ALBERTA LENTIC WETLAND INVENTORY FORM

Record ID No: _____

Polygon No: _____

ADMINISTRATIVE DATA

A1. Field Data Collected by (Organization): _____

A2. Funding Agency/Organization: _____

A3. Date Field Data Collected: _____ **A4.** Year: _____ **A5.** Observers: _____

A6a. Is this site representative?: _____ If **Yes, A6b.** choose category: _____

A6c. How was this site chosen?: _____

A7a. Park(s)? (Yes; No): _____ **A7b.** Please Check all that apply: ◯ National ◯ Urban or Rural Muncipalities ◯ Provincial ◯ Other

A7c. Name? _____

A8a. Other Protected Areas? (Yes; No): _____ **A8b.** Please check all that apply: ◯ Ecological ◯ Conservation Easement ◯ Environmental ◯ Other ◯ Municipal

A8c. Name(s)/Other: _____

A9. Watershed Group Affiliation: _____ **A10.** Project Name: _____

A11. Is This Private Land? (Yes; No): _____ **A11b.** Owner's Name: _____

A12a. Is This Rented Private Land? (Yes; No): _____ **A12b.** Renter's Name: _____

A12c. Renter's Home Legal Land Description: _____ **A12d.** County, if different than polygon: _____

A13a. Is this Public Land? (Yes; No): _____ **A13b.** Type (Federal,Prov., Municipal): _____

A13c. Land Manager's Name: _____ **A13d.** Land Manager's Title, Office/Dept: _____

A14a. Is this part of a grazing lease or grazing reserve? (Yes; No): _____ **A14b.** Lessee Name: _____

A14c. Agricultural disposition No.: GRL: _____ GRP: _____ FGL: _____ Other: _____

A14d. Agricultural disposition Name (e.g., Community Pasture): _____

A15a. Has this polygon been inventoried before? (Yes; No): _____ **A15b.** Other years sampled: _____

A15c. Does this polygon coincide exactly with a previously inventoried polygon? (Yes; No): _____

A15d. ID No.(s) of other inventories of this exact polygon: _____, _____, _____, _____, _____

A16a. Does this polygon share common area with other inventoried polygon(s), but is not exact? (Yes; No): _____

A16b. ID No.(s) of other records sharing area with this polygon: _____, _____, _____, _____

A17a. Has a change in management occurred? (Yes; No, Unknown): _____ If ***Yes,*** **A17b.** Year changed occurred: _____

A17c. Type of management change applied: _____

A18. Primary Contact *(Include agency name)*: _____

LOCATION DATA

B1. Province: _____ **B2.** Municipality or Reserve Type: _____

B3a. Indian Reserve: _____ **B3b.** Military Reserve: _____

B4a. Rural or Specialized Municipality: _____ **B4b.** Hamlet: _____

B5a. City/Town/Village: _____ **B5b.** SubdivPlan #: _____ **B5c.** Block #: _____ **B5d.** Lot #: _____

B6a. Waterbody Name: _____ **B6b.** Side of Waterbody: _____

B7. Legal Land Location: 1/4 1/4 Sec: _____ 1/4 Sec: _____ Section: _____ Township (NS): _____ Range (EW): _____ Meridian: _____

B8a. Natural Region: _____ **B8b.** Sub-Region: _____

B9a. Major Watershed (e.g. North Saskatchewan River): _____

B9b. Minor Watershed (e.g. Battle River): _____

B9c. Sub-basin (e.g. Iron Creek): _____

B10a. UTM coordinates of polygon Upper end: Easting: _____; Northing: _____; Zone: _____ GPS Projection: _____

B10b. UTM coordinates of polygon Lower end: Easting: _____; Northing: _____; Zone: _____

B10c. UTM coordinates of any other point of interest in the polygon: East: _____; North: _____; Zone: _____

