

# Staff Report

**TO:** Board of Directors

**FROM:** Doug Roderick, PE, Director of Engineering  
Chip Close, Director of Operations  
Sandra Dunlap, Director of Finance  
Steve Prosser, Director of Maintenance  
Greg Jones, Assistant General Manager

**DATE:** September 25, 2024

**SUBJECT:** **2024 Capital Improvement Program Mid-Year Project Status Update**

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***ENGINEERING***

**RECOMMENDATION:**

Receive a presentation on the status of the projects included in the 2024 Capital Improvement Program for the Engineering, Maintenance, Operations, Hydroelectric, and Administration Departments.

**ATTACHMENTS:** (1)

- 2024 CIP Mid-Year Project Status Update Presentation

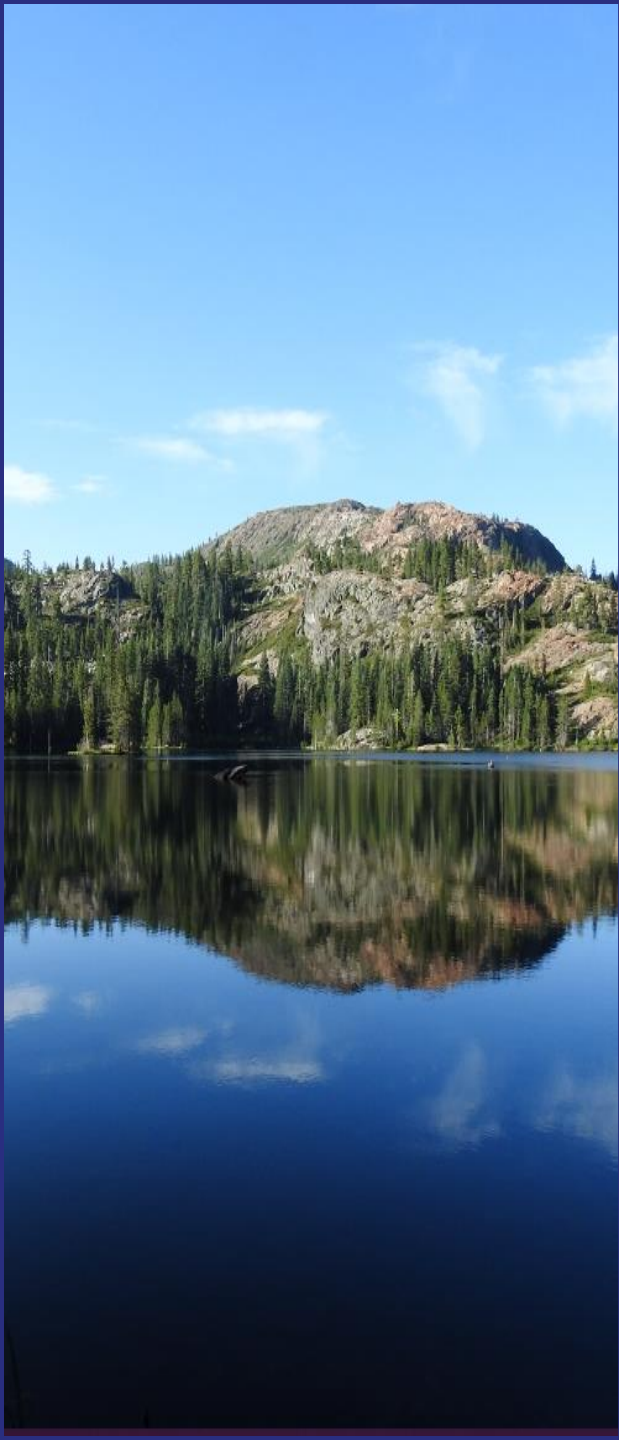


**2024**  
**CAPITAL IMPROVEMENT PROGRAM**  
**MID-YEAR PROJECT STATUS UPDATE**

September 25, 2024



**NID**



# 2024 Capital Projects

- Year to Date Project Budget Summary
- Status of Projects Included in the 2024 CIP Budget
  - **Fund 15**
    - Engineering Department
    - Maintenance Department
    - Operations
  - **Fund 55**
    - Hydroelectric Department
    - Hydroelectric O & M
  - **Fund 70**
    - IT
    - Watershed

## 2024 CAPITAL IMPROVEMENT BUDGET - ALL FUNDS

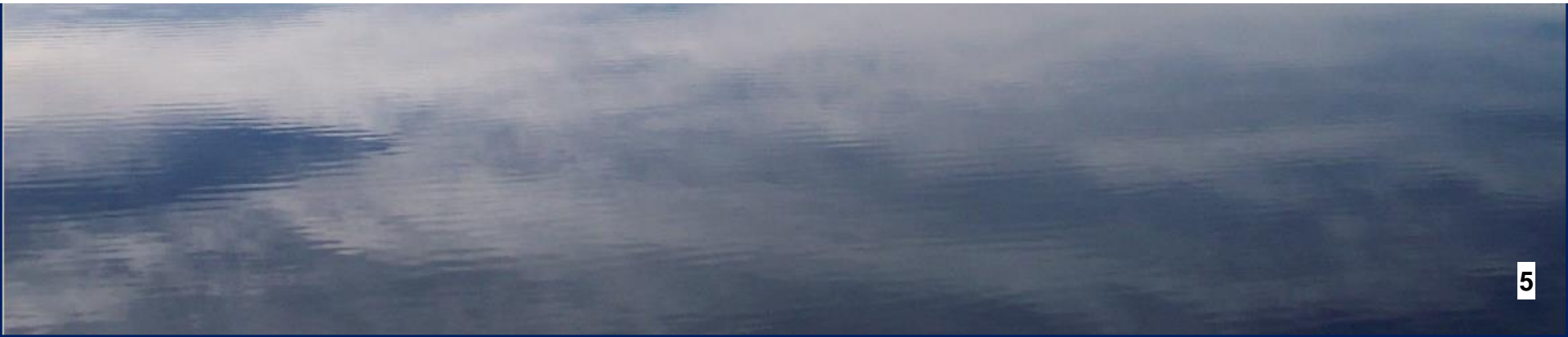
Fund	Department	2024 CIP Budget*	2024 CIP Expenses	2024 Encumbered
15	<b>Engineering</b>	\$ 8,317,071	\$ 3,749,081	\$ 1,827,587
15	<b>Maintenance</b>	\$ 1,432,100	\$ 503,152	\$ 696,868
15	<b>Operations</b>	\$ 237,000	\$ 189,499	-
55	<b>Hydroelectric</b>	\$ 3,500,000	\$ 652,576	\$ 1,235,083
55	<b>Hydroelectric O &amp; M</b>	\$ 575,000	\$ 492,544	\$ 33,370
70	<b>IT</b>	\$ 743,031	-	\$ 393,031
70	<b>Watershed</b>	\$ 1,842,678	\$ 777,970	\$ 394,864
<b>Totals</b>		<b>\$ 16,646,880</b>	<b>\$ 6,364,822</b>	<b>\$ 4,580,803</b>

\* 2024 CIP Budget includes amendments through 9/15/2024





# Fund 15 - Engineering Department 2024 Capital Improvement Projects



## 2024 CAPITAL PROJECT BUDGET SUMMARY - FUND 15 - ENGINEERING

Project No.	Project	2024 Budget	2024 Expenditures	2024 Encumbrances	Priority Score	Percent Complete	Schedule
2182	North Day Road Pipeline Replacement	\$ 110,000	\$ 96,609	\$ -	55	100%	Complete
2690	Hughes Road Pipeline Replacement	\$ 424,000	\$ -	\$ -	53	50%	On Schedule
2643	Ali Lane DFWLE	\$ 361,907	\$ 361,907	\$ -	61	100%	Complete
2409	Maranatha Place DFWLE	\$ 1,011,880	\$ 873,553	\$ -	61	95%	On Schedule
2650	Harris Road DFWLE	\$ 1,449,574	\$ 976,802	\$ 239,318	61	80%	On Schedule
2376	North Auburn WTP	\$ 1,200,000	\$ 909,065	\$ 290,065	60	85%	On Schedule
2568	Lake Wildwood WTP Upgrades	\$ 300,000	\$ -	\$ -	57	25%	On Schedule
2645	Combie Ophir Siphons II & III	\$ 1,381,120	\$ 123,047	\$ 1,154,254	71	50%	On Schedule
2336	Tarr Diversion	\$ 150,000	\$ -	\$ -	57	10%	Delayed
2646	Tarr Canal at Old Auburn	\$ 200,000	\$ -	\$ -	57	10%	Delayed
8099-4	Maben Canal Phase IV	\$ 550,000	\$ -	\$ -	53	45%	On Schedule
2692	Rough & Ready Reservoir Pipe	\$ 100,000	\$ -	\$ -	56	50%	On Schedule
2647	Ramp Repairs Operations	\$ 100,000	\$ 1,985	\$ 90,000	67	10%	Delayed
2689	Charging Stations at GV Headquarters	\$ 418,880	\$ -	\$ 52,200	46	25%	Delayed
2687	ADA Evaluation & Transition Plan	\$ 150,000	\$ -	\$ -	57	25%	On Schedule
2688	Automated Head Gates	\$ 65,000	\$ 63,188	\$ 1,750		65%	Delayed
6971	Alta Sierra Tank Site	\$ 272,710	\$ 272,710	\$ -	n/a	100%	Complete
n/a	Survey Equipment	\$ 72,000	\$ 70,215		70	100%	Complete
<b>Totals</b>		<b>\$ 8,317,071</b>	<b>\$ 3,749,081</b>	<b>\$ 1,827,587</b>			

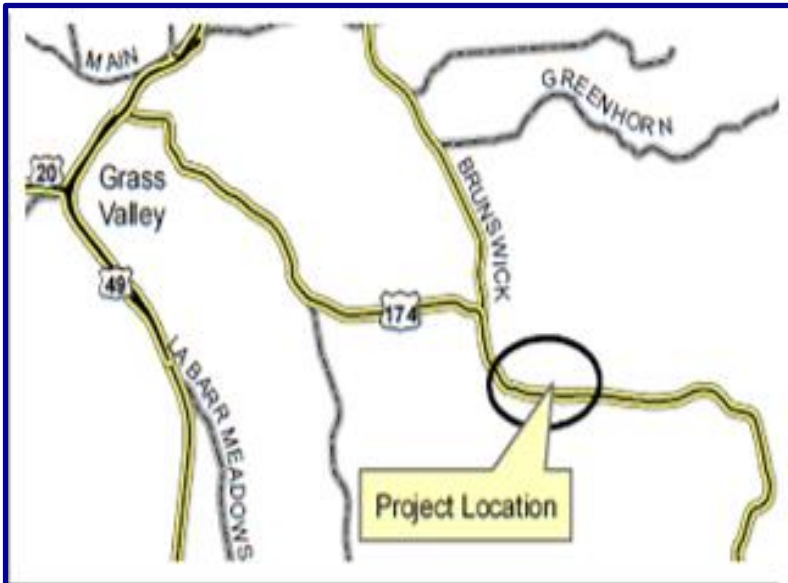
# North Day Road Pipeline Replacement

Project No. 2182

**Purpose:** The North Day Road Pipeline exceeded its life expectancy and was badly deteriorated. The pipeline ran inside of private property lines and against large trees. The mainline had been broken by tree roots, and from property owners working on their property. The Project replaced approximately 3,790 LF of A.C. pipeline within existing roadway and installed five fire hydrants.

