□ Other			
Expected Project Timeline	Begin: 20	019, End: 2019				
Project Triggers	Funding					
	Current s	street sweepers breakdow	n			
Potentially Applicable Federa	al and State	e Programs for Technical a	and Financia	I Assistance		
California Environmental Pro Program	tection Age	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant		
Stormwater Multi-Benefits (p	er SWRP (	Guidelines Table 4):				
Primary Opportunity (h	ighlight an	plicable cells and provide	iustification b	pelow table)		
Benefit Category	ngi ngi ngi ng	Prinary Opportunity (highlight applicable cells and provide justification below table)				
Water Quality				Additional Benefit		
while contributing to compliance		Increased filtration and/o	r treatment	Additional Benefit		
while contributing to com	pliance	Increased filtration and/o	r treatment	Additional Benefit Nonpoint source pollution control		
while contributing to com with applicable permit an	pliance d/or	Increased filtration and/o of runoff	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water		
while contributing to com with applicable permit an TMDL requirements	pliance d/or	Increased filtration and/o of runoff	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment		
while contributing to com with applicable permit and TMDL requirements Water Supply	pliance d/or	Water supply reliability	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater	pliance d/or	Water supply reliability Conjunctive use	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation		
while contributing to com with applicable permit an TMDL requirements Water Supply through groundwater management and/or rund capture and use	pliance d/or off	Main Denent Increased filtration and/o of runoff Water supply reliability Conjunctive use	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management	pliance d/or	Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or off	Water Supply reliability         Water supply reliability         Conjunctive use         Decrease flood risk by regrunoff rate and/or volume         Environmental and habita         protection and improveming	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or	Water supply reliability         Water supply reliability         Conjunctive use         Decrease flood risk by regrunoff rate and/or volume         Environmental and habita         protection and improvem         including:         -Wetland enhancement/c	r treatment	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reastablichment of the natural		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or	Water supply reliability         Water supply reliability         Conjunctive use         Decrease flood risk by regrunoff rate and/or volume         Environmental and habita         protection and improvem         including:         -Wetland enhancement/or         -Riparian enhancement;	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or	Water supply reliability         Conjunctive use         Decrease flood risk by rerunoff rate and/or volume         Environmental and habita         protection and improvem         including:         -Wetland enhancement/or         -Riparian enhancement;         -Instream flow improvem	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or	Water supply reliability         Water supply reliability         Conjunctive use         Decrease flood risk by regrunoff rate and/or volume         Environmental and habita         protection and improvem         including:         -Wetland enhancement/or         -Riparian enhancement;         -Instream flow improvem         Increased urban green specific	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements		
while contributing to complicable permit and TMDL requirements         Water Supply         through groundwater         management and/or rund         capture and use         Flood Management         Environmental         Community	pliance d/or	Increased filtration and/o of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habita protection and improvem including: -Wetland enhancement/or -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement		
while contributing to com with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or	Increased filtration and/o of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habita protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green sp Employment opportunitie Public education	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement         Enhance and/or create reservational and public use		
while contributing to com, with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	pliance d/or	Increased filtration and/o of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habita protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green sp Employment opportunitie Public education	r treatment	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement         Enhance and/or create recreational and public use areas		

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Under this project, the purchase of additional street sweepers will help improve the water quality in the region by helping reduce the amount of trash that is discharged into the local water bodies. Consequently, this project will improve the environment and local habitat conditions. In addition, this project will create jobs as personnel will be needed to drive the additional street sweepers. Project will also engage the community and have a public education component.

Project Included in IRWM:	<ul> <li>Yes, which one</li> <li>No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one_ <u>Street sweepers will benefit several areas including DACs</u> and EDAs _□ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# B.4.16 315 Vactor Truck Program

Project/Program Name	Vactor Truck Program					
Responsible Agency	El Dorado County Department of Transportation					
Partner Agency (ies)	NA					
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			Dry Year: NA		
Estimated Cost	Capital: \$1,000,000 (\$500k per truck x 2)					
Unit Cost	NA					
Site Coordinates:	Latitude: 38.727779° (El Dorado County Department of Transportation) Longitude: -120.829955° (El Dorado Coun Department of Transportation)			20.829955° (El Dorado County Transportation)		
Description						
El Dorado County does not have many vactor trucks. Under the proposed project the County would purchase more vactor trucks to maintain the County of El Dorado's drainage infrastructure. By implementing this project, the willingness to build additional green infrastructure will be encouraged. Vactor trucks are used to clean storm sewers and catch basins. Purchasing additional vactor trucks will enable the County to maintain drainage infrastructure and encourage the development of green infrastructure.						
Component	Component					
Stormwater Management						
Potential Challenges						
Funding						
Conceptual GIS Map of Site						
No available map						
Purpose(s)			Key Stakeholder	s		
Improve in-stream water	quality		El Dorado County Department of Transportation			
☑ Improve health of local w	atersheds					
Improve local water supp	. □ Improve local water supply reliability					
Implement & monitor a re	⊠ Implement & monitor a reliable stormwater system					
□ Increase climate resilience						
□ Increase community awa	reness for sustainable	water				
Stage of Development	Stage of Development					
⊠ Conceptual	Planning		□ Pre-Design			
🗆 Design			□ Other			

Expected Project Timeline	Begin: 2019, End: 2019				
Project Triggers	Funding Current vactor trucks breakdown				
Potentially Applicable Federal	and Stat	e Programs for Technical and Financia	Il Assistance		
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program					
Stormwater Multi-Benefits (pe	r SWRP	Guidelines Table 4):			
Primary Opportunity (hig	ghlight ap	oplicable cells and provide justification I	below table)		
Benefit Category		Main Benefit	Additional Benefit		
Water Quality while contributing to comp	liance	Increased filtration and/or treatment of runoff	Nonpoint source pollution control		
with applicable permit and TMDL requirements	/or		Reestablished natural water drainage and treatment		
Water Supply		Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use		Conjunctive use			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
		Increased urban green space	Water temperature improvements		
Community		Employment opportunities provided	Community involvement		
		Public education	Enhance and/or create recreational and public use areas		
By purchasing additional vactor trucks, the occurrence of nonpoint source pollution will be reduced in some areas throughout the County. The use of the additional vactor trucks will lead to the creation of job opportunities, community involvement, and will educate the public.					
Project Included in IRWM:	□ Ye	es, which one			
☑ No, explain project is in conceptual stage, not added to IRWM currently					
Project Benefits a DAC/EDA:1 Xes, which one <u>Street sweepers will benefit several areas including DACs</u> and EDAs No					

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CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet				
Contact Person(s):					
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905					
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					
1DAC Disaduanta nad Cammunitias					

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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Appendix B Project Description Forms March 2018

### B.4.17 316 Diamond Springs Parkway-Roadway and Drainage Improvement Project

Project/Program Name	Diamond Springs Parkway-Roadway and Drainage Improvement Project				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	County of El Dorado Department of Transportation, California Department of Transportation				
Net Yield	Normal Year: NA	rmal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: \$15 Million				
Unit Cost	NA				
Site Coordinates	Latitude: 38.701126° Longitude: -120.811324°				
Description					

The Diamond Springs Parkway project will provide a connection from State Route 49 to Missouri Flat Road, alleviating existing traffic congestion on State Route 49 through the town of Diamond Springs, CA. The project improvements will include widening and realignment of State Route 49 from Fowler Drive to Bradley Drive, construction of a new 4-lane arterial road from State Route 49 to Missouri Flat Road, drainage system improvements, and relocation of utilities to underground. The Parkway will provide an important route for south county residents to Missouri Flat Road, eventually leading to US 50, as well as providing parallel capacity to State Route 49 in the east-west direction. Drainage improvements will include using existing wetlands to treat and infiltrate stormwater runoff. For the areas that do not have access to a wetland, grass filter stripes will be used along the road to treat and infiltrate additional stormwater runoff.

Right of way acquisition involved several parcels. As of November 2017, only one parcel has been bought. Some of these acquisitions involve businesses, which add a great deal of time to complete. The remaining acquisitions will take place from 2018-2020. The County has contacted each of the land owners and held preliminary discussions regarding the project impacts and anticipated acquisitions.

Component

Stormwater Management

Potential Challenges

Environmental Site Remediation

MS4 Compliance

Conceptual GIS Map of Site



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U.S. Department of Transportation (DOT) - Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program		
Stormwater Multi-Benefits (per SWRP Guidelines Table 4):		
Primary Opportunity (highlight applicable cells and provide justification below table)		
Benefit Category	Main Benefit	Additional Benefit
Water Quality while contributing to compliand with applicable permit and/or TMDL requirements	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
		Reestablished natural water drainage and treatment
Water Supply through groundwater management and/or runoff capture and use	Water supply reliability	Water conservation
	Conjunctive use	
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas
This project will provide road improvements which will improve road conditions that will reduce erosion. Additionally, ecologically based stormwater treatment technologies, such as the use of wetlands and grass filter stripes, will help improve the water quality at a local scale. By implementing this project stormwater runoff will be filtrated/treated, non-point source pollution will be reduced, the flood risk will be reduced, and the natural treatment of stormwater runoff will be reestablished. This project will help create short term employment opportunities, will involve the community and will help reduce greenhouse gas emissions. Project has a public education component.		
Project Included in IRWM:	□ Yes, which one ⊠ No, explain	
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project found under the 2010-2014 DAC Tracts as</u> identified by the CA department of Water Resources</li> <li>□ No</li> </ul>	
CEQA Compliance:	<ul> <li>☑ Yes, explain <u>Completed in 2011</u></li> <li>□ No, explain</li> </ul>	
Contact Person(s):		

Dustin Harrington, Senior Civil Engineer, dustin.harrington@edcgov.us

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Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

https://www.edcgov.us/government/dot/diamsprpkwy/documents/Diam%20Springs%20Pkwy%20Public%20Mtg% 203-18-13\_Presentation.pdf

https://www.edcgov.us/government/dot/diamsprpkwy/documents/Diam%20Springs%20Pkwy%20Fact%20Sheet% 203-18-13.pdf

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area
Appendix B Project Description Forms March 2018

# **B.4.18 317 South East Connector-Expressway LID Projects**

Project/Program Name	South East Connector-Expressway LID Projects			
Responsible Agency	El Dorado County- Community Development Services			
Partner Agency (ies)	Other agencies involved in the project JPA			
Net Yield	Normal Year: 164 AF/y Wet Year: 226 AF/y Dry Year: 113 AF/y			
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	NA			
Site Coordinates	Latitude: 38.650739° Longitude: -121.074167°			
Description				
This a regional project that spans between multiple counties. The South East Connector is a 34 mile expressway that will connect interstate 5 to highway 50. The section that is to be built in the County of El Dorado is planned to be a green project that respects the local environment and water bodies that are in close proximity. The project was designed with the environment in mind, in which the South East Connector will help preserve open space, habitat, and agriculture through a sustainability plan, comprehensive mitigation for environmental impacts, and controlled and limited access along the corridor. The stretch of the project in the County of El Dorado will include relocating utilities, adding drainage facilities, and linear basins along the roadway. With regards to stormwater management the following items will be incorporated: vegetated swales and buffers, detention basins, wet ponds, constructed wetlands, infiltration basins, and other measures. Low impact development (LID) approaches will be incorporated to maintain the site's predevelopment runoff rates and volumes. Examples of such measures include, but are not limited to, sidewalk storage, vegetated swales, landscaped buffers and strips, tree preservation, permeable pavers, and impervious surface reduction and disconnection.				

Component

Stormwater Management

**Potential Challenges** 

Environmental Site Remediation

MS4 Compliance

Conceptual GIS Map of Site



Appendix B Project Description Forms March 2018

California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program

U.S. Department of Transportation (DOT) - Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program

Stormwater Multi-Benefits (per SWRP Guidelines Table 4):

Primary Opportunity (highlight applicable cells and provide justification below table)

Benefit Category	Main Benefit	Additional Benefit
Water Quality while contributing to	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
compliance with applicable permit and/or TMDL requirements		Reestablished natural water drainage and treatment
Water Supply	Water supply reliability	Water conservation
through groundwater management and/or runoff capture and use	Conjunctive use	
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhancement/creation;	Reestablishment of the natural hydrograph
	-Riparian enhancement; and/or -Instream flow improvement	
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

The segment of the South East Connector that is to be built in the County of El Dorado, will incorporate a series of green projects that will contribute towards improving the water quality in the area. The green projects will reduce nonpoint source pollution along the roadway, provide areas for increased filtration (ex. Use of wetlands), reduce flood risk, and will reestablish the natural drainage and treatment of stormwater runoff. This is a large project engaging a large group of people in the community that will create a series of job opportunities. This project will also provide a public education component.

Project Included in IRWM:	□ Yes, which one ⊠ No, explain
Project Benefits a DAC/EDA:1	□ Yes, which ⊠ No
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>Anticipated</u>
Contact Person(s):	

Appendix B Project Description Forms March 2018

Brendan Ferry, El Dorado County Principal Planner, <u>brendan.ferry@edcgov.us</u>, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

http://www.connectorjpa.net/project-overview.html

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

B.4.18.4

Appendix B Project Description Forms March 2018

# **B.4.19 318 Headington Yard to Weber Creek Conveyance**

Project/Program Name	Headington Yard to Weber Creek Conveyance			
Responsible Agency	El Dorado County Department of Transportation			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.			
Unit Cost	NA			
Site Coordinates (Approximate)	Latitude: 38.715862° Longitude: -120.841663°			663°
Description				
The proposed project is a drainage improvement project that is to occur within the facility and downstream from the Headington Yard. This project will ultimately improve the water quality in Weber Creek. The ditches connecting to Weber Creek will be cleaned out. Grass swales will be constructed near Weber Creek if possible to treat and infiltrate stormwater runoff to protect the water quality integrity. Low impact development (LID) approaches will be applied for this project.				
Component				
Stormwater Management				
Potential Challenges				
Project implementation may	Project implementation may interfere with daily operations			
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders		
Improve in-stream water quality			El Dorad	o County Department of Transportation
Improve health of local watersheds				
□ Improve local water supply reliability				
☑ Implement & monitor a relia	able storm	nwater system		
Increase climate resilience				
Increase community aware	eness for s	sustainable water		
Stage of Development				
⊠ Conceptual	🗆 Pla	anning	□ Pre-De	sign
□ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	019, End: 2019		
Project Triggers	Extreme	flood event		
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Finand	cial Assistance
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (hi	ighlight ar	oplicable cells and provide	iustificatio	n below table)
Benefit Category	igningrit op	Main Benefit	Juotinoutio	Additional Benefit
Water Quality		Increased filtration and/o	or	Nonpoint source pollution control
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff capture and use		Conjunctive use		
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habit protection and improven including:	at nent	Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/ -Riparian enhancement; -Instream flow improvem	creation; and/or nent	Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie provided	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas

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Under the proposed project the water quality of Weber Creek will be improved such that pollution from the Headington Yard will be reduced. Consequently, this will help improve the local environment and habitats found along Weber Creek. Under the project flood risk will be mitigated with the addition of grass swales and the cleaning of existing ditches. Since swales will be constructed, natural drainage systems will be introduced, and the filtration and treatment of stormwater runoff will result which will contribute towards reducing non-point source pollution. Long Term employment opportunity are expected to occur, this project will also involve the community.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	□ Yes, which one⊠ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

# **B.4.20 319 Countywide Park BMP Retrofit Improvements**

Project/Program Name	Countywide Park BMP Retrofit Improvements				
Responsible Agency	El Dorado County Department of Transportation				
Partner Agency (ies)	County Stormwater Program	County Stormwater Program and County Facilities			
Net Yield	Normal Year: 238 AF/y Wet Year: 328 AF/y Dry Year: 166 AF/y				
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: 1) 38.80357° 2) 38.664801° 3) 38.607838°	Longitude: 1) -120.907684° 2) -120.926911° 3) -120.702972°			

#### Description

The Park BMP Retrofit Improvements project will occur County wide but mainly along the American River. The areas that will benefit from this project will include: Henningson Lotus Park, Bradford Park, and Pioneer Park. This project will provide drainage improvements that will contribute towards improving the water quality of the region. The drainage improvements include adding culverts, replacing culverts, adding ditches, cleaning out current ditches, cleaning up the local streams and creeks used for drainage, and adding storm sewers and drains to areas that experience critical flooding. To improve the drainage infrastructure, such as curbs and gutters, the County may be able to aid the community by providing discounts and financial assistance. Under this project bank stabilization will also occur along the American River to prevent erosion, reduce sediment inputs, and reduce nutrient inputs. Regarding water quality, if possible wetlands found in close proximity will be used to treat and infiltrate runoff into the ground. Grass swales will be added to areas that are near urban areas or roads, if possible. This project has the potential for a public outreach component. In addition, this project will use low impact development (LID) approaches.

Project will not include much impervious surface removal. It is anticipate that the following will occur: curb cuts and routing water within parking lots or adjacent roads to areas that can infiltrate.

Component

Stormwater Management

Potential Challenges

Areas county-wide may not be accessible while the project is implemented

Conceptual GIS Map of Site



Purpose(s)		Key Stak	eholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> </ul>		El Dorado Services, Division,	o County- Community Development County of El Dorado Facilities County Stormwater program	
Stage of Development			<u> </u>	
Conceptual Design Expected Project Timeline	□ Planning □ Construction		Pre-Des Other	sign
Project Triggers	Severe flo Extreme v	ood event water quality degradation		
Potentially Applicable Federa	I and State	Programs for Technical	and Financ	ial Assistance
California Environmental Pro Program	tection Age n Agency (	ency - State Water Resour	rces Contro	bl Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP G	Guidelines Table 4):		
Stormwater Multi-Benefits (pe	er SWRP G	Guidelines Table 4):	justification	n below table)
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category	er SWRP G	Guidelines Table 4): plicable cells and provide Main Benefit	justification	n below table) Additional Benefit
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements	ighlight app bliance	Guidelines Table 4): plicable cells and provide Main Benefit Increased filtration and/o treatment of runoff	justification r	n below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use	ighlight app bliance d/or	Guidelines Table 4): plicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use	justification	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management	ighlight app oliance d/or	Guidelines Table 4): plicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume	justification r	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	ighlight app ighlight app bliance d/or	Guidelines Table 4): plicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re runoff rate and/or volume Environmental and habits protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	justification r educing at ent creation; and/or ent	Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph
Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP G ighlight app oliance d/or	Guidelines Table 4): Delicable cells and provide Main Benefit Increased filtration and/o treatment of runoff Water supply reliability Conjunctive use Decrease flood risk by re- runoff rate and/or volume Environmental and habita protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie provided	justification r r aducing at ent creation; and/or ent pace s	Additional Benefit         Nonpoint source pollution control         Reestablished natural water         drainage and treatment         Water conservation         Reduced sanitary sewer         overflows         Reduced energy use, GHG         emission, or provides a carbon         sink         Reestablishment of the natural         hydrograph         Water temperature improvements         Community involvement

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Under the proposed project the County will improve the water quality of the region, help reduce flood risk, as well as improve and protect the local environment and habitats. Through this project, non-point source pollution will be reduced, stormwater will be treated and infiltrated, the reestablishment of the natural water drainage and treatment of stormwater runoff will occur, and this project will also help reestablish the natural hydrograph of local water bodies. This project has a great opportunity for public outreach in which the County may inform the general public on measures that they can take to participate in stormwater management. This project will involve the community, generate employment opportunities, and will enhance local recreational areas. Project Included in IRWM: □ Yes, which one\_ No, explain project is in conceptual stage, not added to IRWM currently Project Benefits a DAC/EDA:1 Yes, which one\_\_County wide project that will affect many communities including DACs and EDAs DNO **CEQA** Compliance: Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet\_ Contact Person(s): Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905 Key References: NA Supplemental Information (e.g., Project Webpage or equivalent): NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# **B.4.21 320 BMP County-Wide Demonstration Projects**

Project/Program Name	BMP County Wide Demonstration Projects				
Responsible Agency	El Dorado County- Co	El Dorado County- Community Development Services			
Partner Agency (ies)	County Stormwater P	County Stormwater Program and County Facilities			
Net Yield	Normal Year: NA Wet Year: NA			Dry Year: NA	
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (El Dorado County- Community Development Services)		Longitude: County- Co Services)	-120.829955° (El Dorado mmunity Development	

#### Description

Under the proposed project the County would provide public demonstrations on the green projects, LID projects, and stormwater management projects that are to be done County Wide on several County Facilities (ex. Libraries). The following county locations is where these demonstration projects would occur: County Building at 2850 Fairlane, El Dorado Hills Library at 7455 Silva Valley Parkway, and Pollock Pines Library at 6210 Pony Express Trail. The county has identified this as something that needs to be done for contractors, consultants and the general public to learn from and gain exposure to. County facilities will exhibit rainwater harvesting technology and equipment, stormwater management systems that treat and infiltrate stormwater runoff (swales and wetlands), and water conservation strategies.

