

April 22, 2017

To: The U.S. Army Corps of Engineers

Via: email: jessica.l.kempke@usace.army.mil

From: Friends of the Black River Forest

FBRF is a 501(c) (3) charitable organization comprised of a grassroots group of Wisconsinites working to preserve the unique Central Wisconsin Coastal Landscape of which Kohler Andrae Park, the Kohler land and the Town of Wilson are a part.

Subject:

Kohler Wetland Permit Application

FBRF actions requested:

- We request a public hearing
- We ask the ACOE to follow the process of coordinating with all agencies having jurisdiction
- We ask the ACOE to obtain complete information in consultation with these agencies and to issue a full EIS.

After a review of long and short term impacts, considering public input and in consultation with other agencies, we believe the ACOE will conclude this permit should not be approved and deny the application.

We base our concerns on the reviews of Quentin Carpenter, PhD. UW-Madison, Lee Trotta, PG, Erin O'Brien of the Wisconsin Wetlands Association, Wisconsin Society of Ornithology, Marlin Bowles, The Morton Arboretum, and Timothy Bell, Chicago State University. We add additional commentary from our studies.

This Wetland Permit Application states that the Kohler Company believes its preferred alternative has the least impact on residents and preserves the most wetlands of all the options entertained.

In fact, this project's impacts on the population and the ecosystem will not take place under a dome and are not fully represented in this application.

These impacts include but are not limited to:

- The stripping of a rare, fragile ecosystem of its defining and unique characteristics;
- Adding significantly to the pollution of Lake Michigan, the Black River Watershed and the beaches of Kohler Andrae Park:

- Reducing the recreational and aesthetic value of this area of shoreline;
- Filling in functional and rare wetlands;
- Creating a public health risk to the residents of the Town of Wilson, by using a septic system in an area with a high water table and a fractured aquifer on which the area is located;
- Usurping the water from the Town of Wilson which is entirely dependent on wells and requiring a resident with an affected well to apply to the Kohler Company to determine eligibility for a new well;
- Deforestation of Federally endangered species animal habitat including the Brown eared bat, destroying a significant migratory bird stopover, and incidentally taking state endangered flora;
- Taking the land of Kohler Andrae State Park purchased with Federal LAWCON funds for the good of the public and converting it for the singular profit of a private company;
- Rendering the second most visited Park in the state unapproachable during tournaments by choosing an option that interferes with state park traffic.
- The impacts of pesticides, the types of which have not been disclosed.

IMPACTS DETAILED

1. Stripping this coastal area of its defining characteristics.

The Kohler Company requests permits which, if allowed, will destroy the very elements of this ecosystem that define its uniqueness:

“For a dose of reality on the magnitude of this project, readers who have never been to the area should go to Google Earth and see what the area looks like today, then look at the proposed finished project on page vi of the report; or, scroll up the coast to two miles north of Mosel to see the Whistling Straits Golf Course to which the text often refers”

(Exh 1- Dr. Quentin Carpenter review of Kohler Environment Impact Report).

Central Wisconsin Coastal Landscape

“Lake Michigan is a key ecological and socioeconomic feature. It influences the climate, created unique landforms, and is responsible in part for the presence and distribution of rare species.”

(Exh 2-DNR Central Wisconsin Ecological Coastal Landscape)

Unique Features and Elements Impacted

“The interdunal and ridge swale wetlands located on the proposed development site are rare, with only 10 known examples in Wisconsin and small acreages present at each site. In 2009, WWA recognized the importance and rarity of these interdunal wetlands when we designated the “Kohler-Andrea Dunes Wetland Type” as one of Wisconsin’s Wetland Gems®”

(Exh 3-from Wisconsin Wetland Gems)

- a. Ridge and swale wetlands which are globally significant and protected at the Ridges Sanctuary in Door County and Kenosha, WI will be removed and filled. Other wetlands exposed to the sun will be destroyed and create a much greater indirect wetland loss than the 3.69 acres stated by Kohler.
- b. The biota of wetlands will be significantly reduced
- c. Shifting dunes will be graded
- d. 150+ acres of forest adjacent to and in a symbiotic relationship with Kohler Andrae Park forest will be clear cut reducing the animal habitat to that of a “residential subdivision.” *(Exh 4- Wetland Permit Application)*
- e. The habitat of Federally Endangered Species along with state endangered and threatened species will be decreased significantly *(Exh 5)* and incidental take permits will be applied for several native plants
- f. Migratory bird stopover habitat will be significantly impacted *(Exh 6-Wisconsin Society for Ornithology)*
- g. 195 acres containing significant prehistoric and historic artifacts of peoples dating to 5000 B.C. will be bulldozed.

