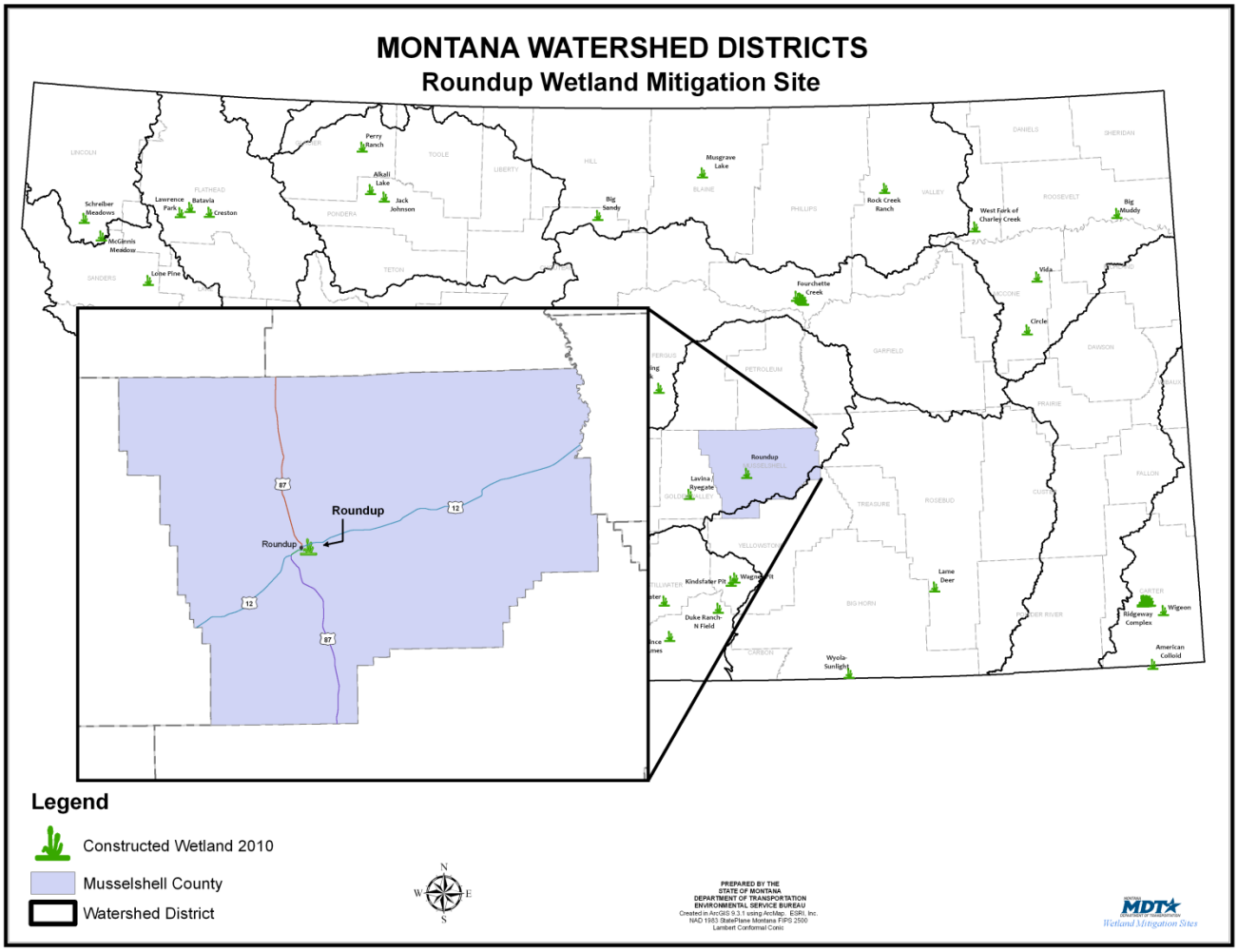
ROUNDUP

Watershed #10-Musselshell River Basin
Musselshell County, Montana



LAND OWNERSHIP: THE CITY OF ROUNDUP

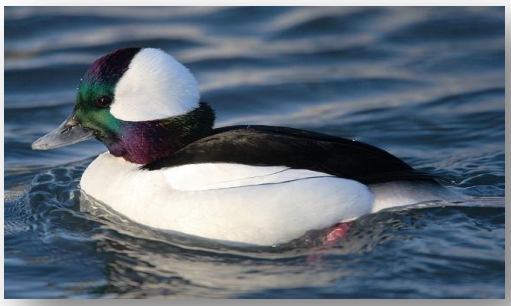
BACKGROUND INFORMATION

The Roundup wetland mitigation project was an experimental effort to reclaim an abandoned sewage lagoon into wetlands. It is located south of U.S. Highway 12 and east of the town of Roundup at the site of the former wastewater lagoons for the city of Roundup. Construction was completed on this site in April of 2000 with a goal of creating wetland mitigation for highway impacts within watershed #10, Musselshell River Basin. This former two-celled treatment facility, contained sludge of varying depths with concentrations of nitrates, of which portions were capped during construction modification. The organic sludge was left in the west end of the southern end of the wetland bed and capped with one foot of soil to prevent potential biohazards risks. Five monitoring wells were installed around the lagoon to monitor any possible groundwater contamination from the decomposing sludge. This restoration project is anticipated to provide approximately 24 acres of mitigation credits to mitigate transportation projects in the watershed.

WETLAND INHABITANTS

AMPHIBIAN AND REPTILE	
Unidentified Turtle (likely painted)	Frog (*Rana* spp.)
Painted Turtle (*Chrysemys picta*)	**Woodhouse Toad (*Bufo woodhousii*)**
Bull Snake (*Pituophis catenifer*)	
BIRDS	
American Avocet (*Recurvirostra americana*)	**Mallard (*Anas platyrhynchos*)**
American Coot (*Fulica americana*)	Marbled Godwit (*Limosa fedoa*)
American Kestrel (*Falco sparverius*)	Marsh Wren (*Cistothorus palustris*)
American Robin (*Turdus migratorius*)	Mourning Dove (*Zenaida macroura*)
American Wigeon (*Anas americana*)	Northern Harrier (*Circus cyaneus*)
Bank Swallow (*Riparia riparia*)	**Northern Pintail (*Anas acutus*)**
Barn Swallow (*Hirundo rustica*)	Northern Rough-winged Swallow (*Stelgidopteryx serripennis*)
Black-billed Magpie (*Pica Pica*)	**Northern Shoveler (*Anas clypeata*)**
Black-necked Stilt (*Himantopus mexicanus*)	**Pied-billed Grebe (*Podilymbus podiceps*)**
Blue-winged Teal (*Anas discors*)	Redhead (*Aythya Americana*)
Bufflehead (*Bucephala albeola*)	Ring-billed Gull (Larus delawarensis)
