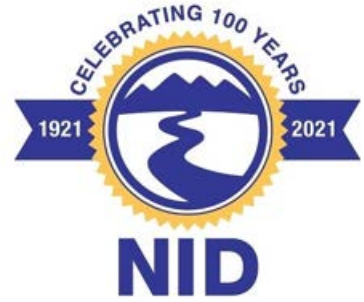


# Nevada Irrigation District

## Department Updates



Presented to the Board of Directors  
March 24, 2021

# Administration Department



## **Environmental Resources Program**

Program, Grants & Outreach Update

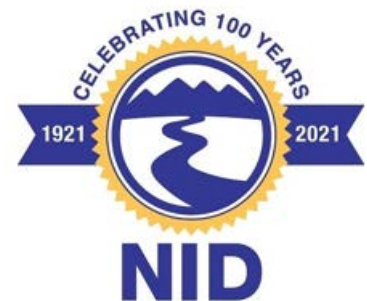
## **Safety**

Site Visits, Training Classes, & Administrative Duties

# Environmental Resources Program

## Program Updates

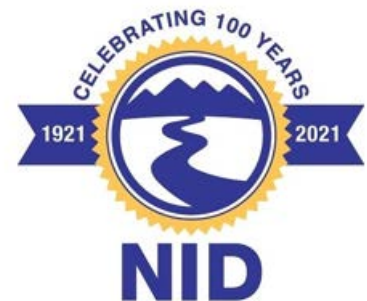
- **Meadow restoration:** English Meadow Floodplain Restoration Project environmental compliance underway in preparation for the Wildlife Conservation Board's upcoming grant August 2021
- **Watershed and Healthy Forests:** Fire fuels treatment at Scotts Flat Reservoir ongoing in partnership with Sierra Nevada Conservancy and Rollins Reservoir CAL FIRE work to begin March 2021. Hazard tree removal ongoing at District facilities
- **Grant administration:** contracting, invoicing and reporting ongoing
- **Regional partnerships/Education:** Actively working with regional partners to finalize the update to the Cosumnes, American, Bear and Yuba River (CABY) Integrated Regional Water Management Plan
- **Grazing:** Grazing to reduce fire fuels and associated leases under review for renewal



# Environmental Resources Program

## Program Highlight: English Meadow Floodplain Enhancement and Restoration Project

- Currently undergoing environmental compliance and IS/MND drafting underway for a 556-acre valley area in the Middle Yuba River headwaters
- \$1.2M grant award from the Wildlife Conservation Board scheduled summer 2021
- Plan for implementation to begin summer of 2022
- Installation of woody debris to Middle Yuba River stream to activate floodplain, and improve hydrology
- Understory thinning on forested slopes to decrease risk of wildfire disturbance and benefit hydrology, forest health, and habitat





# Environmental Resources Program

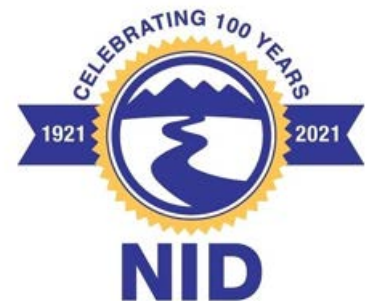
## Grants Update

### CAL FIRE CFIP Grant for Rollins Reservoir

- Bids received and awards to occur by March 19, 2021
- Work to begin March 2021 near Rollins Reservoir to include mastication and handcrews
- CAL FIRE contract is executed for \$145,000 in funding through the California Forest Improvement Program for fire fuels treatment on an 103 acres at Orchard Springs and Long Ravine Campgrounds

### SNC Fuels Treatment at Scotts Flat Phase 4

- Project implementation continues
- Winter conditions have delayed activities for the short-term due to snow and saturated conditions
- Grant agreement is executed with the Sierra Nevada Conservancy for \$981,000 at Scotts Flat Reservoir, and project is in final phase (approximately 90 acres left)
- Mastication and handcrews to reduce fire fuels to improve forest health
- Create a multi-species, multi-aged, properly spaced community
- Will treat total of 300 acres by Jan. 1, 2022



# Environmental Resources Program

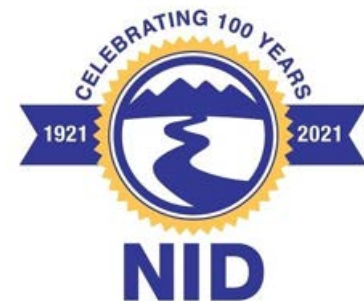
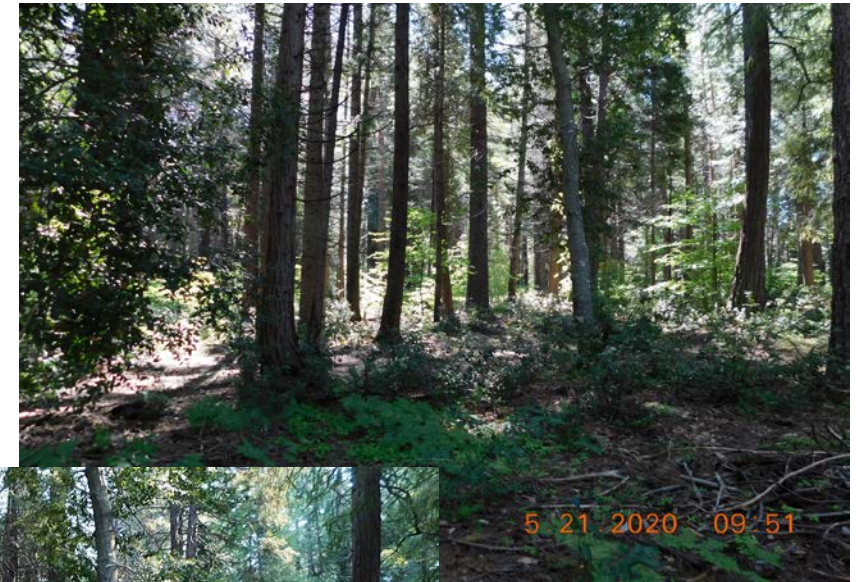
## General Watershed and Healthy Forests Program Update

### Fire Fuels Treatment and Hazard Tree Removal on District Property

- Completed hazard tree removal near the Cascade Pump Station
- Facilitated CAL FIRE hazard tree felling of approximately 30 large trees at Orchard Springs and Long Ravine Campgrounds
- Achieve Public Resource Code 4291-defensible space minimum of 100 ft adjacent to buildings

### Forest Management Plan for District-owned lands

- Under development



# Environmental Resources Program

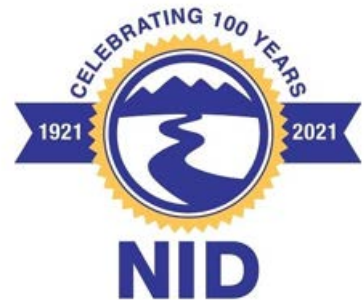
## Outreach, Collaboration & Education

### CABY and Integrated Regional Water Management Planning

- Cosumnes American Bear Yuba IRWM Plan update is nearing completion
- Administrative Draft is publicly available at [www.cabyregion.org](http://www.cabyregion.org)
- CABY IRWM Plan was submitted to the Dept. of Water Resources 3/12/21 for internal review and public process
- Approx. 30-days for DWR internal review, and then open a 30-day public review process
- The plan is then considered final and approved by DWR, and is then ready for adoption by the CABY membership June 2021
- For more information see [www.CABYregion.org](http://www.CABYregion.org)

### Education & Outreach

No report at this time



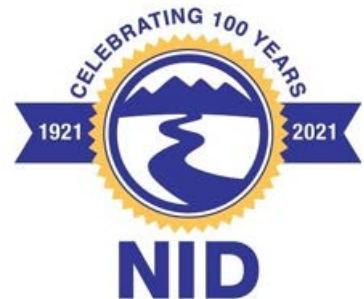
# Safety

## Site Visits

- Maintenance Department: Meeting with Kenton Early, Maintenance Supervisor at the North Auburn Water Treat Plant regarding vault inspection, fall protection with scaffolding, confined space entry back wash sump vault
- Maintenance Department: Loma Rica Water Treatment Plant-safety inspection for scaffolding and confined space entry
- Maintenance Department: South Combie-flume inspection with welders
- Placer Maintenance Department: Safety inspection on the air gas monitors and eyewash stations
- Recreation Department: Fire extinguisher inspections and replenish first aid kits

## Training Classes

- Maintenance Department: New temp orientation for a utility worker
- Maintenance Department: Refresher confined space for six employees
- Maintenance Department: Forklift for three employees
- Operations Department: Confined space for three employees
- Recreation Department: Skid steer with Ken Copher, Recreation Supervisor at Scotts Flat

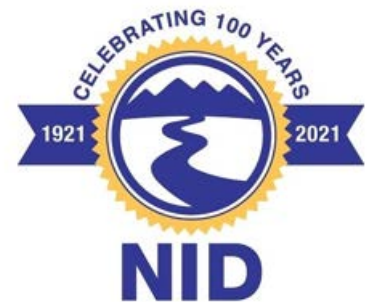




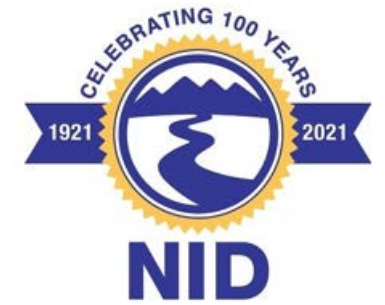
# Safety

## Administrative Safety Activities

- COVID-19 workplace safety considerations are still being executed at NID. Training classes were revised to ensure social distancing guidelines were met; disinfectant still available to all. Weekly restroom checks for the Covid policy regarding the restrooms be stocked with supplies for employees.
- Working with Glatfelter Insurance Claims
- Continue working on District claims
- Reviewing the Confined Space Permits 2020/2021
- Attended the Maintenance department quarterly meeting
- Four gas air monitors-ordered parts and replacements for broken units
- Tracking Anti-Harassment training for the whole District
- Target Solutions: tracking all trainings, certifications, tailgate meetings, etc.



# Safety



## Pictures

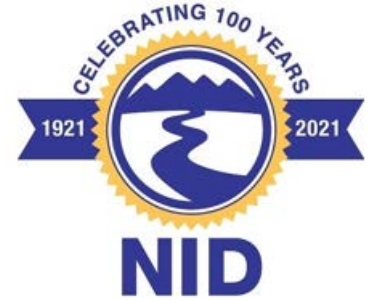
Insurance safety inspection completion of the encasement on the Lake of the Pines water treatment tank