2. The project will contribute to the degradation of the Black River Watershed, add pollutants to Lake Michigan and threaten the quality and quantity of wells on which all residents of Wilson rely.

The coastal population and the population around the Black River Watershed, along with 400,000 yearly visitors to Kohler Andrae Park will be impacted.

This proposed golf course is sandwiched between our Black River and Lake Michigan. Our Black River is an impaired waterway due to sediment build up, phosphorous and other pollutants. Of Lake Michigan’s 285.7 shoreline miles, only 24.9 shoreline miles are uncontaminated according to WDNR impaired waters list, with the major causes of

contamination being phosphorous, suspended sediments and suspended solids. (*Exhibit 7- EPA Wisconsin 2016 Assessment*).

WDNR IMPAIR WATER LISTING (*Exh 8*)

Lake Michigan, Menomonee River, East Twin River, Sheboygan River, West Twin River, Kinnickinnic River, Stony Creek, Ahnapee River, Kewaunee River, Sevenmile and Silver Creeks, Pigeon River, Black River, Sauk and Sucker Creeks, Milwaukee River South, Lower Manitowoc River, Root River, Pike River, Pike River - Kenosha, Red River and Sturgeon Bay, Oak Creek, Wind Point, Upper Door County Watershed (MA01, MA02, MI01, MI02, MI03, SE01, SE02, SE03, SE04, SE05, SH01, SH02, SH03, SH06, TK01, TK02, TK03, TK04, TK05, TK06, TK07)

Size

103.38 Miles

Segment

0 - 0

Natural Community

Year Last Monitored

2016

General Condition

Good

This Great Lakes shoreline is **impaired**.

Impairments include:

Contaminated Fish Tissue

Pollutants include

PCBs, Mercury

The real impacts of sediment, pesticide and foreign material runoff on groundwater and nearby bodies of water are well documented in Federal, State and County studies and based on credible science. There is not a **risk** of this golf course's runoff contaminating Lake Michigan and the Black River, it is a scientific **certainty**.

Altering the entire topography and hydrology of 247 acres containing one mile of Lake Michigan shoreline will result in sediment, pesticide and nutrient loading of the nearby water bodies and the quality of groundwater going into the Silurian dolomite aquifer.

The DNR is convening a group to determine whether a TMDL in this area of Lake Michigan should be undertaken. (*Exh 9- Wheeler Report*). It also suggests determining a TMDL for the Black River Watershed. (*Exh 10-DNR link*)

Sheboygan County 's ten year water plan focuses on the need to improve the Black River and its watershed.

(*Exhibit 11- County Report 2016-2026*), Black River Impairment

The literature on containing sediment and pollutant runoff point to these contributing factors: Deforestation, alteration of site hydrology, filling of wetlands, lack of adequate buffer zones.

This proposed plan involves all of these contributing factors which will not only pollute Lake Michigan and the Black River Watershed, but will eliminate all natural features that filter agricultural and other runoff coming from higher sources.

- 50-60% of the land will be deforested
- functional and rare wetlands will be filled
- the topography will be graded and re-created
- foreign, less permeable materials will be placed on dunes
- non-native plants will be introduced
- existing topsoil will be removed
- impermeable surfaces will be constructed
- Pesticides and fertilizers will be added and carried in the -groundwater to be carried to the aquifer and residents' wells.

A mile of silt fencing along the Lake Michigan shore and the Black River are not sufficient barriers to construction and post construction runoff. The proximity of the deforestation to the lakeshore and the plans to build up to the edges of shifting dunes will further the dumping of contaminants.

