



# Long-Range Water Supply Plan: Information to Town of Chapel Hill

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Carrboro-Chapel Hill's not-for-profit public service agency delivering high quality water, wastewater, and reclaimed water services.

# Purpose

- Provide information on work completed to-date on OWASA's Long-Range Water Supply Plan
- Receive questions and feedback on that work
- Receive feedback on proposed path forward



**University Lake**

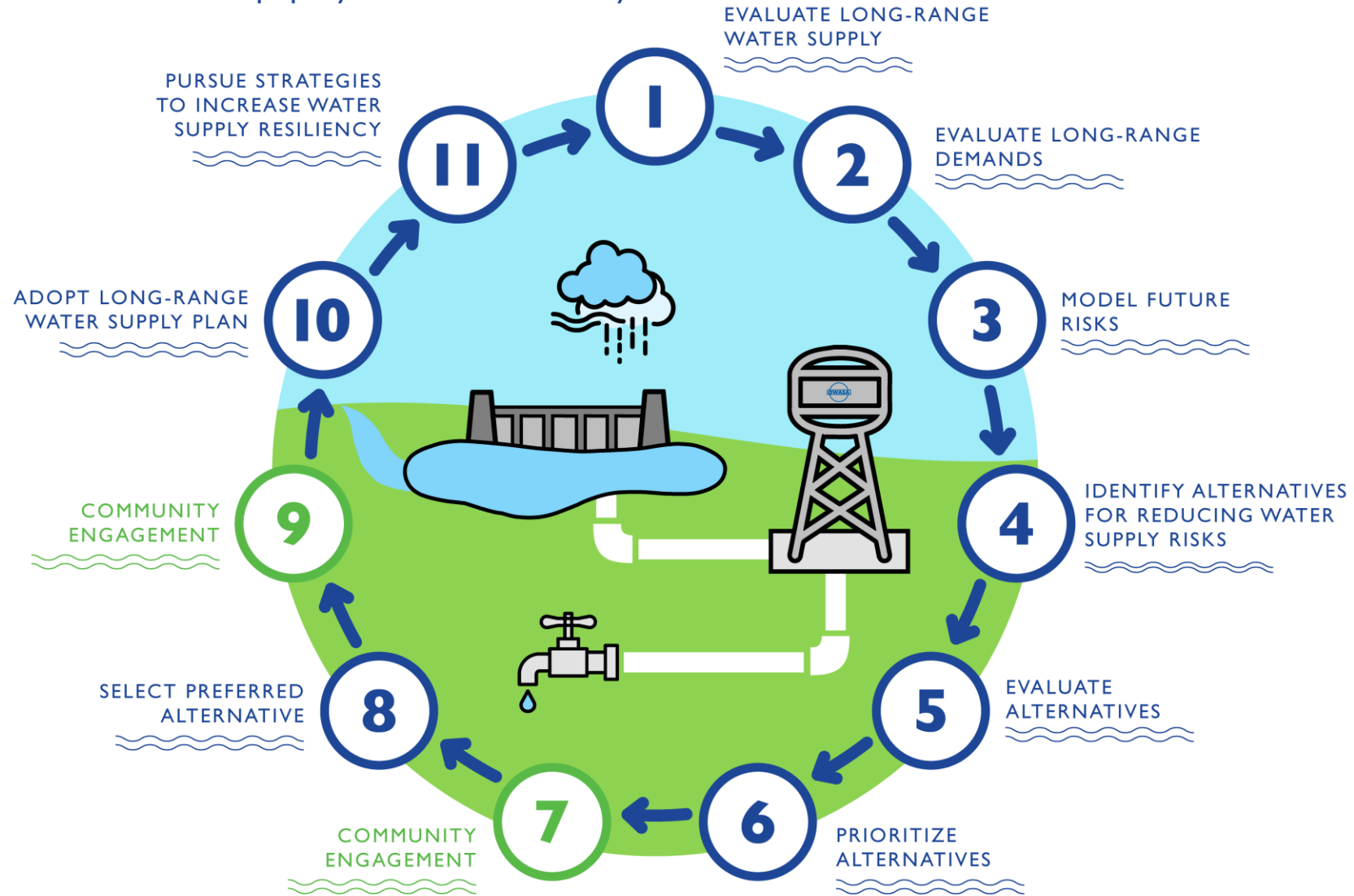
# Key Messages

- We have a low risk of running out of water.
- Our largest vulnerability is in extended drought.
- Jordan Lake alternatives appear to be most cost-effective option for increasing resiliency.



