

Wetland Mitigation Guidance for NDDOT Projects

May 2016

When considering mitigation needs for permanent wetland impacts please use the guidance below. This is general guidance. Each project is different and may have variations to this guidance. The intent is to find onsite mitigate outside of existing NDDOT Right of Way (ROW) when feasible for larger impacts (greater than 1 acre), utilize banks when a permanent easement is not available, and use onsite mitigation within NDDOT ROW as a last resort.

I. General Mitigation Guidance

For Major Rehabilitation projects, with impacts of more than 1 acre requiring mitigation, more emphasis should be placed on finding mitigation locations anywhere outside of the existing NDDOT ROW, typically as a permanent wetland easement, in the same Regional Service Area (RSA) as the impacts. It may be possible to mitigate outside of the same RSA as the impact with justification approved by the USACE. Possible mitigation locations should be included in the process when obtaining ROW or Temporary Construction Easements. If outside of the right of way is not an option, then mitigation within the ditch is acceptable (upland buffer credit is not available within a typical ditch section).

[Appendix B6](#) shows the bank locations, mitigation use (USACE/11990/USFWS) for each bank, and the Regional Service Areas. Contact ETS or Tech Support to determine which bank to use.

For Natural wetland impacts, mitigation created/reestablished at the same wetland impacted receives a 1:1 ratio. Mitigation not created/reestablished at the same wetland impacted receives 2:1. If restoring a wetland the ratio is 1:1.

Mitigation at an approve bank is a 1:1 ratio.

1. Natural/Non-Jurisdictional

(a) EO 11990

- Mitigation is required regardless of size and can be done onsite or at an 11990 bank in any RSA.

b) USACE

- No Mitigation Required

2. Natural/Jurisdictional

(a) 11990

- Mitigation is required regardless of size and can be done onsite or at an 11990 bank if USACE mitigation is not required.

(b) USACE

- Mitigation is required for cumulative impacts (1a, 1b, 1c..etc) to a wetland that is greater than 0.10 acre and can be done at a USACE approved bank or onsite if no USACE bank is available.

3. Artificial/Non-Jurisdictional

(a) 11990

- No mitigation required.

(b) USACE

- No mitigation required.

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4. Artificial/Jurisdictional

(a) 11990

- No mitigation required

(b) USACE

- Mitigation is required for cumulative impacts (1a, 1b, 1c..etc) to a wetland that is greater than 0.10 acre and can be done at a USACE approved bank or onsite utilizing the Jurisdictional Ditch Mitigation Guidance.

II. Jurisdictional Ditch Mitigation Guidance

These are "*GUIDELINES ONLY*" for *typical* USACE jurisdictional artificial ditch wetland impacts requiring mitigation and are subject to case by case determination. Depending on future projects, function of the wetland, size of impact, and the permit type the Corps may require changes to the guideline as we explore the outcomes.

In cases where both jurisdictional natural (non-ditch) wetland and jurisdictional artificial (ditch) wetlands require mitigation by the USACE, only abutting artificial ditch wetland impacts need to be detailed in the 12 component mitigation plan. For non-abutting ditch wetlands meeting the criteria below only reference the Guidelines for Artificial Ditch Mitigation with the acreage and no further detail is required. Abutting refers to a direct *wetland* connection to jurisdictional water. A direct connection includes culverts.

1. **Nationwide Permit – Compensatory mitigation for permanent jurisdictional ditch wetland impacts by "shifting" the new ditch closer to the ROW line, reestablishment by expanding an existing wetland, or creating a new wetland not adjacent to an existing wetland.**

- In Kind. 1:1 ratio.
- 12 component compensatory wetland mitigation plan not required.
- Monitoring not required.

2. **Individual Permits with impacts greater than 0.5 acre**

- Pre-application meeting with the USACE may be required to determine mitigation ratios and level of detail needed.

See [Design Manual Chapter II Section 4](#) for more information.

III. Minimization:

Wildlife Passages

- Wildlife Passages in box culverts or under bridges may be utilized as wetland mitigation. Coordination with the USACE will need to be done as soon as possible to determine if a wildlife passage is an appropriate form of mitigation and to determine the amount of credit.

Lowering Box Culverts and Riprap:

- Lowering a box culvert and riprap 1 foot below the channel elevation may be considered minimization (a form of mitigation) since this practice allows for fish and invertebrates to pass in low flow situations and allows for sedimentation to occur within the box and on the riprap to better mimic stream substrate characteristics and regain some

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functionality. Therefore, compensatory mitigation may not be required for the box and riprap footprint if lowered 1 foot. The box culvert and riprap impact area are always shown as permanent impacts in the plans but are not included in the compensatory mitigation needed at a bank or onsite. This may not include box culvert extensions.

