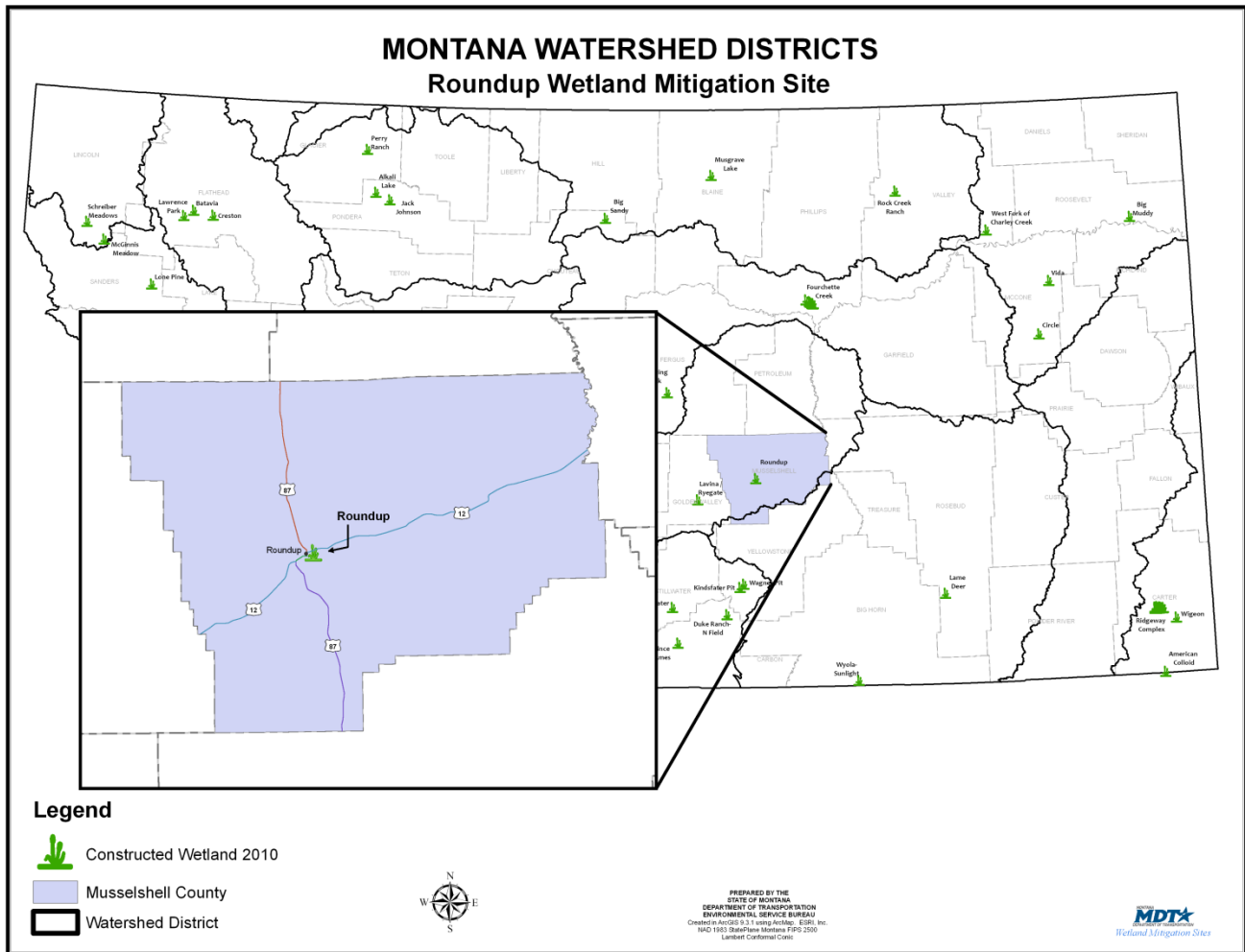


# ROUNDUP

Watershed #10-Musselshell River Basin  
Musselshell County, Montana



**LAND OWNERSHIP: THE CITY OF ROUNDUP**

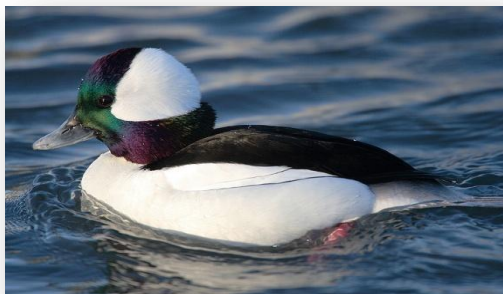
## BACKGROUND INFORMATION

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

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

\*Bolded species indicate those documented within the analysis area in 2008.



**Bufflehead**



**Northern Pintail**

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## 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*)

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## Roundup Lagoons



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

