ALBERTA LENTIC WETLAND HEALTH ASSESSMENT (Survey)

Record ID No: _____

Polygon No: _____

ADMINISTRATIVE DATA

A1. Field Data Collected by (Organization): _____

A2a. Funding Agency/Organization: _____

A2b. Funding Source/Grant: _____

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: _____

A11a. 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 Mgr's Name(s): _____ **A13d.** Title, Office and/or Dept. of Land Mgr(s): _____

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. Is this land part of a Public Land Use Zone (PLUZ)? (Yes; No): _____ **A15b.** PLUZ Name: _____

A16a. Has this polygon been inventoried before? (Yes; No): _____ **A16b.** Other years sampled: _____

A16c. Does this polygon coincide exactly with a previously inventoried polygon? (Yes; No): _____

A16d. ID No.(s) of other inventories of this exact polygon: _____, _____, _____, _____, _____

A17a. Does this polygon share common area with other inventoried polygon(s), but is not exact? (Yes; No): _____

A17b. ID No.(s) of other records sharing area with this polygon: _____, _____, _____, _____

A18a. Has a change in management occurred? (Yes; No, Unknown): _____ If **Yes, A18b.** Year changed occurred: _____

A18c. Type of management change applied: _____

A19. 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 N/E/S/W END: _____ Easting: _____ ; Northing: _____ ; Zone: _____

B10b. UTM coordinates of polygon N/S/E/W END: _____ Easting: _____ ; Northing: _____ ; Zone: _____

B10c. TRIMBLE/GPS Unit #: _____ WPT END N/E/S/W: _____ WPT END N/E/S/W: _____ _____

B10d. Comments: _____

B11a. Map Title(s): _____

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

B12. Aerial Photo Info: Scale: _____ Date: _____ 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 shoreline? (Yes; No; NC): _____

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

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

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

C8. Habitat Types and Community Types

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

OPTIONAL PHYSICAL SITE CHARACTERISTICS

D1a. Does the polygon has potential for tall woody type(s)? (Yes, No): _____

D1b. Does the polygon has tall woody type(s) present? (Yes, No): _____

D2a. Tree **AND** shrub removal by other than browse: None (0-5%); Light (6-25%); Moderate (26-50%);
Heavy (>50%); NA; NC: _____

D2b. Basis of Call: _____

D3. Waterbody number (FMIS/Hydro code): _____

D3a. Is water quality data available on this waterbody? (Yes, No, Unknown, NA): _____

If **Yes, D3b.** Describe the reference for that data (name, year, etc.): _____

D4. Detailed description of upper and lower ends and width (lateral boundaries) of the polygon:

_____
_____
_____
_____
_____
_____

LENTIC WETLAND HEALTH ASSESSMENT SCORE SHEET

Record ID No: _____

Polygon Number: _____

	Actual Score	Possible Score	Comment
1. Vegetative Cover of the Polygon	_____	_____	_____
2a. Invasive Plant Species Canopy Cover	_____	_____	_____
2b. Invasive Plant Species Density Distribution	_____	_____	_____

List Invasive Plant Species present, including Percent Canopy Cover and Density Distribution Class:

	CC	DD		CC	DD		CC	DD
black henbane (HYOSNIG):	___	___	downy brome/chess (BROMTEC):	____		pale yellow iris (irispse)*:	___	___
blueweed (ECHIVUL):	___	___	European buckthorn (RHAMCAT)*:	____		perennial Sowthistle (SONCARV):	___	___
broad-leaved pepper-grass (LEPILAT):	___	___	field bindweed (CONVARV):	____		purple loosestrife (LYTHSAL):	___	___
Canada thistle (CIRSARV):	___	___	field scabious blue buttons(KNAUARV):	____		Russian knapweed (CENTREP):	___	___
caraganna (CARAARB):	___	___	great burdock(ARCTLAP):	____		Russian olive (ELAEANG):	___	___
cleavers (GALIAPA):	___	___	heart-podded hoary cress(CARDDRA):	____		saltlover (HALOGLO):	___	___
common baby's-breath (GYPSPAN):	___	___	Himalayan balsam (IMPAGLA):	____		scentless chamomile (MATRPER):	___	___
common barberry (BERBVUL):	___	___	Japanese brome/chess (BROMJAP):	____		smth peren.sowthistle(SONCULI):	___	___
common burdock (ARCTMIN):	___	___	leafy spurge (EUPHESU):	____		spotted knapweed (CENTMAC)*:	___	___
common hound's-tongue (CYNOOFF):	___	___	lens-podded hoary cress (CARDCHA):	____		tall buttercup (RANUACR):	___	___
common mullein (VERBTHA):	___	___	marsh thistle (CIRSPAL)*:	____		tamarisk/salt cedar (TAMACHI):	___	___
common tansy (TANAVUL):	___	___	meadow hawkweed (HIERCAE)*:	____		tufted vetch (SILEPRA):	___	___
creeping bellflower (CAMPRAP):	___	___	meadow knapweed (CENTMON):	____		white cockle (SILEPRA):	___	___
Dalmatian Toadflax (LINADAL):	___	___	mouse-ear hawkweed (HIERPIL):	____		woolly burdock (ARCTTOM):	___	___
dame's rocket (HESPMAT):	___	___	nodding thistle (CARDNUT)*:	____		yellow clematis (CLEMTAN):	___	___
diffuse knapweed (CENTDIF):	___	___	orange hawkeedHIERAUR)*:	____		yellow toadflax (LINAVUL):	___	___
			ox-eye daisy (CHRYLEU):	____		Others: _____	___	___

2c. Are there elevated status species for this county? (Yes; No; NC): **2d.** If *Yes,* indicate species, elevated status, CC and DD:

_____   _____   _____   _____   _____   ___

	Actual Score	Possible Score	Comment
3. Disturbance-increaser Undesirable Herbaceous Species	_____	_____	_____
4. Preferred Tree and Shrub Establishment and Regeneration	_____	_____	_____
5a. Browse Util. of Preferred Trees and Shrubs	_____	_____	_____
5b. Woody Veg. Removal other than Browsing	_____	_____	_____
6. Human Alteration of Polygon Vegetation	_____	_____	_____
Vegetation Subtotal:	_____	_____	
7a. Percent of Polygon Physical Site Altered By Human Activity	_____	_____	_____
7b. Severity of Human-Caused Alteration of Polygon Physical Site	_____	_____	_____
8. Human-Caused Bare Ground	_____	_____	_____
9. Degree of Artificial Change of Water Level	_____	_____	_____
Soil/Hydrology Subtotal:	_____	_____	
Overall Polygon Total:	_____	_____	

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

RATING CALCULATION

(Actual Score/Possible Score) X 100 = Rating Percent   Descriptive Category

Vegetation Rating: _____ / _____ x 100 = _____   _____

Soil / Hydrology Rating: _____ / _____ x 100 = _____   _____

OVERALL: _____ / _____ x 100 = _____   _____

ADDITIONAL MANAGEMENT CONCERNS (OPTIONAL)

The following items do not contribute to a site's score. Rather they help to quantify inherent physical site characteristics or assess the direction of change on a site. These data can be useful for planning future site management.

10a. Polygon trend: Improving, Degrading, Static, or Status Unknown? _____

(If "status unknown" answer NA to the sub-questions 10b and 10c)

10b. Has management influenced trend? (Yes; No; Unknown; NC; NA): _____

10c. Describe how health parameters have changed and justify your call.

_____
_____
_____
_____

11. Overflow structure stability: _____

Overflow structure location: _____

12a. Shoeline rock volume: _____

12b. Shoreline rock size: _____

13. Vegetation use by animals: _____

14. Susceptibility of parent material to erosion: _____

15. Percent of shoreline accessible to large animals: _____

16. Quantify the percent of tree and shrub cover on the polygon that is dead and/or decadent: _____

17. Primary Land Use Sector (CHOOSE ONLY ONE):

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

18a 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: _____ _____

19. Comments and Observations:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Polygon Number: _____   Record ID No: _____

WAYPOINT DATA/Polygon Boundary Descriptions

E1. NON-PHOTO WAYPOINTS related to polygon (lateral extent, weed patches, etc.)

