DRAFT/FINAL AQUATIC RESOURCE DELINEATION REPORT

Survey Name

Date

Prepared By:
Author's Name, Title
Consulting Company /Region/Cooperating Agency Name
Address
Phone Number
Email

Prepared For:
Name (Role)
Company
Address
Phone Number
email

Executive Summary

THIS DOCUMENT SHOULD NOT INCLUDE REFERENCE TO ARTIFICIAL WETLANDS OR ARTIFICIAL DITCHES. THIS HAS NO BEARING ON WHETHER A WATER IS JURISDICTIONAL. THERE SHOULD BE NO REFERENCE TO WHETHER A WATER IS JURISDICTIONAL OR NON-JURISDICTIONAL. <u>THAT IS A CORPS DECISION.</u>

Provide the following information:

- A statement that the delineation has been conducted in accordance with the 1987 "Corps of Engineers Wetland Delineation Manual" and appropriate regional supplement(s), with the identification of what supplement was used.
  AND/OR
- A statement that the delineation has been conducted in accordance with the 2008 “A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States” and the Corps OHWM Delineation Cover Sheet should be used.
- One paragraph summary of aquatic resource findings including:
  - Number and total area of aquatic resources within project area.
  - **Total acreage of the survey area**
  - Dominant aquatic resource classifications and general condition of aquatic resources.

Table of Contents

Tables

Appendices

Acronyms and Abbreviations

BMP best management practice
cfs cubic feet per second
LIDAR Light Detection and Ranging
LWD large woody debris
MP Mile Post
NRCS Natural Resources Conservation Service
NWI National Wetland Inventory
NWPL National Wetland Plant List
OHWM ordinary high water mark
PEM palustrine emergent
PFO palustrine forested
PSS palustrine scrub-shrub
ROW right-of-way
SR State Route
USACE U.S. Army Corps of Engineers
USFWS U.S. Fish and Wildlife Service
UTM Universal Transverse Mercator coordinate system
WRIA Water Resource Inventory Area

[add or delete acronyms and abbreviations as needed]

Chapter 1. Introduction

- Identify contact information for the applicant(s), property owner(s), and agent(s).
- Survey area description - include entire area surveyed (acres)
- The purpose of this report is to identify and describe aquatic resources and, to identify known possible sensitive plant, fish, wildlife species, and cultural/historic properties in the survey area. This report facilitates efforts to:

1. **Avoid or minimize impacts to aquatic resources during the design process.**
2. Document aquatic resource boundary determinations for review by regulatory authorities.
3. Provide early indications of known sensitive species and historic/cultural properties within the survey area.
4. Provide background information.

Chapter 2. Location

Identify the county and state where the project is located. Also include nearest town, as well as the street address or nearest intersection, and the Section, Township and Range, the UTM or latitude and longitude (in **DECIMAL DEGREES**). Provide driving directions to the survey area. Google maps is a great reference for providing specific driving instructions from the Bismarck Regulatory Office.

Chapter 3. Methods

- Describe all methods used to delineate and survey aquatic resources.
- Include any deviations from standard methods. Make sure methods comply with appropriate U.S. Army Corps of Engineers Guidelines.
- If remote sensing tools were used to aid in delineation, list what tools were used and provide a copy of the maps if possible.

Chapter 4. Existing Conditions

4.1 Landscape Setting

Describe in 1-2 paragraphs the topography, geological features, major water bodies, surface water flow, natural climax community, existing vegetation, current land use and major historical disturbances – such as logging, mining and farming.

Include:

- The total acreage of the survey area.
- A description of existing field conditions including current land use, time of season the site visit(s) were conducted, flood/drought conditions, irrigation practices, modifications to the site, and any characteristics considered atypical.
- A discussion of whether the entire survey area was field verified. If entire survey area was not visited, identify which areas were visited and a rationale for why the entire site was not visited. Provide dates that the field work was completed. Was it within the growing season? **If not, you must provide an email from the ND Regulatory Office State Program Manager that you had prior permission to perform a delineation outside of the growing season.**

4.2 Aquatic Resources

4.2.1 Overview

Provide brief overview of the existing aquatic resource conditions:

Include the following information:

- Describe all aquatic resources depicted on the Aquatic Resources Delineation Map within the survey site (Appendix A). Provide an explanation for the mapped boundaries, especially for resources containing complex transition zones. If the site contains resources that meet one or two wetland criteria or do not exhibit a clear

OHWM, describe the rationale for not delineating these features. Examples include erosional features, upland swales, and other upland areas that appear “wet” on satellite or aerial imagery.

