



PALMDALE WATER DISTRICT
A CENTURY OF SERVICE

AGENDA ITEM NO. 8.2.a

Reservoirs/Tanks

February 2020



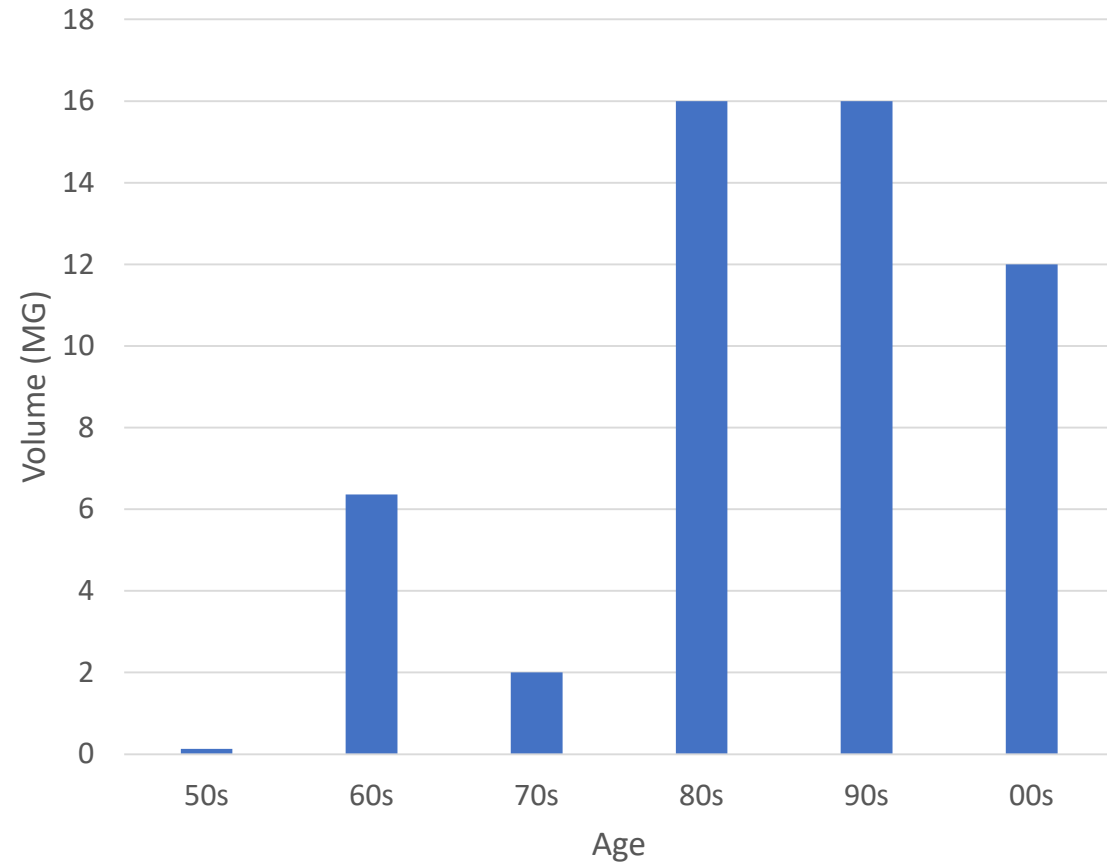
Distribution System

- 15 Reservoir Sites
- 21 Tanks
 - Welded Steel (AWWA D100-05) – 18
 - Bolted Steel (AWWA D103-97) – 2
 - Concrete (AWWA D120-02) – 1
- 52.5 MG Designed Capacity
- 48.5 MG Operating Capacity