Component

Stormwater Management

**Potential Challenges** 

Notifying the community that the demonstration projects are available for the public to see

Effectively distributing the right information on the demonstration projects to all of the community in the County

Conceptual GIS Map of Site

No available map

Purpose(s)	Key Stakeholders
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> <li>Increase community awareness for sustainable water</li> </ul>	El Dorado County- Community Development Services, County Stormwater Program and County Facilities
Stage of Development	

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⊠ Conceptual □ Design	□ Planning □ Pre-Desi □ Construction □ Other		sign	
Expected Project Timeline	Begin: 2020, End: 2025			
Project Triggers	Funding			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financ	cial Assistance
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ap	pplicable cells and provide	e justificatio	n below table)
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/	or	Nonpoint source pollution control
while contributing to comp with applicable permit and TMDL requirements	oliance d/or	treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	ff	Conjunctive use		
Flood Management		Decrease flood risk by r runoff rate and/or volum	educing Ie	Reduced sanitary sewer overflows
Environmental		Environmental and habi protection and improver including:	tat nent	Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement -Riparian enhancement -Instream flow improven	'creation; ; and/or nent	Reestablishment of the natural hydrograph
		Increased urban green	space	Water temperature improvements
Community		Employment opportuniti provided	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas
This project has a large co	mmunity	benefit in which it will	create opp	ortunities for contractors, consultants,

constructions, consultants, developers, and the general public to learn from the green projects, LID projects, and stormwater management projects that the County is developing. Overall, this project will have much community engagement. The projects exhibited at the County facilities will exhibit rainwater harvesting technology and equipment that will promote water supply reliability at a local scale, stormwater management systems that treat and infiltrate stormwater runoff (swales and wetlands) to improve water quality and reduce pollution, in addition to technology that helps promote water conservation. As a result of the BMPs that will be implemented the local environment will be protected and improved and the county facilities where the projects are to be done will be enhanced.

Project Included in IRWM:

□ Yes, which one\_\_\_\_

No, explain project is in conceptual stage, not added to IRWM currently

Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one <u>County-wide project that will benefit several communities</u> including DACs and EDAS □ No		
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet		
Contact Person(s):			
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905			
Key References:			
NA			
<sup>1</sup> DAC = Disadvantaged Communities			
EDA = Economically Distressed Area			

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# B.4.22 323 Urban Roadway Improvement Project-Ray Lawyer Drive, Grind & Overlay Project

Project/Program Name	Urban Roadway Improvement Project-Ray Lawyer Drive, Grind & Overlay Project					
Responsible Agency	City of Placerville					
Partner Agency (ies)	NA					
Net Yield	Normal Year: NA	Wet Ye	ar: NA	Dry Year: NA		
Estimated Cost	Capital: \$62,000	Capital: \$62,000				
Unit Cost	NA	NA				
Site Coordinates	Latitude: 38.729603° Longitude: -120.830839°					
Description						
This project involves a 3" Grind and overlay of travel lanes only, with some roadway section reconstruction in isolated areas. A quote was received from Veerkamp for \$45,199, which reflected \$2.87/SF. Pricing didn't include traffic control or restriping and only includes a portion of the S-Curve. Efficient scope should be revised to include from Armory to Library Driveway Entrance. Additional funds will be needed for the additional area.						
Component						
Stormwater Management						
Potential Challenges						
Residents near project site may not like the noise related to the construction that will result from the project.						
Conceptual GIS Map of Site						



Purpose(s)		Key Stakeholders				
☑ Improve in-stream water quality		City of P	City of Placerville			
□ Improve health of local watersheds						
□ Improve local water supply reliability						
Implement & monitor a reli	able storn	nwater system				
Increase climate resilience	•					
□ Increase community aware	eness for s	sustainable water				
Stage of Development			J			
Conceptual	⊠ Pl	anning	□ Pre-De	sign		
🗆 Design		onstruction	□ Other			
Expected Project Timeline	Begin: 2	2017, End: 2018				
Project Triggers	Funding					
	Road fa	ilures				
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance		
California Environmental Pro	tection Ag	ency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant		
Program						
U.S. Department of Transpor	tation (DC	<ol> <li>I ransportation Invest</li> </ol>	ment Gene	erating Economic Recovery (TIGER)		
	04/55					
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):				
Primary Opportunity (highlight applicable cells and provide justification below table)						
Benefit Categories Identified in SWRP Guidelines						
Benefit Category		Main Benefit		Additional Benefit		
Water Quality		Increased filtration and/o	or	Nonpoint source pollution control		
while contributing to com	bliance d/or	treatment of runoff		Reestablished natural water		
TMDL requirements	a, oi			drainage and treatment		
Water Supply		Water supply reliability		Water conservation		
through groundwater	off	Conjunctive use				
capture and use						
Flood Management		Decrease flood risk by re	educing	Reduced sanitary sewer		
Environmental		Environmental and habit	at	Reduced energy use, GHG		
		protection and improvem	nent	emission, or provides a carbon		
		including:	creation:	sink Reastablishment of the natural		
		-Riparian enhancement;	and/or	hydrograph		
		-Instream flow improvem	nent			
Community		Increased urban green s	pace	Water temperature improvements		
		provided				
		Public education		Enhance and/or create		
				recreational and public use areas		

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This project will improve road conditions which will improve stormwater runoff quality. Consequently, the project will provide short term employment opportunities, will involve the community and will have a public education component.						
Project Included in IRWM:	□ Yes, which one	⊠ No, explain				
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one Project found under the 2010-2014 DAC Places as identified         by the CA Department of Water Resources       □ No					
CEQA Compliance:	□ Yes, explain completed	⊠ No, explain <u>CEQA not</u>				
Contact Person(s):						
Steve Herrera, PE, steve@herreraengineering.net, 530-677-1854						
Rebecca Neves, City Engineer/PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250						
Key References:						
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						
DAC = Disadvantaged Communities						

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

# B.4.23 324 Airport Road/Broadway Culvert Storm Drain Improvement

Project/Program Name	Culvert Pipe Replacement at Airport Road and Broadway					
Responsible Agency	City of Placerville					
Partner Agency (ies)	NA					
Net Yield	Normal Year: NA	Wet Ye	ar: NA	Dry Year: NA		
Estimated Cost	Capital: \$69,000					
Unit Cost	\$500/Linear Feet of 4' x 4' Reinforced Concrete Box, \$2,500/Cubic Yards of 6' x 6' x 1' Cast-Place-Headwall, \$4,000/EA of Drain Inlets, \$46/Linear Feet of Curb & Gutter, \$75/Linear Feet of Guard Rail, \$96/Ton of Asphalt Concrete Paving, \$62/Ton of Aggregate Base					
Site Coordinates	Latitude: 38.729792° Longitude: -120.764422°					
Description						
Project proposes to trench and replace the culvert crossing on Airport Road at Broadway and install new headwalls and railings. All improvements will be constructed within the right-of-way.						
Component						
Stormwater Management						
Potential Challenges						
Locals will have inaccessibility to the site location during the replacement of the culvert. Temporary closure of Airport Road is expected to be necessary during culvert installation.						
Conceptual GIS Map of Site						



Purpose(s)			Key Stakeholders		
☑ Improve in-stream water quality		City of P	lacerville		
□ Improve health of local watersheds					
□ Improve local water supply	reliability	,			
Implement & monitor a reli	iable storr	nwater system			
Increase climate resilience	•				
□ Increase community aware	eness for s	sustainable water			
Stage of Development					
☑ Conceptual	🗆 Pl	lanning	□ Pre-De	sign	
□ Design		onstruction	□ Other		
Expected Project Timeline	Begin 20	020, End in 2021; a 2 year	project		
Project Triggers	Culvert Extreme	Failure Plood Event			
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance	
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Department of Transportation (DOT) - Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant Program Drought Grant Funding					
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Primary Opportunity (highlight applicable cells and provide justification below table)					
Benefit Category Main Benefit Additional Benefit					
Water Quality		Increased filtration and/or		Nonpoint source pollution control	
while contributing to comp with applicable permit and TMDL requirements	oliance d/or	treatment of runoff		Reestablished natural water drainage and treatment	
Water Supply through groundwater management and/or runoff capture and use		Water supply reliability Conjunctive use		Water conservation	
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows	
Environmental		Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	at ient creation; and/or ient	Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie provided	es	Community involvement	
		Public education		Enhance and/or create recreational and public use areas	

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Replacing the culvert will improve local conditions which will translate to reducing non-point source pollution, reestablishing the natural water drainage and treatment of stormwater, will reduce the flood risk at the crossroads, will generate employment opportunities, and involve the community.

Project Included in IRWM:	Yes, which one into IRWM currently	No, explain <u>Project is not added</u>				
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one_Project for by the CA Department of Wate □ No	und under the 2010-2014 DAC Places as identified er Resources				
CEQA Compliance:	☐ Yes, explain been completed	⊠ No, explain <u>CEQA has not</u>				
Contact Person(s):						
Steve Herrera, PE, <u>steve@herreraengineering.net,</u> 530-677-1854 Rebecca Neves, City Engineer/PE/QSD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250 Pierre Rivas, Director Development Services Department, privas@cityofplacerville.org, 530-642-5252						
Key References:						
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						
DAC = Disadvantaged Communities						

EDA = Economically Distressed Area

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# **B.4.24 326 Sewer Relocation-Clay to Locust**

Project/Program Name	Sewer Relocation-Clay to Locust						
Responsible Agency	City of Placerville						
Partner Agency (ies)	Caltrans						
Net Yield	Normal Year: NA	Normal Year: NA Wet Year: NA Dry Year: NA					
Estimated Cost	Capital: \$120,000	Capital: \$120,000					
Unit Cost	NA						
Site Coordinates	Latitude: 38.732249° Longitude: -120.78947°						
Description							
This project involves the construction of a new park and ride facility at the existing City-owned dirt lot at Locust/Mosquito along with frontage improvements and roadway improvements on Mosquito Road from Locust to Clay. Project is funded through an FTA Grant and STBGP Exchange Funds. This project design is underway, utility coordination with PG&E and AT&T is in progress.							
Component							
Stormwater Management							
Potential Challenges							
Residents near project site may not like the noise related to the construction that will result from the project.							
Conceptual GIS Map of Site							



Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality			City of P	lacerville, Caltrans
□ Improve health of local watersheds				
□ Improve local water supply reliability				
Implement & monitor a reli	able storn	nwater system		
Increase climate resilience	•			
□ Increase community aware	eness for s	sustainable water		
Stage of Development				
Conceptual	🗆 PI	anning	□ Pre-De	sign
⊠ Design		onstruction	□ Other	
Expected Project Timeline	Begin: 2	017, End: 2018		
Project Triggers	Road fai	ilure		
	Sewer fa	ailure		
Potentially Applicable Federa	I and Stat	te Programs for Technical	and Finand	cial Assistance
California Environmental Pro Program	tection Ag	jency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ar	policable cells and provide	iustificatio	n below table)
Benefit Category Main Benefit			,	Additional Benefit
Water Quality		Increased filtration and/or treatment of runoff		Nonpoint source pollution control
while contributing to comp with applicable permit and TMDL requirements	oliance d/or			Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	off	Conjunctive use		
Flood Management	Flood Management		educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/ -Riparian enhancement; -Instream flow improvem	creation; and/or ient	Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas

# Appendix B Project Description Forms March 2018

This project involves relocating the sewer from Clay St to Locust Ave. in the City of Placerville. In undergoing this project, short term employment opportunities will be created, sanitary sewer overflows will be prevented, the community will be involved and the project will provide a public education component.						
Project Included in IRWM:	□ Yes, which one	⊠ No, explain				
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one_ Project found under the 2010-2014 DAC Places as identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>					
CEQA Compliance:	□ Yes, explain completed	⊠ No, explain <u>CEQA not</u>				
Contact Person(s):						
Steve Herrera, PE, <u>steve@herreraengineering.net</u> , 530-677-1854 Rebecca Neves, City Engineer/PE/QSD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250						
Key References:						
NA						
Supplemental Information (e.g., Project Webpage or equivalent):						
NA						
DAC - Disadvantaged Communities						

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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# **B.4.25 327 El Dorado Hills Library Water Conservation Project**

techniques can be used by a variety of residential or commercial developments.

Project/Program Name	El Dorado Hills Library Water Conservation Project					
Responsible Agency	El Dorado County & Geor	getowr	n Divide Resource Co	nservation Districts		
Partner Agency (ies)	El Dorado County- Comm	El Dorado County- Community Development Services				
Net Yield	Normal Year: 13 AF/y Wet Year: 17 AF/y Dry Year: 9 AF/y			Dry Year: 9 AF/y		
Estimated Cost	Capital: \$181,080					
Unit Cost	NA					
Site Coordinates	Latitude: 38.672316° Longitude: -121.065017°			017°		
Description						
The El Dorado Hills Public Library has a vacant, county owned, lot immediate to the main library building. The proposed Water Conservation Demonstration Garden is based on a modern understanding of a multi-functional, climatically-adopted, landscape. Features used in the design include drought tolerant landscaping plants, water conservation and water use reduction practices, irrigation efficiency, stormwater capture and pollution prevention functionality. Each area will have its own theme (native, streetscape, lawn, flowering, etc.) each having its own variable water demand/ hydro zone design. This approach will broaden the scope of how these landscaping						

Component

Stormwater Management

Potential Challenges

Funding

Conceptual GIS Map of Site



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Ca Pr	lifornia Environmental Protection Ag ogram	ency - State Water Resources Contr	ol Board (SWRCB) - Stormwater Grant			
St	ormwater Multi-Benefits (per SWRP	Guidelines Table 4): Water Quality, F	lood Management, Community			
	Primary Opportunity (highlight ap	pplicable cells and provide justificatio	n below table)			
	Benefit Category	Main Benefit	Additional Benefit			
	Water Quality	Increased filtration and/or	Nonpoint source pollution control			
	while contributing to compliance with applicable permit and/or TMDL requirements	treatment of runoff	Reestablished natural water drainage and treatment			
	Water Supply	Water supply reliability	Water conservation			
	through groundwater management and/or runoff capture and use	Conjunctive use				
	Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
	Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
		Increased urban green space	Water temperature improvements			
	Community	Employment opportunities provided	Community involvement			
		Public education	Enhance and/or create recreational and public use areas			
Th	e goals of the program are:					
1)	Establish a demonstration garden th	at exhibits the following:				
a)	Drought tolerant landscaping,	<i></i>				
(a (a	vvater conservation and irrigation eff	iciency,				
(0)	c) Stornwater management and politition prevention,					

d) Soil conservation and enhancement,

e) To enhance the outdoor space for community use with an attractive landscaped area;

2) Increase access and use of public space.

3) To create an area that can be used as a model for drought tolerant landscaping and water conservation at residential and commercial developments.

Project Included in IRWM:	Yes, which one presented to the CABY ORWMP working	⊠ No, explain <u>Project has not been</u> a group.
Project Benefits a DAC/EDA:1	Yes, which one	⊠ No
CEQA Compliance:	□ Yes, explain	⊠ No, explain

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Contact Person(s):

Mark Egbert, District Manager. El Dorado County RCD 530-295-5630. Mark.Egbert@ca.usda.gov

Key References:

EDC Stormwater Garden Proposal

Supplemental Information (e.g., Project Webpage or equivalent):

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

# **B.4.26 328 Our Water Our World - Outreach Program**

Project/Program Name	Our Water Our World - Outreach Program					
Responsible Agency	El Dorado County- Community Development Services					
Partner Agency (ies)	Local Businesses					
Net Yield	Normal Year: NA Wet Year: NA		Dry Year: NA			
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.					
Unit Cost	NA					
Site Coordinates	Latitude: 38.727779° County- Community Services)	' (El Dorado Development	Longitude: -120.829955° (El Dorado County- Community Development Services)			
Description	Description					
The proposed project is a stormwater outreach project that is part of Our Water Our World. This program aims at providing information to the community on the pesticides found at retail locations such as Home Depot, and then informing them on safer alternative pesticides and methods that can be used instead. In the long run, this project will help reduce non-point source pollution due to increased awareness in the community and will help improve local environmental conditions. This project will occur County-wide.						
Component						
Stormwater Management						
Potential Challenges						
Information distribution to the community						
Conceptual GIS Map of Site						
No available map						
Purpose(s)	Purpose(s)			Key Stakeholders		
Improve in-stream water	Improve in-stream water quality			El Dorado County- Community Development Services, local businesses		
☑ Improve health of local was	☑ Improve health of local watersheds					
□ Improve local water supply reliability						
Implement & monitor a reliable stormwater system						
Increase climate resilience						
Increase community awareness for sustainable water						
Stage of Development						
Conceptual	□ Planning	$\boxtimes$	Pre-Design			
🗆 Design	□ Construction		Other			

Expected Project Time	eline E	Begin: 2018, End: 2030				
Decident Triggers						
Project Triggers	Project Triggers Large amount of public interest and volunteers willing to help					
Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program						
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)						
Stormwater Multi-Benefits (per SWRP Guidelines Table 4):						
Primary Opportu	nity (higl	hlight ap	pplicable cells and provide justificatio	n below table)		
Benefit Category			Main Benefit	Additional Benefit		
Water Quality			Increased filtration and/or	Nonpoint source pollution control		
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff	Reestablished natural water drainage and treatment			
Water Supply			Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use		Conjunctive use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
			Increased urban green space	Water temperature improvements		
Community		Employment opportunities provided	Community involvement			
		Public education	Enhance and/or create recreational and public use areas			
Under the proposed put the project will help ex pests that does not inv volunteer opportunities	ublic outre ducate th olve usin s.	each pro e comm g pestic	bject, the project has the ability to help nunity in ways that they can use alte ides. Overall, this project will create r	o reduce nonpoint source pollution since rnative and safer methods to get rid much public engagement and will creat	;e of te	
Project Included in IRWM:		ΩYe	Yes, which one			
		⊠ No	o, explain project is in conceptual stage, not added to IRWM currently			
Project Benefits a DAC/EDA:1		⊠ Ye and I	Yes, which one <u>Program will benefit several communities, including DACs</u> d EDAs□ No			

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CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
http://ourwaterourworld.org/ http://ourwaterourworld.org/Resources/Participating-Agencies				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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## **B.4.27 329 Trash Amendments TMDL Implementation**

Project/Program Name	Trash Amendments TMDL Implementation				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	Caltrans, City of Placerville				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (Long Range Planning) Longitude: -120.829955° (Long Range Planning)				

#### Description

The Trash Amendments are to be implemented county wide. They will be implemented in the county by developing an implementation plan for the Western Slope of El Dorado County. Under this plan, plans will be developed to prevent the amount of trash that is observed and makes its way into local water bodies. To reduce the amount of trash that is observed, the goal is to purchase additional Street Sweepers, install full trash capture devices or equivalent, identify the critical areas county wide that need to be maintained, and install detention/retention systems to prevent trash from flowing into the local water systems. The proposed project will ultimately improve water quality and meet MS4 compliance.

For Priority Land Use Areas, the County will aim to be at 0% trash within 10 years. Organic debris and sediment will be reduced as well but unknown as to how much.

