



Long-Range Water Supply Plan Update: Information to Carrboro Town Council

Ruth Rouse, Planning and Development Manager

May 3, 2022



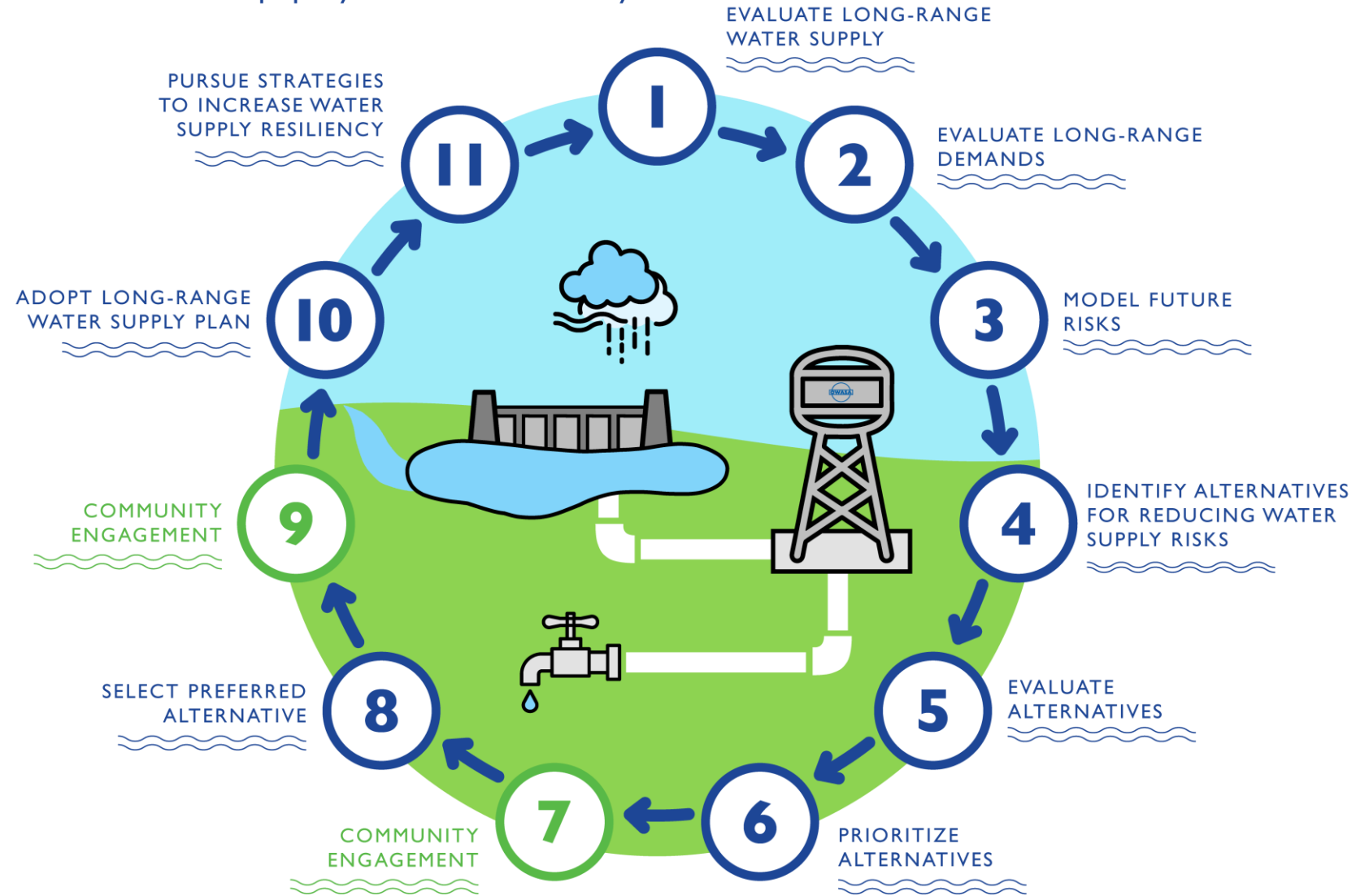
Carrboro-Chapel Hill's not-for-profit public service agency delivering high quality water, wastewater, and reclaimed water services.