- Provide a table listing all Aquatic Resources (Table 1). The table will include the name of each aquatic resource, its Cowardin type, acreage and location (latitude/longitude). For linear features, such as stream channels and ditches, the table must show both acreage and linear feet.
- **Discuss site hydrology**, including any surface or subsurface sources, drainage gradients, surface water connections to the nearest traditional navigable waterway or interstate water, and any potential influence for manmade water sources, such as irrigation. The discussion should also identify the nearest “blue-line” waterway or other feature found on the most recent USGS map.
- **Describe soils** including a discussion of hydric soils and soils with hydric inclusions (Appendix B).
- **Provide a general discussion of plant communities** and habitat types, including both scientific and common names, and the wetland indicator status of all plants (Appendix D).
- Describe any observed or documented interstate or foreign commerce associated with aquatic resources found on the site, specifically recreation or other use by interstate or foreign travelers, sale of fish or shellfish in interstate or foreign commerce, and use by industries operating in interstate or foreign commerce.

Table 1. Aquatic Resources within the Survey Area.

THE TABLE SHOULD NOT INCLUDE REFERENCES TO ARTIFICIAL WETLANDS!

THIS SHOULD NOT INCLUDE REFERENCE TO ARTIFICIAL WETLANDS OR ARTIFICIAL DITCHES. THIS HAS NO BEARING ON WHETHER A WATER IS JURISDICTIONAL. DO NOT USE “RELATIVELY PERMANENT FLOW” AS A MODIFIER. THAT IS ALSO A CORPS DETERMINATION.

Wetland Number	Test Hole (in wetland)	Location	LONG West (Dec. Deg.)	LAT North (Dec. Deg.)	Field Cowardin Classification	Wetland Type	Wetland Size (acres)
#1	11	Sec.19, T146N, R95W	-xxx.xxxxxx	xx.xxxxxx	PEMCx	Ditch	5.00
#2	9	Sec. 6, T146N, R95W	-xxx.xxxxxx	xx.xxxxxx	PEMA	Basin	2.00
#3	7	Sec.6, T146N, R95W	-xxx.xxxxxx	xx.xxxxxx	PEMB	Slope	6.00

#5	5	Sec.30, T146N, R95W	-xxx.xxxxxx	xx.xxxxxx	PEMBx	Slope	0.02
#6	15	Sec 20, T146N, R95W	-xxx.xxxxxx	xx.xxxxxx	PEMA	Mosaic	0.50

Example Other Waters Table for Delineation Report

* OTHER WATERS									
Number	**Location**	**LONG West (Dec.Deg.)**	**LAT North (Dec. Deg.)**	**Local Waterway Name**	**Tributary To**	**Field or NWI Cowardin Classification**	**OW Size (acres)**	**OW Length (feet)**	**Other Water Type**
#OW 1	Sec.19, T146N, R95W	-xxx.xxxxxx	-xxx.xxxxxx	Deep Creek	Heart River	R2UB1	0.64	340	River
#OW 2	Sec. 6, T146N, R95W	-xxx.xxxxxx	-xxx.xxxxxx	Tributary	Deep Creek	R2AB1	0.06	15	Stream
#OW 3	Sec.30, T146N, R95W	-xxx.xxxxxx	-xxx.xxxxxx	Rice Lake	NA	L2ABF	5.00	NA	Lake
#OW 4	Sec. 6, T146N, R95W	-xxx.xxxxxx	-xxx.xxxxxx	Tributary	Deep Creek	R4SBCx	0.30	250	Artificial Straightened Stream
#OW 5	Sec.19, T146N, R95W	-xxx.xxxxxx	-xxx.xxxxxx	NA	NA	L2ABF	0.50	NA	Lake
					TOTALS		**6.50**	**605.00**	

** Other Waters (OW) include: ALL WATERS which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; all interstate waters, including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds that the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters; all impoundments of waters otherwise defined as waters of the United States under this definition; tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) the territorial seas.