Reservoir Age

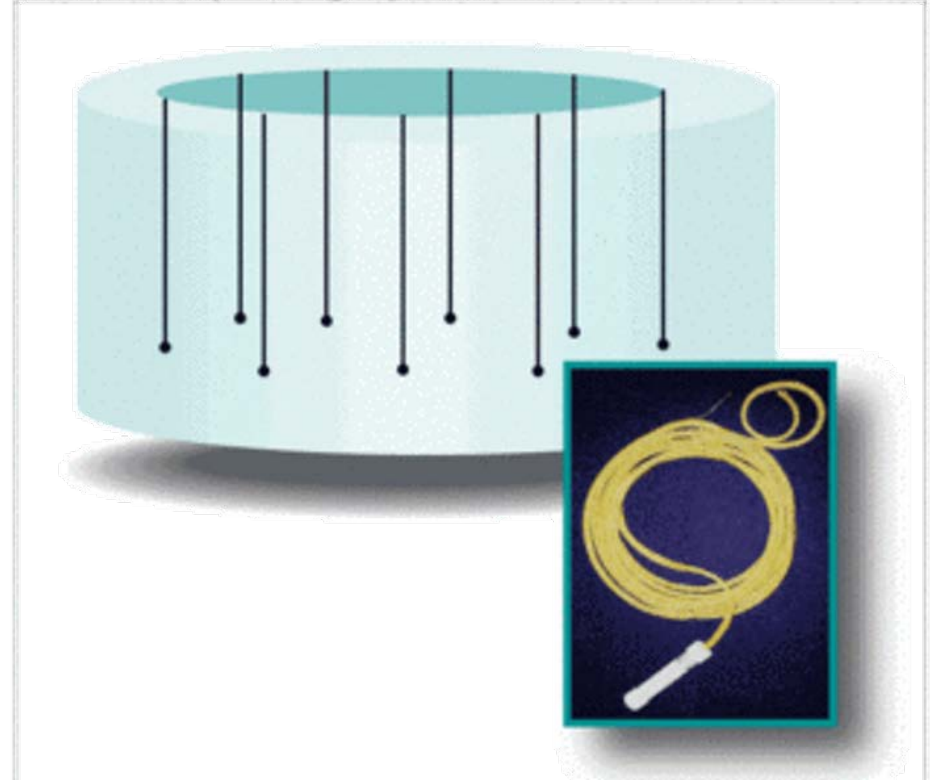
- 1950s – 1 (67 years)
- 1960s – 6 (60 years)
- 1970s – 1 (44 years)
- 1980s – 5 (33 years)
- 1990s – 5 (30 years)
- 2000s – 3 (15 years)



Type of Internal Coating

- No Coating in Concrete Tank
- Tar Coating in 3 Tanks
- Epoxy Painted in 16 Tanks
- No Coating in Well #5 Tank
- 15 Tanks have no Cathodic Protection

Internal Tank CP System Using Suspended Anodes



Reservoir Maintenance

- 5 Refurbished between 2008-09
- 1 Refurbished in 2015
- Inspections between 2008-19
 - 2 in 2008
 - 1 in 2009
 - 7 in 2012
 - 1 in 2013
 - 1 in 2014
 - 1 in 2015
 - 4 in 2017
 - 3 in 2018
 - 1 in 2019



Internal Re-Coating

- 2008 – 25th Street Tank #1, 45th Street Tank #1 & 3MG
- 2009 – 2.6 MG & Tovey
- 2012 – Upper El Camino
- 2014 – 47th Street Tank #1
- 2015 – Well #18/#19
- 2016 – 45th Street Tank #2
- 2018 – Well #14



Internal Cleaning/Repairs

- Minor Repair and Washout – 7
- Good/Fair Conditions – 11
- Poor Conditions – 3
 - Well #5
 - 25th St. Tank #2
 - 47th St. Tank #2 – Rehab
- 5MG – Flooring Repair



Regulatory Requirements

- 50th Street Tank – Quarterly Disinfection By-Product Testing
- 8 Reservoir Sites – Monthly General Physicals (Color, Odor, Turbidity, pH and Conductivity)

El Comino Reservoir

3M Reservoir

5M Reservoir

6MG Clearwell

25th St. Reservoir

45th St. Reservoir

47th St. Reservoir

50th St. Reservoir



Additional Monitoring

- Visual Inspection for Leaks, Graffiti and Chlorine – 2X/Week
- Vaults & Altitude Valves – Quarterly
- Inspect Level Transducers – Yearly



Future Plan

- Contract w/Diver to Inspect Tank
- Vacuum/Debris Removal if Needed
- Develop an Assessment Process
- Use Assessment Data to Develop a Rehab Program
- Continue with Condition Assessment





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Thank you!

