

# Palmdale Water District Strategic Water Resources Plan

**Stakeholder Meeting #1**

**October 13, 2022**



# Meeting Agenda



Provide SWRP overview and schedule



Present supply and demand results



Discuss results



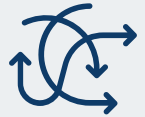
Consider and discuss water supply options



# Meeting Objectives



Provide overview of supply and demand



Discuss water supply options

# SWRP Overview and Schedule

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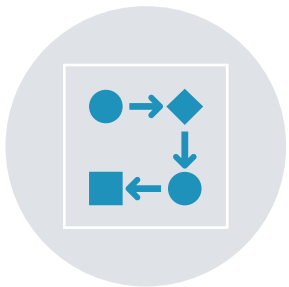
# SWRP Overview



Provide a future vision for how PWD will meet its water supply through 2050



Facilitate meaningful engagement



Create a flexible, dynamic planning process



Build a strong technical foundation

# Stakeholder Meetings



1. Demand and Supply and Estimated Supply Gaps



2. Evaluation Criteria and Alternative Portfolios



3. Preferred Alternatives and Evaluation

# Progress Update

Demand Analysis and Forecast



Baseline Supply Analysis and Forecast



Supply Gaps



Supply and Demand Management Options and Alternatives

# How did we get here?

## ▶ Data included:

- Hydrology
- Demand by sector
- Supplies
  - Local surface water
    - Littlerock Reservoir
  - Groundwater
    - Adjudication, return flows, federal credit
  - Imported water
    - SWP, transfers
  - Recycled water
    - Entitlement, augmentation, City of Palmdale's entitlement





# Shortage Frequency and Depth

	2025	2030	2035	2040	2045	2050
Shortage probability	59%	65%	81%	98%	100%	100%
Average annual shortage (AF)	788	952	1,163	2,815	4,136	5,924
Average annual shortage (% of demand)	4%	5%	6%	13%	17%	23%
Maximum annual shortage (AF)	4,266	5,273	6,885	8,840	10,931	13,990
Max annual shortage (% of demand)	23%	27%	33%	39%	45%	55%