“The sediment does more than cause the water to become cloudy. Turbidity and sediment also impairs feeding and breathing processes of aquatic organisms, eliminates or covers spawning beds, increases water temperature, and acts as a transport mechanism for unwanted nutrients and chemicals”. (*Exh 12- Black River Watershed, Miller and Assoc. 1993*)

“The most significant change to the watershed is caused by the conversion of woodland to farmland and the farmland to urbanization. These conversions increase the hydrologic load and reduce the time it takes for the runoff to reach the river. Where water is no longer slowed down by vegetation, it can reach a stream faster and is less likely to infiltrate the soil. This results in increased peak flow rates during rain events.” (*Exh 12-Black River Watershed 1993*)

The Potomac River pollution increased when Trump National Golf Course clear cut 465 trees from the shore of the Potomac.

“That’s bad news for the river, because trees and shrubs help filter out runoff from urban and agricultural sources—a significant source of pollution for the Potomac—from reaching the river. The Potomac is the second-largest source of water entering the Chesapeake Bay—a water body that’s plagued with its own pollution problems. So keeping pollution out of the Potomac is key to reducing pollution in the bay. And so when we look at Trump National Golf Course, a mile-and-a half long stretch of shoreline where all trees were clear-cut, it’s not

going to be good for the ecological health of the nearby waters and anyone that relies on good water quality downstream.” (Exh 13)

Dr. Quentin Carpenter on Kohler’s responses to DNR question on runoff: “The response to DNR question NH #2 indicates that no stormwater or runoff water will be discharged directly to the Black River or to Lake Michigan We can therefore assume that all this new, dirty water (parking lot runoff, sewage etc will be discharged first to the groundwater (table) and thence to either one or the other of these natural end points. This is one of many examples in these documents of attempting to ignore the Laws of Conservation of Mass and Energy or in simpler terms, out of sight, out of mind.” (Exh 14-Quentin Carpenter Article)

Approximately two thirds of the people living in Wisconsin get their drinking water from groundwater. Adequate supplies of uncontaminated groundwater are crucial not only to the health of those families but also for the continued growth of agricultural production and cutting-edge industries in Wisconsin.

3. Aesthetic Value and Impacts to Recreational Activities and Andrae State Park

The beaches of Wisconsin were ranked as the 2nd most polluted in the country in 2013. (Exh 15).

From south of Hika Bay, near Kohler’s Whistling Straits course, to two miles north at Fisher Creek, (which is a few miles from this proposed site), cladophora and bacteria have caused the water to be un-swimmable. Property values have been affected with residents moving away from the lakeshore. Phosphorous from agricultural runoff and other polluting elements are responsible for this contamination and this area has not been clear cut.

“*Cladophora* currently has a number of negative impacts on communities around the Great Lakes. The most obvious impact is the decline in aesthetic quality of beaches resulting from the sight and smell of large amounts of rotting *Cladophora*. In addition, there is evidence that *Cladophora* may sustain or promote the growth of bacteria, including coliforms. While it is uncertain whether this presents a direct health risk, it may certainly confound the use of coliform bacteria as an index of health risk in nearshore waters. More direct economic impacts results from property depreciation (in the Milwaukee region complaints from lakeshore land owners have prompted State Representatives to consult us on the causes of, and potential solutions to, the *Cladophora* problem) and financial burdens for industries that have water intakes in the lake (in January 2004, the Kewaunee Nuclear Power Plant was forced to shut down because *Cladophora* had clogged its emergency cooling pumps (Exh 16-Dr. Harvey Bootsma, University of Wisconsin-Milwaukee, Water Institute).

4. Indirect Wetland Impact and Rare Ridge and Swale Complexes

Kohler's Wetland Permit Application stresses that its preferred alternative reduces wetland impact to 3.69 acres. In fact, because of deforestation, the indirect impacts to the wetlands from being exposed to the sun will result in greater loss. The specific locations of the deforestation need to be examined so that a more realistic impact to wetland loss can be determined. FBRF's sources indicate a number closer to 20 acres. This needs further study.

Rare Dune and Swale Wetland Mitigation:

Dune and swale complexes have been formed along Lake Michigan from thousands of years of hydrologic action. The same rare complexes are internationally recognized at the Ridges Sanctuary in Door County as being globally significant by the Ramsar Convention. The difference between Door County's and the ones along the Kohler property are only the different plants native to each of the areas.

Kohler has plans to mitigate the dune and swale complexes on property adjacent to the Amsterdam Dunes Mitigation Bank currently being developed 8 miles south of the site. Experts will support the fact that these rare dunes cannot be recreated by anything other than the natural processes which produced them and are therefore not able to be mitigated.

