FINDING OF NO SIGNIFICANT IMPACT AND ENVIRONMENTAL ASSESSMENT

TOWN OF PITTSBORO
WASTEWATER TREATMENT SYSTEM IMPROVEMENTS

RESPONSIBLE AGENCY: NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY

CONTACT: JON RISGAARD, SECTION CHIEF STATE REVOLVING FUND SECTION DIVISION OF WATER INFRASTRUCTURE 1633 MAIL SERVICE CENTER RALEIGH, NORTH CAROLINA 27699-1633 (919) 707-9175

January 5, 2021
FINDING OF NO SIGNIFICANT IMPACT

Article 1, Chapter 113A of the North Carolina General Statutes requires an action to be subject to the requirements of the North Carolina Environmental Policy Act (NCEPA) if it involves the expenditure of public funds and if a potential impact is anticipated to the environment. The project has been evaluated for compliance with the NCEPA and is determined to be a major agency action, which will affect the environment.

**Project Applicant:** Town of Pittsboro, North Carolina

**Project Description:** The proposed project will convert the Town’s existing wastewater treatment plant (WWTP) to provide equalization only and install a pump station and forcemain to pump the Town’s wastewater from the WWTP site to the City of Sanford’s Big Buffalo Creek WWTP. The converted WWTP will provide approximately 1.1 million gallons of equalization capacity. Screening and grit removal will be added prior to the pump station. The pump station will be designed for an average flow of 2 million gallons per day (MGD) and peak day of 3 MGD. The forcemain will be approximately 14 miles long. The proposed project covered under this Finding of No Significant Impact is Phase 1 of a two-phase plan to address wastewater needs in the 20-year planning window, including service for the Chatham Park development. Phase 2 is still under development and is likely to include construction of a regional WWTP to meet the expected need beginning in 2026 and is not covered by this environmental analysis.

- **Project Number:** CS370413-06
- **Project Cost:** $20,185,800
- **Clean Water State:** $19,790,000
- **Revolving Loan Fund:** $395,800

The review process indicated that significant adverse environmental impacts should not occur if mitigative measures are implemented, and an environmental impact statement will not be required. The decision was based on information in the Engineering Report/Environmental Information Document Revision No. 4 December 29, 2020 (ER/EID), submitted by the applicant, and reviews by governmental agencies. The attached Environmental Assessment (EA), prepared by the Division based on the ER/EID, supports this action and, together with the ER/EID, outlines mitigative measures that must be followed. This Finding of No Significant Impact (FONSI) completes the environmental review record, which is available for inspection at the State Clearinghouse.
No administrative action will be taken on the proposed project for at least 30 days after notification that the FONSI has been published in the North Carolina Environmental Bulletin.

Sincerely,

Jon Risgaard, Section Chief
State Revolving Fund Section
Division of Water Infrastructure
ENVIRONMENTAL ASSESSMENT

A. Proposed Facilities and Actions

The proposed project will convert the Town of Pittsboro’s existing wastewater treatment plant (WWTP) to provide equalization only and install a pump station and forcemain to pump the Town’s wastewater from the WWTP site to the City of Sanford’s Big Buffalo Creek WWTP. The converted WWTP will provide approximately 1.1 million gallons of equalization capacity. Screening and grit removal will be added prior to the pump station. The pump station will be designed for an average flow of 2 million gallons per day (MGD) and a peak day of 3 MGD. The forcemain will be approximately 14 miles long. The proposed project evaluated in this environmental assessment is Phase 1 of a two-phase plan to address wastewater needs in the 20-year planning window, including service for the Chatham Park development. Phase 2 is still under development and is likely to include construction of a regional WWTP to meet the expected need beginning in 2026.

Funding Status: The estimated total cost for the project is $20,185,800. The Town is applying for a Clean Water State Revolving Fund (CWSRF) loan of $19,790,000. Local funds will be used for the closing costs of $395,800.

