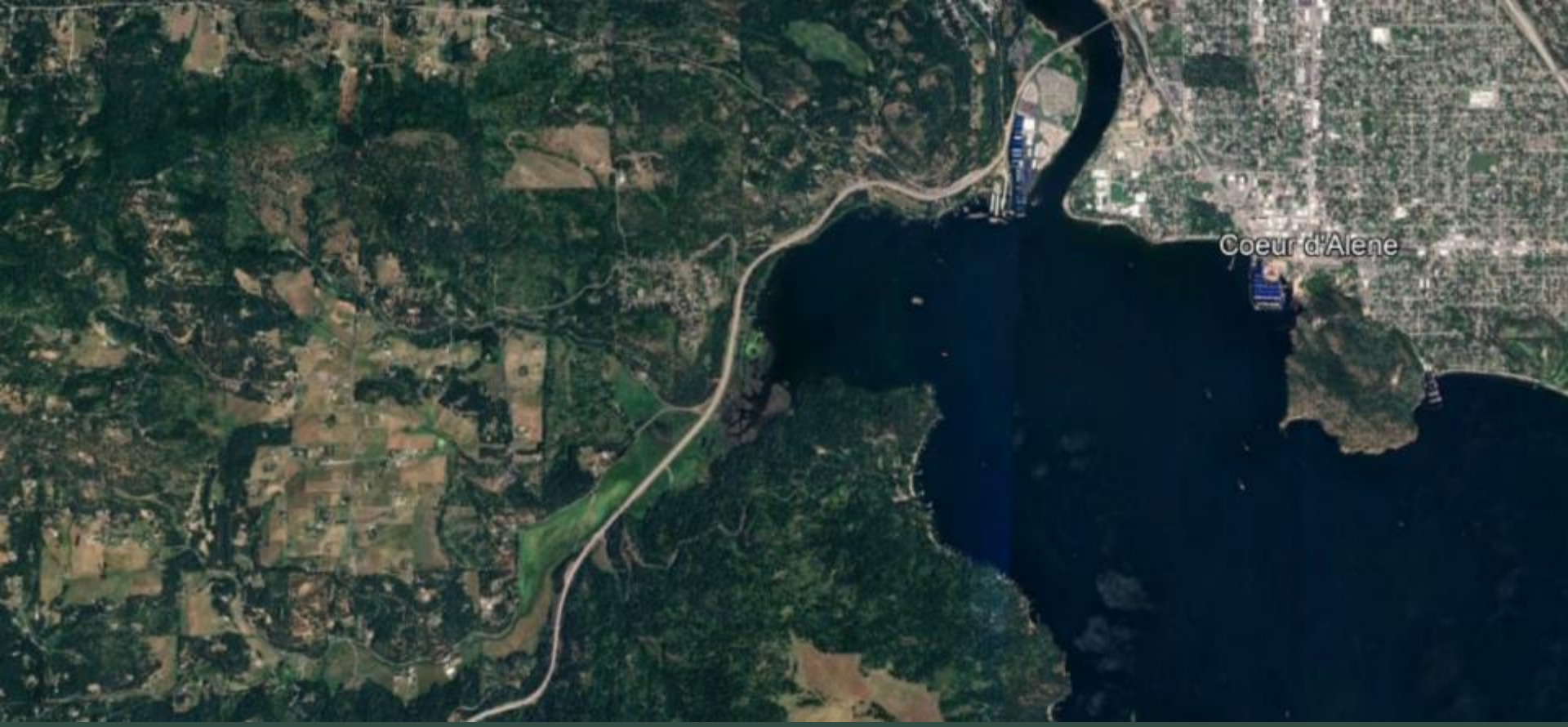


Cougar Bay Wetland Restoration

- Restoring Ecosystem Health and Function

- Key issues: degraded wetland processes & invasive species