# Supply and Demand

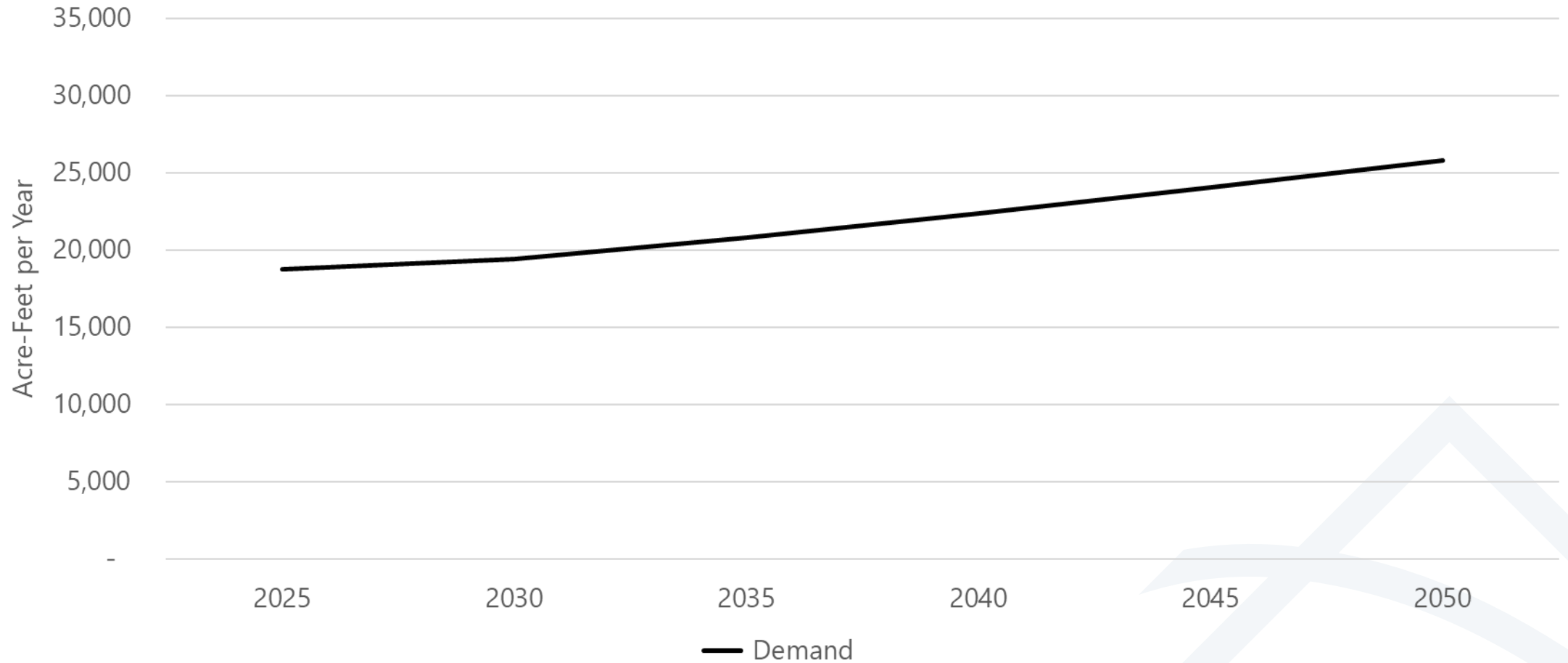
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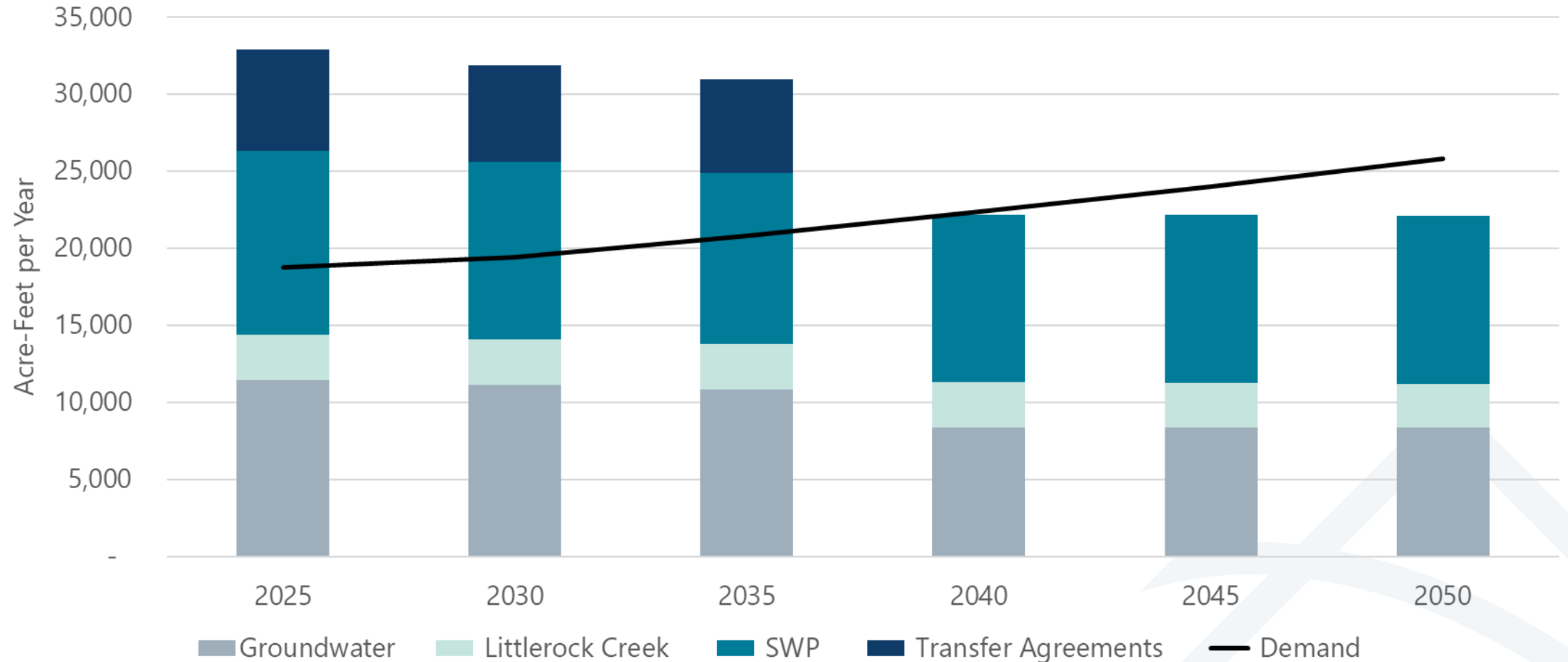


