



2020 Field Operations Year in Review

Liquid Assets Review:
from Source to Course

Source

Granlees Pumping & Diversion Station

- **2019-2020 Pumping Season:** 2,132 Ac. ft. (694.64 million gallons “MG”) pumped from the Cosumnes River to our storage reservoirs
Started filling on Dec.13, 2020
- **Current Pumping Season:** 1,597 Ac. ft. (520 MG) pumped *so far* this season
(as of 4/7/21; began pumping January 4, 2021)

The District may pump water from the Cosumnes River from November 1 thru May 31 of each year for raw water storage. Amounts and times vary depending on river flow. River diversion through the Cosumnes Irrigation Association (CIA) ditch is utilized to convey water for downstream uses at Laguna Joaquin and Anderson Ranch.

Granlees Pumping & Diversion Station

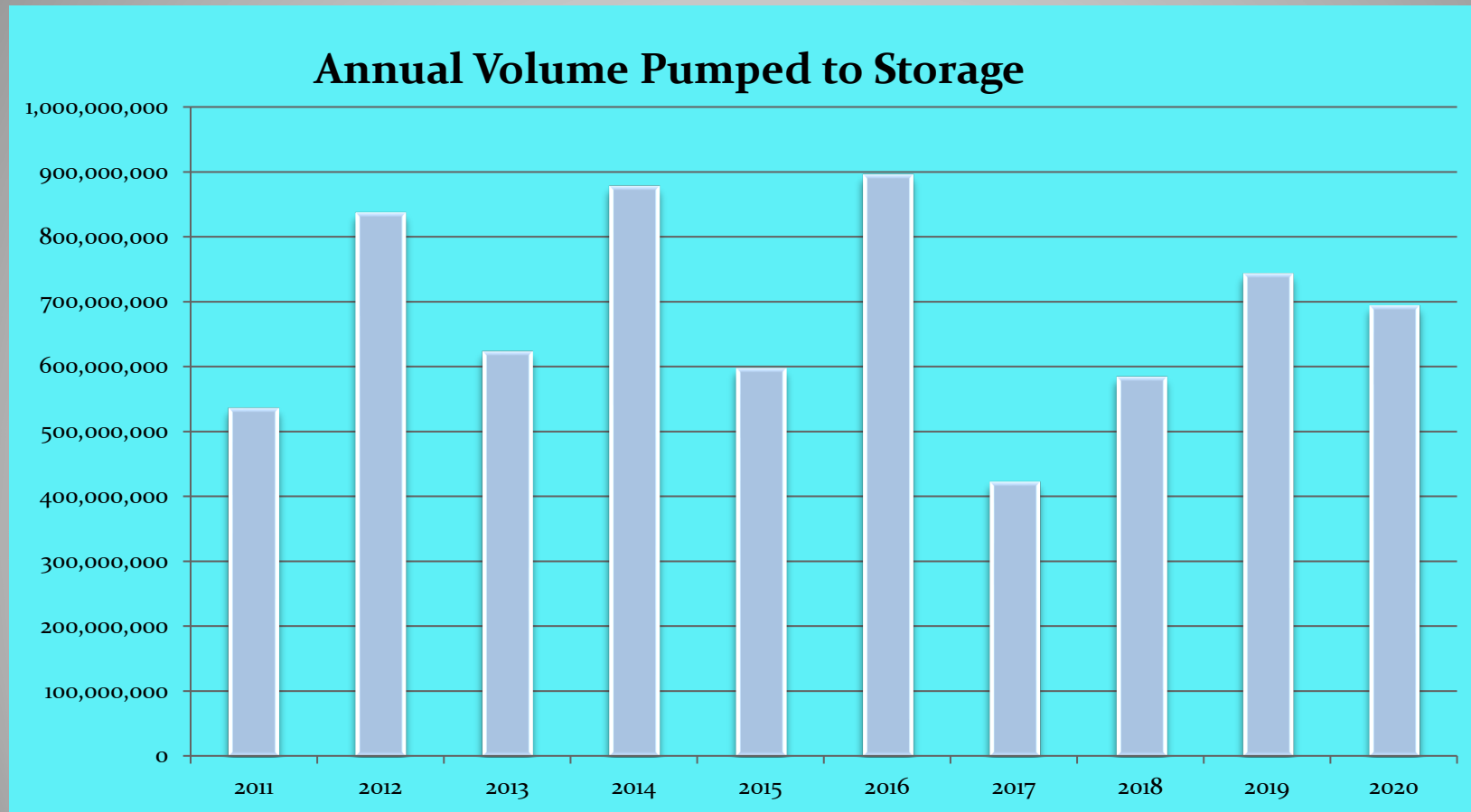


SMUD Pump Test to determine \$'s for various pumping scenarios from River to Calero. Est 700 Million Gallons or 2,148 Acre Feet.