Background and History

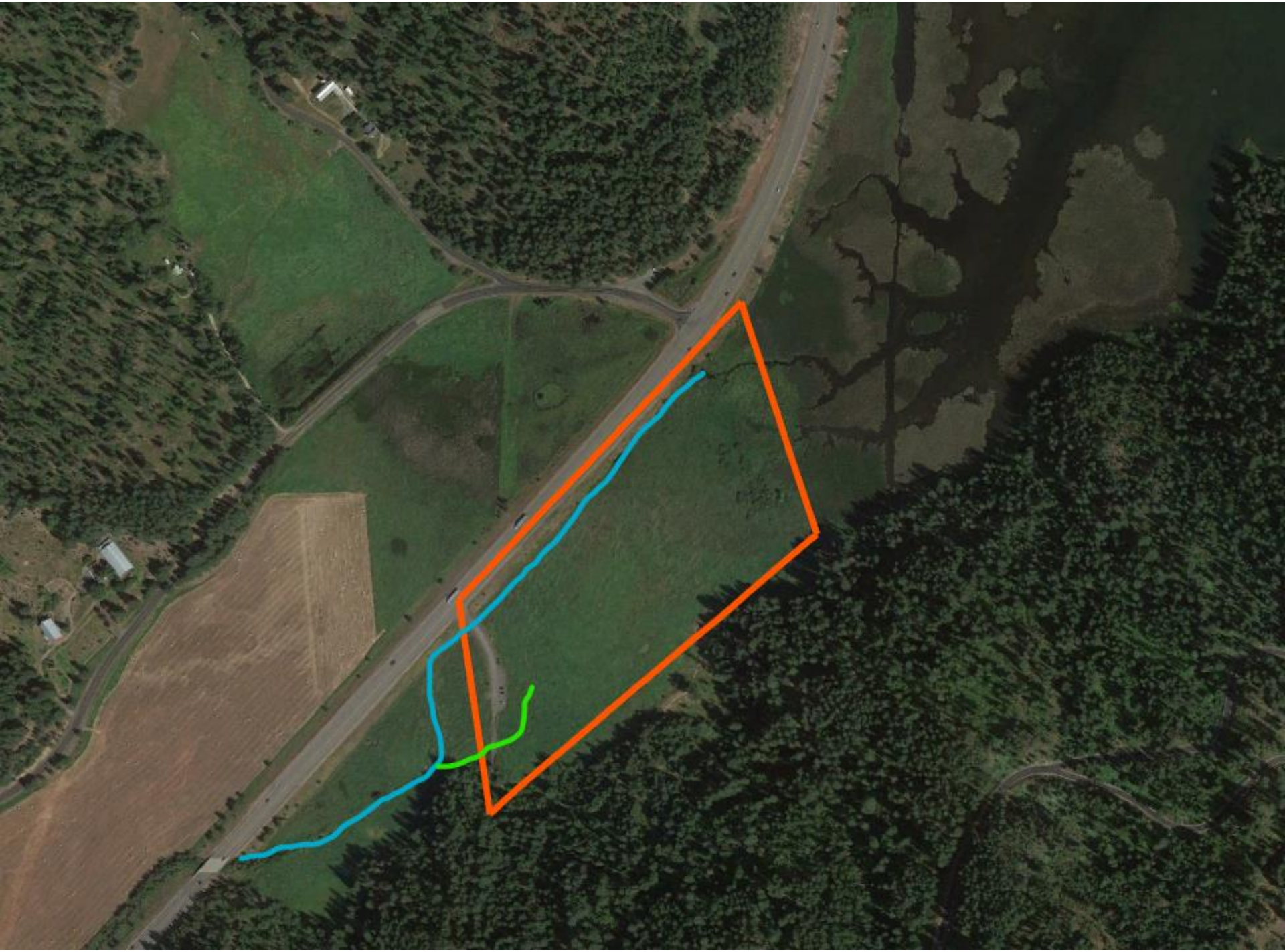
Cougar Bay

Situated at the mouth of the 16-square-mile Cougar Creek watershed and on the shore of Lake Coeur d'Alene.

