

DATE: May 19, 2010

FILE REF: 2300

TO: Jon Brand

FROM: Dick Nikolai

SUBJECT: Bergstrom Wetland (Hwy 41 & Lombardi in Green Bay)

We investigated the area (14 acres total with possible fill of wetlands of 2.5+ acres) with various professionals including representatives for engineering and ecological services for Bergstrom on May 18, 2010. The wetland in question lies near Highway 41 and Lombardi Avenue in Ashwaubenon near the stadium. When arriving I was greeted by a pair of Sandhill cranes that were milling around near the wetland to be filled. They acted as if they either had a nest or some young. Later Ginny Plumeau indicated they had seen them with one young when she had wandered the property. Because of that disturbance the adults wandered away before any picture was taken.

We transversed the wetland designated to be filled in a manner going from east to west to cover the length of the area and also transversed the wetland by going in a zigzag pattern by going north and south to identify plants and wildlife sign that inhabited the wetland. Since previous disturbance had occurred prior to my arrival, wildlife may have been missed that utilized the property from that glimpse of time which may have been pushed out. The wetland was previously mowed sometime in late summer to fall 2009 eliminating the structure (density, height & amount of dead matted material covering the soil) of the vegetation.

Presence of trees, shrubs, sedges, grasses and forbs were noted within the wetland which was beginning to grow. The wetland description best fits a sedge meadow with areas of shrub-carr with deeper pockets of water having cattails. Primarily phragmites was present only on the disturbed portions near the highway fence and already filled in portions of what probably was a larger wetland complex. In the proposed wetland to fill, few invasives were present. The area largely comprised of sedges with pockets of cattails and alder. *From an urban area this was one of the best intact wetlands present that I have seen in my tenure.*

Species of plants noted in the wetland were bottle gentian, marsh marigolds, Jack-in-the-pulpit, Carex (at least four species—Lake Sedge along with some hummock sedge being two of them), nettles, alder, willow-few shrubs but several trees were cut, wild iris, cattails, marsh milkweed, potamogeton sp, asters, goldenrod, mints and monkeyflower. On the south end of the wetland were a few upland pieces which had starflower, Canada mayflower, bastard toadflax, oaks, large-leafed aster and mayapple.

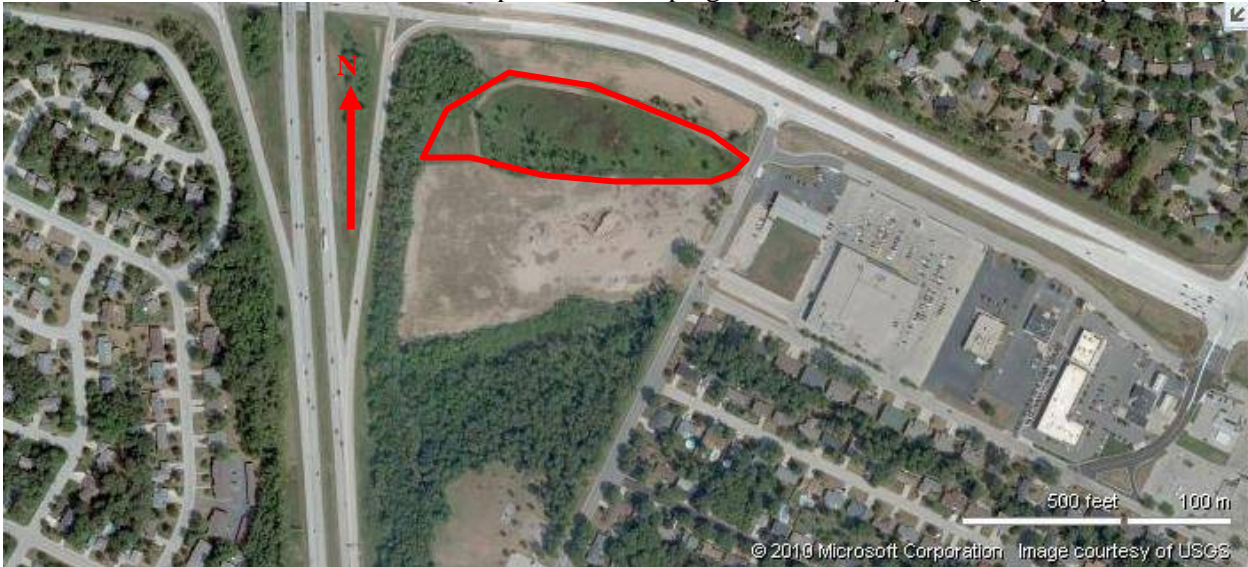
Here is a list of wildlife sign seen on the wetland:

Actual presence of species was noted on Sandhill cranes (pair), Geese (five adults with two pair having a total of nine goslings), robins, red-wing blackbirds (four pairs noted along the fence), morning doves (30+) using the area for water and one nest of two eggs on the wetland proper, female woodcock disturbed on nest with three eggs, killdeer and a song sparrow. Presence of species was noted of muskrat (trail, feces & cuttings) between the fence and the road, a successful goose nest with five amniotic membranes and deer tracks. In the wooded wetland to the west, Baltimore oriole's were seen picking up nesting material, singing in the tree canopy and sparing for territory. Either a hairy or downy woodpecker was seen near some cavities in the trees where the vegetation prevented the correct identification. Some cedar wax-wings were present in the tree canopy and flying to and from the white pines. No amphibians were present in the wetland to be filled or any reptiles. For amphibians the wetland was probably dry last fall as well as late spring so mortality could have taken place with our open winter.

Did find some leopard frogs (two) and green frogs (10+) on the dug ditch to the south. Deeper water exists so freeze outs probably were prevented with suitable habitat to bury down in the mud and debris on the bottom of the ditch.

The wetland suggested to be filled contains a nice mix of habitat for wildlife to exist as noted by the species

observed. This corridor follows along on the west end of the property to more wetlands of forest as well to the south of the overall property. All the needs of wildlife are existent within a short area. If the structure of the wetland would be maintained it would probably add to the diversity of use by wildlife. The current fill on the property does block flow of water from the west to the wetland but it survives quite well. My recommendation is to leave the wetland alone and capitalize on its quality for people to view and absorb the full functions of what a wetland does like prevents flooding, settles out contaminants and silt, offers wildlife habitat to survive and if nurtured can prevent invasives from dominating whole communities. **As mentioned previously this is one of the best urban wetlands in my tenure and deserves to remain functional and intact. Project can be completed on the other remaining acres preserving the wetland and its corridor of habitat for wildlife to successfully exist.** The wetland needs to be buffered with native vegetation for at least 33 feet on the current fill to ensure it continues to be functional from human impacts like dumping of snow from parking lots or deposition of litter.



Aerial view of site showing roadways and development.



View of the wetland looking northwest from the existing fill.



Wetland had an abundance of wildlife using it like geese, doves, Sandhill cranes & woodcock.



Bottle gentian was found in several areas within the wetland.



Ditch is located to the south of the property and heads west. Area had lots of frogs along this corridor of open water. Phragmites was prevalent again where disturbed areas were created.



Woodcock nest found within the sedge meadow wetland.



Looking almost west from the NE corner of the wetland. Note the open aspect where the alder has been mowed and mustard is blooming. Wetland was intact, functional and offering corridors for wildlife to inhabit. Wetland had good structure before mowing, tying in attributes of height, density and structural debris on the ground needed for a variety of wildlife that existed before that disturbance other than what was noticed.



Swales are common within this wetland. They are somewhat deeper containing cattails and retain the water above the soil longer. Sites like this are attractive for shorebirds and waterfowl to find food as well as attract them for mating.