Confined space entry E. George valve inspection



# Engineering Department



Project Status Report  
Engineering & Hydroelectric

## Engineering Department Project Status

<u>Prty</u>	<u>Proj Mgr</u>		<u>Facility Name</u>	<u>WO#</u>	<u>Description</u>	<u>Status</u>	<u>Comments</u>	
<b>01 - EXTENDED CEQA [\$30,000] 10151- 52913</b>								
01	DOUGLAS RODERICK	(DIV 2)	2021	Banner Cascade Canal	6593-02	Banner Cascade Pipeline: Monitoring Canopy Cover and Tree Health Assessment	Post-Construction	Received proposal from Stantec for year-8 canopy cover and pond studies. Consulting agreement sent for signatures. Studies to be completed August-September 2021.
<b>02 - PIPELINE REPLACEMENT (\$2,050,000) 10151-52907</b>								
01	DOUGLAS RODERICK	(DIV 5)	2020	Lidster Avenue & Country Club Terrace	2071	Replacement of deteriorated water mains and services in this area. 4,545 LF of 8" pipe.	Construction	Final mainline tie-in and existing services to new line completed. Final paving to be done after service tie-ins are done, depending on weather.
02	TONIA TABUCCHI HERRERA	(DIV 5)	2020	Rough & Ready Round-a-bout waterline improvements	2497	Nevada county proposed to realign Rough and Ready Hwy, Ridge Road and Adams Ave. NID affected facilities included treated water line along Rough and Ready HWY and Adams Ave; and Rough and Ready Canal crossing/near Ridge Road.	Planning	The County is agreeable to relocating the culvert crossing for the RR canal. Details of ROW management and District participation in discussion internally. The County does not feel the treated waterline is impacted by their project and will not relocate it as a result.
03	TONIA TABUCCHI HERRERA	(DIV 5)	2021	Christian Life Way at Highway 49	6962	Replace approximately 1500 LF of pipeline with 8" pipeline. Existing pipeline is undersized; has reached its useful life, is difficult to access, existing ROW is inadequate, requires new route for accessibility	Design	Investigating an alternative route to improve maintenance access, and potential to add additional service connections.
04	TONIA TABUCCHI HERRERA	(DIV 4)	2021	Meadow Brook Pipeline Relocation	2324	Service lines are located in backyards and trees have broken the mainline several times. Project includes relocation of service lines and abandonment of 4" main.	Planning	Reviewing impacted services to determine area to be surveyed.
05	ADRIAN SCHNEIDER	(DIV 2)	2021	North Day Road Pipeline Replacement	2182	Replacement of badly deteriorated A.C. pipeline on North Day Road. Approximately 3,146 feet long.	Design	Design at 90%. ROW looking into existing easements and potential modifications.
06	ADRIAN SCHNEIDER	(DIV 3)	2021	Willaura Acres )	2323	Replace deteriorated water mains and services.	Design	Survey completed and draft project plan created. Field visit to place new pipe alignment planned.
07	DOUGLAS HOBBS	(DIV 2)	2021	Osborne Hill Inlet Pipe	6966	Osborne Hill Inlet Pipe 1,720' of 18" pipe	Planning	Reinstating project previously deferred due to funding. 2021 Budgeted Project.
08	TONIA TABUCCHI HERRERA	(DIV 4)	2021	Live Oak Way	2534	Replace old and undersized valves and service lines.	Planning	2021 Budgeted Project.
<b>03 - PRV REPLACEMENT (\$480,000) 10151-52908</b>								
01	TONIA TABUCCHI HERRERA	(DIV 2)	2019	Cedar Ridge PRV Replacement	2366	Existing PRV station is badly deteriorated with valves in a vault. Replacement station will be above ground. Additional ROW is required	Design	Design 90%. Property owner to be contacted regarding existing easement; easement adjustment is required.
02	TONIA TABUCCHI HERRERA	(DIV 1)	2019	East Ridge PRV Replacement	2318	Existing PRV station is badly deteriorated with valves in a vault. Replacement station will be above ground. Additional ROW is required.	Design	Design 10%. Survey is complete. Existing easement information received.
03	DOUGLAS HOBBS	(DIV 1)	2020	Berggren Lane PRV Replacement	2370	Replace PRV with 1300 LF of 8" pipe connecting Red Dog Rd. with Jasper Agate Court	Construction	Design and easement acquisition complete. Project will be constructed by Maintenance in 2021.
04	DOUGLAS HOBBS	(DIV 2)	2021	Silver Way PRV Replacement	1010	Replace existing PRV station at corner of Silver Way and Hwy 174 with an above ground PRV station upstream on Hwy 174	Design	Design at 10%. Property owner to be contacted regarding adding above ground structure to existing pipe easement.
<b>05 - RAW WATER SYSTEM IMPROV (\$1,250,000) 10151-52910</b>								
01	DOUGLAS RODERICK	(DIV 4)	2019	Doty North Canal (PC)	1031	Doty North canal which will encase approximately 450 feet of canal and replace siphon #1.	Construction	All piping and headwall installed. Final grading and seeding completed. Contractor finishing punchlist.
02	DOUGLAS HOBBS	(DIV 1)	2020	Santini Siphon 1	1098	Replacement of undersized Siphon with 1500 LF of 18" pipe.	Design	Design at 95. One easement signed and acquiring remaining easement. Project will be completed by Maintenance in 2021.
03	DOUGLAS RODERICK	(DIV 1)	2020	South Yuba Canal Repair & Upgrades Ph 1	2419	Repair/Replace segments of So. Yuba Canal	Planning	Staff reviewing draft Condition Assessment Report.
04	ADRIAN SCHNEIDER	(DIV 3)	2021	Maben Canal IV	8099-4	Rehabilitate and enlarge canal.	Design	Initiate a design process; create draft construction plans and document specs.



## Engineering Department Project Status

Prty	Proj Mgr		Facility Name	WO#	Description	Status	Comments
<b>05 - RAW WATER SYSTEM IMPROV (\$1,250,000) 10151-52910</b>							
05	DOUGLAS HOBBS	(DIV 4) 2020	Hayt Canal Siphon Replacement	2474	Hayt Canal Siphon #1 and #6, replace aged infrastructure.	Design	Construction of siphon #1 improvements complete. Flow test completed by Operations. Anticipate moratorium to be removed this season. Evaluating alternatives for a spill at siphon #6 and shortening the end of the canal.
06	TONIA TABUCCHI HERRERA	(DIV 5) 2021	Pet Hill Extension Repairs	2373	Repair and upgrade pipeline and gate for capacity.	Planning	2021 Budgeted Project.
07	TONIA TABUCCHI HERRERA	(DIV 5) 2021	China Drop Pipe Replacement	2329	Replacement of badly deteriorated pipeline to improve water delivery and reliability.	Planning	2021 Budgeted Project.
08	DOUGLAS HOBBS	(DIV 1) 2021	Clipper Creek Techite	2535	Replace 8600' of 24" Techite pipe.	Planning	2021 Budgeted Project.
<b>06 - BACKBONE EXTENSION 10151-52911</b>							
01	TONIA TABUCCHI HERRERA	(DIV 5) 2020	E. George to LWW Pipeline Project-Phase I	2255	Phase 1 Hope Street to approximately 12390 Rough & Ready Highway along R&R HWY parallel construction of 2475 lf of pipeline and 1 PRV replacement. ROW required for replacement above ground PRV. Pipeline construction within County ROW.	Construction	Ridge Road improvements to be constructed by maintenance in 2021.
<b>07 - NON-PROGRAMMATIC [2,200,000] 10151-52915</b>							
01	DOUGLAS RODERICK	(DIV 3) 2021	Combie I Replacement	6746	Combie Phase 1 Pipeline Bypass, 8900 LF of 96" pipe	Construction	Contractor has installed all 96" RCPP. Siphon inlet structure completed. Backfilling and joint grouting ongoing. Spill structure complete. Outage for placing pipe into service scheduled for March 23-25.
02	DOUGLAS HOBBS	(DIV 2) 2020	Alta Sierra Tank Replacement	6971	Replace existing Alta Sierra Hypalon-covered reservoir with 3MG storage tank	Construction	Electrical design has started. Floor slab is formed and reinforcing mat is being placed. Floor slab will be poured on March 25. Easement for 8" Pop-off valve at golf course is in process.
03	TONIA TABUCCHI HERRERA	(DIV 4) 2020	Hemphill Diversion	7032	Hemphill Diversion Project to facilitate Fish Passage.	Design	DEIR project descriptions under further development. Release of DEIR is scheduled for April 1, 2021. Seeking to close consultation with UAIC under AB52.
04	ADRIAN SCHNEIDER	(DIV 3) 2020	North Auburn Treatment Plant	2376	Upgrade of high lift pumps and addition of emergency generator at North Auburn Water Treatment Plant	Design	Waiting for PG&E response to request for adding larger natural gas service from main in street. Design at 90%. Generator install expected in Summer 2021
05	ADRIAN SCHNEIDER	(DIV 1) 2020	Pine Woods Pump Station	2488	Design, purchase and install a permanent stand-by generator at Pine Woods Pump Station	Planning	Draft Study under internal review.
06	TONIA TABUCCHI HERRERA	2021	SGIP Battery Installation	2520	Battery installation at various District facilities. Part of the California Public Utilities Self-Generation Incentive Program	Planning	Three sites are being pursued that meet the qualifications for backup battery - EGWTP, LRWTP, and Norlene pump station. GSRE working on the applications and interconnection agreement. NID staff providing support. Will be bringing to Board in April 2021.
07	DOUGLAS HOBBS	(DIV 5) 2021	LWW Treatment Plant Expansion	6996	Lake Wildwood Treatment Plant Upgrades - Drying beds, backwash pumps and canal intake screen.	Planning	2021 budgeted project.
08	DOUGLAS HOBBS	(DIV 2) 2021	Loma Rica WTP Clear Well Expansion	2375	Expansion of clearwell to add volume for higher plant flows.	Planning	2021 budgeted project.
09	DOUGLAS HOBBS	(DIV 2) 2021	Loma Rica WTP Modify CT	2378	Modification of Loma Rica Treatment Plant for additional chlorine contact times	Planning	2021 budgeted project.
10	ADRIAN SCHNEIDER	(DIV 3) 2021	David Way Pump Station Rehab	2322	Rehabilitate the existing David Way Pump Station. Facility is badly deteriorated and requires rehab for reliability.	Design	Draft design completed. To be reviewed internally. Hydraulic review of system to be completed.
11	DOUGLAS RODERICK	(DIV 2, 3) 2021	Centennial Water Supply Project	7013	Centennial Water Supply Project	Planning	Quarterly update to Board at the March 24, 2021 meeting. Due to COVID-19, no consulting work or AB52 consultations have taken place. The next quarterly update will be June 2021.
<b>08 - COMMUNITY INVESTMENT 10151-52912</b>							
01	ADRIAN SCHNEIDER	(DIV 2) 2021	Loma Rica Drive - DFWLE	2181	Assist, Design and Construction of a pipeline for existing neighborhoods approved by Engineering Committee January 16, 2018.	Planning	Project approved. Survey request submitted and survey of project to follow. Funding agreements being drafted for ten property owners.

## Engineering Department Project Status

Prty	Proj_Mgr		Facility Name	WO#	Description	Status	Comments
<b>08 - COMMUNITY INVESTMENT 10151-52912</b>							
02	ADRIAN SCHNEIDER	(DIV 3)	2023	Maranatha Place DFWLE	2409	Assist, Design and Construction of a pipeline for existing neighborhoods. Approved by Engineering Committee Aug 20, 2019.	Planning Waiting for available funding to move project forward.
<b>13 - ENGINEERING O&amp;M 10151-NA</b>							
01	DOUGLAS RODERICK		2020	Urban and Agricultural Water Management Plan	1034	Development and approval of Urban and Agricultural Plan as regulatory required.	Planning Held Board Workshop for AWMP at March 10, 2021 meeting. Second Workshop to be held March 18, 2021 in the evening. Public Hearing for AWMP scheduled for March 24, 2021 Board meeting
02	GREG JONES		2020	District Wide Plan for Water	1041	Plan for Water / EIR	Planning Waiting until AWMP & UWMP's are completed. Anticipate public outreach in Fall 2021.
<b>13-1 - ADMIN CAPITAL 10114-52915</b>							
01	GREG JONES		2021	Scotts Flat Lower Connector Trail	2294	Planning, design, and construction of Scotts Flat Lower Connector Trail	Planning CEQA process underway.
<b>17 - SEDIMENT REMOVAL PROJECTS 10151-52914</b>							
01	ADRIAN SCHNEIDER		2020	District-wide Reservoir Study	2500	District-wide reservoir study of the current condition of all District reservoirs, that includes bathymetry to better understand the diminished capacity due to sedimentation. Will assist in determining costs, prioritization, and alternatives.	Planning Draft report being reviewed internally.
02	ADRIAN SCHNEIDER	(DIV 2)	2019	Loma Rica Reservoir	2090	Placement of 5,600 cubic yards of stockpiled sediment at airport property	Post-Construction Monitoring seed growth to obtain 70% coverage per SWPPP permit requirements. Close grading permit (through contractor submittal of final special inspection reporting).
04	GREG JONES	(DIV 3)	2019	Combie Sediment Removal Project	2135	Removal of sediment at the east side of Combie Reservoir	Post-Construction Final report completed and submitted to DWR. Report is available on the District's website. Final disposal of material is ongoing.
05	ADRIAN SCHNEIDER	(DIV 2)	2020	Greenhorn Sediment Removal	8515	Removal accumulated sediment from the Greenhorn Creek arm of Rollins Reservoir.	Planning Pending final Reservoir Sediment Removal Study (cost/benefit analysis) to determine validity of removing sediment from this portion of Rollins Reservoir.
06	ADRIAN SCHNEIDER	(DIV 3)	2020	Orr Creek Reservoir	6963	Cleaning of Orr Creek Reservoir to increase capacity	Planning Pending final Reservoir Sediment Removal Study (cost/benefit analysis) to determine validity of removing sediment from this reservoir.
07	ADRIAN SCHNEIDER	(DIV 2)	2020	Dutch Flat Afterbay Sediment Removal	2213	Remove accumulated sediment from the afterbay to reduce outlet pipe clogging & operation.	Planning Pending final Reservoir Sediment Removal Study (cost/benefit analysis) to determine validity of removing sediment from this reservoir.
08	ADRIAN SCHNEIDER	(DIV 2)	2020	Steephollow Sediment Removal	6877	Removal of sediment at Steep Hollow and protection of hydro facilities	Hold Pending final Reservoir Sediment Removal Study (cost/benefit analysis) to determine validity of removing sediment from this portion of the Rollins Reservoir.