Key Messages

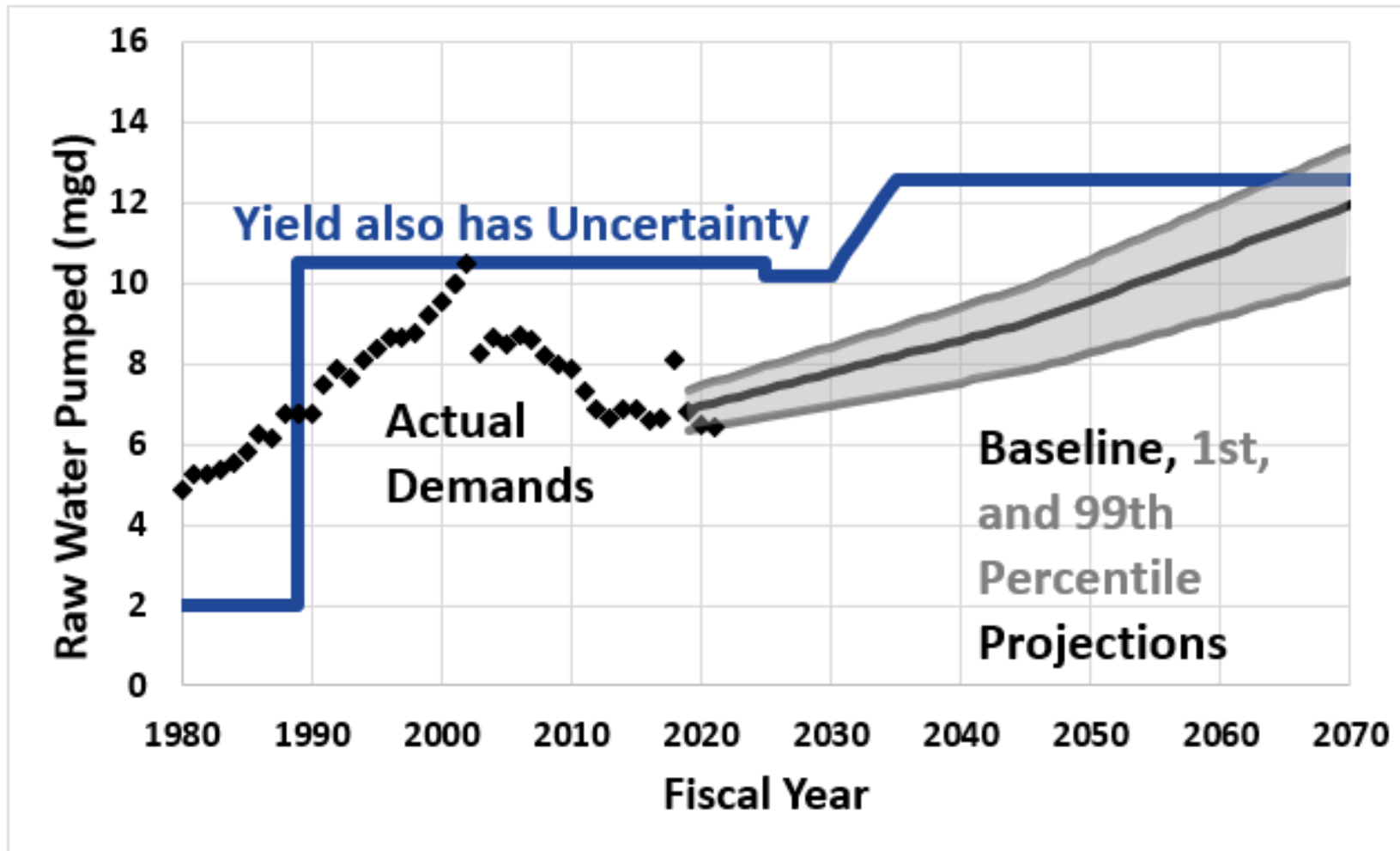
- We have a low risk of running out of water.
- Our largest vulnerability is in extended drought.
- After methodical and inclusive process, Jordan Lake is best option to augment our current supplies.
- A group of local utilities is partnering to design and build new treatment facilities on Jordan Lake.



