#### CHAPTER 21

# WATERS OF THE UNITED STATES, STATE WATERS, AND WETLANDS

#### 21.1 INTRODUCTION

Waters of the United States are surface bodies of waters, including bays, rivers, perennial and intermittent streams, ponds, lakes, and tidal and non-tidal wetlands. State Waters include all areas of waters of the United States plus isolated wetland areas. Wetlands are those areas that are 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. Wetlands generally include swamps, marshes, bogs, and similar areas.

These jurisdictional areas are determined by using the U.S. Army Corps of Engineers Wetland Delineation Manual (Technical Report Y-87-1, January 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountain and Piedmont Region. Activities in these areas are regulated by the U.S. Army Corps of Engineers (USCOE), the Virginia Marine Resources Commission, and/or the Virginia Department of Environmental Quality. Contact information for these agencies is included at the end of this section.

#### 21.2 APPLICABILITY

In accordance with Sec. 10-32 of the Henrico County Code, the requirements of this chapter apply to all regulated land-disturbing activities described in Chapter 3.

#### 21.3 REQUIREMENTS

The following requirements must be addressed for all regulated land-disturbing activities:

- All waters of the United States, State Waters, and wetlands (waters/wetlands) must be clearly identified on the Environmental Compliance Plan (ECP).
- All waters/wetlands to remain must be clearly identified on the ECP.
- All waters/wetlands to be impacted must be clearly identified and quantified on the ECP.

- Evidence of authorization (including accompanying mapping) from all applicable agencies or an engineer's certification (non-notification) must be provided prior to ECP approval. An example of a letter with acceptable content and form can be found at the end of this chapter.
- All impacts shown on the ECP must correspond to impacts (location and acreage) that are identified on the evidence of authorization that has been provided.
- Non-tearable yellow and black barricade tape or orange barricade fencing must be shown on the ECP along the limits of disturbance adjacent to or within waters/wetlands. This tape or fencing must be installed prior to a preconstruction meeting for the project as described in Chapter 17.

The following comments also apply to residential subdivisions:

• Lots that contain waters/wetlands that are not to be impacted must be identified on the ECP with a double asterisk (\*\*) and the following note:

Lots marked with \*\* may contain waters and/or wetlands as determined at the time of recordation of the plat. Disturbance outside of designated water and wetland impact areas will require approval from the U. S. Army Corps of Engineers and/or the Virginia Department of Environmental Quality. Additional requirements may be imposed on these lots prior to the issuance of building permits.

Lots that contain waters/wetlands, that are not to be impacted must be identified
on the record plat with a double asterisk (\*\*) and the following note:

Lots marked with \*\* may contain waters and/or wetlands as determined at the time of recordation of the plat. Disturbance outside of designated water and wetland impact areas will require approval from the U. S. Army Corps of Engineers and/or the Virginia Department of Environmental Quality. Additional requirements may be imposed on these lots prior to the issuance of building permits. See construction plans on file in the Planning Office for additional details.

- There must be a minimum separation between the rear of the buildable area and non-RPA wetlands to remain in the rear yard that is equivalent to the rear yard setback as determined by the Planning Department.
- There must be a 25-foot minimum separation between the side of the buildable area and non-RPA wetlands to remain (even if the wetlands are not located on the lot).
- Waters/wetlands located in front yards and side yards must be considered as impacted and shown accordingly on the plans unless:

- o the waters/wetlands convey runoff from 100 acres or more of drainage, or
- evidence is provided from the appropriate federal or state agency stating that they will not authorize the proposed impacts.
- Environmental Protection Area signs are required to be installed on residential lots containing waters/wetlands in accordance with Section 6.01 of this Manual. The signs must be installed prior to a pre-construction meeting for the project as described in Chapter 17.

Henrico County requires that all channels with less than 100 acres of contributing drainage area be piped or otherwise eliminated. In all cases where the regulatory agencies have determined that the waters/wetlands must remain, the plans must clearly show that the waters/wetlands will adequately convey flow from the 10-year storm through the project. This will be accomplished by providing the following information on the plans:

- delineate the 10-year storm limits on the plan view in relation to the waters/wetlands;
- provide a profile based on field-run elevations for all waters/wetlands that are used for stormwater conveyance;
- demonstrate that the waters/wetlands have an outlet and will not act as an impoundment; and
- provide a cross-section (including the required information included in the plan review checklist) for all waters/wetlands (additional cross-sections will be required where channel and/or drainage characteristics change).

### 21.4 NATURAL AREA TO REMAIN

In accordance with Chapter 3 of the Henrico County Department of Public Works Design Manual, existing and proposed channels with less than 100 acres of drainage must be piped or otherwise eliminated to avoid potential complaints and future erosion and drainage problems.

In some cases however, the environmental regulatory agencies are reluctant to issue permits for impacting these channels when they are determined to be jurisdictional. As a result, many of these channels must be left in developments in their existing state. Over time, these channels become the subject of numerous complaints as the natural streamside vegetation is cleared for the establishment of yards and the construction of parking and drive areas, etc. Removal of the natural streamside vegetation results in streambank erosion that ultimately impact yards, parking areas, and other improvements on the lot(s). In September of 2005, the Department of Public Works developed and implemented the following policy in an effort to reduce these complaints:

When jurisdictional channels are to remain because the environmental regulatory agencies have determined the channel cannot be piped or otherwise eliminated, a natural area 25 feet in width measured landward from the streambank will be required along both sides of the channel. This natural area is to remain undisturbed and will be delineated on the construction plans and clearly marked in the field. For residential subdivisions, similar to the approach with Resource Protection Areas, Stream Protection Areas, and wetlands to remain, a separation equivalent to the front, side, or rear yard setback between the buildable areas and the natural area to remain must be provided.

