U.S. LOTIC WETLAND INVENTORY FORM

Record ID No: _____

Unique Location ID: _____

ADMINISTRATIVE DATA

A1. Field data collected by: _____

A2. Funding Agency/Organization: _____

A3a. BLM State Office: _____

A3b. BLM Field Office/Field Station: _____

A3c. BLM Office Code: _____ **A3d.** Is the polygon in an active BLM grazing allotment? (Yes; No; NA): _____

If ***Yes,*** **A3e:** Allotment Number: _____ **A3f:** Allotment Number: _____

Allotment ID: _____ Allotment ID: _____

Allotment Name: _____ Allotment Name: _____

Management Status: _____ Management Status: _____

A4. USFWS Refuge: _____

A5. Reservation: _____

A6. NPS Park/NHS: _____

A7. USFS National Forest: _____

A8. Other Location: _____

A9. Year: _____ **A10.** Date field data collected: _____ **A11.** Observers: _____

A12a. At least some part of this polygon has been inventoried more than once (resampled)? (Yes; No): _____

If ***No,*** go to item **A13a.** If ***Yes,*** **A12b.** This polygon coincides exactly with another inventoried polygon? (Yes; No): _____

A12c. Is this the latest inventory for this polygon? (Yes; No): _____

A12d. ID No.(s) of other inventories of this polygon: _____, _____, _____, _____, _____

A12e. Other years: _____

A12f. This polygon shares common area with other inventoried polygon(s)? (Yes; No): _____ **A12g.** Other years: _____

A12h. ID No.(s) of other records sharing area with this polygon: _____, _____, _____, _____, _____

A13a. Has a change in management occurred? (Yes; No): _____ If ***Yes,*** **A13b.** Year that changed occurred: _____

A13c. Type of management change applied:

_____

_____

_____

LOCATION DATA

B1. State/Province: _____ **B2.** County/Municipal District: _____

B3. Allotment/Range Unit: _____

B4a. Area name: _____

B4b. Tributary to: _____

B4c. Group name: _____ **B4d.** Group number: _____ **B5.** Polygon number: _____

B6. Location: 1/4 1/4 Sec: _____ 1/4 Sec: _____ Sec: _____

Township (NS): _____ Range (EW): _____ **B7.** Elev. (ft): _____ ; (m): _____

B8a. Hydrologic unit code (HUC): _____ **B8b.** Sub-basin name (4th level HUC): _____

B8c. Sub-basin (sq mi): _____ ; (sq m): _____ **B8d.** Sub-basin (ac): _____ ; (hect): _____

B8e. Sub-basin perimeter (mi): _____ ; (m): _____

B9a. Polygon latitude/longitude coordinates: GPS Projection: _____

	Deg	Min	Sec	N/S	Decimal		Deg	Min	Sec	E/W	Decimal	Accuracy +/- ft	Accuracy +/- m	Observer Initial & WPT
Upper: Lat:						Lon:								
Lower: Lat:						Lon:								
Other: Lat:						Lon:								

B9b. Other Point Comments: _____

_____

B10. Quad map(s): _____ _____

SELECTED SUMMARY DATA Record ID No: _____ Unique Location ID: _____

C1. Wetland 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 (ac): _____ ; (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 riparian zone width (ft): _____ ; (m): _____

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

C8a. Was the Pfankuch rating used? (Yes; No): _____ If ***Yes,*** **C8b.** Pfankuch Score: _____

Health Assessment Summary

C9. 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.** Regen. Category	**D4.** Age Group Dist. Category	**D5a.** Sdlg/Splg Browse Utilization	**D5b.** Browse Architecture Type	**D5c.** Browse Intensity

D5d. 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
POPANG	_____	_____	POPBAL	_____	_____	POPDEL	_____	_____

Shrubs

Record ID No: _____

Unique Location ID: _____

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 utilization

SPECIES	COV (%)	SDLG-SPLG/UTIL	MATURE/UTIL	DEC-DEAD/UTIL	**D6d.** Shrub Growth Form (N,F,U,C)	**D6e.** Browse Architecture Type	**D6f.** Browse Intensity

D6g. Tree ***AND*** shrub removal by other than browse: None (0-5%); Light (6-25%); Moderate (26-50%); Heavy (>50%); NA; NC: _____

D6h. Basis of Call: _____

D7. Graminoids Graminoids present? (Yes; No): _____

SPECIES	COV (%)	SPECIES	COV (%)	SPECIES	COV (%)

Record ID No: _____

Unique Location ID: _____

D8. Forbs Forbs present? (Yes; No): _____

SPECIES	COV (%)	SPECIES	COV (%)

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:

	Cover	
	Canopy (New Way)	Density/ Distribut. Class
bluebuttons (KNAARV):		
Canada thistle (CIRARV):		
cheatgrass (BROTEC):		
common burdock (ARCMIN):		
common cuprina (CRUVUL):		
common hound's-tongue (CYNOFF):		
common tansy (TANVUL):		
dalmatian toadflax (LINDAL):		
diffuse knapweed (CENDIF):		
Dyer's woad (ISATIN):		
field bindweed (CONARV):		
field sow thistle (SONARV):		
Japanese brome (BROJAP):		
leafy spurge (EUPESU):		
musk thistle (CARNUT):		
orange hawkweed (HIEAUR):		
oxeye daisy (CHRLEU):		
perennial pepperweed (LEPLAT):		
purple loosestrife (LYTSAL):		
Russian knapweed (CENREP):		
Russian olive (ELAANG):		
saltcedar (tamarisk) (TAMARI):		
Scotch thistle (ONOACA):		
spotted knapweed (CENMAC):		
St. John's wort (HYPPER):		
sulphur cinquefoil (POTREC):		
tall buttercup (RANACR):		
teasel (DIPFUL):		
whitetop (CARDRA):		
yellow iris (IRIPSE):		
yellow starthistle (CENSOL):		
yellow toadflax (LINVUL):		
Others: _____		
Others: _____		

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: _____

D13c. Cumulative totals for all invasive species:

Cover	
Canopy (New Way)	Density/ Distribution Class

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

Record ID No: _____

Unique Location ID: _____

Classification Type Name	Phase	Percen of Polygon	Successional Stage or Comments

D16. Polygon trend: Improving, Degrading, Static, or Status Unknown? _____

D17. Explain trend description and give other vegetation comments:

WATER QUALITY DATA

E1. Waterbody number: _____

E2a. Is the waterbody a 303(d) listed impaired stream? (Yes; No) _____ Year of listing: _____

E3. Waterbody TMDL priority: _____

E4. TMDL development status: _____

E5. Probable cause(s):

E6. Probable impaired uses:

E7. Probable source(s):

PHYSICAL SITE DATA

Record ID No: _____

Unique Location ID: _____

F1. Does the polygon contain a stream bank or channel bottom? (Yes; No; NC): _____ If ***No,*** go to item **F17a.**

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

F3a. Are bank materials visible? (Yes; No; NC): _____

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

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

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 approx. 100%)

_____ Grazing _____ Mining _____ Construction _____ Other
_____ Cultivation _____ Timber Harvest _____ Recreation

Explain "other": _____

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

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

Explain "other": _____

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

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

F10a. Do available maps accurately represent sinuosity of the stream? (Yes; No; NA; NC): _____

If ***No,*** **F10b.** Determine sinuosity in the field; If **Yes,** determine sinuosity in the office from topo map: ___

F11. Average non-vegetated stream channel width: (ft) _____ ; (m): _____

F12. Stream gradient (percent): _____

F13a. Active downcutting of the stream? (Yes; No; NC): _____ If ***Yes,*** **F13b.** Percent (%) of stream actively downcutting: _____

F14a. Headcuts present? (Yes; No; NC): _____ If ***Yes,*** **F14b.** No. of headcuts: _____ **F14c.** Average headcut height (ft): _____

F14d. Location of headcut(s): _____

F15a. Is the stream channel braided (has multiple active channels during normal flows)? (Yes; No; NC): _____

If ***Yes,*** **F15b.** Percent of the stream channel that is braided: _____

F16. Indicate the best description of channel incisement (None; Slight; Moderate; Severe): _____

F17a. Is there exposed soil surface (bare ground)? (Yes; No; NC): _____ If ***No*** or ***NC,*** go to item **F18.**

F17b. Percent (%) of the polygon which is exposed soil surface (bare ground): _____

F17c. Of this, how much is due to natural processes: _____ Human-caused disturbance: _____ (must approx. 100%)

F17d. Within ***each*** category (natural & human-caused), how much resulted from the listed processes?

NATURAL PROCESSES *(must approx. 100%)*

_____ Erosional _____ Type Dependent
_____ Depositional _____ Saline/Alkaline
_____ Wildlife Use _____ Within Veg. Channel Bottoms
_____ Other

HUMAN-CAUSED PROCESSES *(must approx. 100%)*

_____ Grazing _____ Construction
_____ Timber Harvest _____ Mining
_____ Recreation _____ Other

Explain "Other": _____

Record ID No: _____

F18. 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: _____

Other: _____

F19. Are channel point bars revegetating? (Yes; No; NA; NC): _____

F20a. Are side drainages and hillslopes contributing to degradation of the system? (Yes; No; NA; NC): _____

If ***Yes,* F20b.** Human-caused? (Yes; No; NA; NC): _____ Causes: _____

F20c. Natural cause? (Yes; No; NA; NC): _____ Major soil parent material: _____

F21. Is there a nearby source ***on the system*** for large woody debris to enter the stream? (Yes; No; NA; NC): _____

F22. Is the average riparian zone widening? (Yes; No; NA; NC): _____

F23. Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting? (Yes; No; NA; NC): _____

F24a. Is the polygon away from the streambank physically altered? (Yes; No; NC): _____ If ***Yes,* F24b.** What percent? _____

F24c. Of this, how much resulted from these causes: (must approximate 100%)

_____ Grazing _____ Timber Harvest _____ Construction _____ Other

_____ Cultivation _____ Mining _____ Recreation

***F24a-d** Collected only as HummocksPugging prior to 2005*

Explain Other: _____

F24d. 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: _____

F25a. Animal-caused pugging and/or hummocks present? (Yes; No; NC): _____ If ***Yes,* F25b.** What Percent (%): _____