B. Existing Environment

Topography and Soils. Pittsboro is the Piedmont physiographic province. The topography includes slopes ranging from gentle to strongly sloping with elevations from 208 to 528 feet above mean sea level. The majority of the project area is within the Carolina Slate Belt, with the southern portion of the forcemain in the Triassic Basin. Portions of the proposed forcemain alignment are in the 100-year floodplain and floodway.

The dominant soil type at the WWTP site is Georgeville silt loam. The dominant soil along the forcemain route is Cid-Lignum complex with other soils including Cid silt loam, Nanford-Badin complex, Mayodan fine sandy loam, Pinkston silt loam, and Tarrus silt loam. Some soil types in the project area may have limitations for development due to wetness, low strength, and restricted permeability. These soils are upland soils with hydric inclusions.

Surface Water. The project area is located in the Cape Fear River Basin with portions in the Haw Subbasin (HUC 03030002), Deep Subbasin (HUC 03030003) and Upper Cape Fear Subbasin (HUC 03030004). Surface waters in project area include Roberson Creek, Turkey Creek, Haw River, Rocky River, and Deep River. Roberson Creek, Haw River, and Rocky River are designated as Water-Supply IV, Nutrient Sensitive Waters and are impaired for benthos. Rocky River and Deep River are designated as Class C with no impairments.

Water Supply. The Town of Pittsboro provides drinking water drawn from the Haw River.
C. Existing Wastewater Facilities

The Town currently operates a 0.75 MGD WWTP which discharges to Roberson Creek. The NPDES permit (No. NC0020354) allows expansion in stages starting with increased discharge at the Roberson Creek Outfall from 0.75 MGD to 1.249 MGD and then, upon expansion above 1.249, for discharge to the Haw River up to 1.971 MGD. The plant was originally constructed in 1977 with upgrades made in 1988 and 2010. The influent channel, influent wet well, and aeration basin #1 are original. The 1988 expansion added an additional aeration basin, clarifiers, filters, mechanical bar screens, and a UV system. The 2010 improvements added equalization basins and a new UV system. The influent mechanical bar screen was rebuilt in 2011, and a new emergency generator was added in 2013. The original concrete structures, clarifier sweep arms, and air lifts are showing signs of deterioration. The equalization basins and UV system are in good condition.

The liquid treatment train includes screening, influent pumping, two activated sludge package plants, tertiary filtration, UV disinfection, and cascade aeration. The equalization system includes a dedicated pump station, two tanks, and controlled volume return via a controller pinch valve. The Town also has a water reuse system, which includes chlorination and a dedicated reuse pump to provide water to an industrial user. The reuse system is permitted for 300,000 gallons per day (gpd), but current demand averages approximately 50,000 to 60,000 gpd. Solids treatment includes waste activated sludge pumps, a sludge thickening unit, two digester/storage basins. Waste solids are land applied by an outside contractor.

The Town’s sewer collection system includes approximately 30.6 miles of gravity sewer 4.4 miles of forcemain, six (6) lift stations, and 729 manholes. Most of the gravity sewer lines are more than 20 years old. A comprehensive Sanitary Sewer Evaluation Survey is underway for the collection system to identify and prioritize needed repairs.

D. Need for Proposed Facilities and Actions

Portions of the WWTP are more than 20 years old, and major equipment and structures need to be repaired or replaced. While annual average wastewater flow from the Town is approximately 0.5 MGD, peak daily flows can be as high as 1.4 MGD with three-day sustained peak flow of 1.2 MGD. These peak flows exceed the capacity of the existing equalization and WWTP capacity. The projected future wastewater flow for the Town, when combined with the planned 7,000-acre Chatham Park Development, is expected to be 4.41 MGD in 2035. Flow projections indicate that the existing WWTP’s rated capacity will be reached within three to five years.

In addition, the Town’s existing NPDES permit includes a requirement to meet future total nitrogen mass limits by January 1, 2022. Based on an evaluation of effluent data from 2011 to 2014, there is a need to add nitrogen treatment if the Town continues to operate and discharge treated wastewater from the current WWTP.

