PRESENTATION RELATED TO

BUFFER - WETLANDS - DRAINAGE

INITIATIVE

SEPTEMBER 21, 2021

DISCUSSION

- 1. Buffer Initiative History
- 2. Wetlands & Buffer Working Group (WBWG) Formation
- 3. WBWG Progress & Recommendations
- 4. "Current" Working Document
- 5. Possible Next Steps

BUFFER INITIATIVE HISTORY

- Discussed during the 2018 Comprehensive Land Use Plan with references included in the Plan
- Recognition the current County Code needs updating
- Recent Development General Assembly
 - Senate Joint Resolution 2
 - DIRECTING THE DELAWARE DEPARTMENT OF NATURAL REOURCES AND ENVIRONMENTAL CONTROL TO BEGIN COORDINATION WITH THE FEDERAL AGENCIES CARRYING AUTHORITY TO IDENTIFY THE STRUCTURE NECESSARY FOR A STATE NONTIDAL WETLANDS PROGRAM FOR THE PURPOSE OF SHIFTING PERMITTING AUTHORITY FROM THE FEDERAL LEVEL TO THE STATE.
 - Requires DNREC to develop a report in 1 year to "identify administrative structure, legal structure, and resource needs to establish a State nontidal wetlands permitting program."

2018 COMPREHENSIVE LAND USE PLAN

Future Land Use Element

Objective 4.3.1 Consider strategies for preserving environmental areas from development and the protection of wetlands and waterways.

Objective 4.3.2 Promote new development that incorporates preserved usable open space and mitigates for the protection or replacement of environmental resources in subdivision design.

Strategy 4.3.2.1 Improve the cluster development ordinance.

Strategy 4.3.2.2 Consider deletion of wetlands from density calculations.

Objective 4.4.1 Ensure that new development complements the character of the existing surrounding communities.

Strategy 4.4.1.1 Identify an appropriate range of landscape buffer distances based on location, height, and context.

Strategy 4.6.1 Support the Center for the Inland Bays and other conservation groups in their efforts to educate more people about the necessity of protecting tidal wetlands and other natural resources.

Strategy 4.6.2 Recognize the Inland Bays, their tributaries and other waterbodies as valuable open space areas of ecological importance.

Conservation Element

Strategy 5.1.1.2 Identify an appropriate range of landscape buffer distances based on location, height, and context.

Strategy 5.1.1.6 Consider creating an ordinance designed to protect established, mature, healthy trees during the construction of new developments to better preserve existing trees and green spaces.

Strategy 5.2.1.4 Support and promote the Forest Legacy Program and other programs that sustain and protect working forests.

Strategy 5.3.1.1 Consider developing a program for wetlands and waterways protection.

Strategy 5.3.1.3 Identify an appropriate range of wetlands buffer distances based on location and context.

Strategy 5.3.1.7 Explore opportunities to better support waterway management.

WORKING GROUP

Wetlands & Buffer Working Group formed in 2019

- 1. David Baird
- 2. Chris Bason
- 3. Jay Baxter
- 4. Rich Borrasso
- 5. Jeff Clark

- 6. Ed Launay
- 7. Steve Marsh
- 8. Evelyn Maurmeyer
- 9. Danielle Swallow
- 10. Robert Tunnell III

- 11. Bill Ullman
- 12. Bob Wheatley
- 13. R.C. Willin

County Staff

- 1. Todd Lawson
- 2. Hans Medlarz
- 3. Janelle Cornwell
- 4. Jamie Whitehouse
- 5. Vince Robertson
- 6. Jim Eisenhardt (RK&K Consultant)

BACKGROUND & HISTORY*

GOAL

Convened to provide recommendations to Sussex County Council for updating the County buffer ordinance as it applies to development projects submitted to Sussex County for new residential developments for major subdivisions, cluster subdivisions, residential planned communities, and residential conditional uses.

STATISTICS

- 9 three-hour meetings between February and August 2019
- 13 members representing a variety of interests including academia, agriculture, development, environment, land use, and natural resources
- 4 Sussex County staff members
- 2 consultants / facilitators
- 3 presentations from subject-matter experts
- 5 homework assignments (+ reading and reviewing)

* This information was presented to County Council on September 10, 2019.

BACKGROUND & HISTORY

- WBWG continued its work throughout 2019 until March 2020
- Consensus reached on numerous points, including:
 - Resources subject to the ordinance;
 - Definitions for those resources;
 - Definition and function of buffers;
 - Buffer widths to protect each resource;
 - Two-zone buffer management approach;
 - The width of each zone in each buffer;
 - Some activities allowed or prohibited in each buffer zone;
 - Buffer averaging permitted in Zone B; and
 - Buffers and resources would not be located on any individual subdivided lots.
- County staff reviewed recommendations and developed the working draft related to "certain drainage features, wetland and water resources and the buffers thereto."

