

Edgewater Detention Basin and Pump Station 5 Improvements RD784-03

I. Project Sponsor Contact Information

Lead Agency/Organization	Reclamation District 784
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II. General Project Information

Project Title	Edgewater Detention Basin and Pump Station 5 (Avondale) Improvements
Project Total Budget	\$3.5 Million
Project Funding Match	Project serves a Disadvantaged Community
Project Funding Request	\$3.5 Million
Can a detailed cost estimate be provided upon request?	This is an estimate only. If funds are awarded the project will be bid out with more cost details available after bid results are in.
Project Location:	Old Facility is at 5935 Avondale Rd. Linda CA 95901, new is at the Edgewater Detention Basin near the intersection of Rupert and Avondale Avenues.
Latitude	See above.
Longitude	See above.
Could you provide a map of the project location including boundaries upon request?	Yes
Project Location Description:	Approximately 0.5 miles east of Lindhurst Avenue to Avondale Rd, South approximately 1.5 miles to the end of Rupert Avenue in Linda CA.
County	Yuba County
City/Community	Linda
Watershed/subwatershed	Yuba River
Groundwater Basin	Yuba Groundwater Basin/South Yuba Sub-basin
Project Type	Facility Construction

III. Project Description

Phase I: (\$2.1 Million) Demolition of the current facility and construction of a new pump station at the Edgewater Detention Pond with two pumps (Primary and Redundant) capable of pumping up to 35 cubic

feet per second (Between both pumps) controlled by an automated SCADA (Supervisory Control and Data Acquisition) system.

Additionally, during the design phase I of the project, the feasibility of reclaiming storm water for agricultural and municipal use as well as the project’s possible contribution to groundwater recharge will be considered, assessed and determined.

Phase II: (\$1.5 Million) Installation of a diesel backup generator capable of replacing lost commercial power to both pumps simultaneously in the event of an emergency.

IV. Project Rationale/Issues Statement

This project replaces aging drainage infrastructure which enhances flood management, and protects water conveyance, several wastewater management and ground water recharge facilities that serve Linda and Olivehurst, two Disadvantaged Communities (DACs). Additionally, the project considers the possibility of reclaiming storm water for agricultural and municipal reuse. The project specifically addresses the following regional issues:

- Upgrading infrastructure;
- Mitigating urban, agricultural and sediment run-off;
- Water use efficiency/water conservation;
- Improving flood management;
- Ensuring regulatory compliance;
- Adapting to climate change.

V. Goals/Objectives/Performance Metrics

Goals Addressed by the Project	<p>Goal 1: This project protects water supplies by upgrading flood management infrastructure and promoting disaster preparedness.</p> <p>Goal 2: The project protects water quality by mitigating for impacts from flood and in managing for urban, agricultural and sediment run-off.</p> <p>Goal 5: The project protects public safety by upgrading aging flood management infrastructure and promoting disaster preparedness.</p> <p>Goal 6: The project makes stormwater system modifications that adapt to the effects of climate change.</p> <p>Goal 7: The project provides flood protection for the disadvantaged communities of Linda and Olivehurst.</p>
Objectives Addressed by	1.1 Promote and implement policies and practices to increase water

Project	<p>use efficiency <i>and</i> water conservation in municipal and agricultural sectors;</p> <p>1.2 Promote water conservation and water use efficiency by instituting various techniques including, but not limited to, groundwater recharge, conjunctive management, irrigation efficiencies, municipal water conservation, water recycling and reuse;</p> <p>1.4 Promote disaster preparedness and conservation planning efforts;</p> <p>1.5 Maintain and enhance flood control infrastructure to protect water supplies;</p> <p>2.1 Protect and improve water quality by mitigating for urban, agricultural and sediment run-off;</p> <p>2.2 Minimize water quality impacts from flood, effluent discharge and wastewater spills;</p> <p>5.1 Improve integrated flood management to ensure emergency preparedness, increase flood protection and enhance regional and inter-regional collaboration;</p> <p>6.3 Increase system flexibility and resiliency to adapt to climate variability;</p> <p>7.2 Prioritize ongoing participation of DACs in the Regional Water Management Group</p>
<p>What performance metrics will be used to demonstrate that objectives are being met? Wherever possible, provide a quantitative measurement reflecting successful project outcomes.</p>	<ul style="list-style-type: none"> ▪ Decreased flood risk ▪ Lower FEMA flood insurance premiums