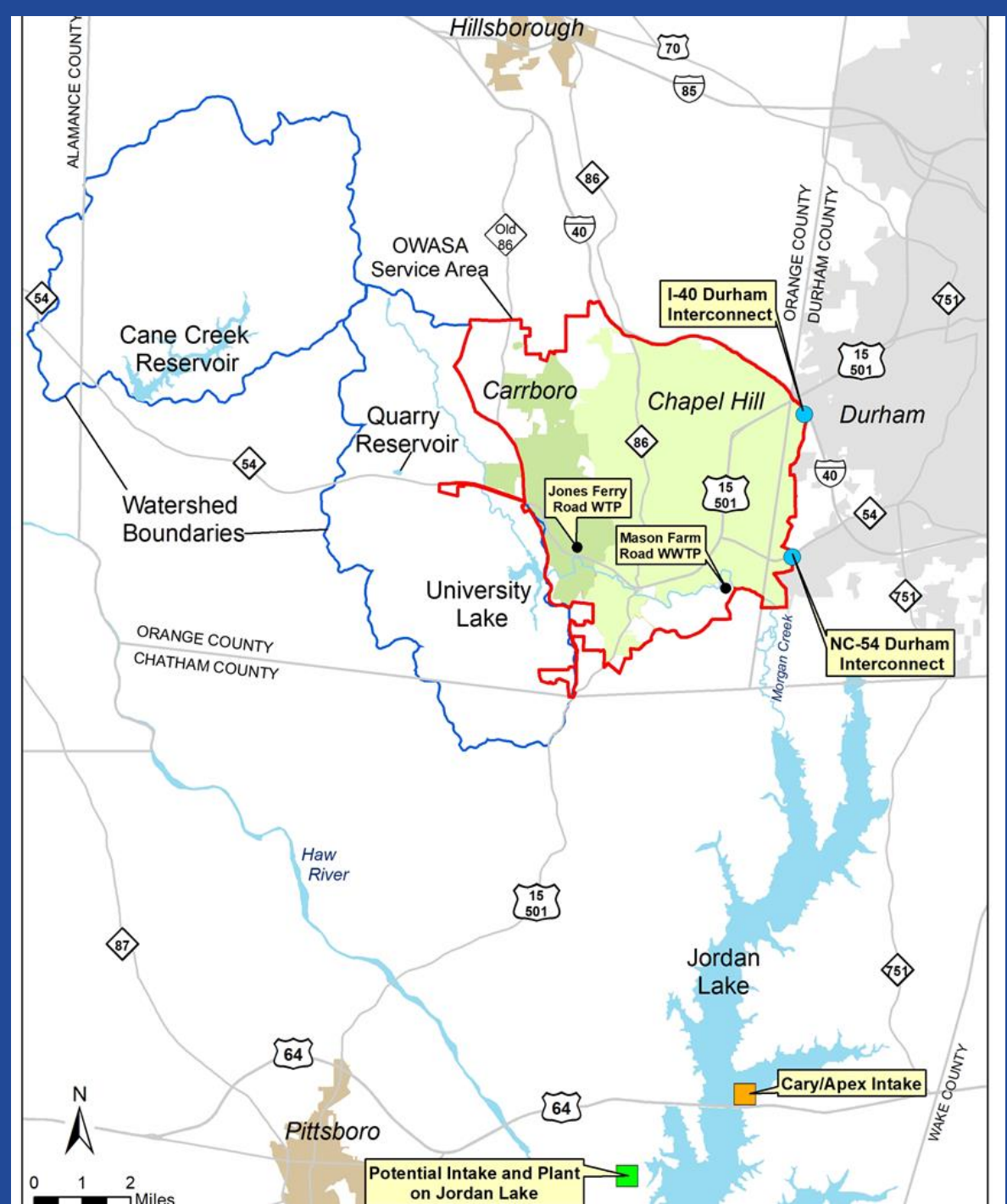
**Intake on Cane Creek Reservoir**

# Ensuring Long-Range Water Supply Resiliency



# OWASA's Water Supplies

- Local Water Supplies
  - Cane Creek Reservoir
  - University Lake
  - Quarry Reservoir
- Jordan Lake