Component

Stormwater Management

**Potential Challenges** 

Wide distribution of Trash Amendment Projects County-Wide

Conceptual GIS Map of Site

No available map

Purpose(s)	Key Stakeholders	
☑ Improve in-stream water quality	El Dorado County- Community Development	
☑ Improve health of local watersheds	Services, Galtrans, City of Placerville	
□ Improve local water supply reliability		
☑ Implement & monitor a reliable stormwater system		
□ Increase climate resilience		
$\Box$ Increase community awareness for sustainable water		

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Stage of Development						
⊠ Conceptual □ Design	<ul> <li>Planning</li> <li>Construction</li> </ul>		Pre-Desiç Other	ŋn		
Expected Project Timeline	Begin: 2	Begin: 2018, End: 2030				
Project Triggers	Statewic	le Implementation as set forth	by the S	tate Water Board		
Potentially Applicable Federa	Potentially Applicable Federal and State Programs for Technical and Financial Assistance					
California Environmental Prot Program California Environmental Prot State Revolving Fund Progra	tection Ag tection Ag m (CWSR	ency - State Water Resources ency - State Water Resources RF)	s Control s Control	Board (SWRCB) - Stormwater Grant Board (SWRCB) - Clean Water		
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):				
Primary Opportunity (h	ighlight ap	pplicable cells and provide just	tification I	pelow table)		
Benefit Category		Main Benefit		Additional Benefit		
Water Quality while contributing to comp	oliance	Increased filtration and/or treatment of runoff		Nonpoint source pollution control		
with applicable permit and TMDL requirements	d/or			Reestablished natural water drainage and treatment		
Water Supply		Water supply reliability		Water conservation		
through groundwater management and/or runo capture and use	ff	Conjunctive use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows		
Environmental		Environmental and habitat protection and improvement including:		Reduced energy use, GHG emission, or provides a carbon sink		
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph		
		Increased urban green space	e	Water temperature improvements		
Community		Employment opportunities pl	rovided	Community involvement		
		Public education		Enhance and/or create recreational and public use areas		

Under this project the water quality countywide will be improved since the amount of trash that is introduced into the water bodies will be significantly reduced. Implementing the Trash Amendments will provide an opportunity for the community to be engaged. This program will also allow an opportunity for educating the public on trash management, will enhance recreational areas, and will generate employment and volunteer opportunities.

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Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which oneCounty-wide program that will benefit DACs and EDAs□ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
https://www.waterboards.ca.gov/water_issues/programs/trash_control/documentation.shtml				
DAC Disadventered Communities				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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## B.4.28 330 Countywide Water Quality Awareness Campaign

Project/Program Name	Countywide Water Quality Awareness Campaign					
Responsible Agency	El Dorado County- Community Development Services					
Partner Agency (ies)	City of Placerville, Caltrans					
Net Yield	Normal Year: NA Wet Year: NA		: NA	Dry Year: NA		
Estimated Cost	Capital: \$80,000.00					
Unit Cost	ΝΑ					
Site Coordinates	Latitude: 38.727779° (Long Range Planning) Longitude: -120.829955° (Long Range Planning)					
Description						
The proposed project is a county wide effort aimed at providing water quality awareness to the community of El Dorado County. The Water Quality Awareness Campaign will tie in closely with the goals that the County of El Dorado has proposed to implement under the Trash Amendments and other water quality pollutants of concern. Ultimately, this campaign will educate the public on how they can contribute towards improving and preserving satisfactory water quality standards in the County of El Dorado.						
Component						
Stormwater Management						
Potential Challenges						
Public Outreach	Public Outreach					
Conceptual GIS Map of Site						
No available map						
Purpose(s)			Key Stakeholder	S		
<ul> <li>☑ Improve in-stream water quality</li> <li>☑ Improve health of local watersheds</li> <li>□ Improve local water supply reliability</li> <li>□ Implement &amp; monitor a reliable stormwater system</li> <li>□ Increase climate resilience</li> <li>☑ Increase community awareness for sustainable water</li> </ul>						
Stage of Development						
Conceptual Design Expected Project Timeline	Planning Construction Begin: 2019 End: 2	2030	□ Pre-Design ⊠ Other			
Expected Project Timeline	Begin: 2019, End: 2	2030				

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Project Triggers	Large ar	arge amount of public interest and volunteers willing to help				
Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)						
Stormwater Multi-Benefits (per SWRP Guidelines Table 4):						
Primary Opportunity (highlight applicable cells and provide justification below table)						
Benefit Category		Main Benefit	Additional Benefit			
Water Quality while contributing to comp	liance	Increased filtration and/or treatment of runoff	Nonpoint source pollution control			
with applicable permit and TMDL requirements	l/or		Reestablished natural water drainage and treatment			
Water Supply		Water supply reliability	Water conservation			
through groundwater management and/or runot capture and use	f	Conjunctive use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
		Increased urban green space	Water temperature improvements			
Community		Employment opportunities provided	Community involvement			
		Public education	Enhance and/or create recreational and public use areas			
Under the proposed Water Quality Awareness Campaign this project will have strong community involvement in which the community will be educated on ways to prevent and maintain satisfactory water quality standards throughout the County. In educating the community, this will ultimately contribute towards reducing nonpoint source pollution, and consequently helping improve the local environment and habitats. This program will also generate employment and volunteer opportunities.						
Project Included in IRWM:          □ Yes, which one         □ Xes, which one         □ No, explain project is in conceptual stage, not added to IRWM currently						
Project Benefits a DAC/EDA: <sup>1</sup>						

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CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado Count	y Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905			
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
https://app.box.com/s/31742182	im89xevruks0			

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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## B.4.29 331 Countywide Stormwater Asset Management Program

Project/Program Name	Countywide Stormwater Asset Management Program				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	City of Placerville, Caltrans				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$2,200,000.00				
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (El Dorado County- Community Development Services)Longitude: -120.829955° (El Dorado County- Community Development Services)				

#### Description

The Asset Management Program that is proposed was developed to create a digital system that will have all of the road and drainage infrastructure stored and mapped out for the Western Slope of El Dorado County. For instance, the digitized system will contain information regarding the location of where all of the outfalls are located on the Western Slope of the County. The proposed program will be a great tool that the County will have access to, to better manage and coordinate stormwater management efforts. This program will help address water quality problems and help meet MS4 compliance. This program is of much need in the county since all of the information that the County has is currently found stored in different locations. With the proposed program, the County will have all of the information in one place and will help the County towards operating and maintaining the water and stormwater infrastructure. This effort will include the documentation of infrastructure maintenance and will aid with the dispatch of maintenance crews to schedule and perform maintenance.

Component

Stormwater Management

**Potential Challenges** 

Data and information retrieval

Conceptual GIS Map of Site

No available map

Purpose(s)	Key Stakeholders	
☑ Improve in-stream water quality	El Dorado County- Community Development Services, City of Placerville, Caltrans	
☑ Improve health of local watersheds		
Improve local water supply reliability		
Implement & monitor a reliable stormwater system		
□ Increase climate resilience		
$\Box$ Increase community awareness for sustainable water		
Stage of Development		

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⊠ Conceptual □ Design	□ Plannir □ Constru	ig uction	□ Pre-Desi □ Other	jn			
Expected Project Timeline	Begin: 2019,	Begin: 2019, End: 2020					
Project Triggers	Funding						
Potentially Applicable Federa	Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
California Environmental Pro Program California Environmental Pro State Revolving Fund Progra	California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)						
Stormwater Multi-Benefits (pe	er SWRP Guid	elines Table 4):					
Primary Opportunity (h	ighlight applica	able cells and provide	justification I	pelow table)			
Benefit Category	Ma	in Benefit		Additional Benefit			
Water Quality while contributing to com	bliance of r	reased filtration and/c unoff	r treatment	Nonpoint source pollution control			
with applicable permit and TMDL requirements	d/or			Reestablished natural water drainage and treatment			
Water Supply	Wa	Water supply reliability		Water conservation			
through groundwater management and/or runo capture and use	ff	Conjunctive use					
Flood Management		Decrease flood risk by reducing runoff rate and/or volume					
	run	crease flood risk by re off rate and/or volume	educing e	Reduced sanitary sewer overflows			
Environmental	Env pro incl	crease flood risk by re off rate and/or volume vironmental and habit tection and improven uding:	educing e at ient	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink			
Environmental	Env pro incl -Rij -Ins	crease flood risk by re off rate and/or volume vironmental and habit tection and improvem luding: etland enhancement; stream flow improvem	educing e at lent creation; and/or ent	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph			
Environmental	run Env pro incl -Wa -Rij -Ins Inc	crease flood risk by re off rate and/or volum vironmental and habit tection and improven uding: etland enhancement/ parian enhancement; stream flow improvem reased urban green s	educing at hent creation; and/or hent pace	Reduced sanitary sewer overflowsReduced energy use, GHG emission, or provides a carbon sinkReestablishment of the natural hydrographWater temperature improvements			
Environmental	Env pro incl -Wi -Rij -Ins Inc	crease flood risk by re off rate and/or volume vironmental and habit tection and improvem luding: etland enhancement/ parian enhancement; stream flow improvem reased urban green s	educing eat at hent creation; and/or ent pace es provided	Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement			

With the proposed program, the water quality of the Western portion of the County will be improved since the County will have a digitized system to better manage its water infrastructure. The digitized system that is proposed will provide insight to the County which will help them better manage their water resources. With the creation of this program there will also be employment opportunities available, as people will be sought to create the digitized system described and another person could be hired to manage/run the Asset Management Program. This program has the potential to educate the public and involve the community.

# Appendix B Project Description Forms March 2018

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one_ <u>County-wide program that will benefit DACs and</u> EDAs□ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado Count	ty Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905			
Key References:				
ΝΑ				
Supplemental Information (e.g., Project Webpage or equivalent):				
ΝΑ				
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

Appendix B Project Description Forms March 2018

## **B.4.30 333 Splash in the Class – Outreach Program**

Project/Program Name	Splash in the Class - Outreach Program				
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	City of Placerville, EDCWA				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$20,000/yr				
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (Long Range Planning) Longitude: -120.829955° (Long Range Planning)				
Description					

#### Description

The El Dorado County Splash in the Class (Splash) program is a non-profit organization dedicated to helping local children understand and value their natural world through science, education and outdoor exploration. Splash aims to create a generation of children who value their natural world and take an active role in its protection. Splash involves teaching students, providing students with activities, and presentations on a variety of topics that include stormwater management, littering, contamination, hydrology, watershed management, and ecosystems.

Currently, the Splash program is specifically designed for Grades 4 and 5 and participation is free thanks to sponsorship from El Dorado County Stormwater Program. The Splash program seeks additional funding to expand the current Splash program to reach several more schools throughout El Dorado County and develop programs for all grade levels K-12.

Component

Stormwater Management

**Potential Challenges** 

Fundina

**Public Outreach** 

Conceptual GIS Map of Site

No available map

Purpose(s)	Key Stakeholders	
⊠ Improve in-stream water quality	El Dorado County- Community Development Services, school system	
☑ Improve health of local watersheds		
□ Improve local water supply reliability		
□ Implement & monitor a reliable stormwater system		
□ Increase climate resilience		
$\boxtimes$ Increase community awareness for sustainable water		
Stage of Development		

# Appendix B Project Description Forms March 2018

⊠ Conceptual □ Design	□ Pla □ Co	□ Planning □ Pre-Design □ Construction ⊠ Other		
Expected Project Timeline	Begin: 2	018, End: 2030		
Project Triggers	Large ar	mount of public interest an	d volunteers	willing to help
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	Il Assistance
California Environmental Pro Program California Environmental Pro State Revolving Fund Progra	tection Ag tection Ag m (CWSR	ency - State Water Resou ency - State Water Resou RF)	rces Control	Board (SWRCB) - Stormwater Grant Board (SWRCB) - Clean Water
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ap	pplicable cells and provide	justification l	below table)
Benefit Category		Main Benefit		Additional Benefit
Water Quality while contributing to comp	oliance	Increased filtration and/o of runoff	or treatment	Nonpoint source pollution control
with applicable permit and TMDL requirements	d/or			Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	ff	Conjunctive use		
Flood Management		Decrease flood risk by re runoff rate and/or volum	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habit protection and improven including:	at nent	Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement		Reestablishment of the natural hydrograph
		Increased urban green s	space	Water temperature improvements
Community		Employment opportuniti	es provided	Community involvement
		Public education		Enhance and/or create recreational and public use areas

With the proposed project, expanding the Splash Program in the County of El Dorado would provide several benefits, the most important being that it would engage the community when educating a group of students on array of subject matter. The program coordinators could ask scientists and professionals (local university grad students, engineers, County Officials, Agency leads) to make classrooms visits and present a topic. In addition, scientists and professionals could provide educational tours to students that would engage them to learn and be interested on topics that would help the environment and relate to stormwater management. Exposing students to an array of topics may help reduce sources of pollution that may impact local water bodies. Some employment opportunities will exist by implementing the program but it will be mainly volunteer base.

# Appendix B Project Description Forms March 2018

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one <u>County-wide program that will benefit DACs and</u> EDAs No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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## **B.4.31 334 County Wide Quality Standards Improvement Project**

Project/Program Name	County Water Quality Standards Improvement Project			
Responsible Agency	El Dorado County- Community Development Services			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA	Wet Year: N	A	Dry Year: NA
Estimated Cost	Capital: Cost not calc	culated due to	conceptual nature	of project.
Unit Cost	NA			
Site Coordinates	Latitude: 38.727779° Range Planning)	(Long	Longitude: -120.8	29955° (Long Range Planning)
Description				
Under the proposed project, throughout the county. This Water Board that they have is water quality. Establishing the and construction of projects i	, the County will crea would be a great in-h internal protocols for p e County Water Qualit n addition to the main	ate internal pr ouse tool for procedures ar ty Standards I tenance of pr	otocols for how ite the county to have id projects related t mprovement Projec ojects related to sto	ems and projects are managed access to and would show the o stormwater management and ct will help with the development rmwater and water quality.
Component				
Stormwater Management				
Potential Challenges				
Funding				
Conceptual GIS Map of Site				
No available map				
Purpose(s)			Key Stakeholder	S
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> <li>Increase community awareness for sustainable water</li> </ul>				y- Community Development
Stage of Development				
⊠ Conceptual	□ Planning		Pre-Design	
□ Design			□ Other	
Expected Project Timeline	Begin: 2019, End: 2	020		

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Potentially Applicable Federal and State Programs for Technical and Financial Assistance         California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program         U.S. Environmental Protection Agency (EPA) - Clean Water State Revolving Fund (CWSRF)         Stormwater Multi-Benefits (per SWRP Guidelines Table 4):         Primary       Opportunity (highlight applicable cells and provide justification below table)         Benefit Category       Main Benefit       Additional Benefit         Water Quality       Increased filtration and/or treatment of runoff       Nonpoint source pollution control         Water Supply       Water supply reliability       Water conservation         Water Supply       Water supply reliability       Water conservation         Environmental       Decrease flood risk by reducing runoff rate and/or numbri       Reduced sanitary sewer overflows         Vetland enhancement/creation; -Riparian project that will benefit DACs	Pr	oject Triggers	Funding	unding			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program         U.S. Environmental Protection Agency (EPA) - Clean Water State Revolving Fund (CWSRF)         Stormwater Multi-Benefits (per SWRP Guidelines Table 4):         Primary       Opportunity (highlight applicable cells and provide justification below table)         Benefit Category       Main Benefit       Additional Benefit         Water Quality       Increased filtration and/or treatment of runoff       Nonpoint source pollution control treatment of runoff         Water Supply       Water supply reliability       Water conservation       Restablished natural water drainage and treatment         Word groundwater management       Decrease flood risk by reducing runoff rate and/or volume       Reduced sanitary sewer overflows         Environmental       Environmental and habitat protection and improvement including:       Reduced energy use, GHG emission, or provides a carbon sink         Reprotect and use       Environmental more and/or runoff rate and/or volume       Restablishment of the natural hydrograph         -Instream flow improvement       Increased urban green space       Water temperature improvements including:         Community       Employment opportunities provided       Community involvement         Public education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols a	Po	otentially Applicable Federa	l and Sta	te Programs for Technical and Financ	cial Assistance		
Stormwater Multi-Benefits (per SWRP Guidelines Table 4):         Primary       Opportunity (highlight applicable cells and provide justification below table)         Benefit Category       Main Benefit       Additional Benefit         Water Quality       Increased filtration and/or treatment of runoff       Nonpoint source pollution control         Water Supply       Increased filtration and/or treatment of runoff       Nonpoint source pollution control         Water Supply       Water supply reliability       Water conservation         Hrough groundwater management and/or runoff capture and use       Decrease flood risk by reducing rounoff rate and/or volume       Reduced sanitary sewer overflows         Flood Management       Decrease flood risk by reducing rounoff rate and/or volume       Reduced energy use, GHG emission, or provides a carbon sink         Environmental       Environmental and habitat protection and improvement       Reduced energy use, GHG emission, or provides a carbon sink         Increased urban green space       Water temperature improvements         Community       Employment opportunities provided       Community involvement provided         Public education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will utimately help improve water q	Ca Pr U.	alifornia Environmental Prot ogram S. Environmental Protectio	ection Ag	gency - State Water Resources Contr (EPA) - Clean Water State Revolving	ol Board (SWRCB) - Stormwater Grant g Fund (CWSRF)		
Primary       Opportunity (highlight applicable cells and provide justification below table)         Benefit Category       Main Benefit       Additional Benefit         Water Quality       Increased filtration and/or treatment of runoff       Nonpoint source pollution control         Water Quality       Increased filtration and/or treatment of runoff       Nonpoint source pollution control         Water Supply       Water supply reliability       Water conservation         Water and use       Conjunctive use       Reduced sanitary sewer overflows         Flood Management       Decrease flood risk by reducing runoff rate and/or twolf       Reduced energy use, GHG emission, or provides a carbon sink         Environmental       Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Reparian enhancement; and/or -Instream flow improvement       Restablishment of the natural hydrograph         Increased urban green space       Water temperature improvements         Community       Employment opportunities provided       Community involvement provided         Public education       Enhance and/or create recertainal and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will utimately help improve water quality.         Project Included in IRWM:       Yes, which one	St	ormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):			
Benefit Category         Main Benefit         Additional Benefit           Water Quality         Increased filtration and/or treatment of runoff         Nonpoint source pollution control Reestablished natural water drainage and treatment           Water Supply         Water supply reliability         Water conservation           Water Supply         Water supply reliability         Water conservation           Flood Management         Decrease flood risk by reducing runoff rate and/or volume         Reduced sanitary sewer overflows           Environmental         Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement         Reduced energy use, GHG emission, or provides a carbon sink           Community         Employment opportunities provided         Community involvement         Reestablishment of the natural hydrograph           The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the county, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.           Project Included in IRWM:         Yes, which one		Primary Opportunity (h	ghlight a	oplicable cells and provide justificatio	n below table)		
Water Quality       Increased filtration and/or treatment of runoff       Nonpoint source pollution control Reestablished natural water drainage and treatment         Water Supply       Water supply reliability       Water conservation         Water Supply through groundwater management and/or runoff capture and use       Decrease flood risk by reducing runoff capture and use       Reduced sanitary sewer overflows         Flood Management       Decrease flood risk by reducing runoff rate and/or volume       Reduced sanitary sewer overflows         Environmental       Environmental and habitat protection and improvement including:       Reduced energy use, GHG emission, or provides a carbon sink         Community       Environmental and enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Restablishment of the natural hydrograph         Numproved       Employment opportunities provided       Community involvement         Dubic education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the county, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one		Benefit Category		Main Benefit	Additional Benefit		
while contributing to compliance with applicable permit and/or TMDL requirements       treatment of runoff       Reestablished natural water drainage and treatment         Water Supply       Water supply reliability       Water conservation         Flood Management       Decrease flood risk by reducing runoff rate and/or volume       Reduced sanitary sewer overflows         Environmental       Decrease flood risk by reducing runoff rate and/or volume       Reduced energy use, GHG emission, or provides a carbon sink         Environmental       Environmental and habitat protection and improvement including: Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reduced nergy use, GHG emission, or provides a carbon sink         Community       Employment opportunities provided       Community involvement         Ducreased urban green space       Water temperature improvements         Community       Employment opportunities provided       Community involvement         The proposed project will include a series of internal protocols aimed at dealing with sortmater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols in water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one		Water Quality		Increased filtration and/or	Nonpoint source pollution control		
Water Supply through groundwater management and/or runoff capture and use       Water supply reliability       Water conservation         Flood Management       Decrease flood risk by reducing runoff rate and/or volume       Reduced sanitary sewer overflows         Environmental       Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reduced energy use, GHG ensistic, or provides a carbon sink.         Community       Employment opportunities provided       Reestablishment of the natural hydrograph         Dublic education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one		while contributing to comp with applicable permit and TMDL requirements	oliance d/or	treatment of runoff	Reestablished natural water drainage and treatment		
through groundwater management and/or runoff capture and use       Conjunctive use         Flood Management       Decrease flood risk by reducing runoff rate and/or volume       Reduced sanitary sewer overflows         Environmental       Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reduced energy use, GHG emission, or provides a carbon sink         Community       Employment opportunities provided       Reestablishment of the natural hydrograph         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one Wes, explain Wes, explain No         CEQA Compliance:       Yes, explain stage, no environmental documentation is completed yet		Water Supply		Water supply reliability	Water conservation		
Flood Management       Decrease flood risk by reducing runoff rate and/or volume       Reduced sanitary sewer overflows         Environmental       Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reduced energy use, GHG emission, or provides a carbon sink         Community       Employment opportunities provided       Water temperature improvements         Community       Employment opportunities provided       Community involvement         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one	through groundwater management and/or runoff capture and use		Conjunctive use				
Environmental       Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reduced energy use, GHG emission, or provides a carbon sink         Community       Environmental enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reestablishment of the natural hydrograph         Community       Employment opportunities provided       Community involvement         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one		Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement       Reestablishment of the natural hydrograph         Community       Employment opportunities provided       Water temperature improvements         Community       Employment opportunities provided       Community involvement         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one		Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
Increased urban green space       Water temperature improvements         Community       Employment opportunities provided       Community involvement         Public education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       Yes, which one			-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph			
Community       Employment opportunities provided       Community involvement         Public education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       I Yes, which one				Increased urban green space	Water temperature improvements		
Public education       Enhance and/or create recreational and public use areas         The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM:       □ Yes, which one		Community		Employment opportunities provided	Community involvement		
The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.         Project Included in IRWM: <ul> <li>Yes, which one</li> <li>No, explain project is in conceptual stage, not added to IRWM currently</li> <li>Project Benefits a DAC/EDAL1</li> <li>Yes, which one</li> <li>No</li> <li>CEQA Compliance:</li> <li>Yes, explain ⊠ No, explain project is in conceptual documentation is completed yet</li> <li>No, explain project is completed yet</li></ul>				Public education	Enhance and/or create recreational and public use areas		
Project Included in IRWM:       □ Yes, which one         Which we will be a stage of the s	The proposed project will include a series of internal protocols aimed at dealing with stormwater management and water quality projects throughout the County, especially for the West Slope. The series of developed protocols will ultimately help improve water quality. This project has the potential to create short term employment opportunities, to educate the public, and involve the community.						
Project Benefits a DAC/EDAL <sup>1</sup> Image: Yes, which one         Project Benefits a DAC/EDAL <sup>1</sup> Image: Yes, which one         CEQA Compliance:       Image: Yes, explain         Image: Yes, explain       Image: Yes, explain         Image: Stage, no environmental documentation is completed yet	Pr	oject Included in IRWM:		es which one			
Project Benefits a DAC/EDAL1       Image: Yes, which oneCounty-wide project that will benefit DACs and EDAs         Image:			<ul> <li>No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>				
CEQA Compliance:          □ Yes, explain          Stage, no environmental documentation is completed yet	Pr	Project Benefits a DAC/EDAL <sup>1</sup> Xes, which one <u>County-wide project that will benefit DACs and EDAs</u>			t that will benefit DACs and EDAs		
	CI	QA Compliance:					