BILLING CODING IS DEPARTMENT-FINANCE CODE-WORK ORDER NUMBER

### Hydroelectric Department Project Status

<u>Prty</u>	<u>Proj Mgr</u>		<u>Facility Name</u>	<u>WO#</u>	<u>Description</u>	<u>Status</u>	<u>Comments</u>
<b>10-1 - HYDRO NON-PROGRAMMATIC (\$250,000) 50112-52915</b>							
01	KEANE SOMMERS	2020	Hydro Field Office	2432	Design and construction of the new Hydroelectric Field Office	Design	The Energy Center program components are under development. The new maintenance facility and storage yard draft pre-design by the architect is complete. The three energy/carbon concept studies are complete; forest carbon sequestration, pumped storage, and solar field. A draft Energy Management Strategy Summary has been received and is under review. Once all efforts are completed, findings will be summarized to present options and alternatives for developing the site into various levels of renewable energy generation and carbon zero footprint.
<b>10-2 - HYDRO POWERHOUSE IMPROV (\$1,925,000) 50112-52920</b>							
01	NATHAN DROIVOLD	2020	Dutch Flat #2 Powerhouse Balance of Plant.	2348	Install an expandable balance of plant to monitor critical plant systems such as excess vibration of the turbine and generator, temperature, and flow.	Post-Construction	The new balance of plant PLC was installed during September/October outage period. Testing of the new vibration monitoring system was completed before returning the unit to service. Testing for the new automatic forebay level controls is complete. Hydro has received final submittals for the project. New system alarms are being added to SCADA, and PLC programming of PH islanding conditions is being revised after review of recent test results. Future testing will be scheduled in Q1 2021.
02	NATHAN DROIVOLD	2020	Deer Creek Powerhouse	2290	Deer Creek Powerhouse Upgrades - Cost of upgrades necessary to sell power upon close of sale	Design	Hydro is finalizing plans for a new gaging station on the South Yuba Canal that will measure flow supplying Deer Creek PH. These plans will be sent to PG&E for approval prior to installation.
03	ADRIAN SCHNEIDER	2019	Chicago Park Fire Suppression System (DIV 2)	2164	Upgrade of existing CO2 system (piping, alarms, sensors) to protect Generator. Includes installation of new Clean Agent suppression system for control room and the addition of a fire detection system for electrical cable trays.	Construction	Construction of project commenced on January 26, 2020. Expected to be completed by end of April.
04	NATHAN DROIVOLD	2021	SFPH Fire Detection Upgrades	2552	Install new smoke detection systems in the Scotts Flat Powerhouse that includes alarming and callout features to notify staff in case of fire while unoccupied.	Planning	Hydro is reviewing a proposal from a fire protection engineering consultant to design a new fire detection system for the PH. Design and install are scheduled to be completed by the end 2021.
05	NATHAN DROIVOLD	2021	CNPH Fire Detection Upgrades	2553	Install new smoke detection systems in the Combie North Powerhouse that includes alarming and callout features to notify staff in case of fire while unoccupied.	Planning	Hydro is reviewing a proposal from a fire protection engineering consultant to design a new fire detection system for the PH. Design and install are scheduled to be completed by the end 2021.
06	NATHAN DROIVOLD	2021	CSPH Fire Detection Upgrades	2554	Install new smoke detection systems in the Combie South Powerhouse that includes alarming and callout features to notify staff in case of fire while unoccupied.	Planning	Hydro is reviewing a proposal from a fire protection engineering consultant to design a new fire detection system for the PH. Design and install are scheduled to be completed by the end 2021.
07	ADRIAN SCHNEIDER	2019	Combie Reservoir	6943	Combie South Access Road. Develop approx. 3,000 ft. from south abutment.	Design	90% Design for new access road is complete. Staff to receive appraisal report. ROW is sending offer packages for required easements. Construction is planned for 2021.
08	THEODORE BLANK	2019	Combie South Electrical Upgrades	2168	Combie South Electrical Upgrades	Design	The new 12kV transformer has been delivered to Hydro. Hydro and Engineering are working on the containment pad and foundation design for the new transformer. Installation is scheduled for 2021.
09	NATHAN DROIVOLD	2020	Rollins Powerhouse	2351	Replace the existing oil circuit breaker (OCB) at the Rollins Powerhouse with a more environmentally acceptable vacuum circuit breaker.	Design	Hydro has opened a project with PG&E's engineering team and is working with PG&E to provide requested project documentation. Hydro received manufacturer's drawings for the new breaker and has approved the unit for fabrication. Installation is planned for Q3 2021. Hydro is working with Engineering to modify the existing pad to accommodate the new VCB footprint.
10	NATHAN DROIVOLD	2021	Chicago Park Powerhouse Governor Replacement	2402	Replace governor, install instrumentation that will enable operators to monitor flow, temperature, and pressure of vital powerhouse components.	Design	Final design complete. Procurement is underway with support from NID Purchasing. Hydro will complete project installation during the 2021 annual outage for Chicago Park Powerhouse.
11	NATHAN DROIVOLD	2021	Chicago Park PH Transformer Replacement	2362	Procure and install a new main transformer at the Chicago Park Powerhouse.	Planning	Hydro is working with an engineering consultant to perform a condition assessment of the existing equipment in the Chicago Park PH to make recommendations for future repair or replacement. The project scope will be developed after reviewing this report in 2021.
BILLING CODING IS DEPARTMENT-FINANCE CODE-WORK ORDER NUMBER							

## Hydroelectric Department Project Status

Prty	Proj Mgr		Facility Name	WO#	Description	Status	Comments
<b>10-2 - HYDRO POWERHOUSE IMPROV (\$1,925,000) 50112-52920</b>							
12	NATHAN DROIVOLD	2021	Chicago Park PH Turbine Overhaul	2353	Replace worn turbine and appurtenances.	Planning	Hydro is working with an engineering consultant to perform a condition assessment of the existing equipment in the Chicago Park PH to make recommendations for future repair or replacement. The project scope will be developed after reviewing this report in 2021.
13	NATHAN DROIVOLD	2020	Rollins Powerhouse Balance of Plant	2393	Install an expandable balance of plant to monitor critical plant systems such as excess vibration of the turbine and generator, temperature, and flow.	Design	Hydro has reviewed the 30% design package received in February and is moving on to the development of a 60% design package in March. The design will be completed in Q2 2021, and installation is scheduled for the 2021 annual outage.
14	NATHAN DROIVOLD	2021	Rollins PH Governor Replacement	2392	Replace worn governor and appurtenances.	Planning	Hydro to begin project scoping in 2021. Installation is scheduled for 2022.
15	NATHAN DROIVOLD	2020	Rollins Powerhouse Relay Protection Upgrade	2394	Replace aging relay protection system to improve protection of the powerhouse relay, transformer, and generator.	Planning	Hydro has contracted with a protection engineering consultant to develop the project scope for a bid package that will be released in Q2 of 2021. Project specifications, scope of work, and high level schedule are expected in March/April.
16	NATHAN DROIVOLD	2021	Dutch Flat #2 PH Cooling Water System Upgrades	2544	Install new instrumentation that will enable operators to monitor flow, temperature, and pressure of vital powerhouse components	Planning	Hydro will solicit proposals to complete the design of a new cooling water system in 2021. Installation is planned for 2022.
17	NATHAN DROIVOLD	2020	Dutch Flat #2 Powerhouse Fire Suppression System	2240	Designing, installing and commissioning a new CO2 fire suppression system for the Dutch Flat #2 Powerhouse.	Design	Hydro has received a draft basis of design report from its consultant for a new fire suppression system at the Dutch Flat #2 Powerhouse. Hydro has reviewed and provided comments for revisions to the document. A final draft of the basis of design report is expected during Q1 2021.
18	NATHAN DROIVOLD	2020	Bowman Intertie	2354	Replace the existing Bowman Inter-tie SF6 breaker with a more environmentally friendly vacuum circuit breaker	Hold	Hydro will replace the existing SF6 breaker with a vacuum circuit breaker after completion of the oil circuit breaker replacement at Rollins PH (FATR# 2351).
19	NATHAN DROIVOLD	2021	Rollins PH Fire Protection System	2379	Provide fire protection system for Rollins Powerhouse (design, installation and commissioning).	Planning	Hydro to begin project scoping in 2021. Installation is scheduled for 2022.
20	NATHAN DROIVOLD	2021	Deer Creek PH Controls and Automation	2342	Install programmable logic controller and automate the Deer Creek Powerhouse.	Hold	Hydro to begin project scoping in 2021 with construction scheduled to start in 2022. Project schedule assumes NID will takeover PG&E facilities in 2021.
21	NATHAN DROIVOLD	2021	Deer Creek PH Exciter Replacement	2395	Replace exciter & appurtenances.	Hold	Hydro to begin project scoping in 2021 with construction scheduled to start in 2022. Project schedule assumes NID will takeover PG&E facilities in 2021.
22	NATHAN DROIVOLD	2021	Deer Creek PH Generator Breaker Replacement	2343	Replace the existing generator breaker with a generator breaker and cabinet to mitigate an arc flash safety hazard at the Deer Creek Powerhouse and improve reliability.	Hold	Hydro to begin project scoping in 2021 with construction scheduled to start in 2022. Project schedule assumes NID will takeover PG&E facilities in 2021.
<b>10-3 - HYDRO DAM &amp; WATER IMPROV (\$2,660,000) 50112-52921</b>							
01	MIN CHEN	2020	Scotts Flat Spillway Repair	2094	Scotts Flat Spillway Repair & Upgrades	Design	FERC has approved the QCIP and design plans. Project has been handed over to Engineering for Construction phase. Construction is planned to start in Q3 2021.
02	MIN CHEN	2019	Combie / Van Giessen Dam	20140 2	Dam stabilization, abutments protection against scouring, and water supply upgrade.	Design	The final alternatives report is being reviewed by the District to decide the preferred design alternative. The chosen design will be submitted to DSOD and FERC for review. Construction is planned for 2025-2026.
03	MIN CHEN	2020	Gaging Station	2007/ 2360	Replace the damaged sections of the concrete lining on the upstream dam face to minimize leakage, modify the spillway training walls to prevent over topping, and construct a weir on the dam outlet to measure flow.	Design	Construction specification and contract documents 90% complete. Requesting permit modifications from the Regional Water Quality Control Board and Department of Fish & Game. Obtaining proposals from environmental consulting firms for field monitoring and reporting. Construction start anticipated by August 2021.
<b>10-4 - HYDRO LOWER DIV (\$100,000) 50112-52922</b>							
01	NATHAN DROIVOLD	2020	Chicago Park Forebay Canal Liner Replacement	2511	Repair segments of the Chicago Park Canal where existing shotcrete liner needs replacement.	Planning	Hydro received a report from Engineering reviewing the findings of the September site visit and damage assessment with Hydro. Hydro and Engineering will hold scoping discussions and start the development of a design report with an alternatives analysis in Q1 2021.
02	NATHAN DROIVOLD	2021	Chicago Park Powerhouse Tailrace Repair	2551	Evaluate and address erosion concerns of the tailrace foundation.	Planning	Hydro received a report from Engineering reviewing the findings of the September site visit and damage assessment with Hydro. Hydro will hold scoping discussions and start the development of a design report with an alternatives analysis in Q1 2021.
03	NATHAN DROIVOLD	2021	Dutch Flat Canal Liner Replacement	2545	Repair segments of the Dutch Flat Canal where existing shotcrete liner needs replacement.	Planning	Hydro will solicit a condition assessment of the existing liner system in 2021 in order to plan for future repairs.

