

ALBERTA LOTIC 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 Municipalities
[] 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 1/4 1/4 Sec: 1/4 Sec: Section: Township (NS): Range (EW): Meridian:
Location: _____
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: _____

SELECTED SUMMARY DATA

Polygon Number: _____ Record ID No: _____

C1. Water body type: _____ **C2.** Polygon size (acres): _____ ; (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 streambank or channel? (Yes; No; NC): _____

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

C7a. Average polygon width (usually same as width of the riparian zone) (ft): _____ ; (m): _____

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

C7c. Riparian area along a stream or small river (channel is less than 15 m wide) or along a river (channel is greater than 15 m wide): _____

Health Assessment Summary

C8. Polygon Health: _____ Rating Percent (%) _____ Descriptive Category: _____

Vegetation: _____

Soil / Hydrology: _____

OVERALL: _____

<u>Rating Percent Range</u>	<u>Descriptive Category</u>
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

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

D6d. Shrub Growth Form (N,F,U,C)

<u>SPECIES</u>	<u>COV (%)</u>	<u>SDLG-SPLG/UTIL</u>	<u>MATURE/UTIL</u>	<u>DEC-DEAD/UTIL</u>	
_____	_____	_____	_____	_____	_____

D6e. Tree **AND** shrub removal by other than browse: None (0-5%); Light (6-25%); Moderate (26-50%); Heavy (>50%); NA; NC: _____ (new 2008)

D6f. Tree **AND** shrub removal other than browse - check cause of removal (new 2015):

- Beaver**
- Human**
- Both (Beaver & Human)**

D6g. Basis of Call: _____
(new 2008) _____

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 (LINAVAL):	_____	_____
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
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

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. Does the polygon contain a stream bank or channel bottom? (Yes; No; NC): _____ If **No**, go to item **F15a**.

F2a. Is the channel bottom visible? (Yes; No; NC): _____

If **Yes, F2b.** Give the percent breakdown of particle sizes (must approx. 100%):

- _____ >20 inches (Medium Boulders +) _____ 0.6 - 2.5 inches (Coarse Gravel)
- _____ 10 - 20 inches (Small Boulders) _____ 0.08 inches - 0.6 inches (Fine Gravel)
- _____ 5 - 10 inches (Large Cobbles) _____ 0.062 mm - 2 mm (Sand)
- _____ 2.5 - 5 inches (Small Cobbles) _____ <0.062 mm (Silt and Clay)

F3a. Is the channel bank material visible? (Yes; No; NC): _____

If **Yes, F3b.** Give the percent breakdown of particle sizes (must approx. 100%):

- _____ >20 inches (Medium Boulders +) _____ 0.6 - 2.5 inches (Coarse Gravel)
- _____ 10 - 20 inches (Small Boulders) _____ 0.08 inches - 0.6 inches (Fine Gravel)
- _____ 5 - 10 inches (Large Cobbles) _____ 0.062 mm - 2 mm (Sand)
- _____ 2.5 - 5 inches (Small Cobbles) _____ <0.062 mm (Silt and Clay)

F4a. Is there active lateral cutting of stream? (Yes; No; NC): _____

If **Yes, F4b.** How much of the stream length displays active lateral cutting (%): _____

F5. Percent of the total bank length unstable (0-5%; 6–25%; 26–50%; over 50%; NC): _____

F6a. Is the streambank altered by on-site human activities? (Yes; No; NC): _____

If **Yes, F6b.** Percent (%) of the bank length that has human-caused alterations? _____

F6c. Of this, how much resulted from these causes: (must approximate 100%)

- _____ Grazing _____ Mining _____ Construction _____ Bank Stabilisation _____ Other
- _____ Cultivation _____ Logging _____ Recreation _____ Dugout

Explain "other": _____

F6d. Distribute the total streambank alteration among these kinds: (must approximate 100%)

- _____ Hoof shear/trampling _____ Roads/RRs _____ Berms
- _____ Veg removal _____ Trails _____ Riprap _____ Other

