LAND OWNERSHIP: PRIVATE

BACKGROUND INFORMATION

The Musgrave Lake wetland mitigation project was constructed in 2001 in Watershed #11 (Milk River Basin). It was constructed on private land south of Zurich in Blaine County. This restoration project has provided approximately 27 acres of mitigation credits to mitigate transportation projects in the watershed.
# WETLAND INHABITANTS

<table>
<thead>
<tr>
<th>Category</th>
<th>Species</th>
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<tbody>
<tr>
<td><strong>FISH</strong></td>
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<tr>
<td></td>
<td>Unidentified Minnow Species <em>(Hybognathus sp.)</em></td>
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<tr>
<td><strong>AMPHIBIANS</strong></td>
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<tr>
<td></td>
<td>Northern Leopard Frog <em>(Rana pipiens)</em></td>
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<td></td>
<td>Western Chorus Frog <em>(Pseudacris triseriata)</em></td>
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<td><strong>REPTILES</strong></td>
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<tr>
<td></td>
<td>Plains Garter Snake <em>(Thamnophis radix)</em></td>
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<tr>
<td><strong>BIRDS</strong></td>
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<tr>
<td></td>
<td>American Coot <em>(Fulica americana)</em></td>
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<td></td>
<td>American Kestrel <em>(Falco sparverius)</em></td>
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<td></td>
<td>American Robin <em>(Turdus migratorius)</em></td>
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<td></td>
<td>American White Pelican <em>(Pelecanus erythrorhynchos)</em></td>
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<td></td>
<td>American Wigeon <em>(Anas Americana)</em></td>
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<td></td>
<td>Bank Swallow <em>(Riparia riparia)</em></td>
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<td></td>
<td>Barn Swallow <em>(Hirundo rustica)</em></td>
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<td></td>
<td>Belted Kingfisher <em>(Ceryle alcyon)</em></td>
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<td>Black-billed Magpie <em>(Pica pica)</em></td>
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<td>Black-capped Chickadee <em>(Poecile atricapillus)</em></td>
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<td>Blue-winged Teal <em>(Anas discors)</em></td>
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<td>Bobolink <em>(Dolichonyx oryzivorus)</em></td>
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<td>Brewer’s Blackbird <em>(Euphagus cyanocephalus)</em></td>
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<td>Brown-headed Cowbird <em>(Molothrus ater)</em></td>
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<td>Bufflehead <em>(Bucephala albeola)</em></td>
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<td>Bullock’s Oriole <em>(Icterus bullocki)</em></td>
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<td>Canada Goose <em>(Branta canadensis)</em></td>
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<td>Cauwasback <em>(Aythya valisneria)</em></td>
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<td>Cedar Waxwing <em>(Bombycilla cedrorum)</em></td>
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<td>Chipping Sparrow <em>(Spizella passerina)</em></td>
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<td>Clay-colored Sparrow <em>(Spizella pallida)</em></td>
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<td>Cliff Swallow <em>(Petronochelidon pyrrhonota)</em></td>
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<td></td>
<td>Common Grackle <em>(Quiscalus quiscula)</em></td>
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<td>Common Nightingale <em>(Chordelia minor)</em></td>
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<td>Common Snipe <em>(Gallinago gallinago)</em></td>
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<td>Common Tern <em>(Sterna hirundo)</em></td>
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<td>Common Yellowthroat <em>(Geothlypis richas)</em></td>
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<td>Double-crested Cormorant <em>(Phalacrocorax auritus)</em></td>
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<td>Eastern Kingbird <em>(Tyrannus tyrannus)</em></td>
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<td>European Starling <em>(Sturnus vulgaris)</em></td>
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<td>Franklin’s Gull <em>(Larus pipixcan)</em></td>
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<td>Gadwall <em>(Anas strepera)</em></td>
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<td></td>
<td>Gray Catbird <em>(Dumetella carolinensis)</em></td>
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<td></td>
<td>Great Horned Owl <em>(Bubo virginianus)</em></td>
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<td>Great Blue Heron <em>(Ardea herodias)</em></td>
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<td>Green-winged Teal <em>(Anas crecca)</em></td>
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<td>House Wren <em>(Troglydtes aedon)</em></td>
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<td>Killdeer <em>(Charadrius vociferus)</em></td>
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<td>Least Flycatcher <em>(Empidonax minimus)</em></td>
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<td>Lesser Scaup <em>(Aythya affinis)</em></td>
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<td>Long-billed Dowitcher <em>(Limnodromus scolopaceus)</em></td>