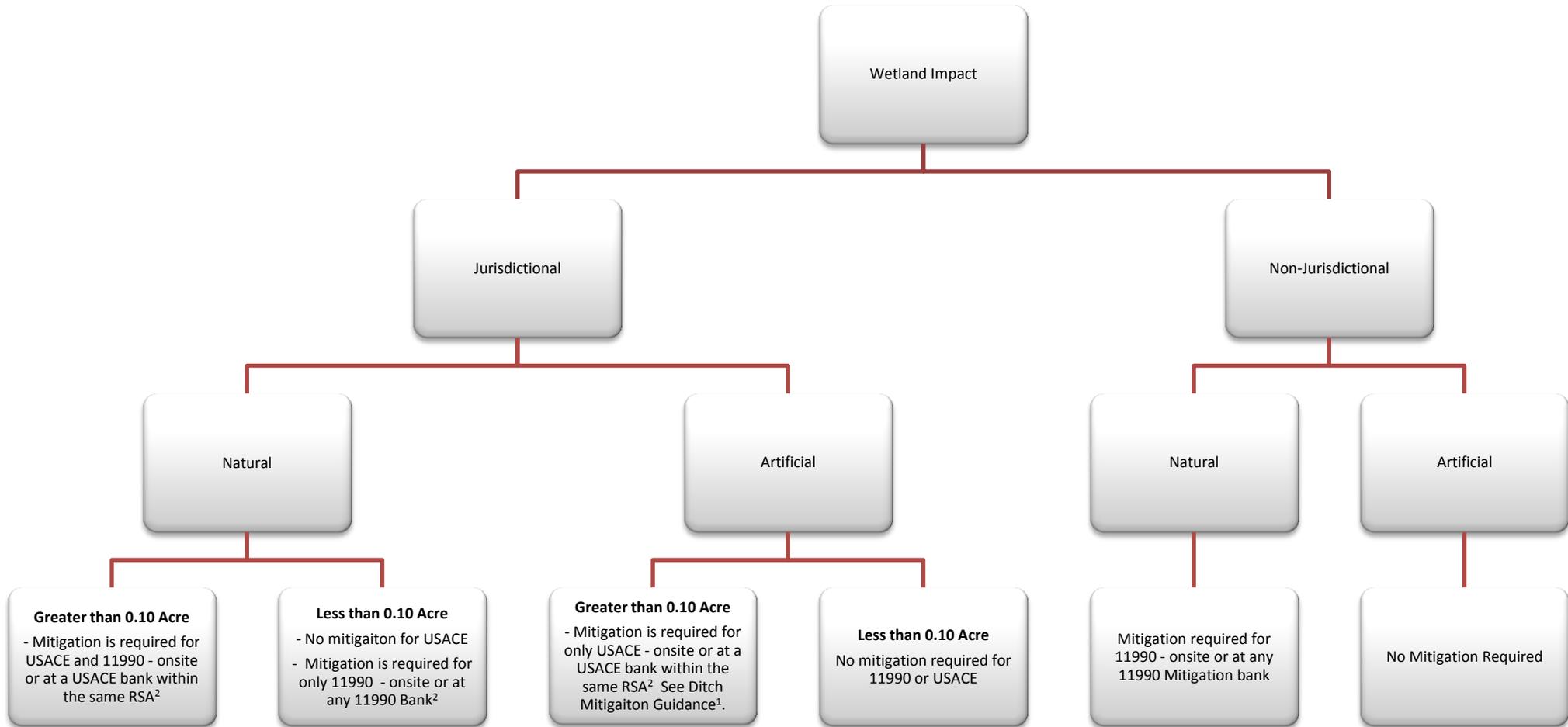
Lowering Riprap Under Bridges

- Lowering riprap under bridges 1 foot below the channel elevation may be considered minimization (a form of mitigation) since this practice allows for fish and invertebrates to pass in low flow situations and allows for sedimentation to occur within the box and on the riprap to better mimic stream substrate characteristics and regain some functionality.

IV. Roadway Footprint

- Wetlands that have developed on the roadway inslopes do not require compensatory mitigation. When determining permanent wetland impacts, wetlands which have been delineated on the roadway inslopes should be “clipped” at the originally designed toe of slope and removed from the wetland reference. The final plan cross sections should not show impacts to wetlands on the existing toe of slope. See [Appendix B5, B7](#), and the example toe of slope (TOS) determination below.

Wetland Mitigation Flow Chart



¹ [Appendix B7](#) General Mitigation Guidance

² [Appendix B6](#) Active mitigation Bank Location and Regional Service Area (RSA) Map