**Status:** NID Maintenance crews have completed construction of the new pipeline. Eight new easements were obtained from property owners. Planning and design took place in 2022, and the Project was constructed in 2023 and 2024.

**Budget:** The 2024 Budget is \$110,000. 2024 year-to-date expenditures are \$96,909. Total project costs including labor are \$971,274 which is \$261,000 less than the lowest bid received.



No. Day Rd. Post Construction



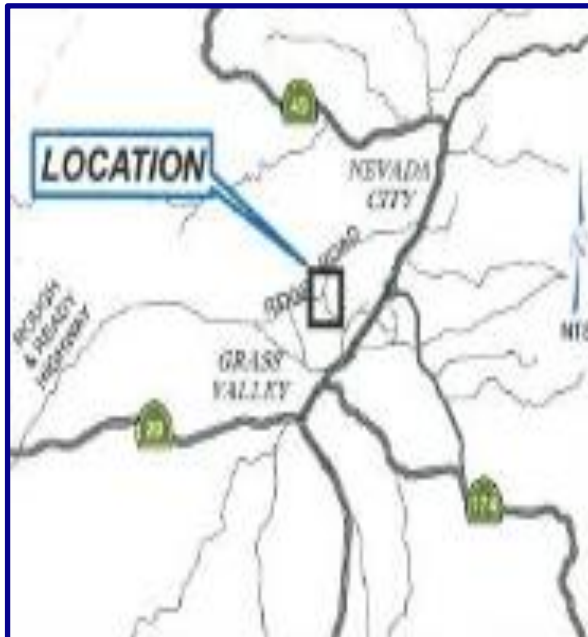
# Hughes Rd. Pipeline Replacement

Project No. 2690

**Purpose:** The original 20-inch steel pipe is more than 55 years old, has numerous leaks, and is at the end of its useful life. The pipe is a transmission main critical for providing downstream flows to the system that will be replaced with approximately 1,240 feet of new pipe. The 600-foot section at the end of Litton Drive will be connected with a 10-inch pipe to provide a loop for flow. This project will provide better operational service for treated water customers.

**Status:** The Project design is currently under review. Anticipate going to bid in November.

**Budget:** The 2024 budget for this Project is \$424,000. There have been no 2024 expenditures.



Hughes Road



Litton Dr. Extension



# Ali Lane DFWLE

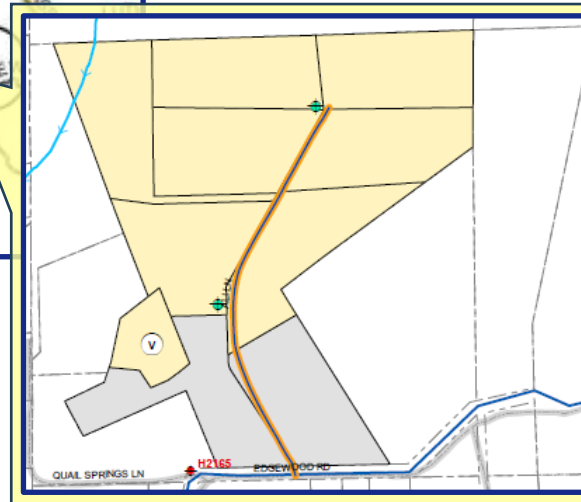
Project No. 2643

**Purpose:** To assist with the expansion of residential water service to new customers seeking the extension of treated waterlines into their community. The District contracted with La Fleur Excavating to install 1,250 feet of 8-inch treated waterline and 2 fire hydrants to serve 8 parcels on Ali Lane in Auburn. Four property owners are participating in the project.

**Status:** The Project is complete.

**Budget:** The 2024 budget for this Project was approved for \$462,416. 2024 expenditures are \$361,907. With overhead, the total Project expenditures are \$388,653.

Ali Lane post construction



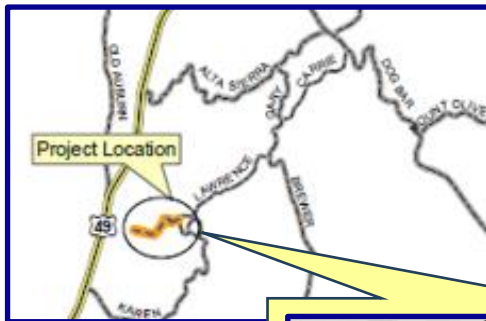
# Maranatha Place DFWLE

Project No. 2409

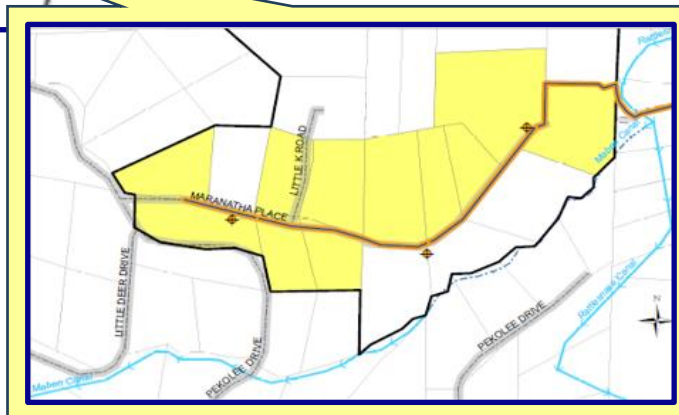
**Purpose:** To assist with the expansion of residential water service to new customers seeking the extension of treated waterlines into their community. The District contracted with La Fleur Excavating to install 3,170 feet of 8-inch treated waterline and 3 fire hydrants to serve 21 parcels on Maranatha Place. 12 property owners are participating

**Status:** Construction of the Project is complete. Finalizing easement acquisitions.

**Budget:** The 2024 budget for this Project was approved for \$1,011,880. 2024 year-to-date expenditures are \$873,553.



Maranatha Place post construction



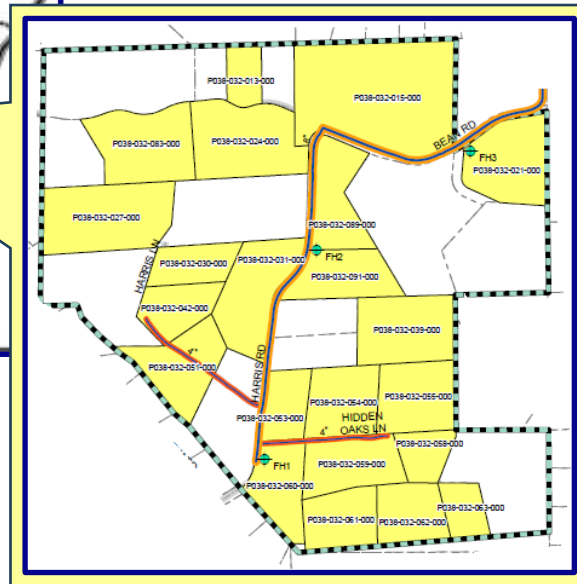
**Purpose:** To assist with the expansion of residential water service to new customers seeking the extension of treated waterlines into their community. The District contracted with La Fleur Engineering to install approximately 3,425 feet of 8-inch treated waterline, 1,442 feet of 4-inch treated waterline, and three fire hydrants to serve 34 parcels on Harris Road and Hidden Oaks Lane. 21 property owners are participating in the project.

**Status:** Construction in process. Anticipated completion is mid-October 2024. Working with property owners to obtain necessary easements.

**Budget:** The 2024 budget for this Project was approved for \$1,449,574. 2024 year-to-date expenditures are \$976,052.



Construction on Harris Road





# North Auburn Water Treatment Plant

Project No. 2376

**Purpose:** Install a motor control center (MCC), electrical panels, and site electrical improvements such as wiring and conduits, along with building modifications to accommodate new variable frequency drives (VFDs) at the North Auburn Water Treatment Plant. The project will result in lower operating costs and provide a regional benefit to the community

**Status:** Construction is underway and is expected to be completed by the end of 2024. The Project had been delayed due to a supply chain issue. Parts have been received, and construction has resumed.

**Budget:** The 2024 budget for this Project is \$1,200,000. 2024 year-to-date expenditures are \$909,935.



No. Auburn Water Treatment Plant



# Lake Wildwood Treatment Plant Upgrades

Project No. 2568

**Purpose:** The Lake Wildwood Treatment Plant has exceeded its useful life and requires substantial upgrades. Upgrades to the plant include replacing the clear wells, pumps, drying beds, sediment ponds, intake structure, SCADA, control room and electrical upgrades.

**Status:** A Request for Proposals for Design was sent to several consulting firms on August 20, 2024. Proposals received on September 12, 2024. The Project is anticipated to be completed in 2027.

**Budget:** The 2024 budget for this Project is \$300,000. There have been no 2024 expenditures.



Lake Wildwood Water Treatment Plant

# Combie Ophir II & III Siphon Replacements

Project No. 2645

**Purpose:** The Orr Creek, Dry Creek and Rock Creek siphons on the Combie Ophir II & III raw water delivery system are approximately 75 years old and in need of an upgrade. The project consists of the replacement/rehabilitation of the three siphons. The siphons are proposed to be upgraded by installing new culverts adjacent to the existing ones for Orr Creek and Dry Creek siphons. The Rock Creek Siphon will be replaced by a new pipeline within the road.

