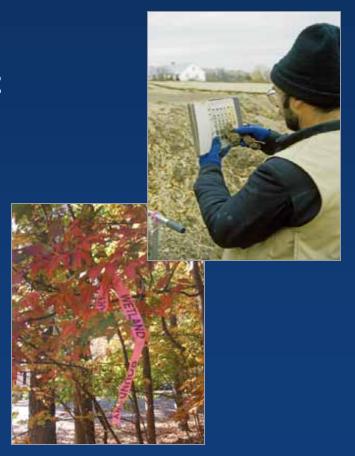


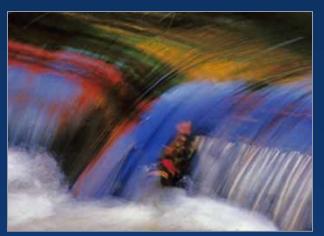
- Step 1: Delineate
 - PWS or Environmental Scientist
- Step 2: GPS Locate or Survey
 - Sub-meter accuracy
- Step 3: Submit Plat Map to ACOE
 - Signed by a Professional Land Surveyor (PLS)

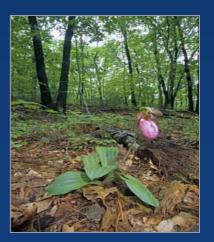




How do I know if I have jurisdictional areas?

- Step 4: Verify
 - ACOE wetlands & streams
 - NC DWQ "buffer calls"
- Step 5: Receive Jurisdictional Determination (JD)
 - Valid for 5 years
 - Current delay due to significant backlog.









Identify Proposed Development Site

Perform Preliminary Site Evaluation for Wetlands, Streams and Buffers

Wetlands, Streams or Buffers Present?

No

Begin Project

Yes

Perform Wetland Delineation

Determine Jurisdictional Status of Wetland Features

Prepare Site Plan

(including location of streams and wetlands)

Will Site Plan Cause Impacts?

Yes ⋖

No





- Before you impact any jurisdictional "Waters of the U.S.," including:
 - Rivers & Streams
 - Lakes & Ponds
 - Wetlands
 - Marshes
 - Swamps
 - Wet Meadows
 - Floodplains





When Do I Need a Permit? (cont'd)

- Before you impact any NC jurisdictional areas, including:
 - Isolated wetlands
 - Buffered area around perennial streams
 - Buffered area around intermittent streams







ACOE Definition:

"Any disturbance to the soil or substrate (bottom material) of a wetland or waterbody, including a stream bed, is an impact and may adversely affect the hydrology of an area."

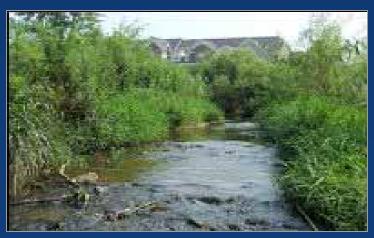
- A permit is required for permanent or temporary work
 - Examples of temporary discharges:
 - temporary fills for access roadways, cofferdams, storage and work areas.





NCDWQ Definition:

"A natural or vegetated area through which stormwater runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants."

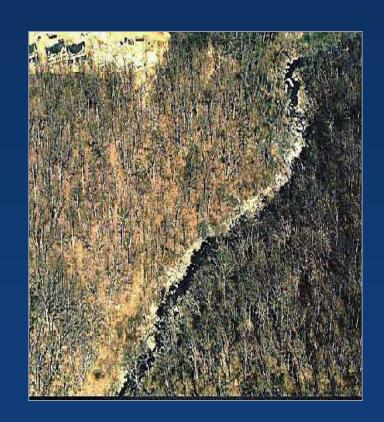






What Does "Buffered" Mean? (cont'd)

- North Carolina has established 50-foot buffer zones on:
 - Neuse River Basin
 - Tar-Pamlico River Basin
 - Catawba River Basin
 - Main Stem and Main Stem Lakes Only
 - Water Supply Watersheds
 - Randleman Lake
 - Upper Cape Fear (up for public review)
- Local Municipalities may have additional buffer regulations
- Consult a Professional





Example: Neuse River Buffer Zones

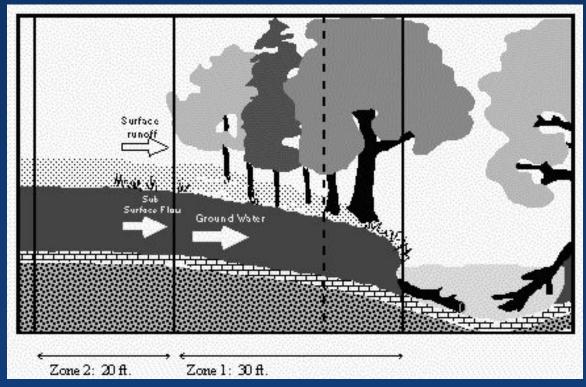


Image Credit: NCDWQ

- Buffered features are only those that appear on the most recent versions of a USGS Topographic Map or NRCS Soil Survey
- If the feature is on one or both of the maps, but an on-site determination shows that surface waters are not present, then buffer rules do not apply



Do I need a Buffer Permit?



