



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Raleigh ES Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

24 October 2017

Town of Pittsboro
Attn: Board of Commissioners
PO Box 759
Pittsboro, NC 27312

RE: Comments on proposed stormwater management for Chatham Park Planned Development District, Town of Pittsboro, NC

Dear Board of Commissioners:

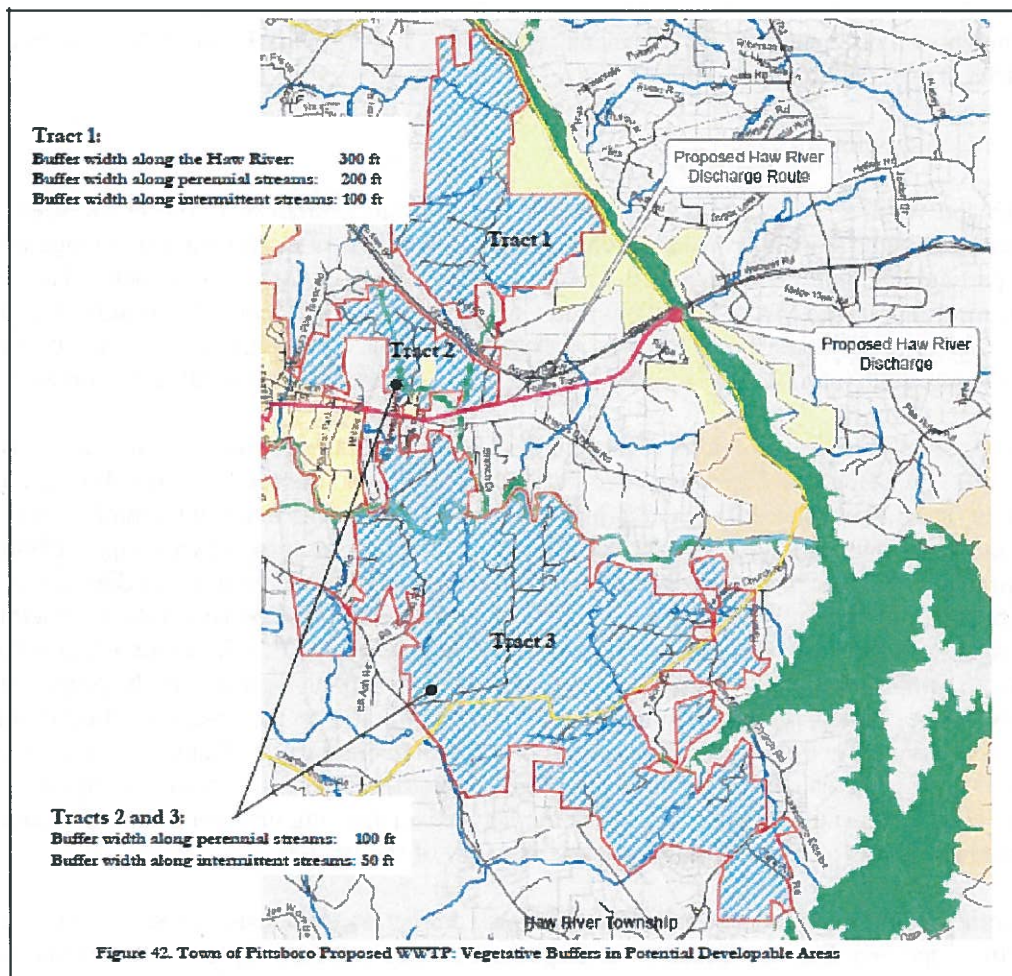
The U.S. Fish and Wildlife Service (Service) would like to submit comments for the Town of Pittsboro's (Town) Board of Commissioners' consideration regarding development of stormwater management regulations, particularly in reference to considerations for the Chatham Park development. This letter is submitted in accordance with the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d), and the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et. seq.), to be used in your public interest review relative to the protection of fish and wildlife resources.

The Service has submitted several letters regarding the Chatham Park development – the first was submitted to the Town Board of Commissioners on 22 July 2013, and the second was submitted to the Town Manager on 18 November 2013, and a third was sent to the Town Board of Commissioners on 22 May 2014. In these previous letters, the Service noted that the proposed project will impact tributaries that flow into the Haw River in the upper Cape Fear River basin. These streams drain directly to occupied habitat for the federally endangered Cape Fear Shiner (*Notropis mekistocholas*). In addition, several federal at-risk species (Yellow Lampmussel (*Lampsilis cariosa*), Brook Floater (*Alasmidonta varicosa*), and Septima's Clubtail Dragonfly (*Gomphus septima*)) are also present in the project area. Federal goals for the conservation of trust resources depend explicitly on the sustained integrity of the Haw River ecosystem. The Cape Fear Shiner Strategic Habitat Conservation Planning Team (consisting of federal and state agency staff, University researchers, and other Cape Fear shiner experts) has identified the Haw River (i.e., the entire length of the Haw River flowing through Chatham County, ending at Jordan Lake) as necessary habitat for the recovery of the species.

