

**Sussex County
Wetlands & Buffers Working Group
Summary Report**

INTRODUCTION

The Sussex County Wetlands Buffers Working Group (WBWG) was formed to provide recommendations to the Sussex County Council (Council) for updating the County wetland 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. The WBWG consists of thirteen interested stakeholders and subject-matter experts familiar with the complex dynamics related to resource protection through buffers. A list of the WBWG members is attached.

Between February and June 2019, the WBWG held eight meetings with the goals of reviewing, discussing, and recommending changes to the County's buffer ordinance. The WBWG deliberated in an open forum allowing for the expression of each member's points of view. Several presentations were made to the group by state experts and the Center for Inland Bays to help inform their recommendations. Examples of other buffer programs and scientific summaries and reports on the resources to be protected under the ordinance were disseminated to the group. To facilitate meetings and gain initial positions from the group, homework assignments and surveys were used. The group followed a phased process with each meeting having specific goals to be achieved to reach the final end-goal.

For all topics discussed related to the ordinance, the goal of the group was to reach consensus on recommendations. Consensus was defined as general agreement among group members, not unanimous approval.

The following report summarizes the WBWG's efforts and lists its recommendations.

WORKING GROUP APPROACH

The WBWG approached its mission by focusing on four objectives:

- Determining the wetlands and waters resources to be protected by Sussex County;
- Developing clear definitions of the resources to be protected;
- Providing buffer widths for the protected resources of concern; and
- Clarifying language in the ordinance for consistency.

By focusing on the objectives, the WBWG reached consensus on the list of resources to be protected, definitions for those resources, and the buffers associated with the respective resources.

Throughout the discussions, the WBWG discussed the importance of recognizing buffers for their system-wide benefits and how they would be managed for the long-term protection of the buffers and the function of the respective resources. The WBWG recognized that a Sussex County buffer program should consider land development potential and that Code-designated buffer protection should not have a significant impact on the retained parcel yield and density for the property. Furthermore, property owners must be given some flexibility in design regarding buffer areas to accommodate site conditions.

CONSENSUS POINTS

The following list outlines topics on which consensus was reached through the WBWG. We recommended that these points serve as the guidelines for drafting an updated wetland buffer ordinance for the County Code. Starred outcomes below are represented in **Table 1**.

1. **Definitions:** the group reached consensus on definitions for the following: buffers, tidal wetlands; tidal waters; non-tidal wetlands; streams (perennial, intermittent, ephemeral).*
2. **Resources Subject to the Ordinance:** all defined resources except for ephemeral streams should be subject to the ordinance.*
3. **Buffer Purpose:** the primary purpose of the buffers proposed for the ordinance are to protect the defined resources. In addition to protecting resources, the buffers in this ordinance also function to help preserve water quality, support flood management and drainage, and provide wildlife habitat.
4. **Buffer Widths:** the group reached consensus on buffer widths for tidal wetlands, tidal waters, non-tidal wetlands, perennial Streams, and intermittent streams.*
5. **Two-Zone Buffer Approach:** the group agreed to a two-zone buffer management approach (Zone A and Zone B) in which the area adjacent to the resource (Zone A) has the greatest level of protection and the outer zone (Zone B) allows certain impacts and/or uses be permitted without a waiver.*
6. **Buffer Activities Permitted and Restricted:** the group developed a list of activities that should be restricted or permitted in the resources and buffers (**Table 2**).
7. **Buffer Averaging:** buffer averaging would be permitted in Zone B.
8. **Buffers and Lot Lines:** defined resources and associated buffers should not be located on any individually subdivided lots.
9. **Management Requirements:** buffer management requirements that identify permitted and non-permitted management activities (in keeping with the ordinance) should be created.

ITEMS FOR FURTHER DISCUSSION

The following list outlines topics where conceptual (high-level) agreement was reached, but the group recommended that additional discussion would be needed to provide clear direction in the ordinance.