- Apply for a buffer authorization (permit)on the Pre-construction Notification (PCN)
- If the proposed activity is prohibited for that River basin:
 - Complete a Major Variance form for impacts in Zone 1
 Complete a Minor Variance form for impacts in Zone 2
- Some activities do not require notification
 - For example: A road crossing in the Neuse Basin that is less than 40 (linear) feet does not require a permit



Wetland-Stream Permitting Decision Flow Chart





Can I impact NC wetlands and/or streams without filing for permits?

Yes, you may only impact <u>isolated</u> wetlands* (waters which have no visible surface water connection to downstream jurisdictional waters) if you meet the following minimum thresholds:

Isolated Streams	≤150 linear feet
Isolated Lakes and Ponds	<1/3 acre
Isolated Wetlands	≤1/3 acre east of I-95 ≤1/10 acre west of I-95

- "Courtesy copy" of PCN suggested if size/quality of feature is in question.
- CANNOT impact any other waters without a permit.



Isolated Wetland Permit Requirements

PCN is required for projects impacting:

Isolated Streams	>150 linear feet
Isolated Lakes and Ponds	>1/3 acre
Isolated Wetlands	≥1/3 acre east of I-95
	≥1/10 acre west of I-95



State issued IPs are required for projects impacting:

Isolated Streams	>250 linear feet
Isolated Lakes and Ponds & Isolated Wetlands	>1 acre



Wetlands and/or Streams will be Impacted... What type of permits do I need?

404/401 Permits

- 401 Water QualityCertification
- Nationwide Permit
- Individual Permit
- Regional General Permit





Section 404/401 of the Clean Water Act

Section 404 of Federal Clean Water Act

- EPA delegated regulatory authority to ACOE
- If wetlands are not considered wetlands by ACOE, EPA approval is required
- Dredge and Fill Permit; issued by ACOE

Section 401 of Federal Clean Water Act

Water Quality Certification (WQC); issued by NC DWQ

Section 404 and 401 go hand-in hand

- NC DWQ <u>must issue</u> 401 WQC <u>before</u> ACOE can grant 404 permit
- Program administered by ACOE



401 Water Quality Certification

- Application for 401 WQC is a Pre-construction Notification (PCN)
- Once a PCN and associated fees are received by the State, a 60-day review period takes place
 - \$200 fee for less than 1 acre of wetland impact or
 150 linear feet of stream
 - \$475 fee for impacts greater than 1 acre of wetland impact or 150 linear feet of stream
 - Express Permits = Additional Fees



Requirements for Permit Submission

All permits must include plans to:

- Step 1: Avoid Impacts
 - Design site to avoid activities in wetlands and streams







Requirements for Permit Submission (cont'd)

All permits must include plans to:

■ Step 2: Minimize (unavoidable) Impacts

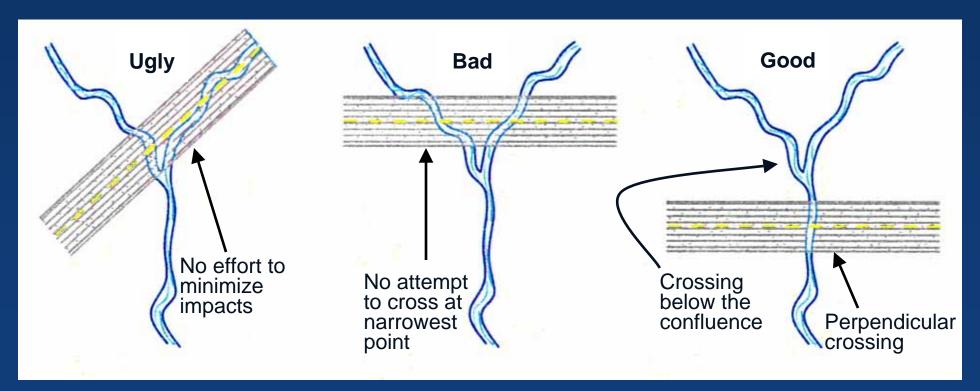
- Cross at narrowest points
- Cross at right angles
- Use retaining walls
- Bore underneath
- Cross bank-to-bank
- No channel disturbance





Requirements for Permit Submission (cont'd)

Step 2: Minimize (unavoidable) Impacts





Requirements for Permit Submission (cont'd)

All permits must include plans to:

- Step 3: Mitigate for Unavoidable Impacts
 - Self-mitigation on or off site
 - State-managed mitigation
 - Mitigation Bank





The practice of allowing unavoidable losses of wetlands (and streams) in exchange for their replacement elsewhere through restoration or through creation of new wetlands



- Applicant mitigation
 - Restore
 - Create (wetlands only)
 - Enhance
 - Preserve
- State managed mitigation
 - NC Ecosystem Enhancement Program (EEP)