B10d. GPS Unit #: _____ WPt Upper: _____ WPt Lower: _____ WPt Other: _____

B10e. Comments: _____

B11a. Map Title(s): _____

B11b. Map Scale: _____ **B11c.** Map Year: _____

B12. Aerial Photo Info: Scale: _____ Date: _____ Job#: _____ Line#: _____

AS#: _____ Photo#: _____ Other Info: _____

Polygon Number: _____ Record ID No: _____

SELECTED SUMMARY DATA

C1. Wetland/waterbody type: _____ **C2.** Polygon size (ac): _____ ; (hect): _____

C3a. Is the entire polygon an upland? (Yes; No): _____ If ***No,*** **C3b.** Does the polygon consist entirely of functional wetland types? (Yes; No): _____ **C3c.** Functional wetland (acres): _____ ; (hect): _____ **C3d.** Percent of total polygon: _____

C4. Does the polygon contain a defined shoreline? (Yes; No; NC): _____

C5. Polygon length (mi): _____ ; (km): _____ **C6.** Number of miles the polygon represents (mi): _____ ; (km): _____

C7a. Average polygon width (ft): _____ ; (m): _____

C7b. Polygon width range (ft): _____ to _____ ; (m): _____ to _____

Health Assessment Summary

C8. Polygon Health:	Rating Percent (%)	Descriptive Category:
Vegetation:	_____	_____
Soil / Hydrology:	_____	_____
OVERALL:	_____	_____

Rating Percent Range	*Descriptive Category*
80-100	*Proper Functioning Condition (Healthy)*
60-79	*Functional At Risk (Healthy, but with Problems)*
<60	*Nonfunctional (Unhealthy)*

VEGETATION DATA

D1a. Wetland prevalence index: _____

D1b. Vegetation Structural Diversity: _____

Trees

D2a. Are trees present? (Yes; No): _____ **D2b.** Tree species by canopy cover (%) and percent age group (%)

SPECIES	COV (%)	SDLG/DEC		SPLG/DEC		POLE/DEC		MAT/DEC		DEAD

SPECIES	**D3.** Regeneration Category	**D4.** Age Group Distribution Category	**D5a.** Seedling/Sapling Browse Utilization

D5b. Cottonwood/poplar regeneration by seed vs. root suckering (asexual). Record the percent for each (must total 100%; NA = Not Applicable):

Species	Seed	Suckering	Species	Seed	Suckering	Species	Seed	Suckering
POPUANG			POPUBAL			POPUDEL		

Shrubs Polygon Number: _____ Record ID No: _____

D6a. Are shrubs present? (Yes; No): _____

D6b. Does the polygon have potential for preferred woody species ? (Yes; No; NC): _____

D6c. Shrub species canopy cover (%), age/size groups (%), and utilisation

SPECIES	COV (%)	SDLG-SPLG/UTIL		MATURE/UTIL		DEC-DEAD/UTIL		**D6d.** Shrub Growth Form (N,F,U,C)

D6e. Tree ***AND*** shrub removal by other than browse: None (0-5%); Light (6-25%); Moderate (26-50%); Heavy (>50%); NA; NC: _____

D6f. Basis of Call: _____

D7. Graminoids

Graminoids present? (Yes; No): _____

SPECIES	COV (%)

D8. Forbs

Forbs present? (Yes; No): _____

SPECIES	COV (%)

Polygon Number: _____ Record ID No: _____

D9. Plant Group by Canopy Cover (%)

Layer	Trees	Shrubs	Graminoids	Forbs
3 (>6.0 ft):				
2 (>1.5 - 6.0 ft):				
1 (0 - 1.5 ft):				

D10. Total canopy cover (%) by lifeform:

Trees: _____ Shrubs: _____

Graminoids: _____ Forbs: _____

D11. Total canopy cover (%) by woody species: _____

D12. Total canopy cover (%) by all plant lifeforms: _____

Weed Data

D13a. Are invasive species present ? (Yes; No; NC): _____

If ***Yes,*** **D13b.** Enter the Canopy Cover and the Density/Distribution Class for each of the following invasive species:

	Canopy Cover	Density/Distribution Class
blueweed (ECHIVUL):		
Canada thistle (CIRSARV):		
caragana (CARAARB):		
cleavers (GALIAPA):		
common burdock (ARCTMIN):		
common hound's-tongue (CYNOOFF):		
common tansy (TANAVUL):		
Dalmatian Toadflax (LINADAL):		
diffuse knapweed (CENTDIF):		
downy chess (BROMTEC):		
European buckthorn (RHAMCAT):		
field bindweed (CONVARV):		
leafy spurge (EUPHESU):		
nodding thistle (CARDNUT):		
ox-eye daisy (CHRYLEU):		
perennial sow-thistle (SONCARV):		
purple loosestrife (LYTHSAL):		
Russian knapweed (CENTREP):		
Russian olive (ELAEANG):		
scentless chamomile (MATRPER):		
smooth perennial sow-thistle (SONCULI):		
spotted knapweed (CENTMAC):		
tall buttercup (RANUACR):		
tamarisk/salt cedar (TAMACHI):		
white cockle (SILEPRA):		
yellow toadflax (LINAVUL):		
Others: _____		
Others: _____		

D13c. Cumulative totals for all invasive species:

Canopy Cover: _____ Density/Distribution Class: _____

D13d. In this polygon, Are there elevated status species for this county? (Yes; No; NC):

D13e. If yes, indicate species, elevated status, CC and DD

ElevatedSpecies:	Status	CC	DD

Polygon Number: _____ Record ID No: _____

D14a. Are undesirable herbaceous species present? (Yes; No; NC): _____ If ***Yes,*** **D14b.** Record the combined canopy cover (%) of all undesirable herbaceous species observed: _____

D15. Habitat Types and Community Types

Classification Type Name	Phase	Percent of Polygon	Successional Stage or Comments/Guides Used

D16a. Polygon trend: Improving, Degrading, Static, or Status Unknown?_____

(If "status unknown" answer NA to the sub-questions D16b and D16c)

D16b. Has management influenced trend? (Yes; No; Unknown; NC; NA): _____

D16c. Describe how health parameters have changed and justify your call.

D17. Explain trend description and give other vegetation comments:

WATER QUALITY DATA Polygon Number: _____ Record ID No: _____

E1. Waterbody number (FMIS/Hydro code): _____

E2a. Is water quality data available on this waterbody? (Yes, No, Unknown, NA): _____

If ***Yes,*** **E2b.** Describe the reference for that data (name, year, etc.): _____

PHYSICAL SITE DATA

F1. What is the primary water source on the polygon? (Perennial stream, Overland surface flow, Springs/seeps, Topograqhic contact with groundwater table, Unknown, Other): _____ Explain Other: _____

F2. Is the water body in a closed basin with no outlet? (Yes, No, NA, NC): _____

F3. Describe the water chemistry (Alkaline/Saline; Fresh, Unknown, NC): _____

F4a. Degree of artificial change of water level (Not Subjected, Minor, Moderate, Extreme, NC): _____

F4b. Basis of call: _____

F5a. Is there an overflow structure? (Yes, No, NA, NC): _____

If ***Yes,*** **F5b.** Indicate type (Concrete, Pipe, Rock Armored, Unprotected, Other): _____

Explain "Other": _____

F5c. Does the overflow structure appear stable? (Yes, No, NA, NC): _____ Stability Category: _____

Explain: _____

F5d. Location of overflow structure on waterbody: _____

F6a. Does the Polygon Contain a defined shoreline? (Yes; No; NC): _____ If ***No,*** Skip to item F8 below.

If ***Yes,*** **F6b.** Are shoreline mineral substrates visible? (Yes; No; NC): _____

If ***Yes,*** **F6c.** Give the percent of each size (total must approx. 100%):

_____ >20 inches (Medium Boulders +) _____ 2.5 - 5 inches (Small Cobbles) _____ 0.062 mm - 2 mm (Sand)

_____ 10 - 20 inches (Small Boulders) _____ 0.6 - 2.5 inches (Coarse Gravel) _____ <0.062 mm (Silt and Clay)

_____ 5 - 10 inches (Large Cobbles) _____ 0.08 inches - 0.6 inches (Fine Gravel)

F7. Percent of the shoreline with deep, binding root mass (0-35%; 36–65%; 66–85%; over 85%; NA; NC): _____

