US Army Corps of Engineers

Minimum Standards for Acceptance of Aquatic

Resources Delineation Reports

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US Army Corps of Engineers **BUILDING STRONG**®



Delineations and Map & Drawing Standards

US Army Corps of Engineers

- Effective: <u>Delineation</u> <u>Maps and Drawings</u>
 January 2016 February 10, 2016
- Quality, Consistency, and Accuracy
- Simplify review and minimize delays
- Must be followed unless it is not practical

Exceptions determined on a case-by-case basis

- Under 0.10 acre
- Limited Financial Resources
- Emergencies



Delineation Checklist DELINEATION REPORT

- Cover Letter identifying PJD or AJD
- Signed permission to enter
 - Includes access through private property
- Contact Info
 - Applicant, Property Owner, Agent
- Total acreage of survey area



Delineation Report

- Statement conducted in accordance with:
 - '87 Manual;
 - Appropriate Regional Supplements; and
 - OHWM Field Guide
- Discussion
 - Hydrology
 - Plant Communities
 - Soils, include soil map
 - Interstate or Foreign Commerce



Delineation Report

- Methodology for Remote Sensing, if used
- Dates of field work and Description of field conditions
 - Wet, dry, drought years, irrigation, etc...
- Table of all aquatic resources
 - Name
 - Cowardin type
 - Acreage / Linear feet
 - Lat/Long



Delineation Report

- Describe all aquatic resources
 - Explanation of boundaries
 - Rationale for not mapping potential features
 - Potential signatures on the aerial
 - Do not meet 3 criteria
- Methods for mapping boundaries
 - GPS equipment (<1 meter) is required
 - Justify rationale for any deviation



Appendices

- Completed Data Forms
- Aquatic Resources Spreadsheet
 - Link in checklist
- Digital data
 - GIS, ESRI shapefiles
 - Metadata file; coordinate system, projection, and datum
 - If no GIS, mark boundaries with flags



- Location (Vicinity) and Plan View Maps
 - Cross-sectional views
 - Include staging, disposal, access, and mitigation sites
- Same Orientation for all maps (North up)
- Format:
 - Submit both paper and electronic versions,
 - Fold larger maps to fit within an 8.5" x 11"
 - GIS data and associated metadata
 - (ESRI shapefiles)

- Base Map:
 - Aerial photographs must be orthorectified
 - Date and source of imagery identified on map
 - Date of imagery should be when aquatic resources are visible (e.g. wet season)
 - At least one map showing topography



- Plan View:
 - Two control points with Lat/Long
 - North Arrow
 - Bar and text scale, not to exceed 1" = 400"
 - Legend
 - Area in parenthesis for each item
 - Date prepared/revised
 - Name & Organization of preparer



- Location (vicinity) Map:
 - USGS 7.5-minute quadrangle
 - Does not need to be to scale
 - Project location clearly marked
 - Include roadways and landmarks



- Proposed Project:
 - Clearly identify limits of project area
 - Show all fill, structures, limits of work within all potential waters of the U.S.
 - Identify permanent or temporary
 - Show delineated waters within project area
 - Completed ORM impacts sheet



- Post Construction (As-Builts):
 - Both plan view and cross-sectional view
 - Same size and alignment as authorized grading plans
 - Show deviations from authorized plans in red



- Delineation Map:
 - Plan view, cross-sectional upon request
 - Clearly identify survey area
 - Show location and extent of all potential waters of the U.S.
 - Each water type must be differentiable
 - Location of all paired data points
 - OHWM widths



- Delineation Map continued:
 - Tidal Mean high tide line with cross section
 - Each polygon must be clearly labeled
 - Feature type and unique number (i.e. SW1, SW2, VP1, VP2, etc.)
 - Completed ORM Aquatic Resources sheet



- Mitigation Map:
 - Both plan view and cross-sectional view
 - Clearly differentiable based on aquatic resource type and mitigation type
 - Each polygon must be clearly labeled with unique name
 - Completed ORM mitigation sheet



- Ground Photograph Map:
 - Any ground photos must be accompanied by a map of photo points
 - Unique label of each point
 - Compass direction of photo
 - Include a table
 - Name and date of photo
 - Lat/Long
 - Compass direction
 - Brief explanation of relevance



Additional Helpful Info

- Topographic maps
- LIDAR (Light Detection and Ranging)
- NWI (National Wetland Inventory)
- Satellite Photos
- Aerial and Ground Photos
- Floodplain Maps