PUMP SIZE	GALLONS PER MINUTE	GALLONS PER DAY	DAYS TO FILL	PUMPING COST	DEMAND COST	ANNUAL COST
2-125 HP	4,950	7,128,000	98	\$ 44,783	\$ 16,914	\$ 61,697
1-500 HP	8,150	11,736,000	60	\$ 57,961	\$ 36,043	\$ 94,004
2-500 HP	15,600	22,464,000	31	\$ 61,408	\$ 73,094	\$ 134,501
3-500 HP	21,700	31,248,000	22	\$ 67,374	\$ 111,553	\$ 178,927

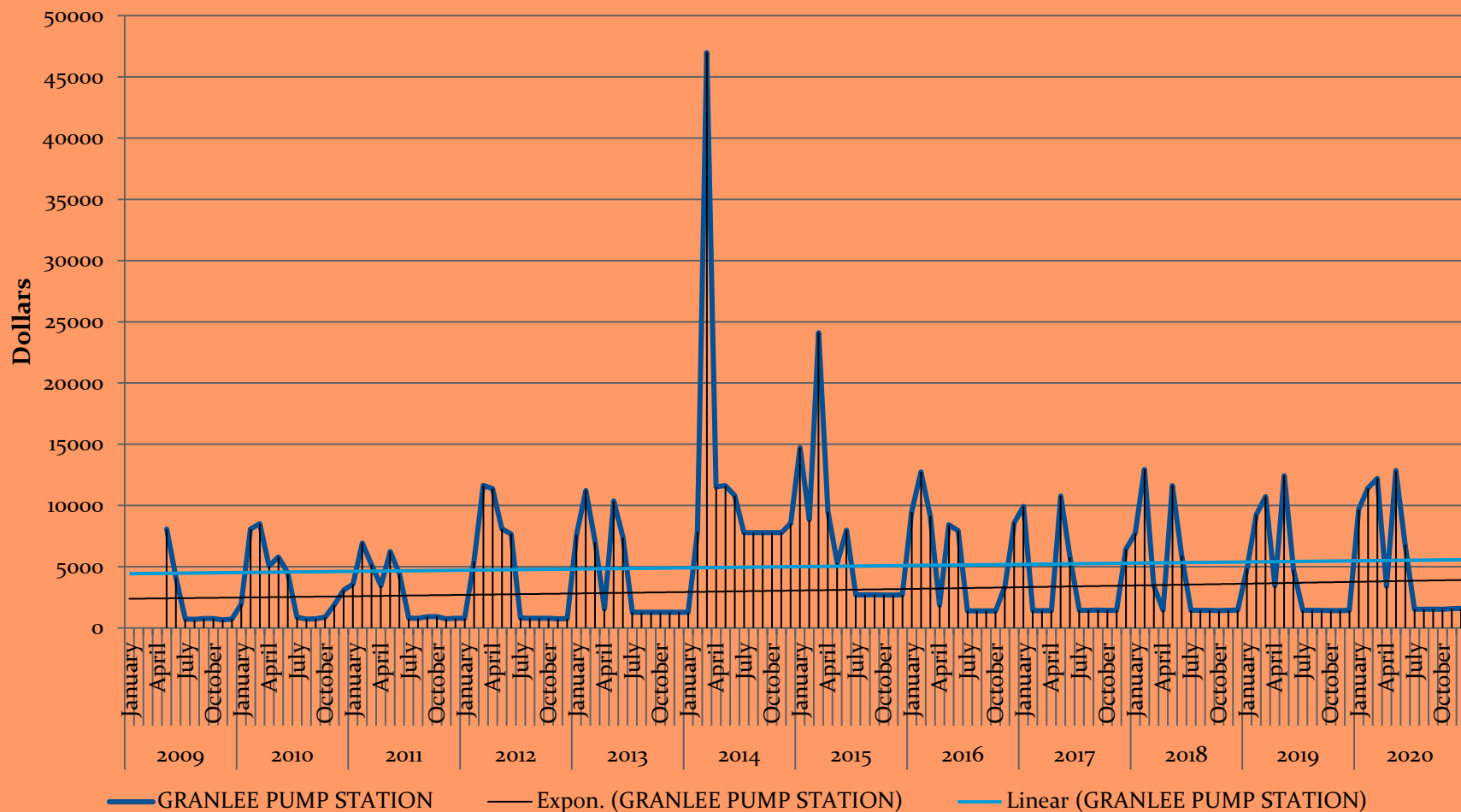
- *Does not account for Water Plant daily demand.*
- *District's Water Right runs November 1 – May 31*
- *Reservoirs need to be topped off by May 31st of each year*