F8. Is there alteration of the polygon vegetation by human activities (Yes; No; NC)? _____

F8a. What percent of the polygon vegetation has been altered by human activities? _____

F8b. Breakdown the causes of human-caused alteration to the polygon vegetation (must approx. 100%):

_____ Grazing _____ Timber Harvest _____ Cottage or Urban Devel. _____ Recreation

_____ Cultivation _____ Mining _____ Construction _____ Other

Explain "Other": _____

F8c. Breakdown the kinds of human-caused alteration to the polygon vegetation (must approx. 100%):

_____ Clearing _____ Replace Native to Non-native Species _____ Other

_____ Replace Tall to Short _____ Replace Woody to Herbaceous

Explain "Other": _____

F8d. Comment on the nature and extent of human-caused alteration to the vegetation:

_____

_____

F9a. Is there physical alteration of the polygon by human activities (Yes; No; NC)? _____ If ***No,*** go to **F9e.**

F9b. What percent of the polygon has been physically altered by human activities (aside from the vegetation)? _____

F9c. Breakdown the causes of human-caused alteration to the physical polygon site (must approx. 100%):

_____ Grazing _____ Timber Harvest _____ Cottage or Urban Devel. _____ Recreation _____ Other

_____ Cultivation _____ Mining _____ Roads and Railroads _____ Water Management

Explain "Other": _____

F9d. Breakdown the kinds of human-caused alteration to the physical polygon site (must approx. 100%):

_____ Soil Compaction (hum-pug, trails, paths, wallows, etc.) _____ Hydrologic Change (ditching, draining, flooding, etc.)

_____ Human Impervious Surface (pavement, roofs, walks, etc.) _____ Topographic Change (landscaping)

_____ Bank Alteration (hoof shear, riprap, berms, etc.) _____ Plowing/tilling _____ Other

Explain "Other": _____

F9e. Choose a category to describe the severity of the alteration recorded in F9a. (None, Slight, Moderate, Severe): _____

F9f. Comment on any odd or unusual aspect of human-caused alteration to the physical polygon:

_____

Polygon Number: _____ Record ID No: _____

F10a. Is there exposed soil surface (bare ground) in the polygon? (Yes; No; NC): _____

If ***Yes,*** complete items F10b-d; if No or NC, go to item F11.

F10b. What percent of the polygon which is exposed soil surface (bare ground): _____

F10c. Of this, how much is due to Natural Processes: _____ Human-caused disturbance: _____ (must approx. 100%)

F10d. Within each category (natural and human-caused), how much resulted from the listed processes?

NATURAL PROCESSES *(must approx. 100%)*		**HUMAN-CAUSED PROCESSES** *(must approx. 100%)*	
_____ Erosional	_____ Type Dependent	_____ Grazing	_____ Mining
_____ Depositional	_____ Saline/Alkaline	_____ Cultivation	_____ Construction
_____ Wildlife Use	_____ Natural Drawdown Area	_____ Timber Harvest	_____ Recreation
_____ Other		_____ Other	

Explain "Other": _____

F11. Non-vegetated ground cover. (***Note:*** Bare ground and vascular plant cover recorded above.)

Rocks (>2.5 in.): _____ Moss: _____ Litter/Duff: _____ Wood: _____ Human Imperv. Surf.: _____ Open Water: _____

Young/Dead Plantings: _____ Other: _____

Explain "Other": _____

F12a. Animal-caused pugging and/or hummocks present? (Yes; No; NC): _____

If ***Yes,*** **F12b.** Percent (%) of polygon affected: _____

F13a. Are side drainages and hillslopes contributing to degradation of the system? (Yes; No; NA; NC): _____

If ***Yes,*** **F13b.** Human-caused? (Yes; No; NA; NC): _____ Causes: _____

F13c. Natural cause? (Yes; No; NA; NC): _____ List major soil type: _____

F14. Is water quality sufficient to support wetland plants? (Yes; No; NA; Unknown; NC): _____

