

OBTAINING AND COMPLYING WITH U.S. ARMY CORPS OF ENGINEERS PERMITS

Bridget Brown,
Biologist

&

David Leput,
Compliance Officer

US Army Corps of Engineers,
Buffalo District
JUNE 2020



US Army Corps
of Engineers®

Photo from NYSDOT



SESSION OVERVIEW

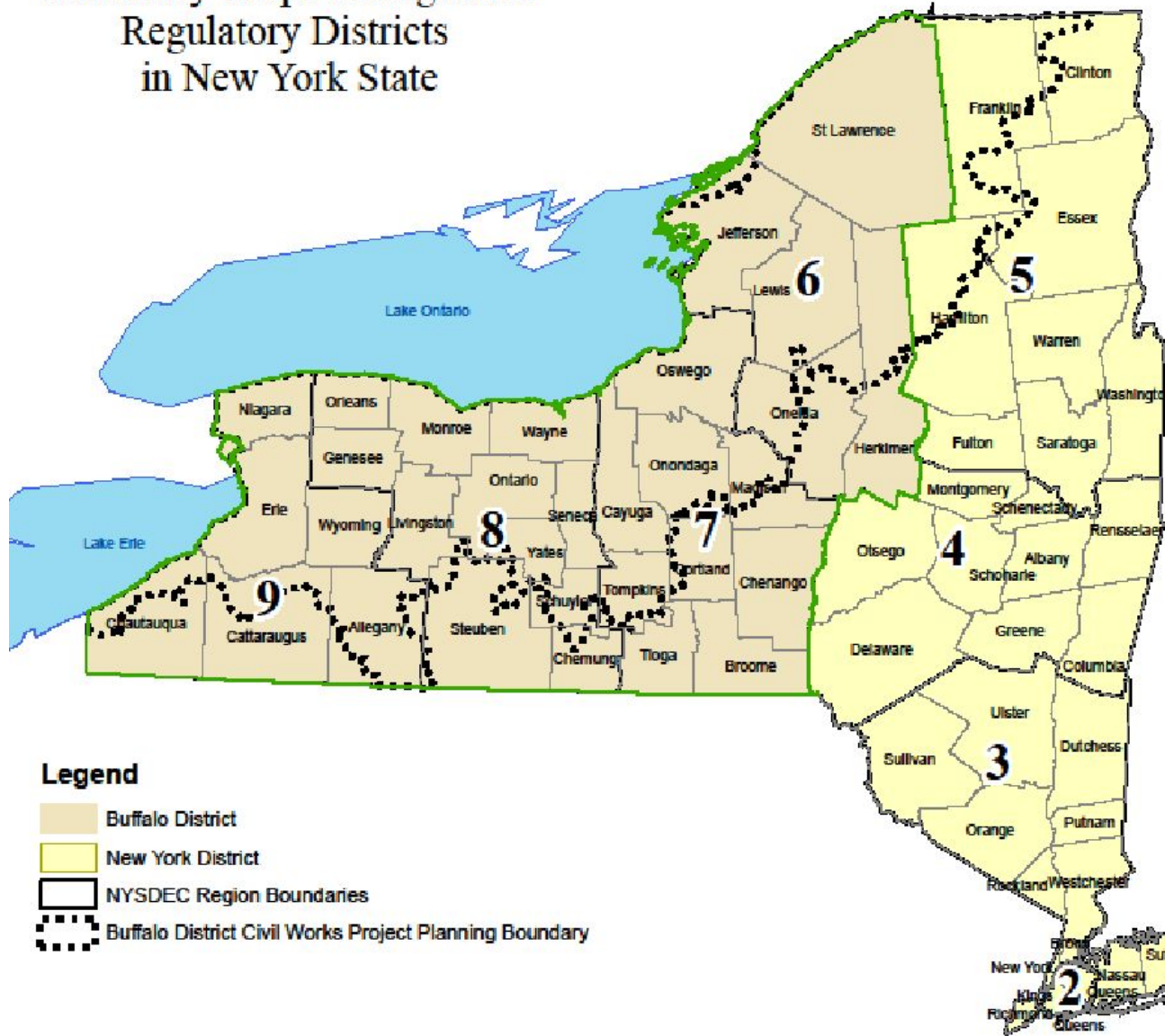


Provide an overview of the U.S. Army Corps of Engineers (Corps) permit evaluation process as it pertains to transportation projects. This will include information specific to the types of activities that would require a permit and the information the Corps needs to complete the evaluation. In addition, the presentation will also provide results of permit compliance inspections conducted by Corps staff and examples of some of the issues and challenges documented during post-construction inspections.

COURSE OBJECTIVE: Gain knowledge and understanding of the Corps permit evaluation process. In addition, take away “lessons learned” from post-construction inspections with the goal to minimize and/or avoid these issues in future projects.