Annual Amounts Pumped from River to Storage



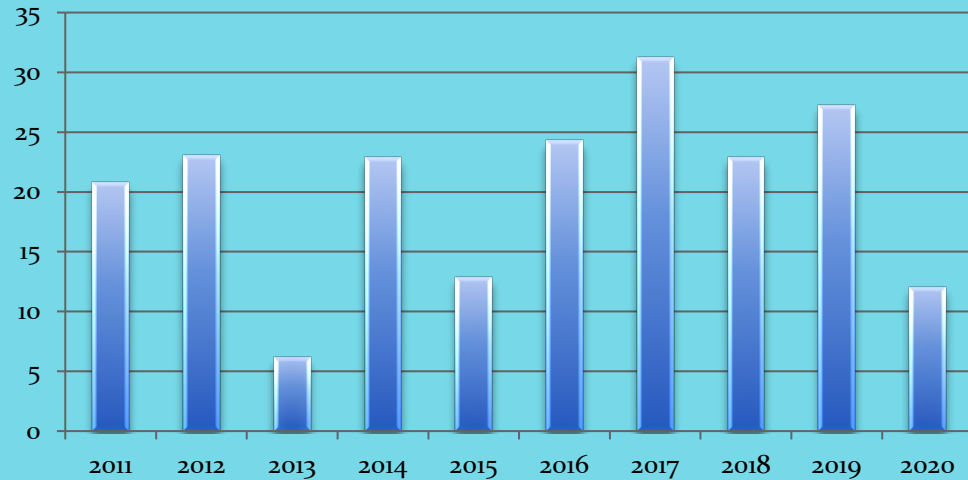
Water Pumping Costs from River

Granlee PS Electrical Cost (raw water pumping)

