



Pend Oreille Valley Wetland Restoration Efforts

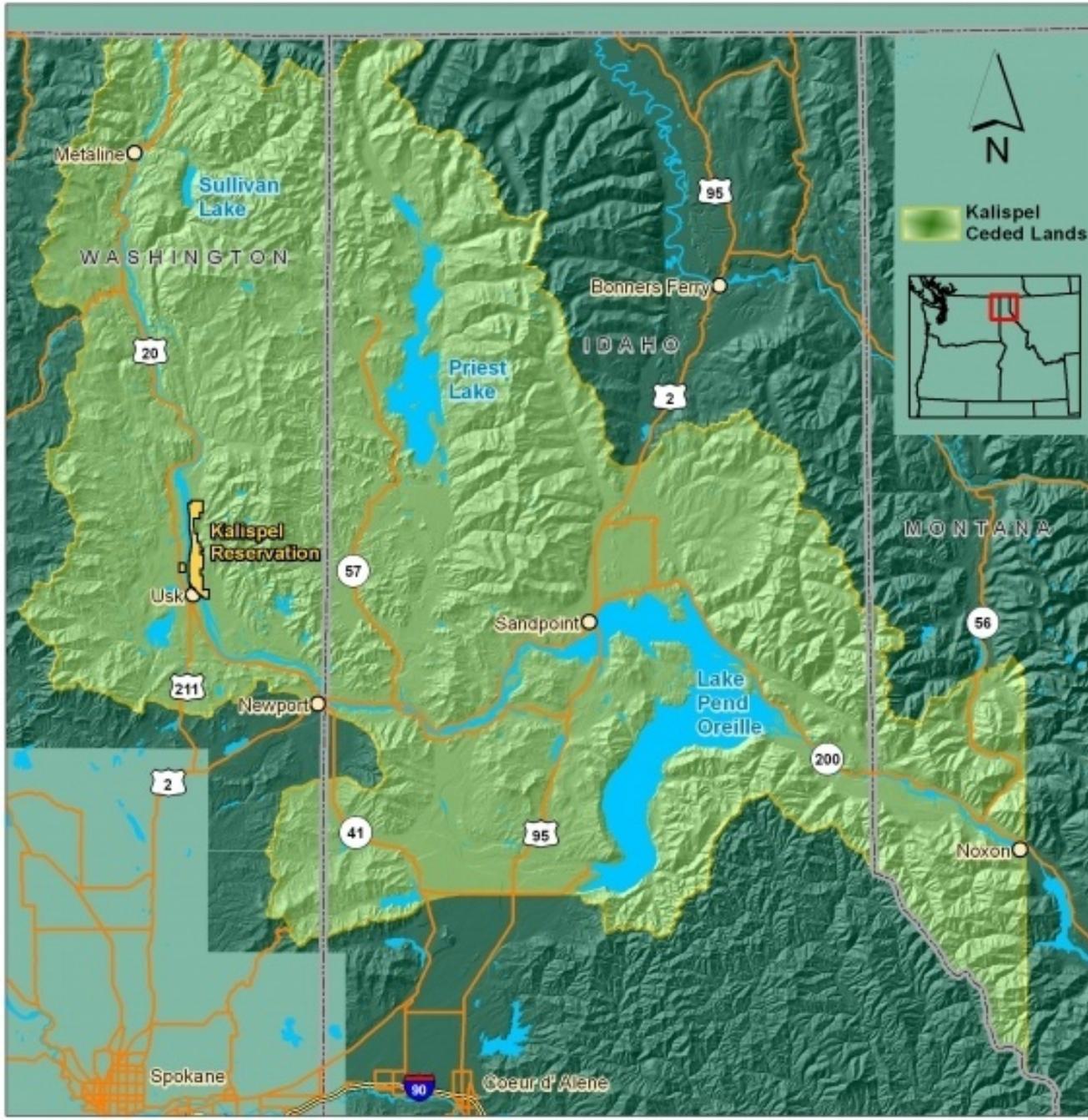
Ken Merrill

Kalispel Natural Resources Department

National Tribal Water Quality Conference

Santa Fe, NM

November 2011



Kalispel Ceded Lands
 NE Washington,
 Idaho and Western
 Montana
 Over 2.3 million
 acres

Reservation
 NE Washington
 4,750 acres
 1,900 additional
 acres in Trust status
 since 1997