BILLING CODING IS DEPARTMENT-FINANCE CODE-WORK ORDER NUMBER

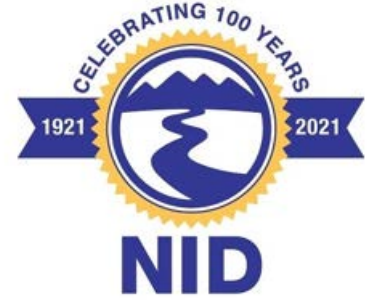


## Hydroelectric Department Project Status

<u>Prty</u>	<u>Proj Mgr</u>		<u>Facility Name</u>	<u>WO#</u>	<u>Description</u>	<u>Status</u>	<u>Comments</u>
<b>10-5 - HYDRO UPPER DIV (\$300,000) 50112-52923</b>							
01	DOUGLAS RODERICK	2021	Rucker Creek Spillgate	2339	Replace existing radial gate at Rucker Creek Diversion with an overshot gate to improve personnel safety and operational performance.	Design	Hydro and Engineering made a site visit to discuss the project scope and proposed approach in December. Engineering will work with Hydro to develop specifications for the new gate and a preliminary construction plan ahead of contacting gate manufacturer's for quotes.
02	PHILIP NEDVED	2021	Fall Creek Flume Upgrades	2404	Bowman-Spaulding Canal Improvements - Make structural enhancements to improve the reliability of the Fall Creek Flume.	Planning	Hydro is reviewing record drawings and reports to develop a flume sheet specification. This will be used to collect quotes from manufacturer's to fabricate the new flume sections. An RFQ will be released in early 2021, with installation planned to start in the summer of 2021.
03	MIN CHEN	2020	Texas Creek Flume Repairs	2525	Repairs along the Bowman-Spaulding Canal below the Texas Creek Diversion.	Design	Work is being planned to repair the exposed weathered foundation bedrock and adjacent ground that has been subject to the erosive impact of the spilling water. The design package was submitted to FERC for approval. Construction is planned for Q3 2021.
04	NATHAN DROIVOLD	2020	Wilson Creek Diversion Rehab	2546	Repair and modify the Wilson Creek Diversion Dam structure to ensure diverted flows are measurable and accurate.	Planning	Hydro has requested Engineering assist to prepare a design for a temporary solution to improve flow measurement and diversion for the 2021-22 winter season. A more permanent solution will be developed for future implementation.
<b>10-6 - HYRDO SCADA/COMMS (\$200,000) 50112-52924</b>							
01	KEANE SOMMERS	2022	Hydro Office Radio Tower	2405	Construct a new hydroelectric field office radio tower to improve communication of critical infrastructure.	Design	Hydro has contracted with a radio tower design firm to complete a feasibility study and preliminary design of the new radio tower to be located at the site of the future Hydro Office. Results of this study are expected in Q2 2021. LOS survey will be conducted as weather allows in early 2021.

BILLING CODING IS DEPARTMENT-FINANCE CODE-WORK ORDER NUMBER

# Water Operations Department



## Activities Report

New Treated Water Accounts

New Raw Water Sales in Miners Inches

Raw Water Sales Changes Miners Inches

Scheduled Treated Water Outages

Emergency Treated Water Outages

Scheduled Raw Water Outages

# Water Operations Department

## Activities Report

### Distribution

- Combie Phase 1 Tie in 3/23/2021
- S.YC outage prep 3/29/2021
- System wide flushing complete
- Setting up D.S. Extension for outages
- Prepping boxes for irrigation
  - Cleaning and replacing screens
- Purchased locks for irrigation boxes

### Water Treatment

- February treated water production = 124.6 Million Gallons
- Drained cleaned 10 storage tanks
- Following up on SWRCB inspections
- NID water quality lab closed
- Developing Risk Resiliency Plan
- Filling out annual state reports
- Developing 2020 Consumer Confidence Report

### Water Resources

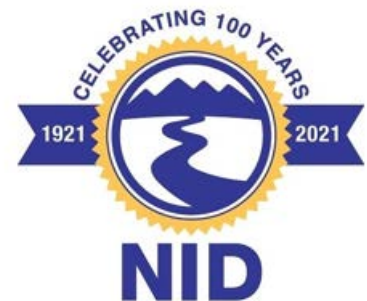
- Water right use reporting to SWRCB
- AG & Urban water plans
- Continued snow surveys

### Customer Service

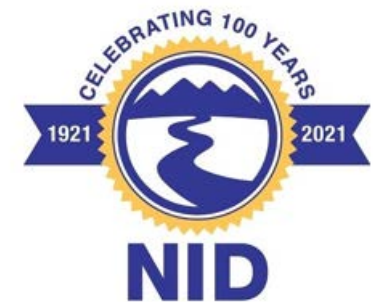
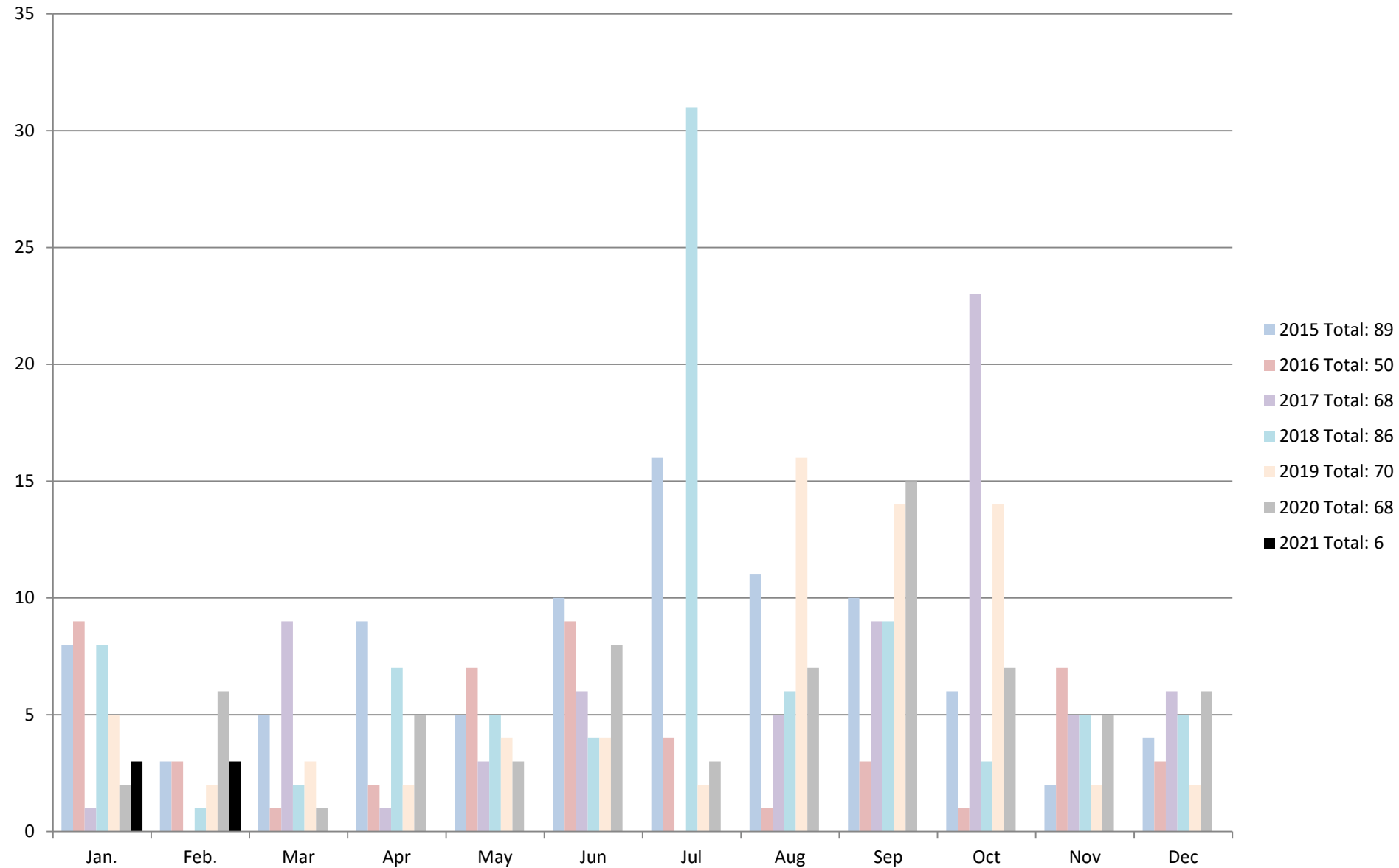
- Responded to 2,197 customer calls and 150 emails
- 2,704 online transactions in February totaling \$228,000
- 52 customers utilized LIRA in Feb.
- Updating fee schedules
- Meter replacement program continues
- Fix a leak week

### Electrical

- Mag 3 pump replacement
- Annual preventative Maint.
- Norlene Pumps installed SCADA

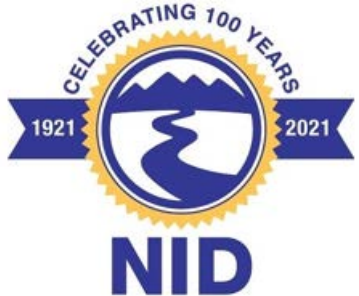
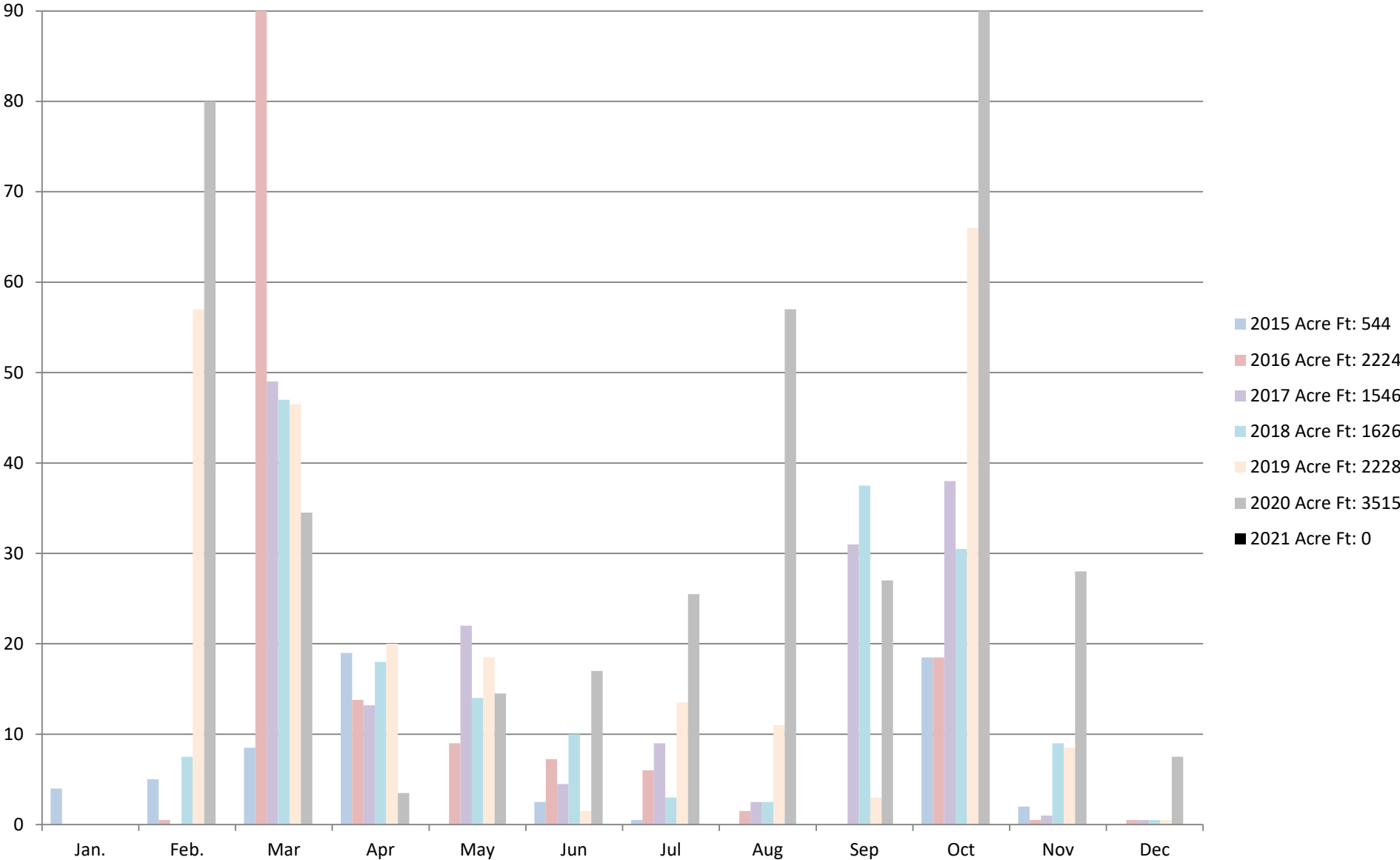