Brewer's Blackbird (*Euphagus cyanocephalus*)	Red-necked Phalarope (*Phalaropus lobatus*)
California Gull (*Larus californicus*)	**Red-winged Blackbird (*Agelaius phoeniceus*)**
Canada Goose (*Branta canadensis*)	**Ring-necked Duck (*Aythya collaris*)**
Canvasback (*Aythya valisineria*)	Ring-necked Pheasant (*Phasianus colchicus*)
Cedar Waxwing (*Bombycilla cedrorum*)	Rock Dove (*Columba livia*)
Cinnamon Teal (*Anas cyanoptera*)	Ross Goose (*Chen rossii*)
Cliff Swallow (*Hirundo pyrrhonota*)	**Ruddy Duck (*Oxyura dominica*)**
Common Merganser (*Megus merganser*)	Sandhill Crane (*Grus canadensis*)
Common Snipe (*Gallinago gallinago*)	Sandpiper (species unidentified)
Common Yellowthroat (*Geothypis trichas*)	Semipalmated Sandpiper (*Charadrius semipalmatus*)
Cooper's Hawk (*Accipiter cooperii*)	Short-billed Dowitcher ((*Limnodromus griseus*)
Double-crested Cormorant (*Phalacrocorax auritus*)	Solitary Sandpiper (*Tringa solitaria*)
Eared Grebe (*Podiceps nigricollis*)	Song Sparrow (*Melospiza melodia*)
Eastern Kingbird (*Tyrannus tyrannus*)	**Spotted Sandpiper (*Actitis macularia*)**
European Starling (*Sturnus vulgaris*)	**Tree swallow (*Tachycineta bicolor*)**
Franklin's Gull (*Larus pipixcan*)	**Violet Green Swallow (*Tachycineta thalassina*)**
Gadwall (*Anas strepera*)	Western Grebe (*Aechmorphus occidentalis*)
Great Blue Heron (*Ardea herodias*)	Western Meadowlark (*Sturnella neglecta*)
Greater Yellow legs (*Tringa melanoleuca*)	Western Sandpiper (*Calidris mauri*)
Green-winged Teal (*Anas crecca*)	Whimbrel (*Numenius phaeopus*)
Hooded Merganser (*Lophodytes cucllatus*)	White-crowned Sparrow (Zonotrichia atricapilla)
House Sparrow (*Passer domesticus*)	Willet (*Catoptrophorus semipalmatus*)
Killdeer (*Charadrius vociferus*)	**Wilson's Phalarope (*Phalaropus tricolor*)**
Lazuli Bunting (*Passerina amoena*)	**Wood Duck (*Aix sponsa*)**
Least Sandpiper (*Calidris minitilla*)	**Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)**
Lesser Scaup (*Aythya affinis*)	Yellow-rumped Warbler (*Dendroica coronata*)
Lesser Yellowlegs (*Tringa flavipes*)	Yellow Warbler (*Dendroica petichia*)
Long-billed Dowitcher (*Limnodromus scolopaceus*)	
MAMMAL	
Mule Deer (*Odocoileus hemionus*)	Domestic cat
Red Fox (*Vulpes vulpes*)	Muskrat (*Ondatra zibethica*)

