



# LOCAL WATER UPDATE

**Glendale Water & Power Commission**

**June 5, 2023**

**Richard Ruyle, Water Services Administrator**  
**City of Glendale Water & Power**



# GLENDALE'S WATER SOURCES



Water Source	Volume in ACFT *	Percent of Total (%)	Notes
San Fernando Basin	7,569	31%	Limited to return flow credit and physical solution.
Verdugo Basin	881	4%	Limited by declining groundwater levels.
LAGWRP	1,712	7%	Limited to 50% of recycled production from the plant and Glendale's longstanding agreement with Pasadena.
Customer Water Demand (Potable & Recycled)	24,273	100%	Varies on customer needs, mainly affected by local weather. Declining due to conservation.
MWD	14,111	58%	Difference needed to meet Customer Demands.

\* Numbers vary each year based on customer use

# IMPORTED WATER

- 95% of Glendale's water is imported
- San Fernando Basin
  - Los Angeles owns all rights to "native" water
  - Glendale's return-flow credit: limited to 20% of delivered water to basin including RW
- Challenges of Imported Water
  - Expense
  - Reliability
    - Drought
      - Glendale reduced potable water deliveries by 20% during the drought
- Glendale has rights to wastewater flows generated by water it imports
  - Joint Powers Agreement with Los Angeles to split LAGWRP discharge





# BENEFITS OF RECYCLED WATER

- City and regional benefit of reducing imported water from Bay Delta and MWD
- Increased water supply reliability
- Maximum beneficial use
  - Multiple uses better than one
  - Highly treated water discharged to ocean



# RECYCLED SYSTEM

- 1978: First recycled water use was for cooling towers at GWP's Grayson Power Plant
- 1992-2014: Glendale invested over \$20.3 million in expansions
- Existing use: 1,700 to 2,000 AFY
- Proposed expansion: 3,500 AFY (400 AFY Glendale; 3,100 AFY Pasadena)



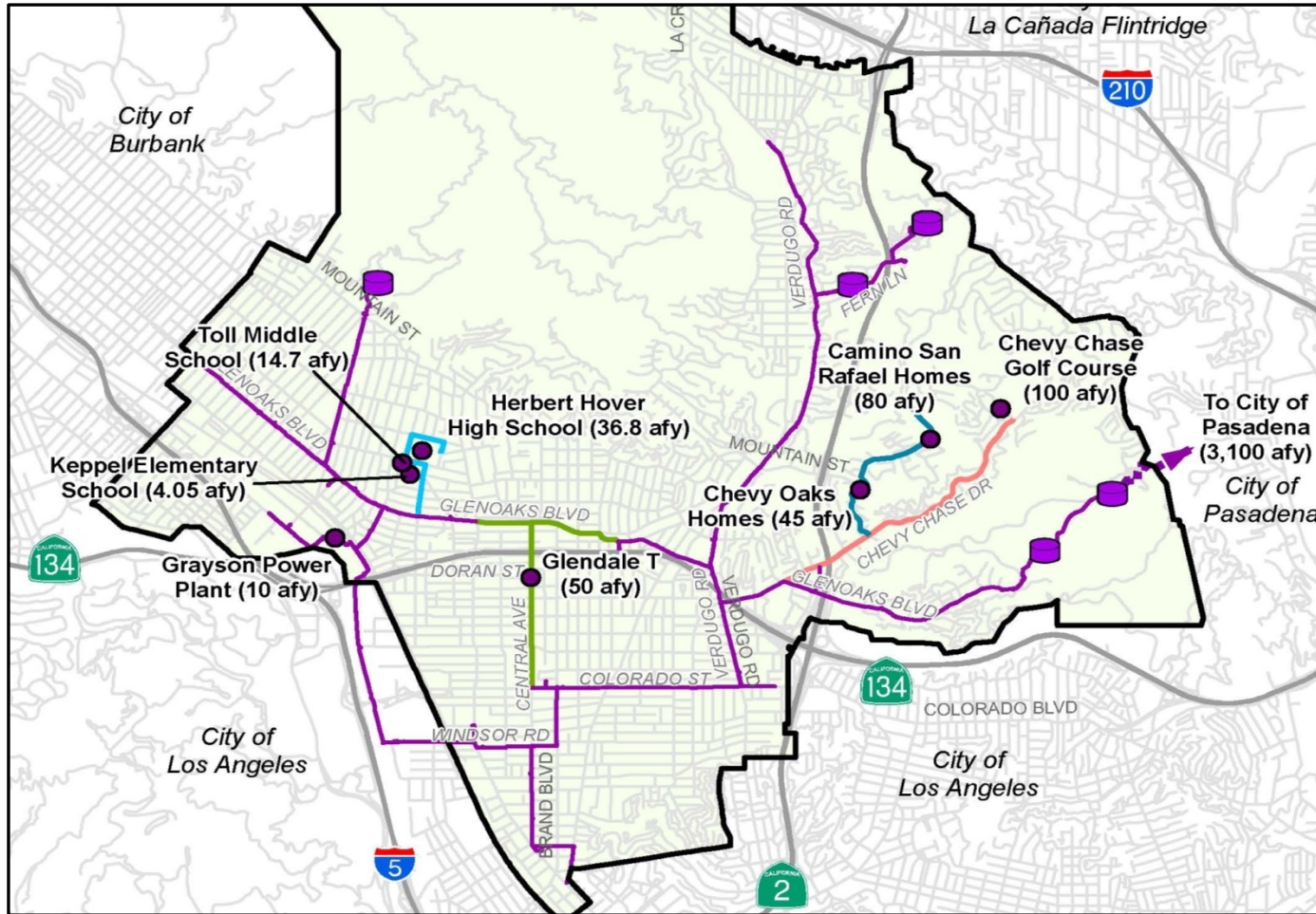
- Approximately 21 miles of recycled water mains
- 6 RW pump stations
- 5 RW storage tanks
- 78 recycled water meters
- Uses include irrigation, cooling, dual-plumbing, dust control