# New Treated Water Accounts

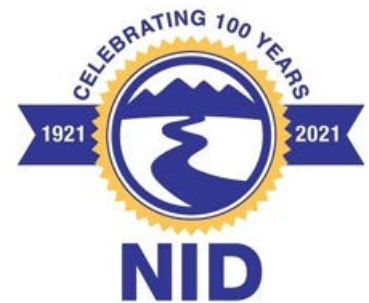
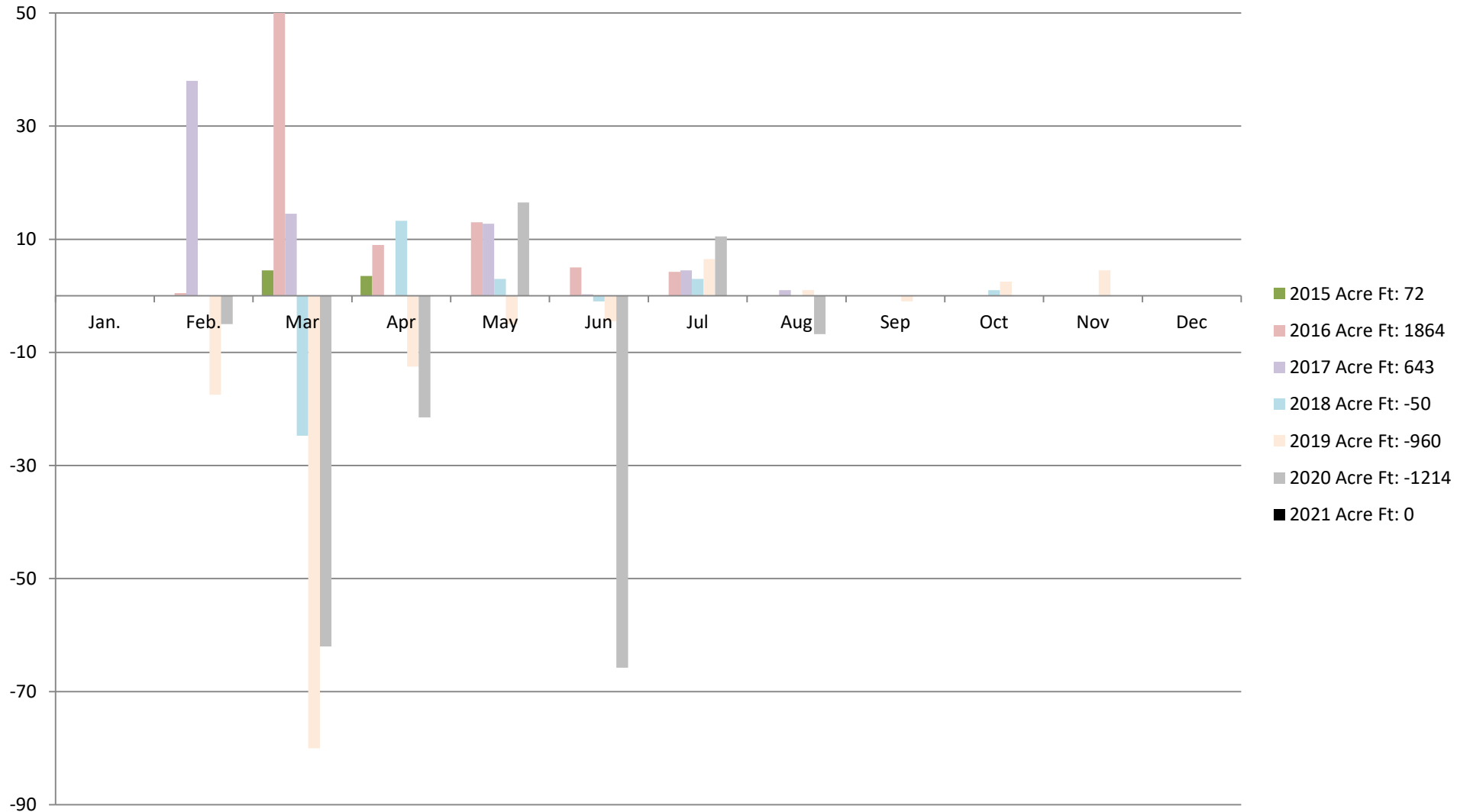




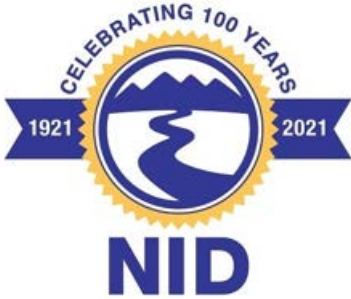
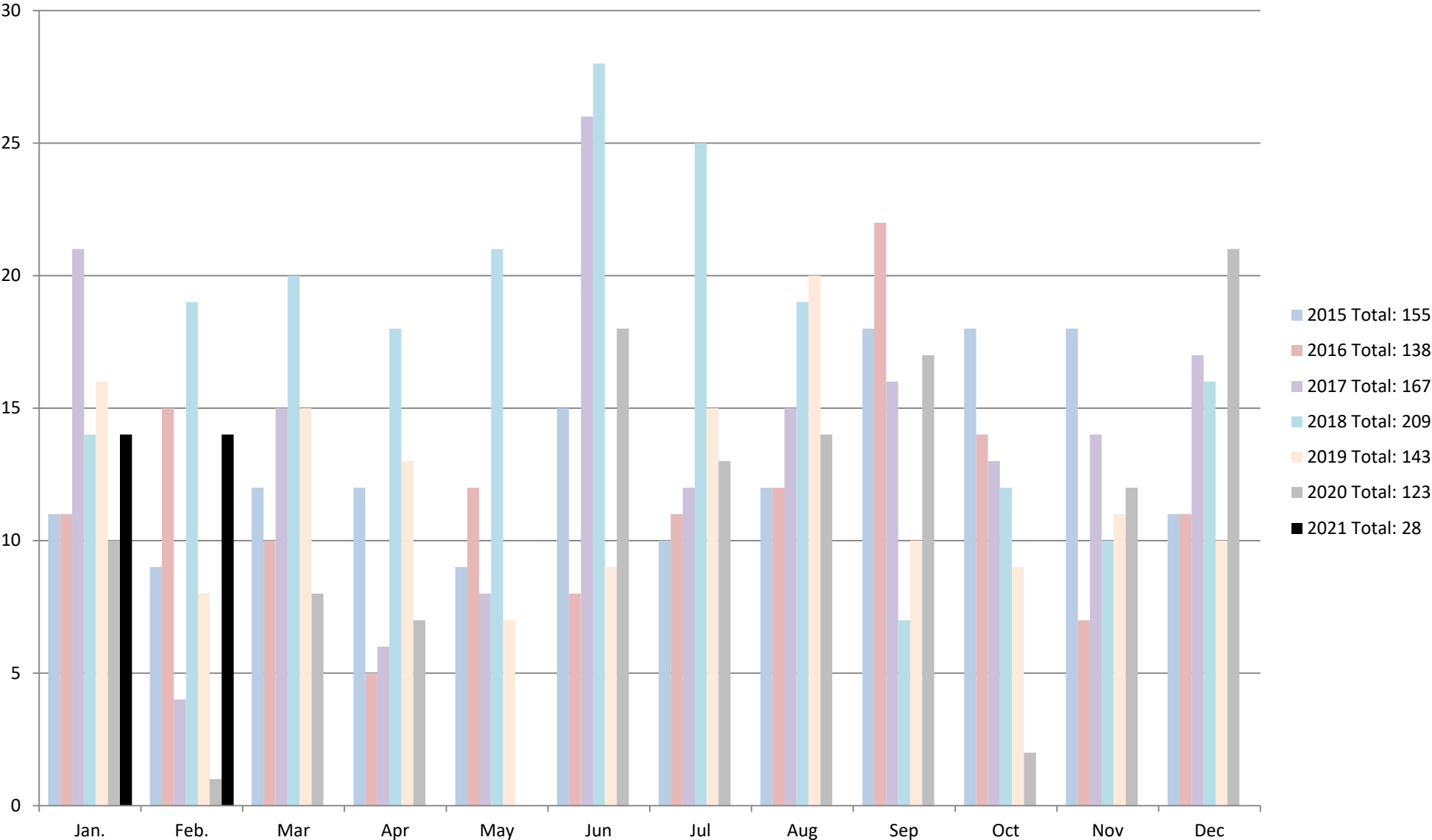
# New Raw Water Sales in Miners Inches