- Cultural and ecological importance.

Historical Impacts

- Early farming and drainage modifications.
- Highway 95's construction bisecting the wetlands.
- Channelized stream



Land Ownership Timeline

- The Nature Conservancy (TNC) acquired 88 acres in 1998.
- BLM acquired adjacent land in 2003 (John C. Pointner Memorial Wildlife Sanctuary)
- Trail system extension and parking lot expansion 2013-2015
- BLM finalized purchase of 88 acres from TNC in 2021.

  The Land and Water Conservation Fund (LWCF)


Donavons Point

Cougar Creek

Cougar Creek – Reed Canarygrass

Reed canarygrass

Six feet in height

Poor habitat for bird species

Thick sod and heavy thatch enable it outcompete most native wetland vegetation

Restoration Goals

1. Restore wetland processes & function
2. Protect & preserve wetlands
3. Restore habitat & stream areas
4. Improve water quality in Lake Coeur d'Alene
5. Preserve & restore lake margin habitats

Restoration Plan

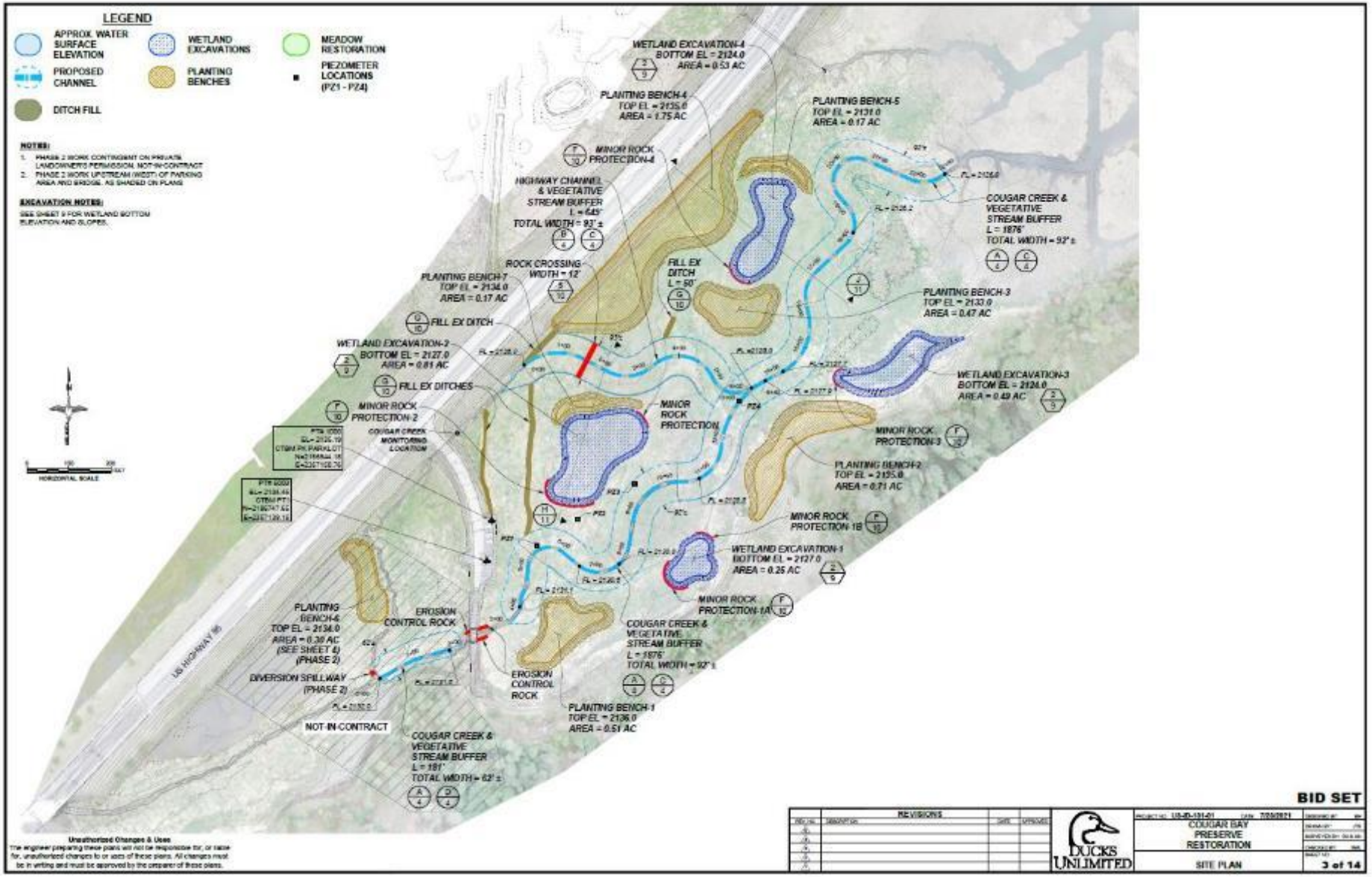
- Redirect channelized flow
- Construct new stream channels & floodplains
- Construct ponds and raised mound areas
- Improve hydrology & habitat diversity