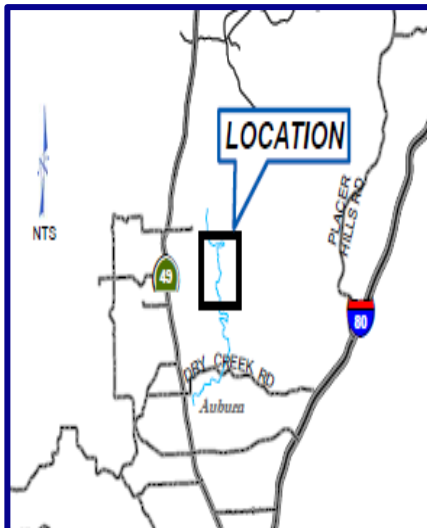
**Status:** The Board of Directors approved the Initial Study and Mitigated Negative Declaration. Construction Contract for the Orr Creek Siphon was awarded to C & D Contractors. Construction to begin in October 2024.

**Budget:** The 2024 budget for this Project is \$1,381,120 for construction of the Orr Creek Siphon replacement. 2024 year-to-date expenditures are \$123,047.

Orr Creek Siphon  
Planned for Construction in 2024

Dry Creek Siphon  
Planned for Construction in 2026

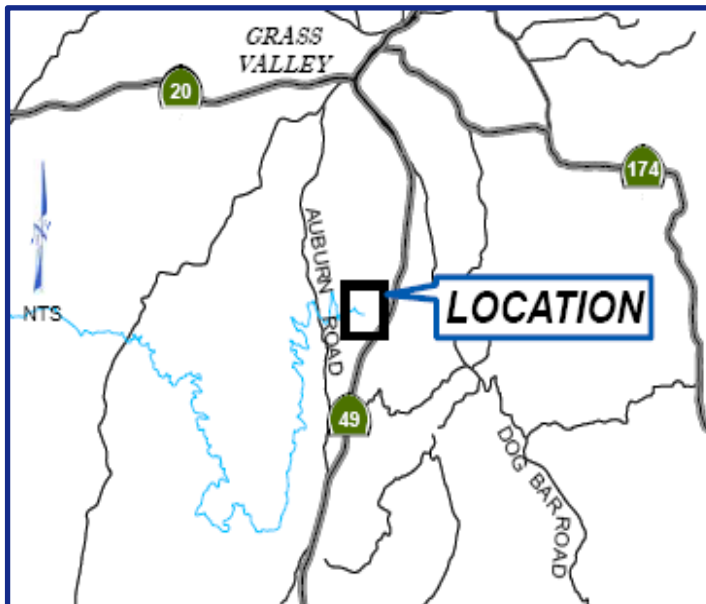
Rock Creek Siphon  
Planned for Construction in 2027



**Purpose:** The Diversion structure on Wolf Creek that feeds the Tarr canal is badly deteriorated and needs major repairs or replacement. Water is leaking through the existing diversion and walls. The sluice gate is inoperable and buried. Project will replace the diversion structure in Wolf Creek with a new concrete structure. Due to the location, extensive CEQA and permits will be necessary. Construction of the facility will be difficult.

**Status:** The Project has been delayed for surveying purposes related to outsourced surveying firm. Staff reviewing data received to determine scope of remaining survey needs.

**Budget:** The 2024 budget for this Project is \$150,000. There have been no 2024 expenditures.



Tarr Diversion



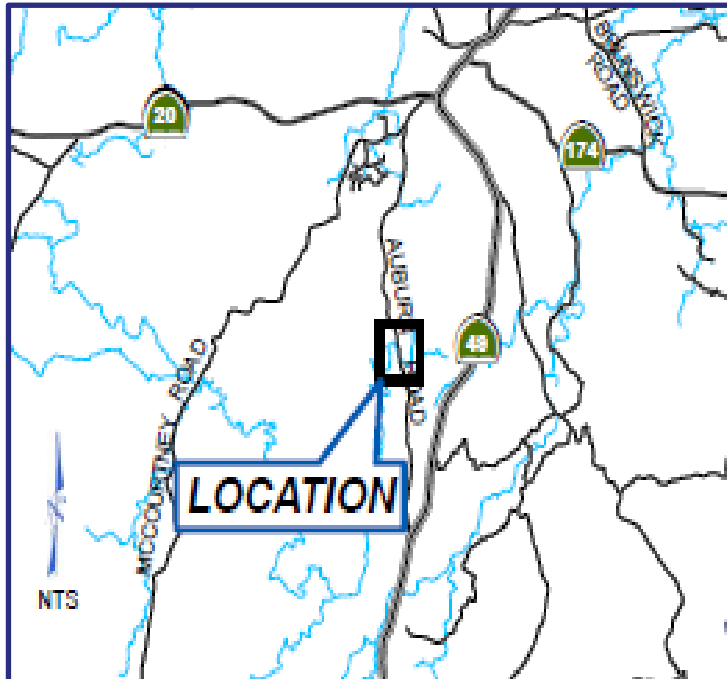
# Tarr Canal Rehabilitation

Project No. 2646

**Purpose:** There are numerous leaks on the shotcrete section of the canal near Old Auburn Road. The Project will encase 6,750 feet of the canal with a precast concrete box culvert. Further investigation may reveal additional shotcrete and reshaping portions of the canal.

**Status:** The Project has been delayed for to surveying purposes related to outsourced surveying firm. Staff reviewing data received to determine scope of remaining survey needs.

**Budget:** The 2024 budget for this Project is \$200,000. There have been no 2024 expenditures.



View of Tarr Canal at Old Auburn



**Purpose:** This is the fourth and final phase of the Maben Canal Projects. Issues downstream of the prior phases include various berm repairs due to an undersized siphon, flow restrictions, over-toppings, and routine leaks. There is currently a moratorium in place. The Project will increase the Maben Canal capacity by encasing 590 feet with 18-inch pipe within the existing alignment and replacing an existing 12-inch siphon with 470 feet of 24-inch pipe. A water flow measuring device will also be installed. The Project will provide uninterrupted service and will lift the moratorium to allow water service for new customers.

**Status:** A Request for Quotes for construction was sent to ten contractors on September 11, 2024. Construction anticipated to start in October.

**Budget:** The 2024 budget for this Project is \$550,000. There have been no 2024 expenditures.



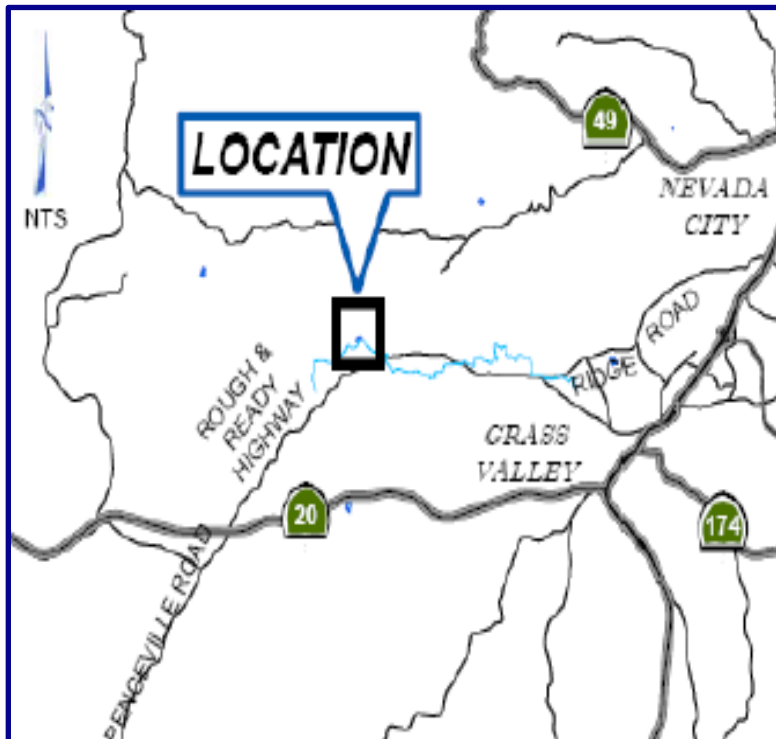
## Rough & Ready Reservoir Pipe

Project No. 2692

**Purpose:** The outlet pipe feeding the lower Rough & Ready canal from the Rough & Ready Reservoir is badly deteriorated and in need of replacement. The Project will replace the outlet pipe and structure that feeds the lower portion of the canal system, as well as replacing the catwalks and control valve.

**Status:** Project planning underway to further evaluate the condition of the outlet pipe.

**Budget:** The 2024 budget for this Project is \$100,000. There have been no 2024 expenditures.



## Ramp & Stairs – GV Headquarters

Project No. 2647

**Purpose:** The existing ramp to the Operations offices and stairs to Customer Service lobby are failing and require extensive reconstruction. The Project will replace the existing ramp and walkway, and stairs to meet current ADA design standards.

**Status:** The Project scope has been completed and design to start late 2024. Consulting contract for Project design awarded to Morrison Structures. Construction to begin in 2025.

**Budget:** The 2024 budget for this Project is \$100,000. 2024 year-to-date expenditures are \$1,985.



Walkway to Operations entrance



Underside of walkway to Operations entrance



Stairs to lobby, customer service



# ADA Self Evaluation & Transition Plan

Project No. 2687

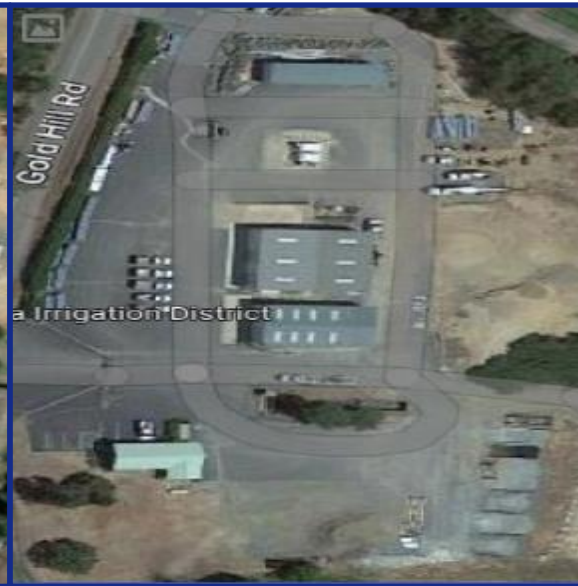
**Purpose:** Review District offices and facilities to ensure compliance with the Americans with Disabilities Act (ADA) and develop a plan to make improvements as necessary.

**Status:** A Request for Proposals was sent to six consulting firms that specialize in ADA Compliance. Proposals are due September 26, 2024.