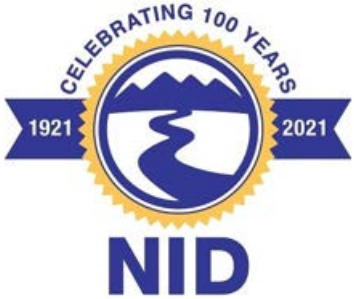
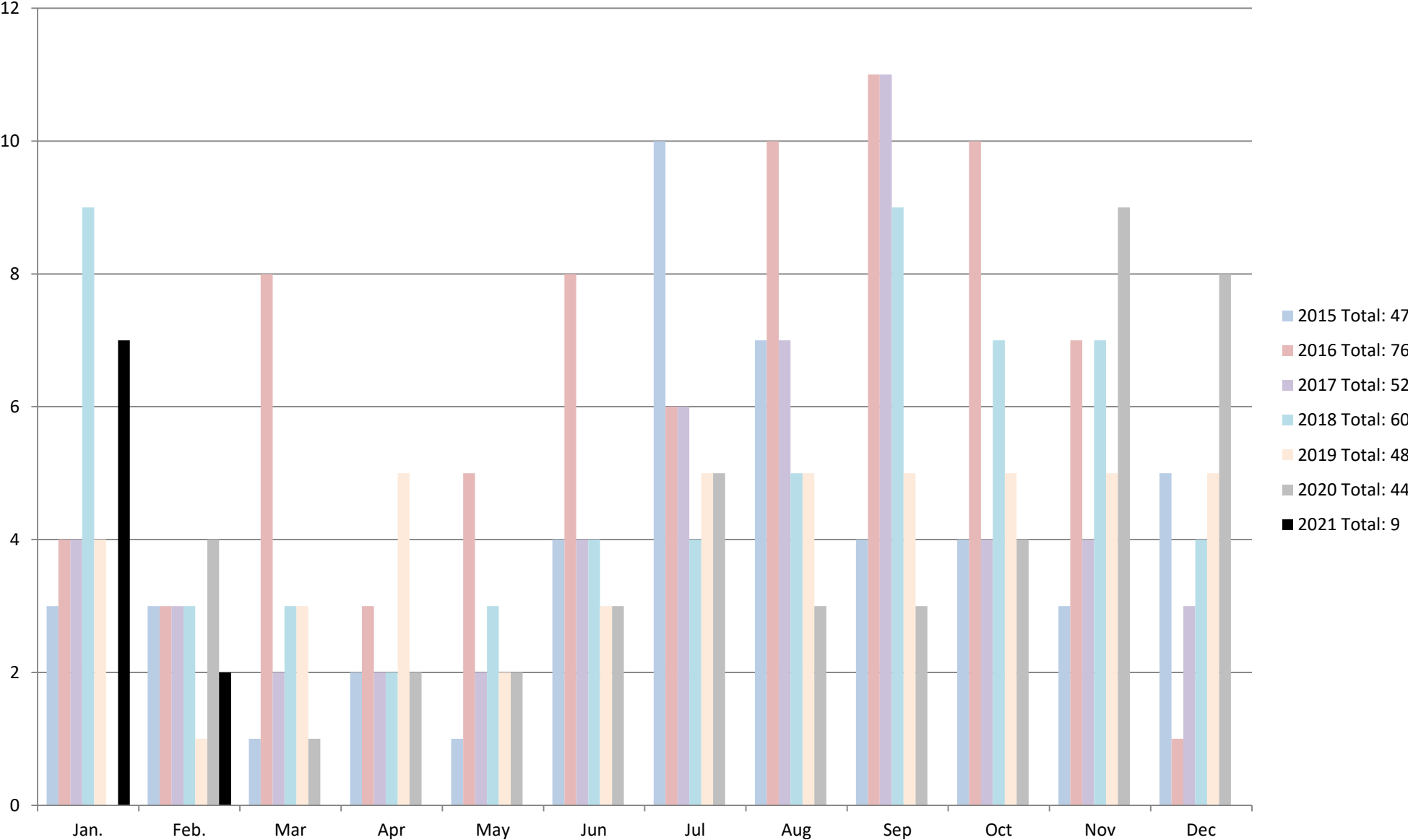
# Raw Water Sales Changes Miners Inches



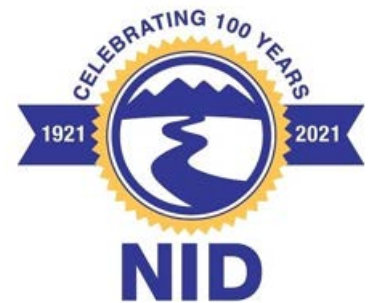
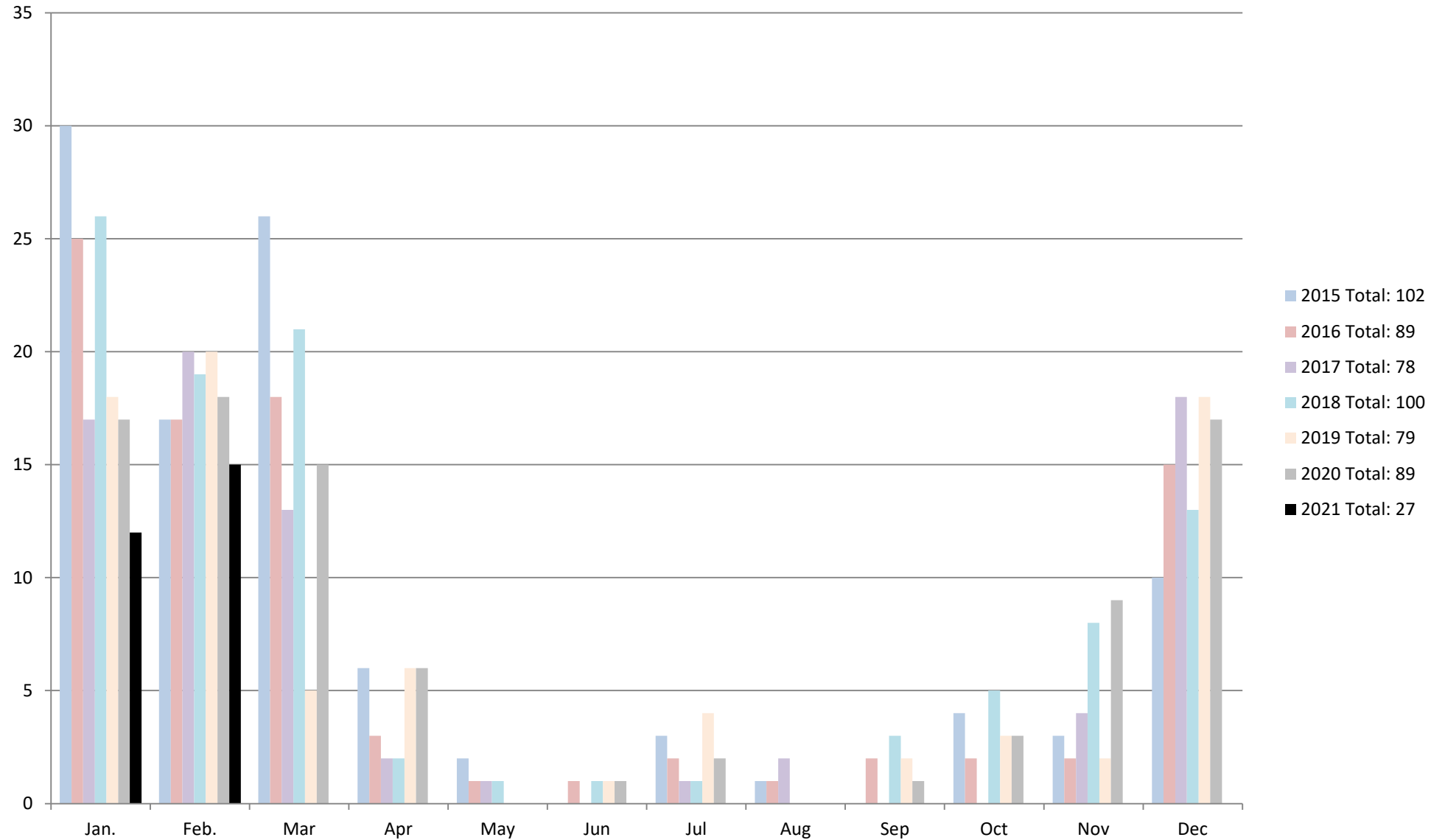
# Scheduled Treated Water Outages



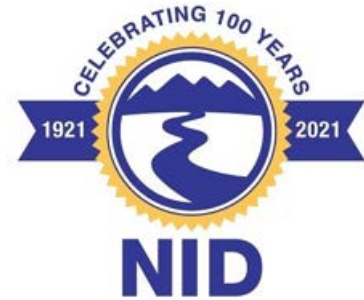
# Emergency Treated Water Outages



# Scheduled Raw Water Outages



# Maintenance Department



Activities Report  
February 15, 2021 – March 14, 2021

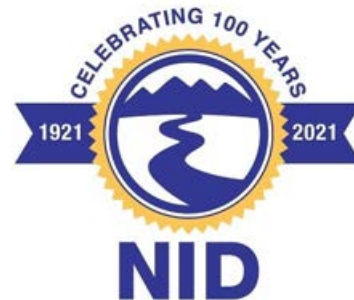


# Maintenance Department Activities Report

## Treated Water

### Summary of Select “Routine” Work

CATEGORY / TASK DESCRIPTION	TOTAL #
<b>TREATED WATER</b>	
“EMERGENCY <u>CALL OUTS</u> ” – HYDRANTS / SERVICE LINES / WATER MAINS	0
HYDRANTS – NEW / REPAIRED / REPLACED	0
METERS – NEW / REMOVED / REPAIRED / REPLACED <i>(includes Meter Replacement Program counts from April to year-end)</i>	17
SAMPLE STATIONS – NEW / REPAIRED / REPLACED	1
SERVICE LINES – NEW / REPAIRED / REPLACED	9
VALVES / DEVICES – ARV, BOV, DCV, GATE , PRV, RP, ETC.	17
WATER MAINS – REPAIRED / REPLACED	2

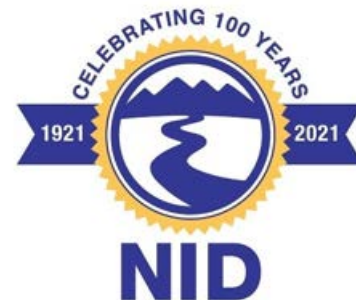


# Maintenance Department Activities Report

## Raw Water

### Summary of Select “Routine” Work

CATEGORY / TASK DESCRIPTION	TOTAL #
<b>RAW WATER</b>	
CANALS / BERMS – LEAKS / REPAIRS	2
CANALS / BERMS – CLEANED	102.28 mi.
CANALS / CONTROL STRUCTURES – INSTALLED / REPAIRED / REPLACED	3
CULVERTS – NEW / REPLACED / REMOVED	0
RAW WATER BOXES – NEW / RELOCATED / REMOVED / REPLACED	23
TREES – REMOVED	4
ACCESS ROADS – MAINTAINED	0