People and Resource Utilization



1857. Sanyakwanan depot camp, on the left bank
of the Pond d'Ouille river.

Animals



Plants



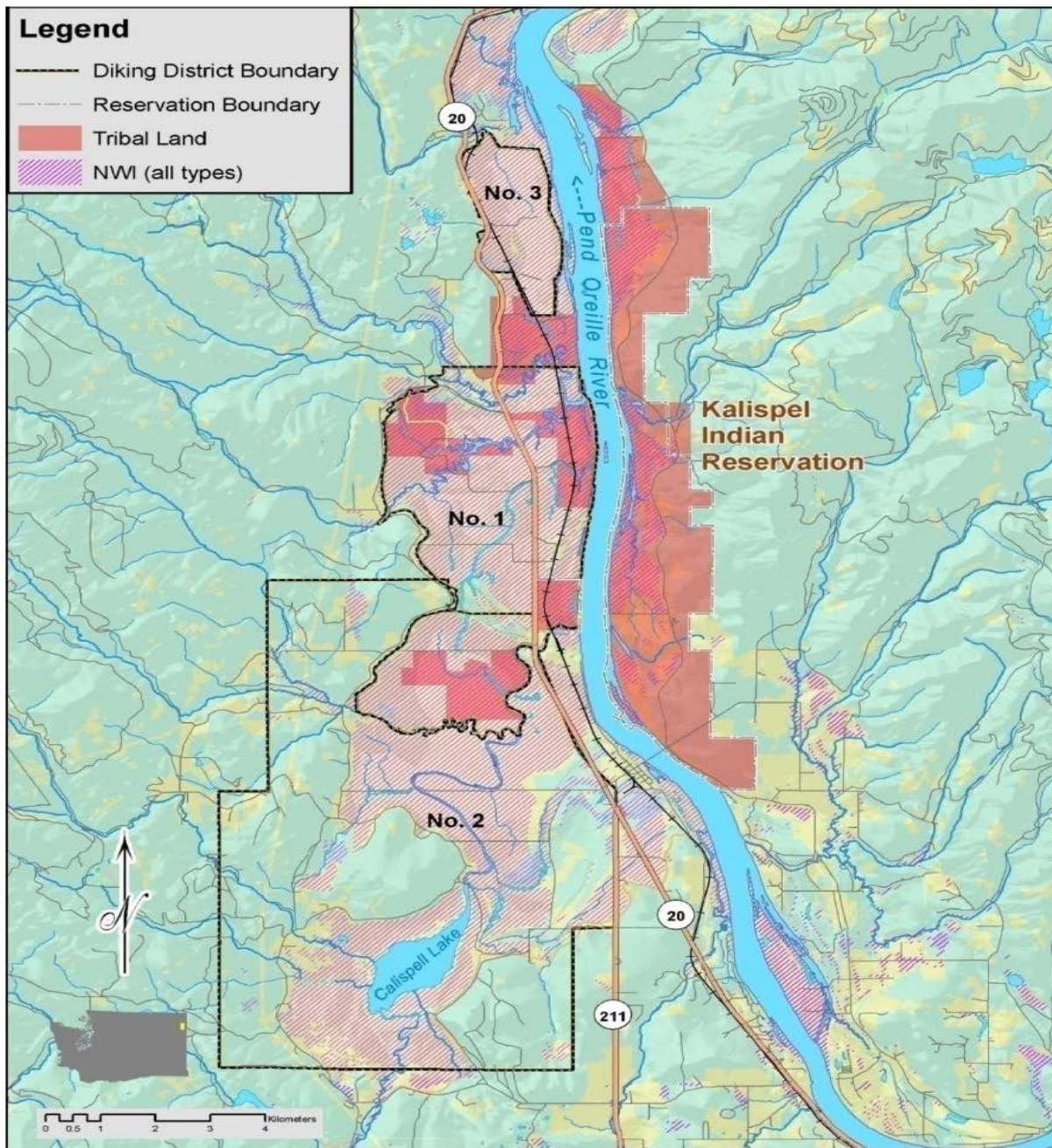
Resident Fish



Salmon



Figure 1. The Calispell- Cusick Valley restoration planning project boundary.