Explain "other": _____

F6e. Comment on the nature, extent, and severity of human-caused alteration of the streambank:

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

F8. Percent of polygon with sufficient fine material to hold water and act as a rooting medium (0-35%; 36–65%; 66–85%; over 85%; NC): _____

F9. Average non-vegetated stream channel width: (ft) _____ ; (m): _____ **F10.** Stream gradient (percent): _____

F11a. Active downcutting of the stream? (Yes; No; NC): _____ If **Yes, F11b.** Percent of stream actively downcutting: _____

F12a. Headcuts present? (Yes; No; NC): _____ If **Yes, F12b.** No. of headcuts: _____ **F12c.** Average headcut height (ft): _____

F12d. Location of headcut(s): _____

F13a. Is the stream channel braided (has multiple active channels during normal flows)? (Yes; No; NC): _____

If **Yes, F13b.** Percent of the stream channel that is braided: _____

F14. Indicate the best description of channel incisement (None; Slight; Moderate; Severe): _____

F15a. Is there exposed soil surface (bare ground)? (Yes; No; NC): _____ If **No** or **NC**, go to item **F16**.

F15b. Percent (%) of the polygon which is exposed soil surface (bare ground): _____

F15c. Of this, how much is due to natural processes: _____ Human-caused disturbance: _____ (must approx. 100%)

F15d. 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 _____ Construction _____ Vehicle Trails
- _____ Depositional _____ Saline/Alkaline _____ Timber Harvest _____ Mine Tailings _____ Trails
- _____ Wildlife Use _____ Within Veg. Channel Bottoms _____ Recreation _____ Cultivation _____ Other
- _____ Other Explain "Other": _____

F16. Non-vegetated (i.e., vascular plant) ground cover. (**Note:** Bare ground and vascular plant cover recorded above.)

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

Young/Dead Plantings: _____ Other: _____ Other: _____

F17. Are channel point bars revegetating? (Yes; No; NA; NC): _____

F18. Is there a nearby source **on the system** for large woody debris to enter the stream? (Yes; No; NA; NC): _____

F19a. Is the polygon away from the streambank physically altered? (Yes; No; NC): _____ If **Yes, F19b.** What percent? _____

F19c. Of this, how much resulted from these causes: (must approximate 100%)

_____ Grazing _____ Logging _____ Construction _____ Dugout
_____ Cultivation _____ Mining _____ Recreation _____ Other

Explain Other: _____

F19d. Distribute the total polygon non-streambank alteration among these kinds: (must approximate 100%)

_____ Soil Compaction _____ Hydrologic Change _____ Topographic Change _____ Other
_____ Plowing/tilling _____ Roads/RRs _____ Impervious Surfaces

Explain Other: _____

F19e. Comment on the nature, extent, and severity of human-caused alteration to the rest of the polygon:

F20a. Animal-caused pugging and/or hummocks present? (Yes; No; NC): _____ If **Yes, F20b.** What Percent (%): _____

F20c. Distribution of hummocks/pugging: Within streambanks: _____ Remainder of polygon: _____ (must approx. 100%)

F21a. Are seeps or springs present? (Yes; No; NC): _____ If **Yes, F21b.** Number of seeps and springs: _____

F21c. How many springs and seeps had hummocks and/or pugging in 25% or more of the wetted area? _____

F21d. Location of the springs and seeps: _____

F22a. Is wetland type a pooled channel of an intermittent stream (item C1)? (Yes; No; NC): _____

If **Yes, F22b.** Percent of the channel length with pooled water: _____

F22c. Is this pooled water expected to remain at the surface through the remainder of the growing season? (Yes; No): _____

F22d. Location of the pools: _____

F23a. Is there evidence of beaver in the polygon? (Yes; No; NC): _____

If **Yes, F23b.** (Active; Inactive): _____ **F23c.** Describe the type and amounts of beaver activity observed:

F23d. # of beaver dams: _____ # of beaver lodges: _____ Old (prior to 2015 combined: dams and lodges): _____