Buffer - A managed area between land uses, natural resources, or other features.

| Function | Function Description |
|----------------------------------|---|
| General | Protect the resources defined in the ordinance and their associated functions |
| Water Quality | Reduce and filter sediment, nitrogen, and phosphorous loads; moderate water temperature; promote infiltration, stabilize water's edge/provide erosion reduction |
| Habitat | Provide nesting and roosting opportunities for wildlife that use protected resources, provide sanctuary/refuge for wildlife during high water events, provide critical water's edge habitat, protect breeding and feeding grounds, protect rare/endangered species associated with these resources and their upland edge. |
| Flood Mitigation and Drainage | Reduce flood velocities, provide additional storage/conveyance, reduce stormwater discharge energy |

Defines the following terms:

- 1. Ephemeral Streams
- 2. Intermittent Streams
- 3. Non-tidal Wetlands
- 4. Ordinary High Water Mark Delineation
- 5. Perennial Non-tidal Rivers & Streams
- 6. Resource Buffer Wetlands & Waters
- 7. Resources

- 8. Tax Ditch
- 9. Tidal Waters (Mean High-Water Lien)
- 10. Tidal Wetlands
- 11. Water Dependent Activities
- 12. Water Related Activities
- 13. Wetlands
- 14. Major & Minor Subdivision (creation of lots)

Establishes Resource Buffer Widths:

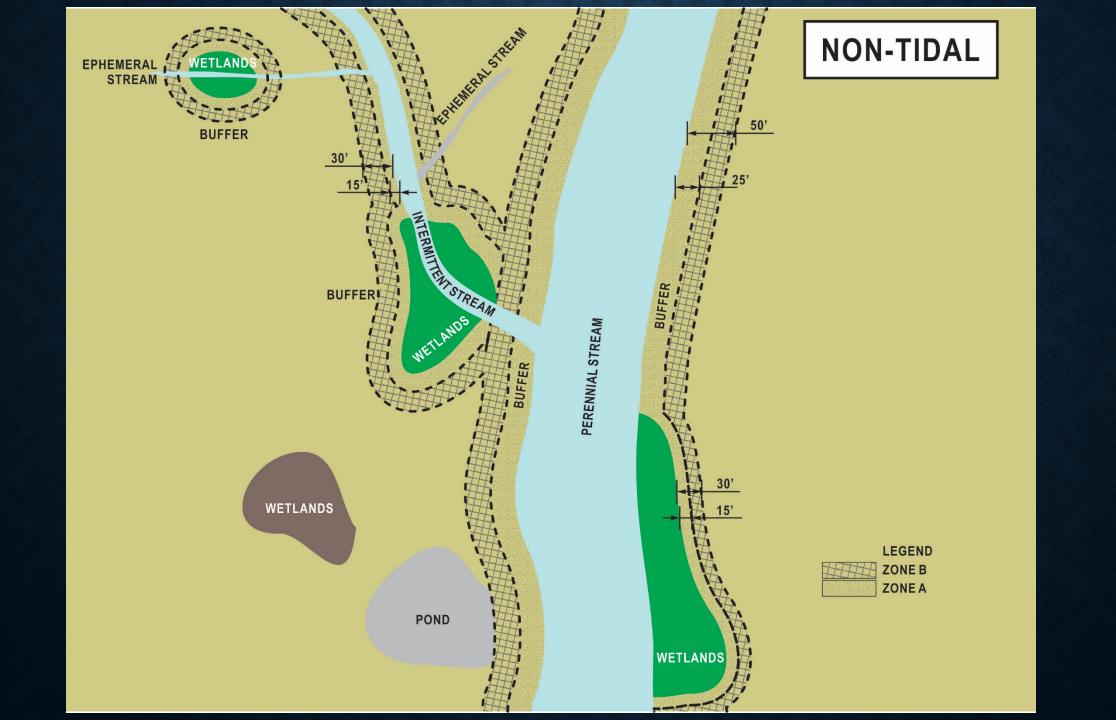
| Resource Type | Current Width (ft) in Code | Full Buffer Width(ft) | Zone A(ft)* | Zone B(ft)** |
|---|----------------------------------|--------------------------|-------------|--------------|
| Tidal Waters | 50 | 100 | 50 | 50 |
| Tidal Wetlands | 50 | 100 | 50 | 50 |
| Perennial Non-tidal Rivers and Streams [^] | 50 | 50 | 25 | 25 |
| Non-tidal Wetlands ⁺ | 0 | 30 | 15 | 15 |
| Intermittent Streams ⁺ | 0 | 30 | 15 | 15 |
| Ephemeral Streams | 0 | 0 | 0 | 0 |

^{*} Zone A is the zone closest to the resource

^{**} Buffer averaging and incentives may reduce stand buffer widths

⁺ Buffers only apply to resources subject to regulation by the U.S. Army Corps of Engineers