5/9/2007 8:18 AM

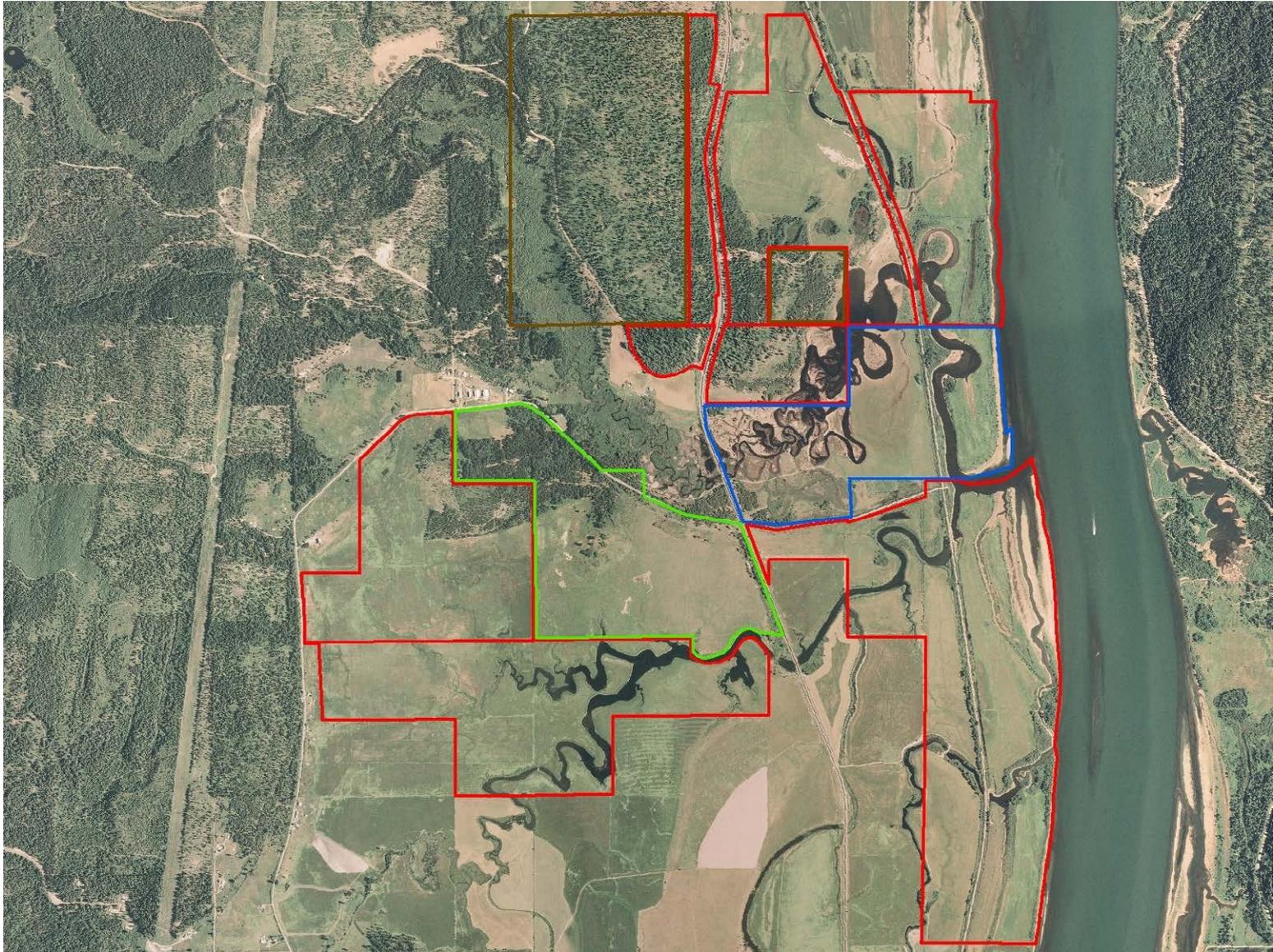




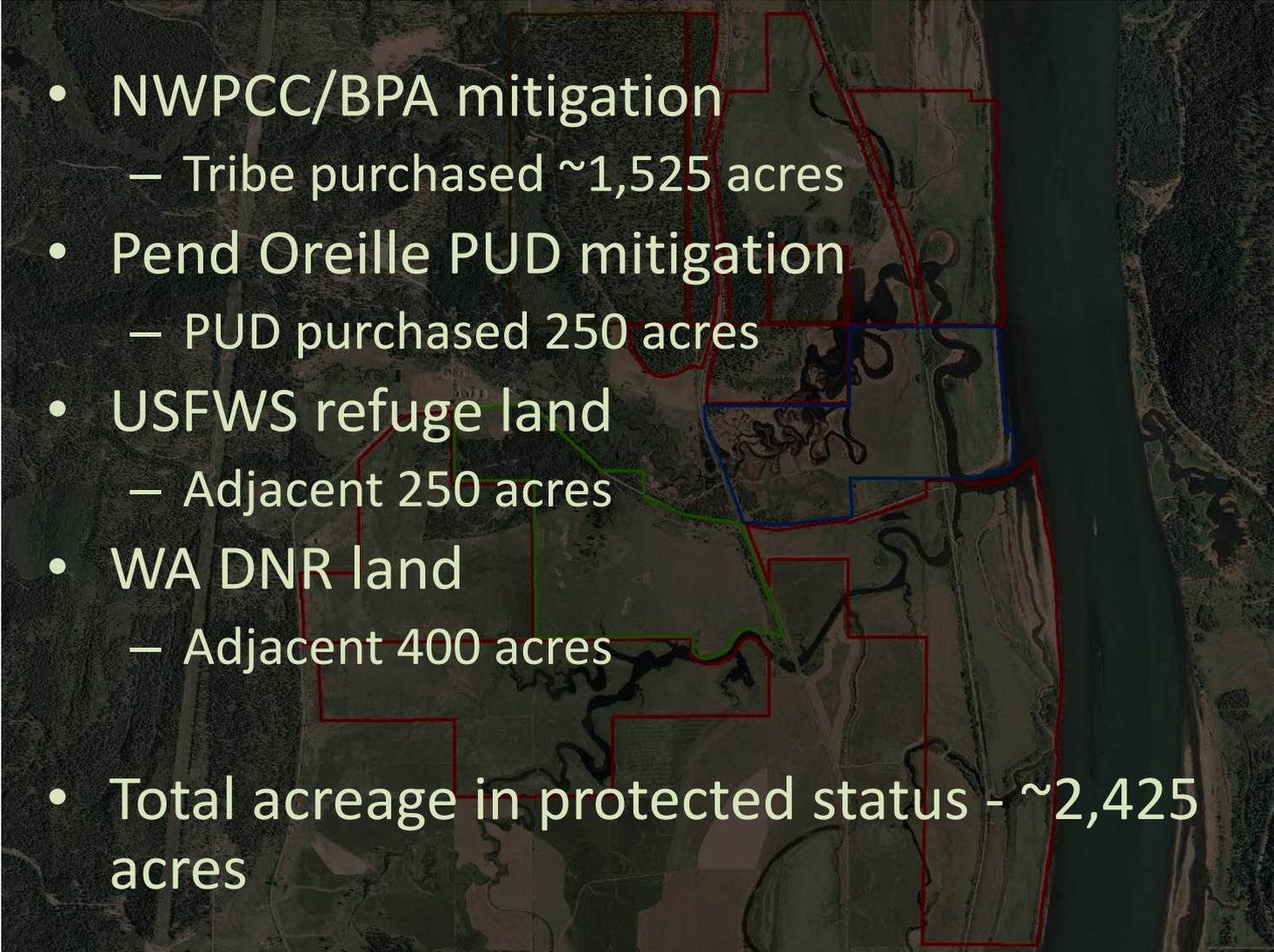




Conservation Project Planning



Conservation Project Planning

- NWPCC/BPA mitigation
 - Tribe purchased ~1,525 acres
 - Pend Oreille PUD mitigation
 - PUD purchased 250 acres
 - USFWS refuge land
 - Adjacent 250 acres
 - WA DNR land
 - Adjacent 400 acres
 - Total acreage in protected status - ~2,425 acres
- 
- An aerial photograph of a river valley with several colored overlays. A large red outline covers most of the central and right portions of the