

Upper Feather River Integrated Regional Water Management Plan Proposition 50 Grant Agreement No. 4600007650

Project Performance & Monitoring Report

Project No./Name: Taylorsville Sewer Project

Project Proponent: Indian Valley Community Services District (IVCSD)

Progress Report No.: 3

Reporting Period: 2020

Date of Post-Performance Report: 5/7/2021

Project Specific Output Signatures			
	Yes	No	Comments
Has the project been operated and maintained in accordance with all state and federal permits?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Was there an improvement noted in water quality sampling of private wells and Indian Creek?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
Project Specific Outcome Indicators			
	Yes	No	Comments
Has an annual laboratory analysis for water quality been set up for the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Have new water quality parameters been compared with original water quality tests from the technical report?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Has the new SCADA system provided reliable data and warnings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Has implementation of the project reduced overall operating costs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Did you meet the goal of your project? If yes, please provide a brief description stating how you achieved this goal. If no, please comment as to why the goal was not achieved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	See narrative below
	<input type="checkbox"/>	<input type="checkbox"/>	
Other Standard Reporting Requirements: Please indicate other monitoring/reporting requirements you may already be required to do independent from DWR contractual obligations. For example: CDPH Title 22 Ch. 15 "Domestic Water Quality AND Monitoring Regulations," NPDES, GAMA, CASGEM, or other internal reporting requirements that may yield valuable data.			
	Yes	No	Comments
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

What Upper Feather River IRWM Plan Objectives did your project address to support implementation of the Plan?				
	Yes	No		Comments
Restore natural hydrologic functions	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Reduce potential for catastrophic wildland fires in the Region	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Balance the needs of forest health, habitat preservation, fuels reduction, forest fire prevention, and economic activity in the Upper Feather River Region	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Build communications and collaboration among water resources stakeholders in the Region	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Work with Department of Water Resources to develop strategies and actions for the management, operation, and control of the State Water Project facilities in the Upper Feather River Watershed in order to increase water supply, recreational and environmental benefits to the Region	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Encourage municipal service providers to participate in regional water management actions that improve water supply and water quality	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Continue to actively engage in FERC relicensing of hydroelectric facilities in the Region	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Address economic challenges of municipal service providers to serve customers	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Protect, restore, and enhance the quality of surface and groundwater resources for all beneficial uses, consistent with the Central Valley Regional Water Control Board Basin Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Address water resources and wastewater needs of Disadvantaged Communities (DACs) and Native Americans	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Coordinate management of recharge areas and protect groundwater resources	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Improve coordination of land use and water resources planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Maximize agricultural, environmental and municipal water use efficiency	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Effectively address climate change adaptation and/or mitigation in water resource management	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

Improve efficiency and reliability of water supply and other water-related infrastructure	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Enhance public awareness and understanding of water management issues and needs	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Address economic challenges of agricultural producers	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
Work with counties, communities, and groups to make sure staff capacity exists for actual administration and implementation of grant funding	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

1. Summary of the operations of the project.

The goal of the Taylorsville Sewer Pipeline Project (Project) was to upgrade the outdated Taylorsville Wastewater System (part of the Indian Valley Community Services District (IVCSD)) to significantly reduce the risk of failure and contamination of Indian Creek and private, domestic wells with raw sewage.

Specifically, the Project replaced 5,000 linear feet of 6-inch forced main with 4-inch fusion-welded SDR11-HDPE, and replaced the pneumatic pump control system with an electronic system that utilizes analog 4-20mA signal with a suitable flow meter and associated SCADA system. The flow meter and associated Supervisory Control and Data Acquisition (SCADA) system installed with this project provides prompt notification of pending failures, enabling the IVCSD to divert or mitigate repercussions of any wastewater spills; and improved data collection, allowing IVCSD to better monitor pump performance and efficiency.

Prior to this Project, there were multiple mainline failures within 100 feet of Indian Creek and/or within 30 feet of private domestic wells. The harmful pollutants in raw sewage often include disease-causing organisms, metals, and nutrients that threaten the local community’s water quality and health. This Project specifically addressed the EPA’s National Enforcement Initiative to reduce raw sewage overflow and stormwater discharge.*

**Under the Clean Water Act's (CWA's) National Pollutant Discharge Elimination System (NPDES) program, the Environmental Protection Agency (EPA) regulates discharges of pollutants from municipal and industrial wastewater treatment plants, sewer collection systems, and stormwater discharges from industrial facilities and municipalities.*

2. Discuss project benefits to water quality, water supply, and the environment.

Since project implementation, the Project has been tested by one above-average precipitation year and a very wet winter season in 2018/19. In the 2106-2017 storm season, high floodwaters would have destroyed the pre-project pipeline system, allowing discharges of raw sewage from broken pipes to enter Indian Creek. Instead, in both 2016/17 & 2018/19, flood flows in Indian Creek caused no damage to the project and water quality and environmental benefits in Indian Creek were, in turn, protected by the Project.

In summary, the Project functions as designed and implemented to protect water quality and environmental benefits in Indian Creek, to maintain water quality in domestic wells located in the vicinity of the project, and to enhance the reliability and performance of the Taylorsville wastewater system.

3. Comparison and explanation of any differences between expected versus actual project success in meeting IRWM priorities as stated in the original IRWM Implementation Grant application.

The Project is a total success as anticipated. Therefore, there are no differences between the expected success and actual Project success.

4. Summary of any additional costs and/or benefits deriving from the project.

By design, the 6-inch pipe was reduced to a 4-inch pipe to maintain uniform pressure upgradient to Taylorsville's wastewater treatment and disposal system. Uniform pressure is important for preventing backflow. However, pumping hours have also increased with the reduced pipeline volume. The IVCSO has replaced the transfer switch to ensure immediate back-up power to the system in the event of a power outage. The IVCSO is currently working to replace the aging back-up power generator and base so that the back-up power system is completely reliable during prolonged power outages. This is a cost that was identified in the IVCSO's Capital Facilities Plan before the Project. Therefore, replacing the back-up generator and base is not an additional cost deriving from the Project.

5. Additional information relevant to or generated by the continued operation of the project.

We are very pleased with the project; it continues to function as planned.