[^]Wetlands presence consideration



PERMITTED ACTIVITIES IN A BUFFER

| ACTIVITY | ZONE A | ZONE B |
|--|-----------|-----------|
| 1. Impacts to resource buffers resulting from State and/or Federally permitted disturbances to Resources (wetlands/waters) such as maintenance of Resources and Resource Buffers, utilities, roads, bridges, docks, piers, boat ramps, bulkheads, shoreline stabilization, and resources authorized to be filled or disturbed for development. | PERMITTED | PERMITTED |
| 2. Water-related facilities and ancillary uses required to support water-dependent projects approved by a federal or state permit, including but not limited to: marinas, wharfs, community docking facilities, boat ramps, and canoe/kayak launches. | PERMITTED | PERMITTED |
| 3. Repair or maintenance of existing infrastructure or utilities, including roads, bridges, culverts, water lines, and sanitary sewer lines. | PERMITTED | PERMITTED |
| 4. Temporary impacts resulting from installation of utilities by trenching methods which are part of State or Federally approved utility installation projects or the installation of utilities by directional boring methods. | PERMITTED | PERMITTED |
| 5. Stormwater Management conveyances as approved by the Sussex Conservation District. | PERMITTED | PERMITTED |
| 6. Tax Ditch Maintenance as approved by DNREC Drainage Program. | PERMITTED | PERMITTED |
| 7. Maintenance or repair of drainage conveyances not within a Tax Ditch Right of Way as approved by the Sussex County Engineering Department or Sussex Conservation District. | PERMITTED | PERMITTED |
| 8. Structural crossings of Resources such as bridges or boardwalks which may not require a State or Federal permit. | PERMITTED | PERMITTED |
| 9. Maintenance or modification to previously existing structures and improvements within existing footprint. | PERMITTED | PERMITTED |
| 10. State or Federally approved wetland restoration, creation, and enhancement projects. | PERMITTED | PERMITTED |
| 11. State or Federally approved flood plain restoration, or Resource restoration projects involving the maintenance, repair, restoration, creation, or enhancement of Resources and their Resource Buffers. | PERMITTED | PERMITTED |
| 12. Soil Erosion and Sediment Control measures as approved by Sussex Conservation District. | PERMITTED | PERMITTED |

PERMITTED ACTIVITIES IN A BUFFER

| ACTIVITY | ZONE A | ZONE B |
|--|--|---------------|
| 13. Forest Management Activities conducted under the guidance and direction of a Licensed Forester, Arborist, Landscape Architect, or Qualified Resource Buffer Professional. | PERMITTED | PERMITTED |
| 14. Invasive Species Control (plant, insect, animal) conducted in accordance with State and Federal law. | PERMITTED | PERMITTED |
| 15. Planting/establishment of non-invasive native species (as listed by DNREC). | PERMITTED | PERMITTED |
| 16. Installation, repair, maintenance, and removal of wells (potable, monitoring, injection as approved by state/federal agencies). | PERMITTED | PERMITTED |
| 17. Walking Trails approved by a State and/or Federal Permit where any associated impervious area runoff is managed under a Sussex Conservation District permit. | PERMITTED | PERMITTED |
| 18. Extended Detention dry and wet stormwater management ponds. | NOT PERMITTED | PERMITTED |
| 19. Removal of any dead, dying, damaged, or unstable live tree from a Resource or Resource Buffer which presents an imminent danger to property or public safety. | PERMITTED | PERMITTED |
| 20. Stormwater Management Water Quality BMPs as approved by the Sussex Conservation District. | PERMITTED (Limited to 10% of Total square footage of Zone A in a proposed development) | PERMITTED |
| 21. Sewage disposal facilities. | NOT PERMITTED | NOT PERMITTED |
| 22. Storage of hazardous materials and siting of industrial sites, landfills, or junkyards. | NOT PERMITTED | NOT PERMITTED |
| 23. Swimming pools, community clubhouses, and all Non-Water-Dependent or Non-Water Related improvements not specifically permitted under this section. | NOT PERMITTED | NOT PERMITTED |

Additional provisions (in general):

- Requires new information and calculations to be included on the preliminary & final plat plans
- Establishes resource buffer standards related to native forests and non-forest meadows
- Allows and defines selective cutting of trees within the buffer
- Establishes drainage and access easements for maintenance and monitoring purposes
- Requires comprehensive Drainage Assessment Report in select conditions when drainage conveys from/through the site
- Provides incentives for forest retention including Buffer Zone B reduction in select conditions
- Provides incentives for conservation easements including Buffer Zones A & B in select conditions
- Requires a Resource and Resource Buffer Management Plan; requires stream positive conveyance
- Provides P&Z Commission authority to waive certain requirements when a qualified hardship exists

BUFFER – WETLANDS – DRAINAGE INITIATIVE

QUESTIONS/COMMENTS