VI. Resource Management Strategies

Improve Operational Efficiency and Transfers	
Conveyance—Regional/Local	Conveys stormwater to nearby drainage canals that eventually reach the rivers
Increase Water Supply	
Conjunctive Management and Groundwater	A policy of retaining water in detention basins at the end of winter seasons for later release or possible groundwater recharge is being considered.
Recycled Municipal Water	Determine feasibility of recycling stormwater for agricultural and municipal use.
Improve Water Quality	
Urban Runoff Management	The catch basin captures sediment and miles of drainage canals convey and filter urban stormwater.
Matching Water Quality to Use	The project aims to determine the feasibility of reclaiming stormwater for non-potable agricultural

	irrigation.
Practice Natural Resources Stewardship	
Land Use Planning and Management	Part of internal drainage system necessary for development of residential, commercial and industrial lands
Recharge Areas Protection	Protects basin infrastructures; assesses the facility's contribution to groundwater recharge.
Improve Flood Management	
Flood Risk Management	Internal Drainage Flood Management that protects water treatment, water conveyance and ground water recharge facilities.

VII. Statewide Priorities

Drought Preparedness

- Promote water conservation, conjunctive use, reuse and recycling
- Achieve long term reduction of water use

Use and Reuse Water More Efficiently

- Increase urban and agricultural water use efficiency measures such as conservation and recycling

Climate Change Response Actions

- Adaptation to Climate Change: Use and reuse water more efficiently
- Adaptation to Climate Change: Water management system modifications that address anticipated climate
- Reduce Energy Consumption: Water recycling
- Reduce Energy Consumption: Water system energy efficiency

Practice Integrated Flood Management

- Better emergency preparedness and response
- Improved flood protection
- More sustainable flood and water management systems

Protect Surface and Groundwater Quality

- Protecting and restoring surface water and groundwater quality to safeguard public and environmental health and secure water supplies for beneficial uses

Ensure Equitable Distribution of Benefits

- Develop multi-benefit projects with consideration of affected disadvantaged communities and vulnerable populations

Climate Change Adaptation

Relocating this pump station to the Edgewater Detention basin enables the surrounding region to handle more stormwater during extreme weather events, resulting more sustainable flood management. Currently the existing pump station comprises of aging infrastructure, only capable of conveying stormwater from surrounding disadvantaged communities through the pumps only. The detention basin would enable much more storage capacity. Additionally, the project will consider modifications to allow for reclaiming storm water for agricultural and municipal use contributing to a more reliable water supply in response to projected climate variability and anticipated drought conditions.

GHG Emissions Reduction

The construction of this basin and pump station would replace two older pumps and less efficient electrical motors to be replaced with new, cleaner technology. A SCADA system would allow offsite control and allow for off-peak operation unless overcome by heavy storms.

VIII. Project Status and Schedule

Project Stage	Description of Activities in Each Project Stage	Planned/Actual Start Date	Planned/Actual Completion Date
Planning	Preliminary		TBD- awaiting funding
Design	Preliminary		TBD- awaiting funding
Environmental Documentation (CEQA/NEPA)	Pending		
Permitting	Identified		TBD- awaiting funding
Tribal Consultation (if not applicable, indicate by N/A)	N/A		
Construction/ Implementation	Pending Funds	Pending Funds	Unknown

IX. Project Technical Feasibility

a. List the water planning documents that specifically identify this project.	<ul style="list-style-type: none"> ▪ Yuba County General Plan ▪ RD 784 Master Drainage Plan
b. List the adopted planning	<ul style="list-style-type: none"> ▪ Yuba County General Plan

<p>documents the proposed project is consistent with (e.g., General Plans, UWMPs, GWMPs, Water Master Plans, Habitat Conservation Plans, etc.)</p>	<ul style="list-style-type: none"> ▪ RD 784 Master Drainage Plan
<p>c. List technical reports and studies supporting the feasibility of this project.</p>	<p>Studies and assessment included in Master Drainage Plan</p>