



To: John Allore, Budget and Management Services
From: Martha Zeigler, Department of Water Management
Date: April 30, 2014
RE: Joven-Northeast Creek Development Proposed Annexation

OVERALL IMPACT:

The Department of Water Management sets rates and fees to recover operational costs and to provide current and future infrastructure necessary to supply water and wastewater for the City and surrounding service area. Any revenues not expended on operations and maintenance are accumulated to provide funding, including debt service, required to repair, rehabilitate, replace, and/or expand capacity of infrastructure.

This project is located in the Triangle Basin and served by City-owned and maintained sewer lines. According to the 1972 Agreement with Durham County, the City agrees to pay Durham County 80% of its standard charges based on sewer consumption billed customers by the City. This charge remains the same whether the property is inside or outside of City limits and as such is independent of what the City charges the customer.

Below is a table of net contribution of revenues over expenditures to the CIP program. Being an Enterprise Fund, any excess revenues from water and sewer services do not impact the General Fund or tax rates.

The operational expenditures may be considered short term operating. The long-term or life-cycle expenditures for this and any other project may be reasonably determined by contributions to capital improvement projects from both rates and one-time capital facility fees which cover not only repair and maintenance for the pipe in the ground contributed by the developer, but also include all the other connecting infrastructure as well as the treatment plants that provide water and sewer treatment services.

Any changes in short and long-term life cycle costs will be managed by adjusting rates and facility fees based on actual performance data. Therefore, there is no anticipated impact on the Department from this annexation as the quantity of anticipated new customers is not material enough to impact the level of service in any material way. There is also no anticipated impact on compliance issues, regulatory requirements, master plans, or other overarching concern.

NET CONTRIBUTION TO WATER AND WASTEWATER CIP

YEAR	INSIDE	OUTSIDE
FY2016-17	\$ 31,562	\$ 128,676
FY2017-18	\$ 68,900	\$ 280,899
FY2018-19	\$ 124,268	\$ 506,630
FY2019-20	\$ 144,568	\$ 589,394
FY2020-21	\$ 148,522	\$ 605,513
FY2021-22	\$ 152,587	\$ 622,084
FY2022-23	\$ 156,766	\$ 639,121
FY2023-24	\$ 161,062	\$ 656,636
FY2024-25	\$ 165,904	\$ 676,377

**ADDITIONAL REVENUE:**

As evidenced by the table above, the Department of Water Management would realize additional revenue from outside City rates. These funds would be used for capital projects and debt service.

In addition, the City would receive one-time revenues from Capital Facility Fees paid to connect to the City Water and Sewer System. As this project is located within the Triangle Basin, the County will receive sewer capital facility fees calculated at their standard rates. The City calculates sewer capital facility fees based on meter size and Durham County on expected usage so the actual fee paid to the County may be slightly more or less than what is collected by the City. This projection assumes an equal amount of sewer capital facility fees collected by the City will be transferred to the County.

COSTS BEYOND THE BUILDOUT TIMEFRAME:

There are no anticipated significant cost, revenue, or regulatory issues associated with this particular development or area.

METHODOLOGY AND DATA SOURCES:

To calculate revenues, the average consumption for the City's residential customers was used, along with the assumption of 5/8" meters. To calculate commercial and industrial consumption, industry standards for water usage per square foot were employed. Meter sizes were estimated based on additional information about types of businesses provided by the Planning Department and similar-type existing customers currently being billed by the City.

The percentage of operational costs versus capital costs was estimated based on factors in the rate model used by the Department.

IMPACTS ON EFFICIENCY AND EFFECTIVENESS:

The Department has currently submitted a new initiative request for an additional pump station maintenance crew. If this is approved, there will likely be no immediate impact on effectiveness by adding new pump stations to be maintained. Otherwise, additional staff could be needed—not for this project in particular, but rather due to the increment of another facility over the current capacity of existing staff. As new infrastructure, the initial impact will be an increase in efficiency as there will be little repair and maintenance cost. However, this will change as the infrastructure ages. The annual recalibration of water and sewer rates based on anticipated operational and capital needs is anticipated to be able to accommodate this project without noticeable adverse impact on level of service or rates.

OTHER RELEVANT CONCERN:

Any renegotiation of reimbursement to compensate Durham County for sewage treatment could impact the projections in this analysis, as well as if the County's standard sewage consumption rates increase over the years at a rate higher than the City's. The result could be less funding than projected would be available for capital projects, which might have an impact on the amount of rate increases necessary to fund the CIP.