**Budget:** The 2024 budget for this Project is \$150,000. There have been no 2024 expenditures.



NID Headquarters Aerial View



NID Gold Hill Yard Aerial View



NID Hydro Electric Field Office Aerial View



## Charging Stations at Grass Valley Headquarters

Project No. 2689

**Purpose:** Installation of new PG&E service meters and transformers, and installation of two electric vehicle charging stations to meet the California Air Resources Board (CARB) new Advanced Clean Fleets (ACF) Regulations.

**Status:** The District has engaged the services of Terra Verde Energy to provide compliance planning support services in consideration of the California Air Resources Board (CARB) Regulations. The Compliance Plan has been received and reviewed by staff. Consultant developing proposal for design phase.

**Budget:** The 2024 budget for this Project is \$418,880. There have been no 2024 expenditures.



NID Headquarters Aerial View

## Automated Head Gates

Project No. 2688

**Purpose:** District head gates and gaging stations have met their life expectancy and need replacing. The FlumeGate is a combination automated overshoot control gate and flow measurement device that mounts in new or existing structures and arrives as a complete turnkey installation.

**Status:** Gate has been purchased. Requires a new structure to install, structure is included in the proposed 2025 budget.

**Budget:** The 2024 budget for this Project is \$65,000. 2024 year-to-date expenditures are \$63,188.





# Alta Sierra Reservoir Replacement

Project No. 6971

**Purpose:** The reservoir was originally used for raw water storage before being reconstructed into a treated water facility utilizing Hypalon lining and cover. The Hypalon liner was vulnerable to damage from the sun and vandalism, and over time required repair and patching, requiring isolation from the system to repair. The Alta Sierra Reservoir was replaced with a 3-million-gallon concrete tank.

**Status:** Construction was completed in 2023. The 2024 budget is for the final payment to the contractor.

**Budget:** The 2024 budget for this Project is \$272,710. 2024 year-to-date expenditures are \$272,710



Side view of water tank



Control Building



## Surveying Equipment

**Purpose:** The surveying crew had been using a Trimble S6 model total station introduced in 2006, that was damaged while in the field. The SX12 is a new model total station with scanning capabilities that collects high-quality, high-speed scan data, saving time and reducing risks to survey staff.

**Status:** The new total station has been received and is in service.

**Budget:** The 2024 budget for this equipment is \$72,000.





# Fund 15 - Operations Department 2024 Capital Improvement Projects

## 2024 CAPITAL PROJECT BUDGET SUMMARY - FUND 15 - OPERATIONS

Asset No.	Vehicles & Equipment	2024 Budget	2024 Expenditures	2024 Encumbrances	Priority Score	Percent Complete	Schedule
11140	Vehicle Replacement Asset 10533	\$ 45,000	\$ 37,900	\$ -	68	85%	Received
11141	Vehicle Replacement Asset 10690	\$ 48,000	\$ 37,900	\$ -	61	85%	Received
11144	Vehicle Replacement Asset 10692	\$ 48,000	\$ 37,900	\$ -	61	85%	Received
11145	Vehicle Replacement Asset 10722	\$ 48,000	\$ 37,900	\$ -	61	85%	Received
11147	Vehicle Replacement Asset 10801	\$ 48,000	\$ 37,900	\$ -	61	85%	Received
<b>Totals</b>		<b>\$ 237,000</b>	<b>\$ 189,499</b>	<b>\$ -</b>			



## Operations Truck (Replace 10690)

No. 11140

**Purpose:** Replacement of vehicle No. 10690, a 2016 Ford F150 4x4 with 131,624 miles and based on historic use, was expected to exceed 150,000 miles by end of 2024. This truck is a high priority vehicle used for daily treated water operations and emergency response.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$48,000. 2024 year-to-date expenditures are \$37,900.



## Operations Truck (Replace 10692)

No. 11141

**Purpose:** Replacement of vehicle No. 10692, a 2015 Ford F150 with 140,154 miles and based on historic use, was expected to exceed 150,000 miles by end of 2024. This truck is a high priority vehicle used for daily water distribution operations and emergency response.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$48,000. 2024 year-to-date expenditures are \$37,900.



## Operations Truck (Replace 10722)

No. 11144

**Purpose:** Replacement of vehicle No. 10722, 2016 Ford F150 4x4 with 136,947 miles and based on historic use, was expected to exceed 150,000 miles by end of 2024. This truck is a high priority vehicle used for daily water distribution operations and emergency response.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$48,000. 2024 year-to-date expenditures are \$37,900.





## Operations Truck (Replace 10801)

No. 11145

**Purpose:** Replacement of vehicle No. 10801 is a 2017 Ford F150 4x4 with 124,700 miles and based on historic use, was expected to exceed 150,000 miles by end of 2024. This truck is a high priority vehicle used for daily water distribution operations and emergency response.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$48,000. 2024 year-to-date expenditures are \$37,900.



## Operations Truck (Replace 10533)

No. 11147

**Purpose:** Replacement of vehicle No. 10533 is a 2013 Ford F150 4x4 with 122,477 miles and based on historic use, was expected to exceed 150,000 miles by end of 2024. This truck is a high priority vehicle used for daily water distribution operations and emergency response.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$48,000. 2024 year-to-date expenditures are \$37,900.





# Fund 15 - Maintenance Department 2024 Capital Improvement Projects





**2024 CAPITAL PROJECT BUDGET SUMMARY - FUND 15 - MAINTENANCE**

Asset No.	Projects, Vehicles, and Equipment	2024 Budget	2024 Expenditures	2024 Encumbrances	Priority Score	Percent Complete	Schedule
2691	Roof Replacement – Business Center	\$ 100,000	\$ -	\$ -	56	25%	Delayed
TBD	(2) 5-yard Dump Trucks - Replace 10003 & 10004	\$ 300,000	\$ -	\$ 279,742	56	75%	On schedule
11133	1.5-Ton Dump Truck - Replace Vehicle 10261	\$ 100,000	\$ 98,422		65	85%	Received
11142	1/2-ton Pickup Truck - Replace Vehicle 9860	\$ 55,000	\$ 37,900		54	85%	Received
11143	1/2-ton Pickup Truck - Replace Vehicle 10418	\$ 55,000	\$ 37,900		59	85%	Received
11146	1/2-ton Pickup Truck - Replace Vehicle 10514	\$ 55,000	\$ 37,900		54	85%	Received
TBD	Excavator - Replace Asset 8580	\$ 290,217		\$ 290,217	58	50%	Delayed
TBD	Forklift - Replace Asset 8339	\$ 127,832	\$ -	\$ 126,909	56	95%	On schedule
11136	Skip Loader-Replace Asset 9138	\$ 118,951	\$ 97,951	\$ -	59	100%	Received
11137-38	Tow- Behind Air Compressors - Replace 10031 & 10032	\$ 88,676	\$ 88,676	\$ -	51	100%	Received
11139	Tow-Behind Chipper - Replace Asset 9995	\$ 76,324	\$ 75,222	\$ -	43	100%	Received
TBD	Vehicle Lift - Replace and Upgrade Existing	\$ 65,100	\$ 29,181		56	75%	On schedule
<b>Totals</b>		<b>\$ 1,432,100</b>	<b>\$ 503,152</b>	<b>\$ 696,868</b>			

## Roof Replacement – Business Center

**Purpose:** This is a flat roof with a rubber liner. Coatings have been applied to the liner to prolong the roof's life. However, leaks at 4 to 6 different locations reappear every winter and the roof needs to be replaced. This project would include working with the roof-mounted HVAC units.

**Status:** Construction contract awarded. Construction to start in September 2024.

**Budget:** The 2024 budget for this Project is \$100,000. There have been no 2024 expenditures.



## 5-Yard Dump Trucks (2)

No. TBD

**Purpose:** The new dump trucks will replace two 2009 dump trucks (Asset Nos. 10003 & 10004); one each for the Grass Valley and Placer Maintenance yards.

**Status:** Two International MV607 SB 5-yard dump trucks are expected for delivery by October 31, 2024.

**Budget:** The 2024 budget for this equipment is \$300,000 2024 year-to-date expenditures are \$279,742.



Dump truck being replaced



International MV607 5-yard dump truck



## 1.5-Ton Dump Truck

No. TBD

**Purpose:** California Air Resources Board (CARB) compliance is necessary for the District's large vehicles. The current 1-ton dump truck will become out of compliance (Asset 10261.) This will be replaced with the 5500 series (1.5-ton) that have better breaking and payload capabilities with the same size chassis .

**Status:** Received a 2023 Ford F550 4x4 Cab Chassis on May 29, 2024.

**Budget:** The 2024 budget for this equipment is \$100,000. 2024 year-to-date expenditures are \$98,422.



Ford F550 Dump Truck

## Maintenance Truck (Replace 9860)

No. 11142

**Purpose:** Replacement of vehicle No. 9860 is a 2007 Dodge 2500 ¾-ton pickup truck with over 90,000 miles. Maintenance Supervisors need reliable vehicles to respond to water emergencies at all times of the day (regular workday and as emergency call outs at nights and on weekends). This vehicle will be reassigned as a District pool vehicle.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$55,000. 2024 year-to-date expenditures are \$37,900.



2024 Toyota Tacoma 4WD SR

## Maintenance Truck (Replace 10418)

No. 11143

**Purpose:** Replacement of vehicle No. 10418 is a 2013 Ford F150 1/2-ton pickup truck with over 121,000 miles. Maintenance Supervisors need reliable vehicles to respond to water emergencies at all times of the day (regular workday and as emergency call outs at nights and on weekends). This vehicle will be reassigned as a District pool vehicle.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$55,000. 2024 year-to-date expenditures are \$37,900.



2024 Toyota Tacoma 4WD SR



## Maintenance Truck (Replace 10514)

No. 11146

**Purpose:** Replacement of vehicle No. 10514 is a 2014 Ford F150 1/2-ton pickup truck with over 145,000 miles. Maintenance Supervisors need reliable vehicles to respond to water emergencies at all times of the day (regular workday and as emergency call outs at nights and on weekends). This vehicle will be reassigned as a District pool vehicle.

**Status:** Received 2024 Toyota Tacoma 4WD SR Access, with 6-foot bed. Truck is currently being outfitted with toolbox and standard accessories.

**Budget:** The 2024 budget for this vehicle is \$55,000. 2024 year-to-date expenditures are \$37,900.



2014 Ford F150



2024 Toyota Tacoma 4WD SR

## Excavator (Replace 8580)

No. TBD

**Purpose:** Replace the existing 1997 John Deere 200LC track excavator (Asset 8580) with over 7,949 operating hours and purchase a CARB compliant 2024 John Deere 200G track excavator for Maintenance's Raw Water Section that will be utilized by both Grass Valley and Placer Maintenance crews.