The proposed project is needed to accommodate future growth and to address peak flows, aging equipment, and future nitrogen effluent limits. Phase 1 is expected to be able to handle projected
flow from the Town and a portion of the Chatham Park development until 2026. Plans for Phase 2 will continue to be developed and will be constructed to meet the 20-year planning needs beyond 2026.

E. Alternatives Analysis

Meeting the wastewater needs of the Town of Pittsboro and the Chatham Park development over the 20-year planning window will require a phased approach and a combination of projects constructed by the Town and Chatham Park. The proposed project will include only Phase 1 of the Town’s project; however, the alternatives analysis considered the combination of Phase 1, Phase 2, and Chatham Park wastewater treatment plans to identify a comprehensive approach to meet the wastewater needs for the full 20-year planning window.

Alternative 1 – No-Action Alternative: The No-Action alternative would continue operating the WWTP under current conditions with no improvements. This alternative would do nothing to alleviate peak flow problems, address aging WWTP equipment, or provide for future growth in the Town and Chatham Park. This alternative would result in repeated by-passes at the existing plant. This alternative was rejected because it does not address the Town’s short-term and long-term wastewater needs.

Alternative 2 – Refurbish Existing WWTP, Pump to Sanford, Regional WWTP: Phase 1 of this alternative would include two major components: (1) refurbishing the existing WWTP to address aging equipment with the treatment capacity remaining at 0.75 MGD; and (2) construction a 1,740 gallon per minute (gpm) pump station at the existing WWTP and approximately 14 miles of forcemain to pump wastewater to Sanford’s Big Buffalo Creek WWTP. Phase 1 under this alternative would provide approximately 2.75 MGD of capacity (0.75 MGD treated at the existing WWTP and 2.0 MGD pumped to Sanford). Separately, a decentralized water reclamation facility (WRF) constructed by Chatham Park with initial capacity of 0.25 MGD and possible future expansion to 0.5 MGD, with treated water used for spray irrigation or reused for other purposes in the Chatham Park development. The decentralized WRF would be funded and constructed by Chatham Park. Phase 2 would consist of a preliminary plan to construction a regional WWTP with a 1.75 MGD capacity discharging to the Haw River. Alternative 2 has lower cost than Alternative 4 on a present worth basis but does have higher Phase 1 construction costs compared to Alternative 4. The agreement between the Town of Pittsboro and City of Sanford requires that all wastewater flow up to 2 MGD must be pumped to Sanford’s Big Buffalo WWTP. Alternative 2 cannot meet this requirement; therefore, this alternative is considered infeasible and is rejected.

Alternative 3 – Expand Existing WWTP, Regional Treatment Plants: Phase 1 of this alternative would include one major component: expansion of the existing WWTP to 1.249 MGD. Separately, a decentralized WRF would be constructed by Chatham Park with initial capacity of 0.25 MGD and possible future expansion to 0.5 MGD, with treated water used for spray irrigation or reused for other purposes in the Chatham Park development. The Chatham Park WRF would be constructed by Chatham Park concurrently with Phase 1. Phase 2 would include construction of a future regional WWTP discharging to the Haw River with initial capacity of 1.25 MGD with future expansion to 2.75 MGD. The regional WWTP is a preliminary plan that
would be fully developed as a separate Phase 2 project. The present worth cost analysis of this alternative is 25 percent higher than the present worth cost for Alternative 2 or Alternative 4 with no advantages to outweigh the additional cost. In addition, Alternative 3 has the disadvantages of more steps, greater treatment requirements, and more complicated operations. Because of these disadvantages and higher costs, this alternative was rejected.