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Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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## **B.4.32 335 West Slope Watershed and Pollutant Generation Study**

Project/Program Name	West Slope Watersh	West Slope Watershed and Pollutant Generation Study			
Responsible Agency	El Dorado County- Community Development Services				
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	Wet Year	: NA	Dry Year: NA	
Estimated Cost	Capital: \$300,000.00	)			
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° Range Planning)	' (Long	Longitude: -120.829	9955° (Long Range Planning)	
Description					
Description           Stormwater from urban runoff is one of the leading causes of pollution in creeks, rivers and lakes. Stormwater is a resource and is part of the hydrologic cycle, along with potable water, so it is imperative to keep it as clean as possible. Identifying the sources of stormwater pollution and keeping pollution away from natural water bodies is the best and most economical strategy to keep stormwater clean and protect vital water resources.           This project entails doing a watershed and pollutant generation study for the Western Slope of EI Dorado County. The analysis that would be completed would be able to identify areas that are critical and would need to be mitigated. This study may also be used to identify locations of where pollutants may result from based on land use.           The Watershed Analysis will include:         Dividing the watershed into basins and sub-basins based on geographic and jurisdictional lines; maps will be produced to illustrate the boundaries.           Describing existing watershed conditions to establish a watershed baseline. The description will include: land use, major water features, water quality, water usage, water supply, designated beneficial uses, point and non-point sources of water pollution, population, infrastructure, vegetation, habitat and wildlife.           Describing watershed trends for which sufficient historical information is available. Trends include growth and land use projections and other similar information.           Identifying issues of concern, gaps in knowledge, and potential watershed management objectives based on the above analyses.           Producing a draft report to be reviewed and made available to stakeholders for comment.           Redrafting the report addressing stakeholder c					
Component					
Stormwater Management					
Potential Challenges					
Data and information retrieval					
Conceptual GIS Map of Site					
No available map					

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Purpose(s)		Key Stakeholders
☑ Improve in-stream water quality		El Dorado County- Community
☑ Improve health of local watersheds		Development Services
□ Improve local water supply reliability		
☑ Implement & monitor a reliable	e stormwater system	
□ Increase climate resilience		
Increase community awarenes	ss for sustainable water	
Stage of Development		
⊠ Conceptual	Planning	Pre-Design
□ Design		□ Other
Expected Project Timeline	Begin: 2019, End: 2029	
Project Triggers	Funding	
Potentially Applicable Federal an	d State Programs for Technical and	Financial Assistance
California Environmental Protecti Program U.S. Environmental Protection Ag U.S. Environmental Protection Ag	ion Agency - State Water Resources gency (EPA) - Clean Water State Re gency (EPA)- Nonpoint Source Impl	s Control Board (SWRCB) - Stormwater Grant evolving Fund (CWSRF) ementation Grants (319 Program)
Stormwater Multi-Benefits (per S	WRP Guidelines Table 4):	
Primary Opportunity (highli	ight applicable cells and provide jus	tification below table)
Benefit Category	Main Benefit	Additional Benefit
Water Quality	Increased filtration and/or	Nonpoint source pollution control
while contributing to compliar with applicable permit and/or TMDL requirements	nce treatment of runoff	Reestablished natural water drainage and treatment
Water Supply	Water supply reliability	Water conservation
through groundwater management and/or runoff capture and use	Conjunctive use	
Flood Management	Decrease flood risk by reduce runoff rate and/or volume	cing Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink
	-Wetland enhancement/crea -Riparian enhancement; and -Instream flow improvement	tion; Reestablishment of the natural //or hydrograph
	Increased urban green space	e Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

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The proposed study will help improve water quality and will ultimately help improve the local environment. This will be a large study that will be undertaken and so it will provide an opportunity for the community to get learn from it, become involved, and learn the significance it has. This study will also create employment opportunities.				
Project Included in IRWM:	□ Yes, which one			
	☑ No, explain project is in conceptual stage, not added to IRWM currently			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which oneCounty-wide study that will benefit DACs and EDAs</li> <li>□ No</li> </ul>			
CEQA Compliance:	□ Yes, explain			
	⊠ No, explain <u>Conceptual project</u>			
Contact Person(s):				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

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### B.4.33 336 West Slope BMP Manual

Project/Program Name	West Slope BMP Manual				
Responsible Agency	El Dorado County- C	El Dorado County- Community Development Services			
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: \$50,000 to \$75,000				
Unit Cost	NA				
Site Coordinates (Approximate)	Latitude: 38.727779° (Long Range Planning) Longitude: -120.829955° (Long Range Planning)				
Description					

The following describes why the BMP manual that contains LID practices is necessary:

According to the SWRCB, LID is"... a sustainable practice that benefits water supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID takes a different approach by using site design and storm water management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall."

This project involves creating a BMP (Best Management Practices) Manual for the Western Slope of El Dorado County.

When implemented correctly on a site, the BMP Manual will provide two primary benefits

The post-construction site hydrology will more closely mimic the pre-development hydrology, thus reducing downstream erosion that may occur due to increased runoff from impervious surfaces; and

Pollutants in runoff from the site will be significantly reduced to meet MS4 compliance

The BMP Manual will ensure that a properly and effectively designed site will incorporate two forms of BMP: LID Principles and LID BMPs. LID principles will focus on planning and designing a site in a manner that minimizes the causes, or drives, of project impacts (site design). LID BMPs will focus on implementation to help mitigate any impacts that are otherwise unavoidable. The selected BMPs will include maximizing direct or incidental infiltration and evapotranspiration, and using vegetation and other biological process to filter and absorb pollutants. For each BMP, the maximum tributary drainage area, siting consideration, design procedures, and maintenance requirements will be included. The BMP Manual will include detailed guidance for infiltration testing, and basin considerations.

The BMP Manual will be used in the developing urban areas of El Dorado County where local officials, contractors and developers will have access to it and see an array of ecologically based stormwater treatment technologies that they may use on proposed projects. By following the BMP Manual, the community can be assured that water quality will be protected to the maximum extent practicable.

Component

Stormwater Management

Potential Challenges

Funding

Conceptual GIS Map of Site

#### Appendix B Project Description Forms March 2018

No available map				
Purpose(s)			Key Stal	keholders
Improve in-stream water q	uality		El Dorad	o County- Community Development
☑ Improve health of local was	tersheds		Services	
□ Improve local water supply	/ reliability	,		
Implement & monitor a reli	able storn	nwater system		
□ Increase climate resilience	;			
Stage of Development	eness for	sustainable water		
Stage of Development				
⊠ Conceptual	🗆 Pla	anning	□ Pre-De	sign
□ Design		onstruction	□ Other	
Expected Project Timeline	Begin: 2	:019, End: 2019		
Project Triggers	Funding			
Potentially Applicable Federa	al and Stat	te Programs for Technical	and Finand	cial Assistance
California Environmental Pro Program U.S. Environmental Protectio	tection Ag	jency - State Water Resou (EPA) - Clean Water State	rces Contr e Revolving	ol Board (SWRCB) - Stormwater Grant g Fund (CWSRF)
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ap	pplicable cells and provide	justificatio	n below table)
Benefit Category		Main Benefit		Additional Benefit
Water Quality	nliance	Increased filtration and/o	or	Nonpoint source pollution control
with applicable permit an	d/or			drainage and treatment
TMDL requirements		Water supply reliability		Water conservation
through groundwater		Conjunctive use		
management and/or runo	off			
Flood Management		Decrease flood risk by re	educing e	Reduced sanitary sewer
Environmental		Environmental and habit	at	Reduced energy use, GHG
		protection and improvem including:	nent	emission, or provides a carbon sink
		-Wetland enhancement/o	creation;	Reestablishment of the natural
		-Riparian ennancement; -Instream flow improvem	and/or ient	nydrograph
		Increased urban green s	pace	Water temperature improvements
Community		provided	es	Community involvement
		Public education		Enhance and/or create recreational and public use areas
·				

# Appendix B Project Description Forms March 2018

The BMP Manual will include several of ecologically based stormwater treatment technologies for various people to reference. The items that will be contained in the BMP manual will ultimately help improve water quality in the County. Creating the BMP Manual will create employment opportunities.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one <u>Manual will benefit several communities, including DACs</u> and EDAs□ No		
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet		
Contact Person(s):			
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905			
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
NA			

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

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## B.4.34 337 Outingdale Stormwater Management Study/Pre-Design

Project/Program Name	Outingdale Stormwater Management Study/Pre-Design			
Responsible Agency	El Dorado County Water Agency and El Dorado County- Community Development Services			
Partner Agency (ies)	El Dorado Irrigation District, El Dorado County Department of Environmental Management, American River Conservancy			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA		Dry Year: NA	
Estimated Cost	Capital: \$50,000			
Unit Cost	NA			
Site Coordinates	Latitude: 38.615906° Longitude: -120.73249°			
			-	

Description

Outingdale is a small, private community located adjacent to the Middle Fork Cosumnes River. The community is identified as part of the DWR DAC Block Group. Because Outingdale is located adjacent to an affluent winery area, it currently is not identified in the DWR disadvantaged community group. However, it will be separately documented in the upcoming Mountain Counties DAC Study.

Outingdale is comprised of smaller lots located on a slope that drains directly to the river. The community was originally designed as a resort in the 1920/30's. Some of the septic systems have failed over time, leading to human waste draining directly to the river, exacerbated by storm water runoff. Marijuana cultivation is also present, with accompanying irrigation drainage. Finally, the community roads were graded without the benefit of engineered drainage. Erosion occurs with high runoff velocities. Sediment and road runoff drain directly to the river. The river is the source of drinking water for the community.

This project proposes an engineering study/pre-design as a first step, to quantitatively define the storm water runoff management challenges, conduct outreach, and develop solutions, including accompanying cost estimates and potential funding sources.

Potential scope of work for study

To advise local officials of stormwater management issues by preparing Outingdale Stormwater Management Study/Pre-Design for public distribution

To develop a summary of stormwater regulations and programs, including program elements, goals, policies, costs, future program visions, and existing outreach, education and technical assistance programs

To identify opportunities for improvement in existing stormwater management programs through analysis of program redundancies and overlaps, consistency, conflicting goals or processes, gaps and barriers to implementation, timing/sequencing and opportunities for increased efficiency and effectiveness

To develop a communication plan to provide concise information about Outingdale stormwater management issues and the study to interested stakeholders, and to develop a training program to promote stormwater awareness among implementing agencies, stakeholders, and citizens.

To develop stormwater management solutions that include proper selection, design, construction, inspection and maintenance of structural and non-structural best management practice.

To develop a cost-benefit analysis that considers the cost of implementing best management practices as well as environmental, social, and public health outcomes of alternative management approaches

To develop a finance plan to establish study priorities, identify funding options, evaluate funding options and develop a plan to pursue the most promising funding sources.

Component

Stormwater Management

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Potential Challenges

Outingdale has a community association, but is not a community services district. It lacks resources to engage professional resources to solve community challenges.

Outreach will be required to work with residents for effective solutions.

Conceptual GIS Map of Site

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Purpose(s)				Key Stakeholders			
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system Increase climate resilience</li> <li>Increase community awareness for sustainable water</li> </ul>			El Dorado County Water Agency and El Dorado County- Community Development Services, El Dorado Irrigation District, El Dorado County Department of Environmental Management, American River Conservancy, and Outingdale residents				
Stage of Development							
Conceptual	⊠ Planning		□ Pre-Design				
□ Design	□ Co	nstruction	□ Other				
Expected Project Timeline	Begin: 20	Begin: 2019, End: 2020					
Project Triggers	The project is consistent with DWR stormwater resource objectives, particularly with respect to disadvantaged communities and implementing projects with multi- benefits. Funding						
Potentially Applicable Federal and State Programs for Technical and Financial Assistance							
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)							
Stormwater Multi-Benefits (per SWRP Guidelines Table 4):							
Primary Opportunity (hi	ighlight ap	plicable cells and provide	justificatio	n below table)			
Benefit Category Water Quality while contributing to compliance with applicable permit and/or TMDL requirements Water Supply through groundwater		Iain Benefit         ncreased filtration and/or         reatment of runoff         Nater supply reliability         Conjunctive use		Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation			
management and/or runoff capture and use				Deduced coniteres over			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		overflows			
Environmental		Environmental and habit protection and improvem including: -Wetland enhancement/ -Riparian enhancement; -Instream flow improvem Increased urban green s	at ient creation; and/or ient pace	Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements			
Community		Employment opportunitie provided Public education	es	Community involvement           Enhance and/or create           recreational and public use areas			

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Effective stormwater management will decrease the sediment, human waste, and pollution inputs that currently reach the Middle Fork Cosumnes River. Consequently, this will improve water quality and provide environmental benefits. Improved water quality will provide a community benefit of fewer pollutants entering the source of the community's drinking water. This project will generate employment opportunities when the study is undertaken, will provide an opportunity to engage the community and provide information and knowledge on why effective stormwater management practices are needed in the community.

Project Included in IRWM:	$\Box$ Yes, which one $\boxtimes$ No, explainWill be included in the next call for projects by the CABY IRWMP
Project Benefits a DAC/EDA: <sup>1</sup>	⊠ Yes, which one <u>Outingdale</u> □ No
CEQA Compliance:	□ Yes, explain

Contact Person(s):

Elena DeLacy, ARC Stewardship Manager, elena@arconservancy.org, 30-621-1224

Melinda Frost-Hurzel, ARC Cosumnes River Monitoring Coordinator, melinda@cosumnescoalition.org

Dana Strahan, Drinking Water Manager, EID, <u>dstrahan@eid.org</u>

Brian Mueller, Engineering Director, EID, <u>BMUELLER@eid.org</u>

Barbara Houghton, El Dorado County Environmental Management, barbara.houghton@edcgov.us

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

DAC = Disadvantaged Communities

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

Appendix B Project Description Forms March 2018

## B.4.35 338 Stormwater Detention Basin- Hangtown Creek Flood Damage Reduction Project

Project/Program Name	Stormwater Detention Basin- Hangtown Creek Flood Damage Reduction Project							
Responsible Agency	City of Placerville							
Partner Agency (ies)	El Dorado County Water Agency							
Net Yield	Normal Year: 451AF/y Wet		′ear: 619 AF/y	Dry Year: 316 AF/y				
Estimated Cost	Capital: \$948,865							
Unit Cost	NA							
Site Coordinates (Approximate)	Latitude: 38.737947°		Longitude: -120.785611°					
Description								
Description The proposed project is the construction of a storm water detention basin that was identified in the Hangtown Creek Comprehensive Watershed Plan (March 2012) for reducing peak flows in Hangtown Creek. The project's primary goal is to reduce flooding impacts on Hangtown Creek and the downtown Placerville corridor This project is important because it will actively reduce floods and reduce associated property damage within the Hangtown Creek watershed, specifically through the City of Placerville's downtown corridor. Floods will be reduced by constructing an upstream detention pond that will help to prevent future creek channel overtopping and bank erosion, while promoting community involvement, education, and urban riparian habitat stewardship. The City of Placerville lies almost entirely within the Hangtown Creek watershed. Downtown Placerville straddles Hangtown Creek with significant portions of the creek located under parking lots and buildings. Significant flood risk exists in the watershed, especially along channelized segments of the Hangtown Creek stream corridor. Due to the proximity of some structures to the channel, there has been significant flood damage from major storm events. By undergoing this project, it will restore and enhance urban creek channels through effective and efficient flood damage reduction approaches that will preserve, restore, and enhance natural environmental values to local communities. The Placerville downtown corridor is located within a rich Historical and natural setting revolving around Hangtown Creek, By improving the hydrology and habitat of Hangtown Creek, thus improving the aesthetic values, the project is benefiting the community as well as the businesses that rely on tourists who visit downtown. This project is a crucial step to enhancing public safety, protecting property, and improving functions of Hangtown Creek, increasing local wetland habitat and promoting community involvement. Currently, the parcel of where the retention basin is to be built is own								
Component								
Stormwater Management								
Potential Challenges								
Funding								
Conceptual GIS Map of Site								
The proposed basin will be located in between Morrene Drive and Hawks Landing Court in Placerville, CA								

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Purpose(s)		Key Stak	eholders	
□ Improve in-stream water quality			City of P	lacerville
☑ Improve health of local watersheds			El Dorad	o County Water Agency
□ Improve local water supply	/ reliability			
Implement & monitor a reli	able storm	water system		
Increase climate resilience	)			
□ Increase community aware	eness for su	ustainable water		
Stage of Development				
Conceptual	⊠ Plai	nning	□ Pre-De	sign
□ Design	□ Cor	struction	□ Other	
Expected Project Timeline	Begin: 20	19, End: 2019		
Project Triggers	Funding			
	Flood Eve	ent		
	Water qua	ality degradation in Hang	town Creel	K
Potentially Applicable Federa	al and State	Programs for Technical	and Finand	cial Assistance
California Environmental Pro	tection Age	ncy - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant
Program	n Agency (	FPA) - Wetlands Program	n Developr	ment Grants (WPDGs)
	in rigency (			
Stormwater Multi-Benefits (pe	er SWRP G	uidelines Table 4):		
Primary Opportunity (h	ighlight app	licable cells and provide	justificatio	n below table)
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and	/or	Nonpoint source pollution control
while contributing to comp with applicable permit an	pilance d/or	treatment of runoff		drainage and treatment
TMDL requirements				
Water Supply	nacement	Water supply reliability		Water conservation
and/or runoff capture and	luse			
Flood Management		Decrease flood risk by reducing runoff rate and/or volume		Reduced sanitary sewer overflows
Environmental		Environmental and hab	itat	Reduced energy use, GHG
		including:	ment	sink
		-Wetland		Reestablishment of the natural
		enhancement/creation; -Riparian enhancemen	t and/or	hydrograph
		-Instream flow improve	ment	
		Increased urban green	space	Water temperature improvements
Community		Employment opportunit	ies	Community involvement
		Public education		Enhance and/or create
				recreational and public use areas