Chapter 5. References

Books, Journal Articles, Reports: [Author(s). YEAR Title. Publisher/Source. Volume: Page begin-Page end].

Correspondence: [Author(s). Date. Subject. Agency/Company. Pp. (pages)].

Phone: [Contact Name. Date. Subject. Agency/Company. Phone Number. Result/Action].

Email: [Contact name. Date. Subject. Agency/Company. Email address. Result/Action].

Appendix A — Aquatic Resource Delineation Maps

- A map of all delineated aquatic resources (“Aquatic Resources Delineation Map”) showing the following:
- All aquatic resources delineated must be clearly shown on the map. Because only the Corps determines the regulatory status of each aquatic resource, the map must not include any labeling about jurisdiction. If the requestor believes one or more aquatic resources are not jurisdictional, the rationale should be included in the delineation report and the resource(s) should be identified on the map.
- Location of all data and photo points.
- A reference block that identifies the site or project name, individual(s) who conducted the delineation, date of the map, and date(s) of any revisions.
- Also include historical aerials if available.
- Refer to the North Dakota Regulatory Office Mapping Standards.

Appendix B — Supporting Maps

This appendix must include a 7.5 USGS quadrangle location map and a soil survey map. Other helpful data should be included, such as a NWI map, site specific topographic maps, LIDAR map, satellite/aerial/ground photographs, floodplain maps, and other related maps. The survey area should be identified on all maps.

Appendix C — Photographs

All photographs should be referenced with the location and the direction the photograph was taken, along with identifying the resources present within the photograph.

Appendix D — Plant List

Plant species found within the survey area.

Use USDA Plants Database and National Wetland Plant List for the most up-to-date scientific name and Wetland Indicator Status.

Genus	Species	Common Name	WIS*

* Wetland Indicator Status (WIS):
OBL = occurs in aquatic resources > 99% of time
FACW = occurs in aquatic resources 67-99% of time
FAC = occurs in aquatic resources 34-66% of time
FACU = occurs in aquatic resources 1-33% of time
UPL = occurs in uplands > 99% of time
NI = indicator status not known in this region
~ = unsure as to FAC or FACU

Appendix E — Wetland Data Sheets

This appendix must contain at least one set of paired data points, documented in data forms, for each aquatic resource or complex. The paired data points must be located close to the delineated boundary. Additional data points may be necessary, and should be shown on the map, depending on various factors including the size and shape of the aquatic resource, changes in vegetation communities, and slope.

Data forms may be modified from the Corps' standard form but must contain all essential information to make a decision.

Appendix F — OHWM Data Sheets (if applicable)

This appendix includes the OHWM data sheets. Please insure to include a map identifying the location of the data points. Data forms may be modified from the Corps' standard form but must contain all essential information to make a decision.

Appendix G — A signed statement from the property owner(s) allowing access

This appendix must contain a signed statement from the property owner(s) allowing Corps personnel to enter the property and collect samples during normal business hours. If the property is land-locked, the owner or proponent must obtain permission from the adjacent property owner(s) in order to provide access.

Appendix H — Aquatic Resource Excel Sheet

The completion and submittal of the *Aquatic Resources Excel* spreadsheet is recommended as a supplement to the Aquatic Resource Delineation Report. A copy may be requested from the Project Manager if there are more than 20 aquatic features within the survey area. This spreadsheet will assist the Corps' in efficient and accurate data entry of the aquatic resources into the Corps' database.

The *Aquatic Resources Excel* spreadsheet contains a validation tool to ensure accuracy of the data. To run the validation tool, first enter all data in the appropriate columns and tabs. Once you have completed entering the data and have saved the document in a .csv format, click the gold shield at the top of the workbook window. The tool has a tooltip showing "Validate Worksheets." After clicking this button, validation of data is performed and any possible errors are added to the Validation tab. This tab is opened after the process is complete to allow the user to see the output. The validation output includes the tab (data type), column, and cell for where the possible error was found and a brief explanation of the issue.

Appendix H — Aquatic Resource Functional Assessment Forms (If applicable)

If a functional assessment was completed, this appendix includes the aquatic resources functional assessment form of each aquatic resource delineated along with a description of the results of the assessment.