U.S. Army Corps of Engineers Regulatory Districts in New York State



Buffalo District

Regulatory Branch, District Office
1776 Niagara Street
Buffalo, New York 14207
(716) 879-4330

Regulatory Branch, Auburn Field Office
7413 County House Road
Auburn, New York 13021
(315) 255-8090

New York District

Regulatory Branch, District Office
26 Federal Plaza
New York, New York 10278-0090
(917) 790-8411

Regulatory Branch, Upstate Field Office
1 Buffington Street
Watervliet, New York 12189-4000
(518) 266-6350

Legend

- Buffalo District
- New York District
- NYSDEC Region Boundaries
- Buffalo District Civil Works Project Planning Boundary



U.S. Army
Corps of Engineers



SECTION 10 OF THE RIVERS AND HARBORS ACT OF 1899



❖ Applies to Navigable Waters - waters that are currently, historically and could in the future represent opportunity for interstate commerce (33 CFR 329.4)



❖ All activities and structures within, above, or beneath navigable waters are regulated



❖ LRB Section 10 list available at website:
<http://www.lrb.usace.army.mil/Missions/Regulatory/DistrictInformation/NavigableWaterways.aspx>



SECTION 9 OF THE RIVERS AND HARBORS ACT OF 1899



Pertains to bridges and causeways, the authority for which was transferred to the USCG (33 CFR 320.2)

- Pipelines over navigable waters are considered bridges

Fill associated with bridges requires a Section 404 Clean Water Act permit from the Corps



SECTION 404 OF THE CLEAN WATER ACT OF 1977

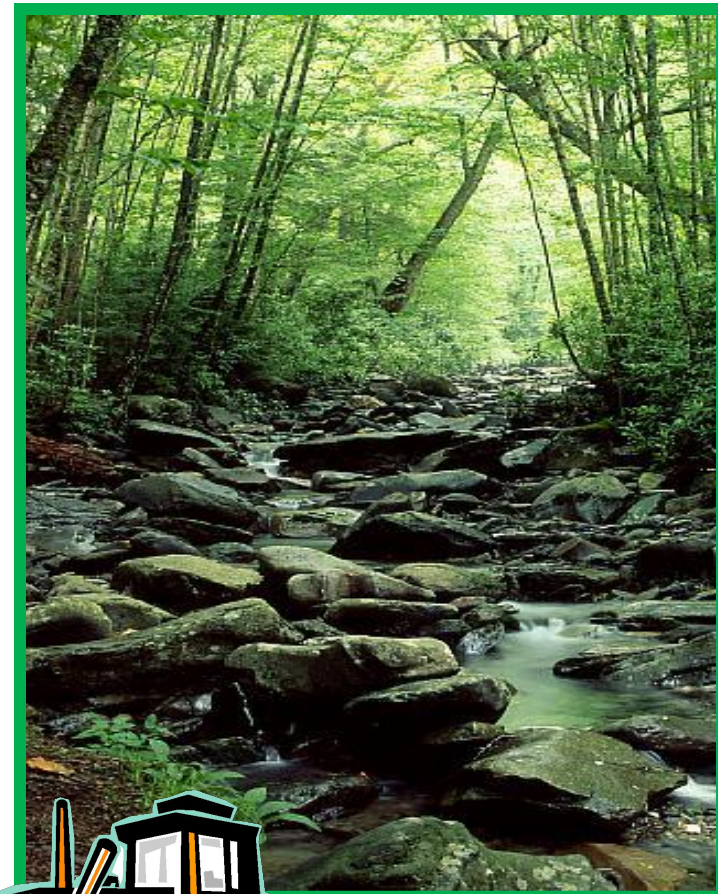


Applies to “waters of the United States” (33 CFR 328.3)

Goal - to preserve the physical, chemical, biological integrity of U.S. waters

Discharges of dredged or fill material are regulated

- Fill to create dry land
- Mechanized land clearing
- Regrading
- Bedding and backfill
- Sidecasting





LIMITS OF JURISDICTION FOR OPEN WATERS (LAKES, RIVERS, STREAM, ETC.)