**Status:** Delivery of the Excavator has been delayed to November 27, 2024.

**Budget:** The 2024 budget for this equipment is \$290,217. 2024 year-to-date expenditures are \$290,217.



Existing John Deere 200LC Track Excavator



John Deere 200G Track Excavator

## Forklift (Replace 8339)

No. TBD

**Purpose:** Replace the existing unit (Asset 8339), a 1999 Eagle Picher forklift with over 2,643 operating hours. As a Tier 0 unit, it has negative impacts to the District's off-road CARB emission score and must be retired by January 2025. The forklift is used daily for loading and off-loading trucks.

**Status:** Delivery of the 2024 Case 588H Rough Terrain forklift (Tier 4) is expected by October 31, 2024.

**Budget:** The 2024 budget for this equipment is \$127,832. 2024 year-to-date expenditures are \$126,909.



Existing forklift



New Case 588H Rough Terrain Forklift



## Skip Loader (Replace 9138)

No. TBD

**Purpose:** Replace the existing 1996 John Deere 770B Motor Grader (Asset 9138) with over 4,500 operating hours, that must be retired by January 2025, with an emissions compliant Tier 4 machine.

**Status:** Received the 2024 Case 570N EP Skip Loader (Tier 4) on July 24, 2024.

**Budget:** The 2024 budget for this equipment is \$118,951. 2024 year-to-date expenditures are \$97,953.



New Case 570N EP Skip Loader

## Tow-behind Air Compressors (2) Replace Existing

No. TBD

**Purpose:** Replace the existing Tier 3 units (Assets 10031 and 10032), 2008 Sullair 260-DSL tankless air compressors, with over 1,684 operating hours combined, that must be replaced by January 2025 with the purchase two new/replacement tow-behind air compressors; one each for the Grass Valley and Placer Maintenance Yards, to be in compliance with CARB/PERP regulations.

**Status:** Received two 2024 Bobcat PA250V 250+ CFM Tow-behind Air Compressors on August 8, 2024.

**Budget:** The 2024 budget for this equipment is \$88,676. 2024 year-to-date expenditures are \$88,676.



Existing tow-behind air compressor

New Bobcat Tow-behind Air Compressors



## Tow-behind Chipper (Replace Asset 9995)

No. TBD

**Purpose:** The existing chipper (Asset 9995) is a 2008 Bandit 65X brush chipper with over 1,173 operating hours. The unit is undersized for the District's needs (can only handle small wood debris) and is becoming mechanically unreliable. This chipper will be used by the Placer crews.

**Status:** Received a 2024 Bandit Intimidator 12XP Tow-behind Chipper on August 13, 2024.

**Budget:** The 2024 budget for this equipment is \$76,324. 2024 year-to-date expenditures are \$75,222



Existing Chipper #9995



New Bandit Chipper



## Vehicle Lift (Replacement)

No. TBD

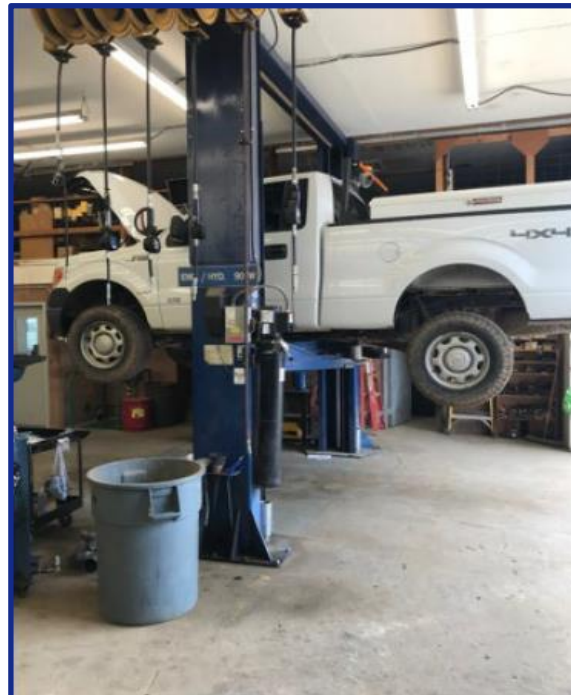
**Purpose:** The Mechanic Shop currently has two vehicle lifts; one rated at 12,000 lbs and one rated at 15,000 lbs. Numerous District vehicles weigh more than 15,000 lbs and cannot be lifted for service and repairs. The ability to lift heavier “medium duty” trucks using a vehicle lift is safer, more ergonomic and more productive than working with jack stands on the shop floor.

**Status:** Delivery of a Rotary SPO20 Symmetric 20,000 lb 2-Post Vehicle Lift is expected for delivery on September 16, 2024

**Budget:** The 2024 budget for this equipment is \$65,100. 2024 year-to-date expenditures are \$29,181. Installation to follow is estimated to be \$19,300.



Vehicle lift to be retired





# Fund 55 - Hydroelectric Department 2024 Capital Improvement Projects



## 2024 CAPITAL PROJECT BUDGET SUMMARY - FUND 55 - HYDROELECTRIC

Project No.	Project	2024 Budget	2024 Expenditures	2024 Encumbrances	Priority Score	Percent Complete	Schedule
2094	Scotts Flat Spillway Repair and Upgrades	\$ 1,000,000	\$ 524,896	\$ 538,317	84	60%	On Schedule
2359	Bowman North Dam Upstream Lining Improvements	\$ 100,000	\$ 10,667	\$ -	72	33%	Ongoing
2392	Rollins Governor Replacement	\$ 200,000	\$ -	\$ 150,000	75	10%	On Schedule
2394	Rollins Powerhouse Relay Protection Upgrade	\$ 50,000	\$ 8,750	\$ -	75	100%	Complete
2395	Deer Creek Exciter Upgrade	\$ 150,000	\$ -	\$ 82,200	70	10%	On Schedule
2432	New Hydroelectric Office Design (Roof)	\$ 900,000	\$ 3,448	\$ 400,000	68	40%	On Schedule
2483	Dutch Flat #2 Powerhouse Backup Generator	\$ 100,000	\$ 27,572	\$ 45,012	70	50%	Delayed
2598	Chicago Park Powerhouse RTU Replacement	\$ 200,000	\$ 72,405	\$ 14,704	68	80%	On Schedule
2655	Chicago Park Powerhouse Refurbishment	\$ 350,000	\$ -	\$ -	82	30%	Delayed
2658	French Lake Low Level Outlet Gate Refurbishment	\$ 50,000	\$ 4,284	\$ -	75	50%	Delayed
2660	Dutch Flat #2 Station Batteries/Charger	\$ 50,000	\$ 118	\$ -	62	85%	On Schedule
2661	Chicago Park Powerhouse Station Batteries/Charger	\$ 50,000	\$ 118	\$ -	62	85%	On Schedule
2665	Deer Creek Powerhouse Communications Upgrade	\$ 150,000	\$ 318	\$ 4,850	75	30%	Delayed
2667	SCADA Software & Hardware	\$ 150,000	\$ -	\$ -	70	30%	On Schedule
<b>Totals</b>		<b>\$ 3,500,000</b>	<b>\$ 652,576</b>	<b>\$ 1,235,083</b>			



# Scotts Flat Spillway Repair and Upgrades

Project No. 2094

**Purpose:** Upgrade the Scotts Flat Spillway to safely pass the probable maximum flood as required by DSOD and FERC. Requires studies and hydraulic modeling of alternatives; design of modifications of spillway chute, chute walls, and the terminal energy dissipation structure; construction of design.

**Status:** Design ongoing. Staff has received 60% design comments from DSOD. Meeting with Staff and DSOD regarding upper plunge pool requirements currently being scheduled. Replacement of upper plunge pool would impact construction schedule and costs.

**Budget:** The 2024 budget for this Project is \$1,000,000. 2024 year-to-date expenditures are \$524,896.



Scotts Flat Spillway

# Bowman North Dam Lining Improvements

Project No. 2359

**Purpose:** Improve the failing lining on the upstream face of Bowman North Dam. The existing lining has been damaged by extreme freeze/thaw action on the concrete at high elevation and needs significant repair to prevent serious damage to critical infrastructure.

**Status:** Construction is underway by Hydro Maintenance and will continue until inclement weather prevents further progress. Construction will resume in 2025 when the site is accessible

**Budget:** The 2024 budget for this Project is \$100,000. 2024 expenditures are \$10,667.



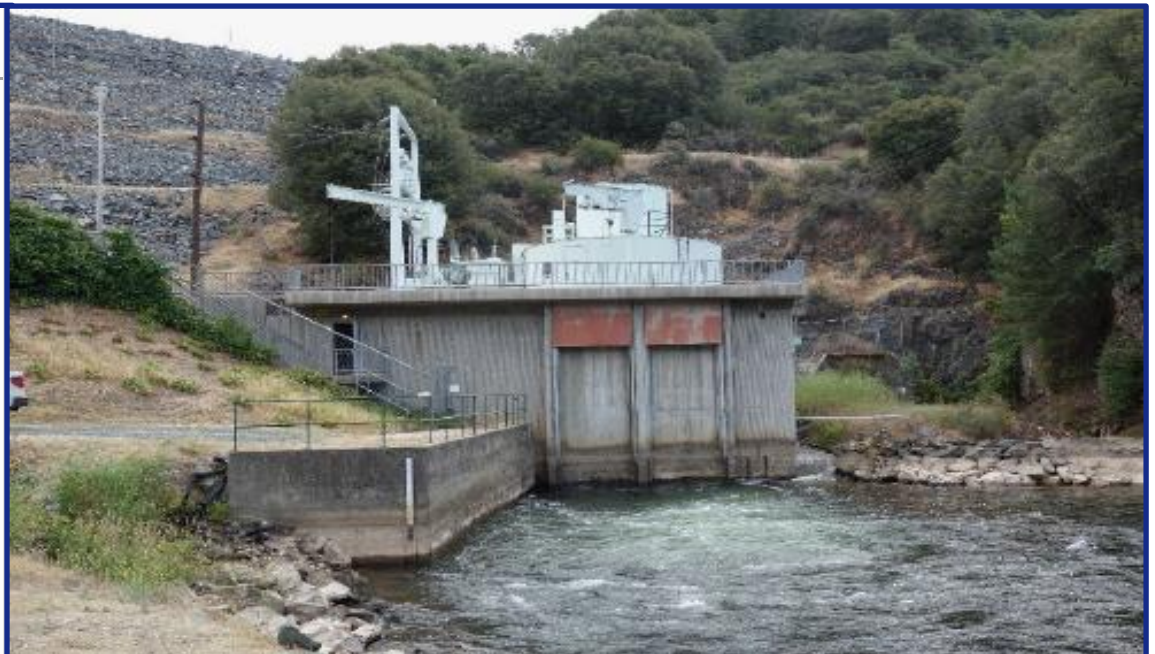
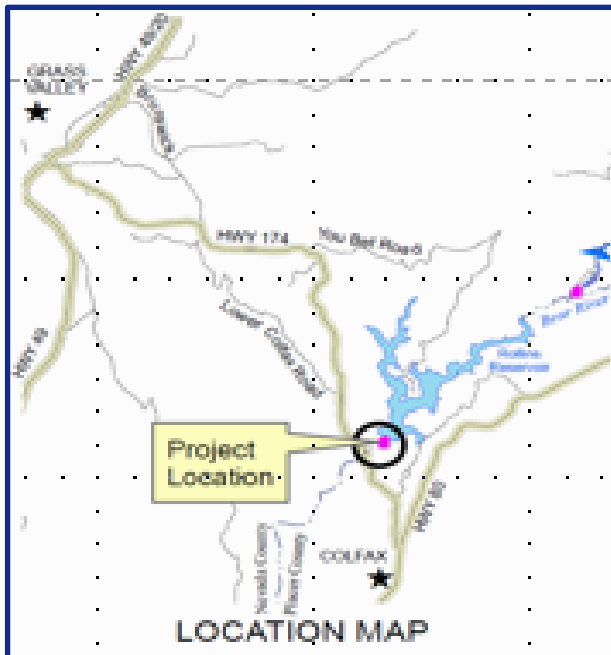
# Rollins Powerhouse Governor Replacement