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# Projected Water Demands



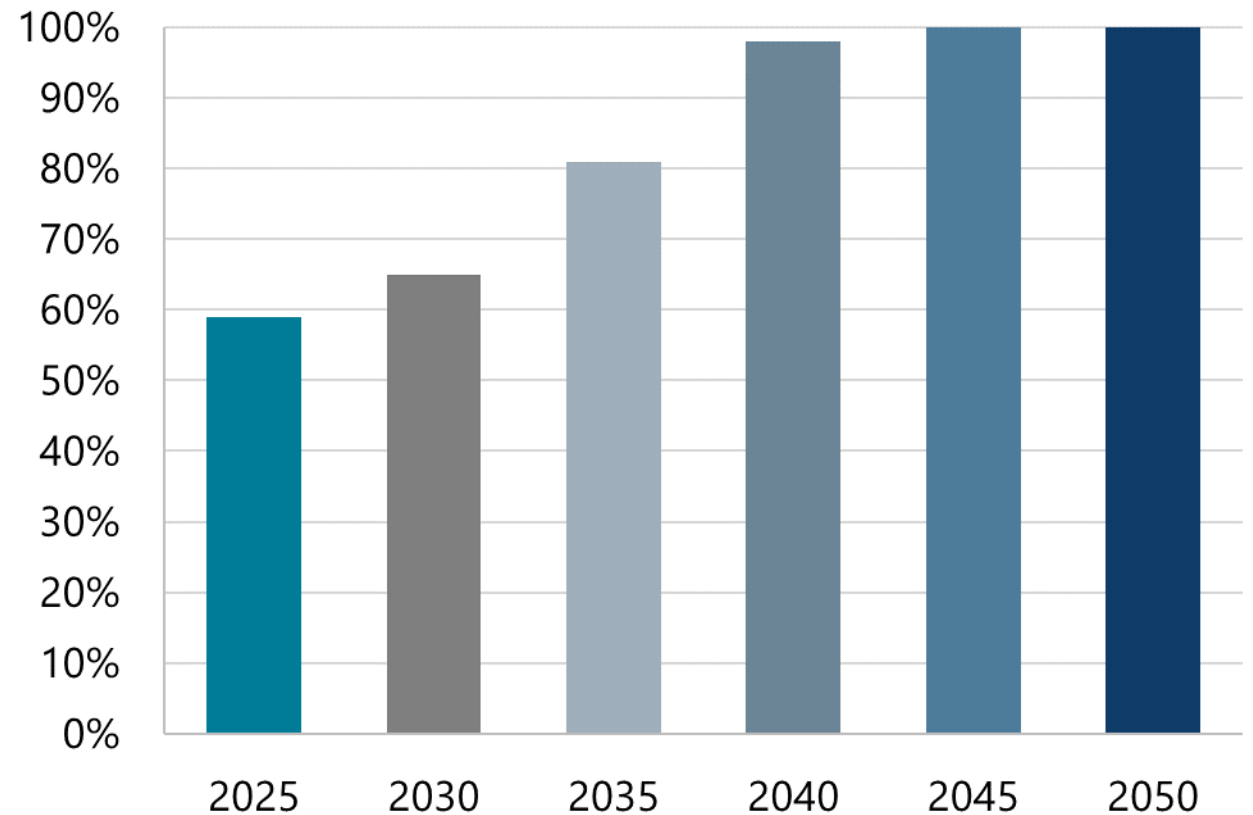
# Projected Water Supplies



# Supply Gaps: Key Takeaways

- ▶ Shortages anticipated every year starting 2045
- ▶ Annual shortages may range between 3% and 23% of total demand
- ▶ Maximum shortages may range between 17% and 55% of demand