Funding and Cooperators

Coeur d'Alene Basin Restoration Partnership

US Fish and Wildlife Service

Ducks Unlimited



BID SET

REVISIONS			
NO.	DESCRIPTION	DATE	APPROVED
1			
2			
3			
4			
5			

DUCKS UNLIMITED

COUGAR BAY PRESERVE RESTORATION

SITE PLAN

3 of 14

Unauthorized Changes & Uses

The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes must be in writing and must be approved by the preparer of these plans.

Mowing reed canarygrass to vertical remove biomass late summer 2020

Spring 2021 Herbicide treatment

Aquatic approved reed canarygrass treatment

Connecting old stream channel
LKE Corporation - October 2021

New channel with floodplain

Ponds

Ponds

More ponds

Hydroseed

Next phase – revegetation

Woody container stock, cuttings, plugs, and seed

Planting

Planting

And more planting

Native revegetation

- 1,500 willow & spirea cuttings
- 1,000 10 cu in herbaceous plugs

small winged sedge

Nebraska sedge

Beaked sedge

Creeping spikerush

Baltic rush

Common rush

Dagger leaf rush

Slender rush

Small-fruited bulrush

Woolgrass

Arrowhead

Douglas spirea cuttings

Small-fruited bulrush plug

Native revegetation

- 1,000 one gallon woody natives

Red-osier dogwood

Drummond willow

Geyer willow

Bebb Willow

Water birch

Black cottonwood

Douglas spirea

Thinleaf alder

Douglas Hawthorn

Quaking aspen

Engleman spruce

Thinleaf alder

Willows, dogwood and cottonwood with deer fencing

Trench planting

Outcomes and Benefits

Restoring Hydrology

•Return wetlands to natural processes and functions.

Water Quality Improvements

•Reduce sedimentation, and pollutant flow into Coeur d'Alene Lake.

Enhanced Plant Diversity

•Shift from invasive monoculture to diverse native vegetation.

Outcomes and Benefits

New Aquatic Habitats and Wildlife Corridors

- **Create sustainable habitat:** for fish, waterfowl, and mammals.
- **Connectivity:** Link isolated water features for species movement.
- **Migration Routes:** Safe pathways for native fish species.