We are concerned about the impacts of the Chatham Park project on the sensitive species in this area, particularly the Cape Fear Shiner. Because the Cape Fear Shiner is present in low numbers and the range of surviving populations are restricted, this fish species is vulnerable to threats to its habitat such as land use changes, chemical spills, road construction, stream channel modification, changes in stream flows from hydroelectric power, impoundments, wastewater discharges, stormwater, increases in agricultural runoff, and other projects in the watershed. Many areas along the Haw River are recognized for their rarity, ecological function in the landscape, and unique natural resources that they support. The importance of the habitats these areas provide for fish and wildlife makes protection from habitat degradation essential.

As the Town considers ways to manage stormwater for the newly developed areas of Chatham Park, the Service encourages the Town to consider commitments made in the Environmental Impact Statement for the Town's Wastewater Treatment Plant (WWTP) in 2010 (attached), as mentioned in our letter dated 22

May 2014. Specifically, Section F.5 “Wetlands and Streams” of the EIS (p.221) states that “the Town of Pittsboro will...ensure that the mitigation requirements listed...are met.” One of the listed requirements (p.221) is the “Maintenance/establishment of minimum-forested buffers for the protection of priority habitats: Buffers along the top banks of the Haw River will be 300 ft to comply with the perpetual riparian buffer established by the Lower Haw River State Recreation Area (i.e. Tract 1 and areas adjacent to the Haw River; See Figure 42 [inserted below]). The vegetative buffer along other streams different from the Haw River within Tract 1 will be 200 ft for perennial streams and 100 ft for intermittent streams. Tracts 2 and 3: vegetative buffers will be 100 ft along perennial streams and 50 ft along intermittent streams.”



The Town also indicated it would implement and enforce specific mitigation measures for the protection of wetlands and streams:

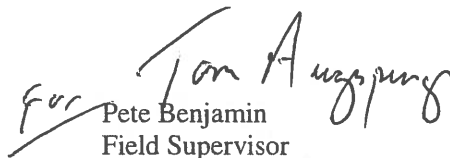
- For new developments, the Town of Pittsboro will encourage developers to set aside a portion of the land to be developed as green space and concentrate these areas along streams and rivers (see recommended buffer widths in Figure 42). Promote sufficient open space to reduce impervious surfaces.
- For new developments, install grassed swales in place of curb/gutter and on-site stormwater management (bio-retention areas), except in areas with >5% slope.

- For new developments draining to the Haw River (i.e. Tract 1) exceeding 6% imperviousness, the Town of Pittsboro requires the developer to include stormwater controls designed to replicate and maintain the hydrographic condition at the site prior to the change in landscape.
- For new developments not draining to the Haw River (i.e. Tracts 2 and 3) the Town of Pittsboro commits to limit impervious surfaces to less than 10% and promotes sufficient open space to reduce impervious surfaces.
- Buffers along the top banks of the Haw River will be 300 ft to comply with the perpetual riparian buffer established by the Lower Haw River State Recreation Area (i.e. Tract 1 and areas adjacent to the Haw River).
- The vegetative buffer along other streams different from the Haw River within Tract 1 will be 200 ft for perennial streams and 100 ft for intermittent streams. Tracts 2 and 3: vegetative buffers will be 100 ft along perennial streams and 50 ft along intermittent streams.

The Service's previous comments to the Town have encouraged Chatham Park to work with the Town staff to address issues of potential direct, secondary and cumulative impacts of new development, and we have offered assistance to the Town as considerations are made for protecting fish and wildlife resources in its jurisdiction. As the Town considers implementing the Chatham Park Stormwater Manual (dated 27 June 2017), the Service encourages the Town to ensure that the stormwater management devices and plans comply with the aforementioned commitments made by the Town. The Service is concerned that without detailed natural resource-focused stormwater planning and wildlife-friendly zoning, the secondary and cumulative impacts associated with increased development in this area could result in significant degradation of aquatic habitats or extirpation of listed species. Again, we urge the Town to incorporate commitments to protective measures in the watersheds draining to the Haw River in order to address issues of secondary and cumulative impacts of new development in Chatham Park.