It is FBRF's stance that before removing this unique element of the coastal landscape, the Kohler Company demonstrate a successful restoration of a ridge and swale complex.
(Exh 17-See Wisconsin Wetland Association Comments to the DNR regarding the proposed course)

5. Putting the Town of Wilson wells and aquifer at risk from over pumping of the Silurian dolomite aquifer, contributing contaminated runoff to the aquifer and installing a septic system which is a public health risk.

The Shallow aquifers (Pleistocene and Silurian age) are more connected to the lakes and streams and high-capacity wells may show negative effects on those water bodies quickly.

"With the Silurian bedrock aquifer now chosen for the high capacity well, it now becomes DNR's responsibility to determine how serious those negative effects may be both on surface water bodies and nearby residential wells. With the proper amount of data, good science can make these determinations. This data will consist of pump tests, step drawdown tests, and (more importantly) recovery tests on wells within the affected radius. In the Silurian bedrock aquifer, the radius affected by pumping may be very large due to the nature of flow in fractured bedrock. Studies of this same aquifer by Bradbury, Rayne, Muldoon, and Roffers (1998) show well capture zones extending several kilometers. Standard procedure is to perform a tracer study and/or create a groundwater model to ensure protection of local water supplies." *(Exh 18-Lee Trotta, PG, Overview of Pumping the Shallow Bedrock Aquifer in the Sheboygan Area)*

“The eastern dolomite aquifer is especially vulnerable to contamination from the surface where the cover of glacial materials is thin. In addition, groundwater is transmitted quickly through cracks that can extend from the surface to nearby wells so contamination can move rapidly through this aquifer.” (*Exh 19-Wisconsin Geological and Natural History Survey, UW Extension*)

6. LAWCON ACT

An easement request was made by Herbert Kohler to the State of Wisconsin in 1984, asking to use state land to expand his personal property. This was denied by the DNR because the State land was purchased with LAWCON funds. (*Exh 20- DNR letter*).

Today we have the Kohler Company asking to use 4 acres of State land purchased in 1963-65 with LAWCON funds for its preferred alternative

Opening a golf course and restaurant to the public for fees 10 times the average price in Sheboygan County does not fulfill the LAWCON directives. It is disingenuous to use the argument that this land is being opened to the general public.

FBRF challenges the 4 acres calculation. It appears that Kohler’s calculations were determined from the footprints of the completed construction. The construction of the road to the Kohler land, the 22, 000 sq. ft. maintenance building and the rotary will impact the state land beyond the finished footprints. The collateral damage to State park land should be included in this estimate.

Using the State Park Entrance:

The Kohler preferred alternative to use the main park entrance and create a rotary will create an impasse for any visitors to the State Park who now line up for extended periods of time along County Road V. This is not an alternative which impacts the public to the least degree. Golfers can proceed through the rotary to a parking lot. Campers will still have to stop at the entry to the park.

Kurt Thiede, Administrator, Division of Land, WDNR, to the Kohler Company on its proposed use of the Park’s main entrance for its Tented Forest Project March 13, 2013:

“The Department's apprehension to any proposed relocation of your northerly guest entrance stems from serious concerns we have about traffic backups that may occur' for both our state park guests, as well as your clientele, as they attempt to enter both properties through the same location. Park traffic can be very heavy at times, especially on the weekend and particularly on Friday evenings. In 2012 we had 432,763 recreational visitors enter the park and had 67,999 campers use our facilities. Additional traffic from your Tented Forest guests through our main park entrance will certainly cause unwanted difficulties for all parties concerned, including local residents.” (*Exh 21-See Kurt Thiede letter*)

Further studies should be required as this letter refers to a Kohler Tented Forest project with an expected 100 guests.

7. TOURNAMENT PLAN

Kohler's choice is to create a championship course where tournaments will be held. The logistics and impacts of a tournament course do not fall within "normal operations" only described in this permit application. In fact, much of the information needs to be re-planned to accommodate space for 300,000+ attendees, trucks, buses, and tents. A Tournament plan should address the logistics of preventing collateral damage to any dunes, wetlands, or Native American burial mounds including information on increased water usage and air pollution controls. Kohler has the necessary data from previous tournaments. This plan should be required as part of the Wetland Permit Application.