1. **Criteria for Buffer Averaging:** criteria for buffer averaging needs to be developed and discussed.
2. **Resource Mapping:** methods for delineating and mapping each of the resources and buffers needs to be further developed and discussed.
3. **Management Requirements:** there needs to be a trigger in the ordinance for the creation of buffer management requirements. Additionally, there needs to be discussion around whether management requirements will be approved at the discretion of a specific agency or group and/or if a specific agency or group will provide oversight. These discussions should include rights of third parties to enter and maintain functionality of buffers and resources; a discussion about notice requirements for future maintenance needs within the buffer area; and items related to clearing vegetation and filling, grading, and excavating.
4. **Waiver Program:** a waiver program based on hardship and approved by the Planning & Zoning Commission as part of the site plan review process needs to be developed and discussed. The

waiver program should also include the use of offsets and mitigation techniques to modify buffer requirements to meet the purposes of buffer program. Offsets could include offsite improvements to resources for reduced buffers or reduced onsite management requirements, additional Stormwater Management practices, fees to County for watershed improvements, or trading with adjacent property owners for additional buffers in same stream system.

5. **Incentive Program:** an incentive program needs to be developed and discussed.

ADDITIONAL TOPICS DISCUSSED

This list contains ideas that the group discussed at length that were related to the buffer topic but outside the scope and mission of the WBWG. These topics are highlighted here due to the time dedicated to them at meetings.

- The WBWG identified the benefits and functions of wetlands and their buffers, as well as floodplains (both wetland floodplains and non-wetland floodplains) for protection from flooding and the impacts of sea level rise (SLR). The group recognized that planning for flooding and inundation cannot be addressed solely by a buffer ordinance. If the County were interested in a strategy for bolstering community resilience from flooding, storms, and SLR, it could establish a strategy through floodplain and land use ordinances. Results of those efforts could require modifications to the wetlands buffer ordinance in order to maintain consistency.
- The WBWG discussed the benefits of maintaining the drainage network represented by the protected resources and the need to restore and enhance many of the resources that would be protected under a buffer ordinance. Several ideas were presented to ensure restoration and maintenance of the drainage system could occur. Strategies for funding and incentivizing these activities were also discussed. If the County decided to further pursue this topic, modifications to the wetlands buffer ordinance could be required for consistency.
- The group discussed that the State of Delaware Tidal Wetlands Regulatory Maps be updated regularly to more accurately reflect existing conditions, as the County relies on these maps to implement the buffer ordinance.
- The group discussed that the County should consider increasing density as an incentive for additional resource protections.
- Some members of the Working Group emphasized the value of ensuring that information about future conditions (including sea level rise, intensifying storms, and population changes) is factored into site design and stormwater management to promote long-term community resilience and sustainability.
- The WBWG discussed including new commercial development in the buffer ordinance.

Table 1: Resource Buffers and Definition

Resource Type	Full Buffer Width (ft)	Zone A (ft)*	Zone B (ft)	Definition
Tidal Waters	100	50	50	Those waters occurring below the mean high-water line of any tidal water body, tidal stream, or tidal marsh, which is defined as the average height of all the high-tide water recorded over a nineteen-year period as defined by the National Oceanic and Atmospheric Administration tidal datum.
Tidal Wetlands	100	50	50	Areas under the jurisdiction of Title 7, Chapter 66 of the Delaware Code, as regulated and mapped by the Department of Natural Resources and Environmental Control.
Perennial Nontidal Rivers and Streams [^]	50	25	25	A well-defined channel that contains flowing water year-round during a year of normal rainfall with the aquatic bed located below the water table for most of the year and which is not subject to tidal influence. Groundwater is the primary source of water for a perennial stream, but it also carries runoff. A perennial stream exhibits the typical biological, hydrological, and physical characteristics commonly associated with the continuous conveyance of water.
Non-tidal Wetlands ⁺	30	15	15	Those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions and that are not Sussex County-defined Tidal Wetlands.
Intermittent Streams ⁺	30	15	15	A well-defined channel that contains flowing water for only part of the year, typically during winter and spring when the aquatic bed is below the water table. The flow may be heavily supplemented by runoff. An intermittent stream often lacks the biological and hydrological characteristics commonly associated with the continuous conveyance of water.
Ephemeral Streams	0	0	0	A feature that carries only runoff in direct response to precipitation with water flowing only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the aquatic bed is always above the water table during a year of normal rainfall, and runoff is the primary source of water. An ephemeral stream typically lacks the biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water.

