



Long Beach Water  
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# Duck Pond Project

Board of Water Commissioners  
September 17, 2020

*Presented By  
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# Presentation Overview

1. Background on reclaimed water supply challenges
2. Overview of Duck Pond project and how it benefits LBWD
3. Progress to date: Grant funding and MOU
4. Future challenges – O&M agreement with PRM
5. Recommendation

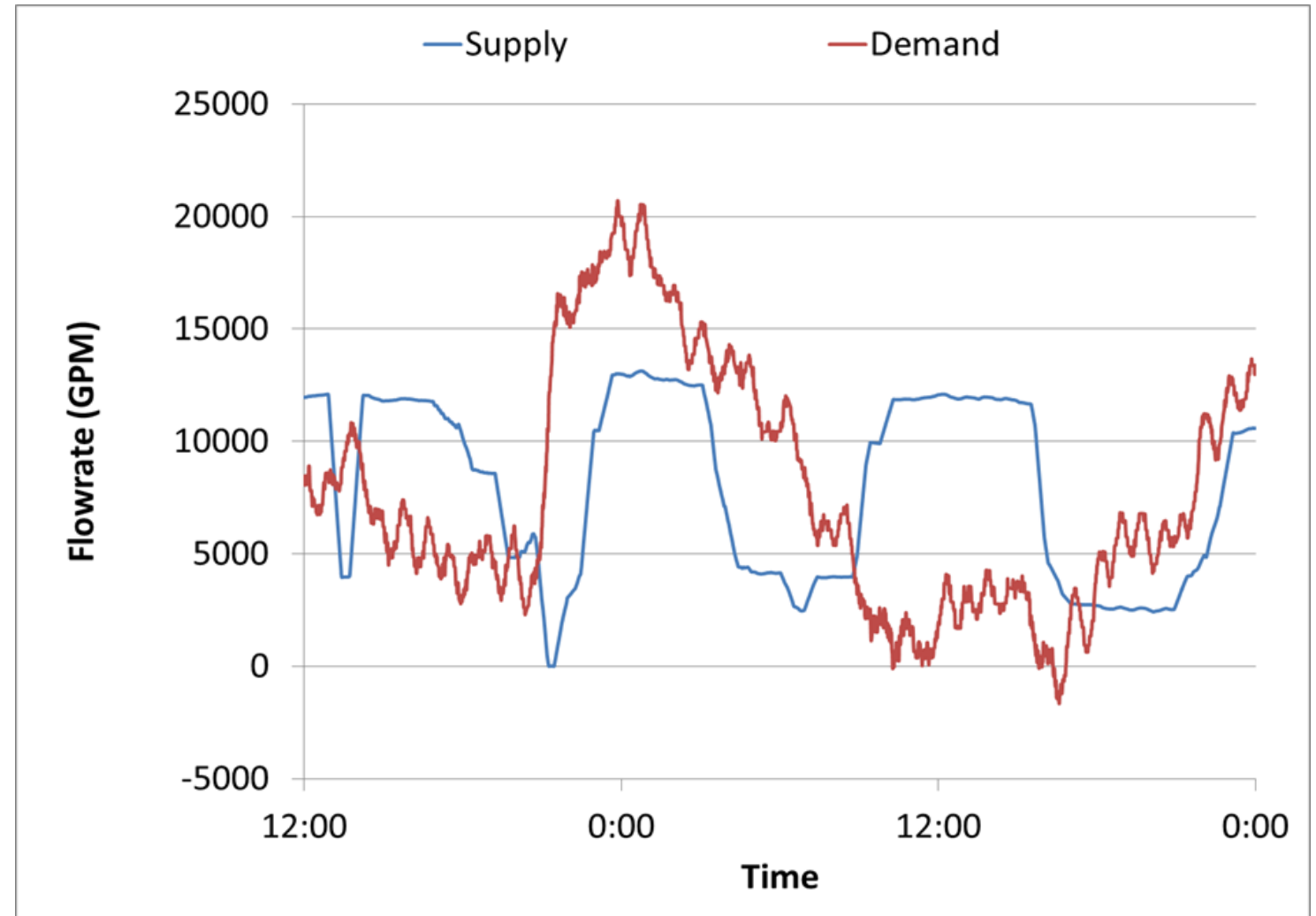
# Long Beach Water Reclamation Plant

- 25 MGD designed capacity
  - Treats daily flows up to ~18 MGD
  - Sewershed is east LB and other communities to the north
- Disinfected to Title 22 Tertiary Reclaimed Water Standard
  - Can be used for irrigation, cooling towers, THUMS
  - Requires additional treatment for seawater barrier injection



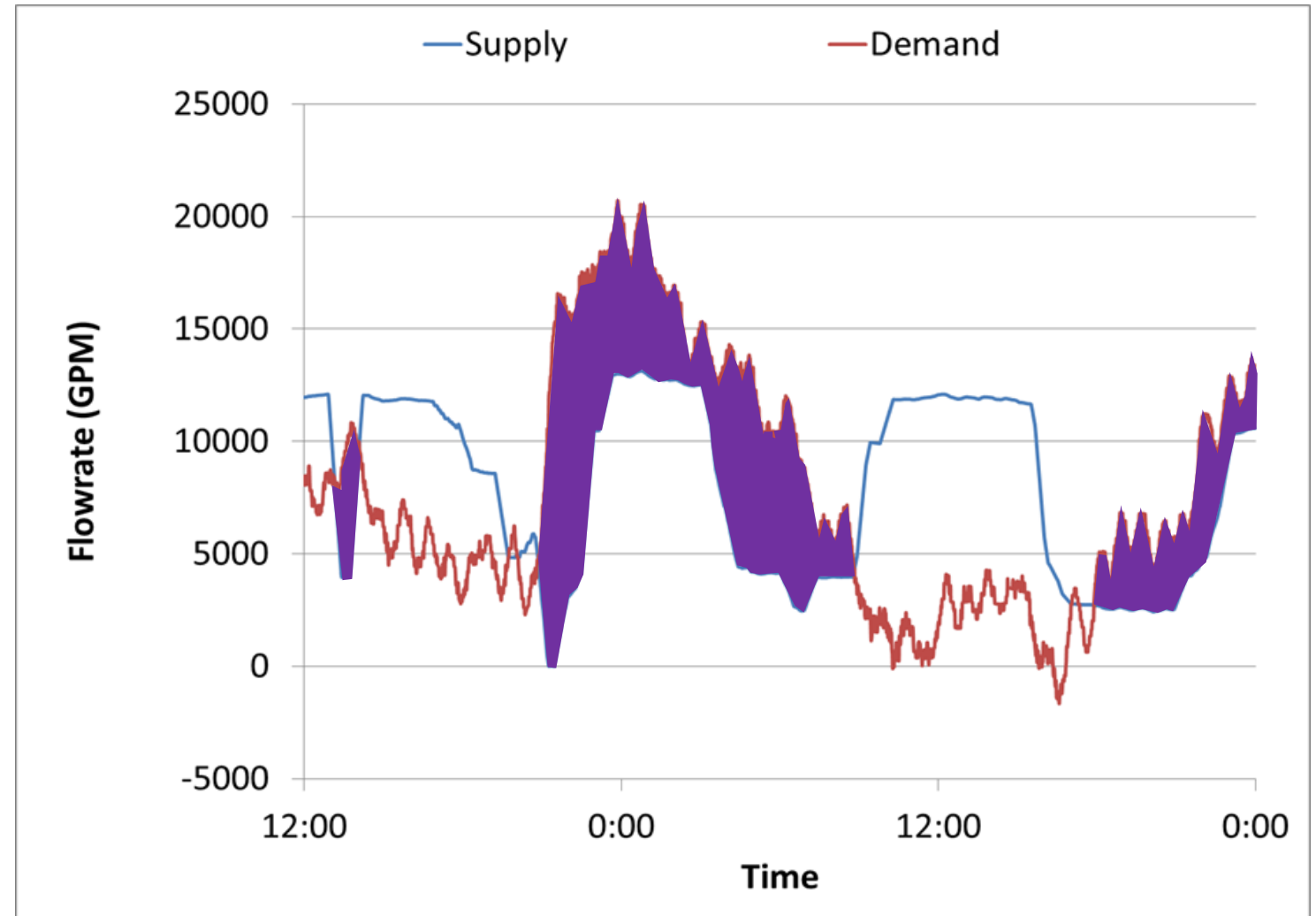
# Reclaimed Supply and Demand Challenges

1. 18 MGD supply is an “average” flowrate.
2. Daily demand fluctuates based on regulation.
3. Challenge – timing of supply does not match demand.



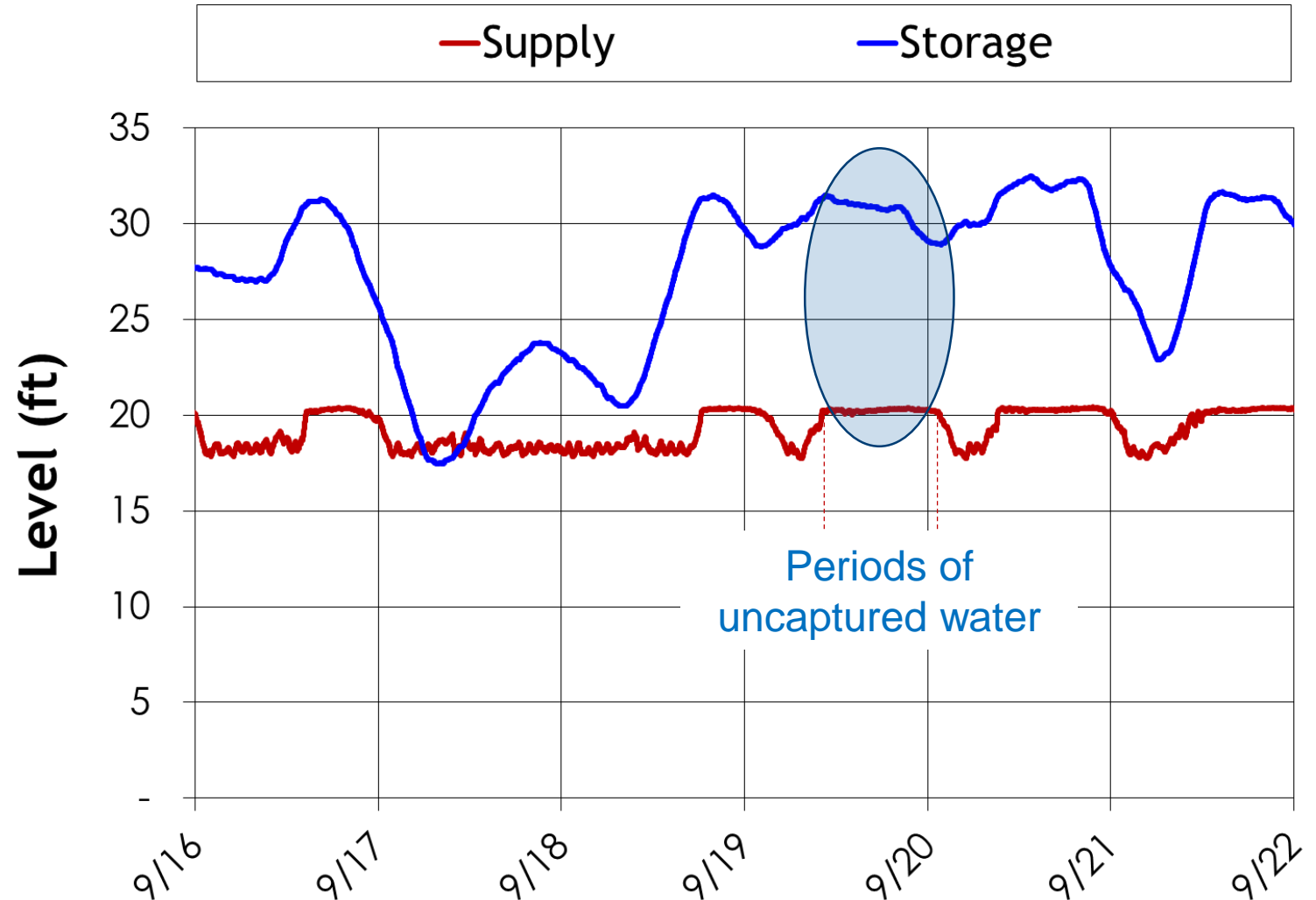
# Reclaimed Supply and Demand Challenges

4. Storage is then needed to meet demand.



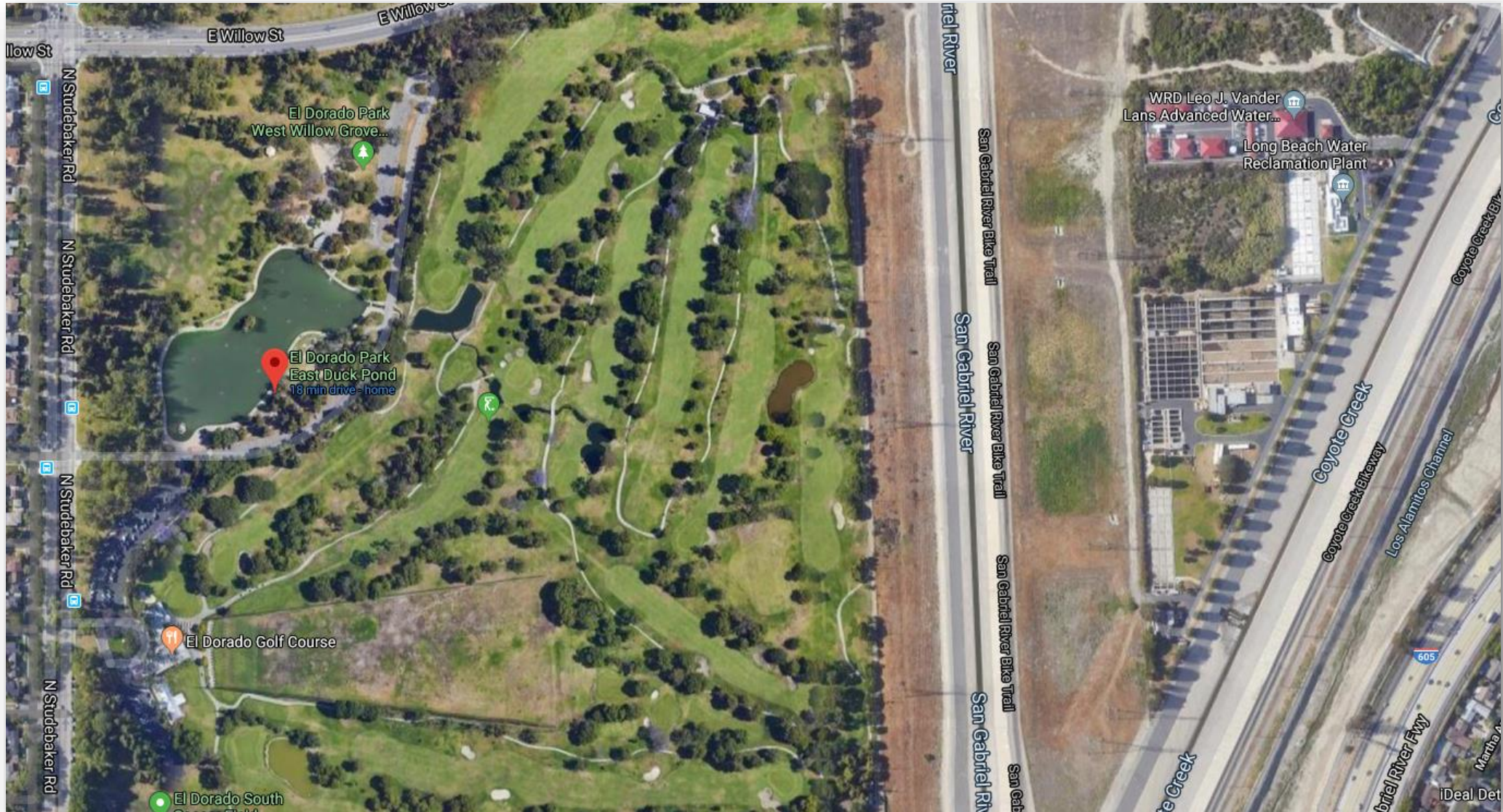
# Managing Supply and Storage

1. There are periods of uncaptured water because tanks are full.
2. Need to create more storage.





# Duck Pond Project





# Duck Pond Storage Project Concept

1. Fill the pond during day time when supply exceeds demand.
2. El Dorado Golf Course will still irrigate at night (peak hours) but will now draw irrigation water from the pond.
3. Anticipate El Dorado Golf Course to use up to 1 million gallons during heavy irrigation cycle, thereby reducing stress on storage by up to 10%.





# Progress to Date

1. Total Project estimated at \$5,001,877. LBWD's component estimated at \$954,241.
2. LBWD was successful in applying for USBR Grant. Grant awarded for \$1,217,827 with a 75% matching requirement.
3. MOU with PW – Total project cost will be used to demonstrate 75% matching and any grant funds received would pay LBWD scope items first, then any remaining grant funds may be applied to rest of the project.

# Future Challenge

1. MOU with PRM needs to be created to ensure PRM will perform the necessary maintenance and water quality monitoring.
2. MOU will need to include cost sharing for maintenance.

# Recommendation

- (i) Authorize the General Manager to execute and deliver all necessary documents associated with the WaterSMART: Title XVI Congressionally Authorized Water Reclamation and Reuse Projects program with the US Bureau of Reclamation (USBR) for the El Dorado Duck Pond Project (project) and
- (ii) Authorize the General Manager to execute all necessary documents to expend up to the grant funding amount for project reimbursement to the Public Works Department.





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# Questions?