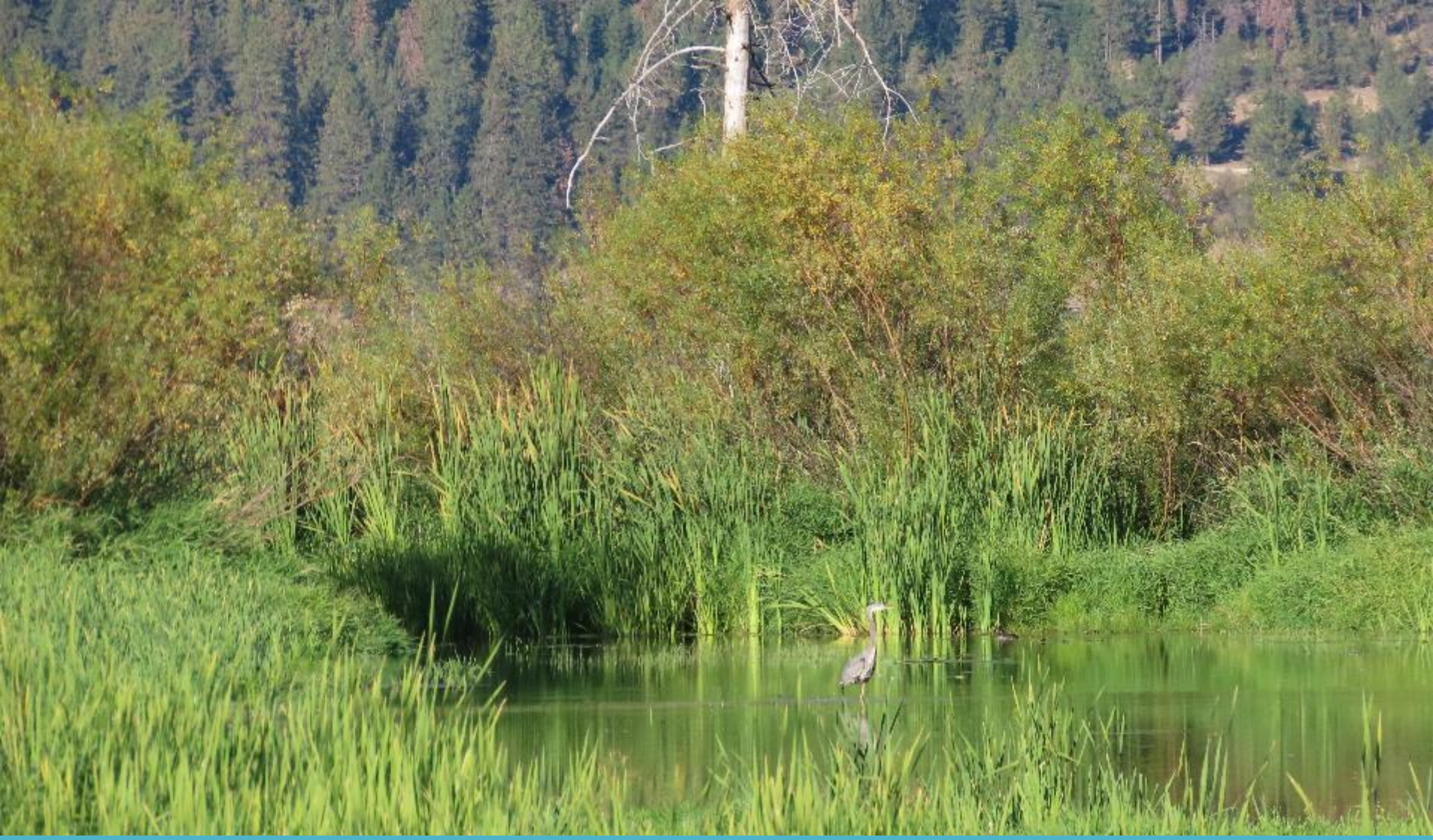
Enhanced Plant Diversity: Shift from invasive monoculture to diverse native vegetation to increase ecosystem resilience

To-do list

Additional reed canarygrass treatments

Stream channel adjustments to improve water flow as vegetation is established

Long-term monitoring and maintenance to preserve restored habitats.



Special thanks to Mike Stevenson –BLM Hydrologist (retired)