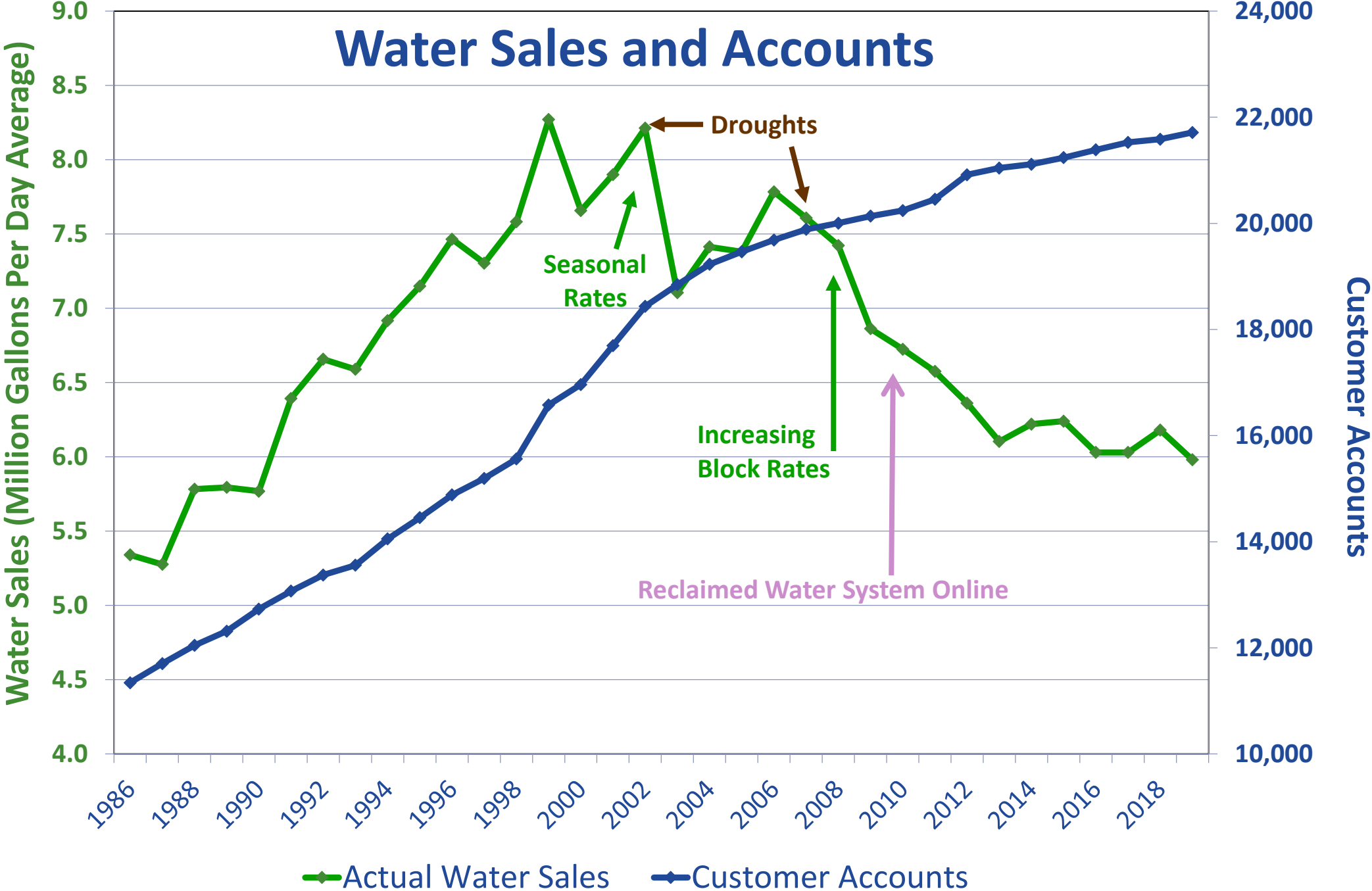
# Jordan Lake

- Federal, multi-purpose reservoir
  - Flood control
  - Water supply
  - Downstream water quality
  - Recreation
- OWASA has had an allocation since 1988.
- Practice has been to only use Jordan Lake during water shortage
- We have no guaranteed access to Jordan Lake.