image, representing the NWPCC/BPA mitigation area. A blue outline follows a winding path through the valley, representing the Pend Oreille PUD mitigation area. A green outline follows a narrow path, representing the USFWS refuge land. A brown outline follows the riverbank, representing the WA DNR land. The river is visible on the right side of the image.

Wetland Restoration Projects



Waterfowl Habitat Projects



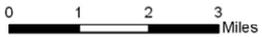
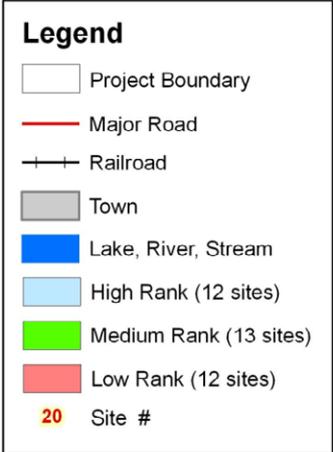
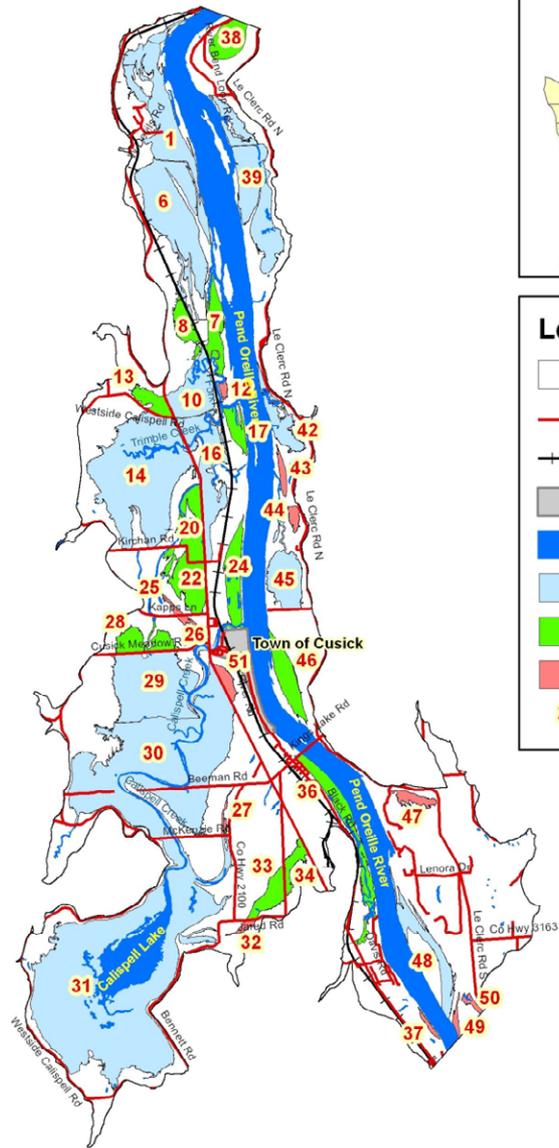
Shoreline Stabilization Projects