Project No. 2392

**Purpose:** Replace the existing governor and appurtenances to improve facility efficiency and performance by replacing the existing mechanical governor at Rollins Powerhouse.

**Status:** A contract was signed in August and the design phase of the project is underway. Design will be completed in 2025. Construction will occur in the Spring of 2026 or when water is available for testing.

**Budget:** The 2024 budget for this Project is \$200,000. There have been no year-to-date expenditures.



Rollins Powerhouse



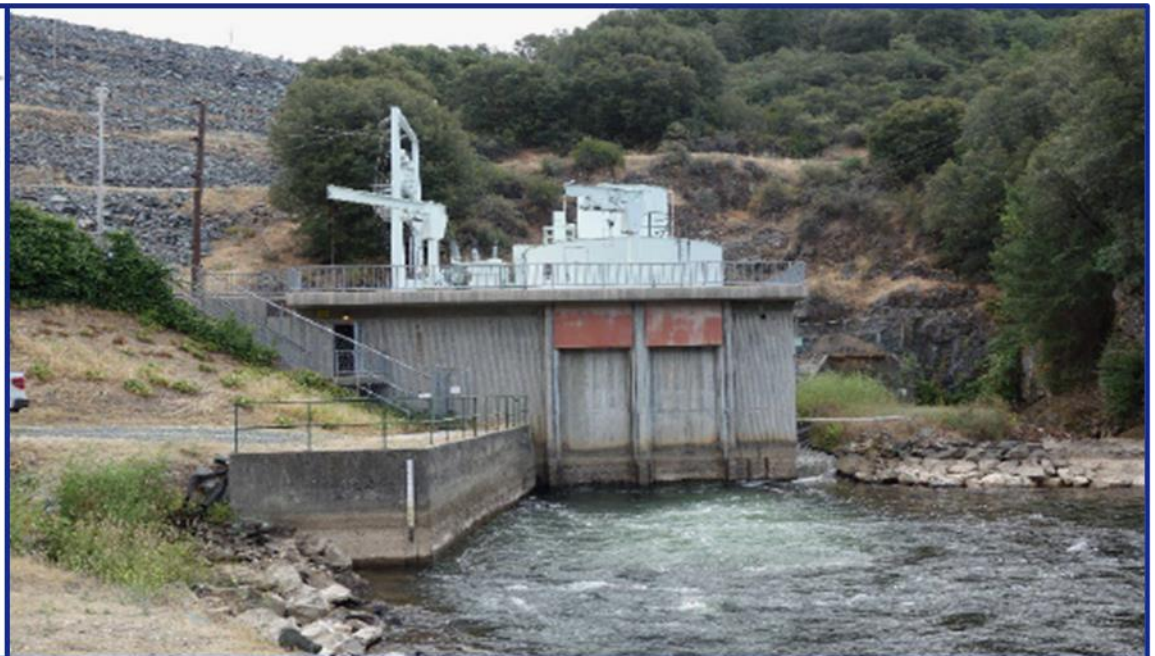
# Rollins Powerhouse Relay Protection

Project No. 2394

**Purpose:** Provide improved high voltage protection for RPH by upgrading the relay system. This will improve plant efficiency and better protect onsite equipment. This project will upgrade the protective relay system by removing the original (1980s vintage) electro-mechanical relays and installing new programmable, multi-function relays and annunciators.

**Status:** This Project is complete. Construction was completed in November 2023. Final Project documentation and as-builts were completed in 2024.

**Budget:** The 2024 budget for this Project is \$50,000. 2024 year-to-date expenditures are \$8,750.



Rollins Powerhouse

# Deer Creek Exciter Upgrade

Project No. 2395

**Purpose:** The existing excitation system at DCPH is obsolete and unsupported by the manufacturer. The system is 1970's vintage and spare parts are unavailable. Issues with the excitation system have caused unplanned outages at DCPH as recently as August 2024

**Status:** A budget amendment to include the project in the 2024 CIP was approved by the NID Board of Directors in August. Bidding has been completed and a vendor has been selected for award. The contract will be signed in September allowing design work to begin the same month.

**Budget:** The 2024 budget for this Project is \$150,000. There are no 2024 expenditures.



Deer Creek Powerhouse



## New Hydroelectric Field Office

Project No. 2432

**Purpose:** Complete office building renovations, make repairs to the roof, install perimeter fencing, upgrade communications, and install a backup generator to make the building habitable for future relocation of the Hydroelectric Department.

**Status:** A contract to install an overlay system over the existing roof was approved by the NID Board of Directors in August. Work on the roof will begin in September once a permit has been issued by the city of Colfax. A request for proposals to obtain architectural and engineering design services is being prepared and will be released in 2024.

**Budget:** The 2024 budget for this Project is \$900,000. 2024 year-to-date expenditures are \$3,448.



New Hydroelectric Field Office - Colfax



# Dutch Flat #2 Powerhouse Backup Generator

Project No. 2483

**Purpose:** Design and installation of a new backup generator at Dutch Flat #2 Powerhouse to provide an onsite backup power source.

**Status:** Delivery of the low voltage switchgear has been delayed. Project installation and final engineering work will be pushed to 2025

**Budget:** The 2024 budget for this Project was \$100,000. 2024 expenditures are \$27,572.



Dutch Flat #2 Powerhouse

# Chicago Park Powerhouse RTU Replacement

Project No. 2598

**Purpose:** Specify, procure, and install a new remote terminal unit (RTU) for Chicago Park Powerhouse to provide modern, onsite SCADA alarming to replace the obsolete hardware for critical systems.

**Status:** Construction is underway and will be complete in September 2024. 90% complete, on schedule.

**Budget:** The 2024 budget for this Project is \$200,000. 2024 year-to-date expenditures are \$72,405.



Chicago Park Powerhouse

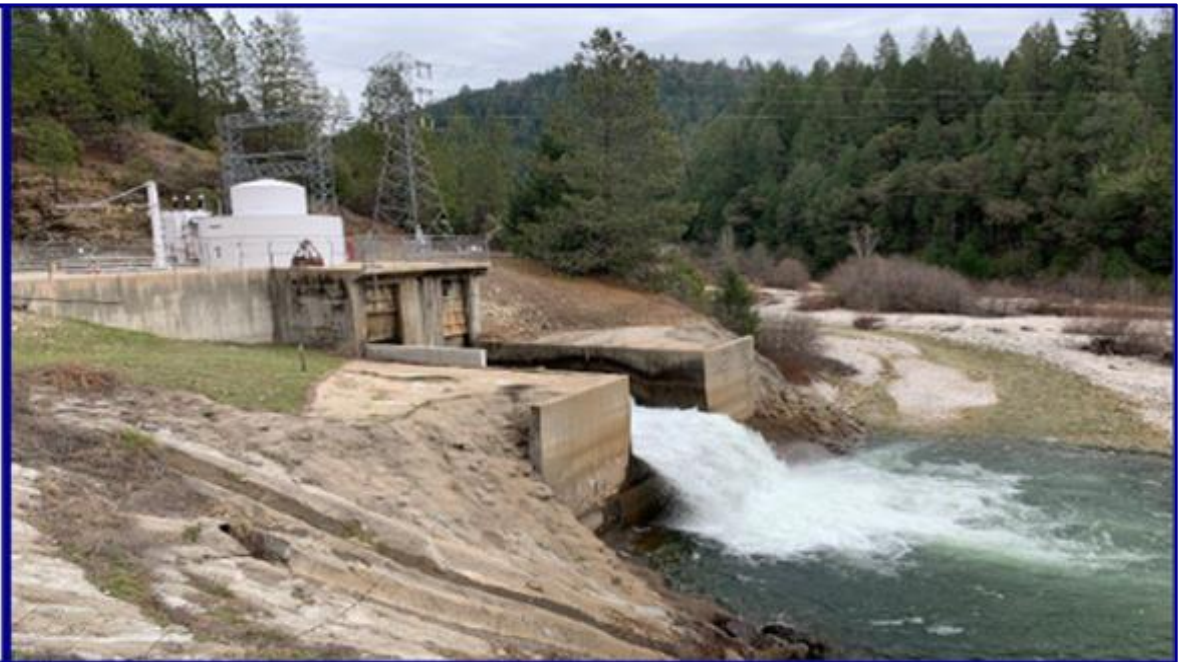
# Chicago Park Powerhouse Refurbishment

Project No. 2655

**Purpose:** Improve facility efficiency and performance by replacing or upgrading the turbine and main transformer (original 1960's vintage), and replace deteriorated generator windings, insulation, poles, and other generator appurtenances and ensure safe plant operation by disassembling, cleaning, and rebuilding the generator at Chicago Park Powerhouse.