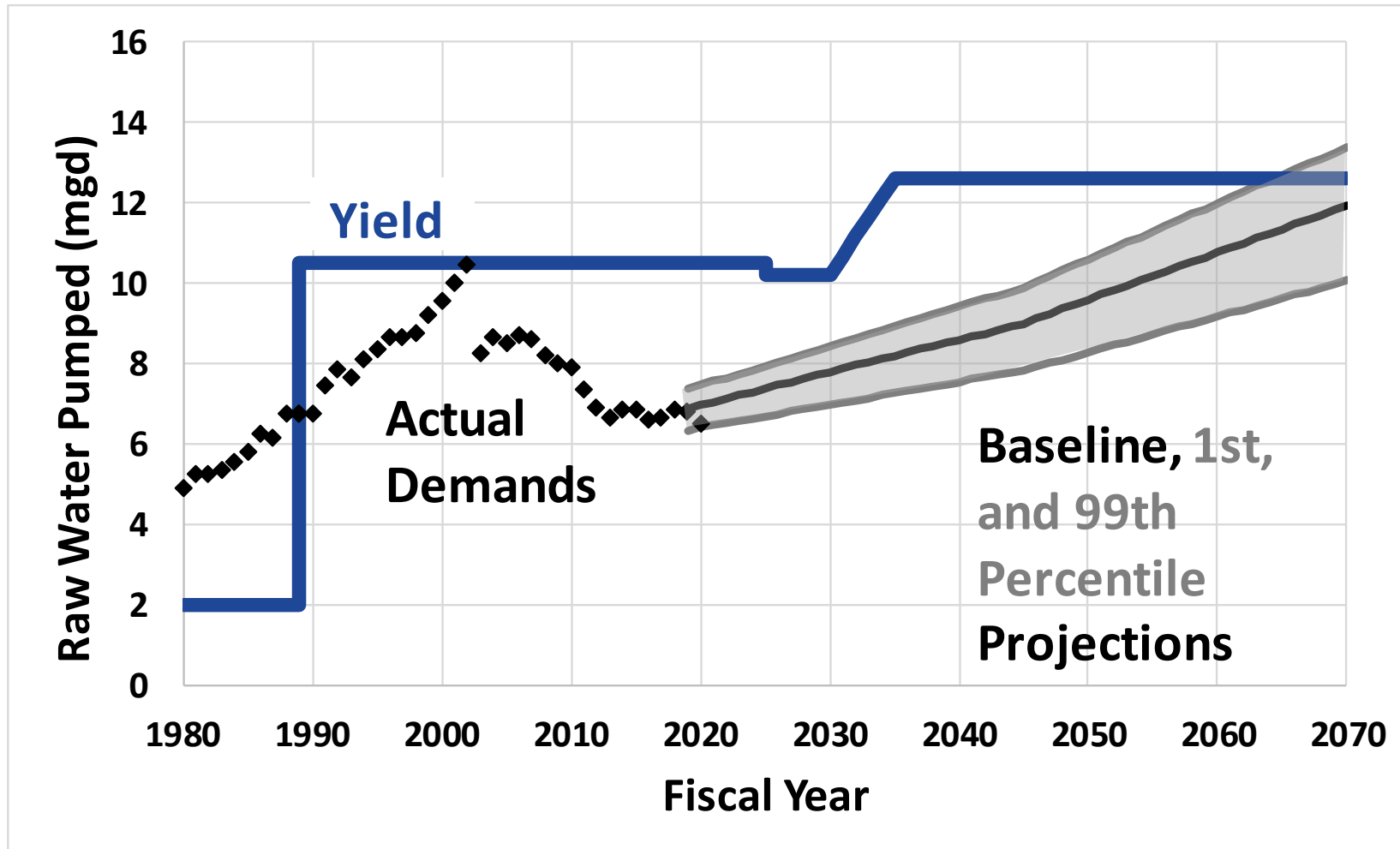


**Jordan Lake**

# Water Sales and Accounts