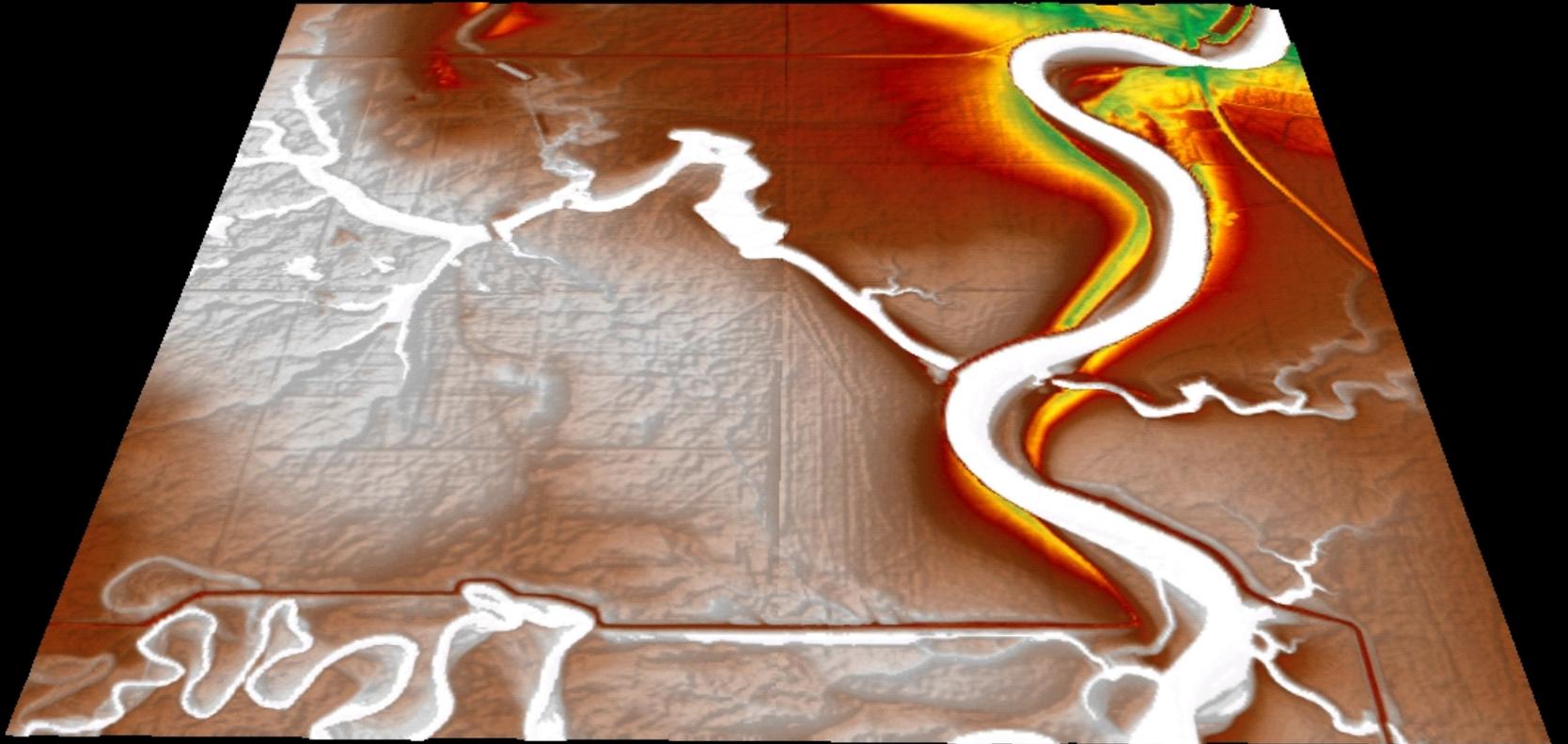
Shoreline Stabilization Projects

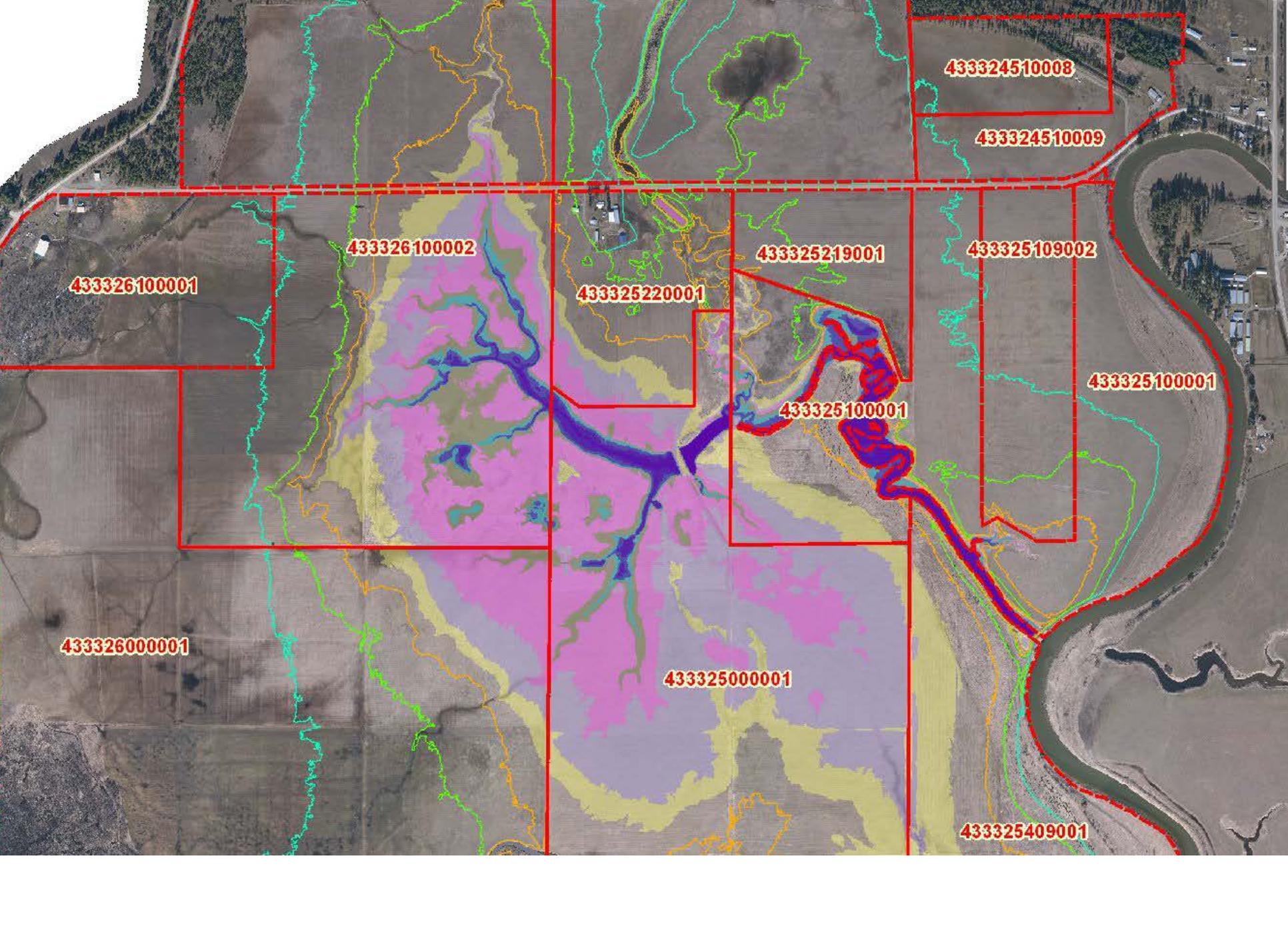


Ranking Result of 37 Sites by Categories









433324510008