The Service hopes to continue discussions with the Town as you plan for growth and conserve local species and habitats, including those of endangered and at-risk species. If you have any questions regarding our perspectives on the unique value of the stream for endangered species conservation or the urgency in implementing strategies to address and manage impacts to rare species, please contact Sarah McRae at 919-856-4520x16 or sarah_mcr@fws.gov.

Sincerely,


for Pete Benjamin
Field Supervisor

Attachments

eC: Brooke Massa, NCWRC
Gabriela Garrison, NCWRC
Susan Kubacki, NCDWR
Bryan Gruesbeck, Town Manager, Pittsboro



**ENVIRONMENTAL IMPACT STATEMENT
PROPOSED WASTEWATER TREATMENT PLANT AND
DISCHARGES INTO ROBESON CREEK AND THE HAW RIVER**

TOWN OF PITTSBORO, NC

SUBMITTED TO:

N.C. Department of Environment and Natural Resources
Division of Water Quality/ Planning Branch
Ms. Hannah Stallings
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

SUBMITTED BY:

William G. Terry
Town of Pittsboro
Town Manager: 635 East Street
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PREPARED BY:

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January 26, 2010

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F.5 Wetlands and Streams

Direct Impacts to wetlands will not occur. Wetland WS-1, located on the northwest portion of the existing WWTP site, will not be impacted (See Section E.5- Alternative 3). To prevent or minimize direct impacts to streams, the Town of Pittsboro will utilize construction managers and inspectors from their selected engineering firm (s) to monitor construction activities and ensure that the mitigation requirements listed below are met. Some of these measures were adapted from the “Guidance Memorandum to Address and Mitigate Secondary and Cumulative Impacts to Aquatic and Terrestrial Wildlife Resources and Water Quality”, published by the NC Wildlife Resources Commission in 2002. These measures are applicable to the protection of wetlands (no direct impacted with this project), streams and, consequently, water resources/quality:

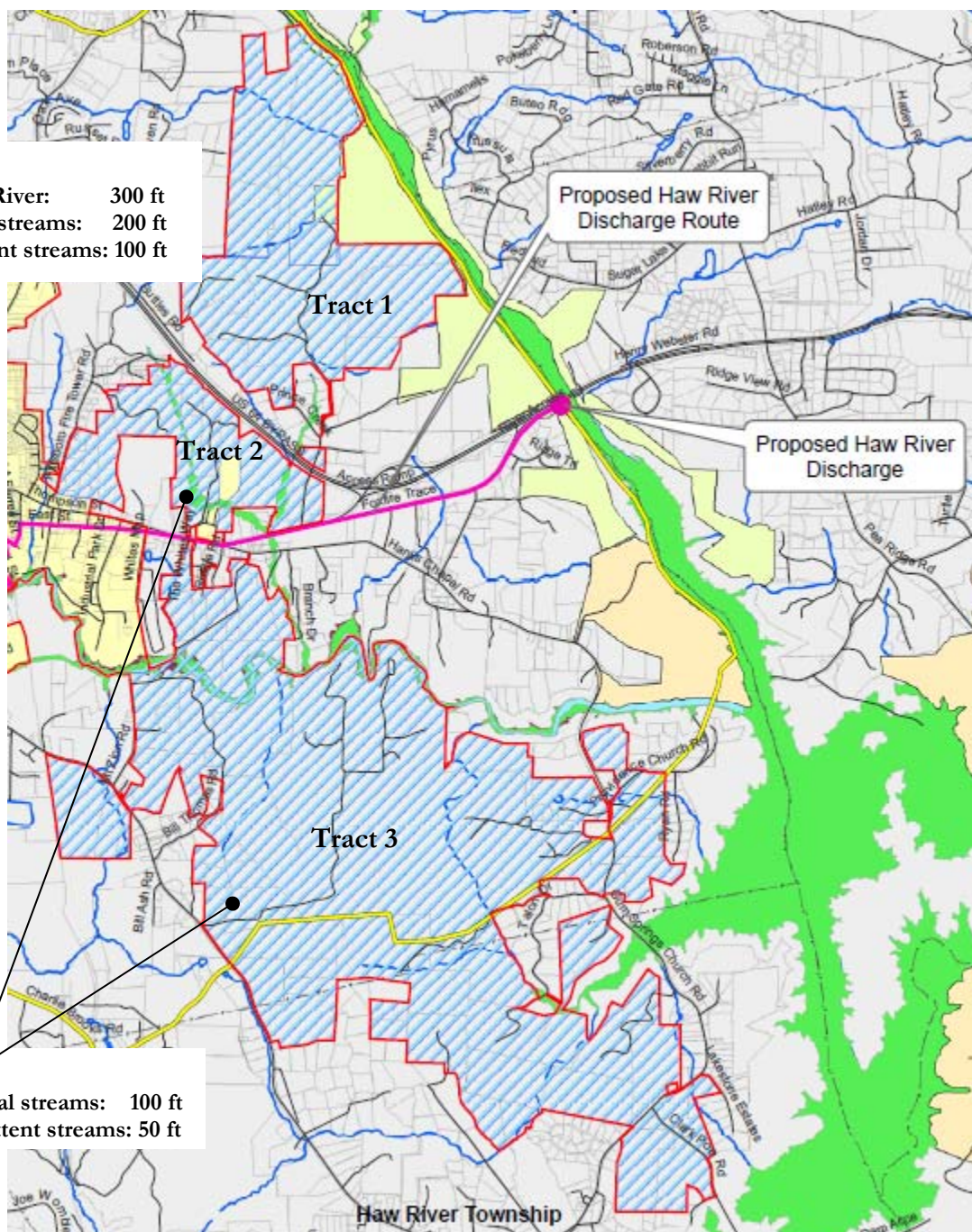
- Delineation of streams will be performed according to the US Army Corps of Engineers or N.C. Division of Water Quality Methodology.
- The forcemain will be buried below grade and will have no permanent impact on floodway hydrology or on aquatic life habitats.
- Directional bore for stream crossing will be used.
- Stream crossings will be near perpendicular (75° to 105°) to stream flow to the extent practicable to minimize impacts to riparian vegetation.
- Stream crossings will be monitored at least every three months for maintenance needs during the first 24 months of the project and then annually thereafter.
- A plan, in compliance with the state erosion controls and regulations (See Section F.2) will be submitted to NC DENR/DLR for approval. The plan will specify temporary sedimentation and control structures necessary to reduce the effects of stormwater runoff during construction.
- Erosion and Sediment Control Plans: The Town of Pittsboro ensures the correct installation and maintenance of erosion control structures to avoid soil loss or sedimentation impacts to streams and nearby wetlands (refer to Section F.2).
- Maintenance/establishment of minimum-forested buffers for the protection of priority habitats: Buffers along the top banks of the Haw River will be 300 ft to comply with the perpetual riparian buffer established by the Lower Haw River State Recreation Area (i.e. Tract 1 and areas adjacent to the Haw River; See Figure 42). The vegetative buffer along other streams different from the Haw River within Tract 1 will be 200 ft for perennial streams and 100 ft for intermittent streams. Tracts 2 and 3: vegetative buffers will be 100 ft along perennial streams and 50 ft along intermittent streams.
- Pre-construction contours in stream crossings along the forcemain will be restored and cleared areas re-vegetated.
- Contractors will immediately begin seeding and landscaping operations upon completion of any construction activity in order to re-establish vegetation on the disturbed areas of the project. This requires that the contractor comply with all sediment and erosion control measures and BMPs required under all applicable regulations to mitigate any potential direct environmental impacts that could occur because of the construction.

Tract 1:

Buffer width along the Haw River: 300 ft

Buffer width along perennial streams: 200 ft

Buffer width along intermittent streams: 100 ft



Tracts 2 and 3:

Buffer width along perennial streams: 100 ft

Buffer width along intermittent streams: 50 ft

Figure 42. Town of Pittsboro Proposed WWTP: Vegetative Buffers in Potential Developable Areas

- Construction specifications to avoid the release of toxic substances will include:
 - Leaking of chemicals from construction equipment will be completely avoided by providing equipment maintenance and continuous containment and inspection of any toxic substances present (oils, solvents, cleaners).
 - Pesticides (including insecticides and herbicides) will not be used for maintenance of ROWs within the vegetated buffers indicated in Figure 42, or within floodplains and wetlands associated with these streams.