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The proposed project will delay and reduce peak runoff from Randolph Canyon and thereby decrease the flow rate and magnitude into Hangtown Creek during storm events. By decreasing the flow rates, delaying the peak flow, and reducing the peak magnitude of flows from Randolph Canyon, the likelihood of flood damage occurring downstream will substantially decrease. In addition, the creation of the detention basin will help improve water quality in Hangtown Creek by allowing some particulate matter to settle out of the water before it makes its way into the creek. Furthermore, the creation of new urban wetland habitat will improve wildlife habitat and community aesthetics by ensuring permanent open space designation of this residential-zoned land. The construction of the project will benefit the community by creating jobs and awareness/education on the importance, yet current degraded conditions of Hangtown Creek.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA:1	□ Yes, which one	⊠ No	
CEQA Compliance:	□ Yes, explain	⊠ No, explain <u>Anticipated</u>	
Contact Person(s):			
Pierre Rivas, Director-Development Services Department, privas@cityofplacerville.org, (530) 642-5252			
Key References:			

Hangtown Creek Comprehensive Watershed Plan

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### **B.4.36 339 Facility Upgrades for the El Dorado Disposal MRF**

Project/Program Name	Facility Upgrades for the El Dorado Disposal MRF			
Responsible Agency	El Dorado County Department of Environmental Management			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA	Wet Year	: NA	Dry Year: NA
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature of	of project.
Unit Cost	NA			
Site Coordinates	Latitude: 38.703741°		Longitude: -120.813	501°
Description	-		-	
Much of this facility's materials processing areas are not under cover. Upgrades to the MRF will included covering and enclosing all materials processing and waste storage areas and existing stormwater basins will be reconfigured to enhance stormwater discharge control. In undergoing this project, a rooftop rainwater capture system for non-potable water use would be added. The rainwater that is captured may be used for dust control or for landscape water.				
Component				
Stormwater Management	Stormwater Management			
Potential Challenges				
Funding Timing				
Conceptual GIS Map of Site				

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Purpose(s)		Key Stakeholders			
☑ Improve in-stream water quality		El Dorado	County Department of Environmental		
Improve health of local watersheds		Manageme	ent, and El Dorado Disposal MRF		
Improve local water supply	reliability				
□ Implement & monitor a reli	able storm	water system			
Increase climate resilience	•				
Increase community aware	eness for s	sustainable water			
Stage of Development					
⊠ Conceptual	⊠ Pla	anning	🗆 Pre-Desig	gn	
□ Design	□ Co	onstruction	□ Other		
Expected Project Timeline	Begin: 20	019, End: 2019			
Project Triggers	Funding				
Potentially Applicable Federa	al and State	e Programs for Technical a	and Financia	Il Assistance	
California Environmental Pro Program California Environmental Pro State Revolving Fund Progra	tection Age tection Age im (CWSR	ency - State Water Resour ency - State Water Resour F)	rces Control rces Control	Board (SWRCB) - Stormwater Grant Board (SWRCB) - Clean Water	
Stormwater Multi-Benefits (pe	er SWRP (	Guidelines Table 4):			
Primary Opportunity (h	ighlight ap	plicable cells and provide	justification I	below table)	
Benefit Category		Main Benefit		Additional Benefit	
Water Quality		Increased filtration and/o	r treatment	Nonpoint source pollution	
while contributing to comp with applicable permit and	pliance d/or	of runoff		control	
TMDL requirements	u/01			drainage and treatment	
Water Supply through groundwater management and/or runo capture and use	off	Water supply reliability Conjunctive use		Water conservation	
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows	
Environmental		Environmental and habita protection and improvem including:	at Jent	Reduced energy use, GHG emission, or provides a carbon sink	
		-Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph	
		Increased urban green s	pace	Water temperature improvements	
Community		Employment opportunitie Public education	es provided	Community involvement Enhance and/or create recreational and public use areas	

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Under this project nonpoint source pollution will be reduced as the upgrades done to the facility will contain and prevent constituents from discharging into the local environment. If the project includes the capture of rainwater and the use of it on site, the project would also help improve water supply reliability at a local scale, which will help towards water conservation efforts. This project will generate short term employment opportunities during the construction phase and will involve the community.				
Project Included in IRWM:	□ Yes, which one			
	⊠ No, explain project is in conceptual stage, not added to IRWM currently			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one_Project found in 2010-2014 DAC Tracts as identified by the CA Department of Water Resources</li> <li>No</li> </ul>			
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet			
Contact Person(s):				
Amy Velasco, County of El Dorado, Community Development Services, Environmental Management Department, Supervising Environmental Health Specialist, <u>amy.velasco@edcgov.us</u> , (530) 621-6665				
Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905				
Key References:				
El Dorado Disposal Franchise Waste Services Agreement between the County of El Dorado and El Dorado				
El Dorado County Solid Waste Management Plan				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### **B.4.37 340 Union Mine Landfill Retention Pond**

Project/Program Name	Union Mine Landfill Retention Pond			
Responsible Agency	El Dorado County Department of Environmental Management			
Partner Agency (ies)	NA	ΝΑ		
Net Yield	Normal Year: 140 AF/y Wet Year: 193 AF/y Dry Year: 97 AF/y			
Estimated Cost	Capital: Cost not calculated	due 1	to conceptual nature	of project.
Unit Cost	NA			
Site Coordinates	Latitude: 38.647599	Latitude: 38.647599 Longitude: -120.827110°		
Description				
The Union Mine Landfill has a series of retention ponds used to manage stormwater runoff, prevent flooding, prevent erosion, and improve water quality. After a storm event, a retention pond was breached. Under this project the retention pond will be rebuilt.				
Component				
Stormwater Management				
Potential Challenges				
Funding				
Conceptual GIS Map of Site				

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Purpose(s)		Key Stakeholders		
<ul><li>Improve in-stream water quality</li><li>Improve health of local watersheds</li></ul>		El Dorado Manageme	County Department of Environmental ent	
☐ Improve local water supply	reliability	'		
	able storn	nwater system		
	ness for s	sustainable water	ļ	
Stage of Development				
Conceptual	🗆 Pl	anning	🗆 Pre-Desi	gn
□ Design		onstruction	⊠ Other	
Expected Project Timeline	Begin: 2	019, End: 2019		
Project Triggers	Funding			
Potentially Applicable Federa	l and Stat	te Programs for Technical	and Financia	Il Assistance
California Environmental Prot Program California Environmental Prot State Revolving Fund Program	ection Ag ection Ag m (CWSF	jency - State Water Resou jency - State Water Resou RF)	rces Control rces Control	Board (SWRCB) - Stormwater Grant Board (SWRCB) - Clean Water
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (hi	ghlight ap	oplicable cells and provide	justification I	below table)
Benefit Category Main Benefit			-	Additional Benefit
Water Quality while contributing to compliance		Increased filtration and/or treatment of runoff		Nonpoint source pollution control
with applicable permit and	l/or			Reestablished natural water
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo	ff	Conjunctive use		
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habita protection and improvem including: -Wetland enhancement/c -Riparian enhancement; -Instream flow improvem	at lient creation; and/or lient	Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie Public education	es provided	Community involvement Enhance and/or create recreational and public use areas

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Under this project the flood risk will be decreased once the retention pond is reconstructed. Additionally, the retention basin will increase filtration and or treatment of runoff. In reconstructing the retention basin, there will be employment opportunities available, the community will be involved and then there will be a public education component. Project Included in IRWM: □ Yes, which one\_ ⊠ No, explain project is not added to IRWM currently\_\_\_\_ Project Benefits a DAC/EDA:1 **CEQA** Compliance: □ Yes. explain ⊠ No, explain CEQA has not been completed Contact Person(s): Rob Brillisour, Disposal Site Supervisor, rob.brillisour@edcgov.us, (530) 295-0429 Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905 Key References: NA Supplemental Information (e.g., Project Webpage or equivalent): NA <sup>1</sup>DAC = Disadvantaged Communities

DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### B.4.38 341 BMP for Agricultural Erosion and Sediment Control Manual

Project/Program Name	Best Management Practices for Agricultural Erosion and Sediment Control Manual				
Responsible Agency	El Dorado County- C	El Dorado County- Community Development Services			
Partner Agency (ies)	NA				
Net Yield	Normal Year: NA	ear: NA Wet Year: NA		Dry Year: NA	
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates (Approximate)	Latitude: 38.727779° (El Dorado County- Community Development Services)		Longitude: -120.829 Community Develop	955° (El Dorado County- oment Services)	

#### Description

This project involves creating a Best Management Practices (BMP) Manual for the Western Slope of El Dorado County that relates towards promoting sustainable and environmentally conscious agricultural practices that will improve the regional water quality. In creating the manual the County will contribute towards improving the water quality in the area in addition to meeting MS4 Compliance. The BMP Manual will be used in the agricultural areas of El Dorado County where local officials, contractors and developers will have access to it and see an array of ecologically based stormwater treatment technologies that they may use on rural and agricultural lands, which may include practices that help reduce the runoff of pesticides into regional water supplies. The goal of the BMP Manual will be to provide the minimum requirements to control water quality from accelerated erosion and sedimentation that result from agricultural activities. The BMP will promote the use of the following drainage features: pipes with inlets, water bars, grass swales, and perforated pipes.

Component

Stormwater Management

**Potential Challenges** 

Funding

Conceptual GIS Map of Site

No available map

Purpose(s)	Key Stakeholders	
⊠ Improve in-stream water quality	El Dorado County- Community	
Improve health of local watersheds	Development Services	
☑ Improve local water supply reliability		
☑ Implement & monitor a reliable stormwater system		
□ Increase climate resilience		
oxtimes Increase community awareness for sustainable water		
Stage of Development		

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⊠ Conceptual □ Design	Planning     Construction	Pre-Design Other			
Expected Project Timeline	Begin: 2019, End: 2019				
Project Triggers	Funding				
Potentially Applicable Federal and	Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Environmental Protection Agency (EPA) - Clean Water State Revolving Fund (CWSRF)					
Stormwater Multi-Benefits (per SW	RP Guidelines Table 4):				
Primary Opportunity (highligh	nt applicable cells and provide justific	ation below table)			
Benefit Category	Main Benefit	Additional Benefit			
Water Quality	Increased filtration and/or	Nonpoint source pollution control			
while contributing to compliance with applicable permit and/or TMDL requirements	e treatment of runoff	Reestablished natural water drainage and treatment			
Water Supply	Water supply reliability	Water conservation			
through groundwater management and/or runoff capture and use	Conjunctive use				
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	g Reduced sanitary sewer overflows			
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
	-Wetland enhancement/creation	n; Reestablishment of the natural			
	-Riparian enhancement; and/or	hydrograph			
		Water temperature improvements			
Community	Employment opportunities provided	Community involvement			
	Public education	Enhance and/or create recreational and public use areas			
The Best Management Practices (BMP) Manual will include several BMPs for the community to reference to prevent accelerated erosion and sedimentation. The items that will be contained in the manual will help improve water quality. The creation of this manual will engage the community in the county of El Dorado to learn and apply the BMPs listed in agricultural and rural land. The development of the BMP Manual will create short term employment opportunities.					

Project Included in IRWM:	□ Yes, which one
	☑ No, explain project is in conceptual stage, not added to IRWM currently

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Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one_ <u>Manual will benefit DACs and EDAs</u> □ No		
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in</u> conceptual stage, no environmental documentation is completed yet		
Contact Person(s):			
Brendan Ferry, El Dorado County Princ	ipal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905		
Key References:			
Proposed Manual would look like the re	ferenced source:		
http://sonomacounty.ca.gov/uploadedFiles/Sonoma_County_Portal/Agriculture, Weights_and_Measures/Divisions _and_Sections/Agriculture_Division/Ordinances/Apiary/_Documents/bmp_handbook3.pdf			
Supplemental Information (e.g., Project	Webpage or equivalent):		
NA			

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### B.4.39 342 Culvert Rehabilitation along Highway 50 near Cameron Park and Shingle Springs

Project/Program Name	Culvert Rehabilitation along Highway 50 near Cameron Park and Shingle Springs					
Responsible Agency	California Departmen	t of Transp	ortation			
Partner Agency (ies)	Cameron Park and S	hingle Sprii	ngs			
Net Yield	Normal Year: NA	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature	of project.		
Unit Cost	NA					
Site Coordinates	Latitude: Starting location         Longitude: Starting location -121.056949           38.657476°			location -121.056949		
Description	-		-			
This project is a culvert rehabilitation project that involves 28 culverts that need to be relined and/or replaced. This project will occur in and near Cameron Park and Shingle Springs, from east of Silva Valley Parkway to the west of EI Dorado Road.						
Component						
Stormwater Management						
Potential Challenges						
Climatological predictions may affect the sizing or effectiveness of this project.						
Conceptual GIS Map of Site						

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#### Appendix B Project Description Forms March 2018

Purpose(s)			Key Stakeholders	
☑ Improve in-stream water quality			California Department of Transportation,	
☑ Improve health of local watersheds				Park, Shingle Springs
□ Improve local water supply	reliability			
Implement & monitor a relia	able storm	nwater system		
□ Increase climate resilience				
Increase community aware	ness for s	sustainable water		
Stage of Development				
Conceptual	⊠ Pla	anning	Pre-De	sign
□ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	022, End: 2023		
Project Triggers	Serious	flooding events along high	way 50 an	d the surrounding areas
Potentially Applicable Federa	l and Stat	e Programs for Technical	and Finand	cial Assistance
California Environmental Prot Program	ection Ag	ency - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP (	Guidelines Table 4):		
Primary Opportunity				
Benefit Category		Main Benefit		Additional Benefit
Water Quality		Increased filtration and/o	r	Nonpoint source pollution control
while contributing to compliance with applicable permit and/or TMDL requirements		treatment of runoff		Reestablished natural water drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runoff capture and use		Conjunctive use		
Flood Management				
		Decrease flood risk by re runoff rate and/or volume	ducing	Reduced sanitary sewer overflows
Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including:	educing e at ent	Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink
Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	educing at ent creation; and/or ent	Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph
Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement; -Instream flow improvem Increased urban green s	educing at ent creation; and/or ent pace	Reduced sanitary sewer overflowsReduced energy use, GHG emission, or provides a carbon sinkReestablishment of the natural hydrographWater temperature improvements
Environmental		Decrease flood risk by re runoff rate and/or volume Environmental and habit protection and improvem including: -Wetland enhancement/ -Riparian enhancement; -Instream flow improvem Increased urban green s Employment opportunitie provided	educing at ent creation; and/or ent pace ss	Reduced sanitary sewer overflowsReduced energy use, GHG emission, or provides a carbon sinkReestablishment of the natural hydrographWater temperature improvementsCommunity involvement

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The replacement and the relining of the various culverts along Highway 50 will improve the water quality of the area in a local scale and ultimately improve habitat and watershed conditions. Replacing the culverts will decrease the flood risk in the county and will reduce the rates of erosion. The proposed project will provide job opportunities since people will be needed to replace the culverts. In replacing the culverts, the natural hydrograph of some water bodies will be reestablished. Project Included in IRWM: □ Yes, which one\_ No, explain project is in conceptual stage, not added to IRWM currently\_\_\_ Project Benefits a DAC/EDA:1 □ Yes, which one\_ ⊠ No\_ **CEQA** Compliance: Yes, explain\_\_\_This will be completed\_ No, explain Contact Person(s): Clark Peri, Project Manager Caltrans District 3, clark.peri@dot.ca.gov, (916) 825-8168 Key References: NA Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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## **B.4.40 343 Culvert Rehabilitation along Highway 50 near the City of Placerville**

Project/Program Name	Culvert Rehabilitation along Highway 50 near the City of Placerville					
Responsible Agency	California Departmen	t of Transportat	ion			
Partner Agency (ies)	City of Placerville					
Net Yield	Normal Year: NA	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: Cost not calc	culated due to co	onceptual nature	of project.		
Unit Cost	NA					
Site Coordinates (Approximate)	Latitude: Starting Location Longitude: Starting Location -120.856004 38.705360°			ting Location -120.856004		
Description						
This project is a culvert rehabilitation project that involves 36 culverts that need to be relined and/or replaced. This project will occur in and near Placerville, specifically from the west of El Dorado Road to west of Schnell School Road.						
Component						
Stormwater Management						
Potential Challenges						
Climatological predictions may affect the sizing or effectiveness of this project.						
Conceptual GIS Map of Site						

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Purpose(s)		Key Stakeholders			
☑ Improve in-stream water quality	1	California Department of Transportation, City of			
☑ Improve health of local watersh	eds	Placerville			
□ Improve local water supply relia	ability				
□ Implement & monitor a reliable	stormwater system				
□ Increase climate resilience					
□ Increase community awareness	s for sustainable water				
Stage of Development					
Conceptual	⊠ Planning	Pre-Design			
□ Design		□ Other			
Notes on Stage of Development					
Expected Project Timeline Beg	gin: 2021, End: 2022				
Project Triggers Ser	rious flooding events along high	way 50 and the surrounding areas			
Potentially Applicable Federal and	d State Programs for Technical	and Financial Assistance			
California Environmental Protectio Program	on Agency - State Water Resour	rces Control Board (SWRCB) - Stormwater Grant			
Stormwater Multi-Benefits (per SV	VRP Guidelines Table 4):				
Primary Opportunity					
Benefit Category	Main Benefit	Additional Benefit			
Water Quality	Increased filtration and/o	r Nonpoint source pollution control			
while contributing to complian	ce treatment of runoff	Reestablished natural water			
TMDL requirements		urainage and treatment			
Water Supply	Water supply reliability	Water conservation			
through groundwater	Conjunctive use				
capture and use					
Flood Management	Decrease flood risk by re runoff rate and/or volume	Reduced sanitary sewer			
Environmental	Environmental and habita	at Reduced energy use, GHG			
	protection and improvem	ent emission, or provides a carbon			
	-Wetland enhancement/c	creation: Reestablishment of the natural			
	-Riparian enhancement;	and/or hydrograph			
	-Instream flow improvem	ent Water temperature improvements			
Community	Employment opportunitie	s Community involvement			
· · · · · · · · · · · · · · · · · · ·	provided				
	Public education	Enhance and/or create			
The replacement and the religing	of the various culverts along Hig	hway 50 will improve the water quality of the area			

The replacement and the relining of the various culverts along Highway 50 will improve the water quality of the area in a local scale and ultimately improve habitat and watershed conditions. Replacing the culverts will decrease the

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flood risk in the county and will reduce the rates of erosion. The proposed project will provide job opportunities since people will be needed to replace the culverts. In replacing the culverts, the natural hydrograph of some water bodies will be reestablished.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>				
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one Project found under the 2010-2014 DAC Places as identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>				
CEQA Compliance:	<ul> <li>☑ Yes, explain<u>This will be completed</u></li> <li>□ No, explain</li> </ul>				
Contact Person(s):	•				
Clark Peri, Project Manager Cal	trans District 3, clark.peri@dot.ca.gov, (916) 825-8168				
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					
$^{1}DAC - Disadvantaged Communities$					

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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## **B.4.41 345 Cameron Park Drainage Improvements**

Project/Program Name	Cameron Park Drainage Improvements			
Responsible Agency	El Dorado County- Co	ommunity D	evelopment Services	
Partner Agency (ies)	Cameron Park			
Net Yield	Normal Year: NA	Wet Year	NA	Dry Year: NA
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature of	of project.
Unit Cost	NA			
Site Coordinates (Approximate)	Latitude: 38.667965°		Longitude: -120.987	758°
Description				
for drainage. The drainage improvements that will be done include adding culverts, replacing culverts, adding ditches, cleaning out current ditches, cleaning up the local streams and creeks used for drainage, and adding storm sewers and drains to areas that experience critical flooding. Bank stabilization will also occur on the creeks and tributaries found in Cameron Park. Cameron Park experiences sheet flow and drains directly to the local creeks that are not maintained. Ideally, 401 and 404 permits should be obtained for drainage maintenance throughout Cameron Park to assure that drainages are maintained pursuant to jurisdictional requirements to allow water to be conveyed at full capacities without impairing the local water supplies. Ultimately, the project goal is to improve the infrastructure, clean up the creeks that are used for drainage, and create a drainage study that identifies the critical drainage points in Cameron Park that need improvements and need to be maintained. This project will also take advantage of the wetlands found in Cameron Park to treat, capture and infiltrate stormwater runoff. If possible, low impact development (LID) approaches will be applied for this project.				
Component				
Stormwater Management				
Potential Challenges				
Funding				
Conceptual GIS Map of Site				