TRIMBLE/GPS Unit #: _____   User Name: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Waypoint Name: _____   Easting: _____   Northing: _____   Zone: _____
Waypoint Description: _____

Polygon Number: _____ Record ID No: _____

PHOTOGRAPH DATA (Do not exceed 40 photos per polygon)

Photographer: _____ Camera Number: _____ TRIMBLE/GPS Unit #: _____

F1a. Benchmark photos (taken at the centre, north, east, south or west end of the polygon): _____
    (Only record center photo in G1)

F1b. Inner benchmark (taken at edge of open water or emergent vegetation if accessible and applicable):

Benchmark Waypoint (BI): _____ Easting: _____ Northing: _____ Zone: _____

    Photo #:   ***OUT*** of Polygon (describe view):

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

    Photo #:   ***INTO*** Polygon (describe view):

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

F1c. Secondary inner benchmark if needed; taken at future repeatable location:

If centre photo taken in G1, include location on polygon of secondary benchmark (taken at north, east, south or west end of polygon): _____

Photo Waypoint (BM): _____ Easting: _____ Northing: _____ Zone: _____

    Photo #:   ***OUT*** of Polygon (describe view):

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

    Photo #:   ***INTO*** Polygon (describe view):

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

F1d. Lateral benchmark (benchmarks taken at the lateral extent of the polygon):

If centre photo taken in G1, include location on polygon of lateral benchmark (taken at north, east, south or west end of polygon): _____

Photo Waypoint (BL): _____ Easting: _____ Northing: _____ Zone: _____

    Photo #:   ***OUT*** of Polygon (describe view):

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

    Photo #:   ***INTO*** Polygon (describe view):

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

_____ View _____ _____

Polygon Number: _____ Record ID No: _____

Photographer: _____ Camera Number: _____ TRIMBLE/GPS Unit #: _____

F2a. Benchmark photos (taken at the north, east, south or west end of the polygon: _____

F2b. Inner benchmark (taken at edge of open water or emergent vegetation if accessible and applicable):

    Benchmark Waypoint (BI): _____ Easting: _____ Northing: _____ Zone: _____

    Photo #:   *OUT* of Polygon (describe view):

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    Photo #:   *INTO* Polygon (describe view):

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

F2c. Secondary inner benchmark if needed; taken at future repeatable location:

    If centre photo taken in G1, include location on polygon of secondary benchmark (taken at north, east, south or west end of polygon): _____

    Photo Waypoint (BM): _____ Easting: _____ Northing: _____ Zone: _____

    Photo #:   *OUT* of Polygon (describe view):

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    Photo #:   *INTO* Polygon (describe view):

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

F2d. Lateral benchmark (benchmarks taken at the lateral extent of the polygon):

    If centre photo taken in G1, include location on polygon of lateral benchmark (taken at north, east, south or west end of polygon): _____

    Photo Waypoint (BL): _____ Easting: _____ Northing: _____ Zone: _____

    Photo #:   *OUT* of Polygon (describe view):

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    Photo #:   *INTO* Polygon (describe view):

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

    _____ View _____ _____

F3a. Is there an adjacent polygon north and/or west of this polygon ? (Yes; No): _____   **F3b.** Adj. polygon name N/W: _____

F4a. Is there an adjacent polygon south and/or east of this polygon ? (Yes; No): _____   **F4b.** Adj. polygon name S/E: _____

F5. Additional Photos and Locations:

Photographer: _____ Camera Number: _____ TRIMBLE/GPS Unit #: _____

Photo Location 1:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Photo Location 2:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Photo Location 3:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Photo Location 4:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Photo Location 5:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Photo Location 6:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Polygon Number: _____ Record ID No: _____

Photographer: _____ Camera Number: _____ TRIMBLE/GPS Unit #: _____

Photo Location 7:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Photo Location 8:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Photo Location 9:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Photo Location 10:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Photo Location 11:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Photo Location12:   Waypoint name: _____ Easting _____ Northing _____ Zone _____

Photo #:   Degrees: Describe photo and waypoint location:

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

F6. Additional LENTIC photo page entered (Yes: No): _____   Lens filter used: _____