

Wastewater Capacity Evaluation Update

January 7, 2019



Future Wastewater Needs Decision

- Factors driving the decision
 - Design-Permitting-Construction timeline
 - Will take ± 4 years to deliver a project
 - Raleigh contract expiration
 - Current commitments
 - Actual Flow vs. Permitted Flow vs. Allocated Flow
- Impacts
 - Delayed decision will require limits on development approvals



Considerations

- Community needs
 - “Best Value” vs. Cost to Customers



Since the Last Update

- Re-evaluated projected flows based on most recent allocations made and requested to the Town
 - 20-year planning period
- Explored options to extend need to have additional capacity (*ongoing*)
 - *Staff met with Johnston County, City of Raleigh, 3rd Party Operators, Legislators*
- Used Rate Model to determine impact of options explored on user rates (*ongoing*)



Variables in Options Considered

- Obtaining Additional Capacity in Clayton vs. JoCo
 - ~45% in JoCo and 55% in Clayton
 - ~20% in JoCo and 80% in Clayton
 - All Flow Treated in Clayton
- Timing
 - Raleigh Contract ends in 2027 vs. 2032
- Maximizing Existing Resources
 - Building one new facility vs. two facilities (maintaining Little Creek WRF and building smaller new facility)
- Phasing
 - Is phasing a feasible option to spread out costs for each scenario considered?



Options Considered

	Raleigh Contract Expires 2027			Raleigh Contract Expires 2032		
	~45% of Flow Treated in JoCo; 55% Treated in Clayton (A)	~20% of Flow Treated in JoCo; 80% Treated in Clayton (B)	All Flow Treated in Clayton (All)	~45% of Flow Treated in JoCo; 55% Treated in Clayton (C)	~20% of Flow Treated in JoCo; 80% Treated in Clayton (D)	All Flow Treated in Clayton (All)
One New Facility	1A	1B	1BAll	1C	1D	1DAll
Two facilities (Little Creek WRF and smaller new facility)	2A	2B	2BAll	2C	2D	2DAll

- This represents 20 options for consideration (including some options as phased)



Options Considered for Rate Study

- Of all the options considered, 5 options were supplied for the Rate Model
 - 1B – One Plant; ~20% of Flow Treated in JoCo; 80% Treated in Clayton
 - 2B – Same as 1B but running Two Plants
 - 1C – One Plant; ~45% of Flow Treated in JoCo; 55% Treated in Clayton
 - 2C – Same as 1C but running Two Plants
 - 1DAI – One Plant, Clayton treats all flows (no flow sent to Raleigh or JoCo by 2037)



Run Enterprise like a Business

- Multi-Year Financial Planning and Monitoring
 - Multiple variable effort
- Maintenance of Expenses and Revenues
 - Capital and Operating Drivers
 - Sustainable Implementation
 - User Rates, System Dev. Fees, and Other Revenues Sources
 - SDF charges are now mandated by NC Legislation
- Maintenance of Financial Metrics
 - Debt Service Coverage and Fund Balance (Cash)



Run Enterprise like a Business

- Rate Comparison (Competitiveness)
 - “Growth” alone will not cover system requirements
- Adequate and frequent stakeholder engagement