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Purpose(s)			Key Stakeholders	
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> </ul>			El Dorado Services, C Community	County- Community Development Cameron Park, and El Dorado Hills y Services District
Increase community aware	eness for s	sustainable water		
Stage of Development				
⊠ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	gn
□ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin: 2	019, End: 2021		
Project Triggers	Project Triggers Funding Extreme Flood Event Water Quality Degradation			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	al Assistance
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ap	pplicable cells and provide	justification I	below table)
Benefit Category Water Quality while contributing to compliance with applicable permit and/or TMDL requirements		Main Benefit Increased filtration and/or treatment of runoff		Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment
Water Supply through groundwater management and/or runoff capture and use		Water supply reliability Conjunctive use		Water conservation
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habit protection and improvem including: -Wetland enhancement/o -Riparian enhancement;	at ient creation; and/or	Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph
		-Instream flow improvem Increased urban green s	ent pace	Water temperature
Community		Employment opportunitie Public education	es provided	Improvements         Community involvement         Enhance and/or create         recreational and public use         areas

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The proposed project is aimed to improve the drainage in Cameron Park. In doing this project the non-point source pollution will be reduced, the risk of flooding will be reduced, the filtration and treatment of stormwater runoff will be incorporated throughout the community, the natural drainage and treatment of stormwater runoff will be reestablished (Ex. with the use of wetlands), the natural hydrograph of the local water bodies will be reestablished (by cleaning up the creeks), and the local environment and habitats will be enhanced. This project will generate job opportunities to complete the work that is to be done. By using wetlands in this project, the reduction of floods and improved water quality in the area will be significantly accomplished. Project Included in IRWM: □ Yes, which one\_ No, explain project is in conceptual stage, not added to IRWM currently Project Benefits a DAC/EDA:1 □ Yes, which one\_\_⊠ No\_ **CEQA** Compliance: Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet Contact Person(s): Dave Spiegelberg, El Dorado County Department of Transportation, dave.spiegelberg@edcgov.us, (530) 621-6077 Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905 Key References: NA Supplemental Information (e.g., Project Webpage or equivalent): NA <sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### **B.4.42 346 Priority County Culvert Replacements**

Project/Program Name	Priority County Culvert Replacements				
Responsible Agency	El Dorado County Department of Transportation				
Partner Agency (ies)	City of Placerville, California Department of Transportation				
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA				
Estimated Cost	Capital: Cost not cald	culated due	to conceptual nature	of project.	
Unit Cost	NA				
Site Coordinates	Latitude: 38.727779° (El Longitude: -120.829955° (El Dorado County Department of Transportation)				
Description					
This project involves the repl to fail or require upsizing for county.	acement of several cu flood reduction. Culv	ulverts throu ert replacer	ghout the County of E nent is essential to re	El Dorado that have the potential educe flood risks throughout the	
Component					
Stormwater Management					
Potential Challenges					
Funding Climatological predictions may affect the sizing or effectiveness of this project.					
Conceptual GIS Map of Site	Conceptual GIS Map of Site				
No available map					
Purpose(s)			Key Stakeholder	rs	
Improve in-stream water of	uality		El Dorado Coun	El Dorado County Department of	
Improve health of local wa	tersheds		I ransportation, California Depar	City of Placerville, and the transportation	
□ Improve local water supply	y reliability				
□ Implement & monitor a reliable stormwater system					
Increase climate resilience					
□ Increase community awareness for sustainable water					
Stage of Development					
⊠ Conceptual	□ Planning		Pre-Design		
🗆 Design	□ Construction		□ Other		
Expected Project Timeline	Begin: 2019, End: 2	2020			

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Project Triggers	Serious flooding events					
Potentially Applicable Federal and State Programs for Technical and Financial Assistance						
California Environmental Prot Program	ection Ag	ency - State Water Resources Control	Board (SWRCB) - Stormwater Grant			
Stormwater Multi-Benefits (pe	r SWRP	Guidelines Table 4):				
Primary Opportunity (hi	ghlight a	oplicable cells and provide justification	below table)			
Benefit Category		Main Benefit	Additional Benefit			
Water Quality while contributing to comp	liance	Increased filtration and/or treatment of runoff	Nonpoint source pollution control			
with applicable permit and TMDL requirements	l/or		Reestablished natural water drainage and treatment			
Water Supply		Water supply reliability	Water conservation			
through groundwater management and/or runol capture and use	ff	Conjunctive use				
Flood Management		Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows			
Environmental		Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink			
		-Wetland enhancement/creation; -Riparian enhancement; and/or	Reestablishment of the natural hydrograph			
		Increased urban green space	Water temperature			
Community		Employment opportunities provided	Community involvement			
		Public education	Enhance and/or create recreational and public use areas			
The replacement of the various culverts throughout the County will improve the water quality of the area in a regional scale and ultimately improve habitat and watershed conditions. As a result non-point source pollution will be reduced. In addition, replacing the culverts will decrease the flood risk in the county and will reduce the rates of erosion. The proposed project will provide job opportunities since people will be needed to replace the culverts. In replacing the culverts, the natural hydrograph of some water bodies will be reestablished. This project will also contain a public education component and will involve the community.						
Project Included in IRWM:	□ Ye	es, which one				
	⊠ No	o, explain <u>project is in conceptual stage</u>	e, not added to IRWM currently			
Project Benefits a DAC/EDA:1	⊠ Ye □ No	es, which one <u>County-wide project the</u>	nat will benefit DACs and EDAs			
CEQA Compliance:						

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Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### **B.4.43 347 Sly Park Portal Subdivision Flood Management Project**

Project/Program Name	Sly Park Portal Subdivision Flood Management Project				
Responsible Agency	El Dorado County- Comm	El Dorado County- Community Development Services			
Partner Agency (ies)	California Department of Transportation				
Net Yield	Normal Year: 897 AF/y Wet Year: 1,231 AF/y Dry Year: 628 AF/y				
Estimated Cost	Capital: Cost not calculated due to conceptual nature of project.				
Unit Cost	NA				
Site Coordinates	Latitude: 38.757440° Longitude: -120.576626°				

Description

In the community of Pollock Pines, Sly Park Portal Subdivision has no gutters and curbs, and as a result it experiences occasional flooding. Overall, this project aims to improve the infrastructure in the area to reduce the flood risk that residents experience. Flood risk will be reduced in the community by cleaning out several existing ditches and cross drainage culverts. Some areas will have the addition of storm sewers and drains to mitigate flood risk. Under this project there is an opportunity to retrofit up-gradient County and Caltrans infrastructure to reduce the amount of water flowing through the subdivision. These retrofits would include impervious area disconnection and infiltration/treatment. If possible, low impact development (LID) approaches will be applied for this project.

Component

Stormwater Management

**Potential Challenges** 

Funding

Climatological predictions may affect the sizing or effectiveness of this project.

Conceptual GIS Map of Site

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Purpose(s)			Key Stakeholders	
<ul> <li>☑ Improve in-stream water quality</li> <li>☑ Improve health of local watersheds</li> </ul>			El Dorado Services ar Transporta	County- Community Development nd California Department of tion
Improve local water supply Implement & monitor a relia	reliability	water system		
		iwater system		
□ Increase community awarer	ness for s	sustainable water		
Stage of Development			Į	
☑ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	ŋn
□ Design	□ Co	Instruction	□ Other	
Expected Project Timeline	Begin: 2	019, End: 2020		
Project Triggers	Serious Sewer of	flooding events r drainage failures		
Potentially Applicable Federal	and Stat	e Programs for Technical	and Financia	I Assistance
California Environmental Prote Program	ection Ag	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	rSWRP	Guidelines Table 4):		
Primary Opportunity (hi	ahliaht ar	policable cells and provide	iustification b	pelow table)
Benefit Category		Main Benefit	,	Additional Benefit
Water Quality while contributing to comp	oliance	Increased filtration and/o	r treatment	Nonpoint source pollution control
with applicable permit and	l/or			Reestablished natural water
Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runof	F	Conjunctive use		
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or		Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunities provided Public education		Community involvement Enhance and/or create recreational and public use areas
This project is a flood management project that will reduce the occurrence of floods in the area. In addressing the flood problems that arise, the occurrence of non-point source pollution will be reduced and opportunities will arise				

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to increase the filtration and treatment of runoff, which will contribute towards improving the local environmental conditions. In addition, the drainage improvements and pipe upgrades that are to be completed will help reduce the possibility of having sanitary sewer overflows. The project will provide short term employment opportunities, will involve the community and will have a public education component.

Project Included in IRWM:	□ Yes, which one ⊠ No, explain <u>project is in conceptual stage, not added to IRWM currently</u>				
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>Yes, which one <u>Project falls under the 2010-2014 DAC Places identified by</u></li> <li>the CA Department of Water Resources</li> <li>No</li> </ul>				
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet				
Contact Person(s):					
Brendan Ferry, El Dorado Coun	ty Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905				
Key References:					
NA					
Supplemental Information (e.g., Project Webpage or equivalent):					
NA					

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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### **B.4.44 348 Fish and Wildlife Routine Maintenance Agreement**

Project/Program Name	Fish and Wildlife Routine Maintenance Agreement					
Responsible Agency	El Dorado County Department of Transportation					
Partner Agency (ies)	U.S. Fish and Wildlife Service					
Net Yield	Normal Year: NA	Wet Year: NA		Dry Year: NA		
Estimated Cost	Capital: \$50,000.00					
Unit Cost	NA					
Site Coordinates	Latitude: 38.727779° (El Dorado County Department of Transportation)		Longitude: -120.829955° (El Dorado County Department of Transportation)			

#### Description

This project is county-wide in which brushing, ditching and infrastructure maintenance will occur in priority maintenance areas that are identified under the CA Fish and Wildlife Jurisdictional area (primarily focused on urban areas susceptible to road, structural flooding, and priority infrastructure locations). The project will include the preparation of necessary documents for the CA Fish and Wildlife Notification of Lake or Streambed Alteration Routine Maintenance Agreement – Attachment D application. This is ultimately a water quality project that can be used for MS4 compliance, flood reduction, and road and drainage infrastructure integrity improvement. Flood reduction will be accomplished by cleaning existing ditches and by cleaning streams and creeks used for drainage. If possible low impact development (LID) approaches will be applied for this project.

Component

Stormwater Management

**Potential Challenges** 

Funding

Climatological predictions may affect the sizing or effectiveness of this project.

Conceptual GIS Map of Site

No available map

Purpose(s)	Key Stakeholders				
<ul> <li>Improve in-stream water quality</li> <li>Improve health of local watersheds</li> <li>Improve local water supply reliability</li> <li>Implement &amp; monitor a reliable stormwater system</li> <li>Increase climate resilience</li> </ul>	El Dorado County Department of Transportation, and U.S. Fish and Wildlife Service				
$\Box$ Increase community awareness for sustainable water					
Stage of Development					

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⊠ Conceptual	□ PI			□ Pre-Design			
	□ Construction □ Other						
Expected Project Timeline	Begin: 2019, End: 2020						
Project Triggers	Water quality degradation Extreme weather conditions Extreme flood event Funding						
Potentially Applicable Federal and State Programs for Technical and Financial Assistance							
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program U.S. Environmental Protection Agency (EPA) - Clean Water State Revolving Fund (CWSRF)							
Stormwater Multi-Benefits (per SWRP Guidelines Table 4):							
Primary Opportunity (highlight applicable cells and provide justification below table)							
Benefit Category		Main Benefit		Additional Benefit			
Water Quality while contributing to compliance with applicable permit and/or TMDL requirements		Increased filtration and/ of runoff	or treatment	Nonpoint source pollution control			
				Reestablished natural water drainage and treatment			
Water Supply		Water supply reliability		Water conservation			
through groundwater management and/or runoff capture and use		Conjunctive use					
Flood Management		Decrease flood risk by r runoff rate and/or volum	educing ie	Reduced sanitary sewer overflows			
Environmental		Environmental and habi protection and improver including:	tat nent	Reduced energy use, GHG emission, or provides a carbon sink			
		-Wetland enhancement -Riparian enhancement -Instream flow improver	/creation; ; and/or nent	Reestablishment of the natural hydrograph			
		Increased urban green	rban green space Water temperature improvements				
Community		Employment opportuniti	es provided	Community involvement			
		Public education		Enhance and/or create recreational and public use areas			
In collaboration with the U.S. Fish and Wildlife Service, the water quality of various areas will be significantly							

In collaboration with the U.S. Fish and Wildlife Service, the water quality of various areas will be significantly improved. With the brushing projects the environment and local habitats will be significantly enhanced. The ditching and infrastructure maintenance proposed will help reduce flood risks. This project also has the potential to create
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opportunities for the pubic to be engaged (volunteer their time to help) or for the project to create job opportunities to do large brushing, ditching and infrastructure maintenance. This project also has a public education component.				
Project Included in IRWM:	□ Yes, which one			
	⊠ No, explain project is in conceptual stage, not added to IRWM currently			
Project Benefits a DAC/EDA:1	☑ Yes, which one <u>County wide project would benefit several areas including</u>			
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in conceptual</u>			
	stage, no environmental documentation is completed yet			
Contact Person(s):				
Brendan Ferry, El Dorado Count	ty Principal Planner, <u>brendan.ferry@edcgov.us</u> , (530) 573-7905			
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

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Appendix B Project Description Forms March 2018

### **B.4.45 349 Cedar Ravine Road Drainage Improvement**

Project/Program Name	Cedar Ravine Road Drainage Improvement				
Responsible Agency	City of Placerville	City of Placerville			
Partner Agency (ies)	Caltrans				
Net Yield	Normal Year:	Wet Year	: NA	Dry Year: NA	
Estimated Cost	Capital: \$2,600,000				
Unit Cost	\$1,000/Linear Feet of 10' x 5' Reinforced Concrete Box, \$2,500/Cubic Yards of 15' x 9' x 1' Cast-Place-Headwall, \$4,000/EA of Drain Inlets, \$46/Linear Feet of Curb and Gutter, \$11/Square Feet of Sidewalk, \$96/Ton of Asphalt Concrete Paving, \$62/Ton of Aggregate Base, \$279/Linear Feet of 10-inch PVC Sewer Main, \$10,000/EA manhole, \$3,400/EA of Sewer Lower Lateral, \$227/Linear Feet of 6-inch Water Main, \$3,220/EA of Water Service				
Site Coordinates	Latitude: 38.724660°		Longitude: -120.793	631°	
Description	-		-		
Some locations of Cedar Ravine have been constricted due to encroachments by private property improvements and trees causing restricting flows and flooding into private properties. There's an existing above ground sewer main located in the flow line of the Cedar Ravine Creek, and water service crossings within the flow area. Residents access driveways by private bridges; many are in poor condition. The top of creek is beginning to encroach and erode the roadway along Cedar Ravine Road. The project proposes to replace the open channel with box culverts which would widen the creek, remove obstructions, and provide necessary capacity for the flow of the channel. The project proposes approximately 800 LF of box culverts. Precast box culverts are manufactured in 12-foot sticks so the project could require 67 boxes. Removal of the sewer main in the channel will create large water quality and environmental benefits through creek restoration and reestablishment of the natural hydrograph. Project also includes a community benefit through building a pedestrian walkway for enhancement of public use .The proposed project will occur on Cedar Ravine Rd, extending from the intersection of Darlington Ave to the intersection of Man St.					
Component					
Stormwater Management					
Potential Challenges	Potential Challenges				
The existing system and proposed improvement is expected to require modeling. Environmental permitting is expected to be required (USACE, F&W, and RSWQB) Extensive public outreach is expected to be necessary. Considerable construction impacts to the public. High Cost					
Conceptual GIS Map of Site					



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Purpose(s)		Key Stakeholders		
□ Improve in-stream water quality			City of P	lacerville, Caltrans
□ Improve health of local watersheds				
□ Improve local water supply	reliability			
Implement & monitor a reli	able storm	water system		
□ Increase climate resilience	)			
□ Increase community aware	eness for su	ustainable water		
Stage of Development				
☑ Conceptual	🗆 Plai	nning	□ Pre-De	sign
🗆 Design	□ Cor	nstruction	□ Other	
Expected Project Timeline	Begin 202	25, End 2032 (8 Years)		
Project Triggers	Funding			
	Flood Eve	ent		
	Water qua	ality degradation in Ceda	r Ravine C	reek
Potentially Applicable Federa	al and State	Programs for Technical	and Finand	cial Assistance
California Environmental Pro	tection Age	ncy - State Water Resou	rces Contr	ol Board (SWRCB) - Stormwater Grant
Program				
Stormwater Multi-Benefits (	per SWRP	Guidelines Table 4):		
Primary Opportunity	(highlight a	pplicable cells and provid	le justificat	ion below table)
Benefit Category	y	Main Benefit		Additional Benefit
Water Quality	r.	Increased filtration and	/or	Nonpoint source pollution control
while contributing to com	pliance d/or			Reestablished natural water
TMDL requirements	u/01			drainage and treatment
Water Supply		Water supply reliability		Water conservation
through groundwater mar	nagement	Conjunctive use		
Elood Management	use	Decrease flood risk by reducing		Reduced senitary sewer
Flood Management		runoff rate and/or volume		overflows
Environmental		Environmental and habitat		Reduced energy use, GHG
		protection and improvement		emission, or provides a carbon
				sink
		-vvetiand		Reestablishment of the natural
		-Riparian enhancement	t: and/or	nydrograph
		-Instream flow improve	ment	
		Increased urban green	space	Water temperature improvements
Community		Employment opportunit provided	ies	Community involvement
		Public education		Enhance and/or create recreational and public use areas
The implementation of this pr	oject will he	elp improve water quality	by reestat	blishing the natural water drainage and
treatment. Additionally, this p	roject will h	elp reduce flood risk, ree	stablish th	e natural hydrograph, provide

employment opportunities and engage the community.