**Alternative 4 – Convert Existing WWTP to Equalization Capacity, Pump to Sanford, Regional WWTP, Regional WWTP:** Phase 1 of this alternative would include two major components: (1) conversion of the existing WWTP to equalization only with a capacity of 1.1 million gallons through installation of two new equalization pumps and forecmain and conversion of existing tanks to equalization tanks with other treatment units at the WWTP being cleaned and left in place; and (2) construction of a 3 MGD peak-flow pump station (2 MGD average daily flow) at the existing WWTP and approximately 14 miles of forecmain to pump wastewater to Sanford’s Big Buffalo Creek WWTP. Separately, a decentralized WRF would be constructed by Chatham Park with initial capacity of 0.25 MGD and possible future expansion to 0.5 MGD, with treated wastewater pumped to the existing WWTP site to be discharged to Roberson Creek to the existing Pittsboro WWTP site and discharged to Roberson Creek with some reuse water provided for an industrial customer. Phase 2 would consist of construction of a future regional WWTP with capacity of 1.91 MGD discharging to the Haw River. The regional WWTP is a preliminary plan that would be fully developed as a separate Phase 2 project. This is the preferred Alternative because it preserves and expands equalization functions of the existing WWTP, avoids the need for the Town to treat wastewater, maximizes the treatment capabilities of Sanford’s WWTP, and meets the terms of the agreement with Sanford.

**F. Environmental Consequences and Mitigative Measures**

The proposed project does include expansion of wastewater conveyance and treatment capacity to serve anticipated growth and development with the Town of Pittsboro and a portion of the planned Chatham Park Development. Anticipated impacts and associated mitigation for direct impacts and secondary and cumulative impacts (SCI) are summarized below. These impacts and mitigative measures are described in detail in the Engineering Report/Environmental Information Document Revision No. 4 December 29, 2020 (ER/EID) prepared by the Town of Pittsboro and reviewed by the Division. SCI are covered in “Appendix N: Secondary and Cumulative Impacts S(CI) Document June 2020”, included in the ER/EID.

**Topography and Soils:** Construction at the WWTP site will include some minor permanent impacts to topography and soils from excavation, filling, and grading. Construction of the forecmain will have temporary impacts to soils and topography as the line is installed, but soils will be replaced and topography restored to pre-project conditions. Soil loss during construction will be minimized by following a DEQ-approved Erosion and Sedimentation Control Plan. A Floodplain Development Permit will be obtained from the Town of Pittsboro for installation of the forecmain. Future development will impact topography and soils through excavation, filling, and grading changes to build developments. Impacts to floodplains will be minimized through the Town’s Flood Damage Prevention Ordinance, which regulates development in floodways, floodplains, and Special Flood Hazard Areas. The Chatham Park master plan does not allow development in the 100-year floodplain or floodway. The master plan identifies ground slopes
greater than 20 percent and requires avoidance of disturbance of such slopes to the maximum extent possible. Chatham County’s Soil Erosion and Sedimentation Control program regulates ground disturbing activity.

Land Use: Impacts to land use are not expected to be significant. The proposed alignment for the force main primarily follows existing utility and Department of Transportation (DOT) rights-of-way. Work at the WWTP will occur within the existing property boundaries with no impact to land use. The Chatham Park master plan has been approved by the Town with the goal that land use will guide future development rather than future development guiding land use. The Chatham Park development process requires Small Area Plans to be prepared by Chatham Park and approved by the Town to encourage development in a planned manner and deter urban sprawl.

Wetlands: Significant impacts to wetlands are not anticipated. Directional drilling will be used for crossing wetlands associated with perennial streams. Open cutting may be used for crossing wetlands associated with intermittent streams where the total crossing, including buffers, is less than 150 feet. Impacted areas will be restored to original grade and stabilized. Most impacts will be temporary, but some permanent impacts will be necessary for maintenance easements. Such easements may result in conversion of some areas from forested cover to herbaceous vegetation. Erosion and sedimentation control measures will be implemented. SCI related to development will be minimized through adherence to Water Supply Watershed regulations for Protected Areas and Critical areas; the Town’s stormwater ordinance and stormwater control measures developed for Chatham Park documented in the master plan, stream buffers for the Haw River, Roberson Creek, and Stinking Creek.

