

Appendix M-4
Wetland Methodology and Agency Correspondence

WETLAND ASSESSMENT METHODOLOGY

This document describes the methodology that will guide analysis of potential effects on wetlands from project alternatives under consideration for the I-81 Viaduct Project.

Project Overview and Background

This memorandum outlines the proposed methodology for wetland mapping and an alternatives impact assessment that will be conducted as part of the Environmental Impact Statement (EIS). Due to the large size of the study area and its location within an urban environment, the proposed methodology will involve the use of mapping and limited field investigations to identify wetlands in lieu of the "Preliminary Wetland Delineation" methodology outlined in NYSDOT's Transportation Environmental Manual (TEM) Attachment 4.A.E., "Comparison of Preliminary Wetland Delineation and Formal Wetland Delineation". The mapping and limited field investigation effort will be used to confirm the presence/absence and general extent of wetlands and surface waters within the project limits and to describe the plant community present within wetlands. Approximate wetland and surface water acreages will be calculated and used to assess the approximate wetland impacts of each alternative in the EIS. This level of analysis will satisfy the requirements of the National Environmental Policy Act (NEPA) and State Environmental Quality Review Act (SEQRA) to assess wetland and surface water impacts under each alternative. A "Formal Wetland Delineation" as per the TEM will be conducted as part of the potential future permitting process once a preferred alternative has been identified and the Record of Decision has been issued.

Purpose of the Study

The purpose of this study is to remotely identify the approximate location and extent of mapped and unmapped wetlands and surface waters within the project limits and to subsequently assess approximate wetland and surface water impacts under each alternative for NEPA/SEQRA purposes. Existing conditions and the impact assessment will be described in the EIS.

Analysis Methodology

For the wetland/surface waters mapping effort, ArcGIS 10.3 desktop software will be used to identify potential wetland/surface water areas for subsequent field verification. Best-available high-resolution digital aerial photography from the New York State Statewide Digital Orthoimagery Program will be compiled and loaded into the software for use as a base map. This imagery is 4-band and includes not only natural color (red, green and blue bands) but also infrared, which can provide additional information regarding vegetation coverage and type. For Onondaga County, best-available imagery will include 0.5-foot resolution imagery captured in 2012 for some areas of the County. For areas outside that coverage area, the February 2015 Annual Lot has been flown and its 1-foot resolution imagery product will be used once it is

made available (expected by early 2016). Alternatively, the 2-foot 2012 imagery that is currently available may also be used.

This imagery will be supplemented with other GIS data overlays, including best-available topographic data from the U.S. Geological Survey; hydric soils data from the Natural Resources Conservation Service's (NRCS) (U.S. Department of Agriculture) Web Soil Survey⁴ and NRCS National Hydric Soils list⁵; U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) (see attached example [Figure 1]) which shows the NWI wetland boundary and an existing stream channel) and the NYS Department of Environmental Conservation (NYSDEC) Article 24 freshwater wetland maps. Topographic data in particular, in conjunction with the high-resolution natural color and infrared imagery, will enable the project team to more accurately approximate potential wetland areas, identify unmapped potential wetlands, and identify areas of disturbance that may have eliminated or modified wetlands subsequent to Federal/State wetland mapping efforts. Specifically, topographic data and high resolution natural color imagery will be used to differentiate developed areas, including areas converted to lawn/pavement subsequent to NWI/NYSDEC mapping, from forested/undeveloped areas that may contain hydrophytic vegetation and wetland hydrology. In this way, some areas of mapped NWI/NYSDEC wetlands may be excluded from further review. NRCS soil mapping units with the potential to include hydric soils will also be incorporated. Specifically, soil mapping units given a hydric component rating of 33% or greater, as is provided in the NRCS Web Soil Survey, will be highlighted and considered in combination with the other wetland/surface water data sources. Infrared imagery will also be used to identify watercourses/wetland hydrology.

Prior to field inspection, the wetlands maps for the project limits will be developed with the mapping data and GIS overlays described above. As per the USACE Wetland Delineation Manual,⁶ three wetland indicators, hydrophytic vegetation, hydric soils, and hydrology, must be present for an area to be classified as a wetland. Any area shown on the maps and/or on the GIS overlays that exhibit signs of wetland conditions (e.g., surface waters, hydric soils, and/or wetland vegetation) will be mapped and further investigated through limited field inspection to determine if all three USACE wetland indicators (i.e., hydrophytic vegetation, hydric soils, and hydrology) are present. Areas that do not have all three USACE wetland indicators (i.e., hydrophytic vegetation, hydric soils, and hydrology) as per field inspection will be excluded from further review. The product of the field inspection will be a presence-absence technical letter report indicating which publicly mapped wetlands (NWI/NYSDEC) and unmapped wetlands (if present) exhibit positive indicators of all three USACE wetland indicators (i.e., hydrophytic vegetation, hydric soils, and hydrology). Where the approximate locations of wetlands are confirmed in the field or where mapped wetlands are found to be absent, this information will be used to update the wetland maps for the project limits and create a final set of wetland maps

⁴ Available: <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

⁵ Available: <http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/>.