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Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one Project found under the 2012-2014 DAC Places as identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>			
CEQA Compliance:	□ Yes, explain			
	⊠ No, explain _ <u>Project still in conceptual phase</u>			
Contact Person(s):				
Pierre Rivas, Director-Developm Rebecca Neves, City Engineer/F	ent Services Department, <u>privas@cityofplacerville.org</u> , 530-642-5252 PE/QSD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250			
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.4.46 350 Debby Lane/Green Valley Road Culvert Improvement**

Project/Program Name	Debby Lane/Green Valley Road Culvert Improvement			
Responsible Agency	City of Placerville			
Partner Agency (ies)	Caltrans			
Net Yield	Normal Year: NA	Wet Ye	ar: NA	Dry Year: NA
Estimated Cost	Capital: \$84,000			
Unit Cost	\$700/Linear Feet of 5' x 6' Reinforced Concrete Box, \$2,500/Cubic Yards of 6' x 6' x 1' Cast-Place-Headwall, \$4,000/EA of Drain Inlets, \$46/Linear Feet of Curb and Gutter, \$11/Square Feet of Sidewalk, \$75/Linear Feet of Guard Rail, \$96/Ton of Asphalt Concrete Paving, \$62/Ton of Aggregate Base			
Site Coordinates	Latitude: 38.727619°		Longitude: -12	20.838272°
Description				
The existing culvert is beyond its service life, and too narrow to meet current roadway design standards. Settling can also be observed on Green Valley Road at the culvert. The proposed project will remove and replace the culvert, bring existing settling roadway back up to grade, and improve pedestrian access. The existing culvert is a 60-inch corrugated metal pipe, it's poorly built and corroded. The culvert would be replaced with a 5'x6' box culvert.				
Component				
Stormwater Management				
Potential Challenges				
The new culvert could require hydraulic modelling to properly size prior to replacement. Funding source not yet identified.				
Conceptual GIS Map of Site				



Purpose(s)		Key Stake	Key Stakeholders	
□ Improve in-stream water quality			City of Placerville, Caltrans	
Improve health of local wa	tersheds			
□ Improve local water supply	reliability			
Implement & monitor a reli	able stormwater system			
□ Increase climate resilience				
□ Increase community aware	eness for sustainable water			
Stage of Development				
Stage of Development				
☑ Conceptual	Planning	□ Pre-Desi	gn	
□ Design		□ Other		
Expected Project Timeline	Begin 2020, End 2022 (3	Years)		
Project Triggers	Funding			
	Flood Event			
	A frontage improvement	project on Green Valle	ey Road.	
Potentially Applicable Federa	I and State Programs for T	echnical and Financia	al Assistance	
California Environmental Pro	tection Agency - State Wat	er Resources Control	Board (SWRCB) - Stormwater Grant	
Program	<b>3 1 1</b>			
U.S. Department of Transportation (DOT) - Transportation Investm			sting Economia Decovery (TICED)	
U.S. Department of Transpor	lalion (DOT) - Transportali	on investment Genera	aling Economic Recovery (TIGER)	
U.S. Department of Transpor Discretionary Grant Program	lation (DOT) - Transportati	on investment Genera		
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (pr	er SWRP Guidelines Table	4):		
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (po Primary Opportunity (h	er SWRP Guidelines Table	4): d provide justification	below table)	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category	er SWRP Guidelines Table ighlight applicable cells an Main Benefit	d provide justification	below table)	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality	er SWRP Guidelines Table ighlight applicable cells an Main Benefit Increased filtrat	4): d provide justification tion and/or treatment	below table) Additional Benefit Nonpoint source pollution	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (pr Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and	er SWRP Guidelines Table ighlight applicable cells an Main Benefit Increased filtrat of runoff	d provide justification	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements	er SWRP Guidelines Table ighlight applicable cells and <u>Main Benefit</u> Increased filtrat of runoff	4): d provide justification tion and/or treatment	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (pr Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply	er SWRP Guidelines Table ighlight applicable cells an Main Benefit Increased filtrat of runoff Water supply re	4): d provide justification tion and/or treatment	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo	er SWRP Guidelines Table ighlight applicable cells an <u>Main Benefit</u> Increased filtrat of runoff <u>Water supply re</u> Conjunctive use	d provide justification tion and/or treatment eliability e	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (pe Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use	er SWRP Guidelines Table ighlight applicable cells and Main Benefit Increased filtrat of runoff Water supply re Conjunctive use	4): d provide justification tion and/or treatment eliability e	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management	er SWRP Guidelines Table ighlight applicable cells and Main Benefit Increased filtrat of runoff ff Mater supply re Conjunctive use Increase flood runoff rate and/	4): d provide justification tion and/or treatment eliability e	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (pr Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells an Main Benefit Increased filtrat of runoff Mater supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental	4): d provide justification tion and/or treatment eliability e risk by reducing for volume and habitat	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells an Main Benefit Increased filtrat of runoff Mater supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental protection and i including:	d provide justification d provide justification tion and/or treatment eliability e risk by reducing /or volume and habitat improvement	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells and Main Benefit Increased filtrat of runoff Water supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental protection and i including: -Wetland enhar	4): d provide justification tion and/or treatment eliability e risk by reducing <u>for volume</u> and habitat improvement hcement/creation;	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural	
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U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells and Main Benefit Increased filtrat of runoff Mater supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental protection and i including: -Wetland enhar -Riparian enhar -Instream flow i Increased urba	4): d provide justification tion and/or treatment eliability e risk by reducing <u>for volume</u> and habitat improvement ncement/creation; ncement; and/or improvement n green space	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells an Main Benefit Increased filtrat of runoff Water supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental protection and i including: -Wetland enhar -Riparian enhat -Instream flow i Increased urba	4): d provide justification tion and/or treatment eliability e risk by reducing <u>for volume</u> and habitat improvement ncement/creation; ncement; and/or improvement n green space	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements Community involvement	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or runo capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells and Main Benefit Increased filtration of runoff Water supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental protection and i including: -Wetland enhar -Riparian enhal -Instream flow i Increased urba Employment op Public educatio	<ul> <li>a):</li> <li>d provide justification</li> <li>d provide justification</li> <li>tion and/or treatment</li> <li>eliability</li> <li>e</li> <li>risk by reducing /or volume</li> <li>and habitat improvement</li> <li>ncement/creation;</li> <li>ncement; and/or</li> <li>improvement</li> <li>n green space</li> <li>oportunities provided</li> </ul>	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements Community involvement Enhance and/or create	
U.S. Department of Transpor Discretionary Grant Program Stormwater Multi-Benefits (per Primary Opportunity (h Benefit Category Water Quality while contributing to comp with applicable permit and TMDL requirements Water Supply through groundwater management and/or rund capture and use Flood Management Environmental	er SWRP Guidelines Table ighlight applicable cells and Main Benefit Increased filtrat of runoff Mater supply re Conjunctive use ff Decrease flood runoff rate and/ Environmental protection and i including: -Wetland enhar -Riparian enhat -Instream flow i Increased urba Employment op Public educatio	d provide justification d provide justification tion and/or treatment eliability e risk by reducing 'or volume and habitat improvement ncement/creation; ncement; and/or improvement n green space portunities provided in	auing Economic Recovery (HGER)         below table)         Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement         Enhance and/or create recreational and public use areas	

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The implementation of this project will help improve water quality by reestablishing the natural water drainage and treatment. Additionally, this project will help reduce flood risk, reestablish the natural hydrograph, provide employment opportunities and engage the community.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>☑ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which oneProject found under the 2012-2014 DAC Places as identified by the CA Department of Water Resources □ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Pierre Rivas, Director-Developm Rebecca Neves, City Engineer/	nent Services Department, privas@cityofplacerville.org, 530-642-5252 PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250			
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
1DAC Disadurante and Communities				

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area

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### **B.4.47 351 Full Capture Storm Drain Inlet Replacements in Placerville**

Project/Program Name	Full Capture Storm Drain Inlet Replacements in Placerville			
Responsible Agency	City of Placerville			
Partner Agency (ies)	Caltrans			
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA
Estimated Cost	Capital: Cost not calc	ulated due	to conceptual nature of	of project.
Unit Cost	NA			
Site Coordinates	Latitude: 38.729602°		Longitude: -120.798	3607°
Description	•			
Proposed project will remove approximately 1,500 drain inlet structures throughout the City and replace with full capture inlet structures which will help to prevent trash from flowing to the local creek.				
Component				
Stormwater Management				
Potential Challenges				
Would require work at hundreds of locations throughout the City.				
High cost to install new inlets.				
High maintenance and more likely to clog than standard inlets.				
Conceptual GIS Map of Site	e			



Purpose(s)		Key Stakeholders		
☑ Improve in-stream water quality			City of Plac	cerville, Caltrans
□ Improve health of local watersheds				
□ Improve local water supply	reliability			
Implement & monitor a reli	iable storn	nwater system		
Increase climate resilience				
Increase community aware	eness for s	sustainable water		
Stage of Development				
☑ Conceptual	🗆 Pla	anning	🗆 Pre-Desig	ŋn
□ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin 20	025, End 2029 (5 Years)		
Project Triggers	Funding			
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	I Assistance
California Environmental Prot Program U.S. Environmental Protectio	tection Ag n Agency	ency - State Water Resou (EPA) - Clean Water State	rces Control e Revolving F	Board (SWRCB) - Stormwater Grant Fund (CWSRF)
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (h	ighlight ap	oplicable cells and provide	justification I	pelow table)
Benefit Category	0 0 1	Main Benefit	,	Additional Benefit
Water Quality		Increased filtration and/o	r treatment	Nonpoint source pollution
while contributing to comp	oliance	of runoff		control
TMDL requirements	a/or			Reestablished natural water
Water Supply		Water supply reliability		Water conservation
through groundwater		Conjunctive use		
capture and use	11			
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or		Reduced energy use, GHG emission, or provides a carbon sink Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature
Community		Employment opportunitie	s provided	Community involvement
		Public education		Enhance and/or create recreational and public use areas
The implementation of this pro this project will help reduce fl	oject will h ood risk, p	elp improve water quality b provide employment oppor	y reducing no tunities and o	on-point source pollution. Additionally, engage the community.

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Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which oneProject found under the 2012-2014 DAC Places as identified by the CA Department of Water Resources □ No			
CEQA Compliance:	☐ Yes, explain ⊠ No, explain <u>project is in conceptual</u> stage, no environmental documentation is completed yet			
Contact Person(s):				
Pierre Rivas, Director-Development Services Department, privas@cityofplacerville.org, 530-642-5252 Rebecca Neves, City Engineer/PE/QSD/P, rneves@cityofplacerville.org, 530-642-5250				
Key References:				
NA				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
<sup>1</sup> DAC = Disadvantaged Communities				

EDA = Economically Distressed Area

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### B.4.48 352 Lions Park Drainage Improvement

Project/Program Name	Lions Park Drainage Improvement			
Responsible Agency	City of Placerville (Public Works Project)			
Partner Agency (ies)	Caltrans			
Net Yield	Normal Year: NA	Wet Year	NA	Dry Year: NA
Estimated Cost	Capital: \$77,000			
Unit Cost	\$75/Liner Feet of 36-i \$46/Linear Feet of Cu 12-inch Trench Drain	nch Storm urb & Gutter	Drain Pipe, \$5,000/EA , \$11/Square Feet of	A of 3' x 3' Drain Inlet, Sidewalk, \$35/Linea Feet of
Site Coordinates	Latitude: 38.718062°		Longitude: -120.775	159°
Description				
The proposed project is set to occur at Lion's Park. In completing the project, flooding events will be reduced in the park by improved storm water control that will occur by installing approximately 375 LF of a 36" Culvert, drain inlets and other flood control structures. The following is a detailed description of the materials that are to be used. 375' of 36" Culvert Pipe Smooth Wall HTPE 36" X 36" Catch Basin 40' 12" Trench Drain 75' Curb, Gutter, Sidewalk				
Component				
Stormwater Management				
Potential Challenges				
Funding Construction Schedule within a Public Park				
Conceptual GIS Map of Site				



Purpose(s)		Key Stakeholders		
Improve in-stream water quality			City of Placerville, Caltrans	
☑ Improve health of local watersheds				
☑ Improve local water supply	reliability	,		
Implement & monitor a reli	able storn	nwater system		
Increase climate resilience				
Increase community aware	eness for s	sustainable water		
Stage of Development			• •	
☑ Conceptual	🗆 Pla	anning	Pre-Desig	gn
□ Design	□ Co	onstruction	□ Other	
Expected Project Timeline	Begin 20	020, End 2020 (1 Year)		
Project Triggers	Traffic a	nd Pedestrian Safety – Fa	cility Damage	e
Potentially Applicable Federa	I and Stat	e Programs for Technical	and Financia	I Assistance
California Environmental Prot Program	tection Ag	ency - State Water Resou	rces Control	Board (SWRCB) - Stormwater Grant
Stormwater Multi-Benefits (pe	er SWRP	Guidelines Table 4):		
Primary Opportunity (hi	ighlight ar	policable cells and provide	iustification I	below table)
Report Cotogory Main Report			Jaounoauon	Additional Benefit
Water Quality		Increased filtration and/o	or treatment	Nonpoint source pollution
with applicable permit and TMDL requirements	d/or			Reestablished natural water
, Water Supply		Water supply reliability		Water conservation
through groundwater management and/or runo capture and use	runoff Vater supply reliability			
Flood Management		Decrease flood risk by re runoff rate and/or volume	educing e	Reduced sanitary sewer overflows
Environmental		Environmental and habit protection and improvem including:	at ient	Reduced energy use, GHG emission, or provides a carbon sink
		-Wetland enhancement/o -Riparian enhancement; -Instream flow improvem	creation; and/or ent	Reestablishment of the natural hydrograph
		Increased urban green s	pace	Water temperature improvements
Community		Employment opportunitie	es provided	Community involvement
		Public education		Enhance and/or create recreational and public use areas

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The implementation of this project will help reduce flood risk, reestablish the natural hydrograph, provide employment opportunities and engage the community.			
Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one <u>Project found under the 2012-2014 DAC Places as identified</u> by the CA Department of Water Resources</li> <li>□ No</li> </ul>		
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet		
Contact Person(s):			
Pierre Rivas, Director-Development Services Department, <u>privas@cityofplacerville.org</u> , 530-642-5252 Rick Ferriera, Public Works Operations Manager, <u>rferriera@cityofplacerville.org</u> , 530-642-5242			
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
NA			

<sup>1</sup>DAC = Disadvantaged Communities EDA = Economically Distressed Area Appendix B Project Description Forms March 2018

### **B.4.49 353 Pleasant Street Storm Drain Improvement**

Project/Program Name	Pleasant Street Storm Drain Improvement			
Responsible Agency	City of Placerville			
Partner Agency (ies)	Caltrans			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: \$655,000			
Unit Cost	\$270/Linear Feet of 24-inch Storm Drain Pipe, \$10,000/EA 48-inch Manhole, \$4,000/EA of Drain Inlets, \$96/Ton of Asphalt Concrete Paving, \$62/Ton of Aggregate Base			
Site Coordinates	Latitude: 38.735978°		Longitude: -120.796	735°
Description				
The existing piecemeal drainage system is suspected to be in poor condition. Stormwater flows from the Cottonwood Subdivision, through Duffey Park (Clay Street and Arizona Way), through a rock-lined roadside ditch on Pleasant Street, and then under homes and other buildings. Under this project approximately 1,000 LF of new drainage main pipe is anticipated to improve drainage in the area. The proposed project will occur between Bedford Ave and Arizona Way.				
Component				
Stormwater Management				
Potential Challenges				
Investigation of the existing system, including video inspection and surveying, is expected to be required to determine condition and layout. Little is known about the system. The existing system and proposed improvement is expected to require modeling.				
Conceptual GIS Map of Site				



Purpose(s)		Key S	Key Stakeholders	
□ Improve in-stream water quality			f Placerville, Caltrans	
$\Box$ Improve health of local watersheds				
□ Improve local water supply reliability				
☑ Implement & monitor a reliable stormwater system				
□ Increase climate resilience				
□ Increase community awarenes	s for sustainable water			
Stage of Development		·		
⊠ Conceptual	□ Planning	□ Pre-D	esign	
🗆 Design	□ Construction	□ Other		
Expected Project Timeline	Begin 2020: End 2024 (5 Ye	ears)		
Project Triggers	Flood Event Funding			
Potentially Applicable Federal an	d State Programs for Technic	al and Financia	Il Assistance	
California Environmental Protecti Program	on Agency - State Water Res	ources Control	Board (SWRCB) - Stormwater Grant	
Stormwater Multi-Benefits (per S	WRP Guidelines Table 4):			
Primary Opportunity (highli	oht applicable cells and provid	de iustification l	below table)	
Primary Opportunity (highli	ght applicable cells and provio	de justification I	below table) Additional Benefit	
Primary Opportunity (highli Benefit Category Water Quality	ght applicable cells and provio Main Benefit Increased filtration and	de justification I d/or treatment	below table) Additional Benefit Nonpoint source pollution	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to compliant	ght applicable cells and provio Main Benefit Increased filtration and of runoff	de justification l d/or treatment	below table) Additional Benefit Nonpoint source pollution control	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to complian with applicable permit and/or TMDL requirements	ght applicable cells and provio Main Benefit Increased filtration and of runoff	de justification l d/or treatment	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to complian with applicable permit and/or TMDL requirements Water Supply	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability	de justification l d/or treatment	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to complian with applicable permit and/or TMDL requirements Water Supply through groundwater	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use	de justification l d/or treatment	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to complian with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use	de justification l d/or treatment	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to complian with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use Decrease flood risk by runoff rate and/or volu	de justification l d/or treatment / reducing	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows	
Primary Opportunity (highling) Benefit Category Water Quality while contributing to compliant with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management Environmental	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use Decrease flood risk by runoff rate and/or volu Environmental and hal protection and improve including:	de justification l d/or treatment / reducing me bitat ement	below table) Additional Benefit Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation Reduced sanitary sewer overflows Reduced energy use, GHG emission, or provides a carbon sink	
<ul> <li>Primary Opportunity (highling</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliant</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> </ul>	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use Decrease flood risk by runoff rate and/or volu Environmental and ha protection and improve including: -Wetland enhancemer -Riparian enhancemer -Instream flow improve	de justification l d/or treatment d/or treatment v reducing me bitat ement ht/creation; nt; and/or ement	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph	
Primary Opportunity (highli Benefit Category Water Quality while contributing to complian with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management Environmental	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use Decrease flood risk by runoff rate and/or volu Environmental and ha protection and improve including: -Wetland enhancemer -Riparian enhancemer -Instream flow improve Increased urban greer	de justification l d/or treatment / / reducing me bitat ement ht/creation; ht; and/or ement h space	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements	
<ul> <li>Primary Opportunity (highling)</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliant with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> <li>Community</li> </ul>	ght applicable cells and provid Main Benefit Increased filtration and of runoff Water supply reliability Conjunctive use Decrease flood risk by runoff rate and/or volu Environmental and ha protection and improve including: -Wetland enhancemer -Riparian enhancemer -Instream flow improve Increased urban greer	de justification l d/or treatment d/or treatment v v reducing me bitat ement ht/creation; ht; and/or ement h space ities provided	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement	
<ul> <li>Primary Opportunity (highling)</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliant with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater management and/or runoff capture and use</li> <li>Flood Management</li> <li>Environmental</li> <li>Community</li> </ul>	ght applicable cells and provid         Main Benefit         Increased filtration and of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by runoff rate and/or volu         Environmental and hal protection and improve including:         -Wetland enhancemer         -Riparian enhancemer         -Instream flow improve         Increased urban greer         Employment opportun         Public education	de justification l d/or treatment d/or treatment v reducing me bitat ement ht/creation; ht; and/or ement h space ities provided	Additional Benefit         Nonpoint source pollution control         Reestablished natural water drainage and treatment         Water conservation         Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         Reestablishment of the natural hydrograph         Water temperature improvements         Community involvement         Enhance and/or create recreational and public use areas	

## Appendix B Project Description Forms March 2018

Project Included in IRWM:	□ Yes, which one		
	No, explain project is in conceptual stage, not added to IRWM currently		
Project Benefits a DAC/EDA:1	<ul> <li>Yes, which one <u>Project found under the 2012-2014 DAC Places as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>		
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in</u> <u>conceptual stage, no environmental documentation is completed yet</u>		
Contact Person(s):			
Pierre Rivas, Director-Development S	ervices Department, privas@cityofplacerville.org, 530-642-5252		
Rebecca Neves, City Engineer/PE/QS	SD/P, rneves@cityofplacerville.org, 530-642-5250		
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
NA			
DAC = Disadvantaged Communities			

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.4.50 354 Wiltse Road Storm Drain Improvement**

Project/Program Name	Wiltse Road Storm Drain Improvement			
Responsible Agency	City of Placerville			
Partner Agency (ies)	Caltrans			
Net Yield	Normal Year: NA	Wet Year	NA	Dry Year: NA
Estimated Cost	Capital: \$832,000			
Unit Cost	\$300/LF of 36-inch Storm Drain Pipe, \$10,000/EA 48-inch Manhole, \$4,000/EA of Drain Inlets, \$1,000/EA of 36-inch Flared End Section, \$96/Ton of Asphalt Concrete Paving, \$62/Ton of Aggregate Base			
Site Coordinates	Latitude: 38.729809° Longitude: -120.778280°			

#### Description

Stormwater from Lumsden Park flows onto Wiltse Road overwhelming roadside ditches and driveway culverts. Some drainage pipes are suspected to be located under homes and other structures. At Martin Lane, once the culvert is overwhelmed, sheet flows over Martin Lane, through private properties to Hangtown Creek. Hangtown Creek at Wiltse Road is constricted by private property encroachments, creating a bottleneck, and contributing to poor storm drainage in the area. The replacement of Hangtown Creek culvert may be necessary but was not included in this project. The proposed project is proposed to occur from Lumsden Park to Hangtown Creek on Wiltse Road. Roadside ditch improvements on Wiltse Road at Martin Lane are proposed in a separate maintenance project called Wiltse Road at Martin Lane.

Component

Stormwater Management

**Potential Challenges** 

Investigation of the existing system, including video inspection and surveying, is expected to be required to determine condition and layout. Little is known about the system.

The existing system and proposed improvement is expected to require modeling.