**Status:** A request for proposals is being developed for procurement support for the new generator step-up (GSU) transformer and will be released in 2024. Construction is planned for 2028 and will include the GSU transformer replacement, generator rewind, and turbine overhaul.

**Budget:** The 2024 budget for this Project is \$350,000. There have been no 2024 expenditures.



Chicago Park Powerhouse



# French Lake Dam Low Level Outlet Gate

Project No. 2658

**Purpose:** Ensure proper and safe operation of the low-level outlet valve for French Lake by repairing or replacing the hydraulic gate control system pending underwater inspection.

**Status:** A work plan will be submitted to FERC by December 2024 in anticipation of acceptance by Spring 2025. Due to Spaulding issues, the reservoir water elevations were too high to perform diving work in 2024. The Project scope will be refined based on the findings from the diving events.

**Budget:** The 2024 budget for this Project is \$50,000. 2024 year-to-date expenditures are \$4,284.



French Lake Dam

## Dutch Flat #2 Powerhouse Batteries/Charger

Project No. 2660

**Purpose:** Replace the station service battery bank and charger that are at the end of their useful lives and are no longer PG&E compliant.

**Status:** The new battery bank was installed in 2023 during the annual plant outage. The new battery chargers arrived in 2024 and are being installed during the annual plant outage in September.

**Budget:** The 2024 budget for this Project is \$50,000. 2024 year-to-date expenditures are \$118.



Dutch Flat #2 Powerhouse

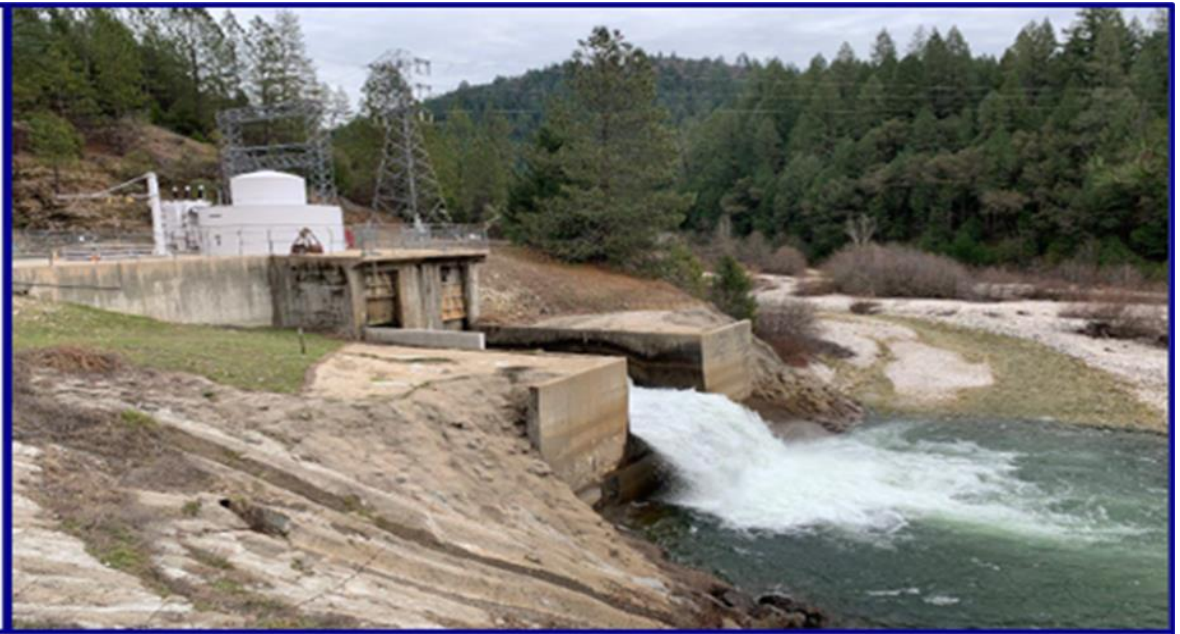
# Chicago Park Powerhouse Batteries/Charger

Project No. 2661

**Purpose:** Replace the station service battery bank and charger that are at the end of their useful lives and are no longer PG&E compliant.

**Status:** The new battery bank was installed in 2023 during the annual plant outage. The new battery chargers arrived in 2024 and are being installed during the annual plant outage in September.

**Budget:** The 2024 budget for this Project is \$50,000. 2024 year-to-date expenditures are \$118.



Chicago Park Powerhouse

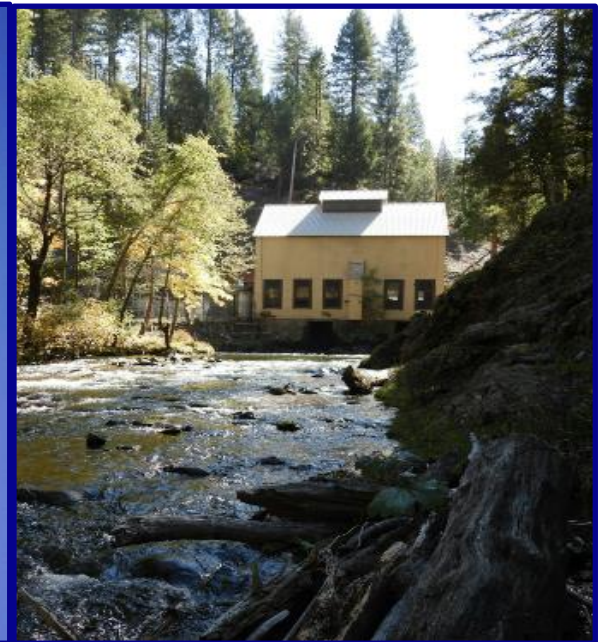
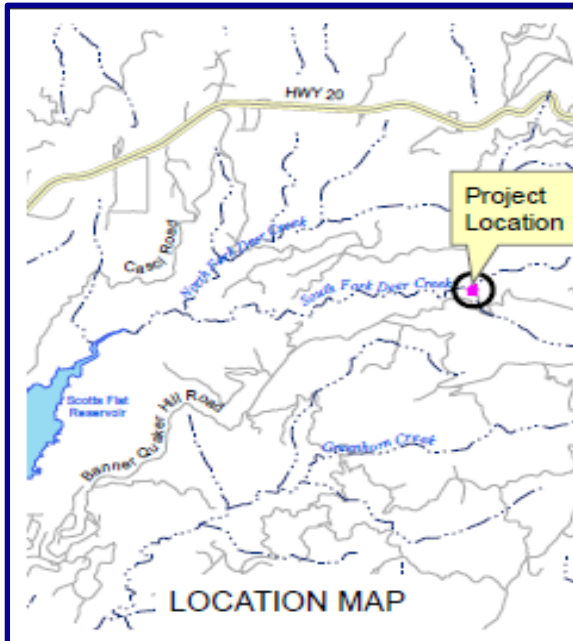


# Deer Creek Powerhouse Communications Upgrade Project No. 2665

**Purpose:** Design and install a new microwave data link from the KLOVE Tower/Deer Creek Powerhouse to Hydro headquarters. Includes specifying hardware, design, and installation work.

**Status:** The design for the new microwave link has been completed. A bill of materials has been received and project planning is underway.

**Budget:** The 2024 budget for this Project is \$150,000. 2024 year-to-date expenditures are \$318.

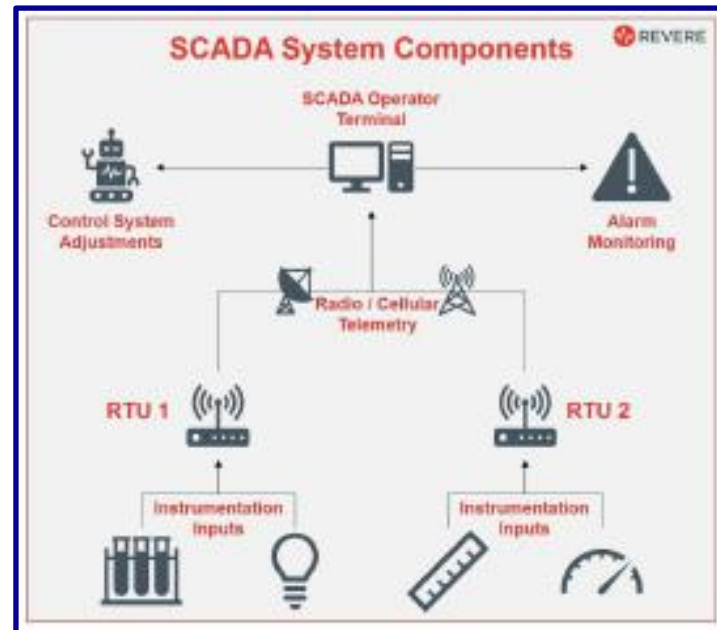


Deer Creek Powerhouse

**Purpose:** Update hardware and software associated with NID's SCADA System. Failure to complete the update could result in hardware failures or leave critical infrastructure systems running on unsupported software

**Status:** Hardware is being purchased in September of 2024. SCADA software will be installed by the consultant in 2025.

