



Information and Resources on Resource Protection Areas

Resource Protection Areas

Listed below is information about perennial streams and riparian buffers, both of which are features of Resource Protection Areas (RPAs). For more information on these and other requirements such as septic pump out, please consult Chesapeake Bay Preservation Act Guidance.

Perennial Stream Determinations

Section [9 VAC 25-830-110](#) of the Regulations requires that local governments, as part of their plan of development review process or during their review of a water quality impact assessment, ensure or confirm that (i) a reliable, site-specific evaluation is conducted to determine whether water bodies on or adjacent to the development site have perennial flow, and (ii) RPA boundaries are adjusted, as necessary, on the site, based on this evaluation of the site. Local governments may accomplish this by either conducting the site evaluations themselves or requiring the person applying to use or develop the site to conduct the evaluation and submit the required information for review.

The Commonwealth recognizes that there are a number of approaches to making evaluations of stream perennality and will not mandate that any particular method be used exclusively. Guidance is available for making distinctions between intermittent and perennial streams. This guidance includes an in-field protocol, which is based largely upon a preponderance of field evidence emphasizing the physical and biological characteristics of the stream channel. Three field indicator protocols, field tested in Fairfax County, VA., the State of North Carolina and James City County, VA. (including some surrounding upper Coastal Plain localities), are acceptable for making site-specific determinations. The protocols and field evaluation forms are:

- [North Carolina Division of Water Quality Methodology for Identification of Intermittent and Perennial Streams and Their Origins](#)
- [Description of Changes in the NCDWQ Intermittent and Perennial Stream Identification Manual](#)
- [NCDWQ Stream Identification Form](#)
- [Fairfax County Perennial Stream Field Identification Protocol](#)
- [Fairfax County Field Datasheet](#)
- [James City County Perennial Stream Protocol Guidance Manual](#)
- [James City County Field Datasheet](#)

The preferred time for making determinations as to whether a stream contains perennial flow is during the height of the local dry season, which in Virginia is usually between July and early September when normal weather conditions prevail. Thus, if the stream contains water at that time, it will likely contain water at all other times of the year. When it is not possible to survey streams in the dry season, additional corroborative evidence is often necessary. Current weather conditions should be noted on the datasheet at the time of the field evaluation as recent or overabundant rainfall can bias the decision. Preferably stream flow observations should not be within 48 hours after the last rainfall. In turn, drought conditions may cause perennial streams to temporarily run dry with water only standing in pools.

Climate Data: Knowledge of recent precipitation and seasonal climatic conditions is very important in corroborating information collected during field evaluations. The following are links

to web sites for current and historic climatic data. Many daily newspapers also provide recent climatic data as well as seasonal information (i.e., month-to-date and year-to-date precipitation).

- The [National Weather Service in Wakefield, VA.](#), includes current and historic data for Richmond, Norfolk, Salisbury, MD., and Elizabeth City, NC. Navigate to climate/local data to obtain daily, monthly and historical data. Monthly regional data is also available for a number of other areas in the state at this same website.
- Precipitation information may also be obtained from the [National Weather Service Office in Sterling, VA](#), which provides recent and historic weather data for northern Virginia areas, Washington D.C., and Baltimore, MD.
- [National Centers for Environmental Information](#) (formerly National Climatic Data Center) This website may have a fee involved for accessing/obtaining data (may be free for some governmental entities).

Riparian Buffers

The Chesapeake Bay Preservation Act and Regulations require that a vegetated buffer no less than 100 feet wide be located adjacent to and landward of all tidal shores, tidal wetlands, non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or along water bodies with perennial flow. These features, including the 100-foot buffer, comprise the Resource Protection Area (RPA), and serve a direct water quality function by removing excess sediment, nutrients, and potentially harmful or toxic substances from groundwater and surface water entering the Chesapeake Bay and its tributaries. Buffers also help to absorb periodic flood surges, and supply thermal protection, food, and cover to fish and other wildlife, stabilize stream-banks, and provide recreation and aesthetic values.

Vegetated riparian buffers are the last defense in preventing non-point source pollution from reaching the Chesapeake Bay and its tributaries. Generally, vegetation in the 100-foot RPA buffer must be preserved if present and established where it does not exist. However, the Regulations do allow a property owner to modify the buffer by removing vegetation for the following reasons, subject to approval by the local government:

- To provide for reasonable sight lines
- The construction of access paths
- General woodlot management
- Shoreline erosion control projects

The [Riparian Buffers Modification and Mitigation Manual \(Buffer Manual\)](#) was adopted by the Chesapeake Bay Local Assistance Board in September 2003 to provide guidance on how to interpret and implement the sections of the regulations that address buffer establishment, conservation, restoration, modification and mitigation. Developed with financial support from the U.S. Forest Service and the Chesapeake Bay Program Forestry Workgroup, the Buffer Manual was developed by a technical advisory committee comprised of local government representatives and stakeholders from the Virginia Institute of Marine Sciences, Virginia Tech, Virginia Department of Forestry, the Natural Resource Conservation Service, and the United States Geological Service. The Buffer Manual provides assistance to local government staff for the implementation of the buffer modification and buffer management provisions of the Regulations. The intent of the Buffer Manual is to provide guidance that is general enough to accommodate various settings and situations, but specific enough to be useful to local staff. The Buffer Manual represents the minimum standards for consistency with the Regulations, although there are other alternatives available to local governments that would satisfy the intent of the

Bay Act. Prior to implementing procedures or policies that may conflict with the Buffer Manual, DEQ recommends that the local government contact their DEQ liaison to determine if such alternatives are consistent with the Regulations.