* Zone A is the zone closest to the resource

+ Buffers only apply to resources subject to regulation by the USACE

[^] Wetlands presence consideration

Table 2: Buffer Activities by Zone

ACTIVITY	ZONE A	ZONE B
Water-related facilities and amenities which are 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
Installation, repair, or maintenance of infrastructure or utilities, including roads, bridges, culverts, water lines, and sanitary sewer lines	PERMITTED	PERMITTED
Temporary impacts resulting from installation of utilities by trenching methods with proper permitting	PERMITTED	PERMITTED
Stormwater Management conveyances as approved by the Sussex Conservation District	PERMITTED	PERMITTED
Tax Ditch Maintenance as approved by DNREC	PERMITTED	PERMITTED
Maintenance of other drainage channels (as approved by Sussex Conservation District)	PERMITTED	PERMITTED
Structural crossings such as bridges or boardwalks which may be exempt from State or Federal Regulations	PERMITTED	PERMITTED
Impacts to resource buffers resulting from State and/or Federally permitted disturbances to wetland and water resources such as resource maintenance, utilities, roads, bridges, docks, piers, boat ramps, bulkheads, shoreline stabilization, and resources authorized to be filled or disturbed for development	PERMITTED	PERMITTED
Maintenance or modification to previously existing structures and improvements within existing footprint	PERMITTED	PERMITTED
State or Federally approved wetland restoration, creation, and enhancement projects	PERMITTED	PERMITTED
State or Federally approved Flood Plain Restoration, Creation, enhancement, or Expansion and/or Stream Restoration	PERMITTED	PERMITTED
Soil Erosion and Sediment Control measures as approved by Sussex Conservation District	PERMITTED	PERMITTED
Walking Trails (pervious materials only) if approved by DNREC and the USACE within the adjoining resource	PERMITTED	PERMITTED
Forest Management Activities conducted under supervision of a Licensed Forester or Arborist	PERMITTED	PERMITTED
Invasive Species Control (plant, insect, animal)	PERMITTED	PERMITTED
Planting/establishment of native vegetation (as listed by DNREC) to reforest buffers or to enhance unforested buffer areas	PERMITTED	PERMITTED
Walking trails parallel to a resource	NOT PERMITTED	PERMITTED

ACTIVITY	ZONE A	ZONE B
Installation, repair, maintenance, and removal of wells (potable, monitoring, injection as approved by state/federal agencies)	NOT PERMITTED	PERMITTED
Stormwater Management Water Quality BMPs as approved by the Sussex Conservation District	NOT PERMITTED	PERMITTED
Sewage disposal facilities	NOT PERMITTED	NOT PERMITTED
Storage of hazardous materials and siting of industrial sites, landfills, or junkyards	NOT PERMITTED	NOT PERMITTED
Swimming pools, community clubhouses, and all non-water-dependent or related improvements not specifically permitted under this section	NOT PERMITTED	NOT PERMITTED

LIST OF WBWG MEMBERS

Member Name	Organization /Agency
David Baird	Sussex Conservation District
Chris Bason	Center for Inland Bays
Jay Baxter	Baxter Farms
Rich Borrasso	Sussex Alliance for Responsible Growth
Jeff Clark	Land Tech, LLC
Ed Launay	Environmental Resources, Inc.
Steve Marsh	George Miles and Buhr
Evelyn Maurmeyer	Coastal and Estuarine Research, Inc., and University of Delaware
Danielle Swallow	Delaware Sea Grant
Robert Tunnell III	Tunnell Companies L.P.
Bill Ulman	University of Delaware School of Marine Science and Policy
Bob Wheatley	Sussex County Planning and Zoning Commission
RC Willin	Willin Farms
Todd Lawson	Sussex County
Hans Medlarz	Sussex County
Vince Robertson	Sussex County
Janelle Cornwell	Sussex County
Jim Eisenhardt Sari Rothrock	RK&K - Facilitation Consultant