Projected Shortage Frequency



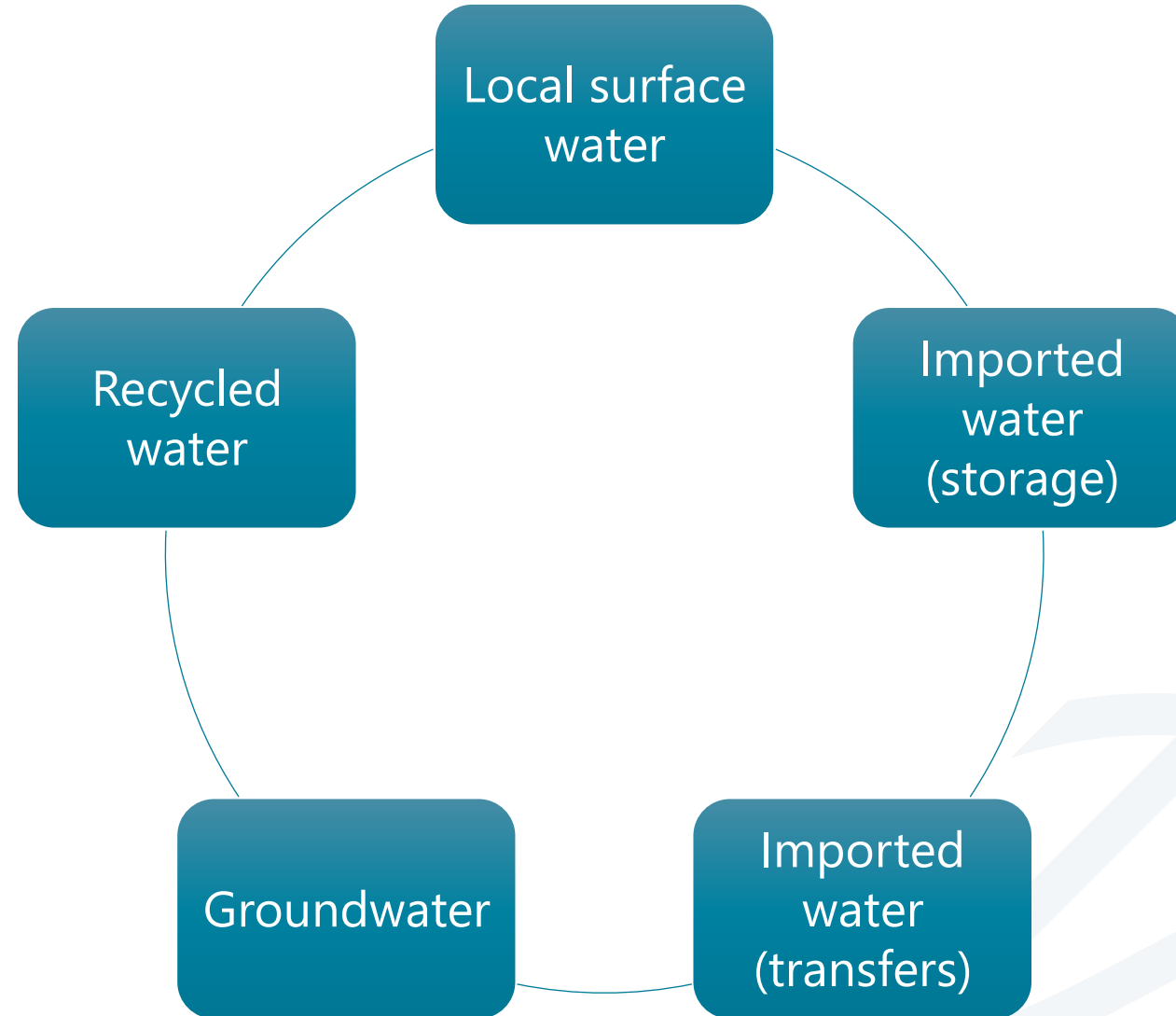


# Water Supply Options

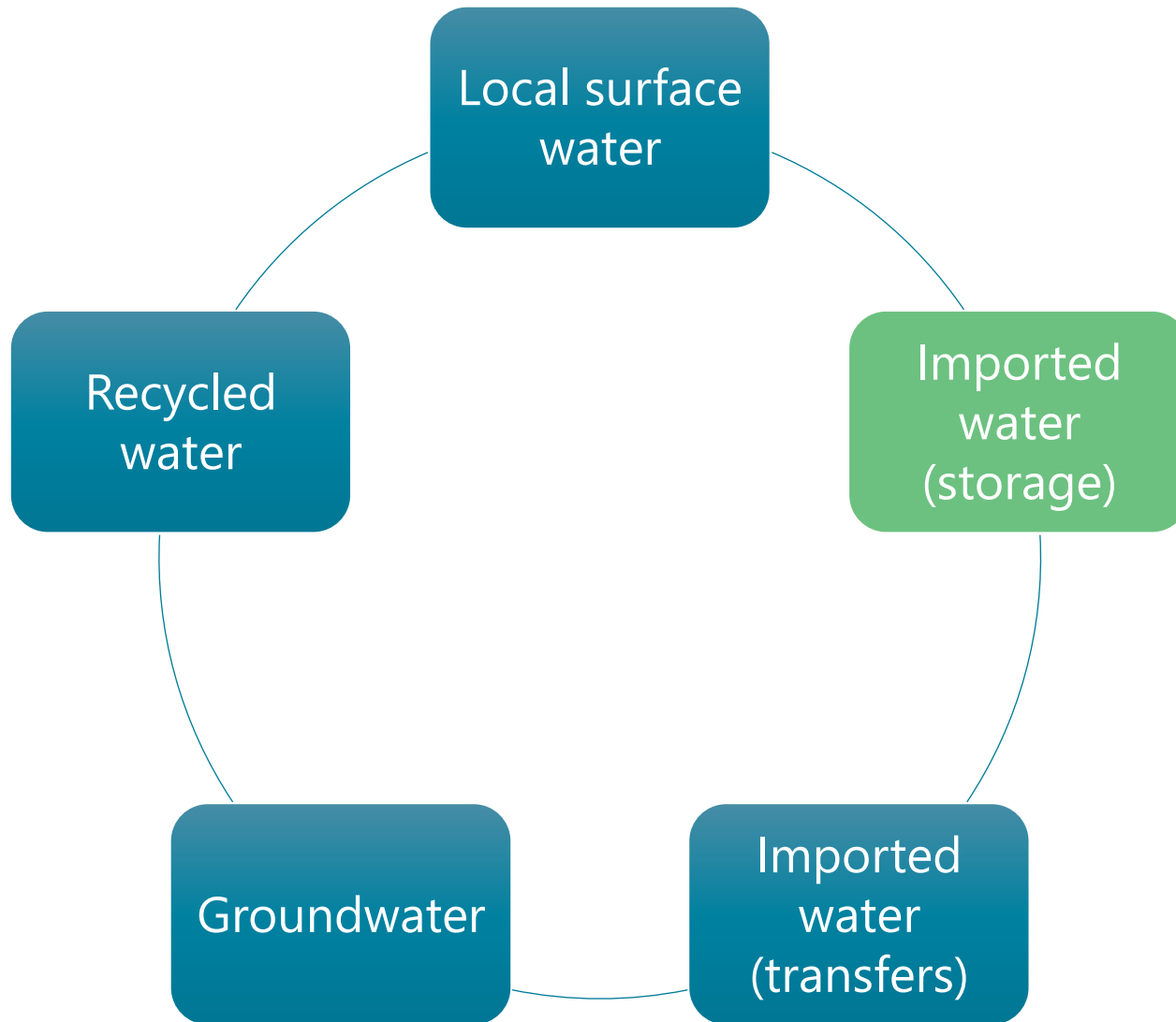
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# Water Supply Options