F15. Is open surface water standing on the polygon? (Yes; No; NA; NC): _____ If ***Yes,*** What percent of the polygon area? _____

F16. Are chemicals that affect plant productivity/composition (i.e., salts) accumulating on the site? (Yes; No; NA; NC): _____

F17. Comments (Summarize unique characteristics or problems not evident from the data collected. Include topics related to any of the optional data. Consider current and historic attributes resulting from human-caused and natural processes.):

F18. Detailed description of the polygon boundaries if it does not include the entire wetland area at the site:

PHOTOGRAPH DATA Polygon Number: _____ Record ID No: _____

G1a. Identification of photos (taken at the ***north or west*** end of polygon): Photographer: _____

Camera Number: _____

Inner Boundary
(at water's edge)

Waypoint: _____ Easting _____ Northing _____ Zone _____

Photo #: _____ OUT of polygon (Describe View) _____

INTO the polygon (Describe View) _____

G1b. Identification of an additional benchmark photos:

Outer Boundary
(inland)

Waypoint: _____ Easting _____ Northing _____ Zone _____

Photo #: _____ OUT of polygon (Describe View) _____

INTO polygon (Describe View) _____

G2a. Identification of photos (taken at the ***south or east*** end of polygon): Photographer: _____

Camera Number: _____

Inner Boundary
(at water's edge)

Waypoint: _____ Easting _____ Northing _____ Zone _____

Photo #: _____ OUT of polygon (Describe View) _____

INTO the polygon (Describe View) _____

G2b. Identification of an additional benchmark photos:

Outer Boundary
(inland)

Waypoint: _____ Easting _____ Northing _____ Zone _____

Photo #: _____ OUT of polygon (Describe View) _____

INTO polygon (Describe View) _____

G3a. Other photos of the polygon: Photographer: _____

Camera Number: _____

Waypoint:	Easting Northing	Zone	Photo #	Description
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

G3b. Additional Lentic photo page entered? (Yes; No): _____

G4a. Is there an adjacent polygon ***north and/or west*** of this polygon? (Yes; No): ____ **G4b.** Adj. Polygon Name N/W: _____

G5a. Is there an adjacent polygon ***south and/or east*** of this polygon?Yes; No): ____ **G5b.** Adj. Polygon Name S/E: _____

G6. Film and Camera Specs: Camera Type: _____ Film Speed(ASA)/Image Quality (dpi): _____

Lens dia. (mm): _____ Lens foc. len. (mm): _____ Filter used (polarizer or none): _____

Polygon Number: _____ Record ID No: _____

ADDITIONAL DATA

H1. Vegetative use by animals (0-25%; 26-50%; 51-75%; 76-100%): _____

H2. Adjacent uplands (Cropland; Grassland; Shrubland; Forest; or Other): _____ _____

H2b. Describe adjacent uplands "Other": _____

H3. Primary Land Use Sector:

____ Agriculture
____ Commercial
____ Energy (Oil, Gas, Coal)
____ Industrial (excl. other types listed)
____ Forestry
____ Recreation (excl. other types listed)
____ Habitat and conservation Protection
____ Parks/Protected Areas
____ Residential (excl. other types)
____ Rural Residential (excl. other types listed)
____ Acreage (excl. other types listed)
____ Lakefront/Waterfront (excl. other types listed)
____ Transportation
____ Utility
____ Institutional
____ Military
____ Open/Vacant
____ Other _____

H4a and b: Break down the polygon and the area adjacent to the polygon into the land uses listed (must total to approx. 100%):

	a) Polygon	**b)** Adjacent
No land use apparent:	_____	_____
Turf grass (lawn):	_____	_____
Tame pasture (grazing):	_____	_____
Native pasture (grazing):	_____	_____
Recreation (ATV paths, campsites, etc.):	_____	_____
Development (buildings, corrals, paved lots, etc.):	_____	_____
Tilled Cropping:	_____	_____
Perennial forage (e.g., alfalfa hayland):	_____	_____
Roads:	_____	_____
Logging:	_____	_____
Mining:	_____	_____
Railroads:	_____	_____
Other:	_____	_____