Conceptual GIS Map of Site



Purpose(s)		Key Stakeholders	
Improve in-stream water quality	City of Placerville, Caltrans		
□ Improve health of local waters			
□ Improve local water supply reli			
☑ Implement & monitor a reliable	e stormwater system		
Increase climate resilience			
□ Increase community awarenes	s for sustainable water		
Stage of Development			
⊠ Conceptual	□ Planning □	l Pre-Design	
□ Design		l Other	
Expected Project Timeline	Begin 2020, End 2024 (5 Years)		
Project Triggers	Flood Event Funding		
Potentially Applicable Federal an	d State Programs for Technical and F	inancial Assistance	
California Environmental Protecti Program	on Agency - State Water Resources C	Control Board (SWRCB) - Stormwater Grant	
Stormwater Multi-Benefits (per S	WRP Guidelines Table 4):		
Primary Opportunity (highli	abt applicable cells and provide justifi	cation below table)	
Benefit Category	Main Bonefit		
Water Quality	Increased filtration and/or treat	tment Nonpoint source pollution	
while contributing to compliar	nce of runoff	control	
with applicable permit and/or		Reestablished natural water	
Water Supply	Water supply reliability	Water conservation	
through groundwater	Conjunctive use		
management and/or runoff			
Flood Management	Decrease flood risk by reducin runoff rate and/or volume	ng Reduced sanitary sewer	
Environmental	Environmental and habitat	Reduced energy use, GHG	
	protection and improvement	emission, or provides a carbon	
	protection and improvement including: -Wetland enhancement/creation	emission, or provides a carbon sink Reestablishment of the natural	
	protection and improvement including: -Wetland enhancement/creation -Riparian enhancement; and/or	emission, or provides a carbon sink on; Reestablishment of the natural hydrograph	
	protection and improvement including: -Wetland enhancement/creation -Riparian enhancement; and/on -Instream flow improvement	emission, or provides a carbon sink Reestablishment of the natural hydrograph	
	protection and improvement including: -Wetland enhancement/creatio -Riparian enhancement; and/o -Instream flow improvement Increased urban green space	emission, or provides a carbon sink or; Reestablishment of the natural hydrograph Water temperature improvements	
Community	protection and improvement including: -Wetland enhancement/creation -Riparian enhancement; and/on -Instream flow improvement Increased urban green space Employment opportunities provement	emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements vided Community involvement	
Community	protection and improvement including: -Wetland enhancement/creatio -Riparian enhancement; and/o -Instream flow improvement Increased urban green space Employment opportunities pro Public education	emission, or provides a carbon sink Por: Reestablishment of the natural hydrograph Water temperature improvements vided Community involvement Enhance and/or create	
Community	protection and improvement including: -Wetland enhancement/creatio -Riparian enhancement; and/o -Instream flow improvement Increased urban green space Employment opportunities pro Public education	emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements vided Community involvement Enhance and/or create recreational and public use areas	
Community The implementation of this project	protection and improvement including: -Wetland enhancement/creatio -Riparian enhancement; and/o -Instream flow improvement Increased urban green space Employment opportunities pro Public education	emission, or provides a carbon sink Reestablishment of the natural hydrograph Water temperature improvements vided Community involvement Enhance and/or create recreational and public use areas sh the natural hydrograph, provide	

# Appendix B Project Description Forms March 2018

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>		
Project Benefits a DAC/EDA:1	<ul> <li>Yes, which one <u>Project found under the 2012-2014 DAC Places as</u> identified by the CA Department of Water Resources</li> <li>No</li> </ul>		
CEQA Compliance:	□ Yes, explain ⊠ No, explain <u>project is in</u> <u>conceptual stage, no environmental documentation is completed yet</u>		
Contact Person(s):			
Pierre Rivas, Director-Development S Rebecca Neves, City Engineer/PE/QS	ervices Department, <u>privas@cityofplacerville.org</u> , 530-642-5252 SD/P, <u>rneves@cityofplacerville.org</u> , 530-642-5250		
Key References:			
NA			
Supplemental Information (e.g., Project Webpage or equivalent):			
ΝΑ			
DAC = Disadvantaged Communities			

EDA = Economically Distressed Area

Appendix B Project Description Forms March 2018

### **B.4.51 355 Pierroz Road at Hangtown Creek, Drainage Improvement**

Project/Program Name	Pierroz Road at Hangtown Creek, Drainage Improvement			
Responsible Agency	City of Placerville			
Partner Agency (ies)	Caltrans			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA			
Estimated Cost	Capital: \$103,000			
Unit Cost	\$46/LF of V-Ditch, \$96/Ton of Asphalt Concrete Paving, \$4,000/LS of Striping, \$4,000/LS of Raise Valve Boxes, \$46/LF of Type "A" AC Curb			
Site Coordinates	Latitude: 38.733817°		Longitude: -120.829	1922°
Description	<u>.</u>			
Description         The proposed project is set to improve the drainage conditions on Pierroz Rd near Hangtown Creek. This project will improve public safety by upgrading the existing storm drain system to help prevent the flooding of the public roadway. The following material will be used for the project.         Catch Basin (36"X36") to existing 36" culvert.         Sewer Lift Station ½ horse grinder pump package system         93' Curb, Gutter and Sidewalk         Drive Entrance with Curb Returns – 12' X 93' of 3"over 8" AB         80' of 36" HTPE Pipe         Clear/Grub/Backfill 200 yards of soil         180' of V-Ditch				
Component				
Stormwater Management				
Potential Challenges				
Funding Traffic disruption during the period of the project implementation				
Conceptual GIS Map of Site				



Purpose(s)	Key Stakeholders	
☑ Improve in-stream water qualit	City of Placerville, Caltrans	
☑ Improve health of local waters		
⊠ Improve local water supply rel		
☑ Implement & monitor a reliable	e stormwater system	
□ Increase climate resilience	-	
□ Increase community awarenes	s for sustainable water	
Stage of Development		
	✓ Planning □	Pro Docian
		Pre-Design
		Other
Expected Project Timeline		
	Begin 2020, End 2020 (1 Year)	
Project Triggers	Public Safety and Property Damage	
Potentially Applicable Federal an	d State Programs for Technical and F	inancial Assistance
California Environmental Protecti	on Agency - State Water Resources (	Control Board (SWRCB) - Stormwater Grant
Program	on Agency - Glate Water Resources C	
Stormwater Multi-Benefits (per S	WRP Guidelines Table 4):	
Primary Opportunity (highli	ght applicable cells and provide justifie	cation below table)
Primary Opportunity (highli	ght applicable cells and provide justifi Main Benefit	cation below table) Additional Benefit
Primary Opportunity (highli Benefit Category Water Quality	ght applicable cells and provide justific Main Benefit Increased filtration and/or treat	cation below table) Additional Benefit tment Nonpoint source pollution
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliant</li> </ul>	ght applicable cells and provide justifie Main Benefit Increased filtration and/or treat of runoff	cation below table) Additional Benefit tment Nonpoint source pollution control
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to complian</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> </ul>	ght applicable cells and provide justifie Main Benefit Increased filtration and/or treat of runoff	cation below table) Additional Benefit tment Nonpoint source pollution control Reestablished natural water drainage and treatment
Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply	ght applicable cells and provide justifie Main Benefit Increased filtration and/or treat of runoff Water supply reliability	cation below table) Additional Benefit tment Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation
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Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use	ght applicable cells and provide justifie Main Benefit Increased filtration and/or treat of runoff Water supply reliability Conjunctive use	cation below table) Additional Benefit tment Nonpoint source pollution control Reestablished natural water drainage and treatment Water conservation
Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management	ght applicable cells and provide justifie Main Benefit Increased filtration and/or treat of runoff Water supply reliability Conjunctive use Decrease flood risk by reducin runoff rate and/or volume	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows
Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management Environmental	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows           Reduced energy use, GHG
Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management Environmental	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows           Reduced energy use, GHG emission, or provides a carbon sink
Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management Environmental	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows           Reduced energy use, GHG emission, or provides a carbon sink           pn;         Reestablishment of the natural
Primary Opportunity (highli Benefit Category Water Quality while contributing to compliar with applicable permit and/or TMDL requirements Water Supply through groundwater management and/or runoff capture and use Flood Management Environmental	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Riparian enhancement; and/or	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           ng         Reduced sanitary sewer overflows           Reduced energy use, GHG emission, or provides a carbon sink           pr         Reestablishment of the natural hydrograph
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliar</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> </ul>	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Riparian enhancement; and/or         -Instream flow improvement	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows           Reduced energy use, GHG emission, or provides a carbon sink           pr         Reestablishment of the natural hydrograph
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliar</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> </ul>	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Riparian enhancement; and/or         Increased urban green space	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows           Reduced energy use, GHG emission, or provides a carbon sink           pn;         Reestablishment of the natural hydrograph           Water temperature improvements
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliar</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> <li>Community</li> </ul>	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Riparian enhancement; and/or         -Instream flow improvement         Increased urban green space	Additional Benefit         tment       Nonpoint source pollution control         Reestablished natural water drainage and treatment       Reestablished natural water drainage and treatment         Water conservation       Water conservation         rg       Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         pn;       Reestablishment of the natural hydrograph         Water temperature improvements         vided       Community involvement
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliar</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> <li>Community</li> </ul>	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Riparian enhancement; and/o         -Instream flow improvement         Increased urban green space         Employment opportunities prove	Additional Benefit         tment       Nonpoint source pollution control         Reestablished natural water drainage and treatment       Reestablished natural water         Water conservation       Water conservation         Image: Second S
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliar</li> <li>with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater</li> <li>management and/or runoff</li> <li>capture and use</li> <li>Flood Management</li> <li>Environmental</li> <li>Community</li> </ul>	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Instream flow improvement         Increased urban green space         Employment opportunities provention	cation below table)           Additional Benefit           tment         Nonpoint source pollution control           Reestablished natural water drainage and treatment           Water conservation           g         Reduced sanitary sewer overflows           Reduced energy use, GHG emission, or provides a carbon sink           pr         Reestablishment of the natural hydrograph           Water temperature improvements           vided         Community involvement Enhance and/or create recreational and public use areas
<ul> <li>Primary Opportunity (highli</li> <li>Benefit Category</li> <li>Water Quality</li> <li>while contributing to compliant with applicable permit and/or</li> <li>TMDL requirements</li> <li>Water Supply</li> <li>through groundwater management and/or runoff capture and use</li> <li>Flood Management</li> <li>Environmental</li> <li>Community</li> </ul>	ght applicable cells and provide justifie         Main Benefit         Increased filtration and/or treat of runoff         Water supply reliability         Conjunctive use         Decrease flood risk by reducin runoff rate and/or volume         Environmental and habitat protection and improvement including:         -Wetland enhancement/creation         -Riparian enhancement; and/or         Increased urban green space         Employment opportunities prove         Public education	Additional Benefit         tment       Nonpoint source pollution control         Reestablished natural water drainage and treatment       Reestablished natural water drainage and treatment         Water conservation       Water conservation         rg       Reduced sanitary sewer overflows         Reduced energy use, GHG emission, or provides a carbon sink         pn;       Reestablishment of the natural hydrograph         Water temperature improvements         vided       Community involvement         Enhance and/or create recreational and public use areas         wh the natural hydrograph, provide

Project Included in IRWM:	<ul> <li>Yes, which one</li> <li>No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>			
Project Benefits a DAC/EDA: <sup>1</sup>	☑ Yes, which one <u>Project found under the 2012-2014 DAC Places as</u> identified by the CA Department of Water Resources □ No			
CEQA Compliance:	□ Yes, explain ⊠ No, explain project is in conceptual stage, no environmental documentation is completed yet			
Contact Person(s):				
Pierre Rivas, Director-Development S Rick Ferriera, Public Works Operation	ervices Department, privas@cityofplacerville.org, 530-642-5252 Is Manager, rferriera@cityofplacerville.org, 530-642-5242			
Key References:				
ΝΑ				
Supplemental Information (e.g., Project Webpage or equivalent):				
NA				
DAC = Disadvantaged Communities EDA = Economically Distressed Area				

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### B.4.52 356 Sand Ridge Road Paving

Project/Program Name	Sand Ridge Road Paving			
Responsible Agency	El Dorado County- Community Development Services			
Partner Agency (ies)	NA			
Net Yield	Normal Year: NA Wet Year: NA Dry Year: NA		Dry Year: NA	
Estimated Cost	Capital: \$266,753.98			
Unit Cost	NA			
Site Coordinates	Latitude: 38.624004°		Longitude: -120.752	:179°
Description				
This is an urban roadway project aimed at improving water quality along the paved and unpaved areas on Sand Ridge Road. In including the unpaved portion of the road in the project, water quality in the Middle Fork Cosumnes River will be improved. The project limits are set to occur from near the intersection of Sand Ridge and Willow Glen and extends just past 1615 Sand Ridge Rd (61,606 ft-Google Earth Approximation). The proposed project will rely on the wetlands, if possible, found in close proximity to treat and infiltrate stormwater runoff. If possible areas that do not have access to a wetland will include grass swales or grass filter stripes along Sand Ridge Rd. Since a portion of Sand Ridge Rd was affected by the Sand Fire, fire restoration along the road will also be done. Restoration efforts along the road will include planting vegetation and trees. Low impact development (LID) approaches will be applied for this project.				
Component				
Stormwater Management				
Potential Challenges				
Funding				
Conceptual GIS Map of Site	Conceptual GIS Map of Site			



Purpose(s)		Key Stakeholders	
☑ Improve in-stream water quality		El Dorado County- Community Development	
Improve health of local watersheds		Services	
□ Improve local water supply	reliability		
Implement & monitor a reliant	able stormwater system		
Increase climate resilience			
□ Increase community aware	eness for sustainable water		
Stage of Development			
⊠ Conceptual	Planning	Pre-Design	
□ Design	□ Construction	Other	
Expected Project Timeline	Begin: 2019, End: 2020		
Project Triggers	Funding opportunities		
Potentially Applicable Federal and State Programs for Technical and Financial Assistance			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Gran Program			
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Clean Water State Revolving Fund Program (CWSRF)			

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Primary 🔳 Opportunity (highlight a	pplicable cells and provide justificatio	n below table)
Benefit Category	Main Benefit	Additional Benefit
Water Quality while contributing to compliance with applicable permit and/or TMDL requirements	Increased filtration and/or treatment of runoff	Nonpoint source pollution control
		Reestablished natural water drainage and treatment
Water Supply through groundwater management and/or runoff capture and use	Water supply reliability	Water conservation
	Conjunctive use	
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows
Environmental	Environmental and habitat protection and improvement including: -Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reduced energy use, GHG emission, or provides a carbon sink
		Reestablishment of the natural hydrograph
	Increased urban green space	Water temperature improvements
Community	Employment opportunities provided	Community involvement
	Public education	Enhance and/or create recreational and public use areas

stormwater runoff quality. By using wetlands, grass swales, and grass filter stripes stormwater runoff will be treated, infiltrated, and nonpoint source pollution will be reduced. The local environment and habitats will be improved and this project will provide short term employment opportunities. The community will be engaged in this project.

Project Included in IRWM:	<ul> <li>□ Yes, which one</li> <li>⊠ No, explain project is in conceptual stage, not added to IRWM currently</li> </ul>
Project Benefits a DAC/EDA:1	□ Yes, which one⊠ No
CEQA Compliance:	□ Yes, explain

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Contact Person(s):

Brendan Ferry, El Dorado County Principal Planner, brendan.ferry@edcgov.us, (530) 573-7905

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

NA

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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# **B.4.53 357 Upper Main Ditch Stormwater Improvements**

Project/Program Name	Upper Main Ditch Stormwater Improvements			
Responsible Agency	El Dorado Irrigation District			
Partner Agency (ies)	El Dorado County Water Agency			
Net Yield	Normal Year: NA	Wet Year:	NA	Dry Year: NA
Estimated Cost	Capital: \$600,000			
Unit Cost	NA			
Site Coordinates	Latitude: 38.766335°		Longitude: -120.597096°	
Description	<u>-</u>			

The Upper Main Ditch (UMD) is approximately 3 miles in length. In addition to carrying El Dorado Irrigation District's (EID) 15,080 acre-feet water supply diverted from Forebay Reservoir, it intercepts approximately 378 acres of the Long Canyon and Iowa Canyon watersheds. Although it was not designed, and is not operated, as a Stormwater conveyance facility, due to its location, runoff from the watersheds upslope of the UMD is captured and conveyed by the ditch to the Res 1 Water treatment plant. During the diversion season (typically spring, summer and fall) the Stormwater, if any, is taken into the plant along with the diverted water. Beginning on October 1st the Res 1 Water Treatment Plant (WTP) is typically taken off line to facilitate maintenance activities, above Forebay Reservoir, within EID's hydroelectric project. The regularly scheduled winter outage can be from one to six months during which time intercepted Stormwater travels past the Res 1 WTP to abandoned portions of the downstream Middle Main Ditch (MMD). In some wet years when spring water demand is low, the Res 1 WTP remains offline even after scheduled maintenance is completed as demand can be met by an alternate WTP.

Since EID abandoned the Middle and Lower Main Ditch circa 2005, Stormwater conveyance capacity has slowly been compromised by accumulated vegetation and property owners dumping yard waste, fill and other debris into the ditch. In January of 2017 during back to back high intensity, long duration precipitation events, flooding occurred as a result of a property owner completely filling in the ditch, presumably to reclaim a portion of his land. Because EID has abandoned the MMD and no longer has jurisdiction to perform maintenance within the ditch, it was left to the property owner to remove the blockage. After several additional storm events and subsequent flooding, the property owner finally cleared the ditch so Stormwater could be conveyed past the blockage. EID received numerous complaints, allegations and claims of private property damage as a result of the flooding. EI Dorado County, the county Stormwater management authority also received many complaints.

#### Expected Outcome

EID is currently in the design phase of replacing the UMD with a pipeline. EID has been considering two pipeline alignments; one within the existing ditch alignment and one in Blair Road with portions of the pipeline within the ditch alignment. Both would leave the ditch intact to continue to intercept storm runoff and convey it past the Res 1 WTP. Considering recent flooding and the long term potential for repeated blockages of abandoned portions of the MMD ditch, EID has investigated how it might eliminate Stormwater collected in the UMD from making its way past the Res 1 WTP to the abandoned MMD. This can be done by either: breaching the down slope ditch berm at the natural drainage courses and diverting water out of the ditch; or filling in the ditch or removing the down slope ditch berm which would cause Stormwater to sheet flow over the ditch to the natural drainage courses. Both options direct Stormwater back to historic drainage patterns but would require downstream improvements including upsizing four culverts that cross Blair Road and some channel armoring to limit erosion.

#### Component

Stormwater Management

Potential Challenges

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Purpose(s)		Key Stakeholders		
□ Improve in-stream water quality		El Dorado County		
☑ Improve health of local watersheds		El Dorado County Water Agency		
□ Improve local water supply reliability				
☑ Implement & monitor a reliable stormwater system				
□ Increase climate resilience				
Increase community awareness for sustainable water				
Stage of Development				
Conceptual	⊠ Planning	⊠ Pre-Design		
🗆 Design	□ Construction	□ Other		
A drainage study has been completed to identify Stormwater flow and culvert location and sizing.				
Expected Project Timeline	Begin: 2021, End: 2022			
Project Triggers	Funding availability, additional flooding			
Potentially Applicable Federal and State Programs for Technical and Financial Assistance				
California Environmental Protection Agency - State Water Resources Control Board (SWRCB) - Stormwater Grant Program				

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Primary Opportunity (highlight applicable cells and provide justification below table)				
Benefit Category	Main Benefit	Additional Benefit		
Water Quality	Increased filtration and/or	Nonpoint source pollution control		
while contributing to compliance with applicable permit and/or TMDL requirements	treatment of runoff	Reestablished natural water drainage and treatment		
Water Supply	Water supply reliability	Water conservation		
through groundwater management and/or runoff capture and use	Conjunctive use			
Flood Management	Decrease flood risk by reducing runoff rate and/or volume	Reduced sanitary sewer overflows		
Environmental	Environmental and habitat protection and improvement including:	Reduced energy use, GHG emission, or provides a carbon sink		
	-Wetland enhancement/creation; -Riparian enhancement; and/or -Instream flow improvement	Reestablishment of the natural hydrograph		
	Increased urban green space	Water temperature improvements		
Community	Employment opportunities provided	Community involvement		
	Public education	Enhance and/or create recreational and public use areas		

reduced at a local scale, the natural water drainage and treatment will be reestablished, flood risk will be reduced, local environmental conditions will be improved, the natural hydrograph will be reestablished, and short term employment opportunities will be provided. In addition, this project will contain a public education aspect as well have community engagement from the locals, EDCWA and EID.

Project Included in IRWM:	□ Yes, which one ⊠ No, explain <u>To be included in CABY IRWM</u>
Project Benefits a DAC/EDA: <sup>1</sup>	<ul> <li>☑ Yes, which one Project benefits DAC Tracts 2010-2014 as identified by the CA Department of Water Resources</li> <li>□ No</li> </ul>
CEQA Compliance:	<ul> <li>□ Yes, explain</li> <li>⊠ No, explainTo be completed</li> </ul>

# Appendix B Project Description Forms March 2018

Contact Person(s):

Brian Mueller, Director of Engineering, El Dorado Irrigation District, bmueller@eid.org, (530) 642-4029

Key References:

NA

Supplemental Information (e.g., Project Webpage or equivalent):

http://www.eid.org/about-us/project-updates/forebay-dam-project/main-ditch-updates-and-documents

<sup>1</sup>DAC = Disadvantaged Communities

EDA = Economically Distressed Area

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