433324510009

433326100002

433325219001

433325109002

433326100001

433325220001

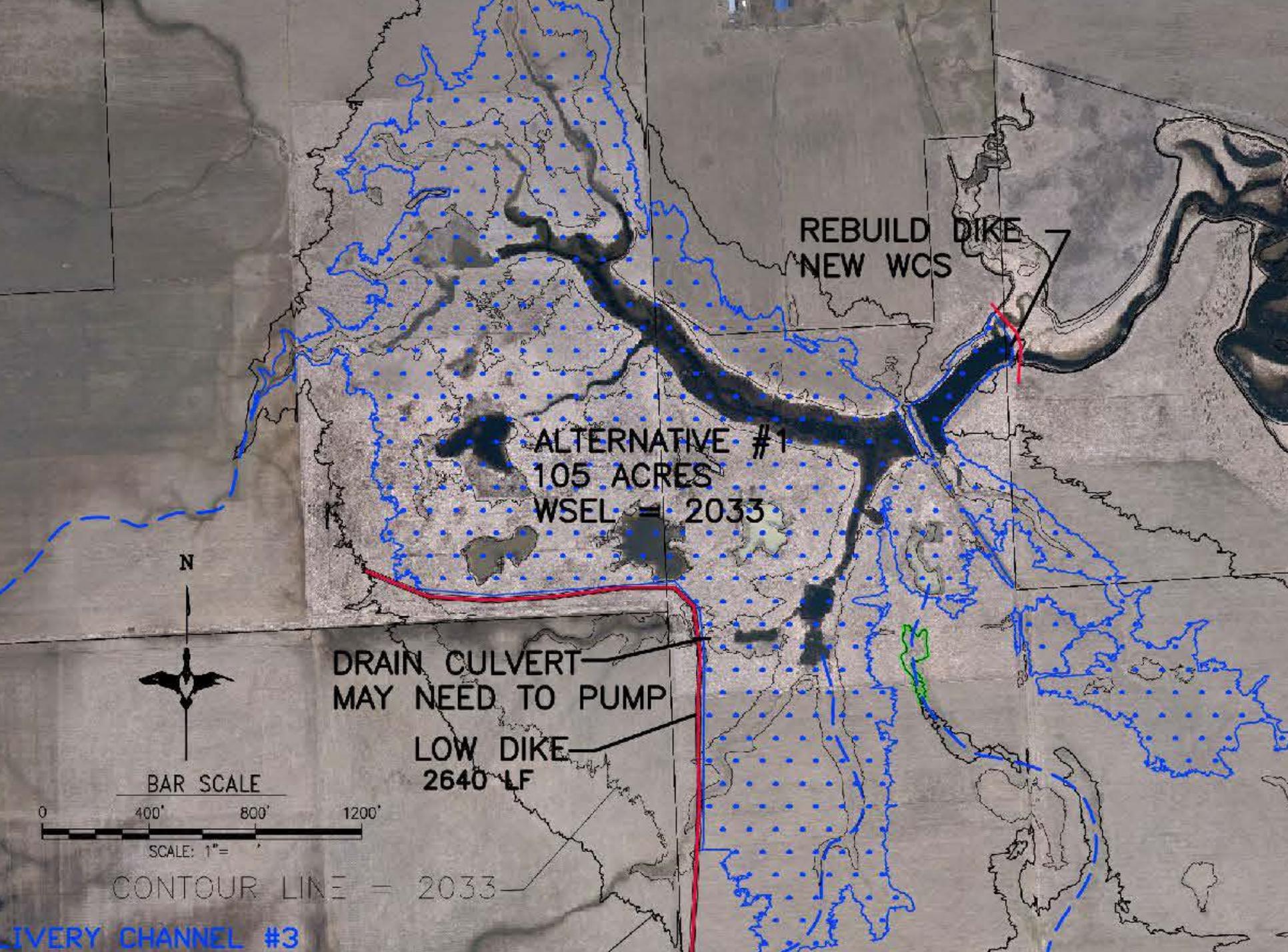
433325100001

433325100001

433326000001

433325000001

433325409001



