

HANDCOX Water Treatment Plant

Resilience Improvements

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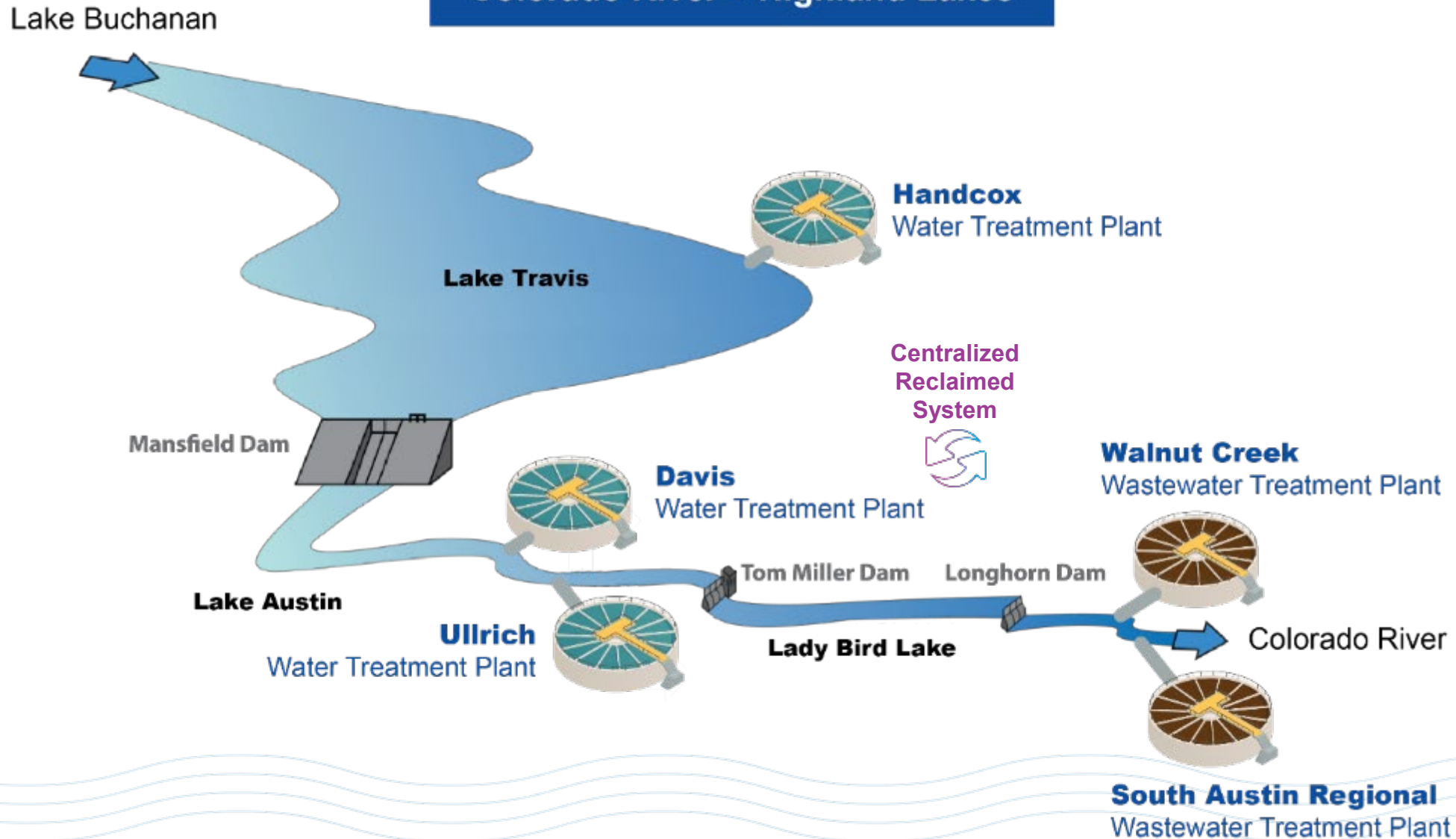
Water & Wastewater Commission

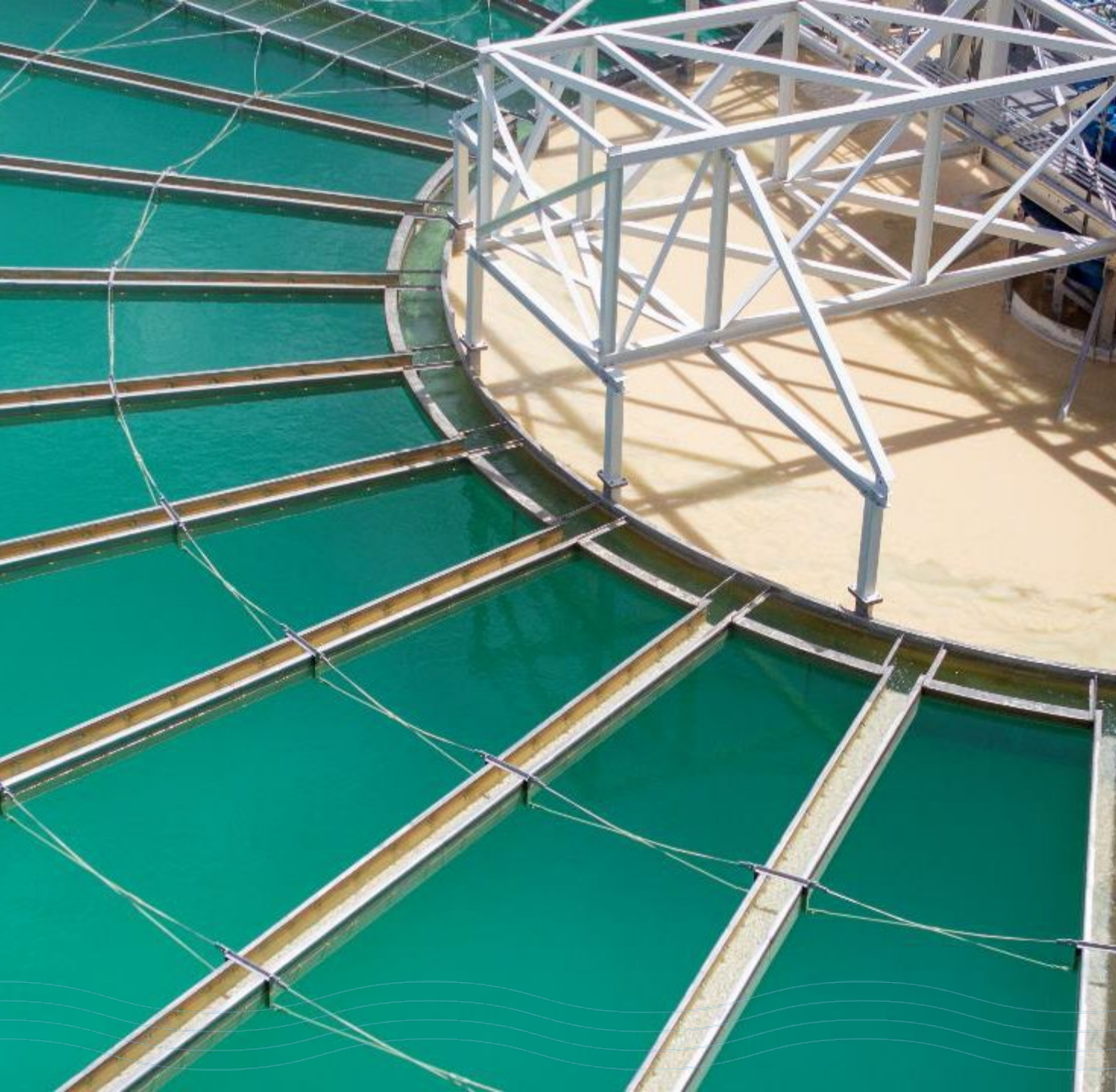


February 14, 2024

Austin's Water

Colorado River + Highland Lakes





Drinking Water Treatment

Davis Plant (1954) – 118 MGD

Ullrich Plant (1968) – 167 MGD

Handcox Plant (2014) – 50 MGD

Combined Water Treatment Capacity up to **335 Million Gallons per Day**



Handcox Resilience Improvements

Provides baseline maintenance capacity of 50MGD:

- ◆ Allows a minimum of 235MGD combined from all AW WTPs
- ◆ Prepares AW for climate change impacts
- ◆ Increases available treatment capacity during maintenance activities
- ◆ Increases ability to handle solids
- ◆ Does NOT rerate the plant for additional capacity beyond 50MGD

Addresses:

- ◆ Winter Storm Uri After Action Report and supported recommendations from the Winter Storm Working Group
- ◆ Recommendations from the External Review

Winter Storm Working Group

The WSWG was formed with members of this Commission to support AW in developing a thorough and objective review following Winter Storm Uri.

The WSWG reviewed and prioritized the following recommendations:

- ◆ Maintain available water production capacity at WTPs to meet demand planning criteria (CP-5).
- ◆ Implement improvements at the WTPs to provide additional flexibility in maintenance scheduling (CP-6).
- ◆ Increase sludge storage and disposal capabilities at treatment plants (CP-8).

Austin Water External Review

Recommended planning to offset hot and cold climate change impacts:

- 💧 Identify possible future scenarios, study such scenarios, identify possible solutions, and plan implementation programs for possible and probable future water quality and treatment challenges (2.7-3).
- 💧 Prepare for sudden requests for additional water treatment (2.8-2).

Handcox WTP



Resilience Improvements

Baseline Maintenance Capacity of 50 MGD Improvements

- 💧 Additional up-flow clarifier
- 💧 Additional sludge thickener
- 💧 Additional sludge holding tank
- 💧 Additional washwater settling basin
- 💧 New treated water pumping



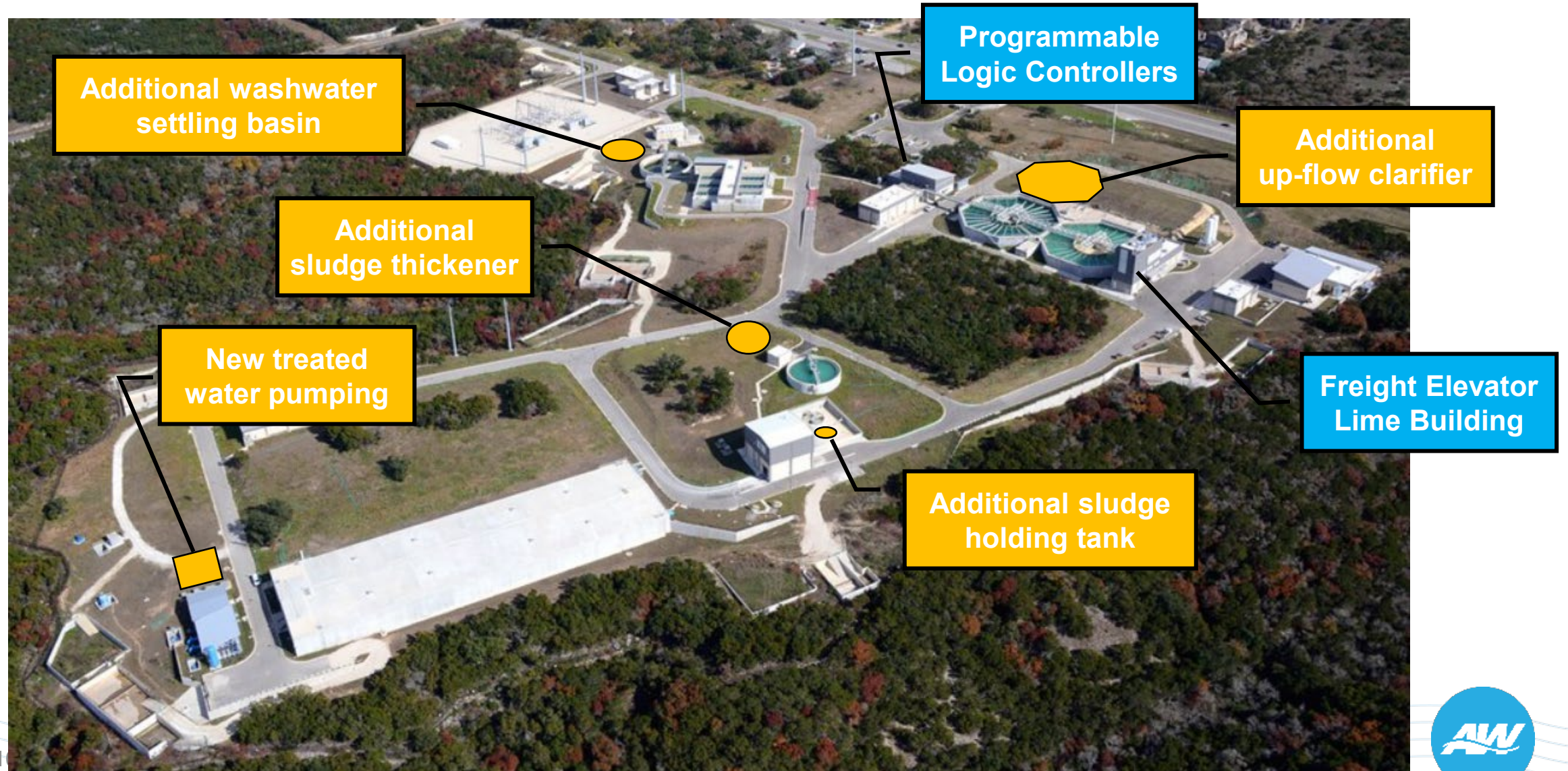
Resilience Improvements

Additional Improvements:

- ◆ New potable water pipeline between plant and the low-service pump station
- ◆ Replacing Programmable Logic Controllers and network switches throughout the plant
- ◆ Freight elevator for lime building (O&M)



Resilience Improvements



Resilience Improvements



The background of the slide is a photograph of a water treatment facility. It features large, vertical blue pipes and green cylindrical tanks. There are also blue valves and control panels visible. The scene is industrial and brightly lit.

Questions?

Austin
IN/WATER