F.5 Wetlands and Streams (Cont'd)

Indirect and Cumulative Impacts to wetlands and streams would occur because of development (Refer to Section F.0). In addition, indirect and cumulative impacts to wetlands and streams will be avoided or mitigated with the implementation and enforcement of the Town of Pittsboro and Chatham County regulations for the protection of those features:

- Specific Mitigation Measures that will be Implemented by the Town of Pittsboro for the protection of wetlands and streams:
 - For new developments, the Town of Pittsboro will encourage developers to set aside a portion of the land to be developed as green space and concentrate these areas along streams and rivers (see recommended buffer widths in Figure 42). Promote sufficient open space to reduce impervious surfaces.
 - For new developments, install grassed swales in place of curb/gutter and on-site stormwater management (bio-retention areas), except in areas with >5% slope.
 - For new developments draining to the Haw River (i.e. Tract 1) exceeding 6% imperviousness, the Town of Pittsboro requires the developer to include stormwater controls designed to replicate and maintain the hydrographic condition at the site prior to the change in landscape.
 - For new developments not draining to the Haw River (i.e. Tracts 2 and 3) the Town of Pittsboro commits to limit impervious surfaces to less than 10% and promotes sufficient open space to reduce impervious surfaces.
 - Buffers along the top banks of the Haw River will be 300 ft to comply with the perpetual riparian buffer established by the Lower Haw River State Recreation Area (i.e. Tract 1 and areas adjacent to the Haw River).
 - The vegetative buffer along other streams different from the Haw River within Tract 1 will be 200 ft for perennial streams and 100 ft for intermittent streams. Tracts 2 and 3: vegetative buffers will be 100 ft along perennial streams and 50 ft along intermittent streams.
- Chatham County Watershed Protection Ordinance (Exhibit H-5, Section 304, pages 16-18) establishes the following buffer widths for streams and wetlands within the Chatham County jurisdiction (i.e. south of Tract 3).
 - A minimum fifty (50) foot vegetative buffer for development activities is required along all intermittent waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps or as determined by local government studies.
 - A minimum one hundred (100) foot vegetative buffer for development activities is required along all rivers/perennial streams.
 - A minimum one hundred (100) foot vegetative buffer for development activities is required along all perennial and intermittent waters with 2,500 feet of rivers. The vegetative buffers listed above shall be required unless the applicant demonstrates that a lesser distance (but not less than thirty (30) feet) is adequate to guard against stream pollution. Evidence may be based on topography, soils, geology, and other pertinent information.
 - A minimum one hundred (100) foot vegetative buffer is required along all perennial streams for all new development activities that exceed the low-density option. A buffer with reduction is not allowed for development activities that exceed the low-density option.

F.5 Wetlands and Streams (Cont'd)

No new development will be allowed in vegetative buffers:

- No new development is allowed in the buffer except for water dependent structures and public projects such as road crossings and greenways where no practical alternative exists.
- These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the utilization of stormwater Best Management Practices. Desirable artificial stream bank or shoreline stabilization is permitted.

Protection of vegetative buffer:

- To avoid a loss of effectiveness in protecting streams, the stream buffer shall remain in natural undisturbed vegetation, except as provided below.
 - Clearing, grading or other land disturbing activities which would reduce the effectiveness of the buffer shall be re-vegetated.
 - Buildings and other features that require grading and construction shall be set back at least ten (10) feet from the edge of the buffer. Crossings by streets, driveways, culverts, railroads, recreational features, intakes, docks, utilities, bridges or other facilities shall be designed to minimize the amount of intrusion into the buffer. The buffer can serve to meet minimum lot size requirements if there is sufficient buildable area remaining on the lot.
 - Stream buffers can be used for passive recreational activities such as walking and bicycling trails, provided that service facilities for such activities, including but not limited to parking, picnicking and sanitary facilities, are located outside the buffer.
 - Trails running parallel to the stream shall be located at least ten (10) feet from the edge of the stream. Water oriented recreational facilities, such as boat or fishing piers, shall require an approved use permit from the Watershed Administrator.
 - Clearing and re-vegetating the stream buffer for the purposes of improving its pollutant removal efficiency may be permitted.
- Specific Mitigation Measures that will be implemented by Chatham County for the protection of the areas to be developed southeast of Pittsboro, near Jordan Lake, the Chatham County LUP in page 22 (Exhibit H-4, page 22) establishes that when designing a development project, developers will:
 - Protect sensitive lands such as wetlands, stream corridors, and steep slopes;
 - Maintain scenic views by protecting ridgelines and buffering road corridors, and
 - Provide connected open space.

The mitigation measures listed above will be outlined in the project plans, contract documents, and specifications during the design phase of the project. Contract documents and specifications require that the contractor "...comply with Federal, State, and local regulations pertaining to the environment, including but not limited to water, air, solid waste and noise pollution."