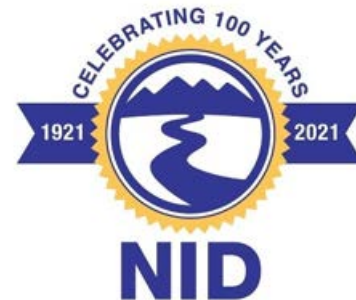


# Maintenance Department Activities Report

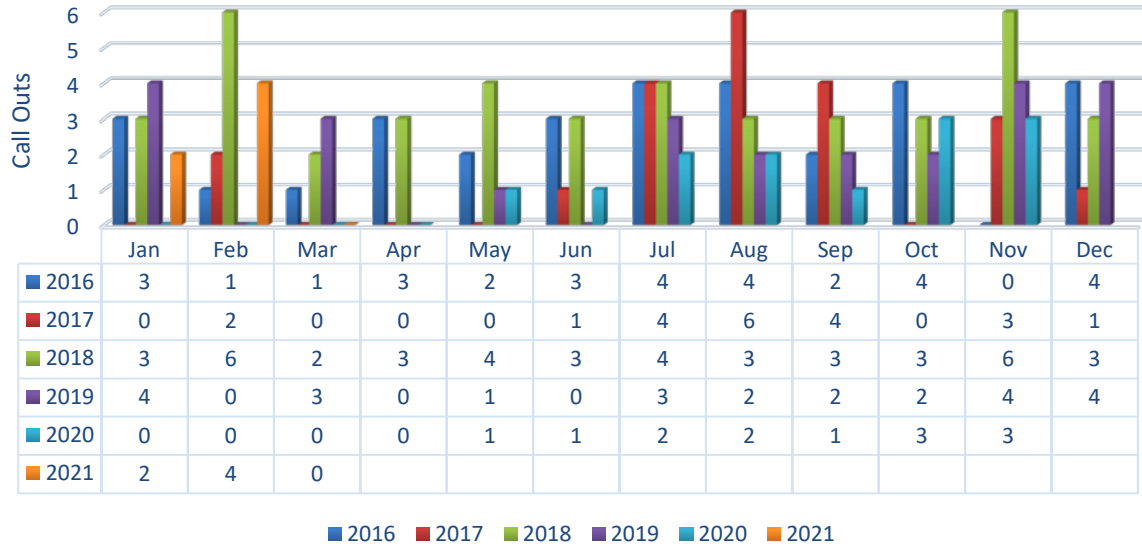
## Fleet

### Summary of Select “Routine” Work

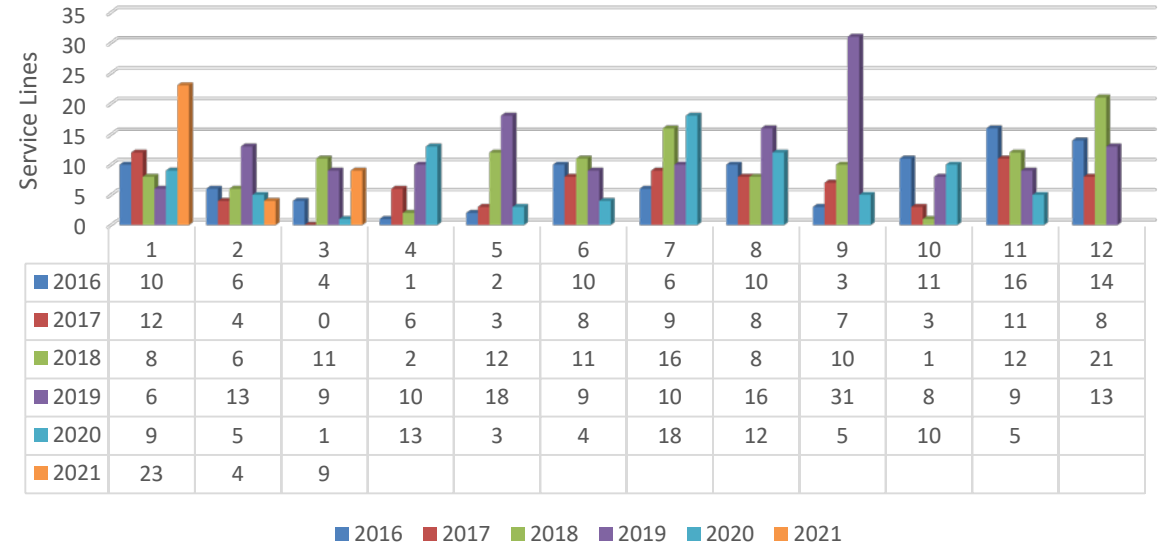
CATEGORY / TASK DESCRIPTION	TOTAL #
<b>FLEET</b>	
TRUCKS / VEHICLES – SERVICE / PREVENTATIVE MAINTENANCE	63
TRUCKS / VEHICLES – DAMAGE REPAIRS / LARGE SCALE REPAIRS	0
TRUCKS / VEHICLES – B.I.T. INSPECTIONS	28
TRUCKS / VEHICLES – RETROFITS	3
EQUIPMENT – SERVICE / PREVENTATIVE MAINTENANCE	13
EQUIPMENT – DAMAGE REPAIRS	0
EQUIPMENT – RETROFITS	0



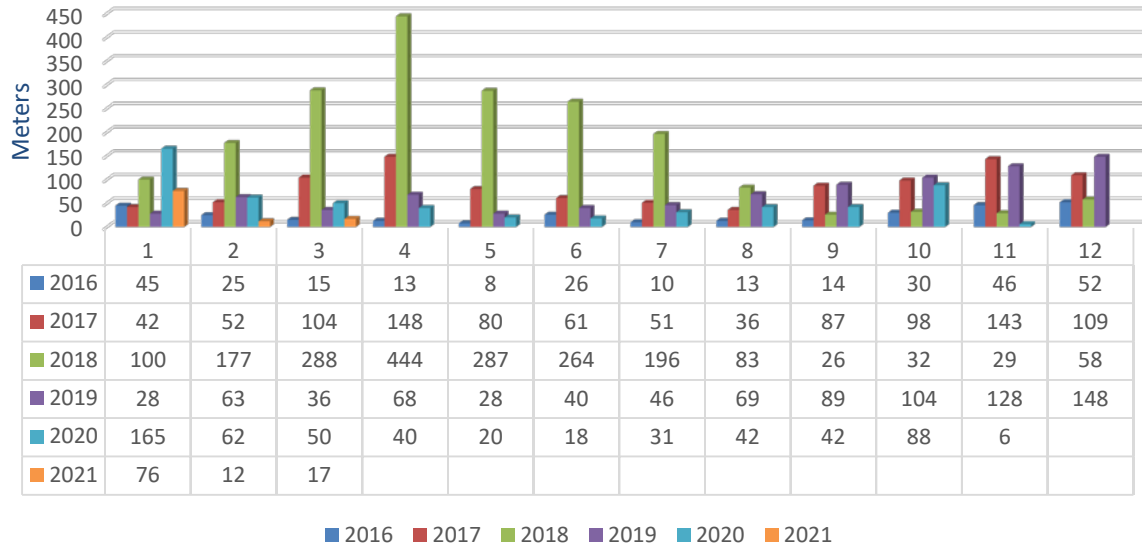
### Emergency "Call Outs"



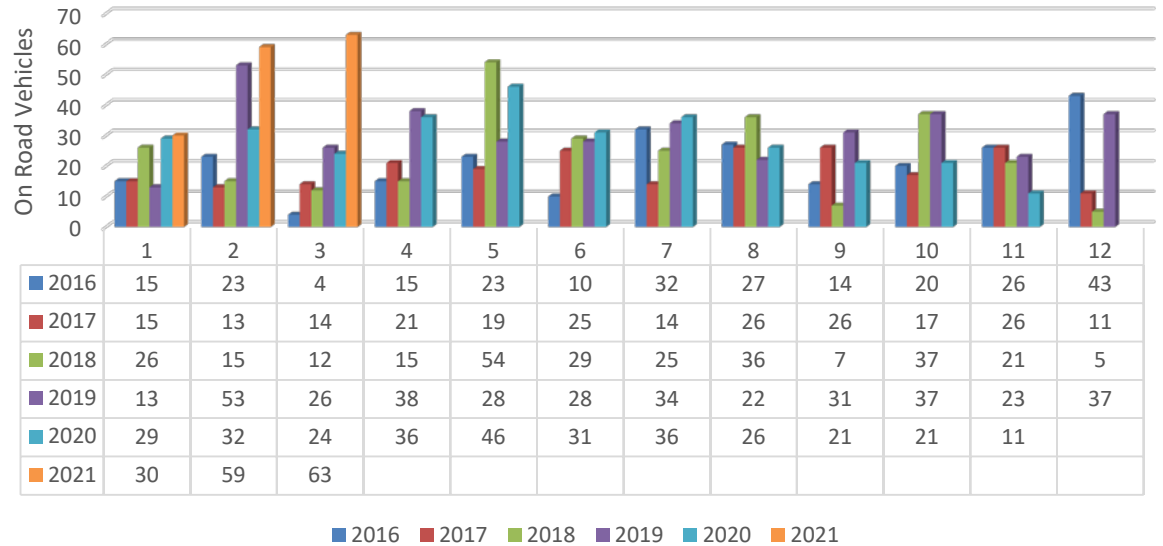
### Service Lines - New / Repaired / Replaced



### Meters - New / Removed / Repaired / Replaced



### On-Road Vehicles - Service / Repairs



# Maintenance Department Activities Report

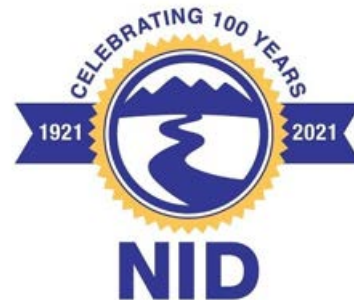
## All Crews

### Canal Maintenance / Placer

- Installed 540 feet of 24-inch pipe and inlet structure at Alta Hill Reservoir (80%)
- Installed 100 feet of 24-inch HDPE pipe on Sanford Struckman Canal (100%)
- 102.28 miles of canals cleaned (100% for irrigation season)
- “Cut” new wood boards for weirs to be installed throughout Lake Wildwood (50%)
- Storm events (3/10 and 3/15/21) – Plowed snow on access roads to DS pump station, Cascade pipe, and Scotts Flat dam and powerhouse

### Construction / Facilities Maintenance / Service

- Performed various treatment plant repairs: replaced and installed new flapper plates, set caustic tank, prepared clearwell tank for inspection, and replaced valves
- Continued buildings and grounds maintenance at various district sites
- Continued repairs and new installations of meters, service lines, water mains and valves
- Storm Events (3/10 and 3/15/21) – Plowed snow at Grass Valley yard and various treated water facility sites





# Maintenance Department Activities Report

## All Crews

### South Yuba Canal

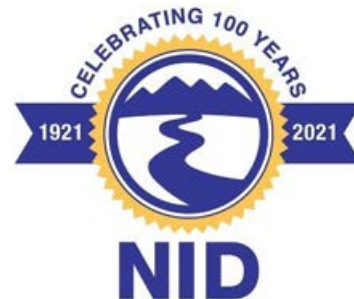
- Assisted with above-referenced Alta Hill Reservoir project
- Trained with PGE for planned work on South Yuba Canal (3/29 - 4/19/21)
- Trained new crewmember (ongoing)

### Vegetation Control

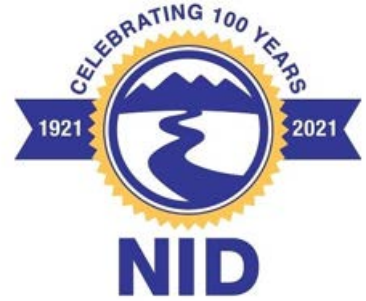
- 92 miles of terrestrial applications
- 32 miles of pre-emergent applications
- Set 15 application sites for Hydro (eliminate contract applications)

### Welders

- Fabricated raw water delivery boxes for 2021 installations
- Fabricated treatment plant items for Construction Crew projects
- Fabricated basket screens for raw water vaults, and channels and gates for structures
- Supported Mechanic Shop with repairs and new truck retrofits



# Recreation Department



Campground Activities Report:  
Scotts Flat, Orchard Springs, Long Ravine,  
Peninsula, Greenhorn, Combie, Jackson Meadows and  
Bowman Corridor

# Activities Report

- Scotts Flat, Orchard Springs and Long Ravine Campgrounds re-opened for winter camping on March 1st. We had several happy campers opening weekend.
- CAL FIRE fell about 30 hazard trees at Orchard Springs and Long Ravine Campgrounds. This service was no charge to the District, CAL FIRE needed the training and we had the hazard trees.
- Staff has been working closely with NID's Watershed Department on preparing for the CAL FIRE CFIP Grant tree work at Orchard Springs, Peninsula, Long Ravine and Greenhorn Campgrounds.
- Group campgrounds and campsites are still closed due to the current State and County COVID-19 guidelines. Staff and campers are hoping these guidelines are revised by the opening of summer camping, May 21, 2021.