REBUILD DIKE
NEW WCS

ALTERNATIVE #1
105 ACRES
WSEL = 2033

DRAIN CULVERT
MAY NEED TO PUMP

LOW DIKE
2640 LF



BAR SCALE



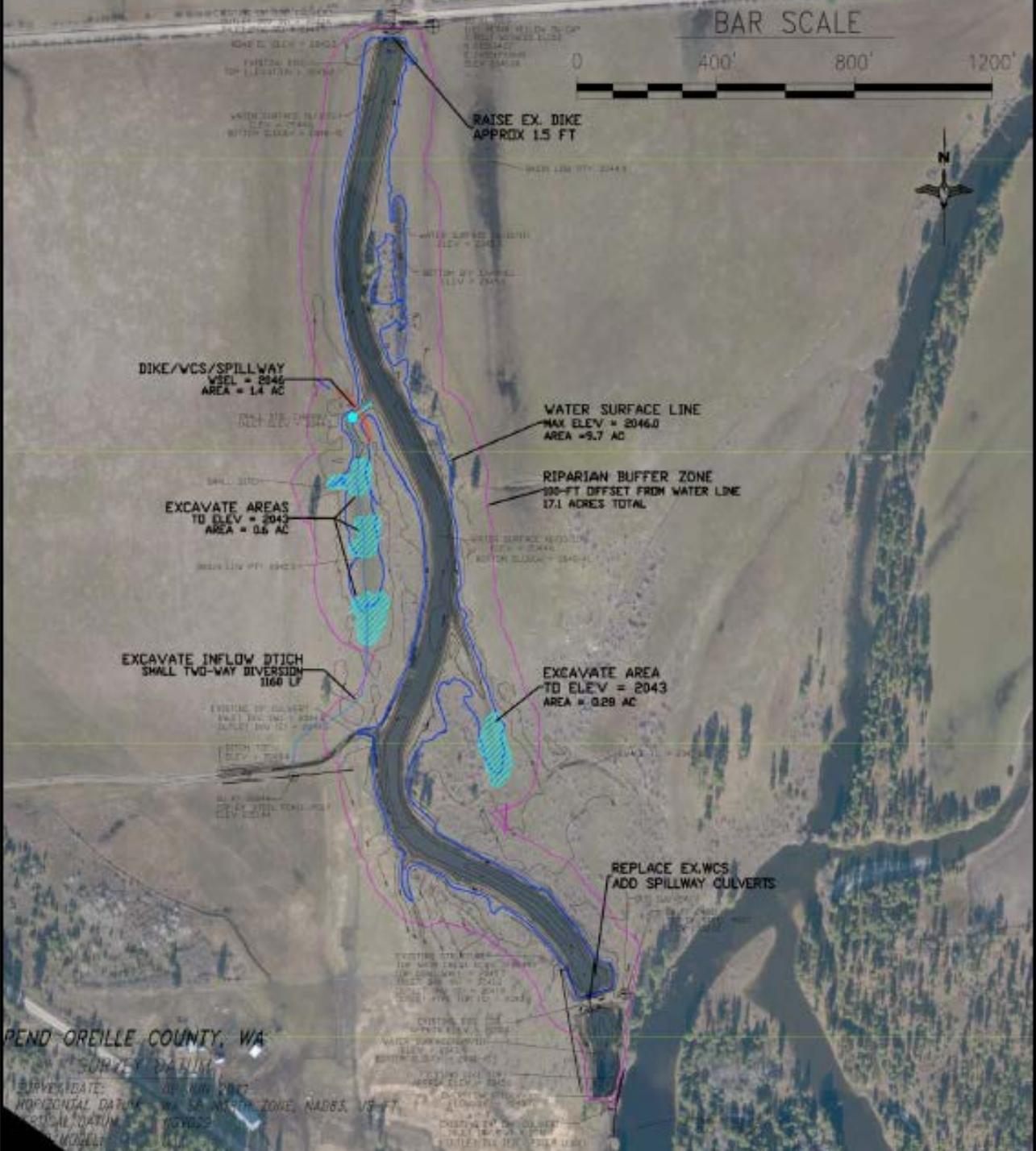
SCALE: 1" = 1200'