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<td>Mallard <em>(Anas platyrhynchos)</em></td>
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<td>Marbled Godwit <em>(Limosa fedoa)</em></td>
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<td>Marsh Wren <em>(Cistothorus palustris)</em></td>
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<td>Mourning Dove <em>(Zenaida macroura)</em></td>
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<td>Northern Flicker <em>(Colaptes auratus)</em></td>
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<td>Northern Harrier <em>(Circus cyaneus)</em></td>
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<td>Northern Pintail <em>(Anas acuta)</em></td>
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<td>Northern Rough-winged Swallow <em>(Stelgidopteryx serripennis)</em></td>
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<td>Northern Shoveler <em>(Anas clypeata)</em></td>
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<td></td>
<td>Orange-crowned Warbler <em>(Vermivora celata)</em></td>
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<td></td>
<td>Red-tailed Hawk <em>(Buteo jamaicensis)</em></td>
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<td>Red-winged Blackbird <em>(Agelaius phoeniceus)</em></td>
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<td>Ring-billed Gull <em>(Larus delawarensis)</em></td>
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<td>Ring-necked Pheasant <em>(Phasianus colchicus)</em></td>
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<td>Rock Dove <em>(Columba livia)</em></td>
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<td></td>
<td>Savannah Sparrow <em>(Passerculus sandwichensis)</em></td>
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<td>Sharp-tailed Grouse <em>(Tympanuchus phasianellus)</em></td>
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<td>Solitary Sandpiper <em>(Tringa solitaria)</em></td>
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<td>Song Sparrow <em>(Melospiza melodia)</em></td>
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<td>Sora <em>(Porzana carolina)</em></td>
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<td>Spotted Sandpiper <em>(Actitis macularia)</em></td>
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<td>Swainson’s Hawk <em>(Buteo swainsoni)</em></td>
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<td>Tree Swallow <em>(Tachycineta bicolor)</em></td>
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<td>Upland Sandpiper <em>(Bartramia longicauda)</em></td>
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<td>Warbling Vireo <em>(Vireo gilvus)</em></td>
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<td>Western Meadowlark <em>(Sturnella neglecta)</em></td>
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<td>Western Sandpiper <em>(Calidris mauri)</em></td>
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<td>Western Wood-pewee <em>(Contopus sordidulus)</em></td>
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<td>Willet <em>(Catoptrophorus semipalmatus)</em></td>
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<td>Willow Flycatcher <em>(Empidonax traillii)</em></td>
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<td>Wilson’s Phalarope <em>(Phalaropus tricolor)</em></td>
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<td>Wood Duck <em>(Aix sponsa)</em></td>
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<td>Yellow-rumped Warbler <em>(Dendroica coronata)</em></td>
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<td></td>
<td>Yellow Warbler <em>(Dendroica petechia)</em></td>
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<tr>
<td></td>
<td>Yellow-headed Blackbird <em>(Xanthocephalus xanthocephalus)</em></td>
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<tr>
<td><strong>MAMMALS</strong></td>
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<tr>
<td></td>
<td>American Badger <em>(Taxidea taxus)</em></td>
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<td>American Beaver <em>(Castor canadensis)</em></td>
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<td>Coyote <em>(Canis latrans)</em></td>
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<td>Long-tailed Weasel <em>(Mustela frenata)</em></td>
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<td>Meadow Vole <em>(Microtus pennsylvanicus)</em></td>
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<td>Raccoon <em>(Procyon lotor)</em></td>
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<td>Richardson’s Ground Squirrel <em>(Spermophilus richardsonii)</em></td>
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<td></td>
<td>White-tailed Deer <em>(Odocoileus virginianus)</em></td>
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</tbody>
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**Bolded** species were observed during 2004 monitoring. All other species were observed during one or more of the previous monitoring years, but not during 2004.
WETLAND VEGETATION

Dominant wetland vegetation

Nine community types were observed

Type 1- Broad-leaf cattail/Hardstem bulrush (*Typha latifolia/Scirpus acutus*)

Type 2- Water smartweed (*Polygonum amphibium*)

Type 3- Sandbar willow/ Russian olive (*Salix exigua/Elaeagnus angustifolia*)

Type 4- Curly pondweed/Parrot feather watermilfoil (*Potamogeton/Myriophyllum*)

Type 5- Sedge (*Carex spp.*)

Type 6- Eastern cottonwood (*Populus deltoids*)

Type 7- Curly dock (*Rumex crispus*)

Type 8- Saltmarsh bulrush/ American sloughgrass (*Scirpus maritimus / Beckmannia syzigachne*)

Type 9- American sloughgrass (*Beckmannia syzigachne*)
Musgrave Lake

Click the icon below for complete monitoring reports for this site (2001 to 2006)

[MT Wetland Mitigation Site]