Ordinary High Water Mark (OHW) (33 CFR 328.3(e))

- *means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*
- See Regulatory Guidance Letter (RGL) 05-05
- <https://www.usace.army.mil/Missions/Civil-works/Regulatory-Program-and-Permits/Guidance-Letters/>
- Caution – limit of Sec. 10 extends into tributaries/wetlands to limit of OHW for the navigable water (33 CFR 329)



WATERS OF THE UNITED STATES



STAY TUNED FOR PENDING CHANGES TO THE DEFINITION OF WATERS OF THE US

[http://www.usace.army.mil/Missions/CivilWorks/Regulatory
ProgramandPermits/FederalRegulation.aspx](http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/FederalRegulation.aspx)

<https://www.epa.gov/nwpr>



WETLAND DELINEATION



Performed in accordance with

- 1987 Federal Wetland Delineation Manual
- Associated Regional Supplement
- USDA/NRCS Field Indicators of Hydrophytic Vegetation

Three criteria:

- Hydric soils
- Hydrology
- Hydrophytic vegetation





COMMON QUESTIONS ABOUT FEDERAL WETLANDS



Are there Federal Regulatory maps like the state?

NO. Determined on a case by case basis, no size limit, National Wetland Inventory (NWI) maps are USFWS habitat maps not regulatory

Is there a regulated buffer?

NO.

Which agency has precedence when both regulate?

Neither, must comply with both and boundaries may not be exactly the same

Highly recommend use of environmental professional familiar with identification of federal waters



TYPES OF USACE PERMITS



General Permits (minimal effect)

- Regional Permits (RP) – specific activities developed by District
 - LRB = 7 RPs, NAN = 3
 - LRB RP 99-000-1 & NYDGP15 emergency activities resulting from storm event
 - requires USACE activation
- Nationwide Permits (NWP) – 52 specific activities, developed by HQ for the Nation with added District Regional Conditions
 - e.g. NWP 3 – Maintenance, NWP 13 – Bank Stabilization, NWP 14 – Linear Transportation Projects

Individual Permits

- Letter of Permission (LOP) – Sec. 10: large dock structures, dredging. Sec. 404 specific activities developed by District (e.g., discharges up to 1 acre (LRB), etc.)
- Standard Individual Permit (SP) – anything that doesn't fit in the other categories/controversial

<https://www.lrb.usace.army.mil/Missions/Regulatory/New-York-Permit-Information/>
<https://www.nan.usace.army.mil/Missions/Regulatory/Regional-General-Permits/>



OTHER APPROVAL MANDATED BY LAW:

- 401 Water Quality Certification by the New York State Department of Environmental Conservation (NYSDEC)
- Coastal Zone Management Program Consistency by the New York State Department of State (NYSDOS)
- Section 408 permission to alter Federal Civil Works projects

<https://www.lrb.usace.army.mil/Missions/Regulatory/Section-408-Requests-Section-404-10-Applications/>

Also need to show compliance with:

- Endangered Species Act
- National Historic Preservation Act





NATIONWIDE PERMIT (NWP) 3 – MAINTENANCE



- 3.(a) Repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill
 - Minor deviations permitted
 - Includes removal of sediment & debris within & immediate vicinity of structure

- 3.(b) Removal of accumulated sediment and debris outside of the immediate vicinity of structures up to 200 feet (Notification required (aka submission of an application))

- 3.(c) Authorizes temporary structures, fills and work necessary to conduct maintenance activity



NATIONWIDE PERMIT 13 – BANK STABILIZATION

- Minimal necessary for erosion protection
- Notification required if:
 - Exceeds 500 ft in length along bank
 - Exceeds average of 1 cubic yard per running foot placed along the bank below OHW
 - within special aquatic site (e.g. wetlands, riffle/pool)





NWP 14 – LINEAR TRANSPORTATION PROJECTS



- Loss of waters cannot exceed $\frac{1}{2}$ acre in non-tidal waters
 - Notification required if:
 - within Special Aquatic site (includes wetlands and riffle & pool complex) or
 - exceed 0.1 acre loss of waters

- Non-linear features are not authorized, e.g. storage buildings, parking lots

- Authorizes temporary structures, fills and work necessary to construct the project



OVER WIDENING



Avoid Over Widening Channel

Ensure Design Includes Low Flow & Normal Flow Channel

Use Floodplain Benches

Otherwise Stream Will Adjust Itself





APRONS



AVOID CONCRETE – Can't concentrate flow, too smooth to hold bed material

BETTER CHOICE – STONE, However, use native stream bed material and supplemented with similarly sized material, if needed, to fill interstitial spaces to maintain water flow on the surface of the stream bed.





NWP GENERAL CONDITIONS



- ❖ 32 conditions developed by HQ for the Nation, not all apply to every project

#2. Aquatic Life Movements.

- No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody
- All permanent and temporary crossings shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.



NWP GENERAL CONDITIONS



#9. Management of Water Flows.

- pre-construction course, condition, capacity, and location of open waters must be maintained
- constructed to withstand expected high flows
- must not restrict or impede the passage of normal or high flows
- may alter if it benefits the aquatic environment (e.g., stream restoration or relocation activities).