# WASTEWATER OPERATIONS

- 1976: Glendale is a co-owner of the new LA – Glendale Water Reclamation Plant (LAGWRP) sharing in 50% of costs and tertiary treated water
- Treatment capacity: 20 MGD
- Current average treatment: 16 MGD (18,000 AFY)
  - Glendale's half: 9,000 AFY
- Glendale's current RW demand: 1,700 to 2,000 AFY
- Currently, Glendale is discharging 7,000 AFY (6.3 MGD) of tertiary treated water to the LA River
- Water that could be reused to meet non-potable demands



# RECYCLED WATER - CURRENT AND FUTURE SYSTEM MAP



## Legend

- Future RW Customers
- Existing RW Tanks
- Recycled Water Main Line

## Proposed Future Expansions

- Glendale Unified School District
- Glendale Tee
- Chevy Chase Golf Course
- Camino San Rafael

# RECYCLED WATER PLANNING - PASADENA

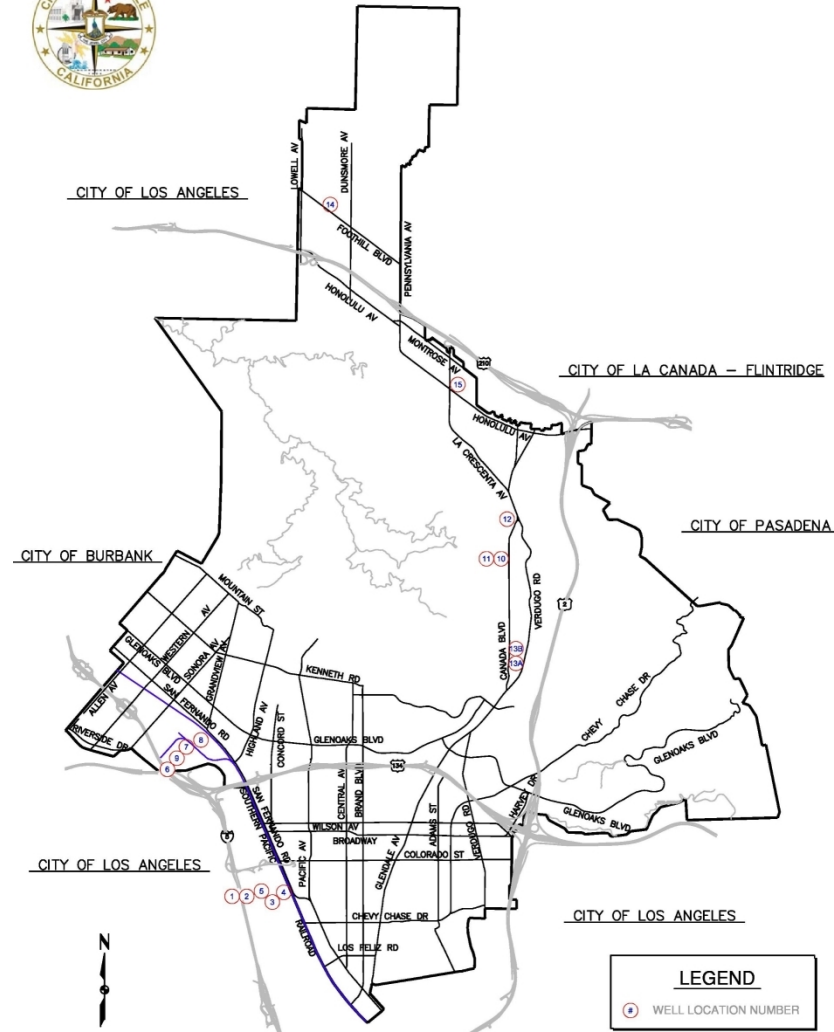
- 1983: EIR for “Wastewater Reclamation Facilities Plan” included Glendale, Pasadena, and portions of LA
- 1993: Agreement between Pasadena and Glendale for Recycled Water
  - Glendale’s system built to accommodate Pasadena’s demands – including pumping facility at LAGWRP
- Glendale Municipal Code: “Extend and enhance local water supplies by using recycled water for special non-potable purposes to free up potable supplies for higher uses.”

Annual Average Amount of Wastewater Discharged at LAGWRP (AFY)	
Existing Discharge	10,500
Proposed reduction	3,500
Proposed Discharge	7,000





# WELL LOCATIONS



LOCATION NO.	FACILITY
1	GLENDAL OPERABLE UNIT - GS-1
2	GLENDAL OPERABLE UNIT - GS-2
3	GLENDAL OPERABLE UNIT - GS-3
4	GLENDAL OPERABLE UNIT - GS-4
5	GLENDAL OPERABLE UNIT - GS-5
6	GLENDAL OPERABLE UNIT - GN-1
7	GLENDAL OPERABLE UNIT - GN-2
8	GLENDAL OPERABLE UNIT - GN-3
9	GLENDAL OPERABLE UNIT - GN-4
10	GLORIETTA WELL #3
11	GLORIETTA WELL #4
12	GLORIETTA WELL #6
13A & 13B	VERDUGO WELLS A & B
14	FOOTHILL WELL
15	ROCKHAVEN WELL



# STORMWATER CAPTURE & NEW WELLS

- Challenges
  - San Fernando Basin
    - Los Angeles owns all rights to “native” water
  - Verdugo Basin
    - Limited space
    - Foothill Well rehab





**#MyGlendale**