

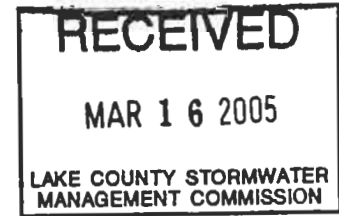


IN REPLY REFER TO:

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FWS/AES-CIFO/5-0889

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chicago Ecological Services Field Office
1250 South Grove Avenue, Suite 103
Barrington, Illinois 60010
Phone: (847) 381-2253 Fax: (847) 381-2285



March 10, 2005

03-23-176

Col. Gary E. Johnston
District Engineer
U.S. Army Corps of Engineers
Chicago District
111 N. Canal Street
Chicago, Illinois 60606

Attention: Steven Gagnon
CELRC-TS-R

Dear Colonel Johnston:

This responds to your Public Notice (PN) dated February 8, 2005 seeking comments on application #200400880 submitted by Field Partners, LLC. The applicant seeks authorization for the construction of a Costco Wholesale Store/Fueling Station. The proposed activities are located in Lake Forest, Lake County, Illinois (Section 25, T44N, R11E). We recommend denial of the project as currently proposed based on an unacceptable risk of impacts to important wetlands as that term is defined in your implementing regulations [33 CFR 320.4(b)(2)].

According to the information provided to our office, the applicant would impact 0.38 acres of jurisdictional wetland and waters of the United States to construct the Costco and associated infrastructure. The project would also impact 0.71 acres of isolated wetlands. The City of Lake Forest also intends to acquire the northern half of the property to develop up to 13 acres of the parcel for an unspecified use. Possible uses for the 13 acres include development for city facilities, secondary retail spaces, office buildings, or open space. Thorough consideration by City Council is proposed to be given to the first of the possible uses listed.

Seven wetlands/waters complexes are located onsite; four are jurisdictional under Section 404 of the Clean Water Act (Wetland Areas 1A, 1B, 1C, and 5). Wetlands Area 7 is located offsite along the frontage road right-of-way located west of the site. Areas 1B, 1C, 5, and 7 would be impacted (Areas 5 and 7 would be impacted in their entirety). Area 1A would be preserved onsite. Area 1A also qualifies as a High Quality Aquatic Resource (HQAR) due to its Mean C and FQI values of 4.0 and 29.3, respectively. Area 1A is also a part of Lake County Advanced Identification (ADID) site #128 based on its high quality plant community and high water quality functions provided by the wetland as part of the wetland complex (ADID sites #128 through

#135 and #145) and natural area known as Middle Fork Savanna Forest Preserve. Middle Fork Savanna Forest Preserve is also a dedicated nature preserve (Middle Fork Savanna Nature Preserve) which is adjacent to the project site. In addition, according to the Lake County ADID inventory map, Areas 1C, 3, and 5 are located in areas depicted as being part of ADID site #128. The applicant asserted that these areas are not ADID based on their low quality and because they do not resemble the recorded characteristics described for ADID site #128. However, we believe considering them as part of ADID #128 is appropriate because of their hydrologic connection and physical proximity.

In addition to direct wetland impacts, 1.12 acres of high quality prairie and 8.12 acres of moderate quality prairie would also be directly impacted by the project. These upland areas onsite (Area 4) had Mean C and FQI values of 3.9 and 36.0, respectively which would warrant high quality status for these upland areas. Indirect impacts would include increased runoff from the building and parking lots. All runoff would drain to Area 1B (with about half of the runoff being directed to vegetated swales first). Area 1B would be excavated to provide increased stormwater detention for the site and to enhance the pond through wetland and habitat creation and stormwater best management practices (BMPs).