8. ENDANGERED AND THREATENED SPECIES

Removing species from this area robs the coast of its unique character.

Sixteen endangered resources were record from within the project area and surrounding area. Included on that list are federally endangered species the Piping plover and Dune Thistle.

"Northern mesic forests may occur within the project site. A community is an assemblage of plant and animal species within a specific habitat. Natural communities may contain rare or declining species and their protection should be incorporated into the project design as much as possible. **We recommend minimizing impacts to and/or incorporating buffers along the edges of northern mesic forests**"

"Alder thickets may occur within the project site. A community is an assemblage of plant and animal species within a specific habitat. Natural communities may contain rare or declining species and their protection should be incorporated into the project design as much as possible. **We recommend minimizing impacts to and/or incorporating buffers along the edges of alder thickets.**"

(DNR Endangered Resources Review Sept 2014)

Regarding the Pitcher's Thistle on the Federally Endangered List:

"We have reviewed the Environmental Impact Report for its approach to impacts to the Federal listed Pitcher's Thistle. The report's assessment of potential impacts on Pitcher's thistle, and proposed solutions are not adequate."

(Exh 22- comments of Marlin Bowles, Plant Conservation Biologist, The Morton Arboretum)

“The Wisconsin Stopover Initiative (WISI) recognizes the Sheboygan coastal area as an important migratory bird stopover site. According to the WISI stopover habitat models, stopover habitat attributes identified as high priority for all bird groups (landbirds, raptors, waterfowl, waterbirds, and shorebirds) occur in and adjacent to Kohler-Andrae State Park. The presence of these attributes suggests that high concentrations of birds from each group are likely to occur consistently during spring and/or fall migration and surveys during these periods are recommended.”

“If federally-protected species or habitats are involved and the project involves federal funds, technical assistance or authorization (e.g., permit) and there are likely to be any impacts (positive or negative) to them, consultation with USFWS will need to occur prior to the project being able to proceed. *(DNR Endangered Resource Review Sept 2014)*

Wisconsin Society for Ornithology:

“Bird, mammal, reptile, amphibian and insect life (some rare/threatened) that have adapted to both the wooded and open dune habitat would also be displaced or destroyed by the Kohler development. The combination of the state park and Kohler forested area has long been known as an “Important Bird Area” (IBA) for migratory birds along Lake Michigan. Throughout the entire history of the DNR and the Conservation Commission before that, staff managers, biologists and scientists have supported and strived to protect these areas at all costs. The EIS should make a strong statement against the destruction and fragmentation of this important IBA and Great Lakes dunes habitat. It should be noted also that an active bald eagle nesting site is located only a short distance to the north of the Kohler property which most likely will be negatively affected by the massive tree removal, development and increase in public use of this area.” *(Exh 6- July 23 letter)*

Jim Buchholz, former Kohler Andrae Park Superintendent email:

“Bird, mammal, reptile, amphibian and insect life (some rare/threatened) that have adapted to both the wooded and open dune habitat would also be displaced or destroyed by the Kohler development. The combination of the state park and Kohler forested area has long been known as an “Important Bird Area” (IBA) for migratory birds along Lake Michigan. Throughout the entire history of the DNR and the Conservation Commission before that, staff managers, biologists and scientists have supported and strived to protect these areas at all costs. The EIS should make a strong statement against the destruction and fragmentation of this important IBA and Great Lakes dunes habitat. It should be noted also that an active bald eagle nesting site is located only a short distance to the north of the Kohler property which most likely will be negatively affected by the massive tree removal, development and increase in public use of this area.” *(Exh 23-Jim Buchholz-Former Town of Wilson Resident/ Retired Kohler-Andrae Superintendent 1986-2014)*

9. PESTICIDES

The scientific literature is clear that certain components of golf course pesticides include glyphosate and other toxic chemicals. We object to the cursory description of pesticide

handling and use. Residents should know what pesticides are going into their groundwater. (Exh 24)

CONCLUSION

FBRF concurs with the analyses by Dr. Carpenter.