CONTOUR LINE = 2033

LIVERY CHANNEL #3



BAR SCALE

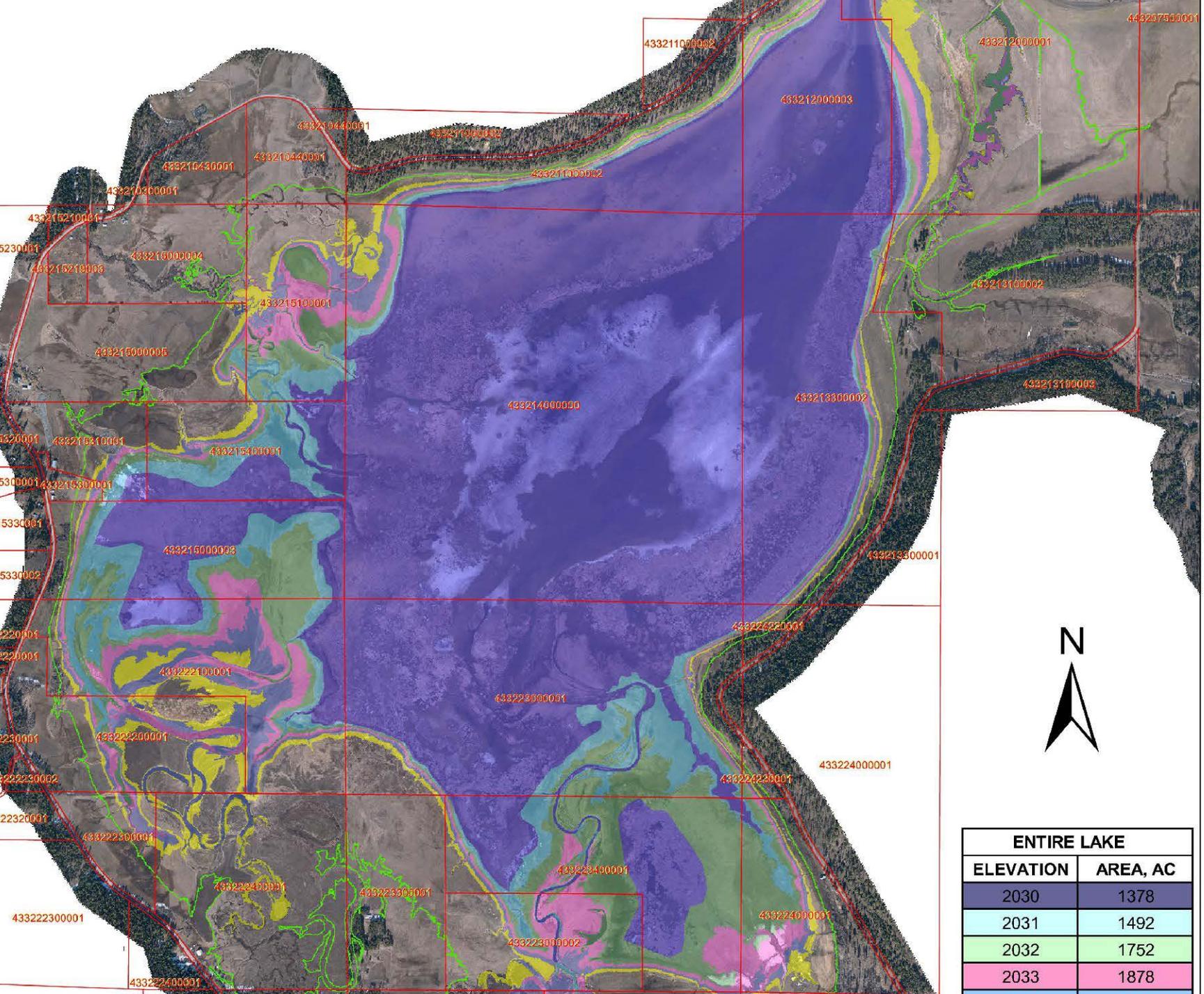


PEND OREILLE COUNTY, WA

SURVEY DATUM
SURVEY DATE: 08/19/2007
HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD83
MODEL: 11.1

EXISTING STRUCTURE
TOP SURFACE ELEV = 2047.0
TOP OF CHANNEL = 2047.0
BOTTOM OF CHANNEL = 2041.0
BOTTOM OF SPILLWAY = 2041.0
BOTTOM OF OULVERT = 2041.0
EXISTING SPILLWAY
TOP SURFACE ELEV = 2046.0
TOP OF CHANNEL = 2046.0
BOTTOM OF CHANNEL = 2041.0
BOTTOM OF OULVERT = 2041.0





ENTIRE LAKE	
ELEVATION	AREA, AC
2030	1378
2031	1492
2032	1752
2033	1878

Kalispel Wetland Program Plan

Core Elements

- Voluntary Restoration
 - Comprehensive Regional Plan
 - Incorporate existing goals and focus
 - Developing private partnerships
 - Implementation funding
 - Periodically reassess goals
- Monitoring and evaluation – UWMEP
 - UCUT (Upper Columbia United Tribes) Wildlife Monitoring and Evaluation Program

Thank You