⁶ Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss; U.S. Army Corps of Engineers. 2011. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (version 2.0), ed. J.S. Wakeley, R.W. Lichvar, C.V. Noble, and J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

to be used for the EIS.⁷ Subsequently, approximate wetland impacts under each alternative will be assessed for NEPA/SEQRA purposes by overlaying the footprints of disturbance of the alternatives on these wetland maps.

⁷ A formal wetland delineation would not be conducted under this methodology (i.e., no flags would be placed in the field). These wetlands maps would show the approximate locations of wetlands within the project limits and would not replace formal wetland jurisdictional mapping (i.e., field delineated wetland boundaries and acreage calculations)

Mon 12/21/2015 2:54 PM
From: Brown, Bridget LRB Bridget.Brown@usace.army.mil
RE: Wetland Methodology (UNCLASSIFIED)
To: Adams, Jon (DOT) Jon.Adams@dot.ny.gov

Classification: UNCLASSIFIED
Caveats: NONE

Sorry for the delay. The changes to the document look fine.

Bridget Brown
USACE, Auburn FO
(315)255-8090x5
direct (716)879-6329

-----Original Message-----

From: Adams, Jon (DOT) [<mailto:Jon.Adams@dot.ny.gov>]
Sent: Friday, December 11, 2015 11:34 AM
To: Brown, Bridget LRB
Cc: patricia.millington@dot.gov; Leslie, Catherine S. (DOT); Prockup, Jessica (DOT); Flint, Joseph A (DOT)
Subject: [EXTERNAL] Wetland Methodology

Bridget,

NYSDOT has worked with our consultant team to address ACOE comments on the proposed wetland assessment methodology for the I81 Viaduct Project. Considering EPA and NYSDEC had no comments on the previous draft, NYSDOT wanted to share this draft with ACOE to ensure your comments are satisfactorily addressed prior to send to the other agencies with jurisdiction for final concurrence.

I have attached the revised document along with the original draft with ACOE comments for reference. Please review the revised document. If you are satisfied with the document with no further comments, NYSDOT will finalize and share with the other agencies with jurisdiction. We also intend to provide the final Wetland Assessment Methodology as an update to the projects coordination plan.

Feel free to call to discuss if you have any questions.

Jonathan Adams, RLA
I-81 Viaduct Project Environmental Team Lead
New York State Department of Transportation - Region 3
333 E. Washington St., Syracuse, NY 13202

Thu 12/24/2015 1:24 PM

From: Bimber, David L (DEC) david.bimber@dec.ny.gov

RE: Revised I81 Viaduct Project Wetland Assessment Methodology

To: Adams, Jon (DOT) <Jon.Adams@dot.ny.gov>; Knutson, Lingard Knutson.Lingard@epa.gov

Jon: DEC Regional Staff have no objections or comments regarding this final update to wetlands assessment.

Thanks

Dave

David L. Bimber

Regional Permit Administrator, Division of Environmental Permits

New York State Department of Environmental Conservation

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From: Adams, Jon (DOT)

Sent: Monday, December 21, 2015 3:47 PM

To: Bimber, David L (DEC); Knutson, Lingard

Cc: Brown, Bridget LRB; patricia.millington@dot.gov; Flint, Joseph A (DOT); Leslie, Catherine S. (DOT); Hitt, Dan (DOT); Robert.Davies@dot.gov; dot.sm.mo.I81Team

Subject: Revised I81 Viaduct Project Wetland Assessment Methodology

Dave & Knutson,

NYS DOT has worked with our consultant team to address USACE comments on the proposed wetland assessment methodology for the I81 Viaduct Project. USACE has reviewed this revised document and the agency is now satisfied with the methodology.

In cooperation with FHWA, NYS DOT is providing the attached final draft wetland assessment methodology to your agencies (USEPA & NYS DEC) for final concurrence. If there are no further comments, NYS DOT will finalize the document and intends to include the final methodology as an update to the Coordination Plan.

We respectfully request any comments by 1/4/16.

Hope each of you enjoy the upcoming holiday and new years.

Jonathan Adams, RLA
I-81 Viaduct Project Environmental Team Lead
New York State Department of Transportation - Region 3
333 E. Washington St., Syracuse, NY 13202



Mon 12/28/2015 9:35 AM

From: Knutson, Lingard Knutson.Lingard@epa.gov

RE: Revised I81 Viaduct Project Wetland Assessment Methodology

To: Bimber, David L (DEC) <david.bimber@dec.ny.gov>; Adams, Jon (DOT) Jon.Adams@dot.ny.gov

EPA also has no comments. Thank you for the update.

Lingard

From: Adams, Jon (DOT)

Sent: Monday, December 21, 2015 3:47 PM

To: Bimber, David L (DEC); Knutson, Lingard

Cc: Brown, Bridget LRB; patricia.millington@dot.gov; Flint, Joseph A (DOT); Leslie, Catherine S. (DOT); Hitt, Dan (DOT); Robert.Davies@dot.gov; dot.sm.mo.I81Team

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