"The reality is that the proposed project will drastically and permanently alter the landscape and ecology of this large remnant of minimally-disturbed lakeshore habitat, and no feasible amount of avoiding, minimizing, IPMing or BMP's will change that fact. It is simply not possible to rearrange the landscape, add vast quantities of imported soil and water and the other infrastructure needed to grow and maintain the many acres of exotic grasses, added roads, hospitality structures, hundreds of clients per day along with those who tend to their needs, and expect to preserve much of the original landscape, rare habitat and its denizens. DNR needs to look at all the individual risk factors associated with this project individually but also consider their additive and cumulative consequences because that is what the habitat and landscape receive." (Exh 1- Carpenter)

Erosion control on shore

Quentin Carpenter, cont'd: *"Another danger that I see here that if a golf course is allowed this close to the lake, very quickly the DNR will receive a request to armor the lakeside to protect it. The detrimental effects of armoring on adjacent shorelines are well-documented (more erosion). The neighbors of this shoreline are the residents to the north and the State Park to the south." (Exh 25 - Carpenter)*

A drastically changing shoreline is characteristic of the lake and can erode the beaches leaving five foot bluffs with one storm. FBRF opposes the placement of boulders, barriers or any unnatural build along the shore which would prevent the water from establishing a natural edge along which the public can walk. (Exh 26- DNR Watch, Whistling Straits Violations)

No Build Alternative

The alternatives Kohler has discussed in its application need to be studied further when complete long term impact information is gathered and reviewed. The Company insists their preferred option is "minimalist." Avoiding the impacts we have pointed out would have a minimal effect on the ecosystem.

Dr. Carpenter's comment on "minimalist":

"In the response to DNR question NH#4 we see an incredible example of double speak. We are told that, impacts to the dune community are expected to be minimal as major dune structures will be retained and incorporated into the design of the golf course. My understanding is that the site contains both active and stabilized dunes. (active dunes tend to be near the water, have poorly developed soils, have less vegetative cover and are therefore

prone to changes in shapes and size; stabilized dunes are generally older dunes behind these with better-developed soils and vegetation that keep them in place). I am skeptical that the active dunes are going to be allowed to roam at will, and the documents indicate the stabilized dunes are slated to be covered with imported soils and planted to mostly exotic grasses. I would not characterize these a minimal impacts to the dune communities.”

In the response to DNR question Wetlands #1 we are provided a slightly better map which even more clearly shows that the most significant impacts of the roads, buildings, parking lots, practice range and lake-edge greens are clustered where the concentration of rare wetland and upland communities are found. This graphic alone when combined with the redacted information about the rare communities should make it clear that a golf course and conservation of these rare communities are incompatible at this location.” (Exh 14- Quentin Carpenter letter)

The DNR on April 7, 2017 has informed the Kohler Company of the incompleteness of its Wetland Permit Application.

(see DNR letter)

Further and accurate well studies, larger buffer zones, deforestation locations and studies of indirect wetland impact are needed along with collateral damage studies. The risk of a septic system on this land considering the fractured aquifer, the high water table and the soils is not acceptable.

This entire proposed project clearly will add to the contamination of Lake Michigan and the Black River Watershed which are documented as impaired. Along the immediate coast, the Lake Michigan shoreline is impaired from Milwaukee to beyond Manitowoc. We ask that a TMDL be established in this area of the Lake Michigan shore before the proposed project is considered. The fragility of the area and the current documented pollution of nearby waters indicate that there can only be increased levels of contaminants going into the water. A TMDL is being considered for this area of Lake Michigan. Why would the Army Corps of Engineers permit a project which they know will add contaminants over a period of time before the TMDL is completed?

FBRF asks the USACE how much more leveling, grading, filling, deforestation, destruction of habitat and creation of pollution have to occur before this project is prohibited?

This kind of intensive golf development simply does not belong on the edge of our precious and irreplaceable lakes and streams. Putting this project in such a fragile place jeopardizes the natural features which attract people to the State Park and the Central Lake Michigan shore in the first place. (Exh 27)

We ask the Army Corps of Engineers:

- Notice a Public Hearing
- Follow the process of obtaining information from, and consulting with, all agencies involved
- Write a full Environmental Impact Study

While we believe this will result in denial of the application, at this point it cannot possibly be granted without complete information on short and long term impacts.

Thank you in advance for your critical review of this proposed project.

Respectfully submitted,

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