Description of Other Usage Noted: _____ _____

H5. Percent of polygon area accessible to large animals: _____

H6a. If the polygon has a bank, has the bank profile been modified by construction? (Yes; No; NC, NA): _____

If ***Yes,*** **H6b.** How much of the bank length is modified (%)? _____

H6c. What part resulted from the various sources: (must approx. 100%)

Dikes	_____	Road Construction	_____	Railroads	_____
Berms	_____	Water Diversion Structures	_____	Mining	_____
Dams	_____	Vegetation Removal	_____	Bridges	_____
Rip-rap	_____	Channelization	_____	Logging	_____
Other	_____				

Explain "Other": _____

H6d. Location(s): _____

Waterfowl Data _____

H7a. Were waterfowl nests or broods observed? (Yes; No; NC): _____

If ***Yes,*** **H7b.** Describe: _____

Fishery Data

H8a. Does the polygon contain a fishery? (Yes; No; Unknown): _____

If ***Yes,*** **H8b.** Is it a sport fishery, non-sport fishery, or unknown: _____

H8c. Fish types present, if known (use common names or descriptions): _____

H8d. How many fish were observed? (0; 1-10; 11-50; >50): _____

H8e. If the polygon does not contain a fishery, is there potential for one? (Yes; No; Unknown): _____

Explain: _____

Polygon Number: _____ Record ID No: _____

Amphibian and Reptile Data

H9a. Were amphibians observed? (Yes; No; NC):_____ If ***Yes,*** **H9b.** How many?: Frogs: _____ Toads: _____ Salamanders: _____

H10a. Were reptiles observed? (Yes; No; NC): _____ If ***Yes,*** **H10b.** How many?: Snakes: _____ Turtles: _____ Lizards: _____

H11. List amphibian or reptile species and the quantity of each identified in the polygon.

Spp. #1:_____ No.: _____ Loc.: _____
Spp. #2:_____ No.: _____ Loc.: _____
Spp. #3:_____ No.: _____ Loc.: _____
Spp. #4:_____ No.: _____ Loc.: _____

Beaver Data

H12a. Is there evidence of beaver in the polygon? (Yes; No; NC) _____

If ***Yes,*** H12b. (Active; Inactive): _____ **H12c.** Describe the type and amounts of beaver activity observed:

_____
_____

H12d. # of beaver dams: _____ # of beaver dams: _____ Old (prior to 2015 combined: dams and lodges: _____

H12e. Level of beaver activity (number of stems chewed) (1-25; 26-100; over 100; NC): _____

H12f. How many beavers were observed? _____

Where? _____

Threatened and Endangered Species Data

H13a. Were Threatened and Endangered animal species observed? (Yes; No; NC): _____

H13b. Species observed:

Species	Number	Species	Number

H13c. Location in polygon where Threatened and Endangered animals or nests were sighted:

_____

Notable Bird Observations (Other than Waterfowl)

H14. Were notable bird species (other than waterfowl) seen? (Yes; No; NC): _____

Spp. #1: _____ No.: _____ Loc.: _____
Spp. #2: _____ No.: _____ Loc.: _____
Spp. #3: _____ No.: _____ Loc.: _____
Spp. #4: _____ No.: _____ Loc.: _____
Spp. #5: _____ No.: _____ Loc.: _____
Spp. #6: _____ No.: _____ Loc.: _____
Spp. #7: _____ No.: _____ Loc.: _____
Spp. #8: _____ No.: _____ Loc.: _____
Spp. #9: _____ No.: _____ Loc.: _____
Spp. #10: _____ No.: _____ Loc.: _____
Spp. #11: _____ No.: _____ Loc.: _____
Spp. #12: _____ No.: _____ Loc.: _____

Rare Plant Observations

H15. Were rare plant species observed on the polygon? (Yes; No; NC): _____

Spp. #1: _____ No.: _____ Loc.: _____
Spp. #2: _____ No.: _____ Loc.: _____
Spp. #3: _____ No.: _____ Loc.: _____

H16. Additional Comments: