



# Metropolitan/Antelope Valley-East Kern Storage Program

Water Planning and Stewardship Committee

Item 9-2

September 10, 2018

# SWP Storage Program Observations

- Improves regional water supply reliability
- Provides water in SWP exclusive areas
- Direct pump back to the California Aqueduct more valuable than exchange capability
- Water quality can become an issue
- SWP Groundwater Storage Programs have termination dates that need to be addressed
- Develops partnerships with other State Water Contractors and agricultural water districts

**Antelope Valley-East  
Kern Water Agency**

**San Francisco**

**California Aqueduct**

**Los Angeles**



# Antelope Valley-East Kern Water Agency (AVEK)

- Serves the Antelope Valley
- Served by SWP East Branch
- Downstream of Edmonston Pumping Plant
- Third largest of the 29 SWP contractors
- Maximum Table A amount of 144,844 AFY
- Existing groundwater storage program

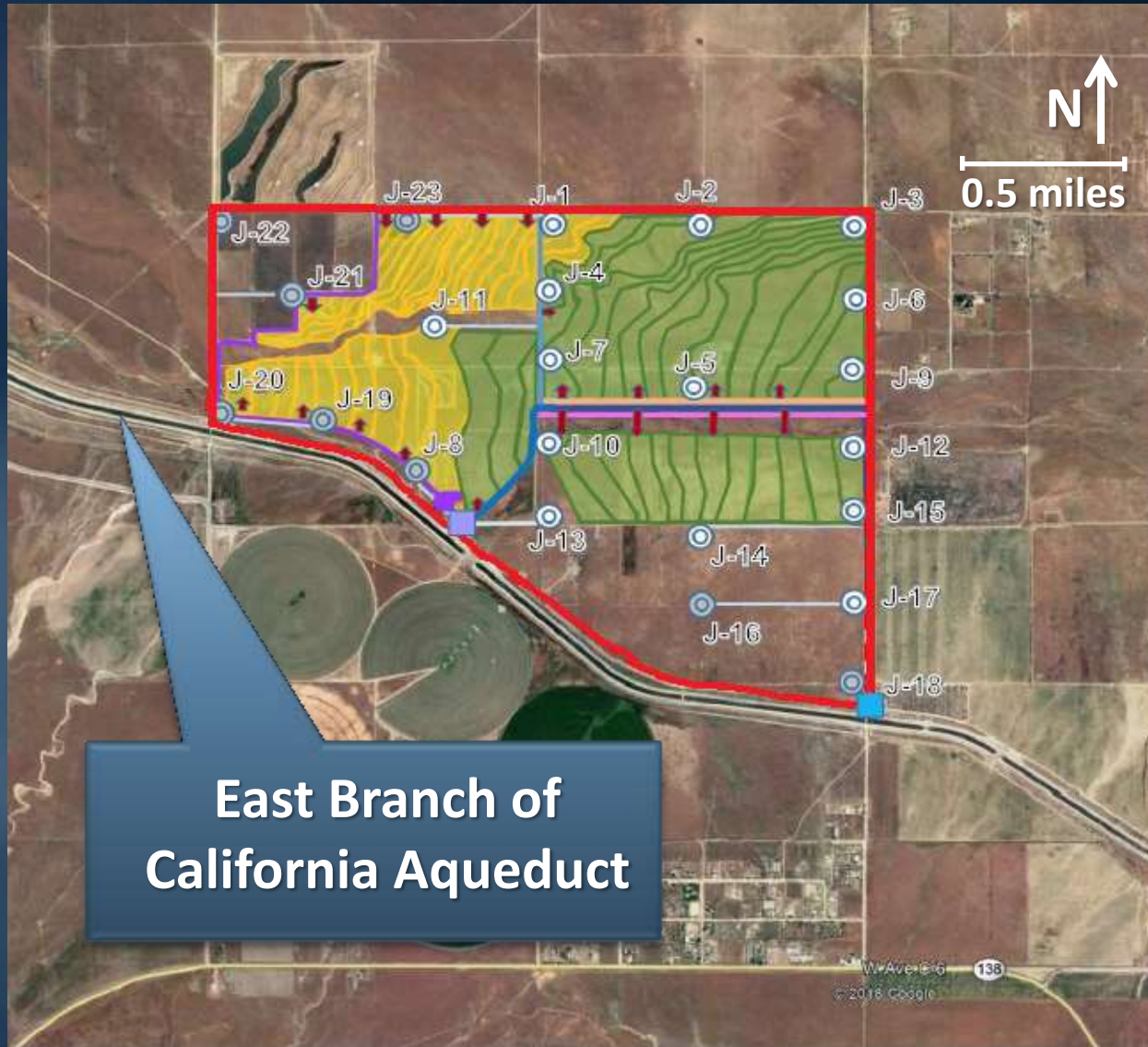


# Potential AVEK Storage Program

- Antelope Valley Groundwater Basin
- 280,000 AF Storage Capacity
  - 70,000 AFY max put
  - 70,000 AFY max take
  - Doubles existing direct pumpback
  - 10% One-time Storage Loss
- Water quality meets MCLs
- Construction of new facilities needed

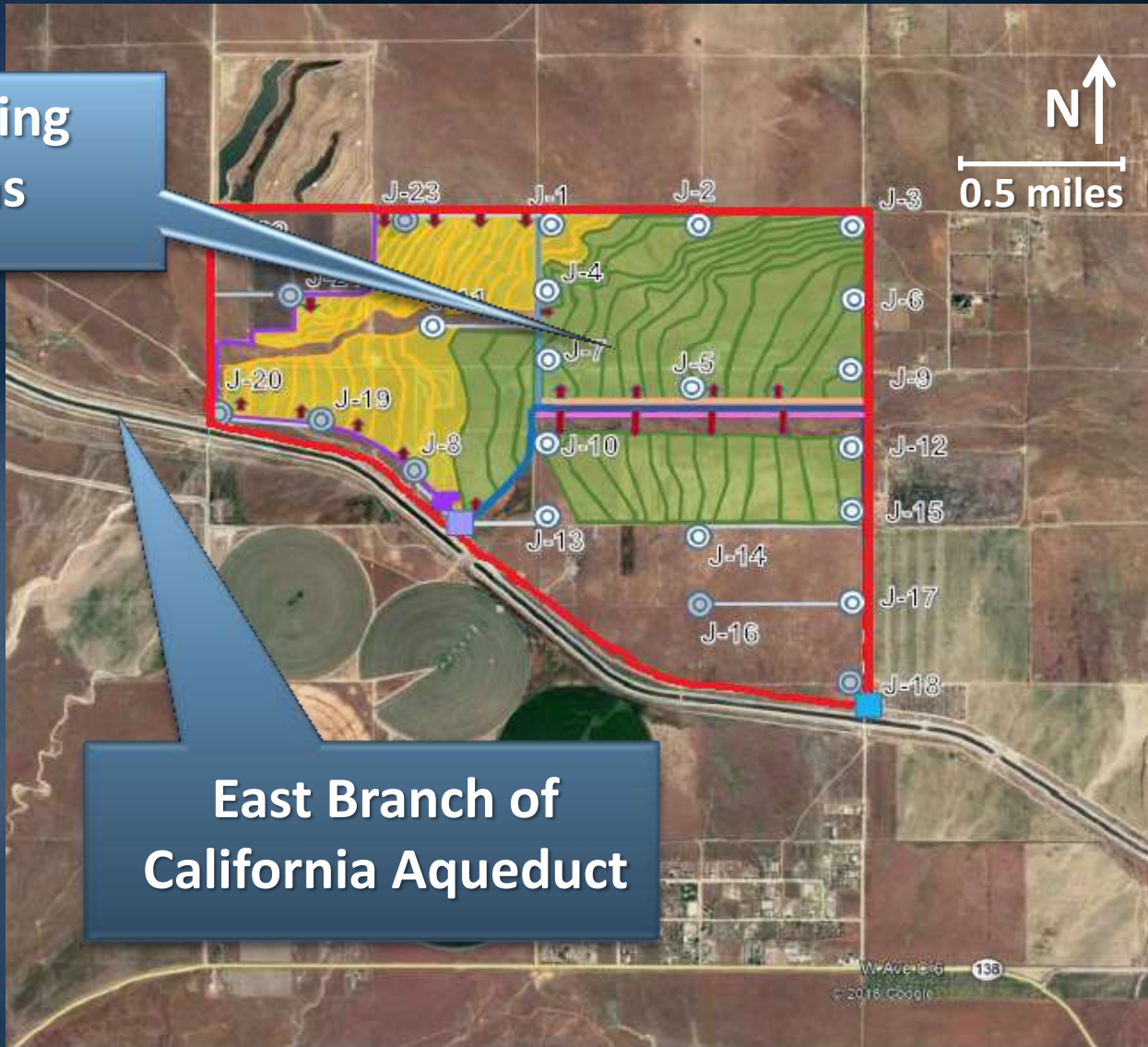


# Potential AVEK Storage Program



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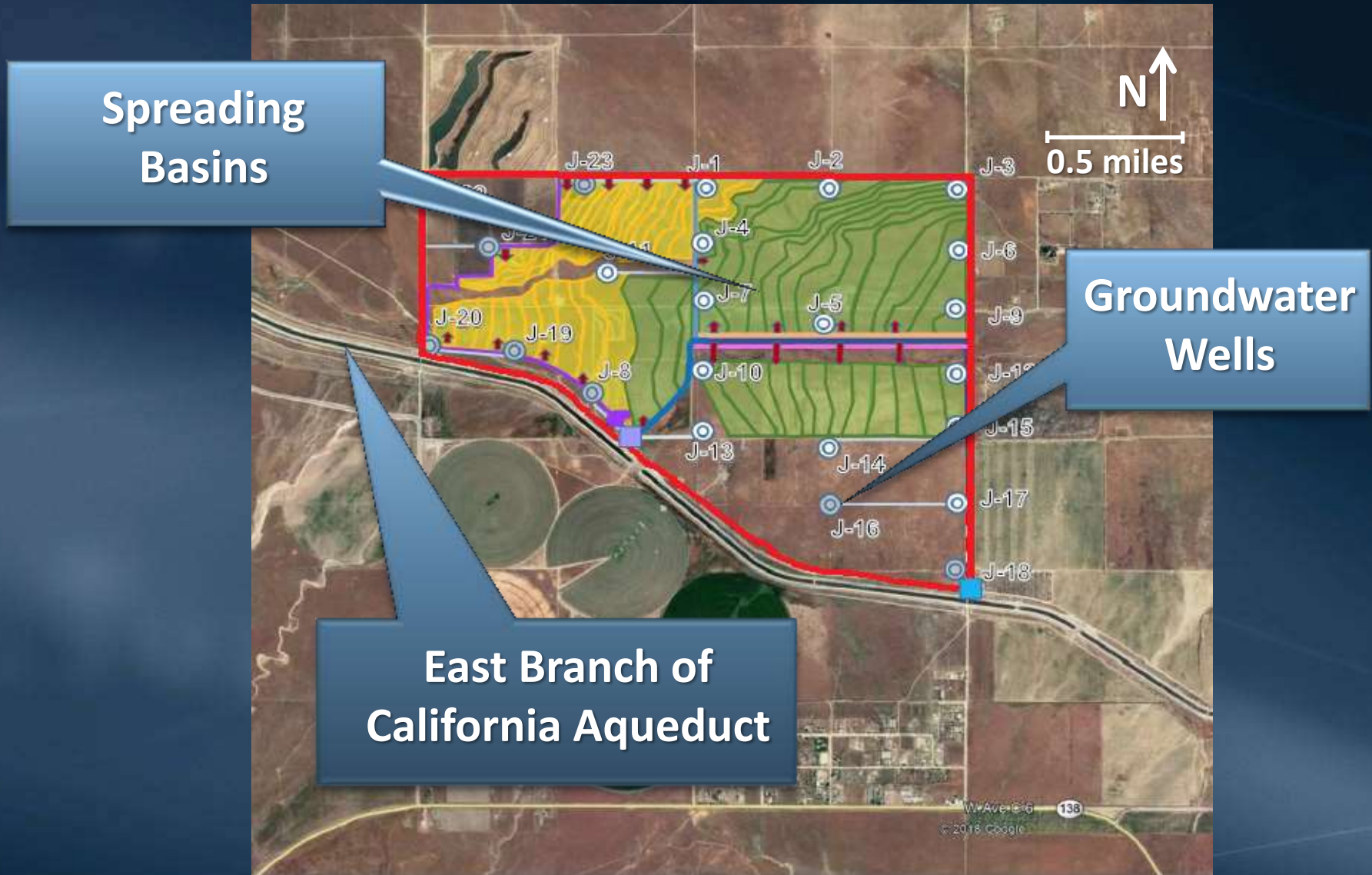
Spreading Basins



East Branch of California Aqueduct



# Potential AVEK Storage Program





# Potential Terms

- AVEK SWP Contract terminates in 2037
- Storage agreement to 2037 with no cost option to extend 20 years
- First priority right for Metropolitan use
  - AVEK second priority access to unused capacity
  - Lower priority users
- Metropolitan shares revenue from other partners
- Returned by direct pumpback or exchange

# AVEK Storage Program Costs

- Metropolitan would be responsible for program capital costs estimated at \$119 million
  - Payment schedule based on actual costs
  - Participation right, not ownership right similar to other SWP groundwater programs
- Recovery usage fee \$100/AF, no fee to store
  - Escalated every year
  - Minimum average payment
- O&M and power costs
- Estimated Total Present Value Full Cycle Costs: \$300/AF



# How does this program address the risk factors?

- Return Capability
  - ✓ First priority return capacity
  - ✓ Dedicated well extraction capability
- Water Quality
  - ✓ Water below MCL
- Termination Date
  - ✓ Program terminates with option to extend to 2057



# Program Benefits

- Improves water supply reliability during hydrologic droughts
- Provides greater operational flexibility to help meet demands
- Provides emergency reliability to SWP exclusive areas downstream of Edmonston Pumping Plant
- Improves relationship with a key State Water Contractor
- Program unit cost is competitive to other groundwater banking programs

# Next Steps

- Receive feedback from the committee
- Staff continue to evaluate the facility costs
- Staff continue discussions with AVEK
- Follow-up to committee with detailed proposal and potential action