Run Enterprise like a Business

Combined Rates					Inside Jurisdiction				Outside Jurisdiction			
Utility	Customers				Estimated Bills				Estimated Bills			
	Residential	Commercial	Industrial	Institutional	5,000 Gals	50,000 Gals	100,000 Gals	1,000,000 Gals	5,000 Gals	50,000 Gals	100,000 Gals	1,000,000 Gals
Town of Cary	65,668	3,150	65	300	\$ 59	\$ 836	\$ 1,992	\$ 18,842	\$ 116	\$ 985	\$ 2,133	\$ 17,827
Town of Morrisville	12,387	2,163	-	97	\$ 70	\$ 925	\$ 2,169	\$ 20,614	\$ 149	\$ 1,251	\$ 2,665	\$ 23,146
City of Durham	86,834	5,811	120	1,332	\$ 37	\$ 491	\$ 1,306	\$ 10,301	N/A	N/A	N/A	N/A
County of Durham	19,238	883	-	550	\$ 40	\$ 368	\$ 913	\$ 6,719	N/A	N/A	N/A	N/A
City of Raleigh	171,033	14,923	183	831	\$ 46	\$ 417	\$ 1,152	\$ 7,834	\$ 93	\$ 1,390	\$ 2,753	\$ 20,436
Town of Angier	2,660	342	1	34	\$ 75	\$ 491	\$ 954	\$ 9,279	\$ 90	\$ 612	\$ 1,192	\$ 11,692
Town of Fuquay Varina	11,465	904	10	42	\$ 79	\$ 577	\$ 1,130	\$ 11,084	\$ 88	\$ 630	\$ 1,232	\$ 12,139
Town of Holly Springs	13934	874	12	74	\$ 75	\$ 755	\$ 1,512	\$ 15,695	\$ 82	\$ 767	\$ 1,415	\$ 15,453
Town of Wendell	Part of Raleigh				\$ 56	\$ 463	\$ 1,069	\$ 8,879	\$ 111	\$ 1,484	\$ 2,587	\$ 22,527
Town of Zebulon	Part of Raleigh				\$ 67	\$ 478	\$ 1,088	\$ 8,965	\$ 135	\$ 1,514	\$ 2,624	\$ 22,699
Johnston County	31,574	914	16	30	\$ 81	\$ 723	\$ 1,666	\$ 13,215	N/A	N/A	N/A	N/A
Town of Smithfield	4,609	992	19	83	\$ 87	\$ 717	\$ 1,422	\$ 14,112	\$ 118	\$ 865	\$ 1,708	\$ 16,943
Town of Selma	2,081	168	-	-	\$ 77	\$ 790	\$ 1,980	\$ 19,882	\$ 119	\$ 1,086	\$ 2,973	\$ 29,748
Harnett County - Residential	38,439				\$ 101	\$ 568	\$ 1,093	\$ 10,543	N/A	N/A	N/A	N/A
Harnett County - Commercial		698	11	28	\$ 104	\$ 571	\$ 1,096	\$ 10,546	N/A	N/A	N/A	N/A
Aqua	N/A	N/A	N/A	N/A	\$ 98	\$ 958	\$ 1,914	\$ 19,114	\$ 98	\$ 958	\$ 1,914	\$ 19,114
Clayton - Today	7,710	661	21	104	\$ 74	\$ 544	\$ 1,061	\$ 8,705	\$ 124	\$ 788	\$ 1,501	\$ 12,545
Clayton Proposed - 2020					\$ 84	\$ 803	\$ 1,337	\$ 13,090	\$ 104	\$ 997	\$ 1,658	\$ 16,126
Clayton Proposed - 2021					\$ 95	\$ 912	\$ 1,518	\$ 14,859	\$ 118	\$ 1,132	\$ 1,882	\$ 18,305
Clayton Proposed - 2022					\$ 110	\$ 1,050	\$ 1,749	\$ 17,116	\$ 136	\$ 1,304	\$ 2,167	\$ 21,085
Clayton Proposed - 2023					\$ 128	\$ 1,227	\$ 2,043	\$ 19,997	\$ 159	\$ 1,523	\$ 2,532	\$ 24,634



Options Considered for Rate Study

- These 5 options require final review in the Rate Model
 - **1B – One Plant; ~20% of Flow Treated in JoCo; 80% Treated in Clayton**
 - 2B – Same as 1B but running Two Plants
 - 1C – One Plant; ~45% of Flow Treated in JoCo; 55% Treated in Clayton
 - 2C – Same as 1C but running Two Plants
 - 1DAll – One Plant, Clayton treats all flows (no flow sent to Raleigh or JoCo by 2037)



What's next?

- Town Council Decision needed on February 18th
 - Continue Public Hearing to the 18th (Action needed)
 - Staff tasks in the short term:
 - Solicit responses to RFQ for Design Services
 - Negotiate contract with Consultant
 - Final Approval of Contract by Town Council
- Additional information needed?