[1]**Bolded** species indicate those documented within the analysis area in 2008.



Bufflehead



Northern Pintail

WETLAND VEGETATION

Dominant wetland vegetation

Fifteen community types were observed

Type 1- Summer-cypress (*Kochia scoparia)*

Type 2- Lambsquarter (*Chenopodium* spp.*)*

Type 3- Creeping meadow foxtail (*Alopecurus arundinaceus)*

Type 4- Creeping meadow foxtail (*Alopecurus arundinaceus / Bare Ground)* (dominant species in this type have changed since 2002)

Type 5- Crested wheatgrass/Summer-cypress (*Agropyron cristatum / Kochia scoparia)*

Type 6- Bulrush (*Scirpus* spp.*)*

Type 7- Lambsquarter/curly dock (*Chenopodium / Rumex)*

Type 8- Foxtail barley/ Creeping meadow foxtail (*Hordeum jubatum / Alopecurus arundinaceus*)

Type 9- Creeping spike rush/Creeping meadow foxtail (*Eleocharis palustris/Alopecurus arundinaceus*)

Type 10- Tansy mustard (*Descurainia Sophia)*

Type 11- Canada thistle/ Lambsquarter (*Cirsium arvense* / *Chenopodium)*

Type 12- Canadian horseweed (*Conyza Canadensis)*

Type 13- Slender wheatgrass (*Agropyron trachycaulum)*

Type 14- Big basin wild rye (*Elymus cinereus)*

Type 15- Poison hemlock (*Conium maculatum)*

Roundup Lagoons



Click the icon below for complete monitoring reports for this site (2001 to 2010)

MONTANA MDT DEPARTMENT OF TRANSPORTATION

Wetland Mitigation Site