The applicant proposes to mitigate for wetland impacts onsite. Mitigation credits for the proposed mitigation activities have not been determined. The proposed mitigation activities are as follows:

- 0.36 acres of wetland enhancement (within Area 1A and Area 6)
- 0.41 acres of Blanding's Turtle (*Emydoidea blandingii*) hibernation habitat/open water features (within Area 1B)
- 0.75 acres of BMP open water/sedimentation basin (within Area 1B)
- 0.41 acres of aquatic vegetation (within Area 1B)
- 3.29 acres of emergent vegetation (within Area 1B)
- 1.30 acres of prairie topsoil placement (around Area 1B)
- 1.87 acres of woodland enhancement in 100 foot wetland buffer (proposed for Area 1A)
- 3.47 acres of woodland enhancement outside of 100 foot wetland buffer

We have reviewed the information included in your PN #200400880 and a biologist from our Chicago Field Office attended a site visit at the project site in December of 2004. According to the applicant's submittal, the wetlands and waters of the United States within the project vicinity (excluding Area 1A) are of low to moderate quality. While this may be true from a floristic standpoint, they are hydrologically connected and immediately adjacent to Middle Fork Savanna and thus are functionally connected to a system of lands and waters that support regionally and even globally significant biodiversity. Because of the ecological significance of the site, the U.S. Fish and Wildlife Service has committed substantial funding and technical resources toward wetland and stream restoration projects recently completed on forest preserve. These restored wetlands would receive storm water discharges from the proposed development. Therefore, we are interested not only in protecting important natural resources but also protecting federal investments in these resources. We believe this warrants an exceptionally low threshold for acceptable impacts.

We have substantial concerns for the potential effects of the increased volume and decreased quality of runoff resulting from the nearly complete conversion of the proposed development site to impervious surface. Increased runoff volumes can result in erosion of channels in the adjacent preserve, shift plant communities due to the longer duration of inundation downstream, and promote the dominance of invasive plant species tolerant of increased nutrients, salt, and other contaminants. We have concerns about the effects of impacts onsite (e.g., water quality degradation, changes in hydrology, changes in soil chemistry, etc.) on the resources located on Middlefork Savanna Forest Preserve.—We therefore have the following recommendations.

We recommend that you rigidly adhere to the 404 (b) (1) Guidelines requirement of a clear rebuttal of the presumption of practicable alternatives. This would involve an alternatives analysis (which was not provided to this office in the submittal) due to indirect impacts to HQARs onsite and offsite (Middlefork Savanna Forest Preserve). The alternatives analysis should consider not only the potential practicability of other sites but of alternative designs of this site, such as reduction in scope and special design considerations for storm water management. Design considerations could include permeable pavement, infiltration trenches, bioswales, rooftop gardens, and similar practices that promote rainfall infiltration and reduce runoff. Through such measures, runoff volumes could be reduced to pre-project conditions and we believe a stringent design goal such as this is justified in light of the significance of Middlefork Savanna. The applicant should also prepare a detailed assessment of the potential indirect effects of various alternatives on Middlefork Savanna Forest Preserve.

The eastern prairie fringed orchid (*Platanthera leucophaea*) a federally listed species, is located less than a ½ mile away from the project site and could be adversely impacted by actions onsite. Specifically, we are concerned with water quality degradation to wetlands at Middlefork Savanna Forest Preserve which provide suitable habitat for the eastern prairie fringed orchid. Suitable habitat for the orchid is found immediately north of the site along the unnamed tributary to the North Branch (which flows from Area 1B). Proposed changes to Area 1B and its proposed use to treat all runoff from the site could adversely impact suitable habitat for the orchid. Although we have provided concurrence for orchid surveys and noted that orchids are not likely found on the site, this concurrence does not cover suitable habitat for the orchid immediately north of the site boundary and elsewhere on the forest preserve. Therefore, consultation, pursuant to section 7 of the Endangered Species Act, for impacts to potential orchids offsite should be initiated.