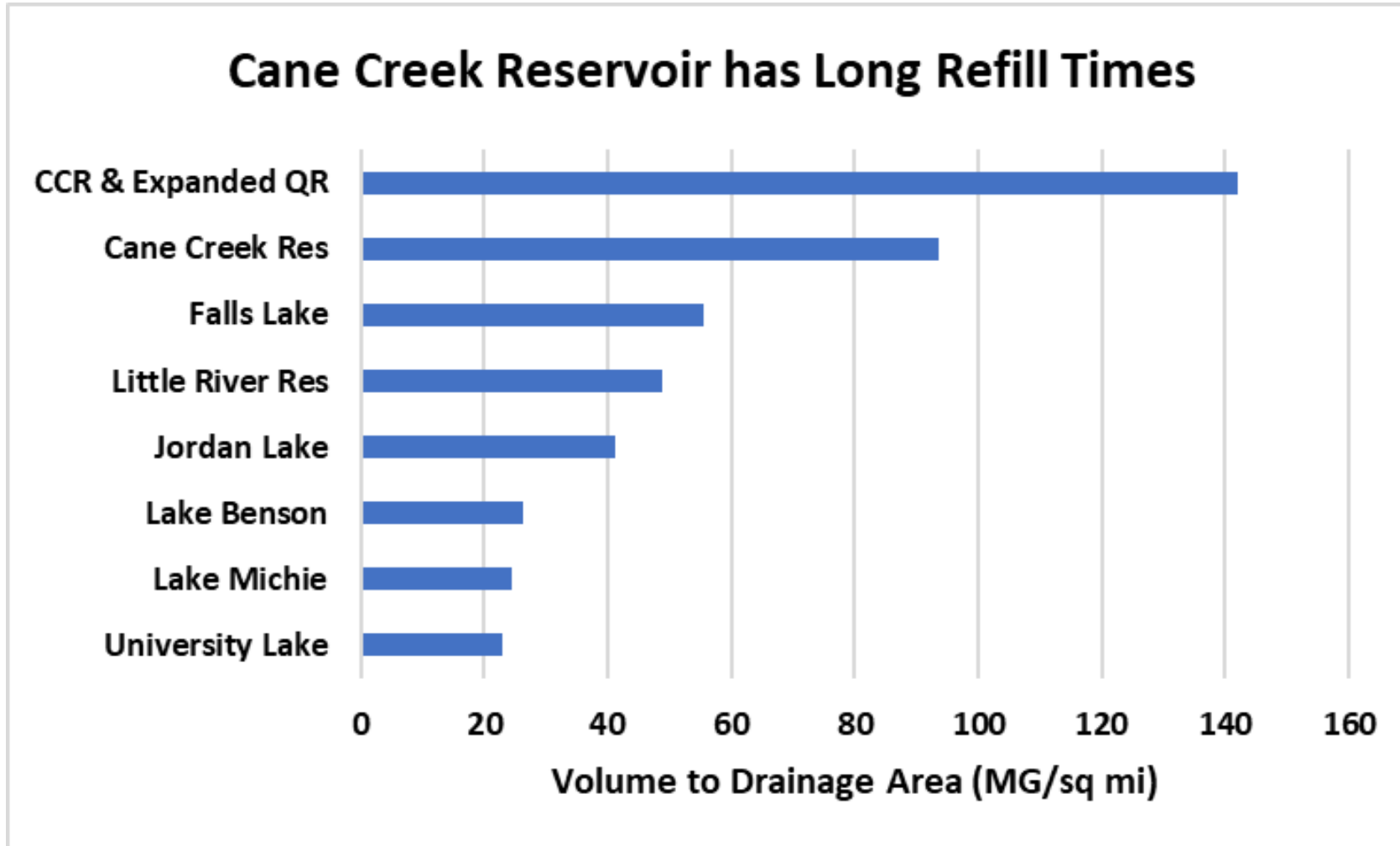
Ensuring Long-Range Water Supply Resiliency



Our Planned Water Supply Meets Demands Under Most Conditions



Our Current Water Supply Risk is the Long Refill Time of Cane Creek Reservoir



1970

1995

2020

2045

2070

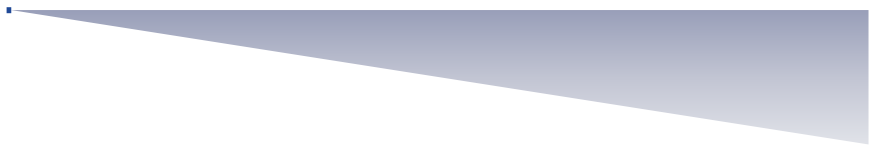
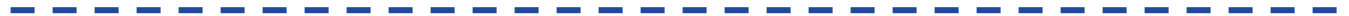
University Lake: 450 million gallons

Cane Creek Reservoir: 3 billion gallons

Quarry Reservoir Phase 1: 200 million gallons

Quarry Reservoir Phase 2: 1.5 billion gallons

Jordan Lake Allocation: 750 million gallons



Jordan Lake Water Quality

- Hundreds of thousands of people drink treated water from Jordan Lake daily
- Reviewed drinking water quality from Cary and Chatham County
- Drinking water from Jordan Lake meets all state and federal criteria
- Proposed WTP being designed to remove contaminants of emerging concern



Process for Narrowing Alternatives

Community
Engagement

Options
Eliminated

All supply and demand
management possibilities

- None

Alternatives with
potential

- Groundwater
- Stormwater
- Some demand side
management

Best alternatives

- Demand side management
- Indirect potable reuse

Jordan Lake
alternatives

- Direct potable reuse
- Deep Quarry

TBD

- TBD

* Direct outreach



Guiding Principles

Must Have

- A. drinking water meets or surpasses public health requirements.


