

# **Components of a Complete Wetland Delineation Report**



For submittal to the U.S. Army Corps of Engineers, Seattle District January 20, 2011

In Washington State, wetland delineations submitted to the Corps of Engineers (Corps), Seattle District must be conducted in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual* and the appropriate supplement for the project site, either the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region, Version 2.0 (May 2010) or Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (September 2008).* 

### A complete wetlands delineation report should include:

- 1. Who authorized the wetlands delineation, property ownership, and who conducted the delineation.
- 2. The reason the wetlands delineation was conducted (is it for a particular project?)
- 3. Date of the site visit/s with information on tasks performed on those dates.
- 4. Recent weather conditions and conditions during the delineation.
- 5. A vicinity map showing the project location and text identifying the street address, latitude/longitude, and section/township/range.
- 6. The most current field data sheets from the appropriate Regional Supplement.
- 7. A map identifying delineated wetland boundaries and the locations of all data collection points (for large and/or complex projects, a large scale [1":400" to 1":100"] aerial photo with overlays displaying site property and wetland boundaries is helpful). This map must also clearly identify the boundaries of the overall area evaluated.
- 8. Each separate wetland labeled (e.g. Wetland A, Wetland B, etc.) on the map and in the report text.
- 9. Use of scientific names of plants (vs. only using common names) recorded on the data sheets.
- 10. An explanation of the approach used to delineate the wetlands and synthesize the data. Describe if the delineation methodology used was routine, comprehensive, or atypical, or if "Difficult Wetland Situations" procedures were used and why.
- 11. A description of the site including mapped and observed vegetation, soils, hydrologic characteristics, and topography. This should include all waterbodies (e.g., ditches, streams, rivers, lakes, etc.)
- 12. A summary of the available information used in making the wetland determination. Information sources consulted should be listed in a "References Cited" section of the report. The following are examples of potential sources of information:
  - Aerial photos
  - County drainage maps many can be found online
  - Federal Emergency Management Agency (FEMA) insurance maps
  - Rare plants and high-quality wetlands data from the Washington National Heritage Program
  - Priority habitats and species lists from the Washington Department of Fish & Wildlife
  - Local experts
  - Local wetland inventories and soil surveys
  - National Wetland Inventory (NWI) map (see USFWS website: http://www.fws.gov/wetlands/)
  - Plant Lists (preferably a wetland plant list with the indicator status)
  - Precipitation records. (see WETS table data on the NRSC website: <a href="http://www.wcc.nrcs.usda.gov/">http://www.wcc.nrcs.usda.gov/</a>)
  - Previous site documentation and analysis (e.g., environmental checklist, prior delineation, etc.)
  - Scientific literature
  - Stream and tidal gage data
  - USGS land use and land cover maps
  - USGS quadrangle map (or other topographic map of the area)
- 13. A narrative description of results and conclusions, including characteristics and acreage of each area of wetland and non-wetland waters and the rationale for the wetland boundary line/s.
- 14. A list of references cited.



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#### Additional recommendations for wetland delineations and reports include:

- Upland and wetland data points should be paired on both sides of the wetland boundary to facilitate the reviewer's understanding of the justification for the location of the wetlands boundary line. Additional data points and supporting description should be provided in areas where a narrow area of upland is identified as the break between two wetlands, or for other situations that warrant additional explanation.
- Data points should be surveyed to create accurate maps and acreage computations.
- As described in the Regional Supplements, only on highly disturbed or problematic sites or areas, direct
  hydrology monitoring may be needed. Any monitoring wells used to facilitate wetland hydrology
  determinations must be installed in accordance with the guidelines in *Technical Standard for Water-Table*Monitoring of Potential Wetland Sites, ERDC-TN-WRAP-05-2, U.S. Army Research and Development Center,
  Vicksburg, MS (http://el.erdc.usace.army.mil/elpubs/pdf/tnwrap05-2.pdf). Hydrologic monitoring data should
  be interpreted and discussed.
- Photographs showing wetlands and non-wetlands areas, and other details, such as soil profiles.
- If the site was the subject of prior delineations, provide a reference to that document, a summary of the prior delineation's findings, the prior delineation's wetland boundary map, and an explanation of any differences in the findings between the prior and current delineation. Provide the Corps' reference number for the prior delineation, if available.
- To assist with the Corps' jurisdictional determination, provide information about flow in and out of the wetland/water (volume/duration of flow and directional flow path to other wetlands, streams, rivers, lakes or tidal waters) for each wetland or non-wetland water. It is recommended that this data be provided either in the report or on a *Tributary and Wetland Information Form*, available at: <a href="http://www.nws.usace.army.mil/PublicMenu/documents/REG/Trib">http://www.nws.usace.army.mil/PublicMenu/documents/REG/Trib</a> Wtld Info Checklist(11-1-07) DRAFT.doc
- Refer to *Wetland Mitigation in Washington State, Part 2, Version 1, Appendix H*, Ecology Publication #06-06-011b, March 2006, for a wetlands delineation report sample outline.
- Tailor the delineation and the wetlands delineation report to the size and complexity of the site, providing enough information to support the boundary line/s and wetlands/waters area calculations.
- On drawings please draw a box around the review area that was evaluated and in the report text specify if you are discussing inside or outside the review area.
- Please indicate if the wetlands or other waterbodies extend out of the review area and/or cross property lines.
- An overall plan view that includes all demarcated waterbodies allows the reviewer to visualize total impacts.
   For large or linear projects please include match lines to show where a drawing that is too large to be contained on one page is continued onto another.
- The number and size of upland inclusions in a wetland area should be discussed and delineators may want to coordinate with the Corps to determine whether each upland area needs to be delineated. Mosaic wetlands are discussed in the Supplements and specific delineation procedures are provided that should be adhered to.
- The Corps may choose to visit the site to confirm wetland boundaries after review of a wetland report so the wetland boundaries must be well-marked with stakes/flags for the site inspection.

### More information is available at:

- Corps, Seattle District Website:
   <a href="http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=mainpage">http://www.nws.usace.army.mil/PublicMenu/Menu.cfm?sitename=REG&pagename=mainpage</a> Wetlands and Waters
- Washington State Department of Ecology Website: http://www.ecy.wa.gov/programs/sea/wetlands/delineation.html