**Budget:** The 2024 budget for this Project is \$150,000. There are no 2024 year-to-date expenditures



## 2024 CAPITAL PROJECT BUDGET SUMMARY - FUND 55 - HYDROELECTRIC O&M

Asset No.	Project	2024 Budget	2024 Expenditures	2024 Encumbrances	Priority Score	Percent Complete	Schedule
H5532	Hydro Operations Truck 5372	\$ 55,000	\$ 47,606	\$ -	58	100%	Complete
H5534	Hydro Operations Truck 5435	\$ 55,000	\$ 47,606	\$ -	58	100%	Complete
H5533	Hydro Maintenance Truck 5359	\$ 55,000	\$ 51,567	\$ -	58	100%	Complete
H5531	Hydro Maintenance Truck 5406	\$ 100,000	\$ 90,433	\$ -	58	100%	Complete
H5529	SnoCat - 2000 XL (Xtra Lite)	\$ 260,000	\$ 254,137	\$ -	73	100%	Complete
2664	Rollins Excitation Transformer Replacement	\$ 50,000	\$ 1,195	\$ 33,370	66	90%	On Schedule
<b>Totals</b>		<b>\$ 575,000</b>	<b>\$ 492,544</b>	<b>\$ 33,370</b>			



## Hydro Operations Truck (Replace H5372)

No. H5532

**Purpose:** Replacement of vehicle H5372, a 2014 Ford F150 Pickup truck with 151,778 miles.

**Status:** Received a 2024 Ford F150 SuperCab 4X4 V-6 with EcoBoost on August 5, 2024

**Budget:** The 2024 budget for this vehicle is \$55,000. 2024 year-to-date expenditures are \$47,606.



Vehicle to be retired



2024 Ford F150 4X4

## Hydro Operations Truck (Replace H5435)

No. H5534

**Purpose:** Replacement of vehicle H5435, a 2016 Chevy Colorado with 112,972 miles.

**Status:** Received a 2024 Ford F150 SuperCab 4X4 V-6 with EcoBoost on August 5, 2024

**Budget:** The 2024 budget for this vehicle is \$55,000. 2024 year-to-date expenditures are \$47,606.



Vehicle to be retired



2024 Ford F150 4X4

## Hydro Maintenance Truck (Replace H5359)

No. H5533

**Purpose:** Replacement of vehicle No. H5359, is a 2013 Ford F150 4x4 pick up that was totaled in a vehicle collision.

**Status:** Received a 2025 Dodge Ram 1500 Crew Cab.

**Budget:** The 2024 budget for this vehicle is \$55,000. 2024 year-to-date expenditures are \$51,567.



Vehicle to be retired



2025 Dodge Ram



## Hydro Maintenance Truck (Replace H5406)

No. H5531

**Purpose:** Replacement of vehicle H5406, a 2015 Ford F350 4X4 Pickup with 121,885 miles.

**Status:** Received a 2023 Ford F350 SuperCab 4X4 diesel with 9-foot service body with drawers and tire carrier.

**Budget:** The 2024 budget for this vehicle is \$100,000. 2024 year-to-date expenditures are \$90,378.



Vehicle to be retired



2023 Ford F350 with 9-foot service body.

## SNO-CAT – 2000 XL (Xtra Lite)

No. H5529

**Purpose:** SnoCats are necessary to make access to remote facilities in extreme winter weather. The District's existing SnoCats are 2003 and 2016 vintage. The 2003 SnoCat will be kept for use on South Yuba Canal if necessary and allowed under CARB regulations.

**Status:** Received a 2024 200BXL-26-5 Tucker-Terra Sno-Cat.

**Budget:** The 2024 budget for this vehicle is \$260,000. 2024 year-to-date expenditures are \$256,733.



2024 Sno-Cat 2000 XL

## Rollins Excitation Transformer Replacement

Project No. 2664

**Purpose:** The excitation transformer at Rollins Powerhouse is beyond its useful life per industry standards and has shown signs of deterioration.

**Status:** Expecting delivery of transformer in November 2024. Will be replaced during outage by Hydro Maintenance crews.

**Budget:** The 2024 budget for this vehicle is \$50,000. 2024 year-to-date expenditures are \$34,565







# Fund 70 – Information Technology (IT) 2024 Capital Improvement Projects

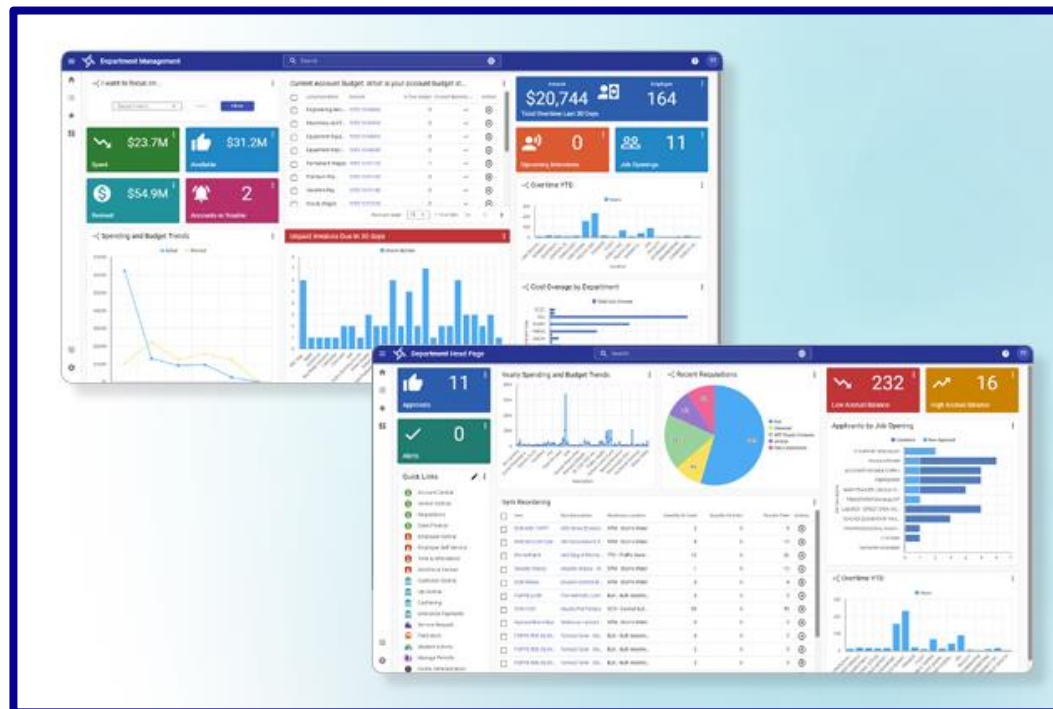
**2024 Budget Summary - Fund 70 - Information Technology (IT)**

<b>Project No.</b>	<b>Project</b>	<b>2024 Budget</b>	<b>2024 Expenditures</b>	<b>2024 Encumbrances</b>	<b>Percent Complete</b>	<b>Schedule</b>
2295	Tyler ERP	\$ 393,031	\$ -	\$ 393,031	0%	On Schedule
2693	Upgrade Security Door	\$ 350,000	\$ -	\$ -	5%	On Schedule
	<b>Totals</b>	<b>\$ 743,031</b>		<b>\$ 393,031</b>		

**Purpose:** Streamline processes, improve reporting, provide real-time data, improve collaboration, and help streamline supply chain management.

**Status:** The Board of Directors approved a contract with Tyler Munis ERP with a planned implementation starting in October 2024.

**Budget:** The 2024 budget for this Project is \$393,031. There are no 2024 year-to-date expenditures.





# Upgrade Door Security

Project No. 2693

**Purpose:** Firmware updates and support for the existing access control system for the doors and gates are ending in 2024. Need to find an upgrade path to migrate the current P2000 platform or seek a new access security control system to reduce the risk of system failure, bring us on to a supported system, and enhance our security with advanced security protocols.

**Status:** A Request for Proposals is being prepared. Anticipate vendor selection by end of October 2024

**Budget:** The 2024 budget for this Project is \$350,000. There are no 2024 year-to-date expenditures.





# Fund 70 – Watershed 2024 Capital Improvement Projects



## 2024 Budget Summary - Fund 70 - Watershed

Project No.	Project	2024 Budget	2024 Expenditures	2024 Encumbrances	Percent Complete	Schedule
2592	English Meadow Restoration	\$ 569,428	\$ 250,218	\$ 318,827	80%	On Schedule
2651	Bear River Wildfire Recovery	\$ 429,750	\$ 283,552	\$ 76,037	95%	On Schedule
2697	Upper Yuba Forest Restoration	\$ 395,000	\$ 10,453	\$ -	10%	On Schedule
2698	Hazard Trees/Fire Fuels Management	\$ 283,500	\$ 233,747	\$ -	80%	Ongoing
2699	Selective Logging	\$ 165,000	\$ -	\$ -	0%	Ongoing
	<b>Totals</b>	<b>\$ 1,842,678</b>	<b>\$ 777,970</b>	<b>\$ 394,864</b>		



## English Meadow Restoration

Project No. 2592

**Purpose:** Floodplain restoration and forest management on approximately 380 acres of the headwaters of the Middle Yuba River, 1 mile upstream of Jackson Meadows Reservoir. In-stream restoration work will include construction of debris jams to reconnect the river with its floodplain, and ladder fuels and small diameter tree removal. This project will protect our headwaters and long-term watershed health by improving hydrology, forest health, sediment attenuation, and protection of montane meadow habitats from impacts associated with catastrophic wildfire. Significant project funding provided by a grant from the Wildlife Conservation Board.

**Status:** This project is currently in it's second year of implementation.

**Budget:** The 2024 budget for this Project is \$569,428. 2024 year-to-date expenses are \$250,218



## Bear River Wildfire Recovery

Project No. 2651

**Purpose:** The River Fire burned approximately 300 acres of NID property, threatening water quality and ecosystem health. NID has removed the burned trees which would become dangerous fire fuels in the future. In addition, approximately 50 acres of unburned area were masticated and thinned to reduce future wildfire risk while improving forest health. Significant project funding provided by a grant from the Sierra Nevada Conservancy.

**Status:** This project is in its final year of implementation.

**Budget:** The 2024 budget for this Project is \$429,750. 2024 year-to-date expenses are \$283,552.





## Upper Yuba Forest Restoration

Project No. 2697

**Purpose:** The purpose of the Upper Yuba Headwaters Forest Restoration Project is to remove understory fire fuels and hazardous trees on 400 total acres owned and managed by Nevada Irrigation District (NID) to reduce the risk of catastrophic wildfire, improve forest ecological health and resilience, protect water supply and quality, and to remove risks to human health and safety in this critical headwaters area. Site preparation is underway, and fire fuels mastication to begin in October. Significant project funding provided by a grant from the Sierra Nevada Conservancy.

**Status:** This project is in the site preparation / bidding phase of the first year of implementation.

**Budget:** The 2024 budget for this Project is \$395,000. 2024 year-to-date expenses are \$10,453.





## Hazard Tree / Fire Fuels Management

Project No. 2698

**Purpose:** Annual hazard Tree, Defensible Space Requests, and General Fire Fuels reduction to protect infrastructure and improve forest health.

**Status:** Ongoing

**Budget:** The 2024 budget for this Project is \$283,500. 2024 year-to-date expenses are \$233,747.



## Selective Logging

Project No. 2699

**Purpose:** For over 100 years, wildfire suppression and reduced forest thinning have inadvertently increased the risk of severe wildfire in California by overcrowding forests. Overcrowded forest communities are susceptible to diseases and pests, like the western pine beetle, which increases tree mortality and subsequently further increases the risk of wildfire. Removing merchant timber from the region decreases forest fuels, increases forest health, and allows for project work to be offset through timber sales. Tasks include tree density assessments, watershed environmental analysis, and felling and hauling timber from the forest.

**Status:** Ongoing

**Budget:** The 2024 budget for this Project is \$165,000. There are no 2024 year-to-date expenditures.

