

## Rationale for supporting the Ordinance to amend Chapter 115, Article IV, Section 115-25 of the Sussex County Code.

- The proposed ordinance would require that all homes be clustered on the environmentally suitable portions of a proposed development, specifically those portions of the tract least encumbered by sensitive environmental features, including but not limited to wetlands, mature water quality and fish and wildlife populations of the Inland Bays, but have declined greatly overtime and are in overall poor condition due to disturbances such as development. Woodlands and wetlands also act as sanctuaries for wildlife in otherwise developed areas. By clustering homes away from these sensitive areas, the potential for human disturbance of their important wildlife habitats is decreased, as is the potential of degradation of water quality from runoff associated with dense development.
- Clustering homes away from sensitive wildlife areas, and requiring that the removal of healthy
  mature tress be limited, will help protect existing woodlands which is critical for not only habitat
  but for carbon sequestration as well. Trees remove carbon from the atmosphere, but when
  destroyed release the stored carbon back into the atmosphere. Carbon dioxide is one of the
  primary greenhouse gases, contributing to the changes in climate we are experiencing. By
  limiting disturbances to existing trees and woodlands, the carbon benefit provided by trees is
  protected. One acre of trees absorbs enough carbon dioxide over one year to equal the amount
  produced by driving a car 26,000 miles. \*
- Forestland in the Inland Bays watershed is declining at a rapid pace. Historically, this loss stemmed from conversion to agriculture, but is now mostly the result of residential and commercial development and associated infrastructure. According to the 2016 State of the Delaware Inland Bays, from 1992 to 2012 upland forests decreased by 14 square miles in the Inland Bays watershed. To put that into context, the Inland Bays and tributaries cover approximately 35 square miles so we have lost almost half the size of the Inland Bays in forestland during this time period.
- This proposed ordinance would require open space in each development, designed to provide maximum value to residents. Required open space will not be constituted of fragmented lands, and at least 30% of open space shall be located on one contiguous tract of land and adjacent to existing or planned parks, easements or other preserved lands, existing wetlands, waterways, wildlife corridors, or farm or woodlands if present near the cluster development. Open space regions throughout Delaware have been highly fragmented. The lack of continuity between open spaces has had negative impacts on local wildlife and habitats. This proposed ordinance could alleviate the effects of rapid development by providing habitat for birds and other wildlife.

- Allowing for contiguous open space will also alleviate issues related to flooding, will aid in groundwater recharge, and will allow nutrients to soak into the ground rather than runoff into nearby waterways. This would help reduce nutrient pollution in runoff entering the Inland Bays.
- The proposed ordinance would require a minimum of 25 feet permanent setback around outer boundaries of all wetlands, and a 50-foot setback as required under Ordinance No. 774 around tidal waters, tidal tributary streams, and tidal wetlands. This setback would further enhance protection of ecologically sensitive areas that provide flood abatement, habitat for fish and wildlife, and scenic value.
- The proposed ordinance would require that stormwater management be designed to promote groundwater recharge and protect groundwater quality. It also would require that drainage from rooftops be directed to vegetated areas or allow for green technology. Impervious surfaces and subsequent stormwater runoff contribute to the flooding issues that many people already experience. The subsequent stormwater runoff also contributes to increased nutrient pollution into nearby waterways and streams, contaminating the Inland Bays and harming fish and shellfish populations. Promoting groundwater recharge and redirecting drainage from impervious surfaces will reduce the amount of surface water runoff, thereby reducing the amount of nitrogen, phosphorus, and other contaminants entering the Inland Bays.
- Though considerable progress has been made to reduce nutrient pollution in the Inland Bays since Total Maximum Daily Loads were established in 1998, nitrogen loads remain far in excess of healthy limits in all bays. We have only achieved about 37% of the nitrogen reduction goal set for the Bays. High nitrogen concentrations can lead to algal blooms, which worsens dissolved oxygen levels particularly in the tributaries. The Indian River continues to suffer from severely low dissolved oxygen. Recent data shows that dissolved oxygen levels are frequently at zero. This is important because all living creatures in the Bays—from swimming fish, shrimp and crabs to the clams and worms that burrow into the mud—need oxygen to survive. Dissolved oxygen levels that are high and stable support diverse and healthy populations of bay life.