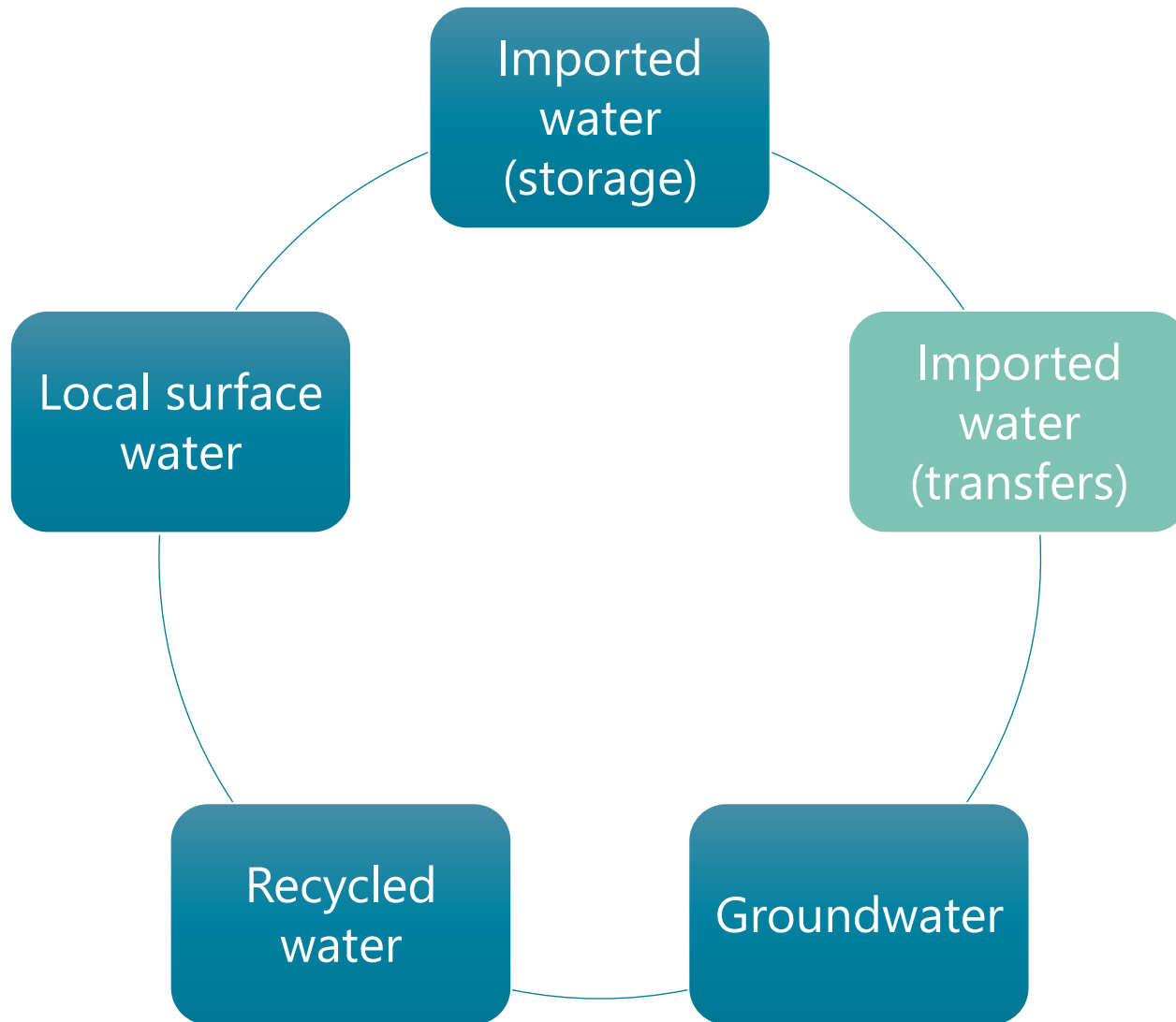
# Water Supply Options



- SWP storage north of Delta
- SWP storage in San Joaquin Valley
- SWP storage in Antelope Valley
- SWP storage south of PWD
- Recharge imported water in Big Rock Creek area