REGIONAL GENERAL CONDITION

G-B - CULVERTS



#1 – New or replacement culverts

- Provides general information on items to consider when designing
 - Bed slope & material, stability, flows, aquatic life, etc.

- Suggests ways to design to meet GC #2 & #9
 - Span, embedment 20%, maintain slope
 - Culvert width accommodate bankfull channel (~1.25 x width at OHW or 2 YR design storm)
 - When assessing OHW move up/down stream from existing culvert to ensure natural channel represented

- If you meet terms no notification (permit application) is needed



REGIONAL GENERAL CONDITION

G-B - CULVERTS



- Provides for waiver as suggested measures do not work in every instance
- Requires site specific information about aquatic system, evaluation of effects, & rationale
- Mitigation measures may include, but are not limited to baffles, weirs, roughened channels, and grade control structures.





REGIONAL GENERAL CONDITION

G-B - CULVERTS



#2 – ALL CULVERT REHABILITATION PROJECTS

- Evaluate existing culvert to see if it is compliance with GC #2 & #9
- If project results in an impediment or doesn't address impediment to flow or aquatic life movement, an application (PCN) is required





SOME EXAMPLES OF IMPEDIMENTS



- Multi-barrel culverts
- Perched outlet
- Insufficient size to pass normal or expected high flow





SOME EXAMPLES OF IMPEDIMENTS



- Insufficient depth (lack of flow concentration)
- Excessive velocity (too fast to swim against)
- Lack of proper substrate





APPLICATION CONTENT



- Form: Joint Application Form (Please read instructions)
- Location Map
- Photos: aerial and on-site, without snow cover
- Narrative
- Plans:
 - Plan & Cross-Section Views (provide scale/all dimensions)
 - ❖ Make sure to show limits of waters of the US
 - Water Management/Pollution Control Measures (temporary diversions, cofferdams, turbidity curtains, time-of-year)
 - Construction Access
- Delineation report
- Also see NWP for additional items
 - Endangered Species
 - Historic properties



HOW TO HELP YOURSELF



Plan Ahead

- Delineate wetlands and waters
 - During growing season!
 - Include OHW
 - Document inlet/outlet conditions during inspections
- Allow sufficient time for regulatory review (minimally 3-4 months)
- Schedule a pre-application meeting

Do Your Homework

- Consult available resources
- Review NWP



COMPLIANCE ON TRANSPORTATION PROJECTS





BANK PROTECTION





BANK PROTECTION





BANK PROTECTION





BANK PROTECTION





GRADE-CONTROL



COMPLIANCE CHALLENGES





EMBEDDEDNESS





UNDER-EMBEDDED





CORRECTIVE ACTIONS





CORRECTIVE ACTIONS - BAFFLES



OVER-EMBEDDED





CHANNEL "CLEANING" & CHANNELIZATION





TEMPORARY FILLS





TEMPORARY FILLS





EROSION & SEDIMENTATION CONTROLS





ENGINEERING





RECOMMENDATIONS



- Modifications – Recommend looking over permit
- Ensure all contractors aware of permit and conditions
 - If there are violations, the permittee is responsible
- Monitoring
- Erosion and Sediment Controls - Maintenance



QUESTIONS?



THANK YOU!



ASSESSMENT OF LEARNING QUESTIONS



#1 – Name two types of Department of the Army permits:

- a. General & Individual
- b. Streams & Wetlands
- c. Routine & Comprehensive
- d. Linear and Non-Linear

#2 –Which of the following is **NOT** true about federal jurisdictional wetlands.

- a. Upland areas (buffers) immediately adjacent to the wetland are not regulated.
- b. To determine the wetland's jurisdictional limits refer to the National Wetland Inventory maps.
- c. Wetlands are to be delineated in accordance with the 1987 Federal Delineation Manual & associated regional supplement.
- d. There is no size limit (minimum/maximum) for a federal jurisdictional wetland.



ASSESSMENT OF LEARNING QUESTIONS (CON'T)



#3 – One of the biggest issues encountered/observed by Corps of Engineers staff associated with road/highway crossings of waterways is:

- a. Road grade
- b. Materials used in construction
- c. Culvert installation
- d. Dewatering of work area

#4 – The Corps of Engineers regulatory authorities are derived from:

- a. Section 10 of the Rivers and Harbors Act & Section 404 of the Clean Water Act
- b. Section 7 of the Endangered Species Act
- c. Section 106 of the National Historic Preservation Act
- d. Coastal Zone Management Act

#5 – In addition to the evaluation and issuance of permits, one of the Corps of Engineers primary, Regulatory missions is to:

- a. Notify the responsible party when a bridge/road is failing
- b. Perform permit compliance inspections
- c. Assist in the design of temporary water diversions
- d. Monitor vegetation coverage to ensure a diversity of habitats are maintained