The Town of Pittsboro’s Riparian Buffer Protection Ordinance includes the following general requirements: 50-foot buffer adjacent to surface waters, excluding wetlands, with a Zone 1 buffer 30 feet from the water’s edge and Zone 2 buffer 20 feet beyond the Zone 1 buffer. Wetlands adjacent to surface waters or within 50 feet of surface waters shall be considered part of the riparian buffer. Development in the North Village area will include buffers of 300 feet adjoining the top of the Haw River western bank in Section 1.1; 1,000 feet adjoining the top of the Haw River western bank in Section 1.5; 100 feet adjoining the top of each bank (200 feet total) for perennial streams; 100 feet adjoining the top of each bank for intermittent streams in the sections that discharge to the Haw River; and 50 feet adjoining the top of each bank (100 feet total) for other intermittent streams that drain to the Roberson River. Development in the South Village area will include buffers of 50 feet adjoining the top of each bank (100 feet total) for intermittent and perennial streams shown on the National Resource Conservation Service (NRCS) soil survey and 100 feet adjoining the top of each bank (200 feet total) for perennial streams shown on the United States Geologic Survey (USGS) topographic maps. Additionally, the Chatham Park Open Space Element requires an additional 50 feet of open space adjacent to the riparian buffer on each side of the portions of Roberson Creek that are located in Chatham Park; an additional 150 feet of open space or park land along the south side of Roberson Creek in Chatham Park; and approximately 250 acres of open space and/or park land in the far southeast corner of Chatham Park.
Important Farmlands: Significant impacts to important farmlands are not anticipated. Construction will take place on the existing WWTP site, utility easements, DOT rights-of-way. Although some land that will be crossed by the forcemain includes soils designated as prime and unique farmland, these lands are not currently in agricultural use. Impacts to such areas will be temporary, with trenches back-filled after construction. Development is planned for areas that will not be farmed with no conversion of farmlands anticipated, thus no SCI to important farmlands are expected.

Public Lands and Scenic, Recreational, and State Natural Areas: Significant impacts to public lands, scenic, recreational, or state natural areas in the project area or service area are not anticipated. The forcemain route runs adjacent to Endor Iron Furnace and the Town’s Rock Ride Park, but these resources will not be disturbed. Chatham Park’s master plan includes open space elements, parks, and buffers to minimize impacts to state and federal lands near the proposed development areas. Riparian buffers and maintenance of existing forest habitat as well as storm water management plans will mitigate impacts to the Haw River and surrounding natural areas.

Cultural Resources: Impacts to cultural and historic resources are not anticipated. The North Carolina State Historic Preservation Office (SHPO) noted that it is unlikely that significant archaeological sites will be affected by the project and did not recommend an archaeological survey but did request that caution be used during installation of the forcemain in the vicinity of the Endor Iron Furnace (September 8, 2017, ER 17-1469). The forcemain route will stay within an existing utility easement owned by the City of Sanford adjacent to the Endor Iron Furnace to avoid any impacts. An historic assessment has been conducted for Chatham Park’s North Village to identify historic resources, including the Griffin House, which has been donated to the NC Preservation Society, and the Riddle-George-Straughan historic cemetery, which will be preserved as the North Village is developed. A similar assessment will be done for Chatham Park’s South Village as development plans proceed.

Air Quality: No significant impacts to air quality are anticipated. Construction activities may cause a temporary increase in vehicle emissions as well dust. Construction equipment will be properly equipped with emission controls, and contractors will spray down soil piles or dry material as necessary to minimize dust. SCI will be minimized through adherence to erosion and dust control measures during construction. The Chatham Park master plan includes a transit plan to encourage multi-modal transportation options such as bicycles, pedestrians, and fixed route transit to reduce car traffic and associated emissions in the Chatham Park development.

Noise Levels: No significant permanent noise impacts are anticipated. Construction activities will be limited to normal daytime working hours. Construction equipment will include mufflers and noise suppression equipment as appropriate. SCI will be mitigated through adherence to the Town of Pittsboro’s noise ordinance as well as Chatham Park’s transit plan encouraging multi-modal transportation options to help minimize vehicular traffic and associated noise levels.