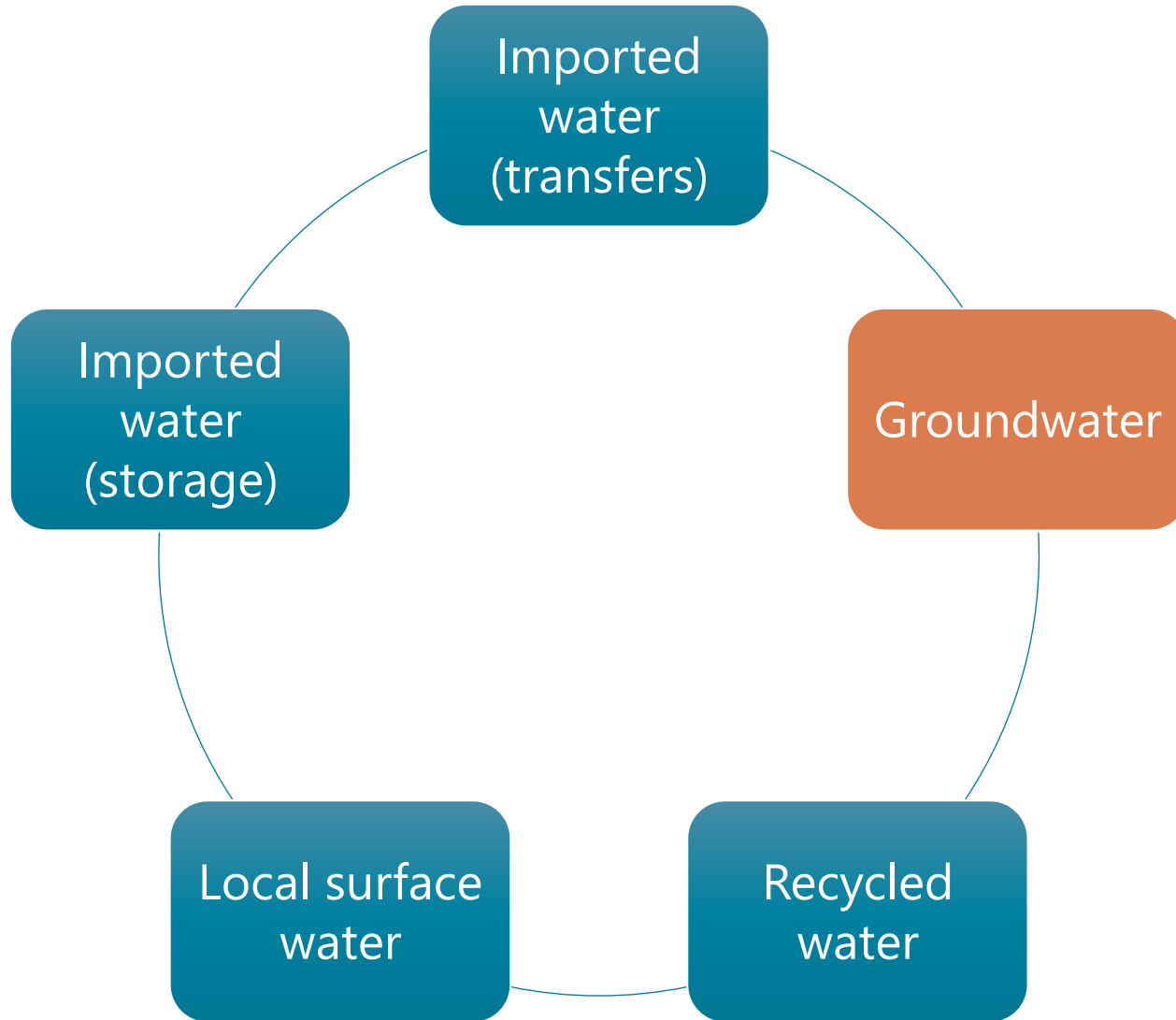


# Water Supply Options



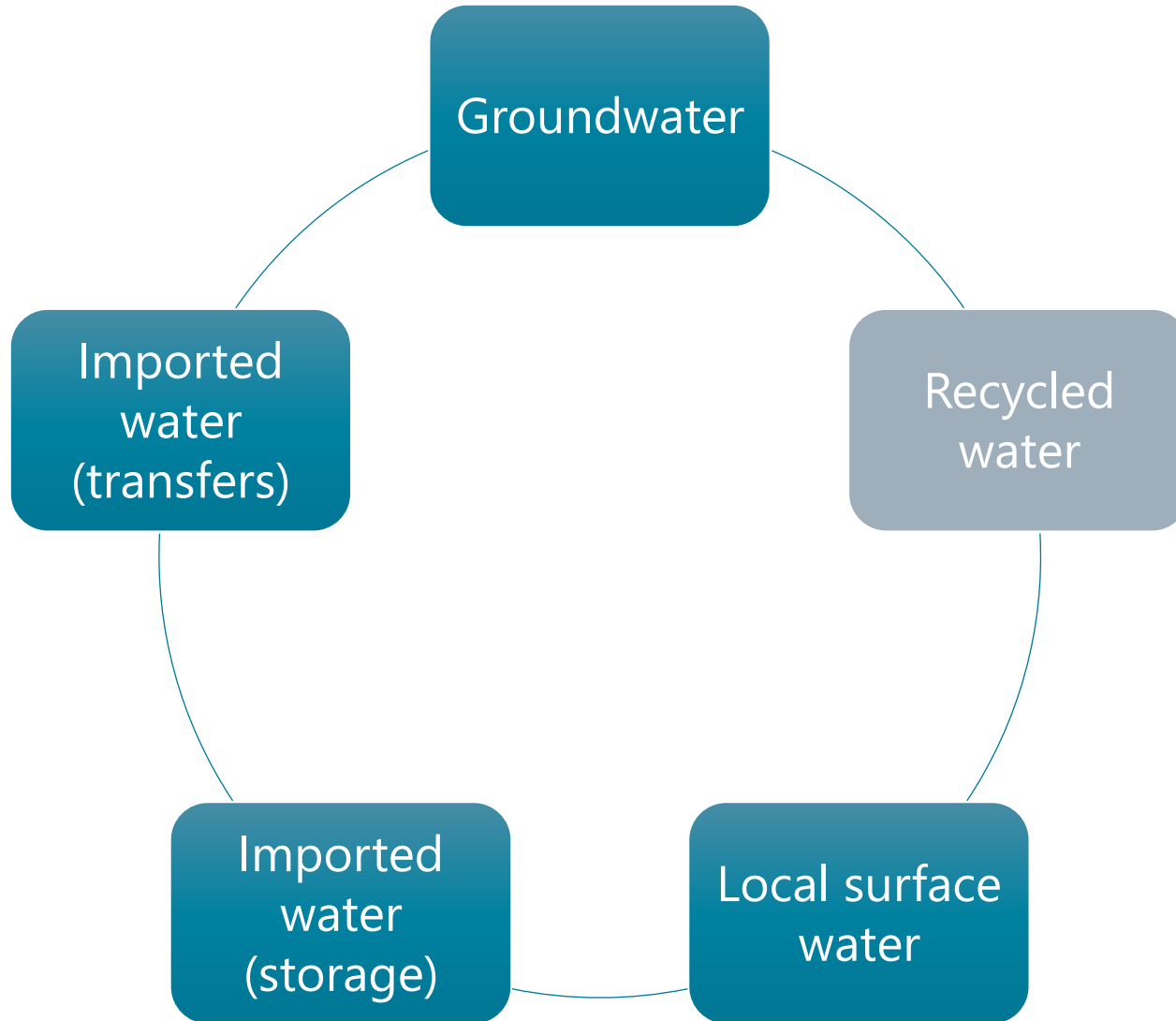
- SWP transfers with UWCD
- Renegotiate with Butte County for Table A SWP Water
- Excess wet year water (Article 21)
- SWP Wet-Year (1 Year)
- SWP Long-Term Lease
- Permanent Transfer SWP/CVP Water
- Table A SWP Water
- CVP Water
- Non-SWP Water PRE-14
- Seawater desalination

# Water Supply Options



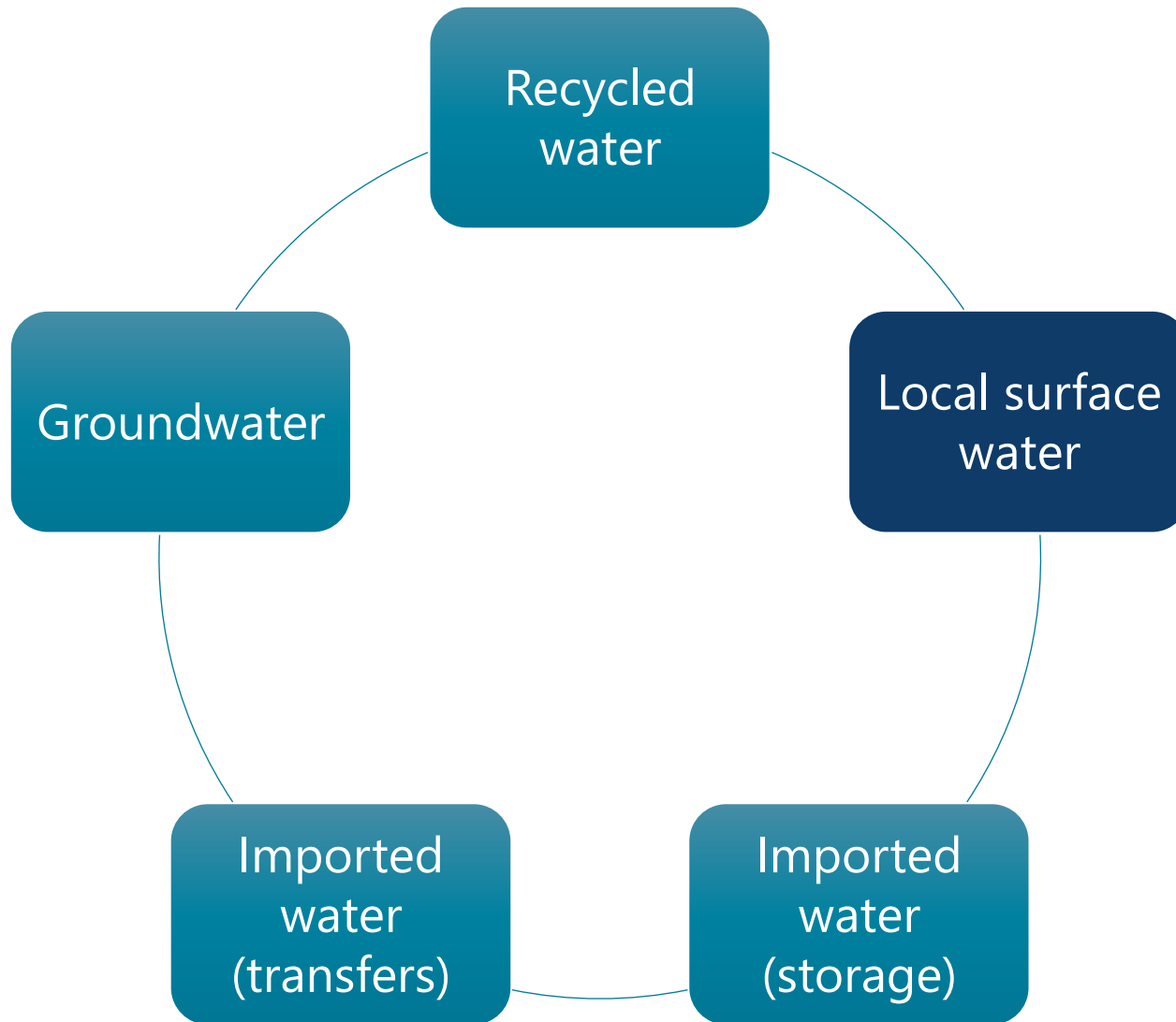
- Well replacements

# Water Supply Options



- Partner with LACSD to develop recycled water
- PWRP deliveries for nonpotable use
- PWRP recharge in Palmdale Lake
- PWRP recharge in groundwater

# Water Supply Options



- Sediment removal at Littlerock Creek Dam
- Pipe water from Littlerock Dam to Lake Palmdale

# Additional Discussion



Thank you!

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