If the regulatory agencies (U.S. Army Corps of Engineers and/or the Virginia Department of Environmental Quality) have indicated impacting the channel will not be permitted and, therefore, the channel is to remain, the following actions must take place:

- 1. Submit a letter to the County stating that the regulatory agencies will not permit the channel impacts and copy the regulatory agencies (see example in Section 21.6 at the end of this chapter);
- 2. Provide a *Natural Area to Remain* 25 feet wide along both sides of the channel measured from the top of the streambank;
- 3. Identify corrective action on the construction plans for problem areas identified during plan review (areas of headcutting, streambank erosion, debris or other obstructions, etc.);
- 4. Provide evidence of all necessary permits for correcting the problem areas.
- 5. Provide a separation between the buildable area and the *Natural Area to Remain* that is equivalent to the front, rear, or side yard setback, depending on the location of the *Natural Area to Remain*, in residential subdivisions;
- Delineate the limits of the Natural Area to Remain on the construction plans with either yellow and black barricade tape or orange safety fence (similar to RPA, SPA, and wetlands). Where the Natural Area to Remain is within a residential lot, Environmental Protection Area signs must be provided.
- 7. Install the Environmental Protection Area signs prior to the preconstruction meeting.

Please note that the *Natural Area to Remain* applies to channels that remain, not wetlands. This policy does not affect the policy concerning wetlands in the front and side yards.

Also note that the Department of Public Works continues to require non-jurisdictional channels with less than 100 acres of drainage area to be piped or otherwise eliminated. The *Natural Area to Remain* policy only applies to channels that are determined to be jurisdictional and must remain according to the state and/or federal environmental regulatory agencies.

In situations where there appears to be a conflict regarding the buildable area location based on the required separation from wetlands and the *Natural Area to Remain*, the most restrictive buildable area location will apply.

#### 21.5 CONTACTS

Agencies regulating activities in waters/wetlands:

U.S. Army Corps of Engineers 803 Front Street, Fort Norfolk Norfolk, Virginia 23510 (757) 201-7727

Contact Name: Ms. Lynette Rhodes

Virginia Marine Resources Commission Habitat Management Division 2600 Washington Avenue Newport News, Virginia 23607 (757) 247-8028

Contact Name: Mr. Mark Eversole

Virginia Department of Environmental Quality Piedmont Regional Office 4949-A Cox Road Glen Allen, Virginia 23060 (804) 527-5086

Contact Name: Ms. Allison Dunaway

#### 21.6 SAMPLE LETTER

Ms. Jennifer Cobb, PE Engineering and Environmental Services Division Director Department of Public Works P.O. Box 90775 Henrico, VA 23273-0775

RE: Jurisdictional Channels on (Project Name)

Dear Ms. Cobb:

As part of the design phase for the above referenced project, we have contacted the [U.S. Army Corps of Engineers and/or Virginia Department of Environmental Quality] concerning the channels shown on the attached plan. The [U.S. Army Corps of Engineers and/or Virginia Department of Environmental Quality] has/have determined that these channels are within their jurisdiction.

We expressed the County's desire to have these channels piped or otherwise eliminated. The [U.S. Army Corps of Engineers and/or Virginia Department of Environmental Quality] determined that these jurisdictional channels shall not be piped and impacts are to be avoided. They also determined that impacting these channels or providing associated mitigation was not an option.

In accordance with Chapter 21 of the Henrico County Environmental Compliance Manual, a 25 feet wide *Natural Area to Remain* will be provided on both sides of the channel measured from the streambank, and Environmental Protection Area signs will be provided where the *Natural Area to Remain* is located on any residential lot.

We are providing the [U.S. Army Corps of Engineers and/or Virginia Department of Environmental Quality] with a copy of this letter and the above mentioned plan sheet.

Sincerely,

CONSULTING ENGINEER

#### Attachment

Copy: [USCOE REPRESENTATIVE], U.S. Army Corps of Engineers [VA DEQ REPRESENTATIVE], Virginia Department of Environmental Quality [PLAN REVIEW ENGINEER], Henrico County Department of Public Works

#### 21.7 SAMPLE LETTER

# ENGINEER'S CERTIFICATION OF PERMIT AUTHORIZATION (NON-NOTIFICATION)

Ms. Jen Cobb, PE Engineering and Environmental Services Division Director County of Henrico Department of Public Works P.O. Box 90775 Henrico, VA 23273-0775

RE: Permit Authorization for {PROJECT NAME}

Dear Ms. Cobb:

" dated I have reviewed the site plan entitled " the above referenced project and performed a site visit to verify the location and extend of the jurisdictional Waters of the U.S. (WOUS), including wetlands, on the project. These jurisdictional limits have been flagged in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual and/or confirmed by the U.S. Army Corps of Engineers. The site plan indicates the total impacts to wetlands on the project are (less than 0.10 acre). This impact does not result in an above-grade fill within a 100year floodplain. The project will not have a negative effect on a Federally protected threatened or endangered species or an effect on an historic property that is eligible or potentially eligible for the National Register of Historic Places. The project has been designed in accordance with other Federal and State regulations protecting water quality and other Nationwide Permit General Conditions. Therefore, it is my professional opinion that this project is authorized under the U.S. Army Corps of Engineers' Nationwide Permit # .

The project proponent is hereby notified via copy of this correspondence that within 30 days of completion of the project work, a report must be submitted to the U.S. Army Corps of Engineers that contains the following information: (1) the name, address, and telephone number of the permittee; (2) the location of the work; (3) a description of the work; (4) the type and acreage of the loss of WOUS; and (5) the type and acreage of any compensatory mitigation used to offset the loss of WOUS.

Sincerely,

Principal Engineer/ Environmental Consultant

CC Project Proponent/Applicant