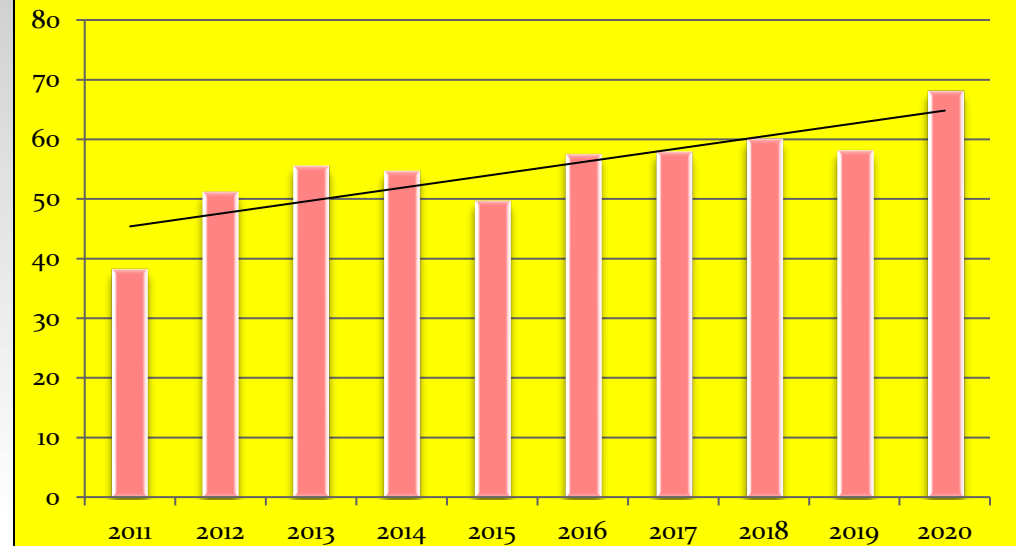


Rainfall & Evaporation

**INCHES OF RAINFALL MEASURED
AT WASTEWATER PLANT**



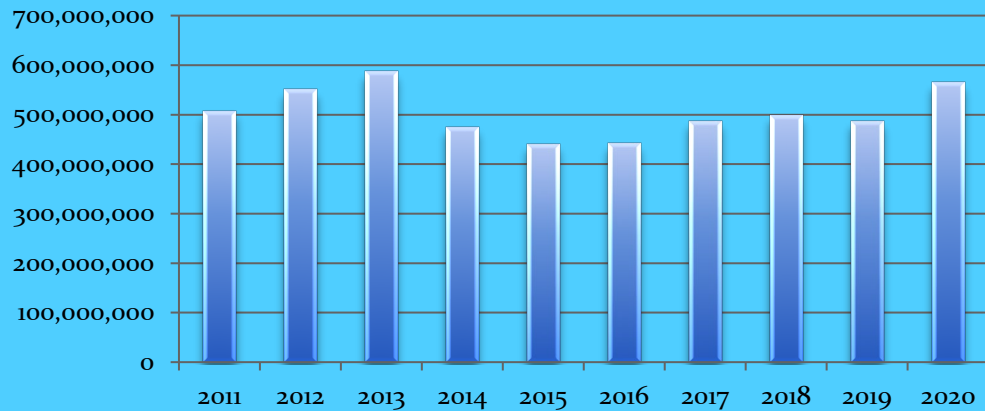
INCHES OF EVAPORATION



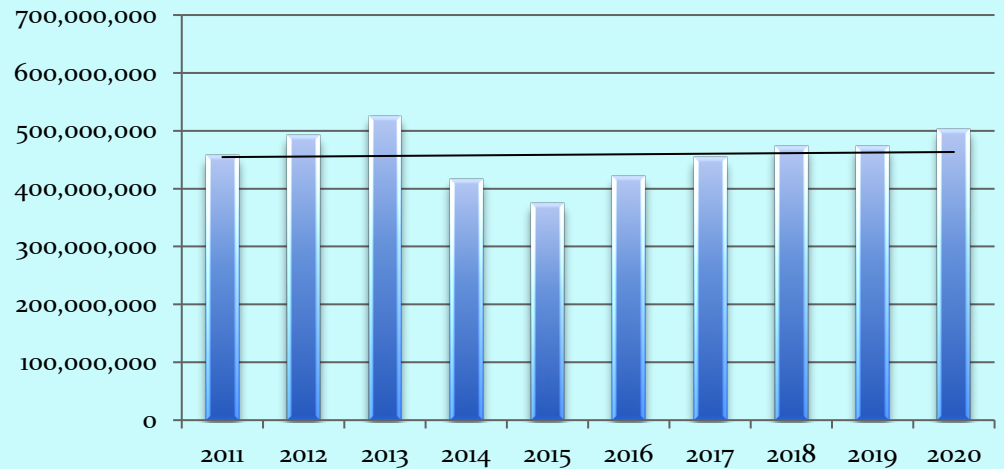


WATER

TOTAL WATER PRODUCTION FROM WATER TREATMENT PLANTS



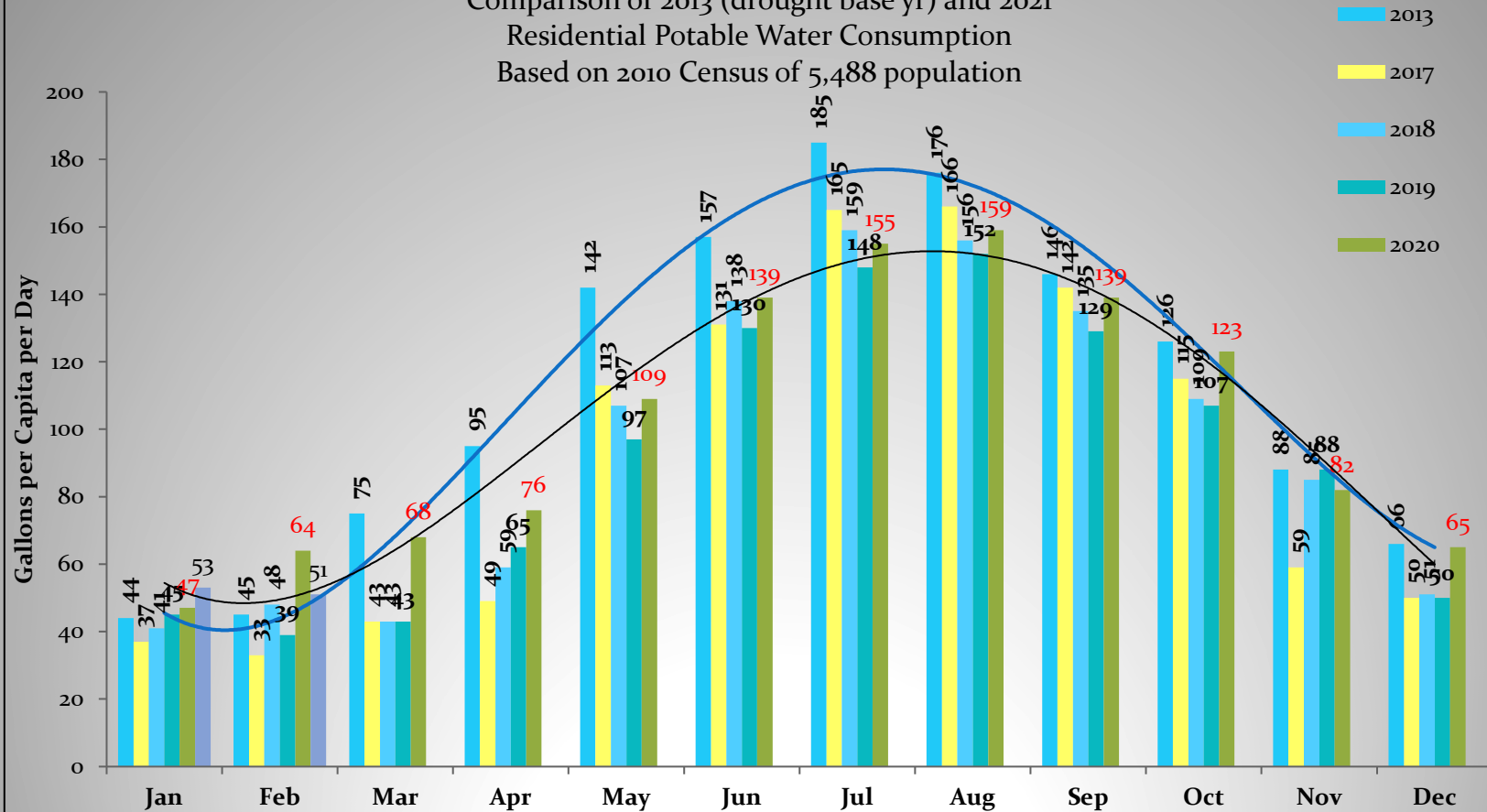
Potable Water Consumption - from Meter Use Data