A major difficulty in assessing impacts from this project is the uncertainty of how the City of Lake Forest will develop the adjacent portions of the site and the consequent potential for cumulative impacts. Potential uses by the City of Lake Forest should be reviewed with the entire Costco project as impacts for these potential uses would likely result in further impacts to wetlands and waters onsite and offsite. Since you are required to consider cumulative impacts, we suggest you recommend that the applicant and City of Lake Forest develop a single proposal that addresses all impacts up front. This site could be developed as a model of conservation design, with adequate protections for Middlefork Savanna Forest Preserve, but its current piecemeal treatment precludes an accurate assessment of impacts. We are thus forced to make the highly conservative recommendation of permit denial because we believe any level of impact

to Middlefork Savanna beyond minimal is unacceptable, and we believe the project as proposed will cause or contribute to more than minimal impact

As stated previously, because of their functional relationship to the larger ADID complex we believe that Areas 1C, 3, and 5 are properly considered part of ADID site #128 as depicted on the Lake County ADID inventory map, despite the applicant's suggestion to the contrary. Impacts to Areas 1C, 3, and 5 should receive the protection afforded to all ADID wetlands (e.g., avoidance, higher mitigation ratios, etc.) and should be considered in the alternatives analysis.

We have several comments on the proposed mitigation. We recommend that impacts to Areas 1C, 3, and 5 should receive higher mitigation ratios (at least 3:1 ratio). We also recommend that higher mitigation ratios be considered for impacts to the offsite portions of ADID site #128 located on Middle Fork Savanna Forest Preserve. We recommend that the Lake County Forest Preserve District (LCFPD) be the long term managers of the preserved areas onsite. We also recommend that an endowment be established to providing funding in perpetuity.

Although we agree that the proposed wetland creation/enhancement of Area 1B would provide wildlife habitat, it could be an attractive nuisance, especially for sensitive species like the Blanding's turtle, by attracting wildlife to an area that provides poor water quality and therefore poor habitat conditions due to the volume of contaminated runoff entering the basin. We therefore reinforce our recommendation that the applicant explore alternative storm water management design features to reduce runoff to pre-project conditions and ensure maximum filtration of surface runoff before it reaches a storm water basin intended to support sensitive wildlife species.

With the current design, in order to protect Blanding's turtle from potential contaminants within Area 1B, we would recommend that you condition a permit to require the placement of a concrete turtle barrier along the northern property boundary to keep this species from using Area 1B. We would also recommend that Blanding's turtles onsite be trapped and relocated before construction begins. Use of baited hoop traps is most effective in late May-June. Any turtles captured should be relocated to adjacent contiguous wetland on LCFPD property, pending coordination with LCFPD. While the "core" home areas for this species may be small, individual Blanding's turtles may move several hundred meters per day. Therefore, retrofitting 0.41 acres of the detention basin to include plants and structure suitable for Blanding's turtle habitat would be insufficient to remediate for losses of occupied habitat.

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*). There is suitable summer habitat, including suitable roost trees, for the Indiana bat at the project site. There are no current records of Indiana bats near the site but to our knowledge the area has not been surveyed. We therefore request that surveys for the Indiana bat be conducted during the mist netting season (May 15th through August 15th). The applicant has already been informed of this requirement and provisions are being made to do so. If Indiana bats are found on the project site or within its vicinity, further consultation in accordance with section 7 of the Endangered Species Act of 1973, as amended would be required.

This letter provides comment under the authority of, and in accordance with, the provisions of

the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and the Endangered Species Act of 1973, as amended (87 Stat. 884. as amended; 16 U.S.C. 1531 *et seq.*).

If you have any questions, please contact Mr. Shawn Cirton at 847/381-2253, ext. 236.

Sincerely,

A handwritten signature in black ink that reads "John D. Rogner". The signature is written in a cursive style with a large, looped initial "J".

John D. Rogner
Field Supervisor

cc: IDNR, Schanzle
IDNR, Shank
INPC, Nelson
LCFPD, Anderson
✓ XCSMC, Hmieleski