

**THE UNIFIED GOVERNMENT OF ATHENS-CLARKE COUNTY
COMMISSION AGENDA ITEM**

SUBJECT: Development of the Rock Hill Quarry Schedule

DATE: April 26, 2023

BUDGET INFORMATION:

CAPITAL REVENUE:	\$6,473,711	Improve Water Supply Reliability
CAPITAL EXPENSES:	\$2,313,948	Improve Water Supply Reliability
	<u>\$3,375,548</u>	<u>Expenditures & Encumbrances</u>
	\$ 784,215	Available for Quarry Scheduling

FUNDING SOURCE: Water & Sewer Enterprise Fund

COMMISSION ACTION REQUESTED ON: June 6, 2023

PURPOSE:

To request that the Mayor and Commission:

- a. Award a task order in the amount of \$784,215 to the Public Utilities Department's On-call Consultant, Stantec, to develop the schedule for bringing the Rock Hill Quarry (Quarry) on-line; and
- b. Authorize the Mayor and appropriate staff to execute all related documents.

HISTORY:

1. On September 20, 2015, the Mayor and Commission (M&C) approved the 2015 Public Utilities Service Delivery Plan (SDP) Infrastructure and Capital Improvements Element, which included a water storage facility.
2. On January 10, 2017, Public Utilities Department (PUD) staff presented a Risk-Based Supply Assessment (Assessment) to the M&C which evaluated factors beyond projected future water demand in the SDP.
3. On February 7, 2017, the M&C approved the recommendations in the Assessment to plan a water recycling program and a water storage facility.
4. In May 2018, PUD consultant CH2M Hill completed the ACCGov Reuse System Master Plan that included storage of purified recycled water in a water storage facility. This recycled water would mix with raw river water and be used to supplement drinking water supplies during times of shortage.

5. On June 5, 2018, the M&C adopted the 2018 Comprehensive Plan that includes the Strategy, “Ensure adequate water supply to meet current and future demand through conservation (demand management), water recycling/reuse and additional water storage.” (p. 49, ACCGov Comprehensive Plan)
6. Between 2013 and 2020 a number of studies were performed as part of due diligence to assess the Rock Hill Quarry as a potential future water storage facility for ACC.
7. On January 14, 2020, at a M&C Work Session, PUD staff presented an update on the progress of the water recycling program.
8. On August 4, 2020, the M&C approved the Updated 2020 SDP Infrastructure and Capital Improvements Element, which included a water storage facility and water recycling program.
9. In the fall of 2020, the purchase of the Rock Hill Quarry was completed. The Quarry will be used as a water storage facility for ACC when the lease with Hanson Aggregates Southeast LLC ends (December 31, 2030).
10. In March 2022, the M&C approved the FY23-FY25 ACCGov Strategic Plan which included “develop timeline to have the quarry online.”
11. On August 2, 2022, the M&C approved the selection of four on-call engineering firms with the scope of work that included consulting, design and construction management to Rehabilitate and Replace Critical Infrastructure.
12. On November 10, 2022, at a work session, PUD presented an option for dual operations of the quarry from 2032 to 2045.

FACTS & ISSUES:

1. The Unified Government of Athens-Clarke County draws the community’s drinking water supply from the Middle and North Oconee Rivers and the Bear Creek Reservoir. During severe drought, the only raw water source for the citizens and industry of Athens-Clarke County is the Bear Creek Reservoir.
2. ACCGov shares the Bear Creek Reservoir with Barrow, Oconee, and Jackson Counties. The Reservoir is the primary water source for Oconee, Jackson, and Barrow Counties. Withdrawals from the reservoir will increase as all four counties grow.
3. At current water use demands, there is approximately a 12% chance that ACC will enter a drought that could require water use restrictions in any given year. As water use demands grow, less water is available in the Bear Creek Reservoir and the chance of entering into a drought will increase beyond 12%. While the risk of imposed reductions may be small, the negative economic impacts to the community are large.
4. Athens-Clarke County was under Level 4 Drought Response for five months and Level 3 for six months during the 2007-2008 drought. This drought was the worst on record. Predicting

the exact chance of entering into a more severe drought is impossible. However, previous “worst droughts on record” happened in 1987-1988 and 1998-2003. The US Environmental Protection Agency states that there is likely to be an “increase in the severity of droughts” in Georgia (EPA 430-F-16-012). Based on trends in climate data, Athens-Clarke County will eventually enter a drought that is more severe and lasts longer than the drought of 2007-2008.

5. The Assessment shows that additional raw water storage capable of providing 20 mgd reduces the probability of needing to implement severe drought-related water demand restrictions to almost 0%.
6. Stantec has decades of experience bringing on additional water supply storage including quarries. The latest one is the Bellwood Quarry in Atlanta.
7. The Public Utilities Department is currently reviewing the report for dual operation as proposed by Stantec and will have a recommendation at the next agenda cycle (History #12).
8. The Stantec task order includes:
 - Site Investigation/Site Characteristics - Environmental permitting
 - Applicable regulatory requirements, permitting considerations, water use and wastewater discharges, stormwater management and permitting, site limitations.
 - Intake Pump Station and Transfer Pump Station
 - River intake locations, quarry intake (horizontal tunnel to quarry) locations, pump station site selection and accessibility, hydraulic requirements, pump types, suction depth, number of pumps and pump redundancy considerations.
 - Raw Water Conveyance
 - Surface-level buried piping versus deep tunnels. Considerations for existing infrastructure near the quarry.
 - PUD Water Distribution System
 - Continuity, planning, and coordination (how the quarry will operate within the existing and future planned water distribution system overall).
 - Financial Considerations
 - Internal funding or additional grant sourced funding, federal funding options, grant submission and administration options, Rough Order of Magnitude (ROM) design and construction estimate for the project scenarios and matrix of options to cost and schedule.
 - Summary of Likely Regulatory Requirements
 - Power, Electrical, utility interface requirements, land purchase needs, road crossing, and easements.
 - Identify potential recreational uses

- Schedule to have Quarry online by 2032

9. Anticipated Project Schedule:

Purchase Order/Issuance of Notice to Proceed	Summer 2023
Quarry Phasing Schedule/Options Complete	Spring 2024
PUD Recommends Options to M&C	Summer 2024

10. This recommendation supports the following ACCGov Strategic Plan Goal & Strategy:

- Built and Natural Infrastructure Goal, Strategy A: *Develop timeline to have quarry online.*

OPTIONS:

1. Mayor and Commission:
 - a. Award a task order in the amount of \$784,215 to the Public Utilities Department's On-call Consultant, Stantec, to develop the schedule for bringing the Rock Hill Quarry on-line; and
 - b. Authorize the Mayor and appropriate staff to execute all related documents.
2. Mayor and Commission deny the request.
3. Mayor and Commission defined option.

DEPARTMENT RECOMMENDED ACTION:

Option 1 A & B

DEPARTMENT: Public Utilities

Prepared by: Hollis Terry IV



Hollis Terry IV

April 26, 2023

Date:

ADMINISTRATIVE COMMENTS:

ADMINISTRATIVE RECOMMENDATION: Option 1 A & B



Manager

Date:

May 10, 2023