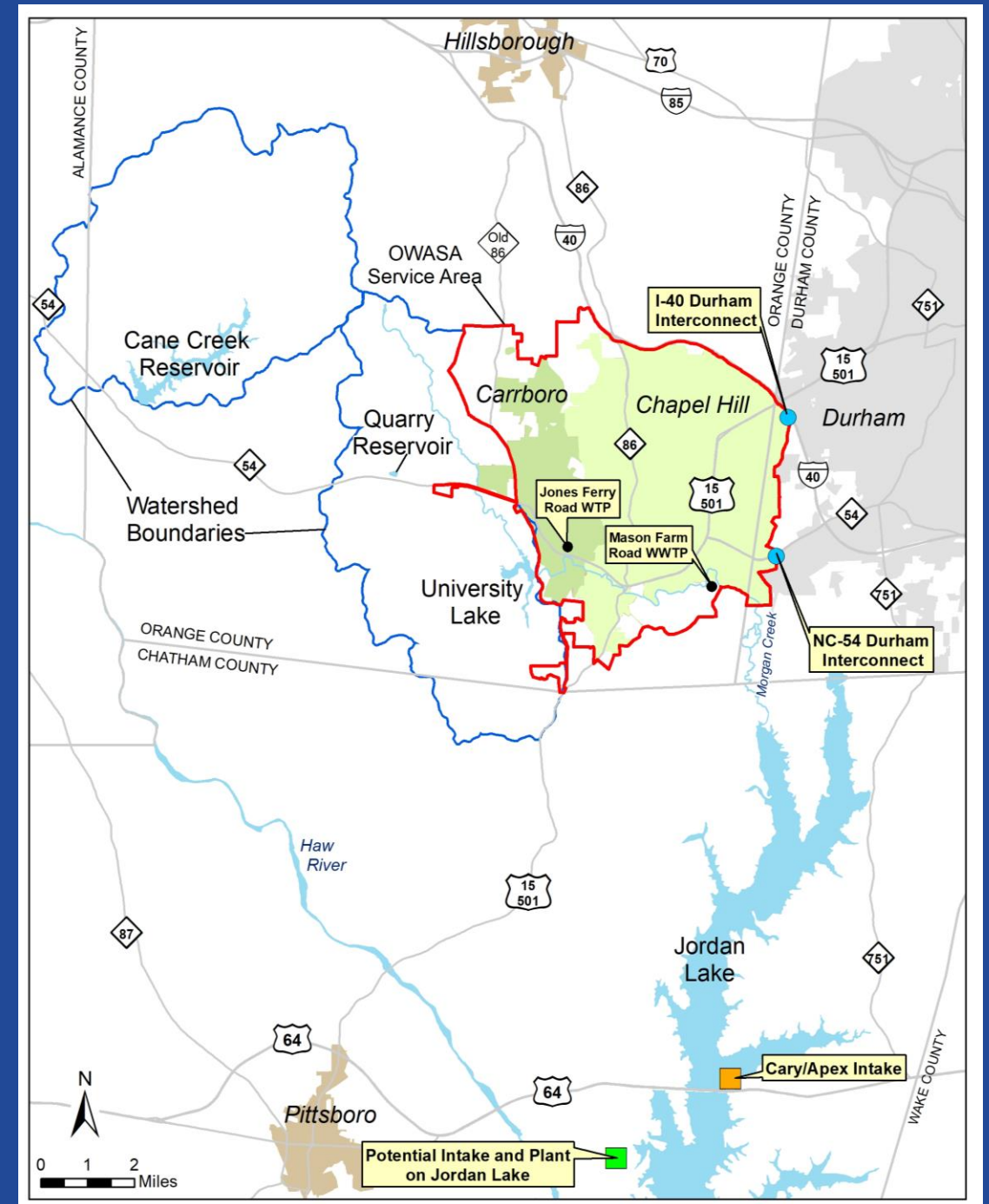
# Our Water Supply Meets Demands Under Most Conditions



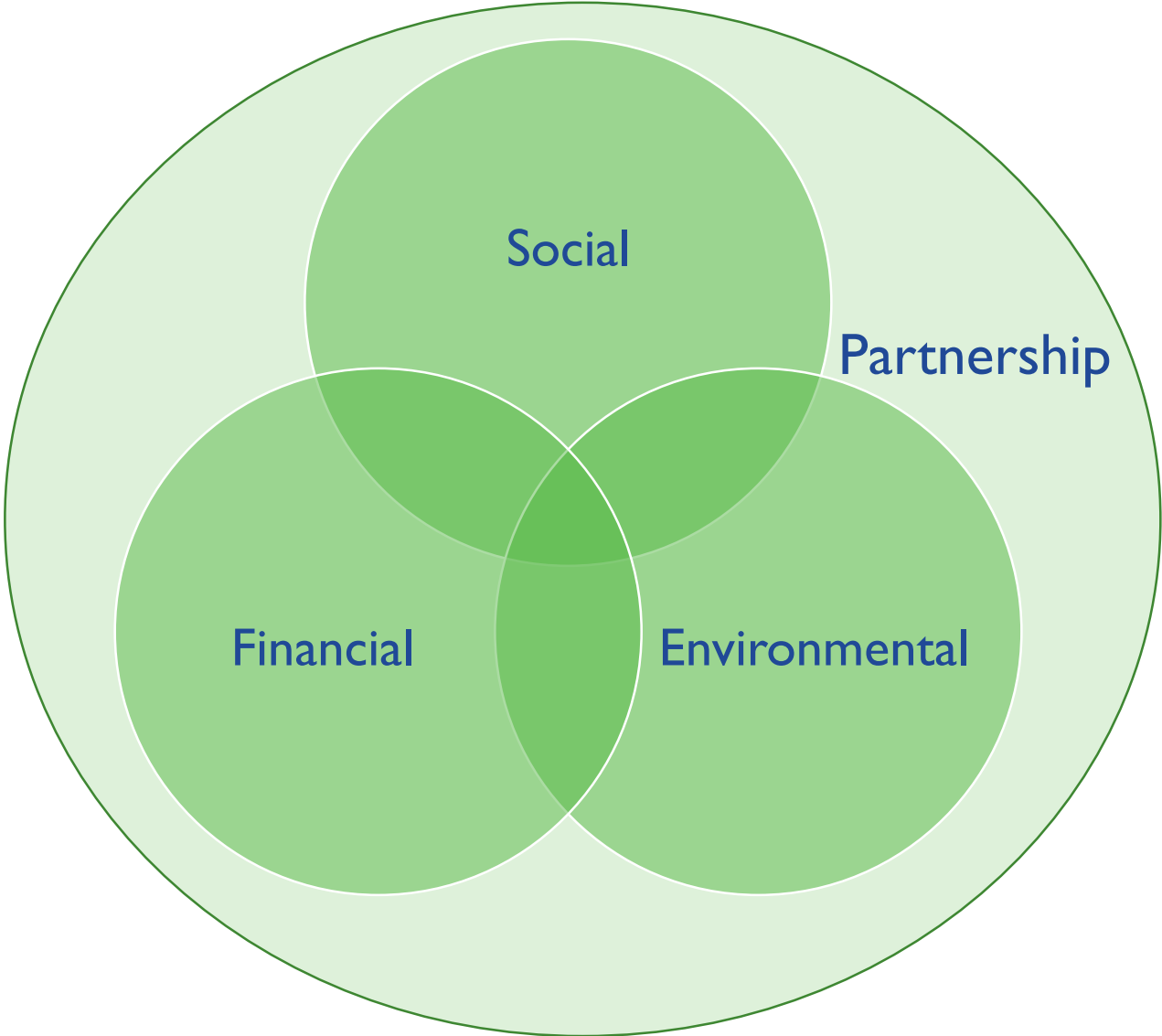


# Our Water Supply Risk is Low

- Our predecessors set us up well
  - Supply
  - Conservation
- Cane Creek Reservoir has small watershed relative to its storage
- Long refill times following drought
- Our main vulnerability is extended drought