F25c. Distribution of hummocks/pugging: Within streambanks: _____ Remainder of polygon: _____ (must approx. 100%)

F26a. Are seeps or springs present? (Yes; No; NC): _____

If ***Yes,* F26b.** Number of seeps and springs: _____

F26c. How many springs and seeps had hummocks and/or pugging in 25% or more of the wetted area? _____

F26d. Location of the springs and seeps: _____

F27a. Is wetland type a pooled channel of an intermittent stream (item C1)? (Yes; No; NC): _____

If ***Yes,* F27b.** Percent of the channel length with pooled water: _____

F27c. Is this pooled water expected to remain at the surface through the remainder of the growing season? (Yes; No): _____

F27d. Location of the pools: _____

F28. 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.):

F29. Detailed description of upper and lower ends of the polygon:

PHOTOGRAPH DATA Unique Location ID: _____

G1a. Identification of photos (taken at the ***Upstream*** end of polygon): Roll #: _____ Photographer: _____

Photo nos.: (Upstream): _____ (DwnStream): _____ (others): _____

G1b. Location of "other" photos: _____

G1c. Descript. of views Upstream: _____

(Down-stream): _____

(others): _____

G2a. Identification of photos (taken at ***Downstream*** end of polygon): Roll #: _____ Photographer: _____

Photo nos.: (Upstream): _____ (DwnStream): _____ (others): _____

G2b. Location of "other" photos: _____

G1c. Descript. of views Upstream: _____

(Down-stream): _____

(others): _____

ADDITIONAL DATA

Record ID No: _____

H1. Aspect: _____

Unique Location ID: _____

H2. Vegetative use by animals (0-25%; 26-50%; 51-75%; 76-100%): _____

H3a. Break down the polygon area into the land uses listed (must total to approx. 100%):

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: _____

H3b. Break down the area adjacent to the polygon into the land uses listed (must total to approx. 100%):

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: _____

H4. Adjacent uplands (Agriculture; Grassland; Shrubland; Forest; or Other): _____ _____

H5a. Were Category 2 (T & E) plant species observed? (Yes; No): _____ If **Yes, H5b.** Species: _____ _____ _____

H5c. Location(s): _____

H6a. Do subsurface water supplies, independent of flowing surface water in the area, appear to influence area vegetation? (An example of this is a hardwood draw with riparian vegetation, but rarely flowing surface water.) (Yes; No): _____

If ***Yes,*** **H6b.** Describe the situation:

_____

H7. Bankfull width/depth ratio: _____

H8. Entrenchment ratio (floodprone width/bankfull width) (<1.4; 1.4-2.2; >2.2): _____

H9. Distribution of exposed soil surface (item F17b) (must approx. 100%):

Inside/outside the bank/channel area: Inside: _____ Outside: _____

H10. Percent of streambank accessible to livestock: _____

H11a. Has the bank configuration or channel profile been modified by construction? (Yes; No; NC): _____

If ***Yes,*** **H11b.** How much of the bank or channel length is modified (%)? _____

H11c. 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": _____

H11d. Location(s): _____

H11e. If human-caused channel modifications are present, are they stable? (Stable; Unstable): _____

H11f. What is the effect of the modifications on the immediate and downstream channel?

_____

WILDLIFE DATA Record ID No: _____

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. Number of beaver dams and lodges observed: _____

H12e. Level of beaver activity (number of stems chewed) (0; 1-25; 26-100; over 100; NC): _____

H12f. How many beavers were observed? _____

H12g. Where in the polygon?

_____

Waterfowl Data

H13a. Were waterfowl nests or broods observed? (Yes; No; NC): _____

If ***Yes,*** **H13b.** Describe: _____

Fishery Data

H14a. Does the polygon contain a fishery? (Yes; No; Unknown): _____

If ***Yes,*** **H14b.** Is it a sport fishery, non-sport fishery, or unknown: _____

H14c. Fish types present, if known (use common names or descriptions): _____

_____

H14d. How many fish were observed? (0; 1-10; 11-50; >50): _____

H14e. If the polygon does not contain a fishery, is there potential for one? (Yes; No; Unknown): _____

Explain: _____

_____

Amphibian and Reptile Data

H15a. Were amphibians observed? (Yes; No; NC): _____

If ***Yes,*** **H15b.** Number observed: Frogs: _____ Toads: _____ Salamanders: _____

H16a. Were reptiles observed? (Yes; No; NC): _____

If ***Yes,*** **H16b.** Number observed: Snakes: _____ Turtles: _____ Lizards: _____

H17. 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

H18a. Were T & E animal species observed? (Yes; No; NC): _____

If ***Yes,*** **H18b.** What species? Peregrine Falcon: _____ Bald Eagle: _____ Bull Trout: _____

Peregrine Falcon Nest: _____ Bald Eagle Nest: _____

	Species	Number	Species	Number
Other T & E species observed:	_____	_____	_____	_____

H18c. Location in polygon where T & E animals or nests were sighted:

_____

_____

_____