Conservation

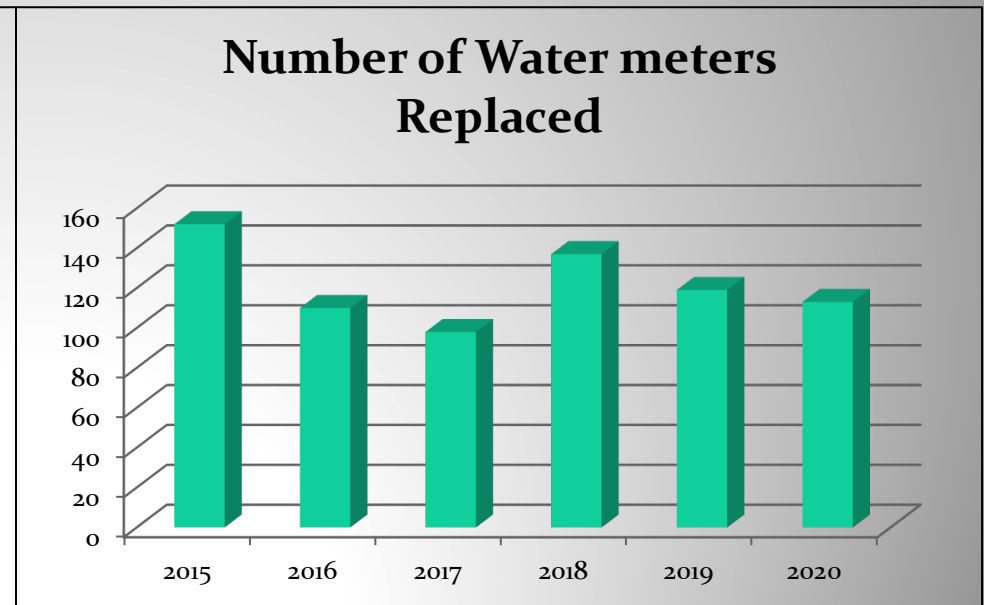
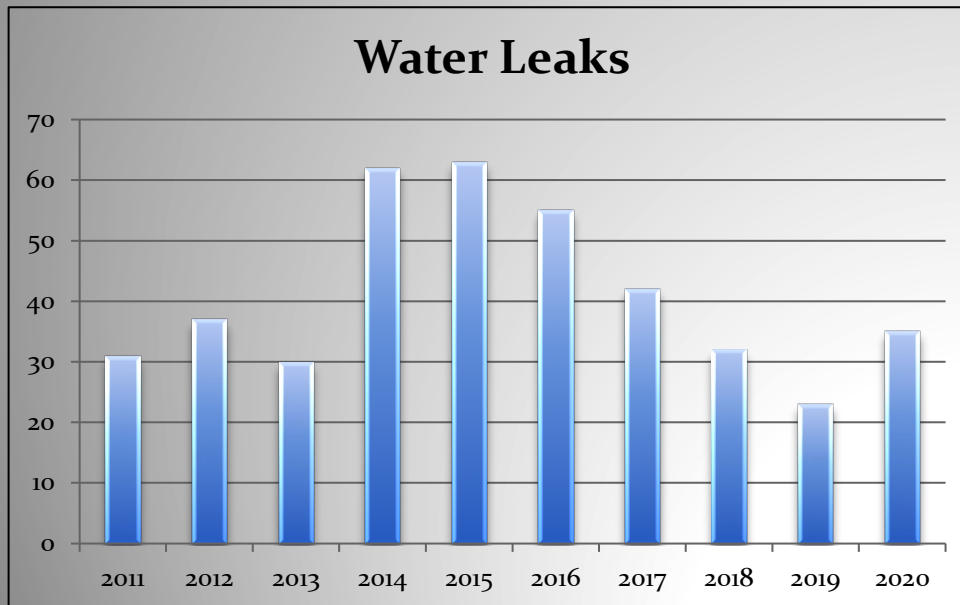
Rancho Murieta - Residential Gallons per Capita per Day

Comparison of 2013 (drought base yr) and 2021
Residential Potable Water Consumption
Based on 2010 Census of 5,488 population



Water Distribution & Maintenance

- 35 Water Leak Repairs in 2020
- 113 Meters Replaced
- 23 MXU's Replaced



Wastewater Treatment System Overview

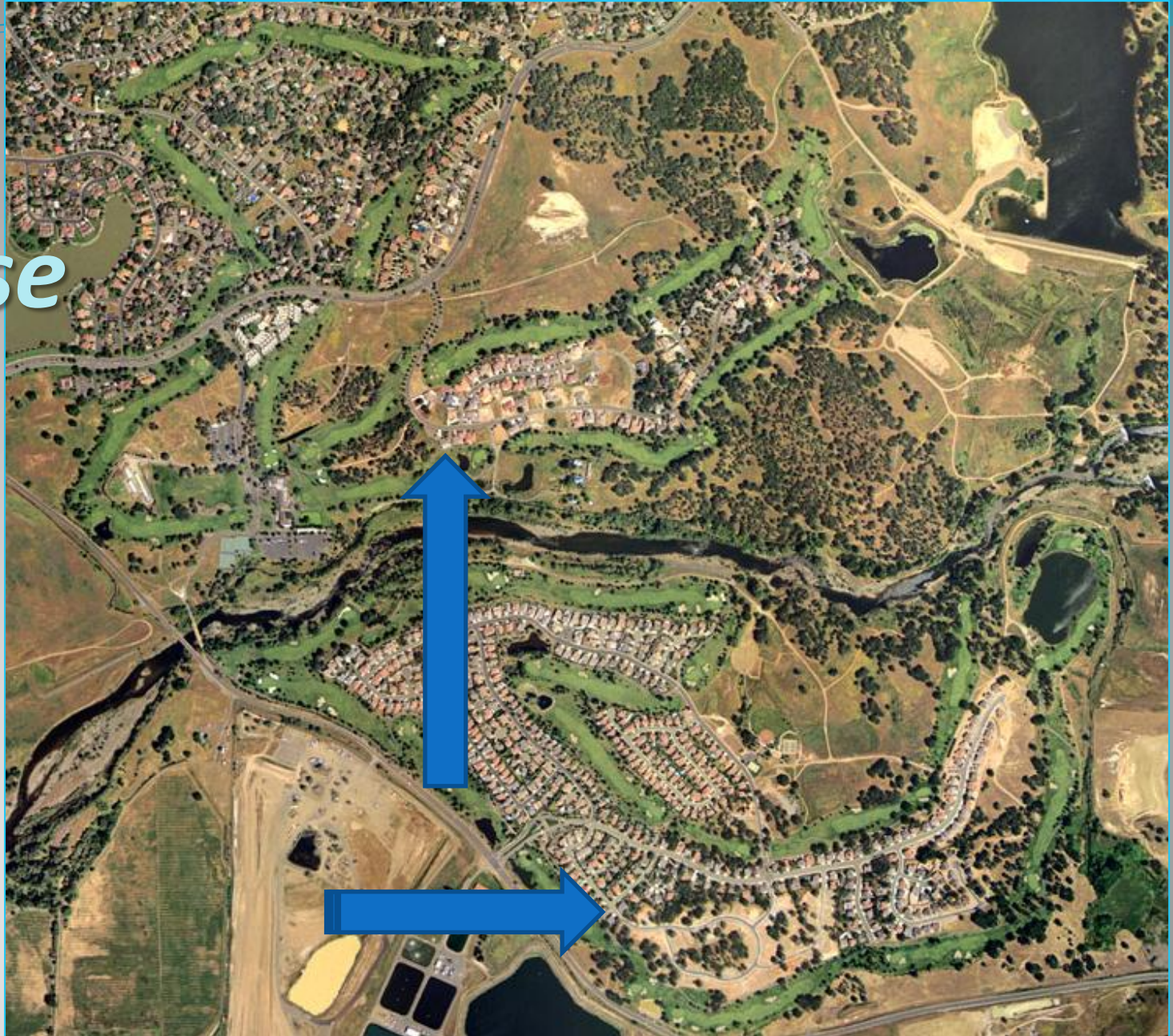
- **2020** influent flow received was **154.287 MG** (473.52 acre-feet)
- Treated wastewater is stored in two reservoirs until needed for reclamation use by RMCC during summer months.

• Stored secondary treated wastewater is pumped through a Dissolved Air Floatation system and then filtered, disinfected with chlorine, becoming tertiary treated water, and supplied to the golf courses for irrigation.



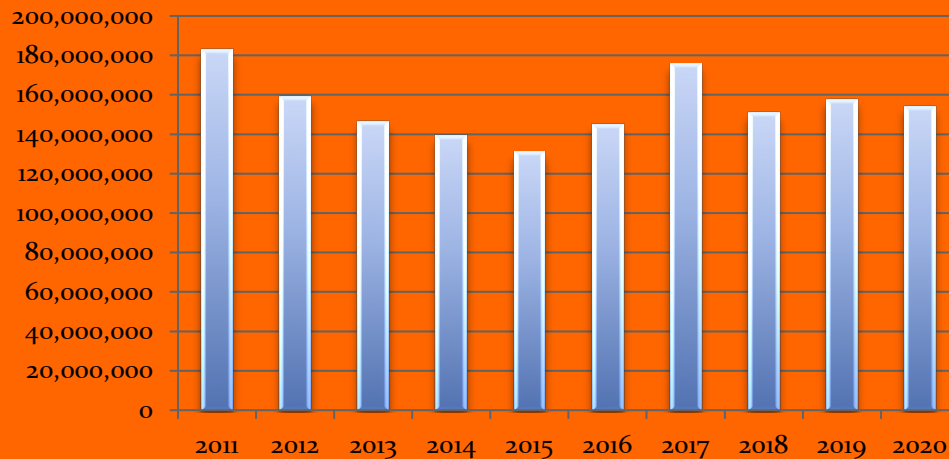
To Course

134.65 MG
(413.3 Acre-feet) of
tertiary water was
delivered in 2020 for
RMCC irrigation use.

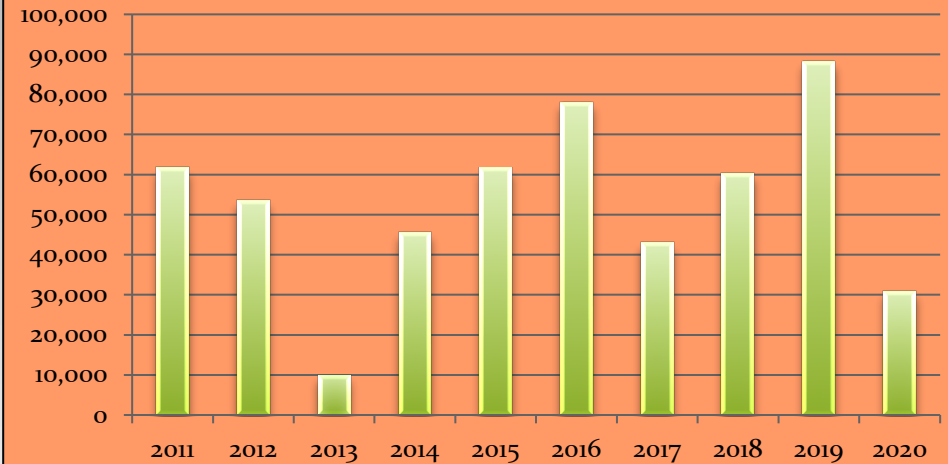


Sewer Metrics

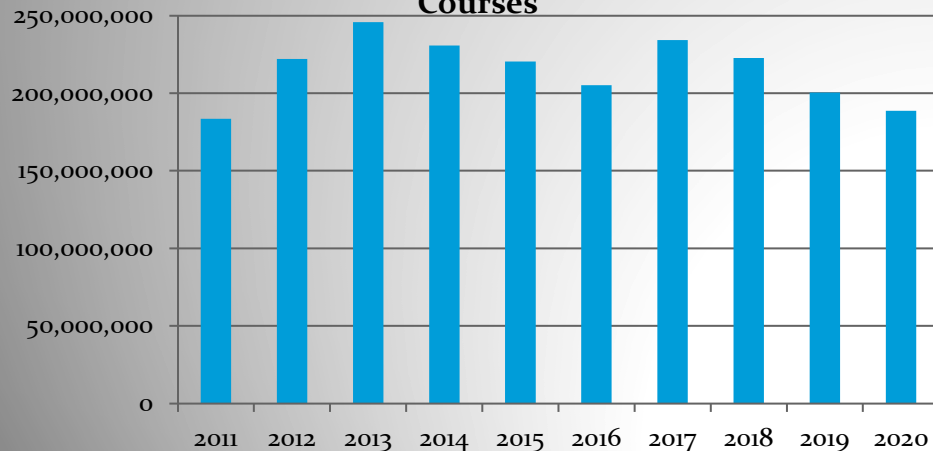
Total Wastewater Flow in to Plant



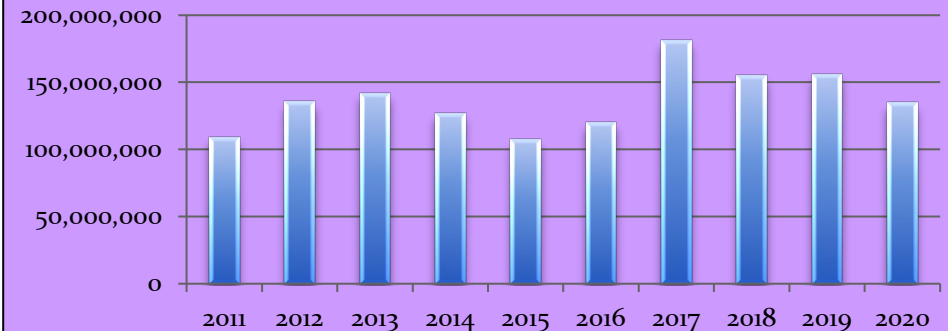
Sewer Line Cleaned - Feet



Reclaimed/Rain/ River Water used to Irrigate Golf Courses

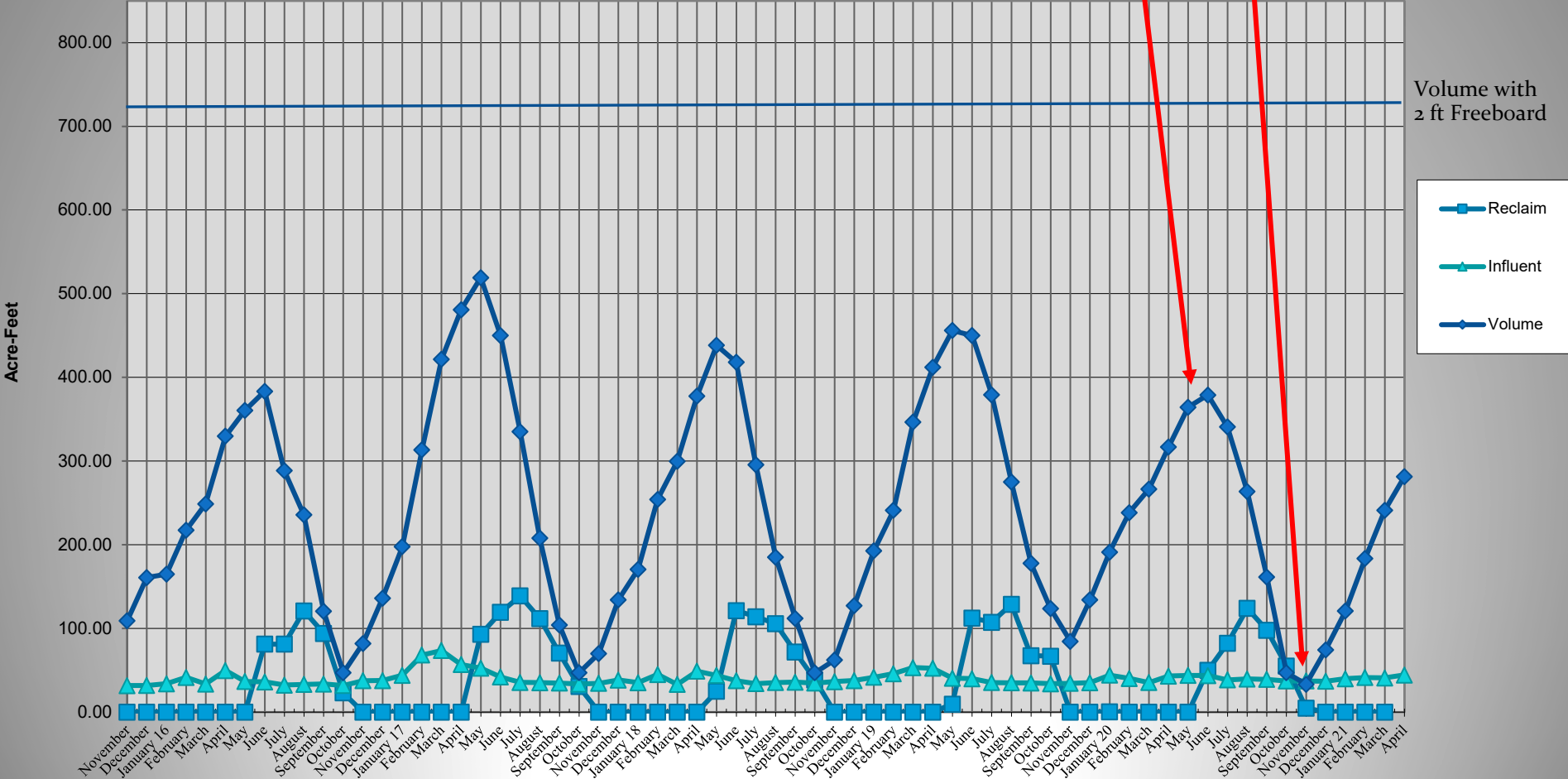


TREATED RECLAIMED WASTEWATER DELIVERED FOR GOLF COURSE IRRIGATION



We effectively lowered secondary wastewater storage to 34 acre-feet. The highest storage volume for the year was 384 acre-feet.

Volume of Secondary Wastewater in Reservoirs 2016-2021



Completed Projects in 2020-21:

- 1) Chesbro bouys and fencing around water plant intake
- 2) Replacement of truck 217 from sewer fund CRP #20-02-1
- 3) Sewer main repair in South community at Labranza
- 4) Main Lift South sewer forcemain pump replacement
- 5) Purchase of new loader to replace Bobcat loader; CIP #08-07-1
- 6) Water main valve repair at intersection of Lago-Pera-Lindero in North
- 7) 6B sewer pump station PLC and backpanel replacement
- 8) East DAF saturation tank replacement at Tertiary treatment facility
- 9) Rehabilitation of WTP#1 three (3) effluent pumps CIP #20-05-1

Projects in Process

- Fire Hydrant replacements (10 total) CRP #20-06-1
 - 8 of 10 completed so far
- Dam Inundation Study and Emergency Action Plans CIP #17-03-1
 - Inundation studies are done and submitted to DSOD. EAPs are going through review process with OES
- Wastewater Reclamation Plant- Chlorine gas to Bleach conversion project CIP #18-07-2

Unfunded mandates & looming \$'s

- Drainage:
 - Sediment removal from Laguna Joaquin
 - Special tax doesn't keep up with inflation at 2%/yr let alone current needs
 - Wastewater:
 - CVSalts
 - Water:
 - Urban Water Management Plan required at 3,000 connections
 - Assembly Bill 685 – Human Right to Water
- Development review and construction inspections

Thank You!

With the continued support of the Board and community, we will continue to make improvements and keep the District running with a high standard of service and operation.