Highest Priority

- B. reduce vulnerability to extended drought;
- C. improve the reliability and resiliency of our water supply;
- D. impact on current rates.

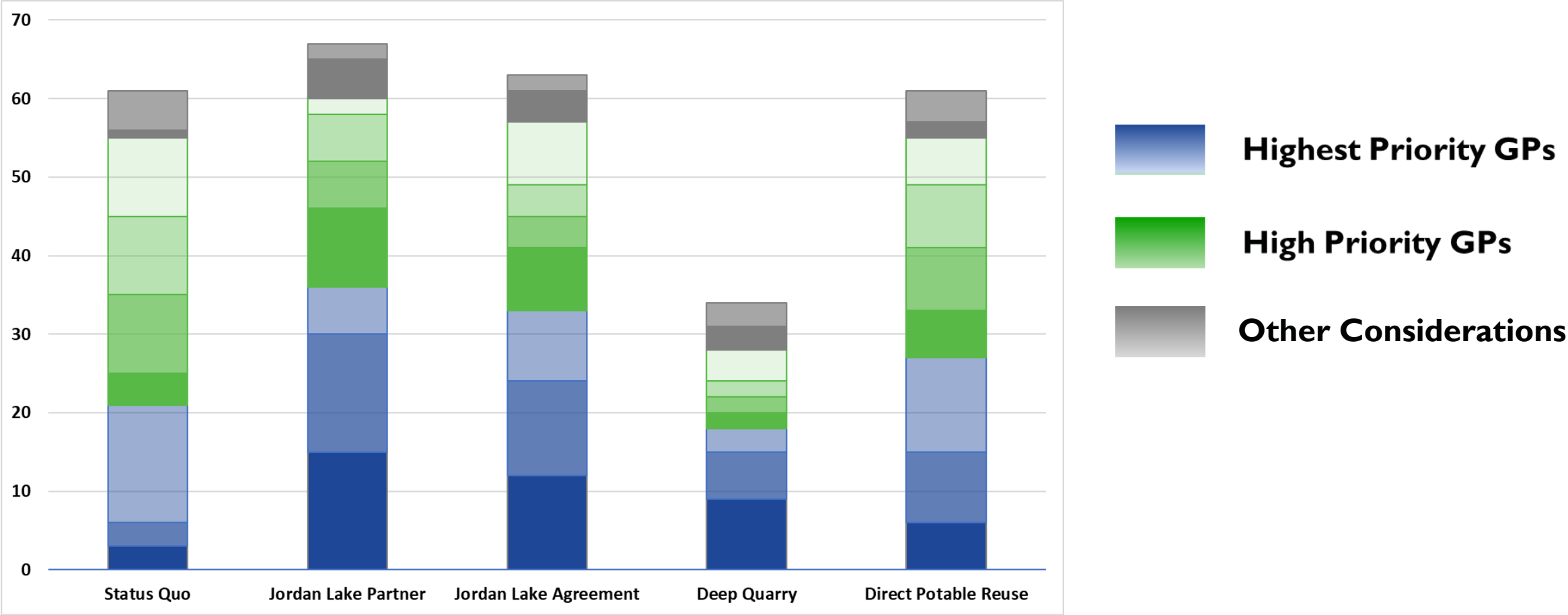
High Priority

- E. impact on future rates;
- F. incremental long-term impacts on the environment;
- G. incremental impacts on the community;
- H. flexibility to change course.

Other Considerations

- I. support for regional water supply planning efforts;
 - J. incremental short-term impacts on the environment.
- 

Jordan Lake Alternatives Rank Highest Against Guiding Principles



Western Intake Partnership (WIP)

- City of Durham, Chatham County, and Town of Pittsboro
- Working since 2014 on regional approach
- Plans to build new Drinking Water Treatment Plant
 - Phase 1: 2031
 - Phase 2: 2050
- OWASA beginning discussions with WIP



Interests in Western Intake Partnership Discussions

- OWASA has access to its Jordan Lake allocation.
- We maintain our allocation of Jordan Lake water.
- Intake and transmission infrastructure are built to meet OWASA's demands.
- Impact on near-term water rates is minimized.
- Our working relationships with our utility partners are important to OWASA, and we are committed to maintaining them.
- We share with those partners a commitment to providing our customers high quality drinking water.

Questions and Discussion

- Does the Council have any questions on our long-range water supply planning process?
- What feedback would you like shared with the OWASA Board of Directors regarding our Long-Range Water Supply Plan?
- Other?

Ruth Rouse
rrouse@owasa.org