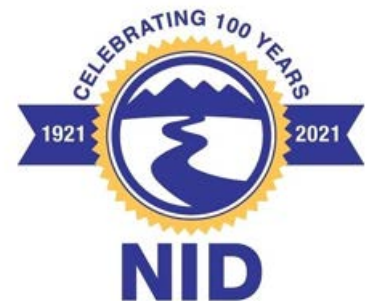
## Scotts Flat Campground

### Projects in Progress or Completed

- Retaining wall replacement project is almost complete. This has been a team effort between NID's Maintenance, Hydro, Engineering and Recreation Departments

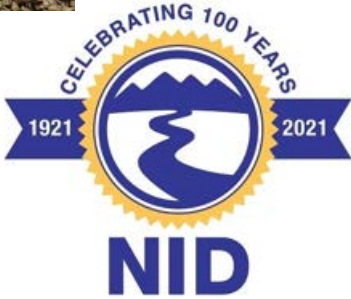
### Future Projects

- Upgrade the play area
- Pre-season hazard tree work





# Scotts Flat Retaining Wall

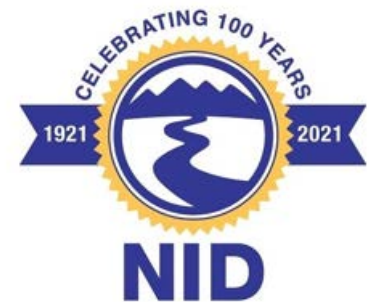




## View From Cascade Shores Boat Launch



## Winter Camping





## Orchard Springs Campground

### Projects in Progress or Completed

- Camp host house kitchen and bathroom repair

### Future Projects

- Order picnic tables and umbrellas for the store picnic area
- Install a shade structure over the picnic and play area

## Long Ravine Campground

### Projects in Progress or Completed

- Repaired both boat launches
- Camp host house roof repair

### Future Projects

- Develop the picnic area above the boat slip area

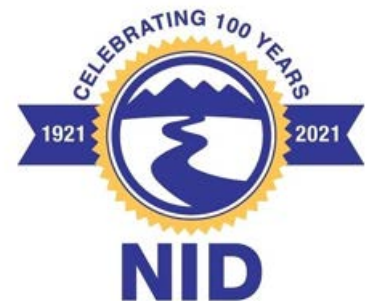
## Peninsula Campground

### Projects in Progress or Completed

- Peninsula has been closed since September 13, 2020

### Future Projects

- Creating a day-use/swim area



# Combie Reservoir

## Projects in Progress or Completed

- Low water level, boat owners have pulled their boats off their docks until next season

## Future Projects

- Staff presence on the lake during summer months to help educate users on lake/reservoir rules

# Greenhorn Campground

## Projects in Progress or Completed

- The Liserra's (concessionaire) are preparing for the 2021 camping season

## Future Projects

- Assist the Liserra's with replacement of the campgrounds sewer pump system
- Continued team approach to issues

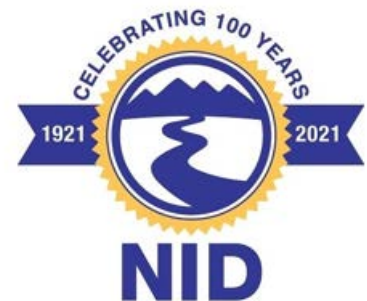
# Jackson Meadows Campgrounds and Bowman Corridor Camping

## Projects in Progress or Completed

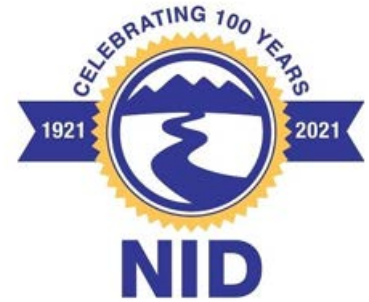
- Upper Division closed since November 1<sup>st</sup>, 2020

## Future Projects

- Pre-season hazard tree work
- Hazard tree work at Sawmill dispersed sites



# Hydroelectric Department



Reports: Generation, Availability & Outage  
Inspections: Powerhouses, Dams & Linear Facilities

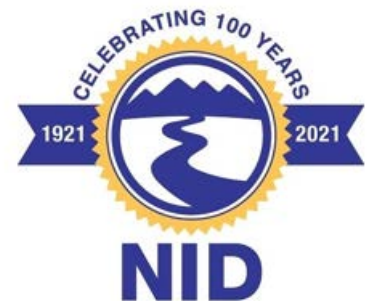
## Generation Report

Location	MWh
Chicago Park	4001.3
Dutch Flat	1357.6
Rollins	2299.2
Bowman	54.8
Combie South	280.2
Combie North	1.8
Scotts Flat	17.4

## Availability Report

Location	Availability
Chicago Park	100.0%
Dutch Flat	100.0%
Rollins	100.0%
Bowman	98.2%

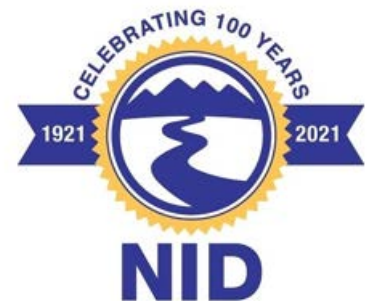
Note: Data is preliminary and subject to verification



# Outage Report

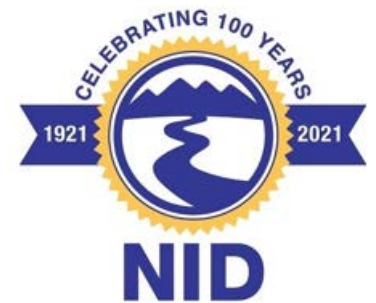
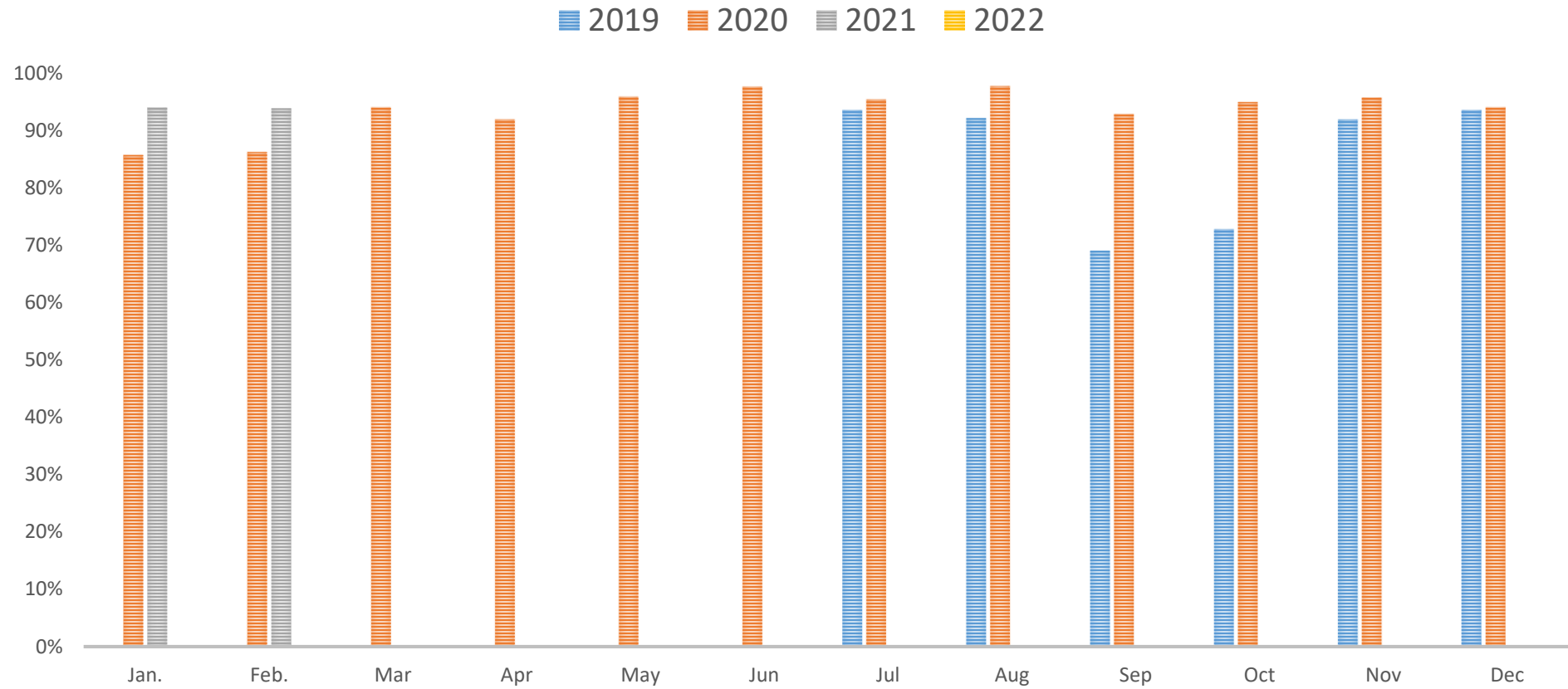
Location	Date and Time Out	Duration (HH:MM)	Cause
Bowman	2/1/21 11:59	1:30	Computer trouble
	2/13/21 08:38	4:39	60 kV Line Relay
Chicago Park	2/24/21 7:35	8:42	Fire System Install
	2/25/21 7:39	8:27	Fire System Install
Dutch Flat #2	2/10/21 6:00	2:39	115 kV Line Trouble

Note: Data is preliminary and subject to verification



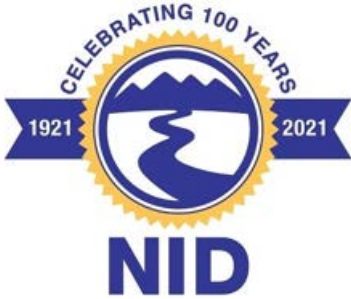
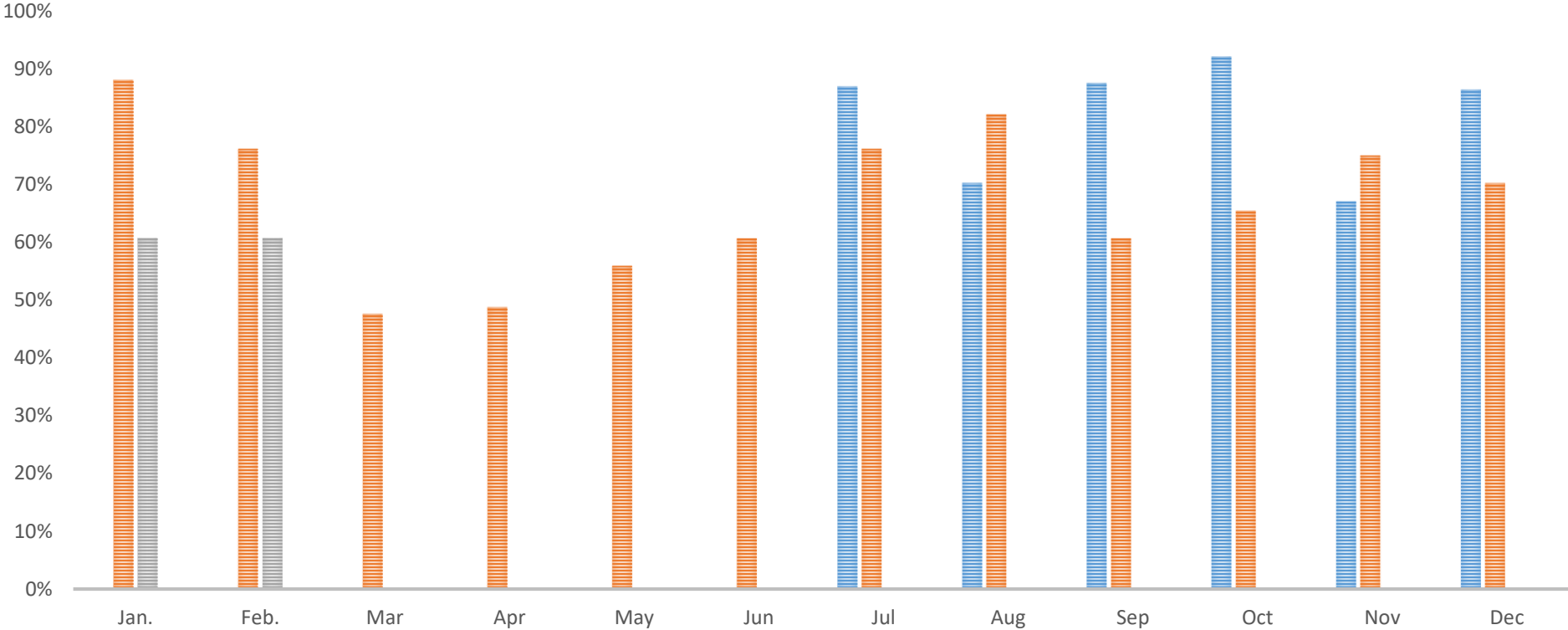


# DAILY POWERHOUSE INSPECTIONS



# WEEKLY DAM INSPECTIONS

2019 2020 2021 2022



# LINEAR FACILITY INSPECTIONS