# Sustainability Principles



# Identifying Alternatives to Evaluate



- Meetings
- Plans
- OWASA Board and others

- Potential water supply or savings
- Incremental costs
- Implementation

Apples to apples comparison across 3 pillars of sustainability

# Preliminary Alternatives Analysis




## Demand Management Alternatives

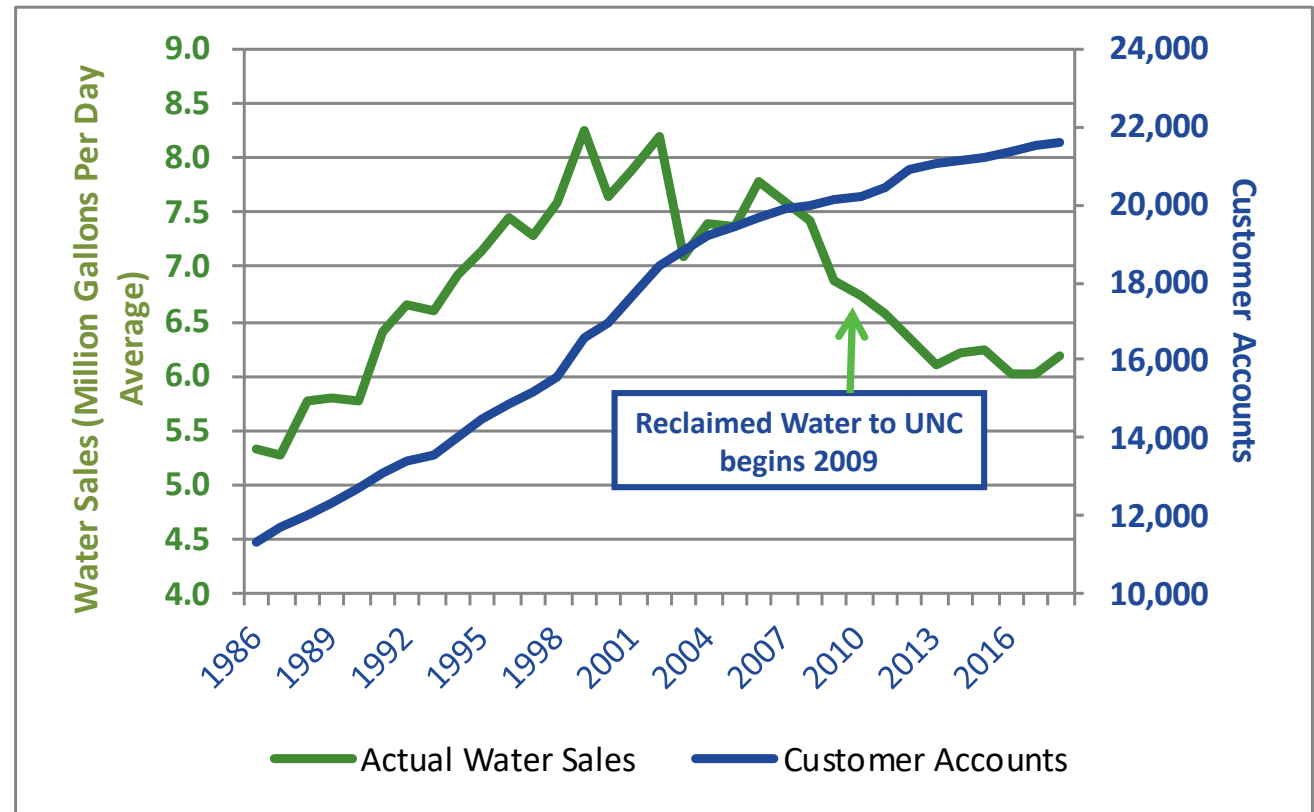
Reclaimed Water  
Programmatic Strategies

## Supply Alternatives



Quarry Reservoir  
Potable Reuse  
Jordan Lake

# Demand Management Alternatives

- Do not meet long-term demands 
- Cost-effective strategies will be considered in Water Conservation Plan as Appendix to LRWSP



# Supply Options

- Deep Quarry 
  - Does not diversity water supply
  - High capital cost
- Potable Reuse 
  - Options not legal or have uncertain permitting process
  - High capital cost
- Jordan Lake
  - Meets long-term needs and diversifies our water supply
  - Lower capital costs
  - Several potential ways to use Jordan Lake

# Where are we headed?

- Report to Board of Directors on community engagement - March
- Develop guiding principles to evaluate Jordan Lake alternatives – May/June
- Continue to evaluate Jordan Lake - FY22
  - Mutual aid agreements
  - Full partner in new intake and plant on western side of Jordan Lake
  - New agreement with Western Intake Partners to guarantee access to our Jordan Lake allocation
- Select draft preferred alternative - FY22
- Engage the community
- Develop final Long-Range Water Supply Plan with preferred alternative

# Questions and Discussion

- Does the Council or community have any questions on our long-range water supply planning process?
- What feedback would you like shared with the OWASA Board of Directors regarding future evaluation of Jordan Lake water supply alternatives?
- Other?

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