Water Resources: No significant impacts to water resources are anticipated. The forcemain route crosses Roberson Creek, Turkey Creek, Rocky River, Deep River, and numerous unnamed tributaries to these waters. Directional drilling will be used for crossing perennial streams and associated wetlands, with open cut used for crossing intermittent streams and associated
wetlands. Impacts from construction activities will be mitigated through use of a DEQ-approved Erosion and Sedimentation Control Plan and adherence to permit and buffer requirements from the Division of Water Resources and U.S. Army Corps of Engineers. SCI related to development will be minimized through adherence to Water Supply Watershed regulations for Protected Areas and Critical areas; the Town's stormwater ordinance and stormwater control measures developed for Chatham Park documented in the master plan, stream buffers for the Haw River, Roberson Creek, and Stinking Creek. (See the discussion under wetlands for detailed information on buffer requirements.)

Forest Resources: Significant impacts to forest resources are not expected. Construction will take place on the cleared WWTP site, and the foremain route largely follows existing easements and rights-of-way that have already been cleared. A small amount of clearing will be required for some portions of the route. Clearing will be minimized to the extent possible. Future development will result in some forest clearing. Riparian buffer requirements will protect some forested areas. Buffer areas will be maintained. The Chatham Park Tree Protection Element and Landscaping Element include specific provisions to mitigate forest resource impacts and include measures to retain or replace specific percentages of trees.

Shellfish or Fish and Their Habitats: Significant impacts to shellfish, fish, and their habitats are not expected. Directional drilling will be used for crossing perennial streams to minimize direct construction impacts. Area streams do provide habitat for a number of state and/or federally listed threatened or endangered species including the Cape Fear Shiner (Notropis mekistocholas), Brook Floater (Alasmidonta varicose), Carolina Creekshell (Villosa vaughaniana), Creeper (Strophitus undulatus), and Triangle Floater (Alasmidonta undulata). In addition, area streams are tributary to the Haw River, which provides critical habitat for the endangered Cape Fear Shiner. The U.S. Fish and Wildlife Service noted that with the SCI measures detailed in Appendix N of the ER/EID, no adverse impacts are anticipated. These SCI measures include the following: (1) expanded buffers, (2) limitations on development in the floodplain and steep slopes, (3) no change in 1-year 24-hr storm event hydrograph, (4) no change in peak discharge rates for 1 to 10 year 24-hr storm events, (5) retention of 85% of suspended solids on-site, adverse impacts are not anticipated. The U.S. Fish and Wildlife Service encourages the Town to include them in the design and review of stormwater monitoring by providing copies of the Stormwater Element Annual Compliance Reports.

Wildlife and Natural Vegetation: No significant impacts to wildlife and natural vegetation are expected. Construction activities will take place at the existing WWTP site and in existing easements and rights-of-way. The project areas do not include habitat for any threatened and endangered terrestrial wildlife species. Wildlife may be temporarily disturbed or displaced during construction activities but are expected to return upon completion of construction activities. Impacts from future development will be mitigated through maintenance of buffers and open space requirements, parks, tree protection, and landscape requirements that are part of the Chatham Park master plan. The Chatham Park development will include River Park, which will maintain a wildlife corridor near the Haw River. The federally endangered Harperella (Ptilimnium nodosum) plant occurs on gravel or rocky shoals or sandbars along certain streams, with a population in the Deep River in Chatham County. This species is sensitive to changes in water flow. The U.S. Fish and Wildlife Service noted that with the SCI measures detailed in Appendix N of the ER/EID, no adverse impacts are anticipated. These SCI measures include the
following: (1) expanded buffers, (2) limitations on development in the floodplain and steep slopes, (3) no change in 1-year 24-hr storm event hydrograph, (4) no change in peak discharge rates for 1 to 10 year 24-hr storm events, and (5) retention of 83% of suspended solids on-site.

**Introduction of Toxic Substances:** The project is not expected to introduce toxic substances into the environment. The contractor will take appropriate actions to prevent spills of gasoline, diesel fuels, lubricants, and hydraulic fluids and will follow EPA’s Spill Prevention Control and Countermeasures rule as appropriate.

The U.S. Fish and Wildlife Service reviewed the proposed project and concluded that with measures outlined in the ER/EID Appendix N implemented appropriately, threatened and endangered species should not be adversely impacted (October 1, 2020). The North Carolina Wildlife Resources Commission, Natural Heritage Program, and DWR Raleigh Regional Office do not object to the proposed project. The U.S. Army Corps of Engineers was consulted and did not object to the project. The North Carolina Department of Natural and Cultural Resources does not anticipate impacts to historic resources as a result of the project the project (September 8, 2017, ER 17-1469).

**G. Public Participation, Sources Consulted**

The Town held public meetings on November 9, 2020, and December 14, 2020 via videoconference due to the COVID-19 pandemic. Both meetings included a presentation about the proposed project and an opportunity for questions and comments from the Board of Commissioners and the general public. Board members did not object to the project but asked several questions as summarized with responses as follows:

- **Comment:** Is the 1.91 MGD from Alternative 4 what was left on the permit?
  **Response:** 1.91 MGD is based on the 20-year demand curve (4.41 MGD minus the Phase 1 capacity of 2.5 MGD). The 1.97 MGD is the permit capacity for discharge to the Haw River.

- **Comment:** Clarification requested to the 1.91 MGD discharge to the Haw River from the future Phase 2 plant. Commenter’s understanding is that the Town’s total discharge is 3.22 MGD with 1.249 going to Roberson Creek and the remaining 1.971 going to the Haw River.
  **Response:** when the Town reaches Phase 2, the number might be a little higher than 1.91; this is why the numbers appear to be off.

- **Comment:** Is the projection for 2.0 MGD capacity to last 8-10 years from 2017?
  **Response:** The numbers are based on the growth project report. The Capacity Graph shows proposed timeframes and how needs will change with time.

- **Comment:** (Regarding graph in the presentation) Would the plant have to be fully operational for the 2.5 MGD
  **Response:** Where the red line crosses the 2.5 MGD on the graph, the Town will be out of sewer capacity.
• Comment: Does construction have to be completed and ready to start up while also dealing with the pump station and forcemain? The initial version of the ER/EID was submitted in 2016, and it’s now almost 2021 and just now getting to permitting. If that 2.5 MGD is good for 8-10 years, then the Town needs to start on Phase 2 as soon as possible.
Response: Phase 2 will not take as long because a permit will not have to be obtained and the agreements are already in order.

• Comment: Will the ER-EID come off the table once the Town begins to pump sewer to Sanford?
Response: No.

• Comment: Will the proposed infrastructure in the ground have the ability to increase sewer capacity without constructing a separate or new force main?
Response: The Town might need to construct another intermediate pump station or replace the pumps in the Phase 1 pump station; however, the force main pipe is sized where it could remain in the ground unchanged.

• Comment: How much additional capacity could the force main pipe handle?
Response: That number will be researched and reported back to the Board.

• Comment: If the Town were to consider the Interbasin Transfer (IBT), how long would that process take?
Response: Rule of thumb is 3-5 years as the Town would have to go through the EMC board for approval.

• Comment: If the Town placed a pipe in the right-of-way and pumped back from Sanford, would that impact IBT volume rules?
Response: Yes, it does; if you get water back in return, however, it is unlikely to off-set all the wastewater flow sent to Sanford.

• Comment: What is the loan origination fee?
Response: It’s a lump sum of money paid directly by the Town and not rolled into the loan.

• How did we reach $686,000?
Response: Mathematical response provided.

• Comment? Is the reserve fee paid each year until reaching 2.5 MGD in flow or for the duration length of the agreement?
Response: The loan is paid over a 20-year term, and the Chatham Park portion is paid over a 10-year term.

• Comment: Will the 30-day FONSI notice period start as of the meeting date?
Response: No, comments would be submitted to the Division and sent out to the public
before the 30 days begins.

- **Comment:** What does “future regional treatment plant” refer to?
  **Response:** The combined wastewater improvements planned for Pittsboro and Chatham Park.

- **Comment:** Does the reuse water sent to 3M reduce the overall discharge?
  **Response:** Yes, that is correct.

- **Comment:** How is discharge affected if the Town finds another reuse water customer?
  **Response:** That would benefit the Town even more.

- **Comment:** Are any plans for alternative discharge to be considered? Could the Town treat 1.249 MGD at the plant and discharge zero to Roberson Creek if the Town had another location to discharge?
  **Response:** Yes, but only if the Town finds enough demand in reuse water.

- **Comment:** If we are going to use 8-10 MGD now, we will need much more capacity soon. The Town may need to increase flow going to Sanford as building another wastewater treatment plant will likely take a long time.
  **Response:** The Town may want to consider that as soon as possible.

In addition to the above questions and comments from the Board, the following comments were received from the public:

- **Comment:** Chatham Park will be operating its own plan and will need customers. I assume those customers will not contribute to the capital costs of the Sanford line. The lag time between the Sanford line becoming operational and state of loan payments is not many years. How much growth outside of Chatham Park can be reasonably expected in a short period to add new customers to the Town’s system and the Town’s portion of loan payments?
  **Response:** Based on growth projects, approximately 241 new connections per year are anticipated within the Town, with Chatham Park anticipated to add another 390 connections per year. Note that Chatham Park residents are Town residents and customers and will be charged user rates by the towns. Also note that, depending on development patterns, sewer infrastructure, and timing, and portion of Chatham Park wastewater flow may be directed to the Pittsboro pump station rather than the decentralized plant.

- **Comment:** How can the Town reasonably expect to add the equivalent of 14 subdivisions of 100 homes outside of Chatham Park in just two years or less?
  **Response:** The growth rates in the ER/EID are not intended to imply 1,400 connections in the first two years. The number is intended to show anticipated connections required in a reasonable but not specific amount of time to produce no net increases in rates paid by customer base. The Town currently has approximately $2.0 million in retained sewer
fund earnings that could be used to fund the initial loan payments as the customer base grows. The approval of the Sanford sewer force main and associated wastewater improvements project allows the Town the ability to authorize development that is currently delayed or behind schedule to be reactivated and facilitate growth of the Town's utility customer base.

- Comment: As a business owner in Town, commenter is pleased to see the project moving forward and looks forward to construction completion.
  Response: Comment noted and appreciated.

The current user charge for a typical residential customer is $72 per month for water and sewer service combined, based on the average use of 3,200 gallons per month. An analysis of rates based on existing users shows an increase of $23 per month (approximately 58%) for typical users. However, the Town does not plan to raise rates for existing users. Rapid development will add new users to the system to pay for additional costs. The Town has an approved agreement with Chatham Park for assistance with paying for 62.5 percent of the loan for this project as well as a portion of the Sanford Capacity Reserve Charge. The agreement also includes funding from Chatham Park if there is a shortfall in user revenues prior to connecting new users. With this agreement in place, the Town does not anticipate an increase in rates for existing customers.

Sources consulted about this project for information or concurrence included
1) Town of Pittsboro
2) Chatham County
3) North Carolina Department of Environmental Quality
   - Wildlife Resources Commission
   - Natural Heritage Program
   - DEQ Raleigh Regional Office
   - Division of Air Quality
   - Division of Water Resources
   - Division of Forest Resources
   - Division of Environmental Assistance and Customer Service
   - Division of Waste Management
4) North Carolina Department of Natural and Cultural Resources
5) North Carolina State Clearinghouse
6) North Carolina Department of Public Safety
7) U.S. Fish and Wildlife Service
8) U.S. Army Corps of Engineers