F23e. Level of beaver activity (number of stems chewed) (1-25; 26-100; over 100; NC): _____

F23f. How many beavers were observed? _____

Where? _____

F24. Amount (%) of removal or addition of water from/to a **LARGE RIVER SYSTEM (> 15 m wide):**

(NA; < 10%; 10-25%; 25-50%; > 50%): _____

F25. Percent control of flood peak and timing by upstream dam(s) on a **LARGE RIVER SYSTEM (> 15 m wide):**

(NA; < 10%; 10-25%; 25-50%; > 50%): _____

F26. Percent of natural floodplain that is accessible to flood flows for a **LARGE RIVER SYSTEM (> 15 m wide):**

(NA; > 85%; 65-85%; 35-65%; < 35%): _____

F27. 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.):

F28. Detailed description of upper and lower ends and width (lateral boundaries) of the polygon:

ADDITIONAL DATA

Polygon Number: _____ Record ID No: _____

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: _____

H5a. Do available maps accurately represent the sinuosity of the stream? (Yes; No; NA; NC): _____

If **No**, **H5b.** Determine sinuosity in the field; If **Yes**, determine sinuosity in the office from topo map: _____

H6. Percent of streambank physically accessible to large animals: _____

H7a. Has the bank configuration or channel profile been modified by construction? (Yes; No; NC): _____

If **Yes**, **H7b.** How much of the bank or channel length is modified (%)? _____

H7c. 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": _____	

H7d. Location(s): _____

H7e. If human-caused channel modifications are present, are they stable? (Stable; Unstable): _____

H7f. What is the effect of the modifications on the immediate and downstream channel?

H8. Rosgen STREAM and VALLEY type classification

H8a. Rosgen stream types recorded and the percent of the stream length accounted for by each:

Rosgen 1: _____ / _____ Rosgen 2: _____ / _____ Rosgen 3: _____ / _____ Rosgen 4: _____ / _____

H8b. Rosgen valley types recorded and the percent of the stream length accounted for by each:

Valley 1: _____ / _____ Valley 2: _____ / _____ Valley 3: _____ / _____ Valley 4: _____ / _____

H8c. Comments on basis for, and confidence in, Rosgen calls:

Waterfowl Data

Polygon Number: _____ Record ID No: _____

H9a. Were waterfowl nests or broods observed? (Yes; No; NC): _____

If **Yes, H9b.** Describe: _____

Fishery Data

H10a. Does the polygon contain a fishery? (Yes; No; Unknown): _____

If **Yes, H10b.** Is it a sport fishery, non-sport fishery, or unknown: _____

H10c. Fish types present, if known (use common names or descriptions): _____

H10d. How many fish were observed? (0; 1-10; 11-50; >50): _____

H10e. If the polygon does not contain a fishery, is there potential for one? (Yes; No; Unknown): _____

Explain: _____

Amphibian and Reptile Data

H11a. Were amphibians seen? (Yes; No; NC): _____ If **Yes, H11b.** How many?: Frogs: _____ Toads: _____ Salamanders: _____

H12a. Were reptiles seen? (Yes; No; NC): _____ If **Yes, H12b.** How many?: Snakes: _____ Turtles: _____ Lizards: _____

H13. 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.: _____

Threatened and Endangered Species Data

H14a. Were Threatened and Endangered animal species observed? (Yes; No; NC): _____

If **Yes, H14b.** What species? Peregrine Falcon: _____ Bald Eagle: _____ Bull Trout: _____

Peregrine Falcon Nest: _____ Bald Eagle Nest: _____

H14c. Other T&E spp. seen? Species Number **H14d.** Location in polygon where T&E animals or nests were sighted:

Species	Number	Location in polygon where T&E animals or nests were sighted:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Notable Bird Observations (Other than Waterfowl)

H15. 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

H16. Were rare plant species observed on the polygon? (Yes; No; NC): _____

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

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

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

H17. Additional Comments:

