

Hodges Dam Repair & DSOD Height Restriction Update

September 15, 2022

Agenda

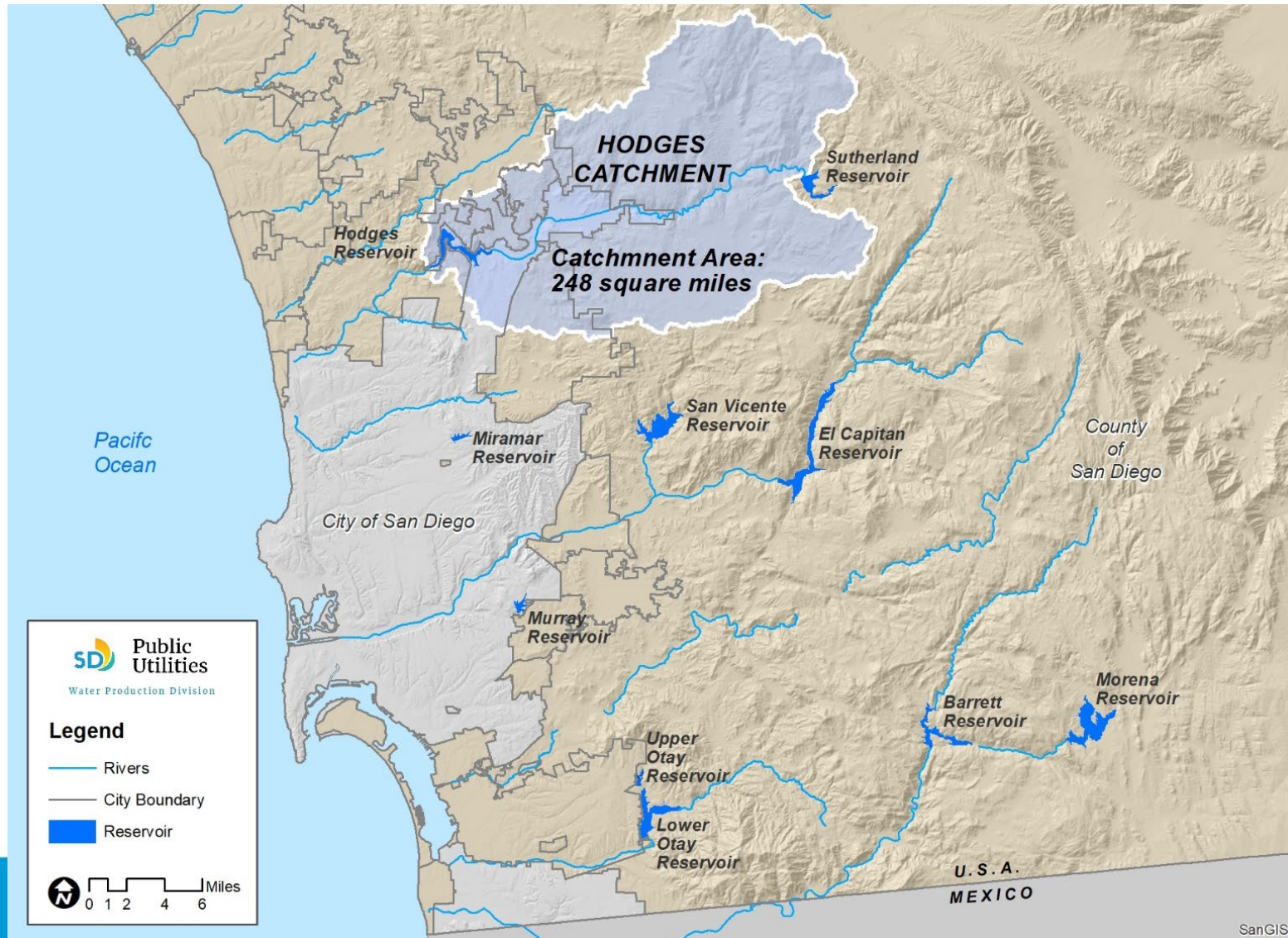
1. Hodges Dam Repair - Background
2. What's New
3. What Does This Impact
4. Next Steps





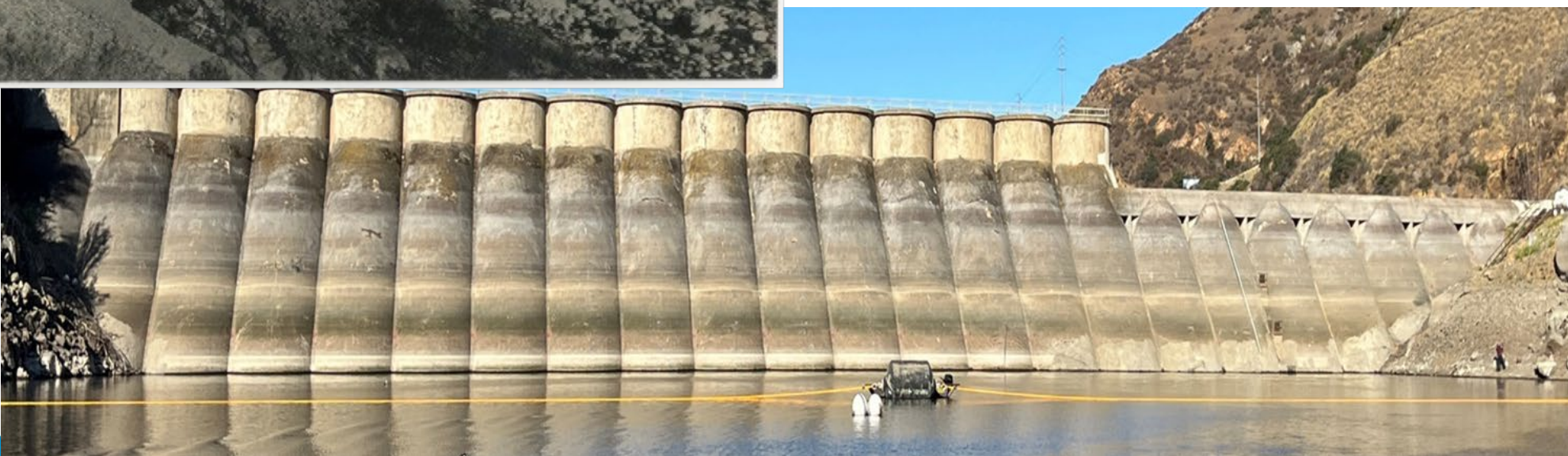
Background

San Dieguito River Watershed



Background

- Constructed 1918
- City purchased 1925
- Arch buttress design
- 12-30" thick concrete arches



Background



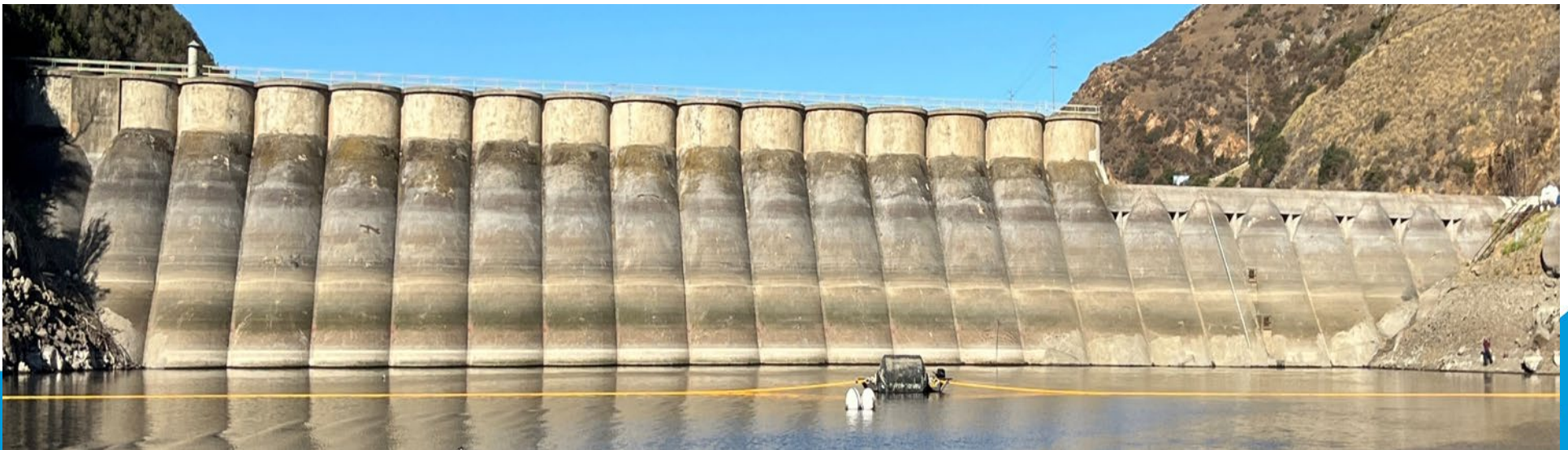
- March 2022 underwater condition assessment identified defects
- 292 to 275 elevation
- Up to 11" depth in 12" thick dam
- Immediate repairs recommended





Background

- Repairs required water level to be lowered to 275
- Initial schedule estimated refilling to 293 end of October
- Water agencies coordinated effective drawdown that avoided water release
- Water-related recreation temporary closure
- Public communication



Hodges Dam – What's New

DSOD letter based on current observation of condition of dam

- Hole in dam observed at 285'
- New Height Restrictions
 - Allow up to 285' for repairs
 - Required to be at/below 275' by November 30
- Required Consequence & Structural Modeling Analysis
 - At what height level = ZERO loss of life in event of failure
 - Analysis underway – preliminary results in November



What Does This Impact

Original Repair Plan

- Use of floating dock to conduct repairs up to 295-300'
- Rappelling for repairs at ~300-315'
- Estimated refill by October
- Estimated completion by January

Revised Repair Plan

- Additional rappelling work required between ~290' and 300'
- Additional Time: 1 month (estimated completion by February)
- Additional Cost: \$1M (estimated)



What Does This Impact

Revised Refill and Drawdown Plan

Refill

- September refill added 1,200 AF
- Additional 2,800 AF to 285'

Drawdown

- To 275' by November 30
- Water Authority able to pump down to 280'
- Gravity to 275' to Districts



What Does This Impact

- Continued closure of CWA pumped storage operations
 - Unless DSOD approves 280+ height limit
 - Will not be able to discuss/negotiate until consequence modeling is completed
- Continued closure of water recreation activities
- Reduced runoff storage
 - If rains occur, water must be released below dam

What's Next

- Coordinate with partner agencies (CWA, Santa Fe, and San Dieguito) on operations plan
- Adjust and continue repairs
- Public communication
- Review consequence analysis and discuss with DSOD (no earlier than November)
- Have procedures in place to operate the reservoir under restricted level during rain events