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**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 2:14 PM  
**To:** DNR Kohler Proposal  
**Subject:** Additional topics for Consideration by the WDNR

First, thank you for providing the opportunity to raise additional issues to be considered before you publish your environmental impact statement.

I live along the Lake Michigan shoreline and my property lies about ¼ mile south of the mouth of the Black River in the Town of Wilson. Over my 26 years here I have witnessed the degradation of the lake from the phosphorous run-off from the Black River and can no longer swim in the water in front of my house. I am on the Board of the Wisconsin Great Lakes Coalition and, while I may be supersensitive to the environmental hazards facing the Great Lakes, I believe the construction of the proposed golf course will have a profoundly negative impact on the ecology of a large area of shoreline dunes, wetlands, and wildlife. It will also negatively affect the culture of this small town that has prided itself on being a serene oasis of natural beauty.

Although I am obviously opposed to the course on many levels and for many reasons, I am writing you today specifically about the **use and monitoring of herbicides and pesticides on the proposed site.**

### Herbicides

- The Environmental Impact Report states that there is planned use of the herbicides Triclopyr, Glyphosate, and Aminopyralid. I ask that you review their use based upon potential health effects of these and other chemicals.
- Specifically, Glyphosate has been linked to cancer, endocrine disruption, reproductive effects, kidney/liver damage and sensitivity and irritation and the International Agency for Research on Cancer recently raised the alert level for Glyphosate to “a probable carcinogen”. Sources:  
<http://www.beyondpesticides.org/lawn/factsheets/30health.pdf>, <http://gmoinside.org/wp-content/uploads/Journal-of-Organic-Systems-2014-Vol9-No2.pdf> <http://gmoinside.org/wp-content/uploads/Journal-of-Organic-Systems-2014-Vol9-No2.pdf>
- Aminopyralid has also been linked with severe eye irritation and “However, the free acid form of aminopyralid produces severe eye irritation. Thus, the technical product is classified in toxicity category I (DANGER), while the formulated end use product (Milestone) is classified as toxicity category IV (CAUTION). Source:  
<http://www.beyondpesticides.org/infoservices/pesticidesandyou/documents/aminopyralid.pdf>
- Nitrogen rich fertilizers, such as those used on turf grass can leach into ground water causing pollution. Sandy soils, like that of the proposed golf course are particularly prone to leaching. Source:  
<https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=Nitrogen+Pollution+of+groundwater+Lee+Haller>
- One of the herbicides Kohler proposes to use is Triclopyr, which can pollute ground water. Considering that the course is being constructed over a shallow aquifer and on sandy soil, this concerns me. Source:  
<http://npic.orst.edu/factsheets/triclogen.pdf>
- The Garden Club of America, in their monograph, “The New American Golf Course”, states, “*It is important that new It is important that new golf courses choose areas that are not wetlands, prime and unique farmland, endangered species habitat, or aquatic habitat that is environmentally sensitive. Degraded sites such as Superfund sites (Old Works Course) or gravel pits (Widow’s Walk Golf Course) can be reclaimed for golf course*”

use. golf courses choose areas that are not wetlands, prime and unique farmland, endangered species habitat, or aquatic habitat that is environment **It is important that new golf courses choose areas that are not wetlands, prime and unique farmland, endangered species habitat, or aquatic habitat that is environmentally sensitive.. Degraded sites such as Superfund sites (Old Works Course) or gravel pits (Widow's Walk Golf Course) can be reclaimed for golf course use."** <https://www.gcamerica.org/index.cfm/publications/publicationdetails/pid/83>

- In The Water Encyclopedia, the authors state. "For many years, people believed that the soil and **sediment** layers deposited above an aquifer acted as a natural filter that kept many unnatural pollutants from the surface from infiltrating down to groundwater. By the 1970s, however, it became widely understood that those soil layers often did not adequately protect aquifers. Despite this realization, a significant amount of contamination already had been released to the nation's soil and groundwater. **Scientists have since realized that once an aquifer becomes polluted, it may become unusable for decades, and is often impossible to clean up quickly and inexpensively."** They go on to say, "Fertilizers and pesticides applied to crops (or, I assume, golf courses) eventually may reach underlying aquifers, particularly if the aquifer is shallow and not "protected" by an overlying layer of low permeability material, such as clay. Drinking-water wells located close to cropland sometimes are contaminated by these agricultural chemicals." Source, *The Water Encyclopedia*, Science and Issues: The Pollution of Groundwater.

### Pesticides

In their Environmental Impact Report, Kohler states in rather vague terms, that they will follow the latest integrated pest management practices, but they don't elaborate on the specific pesticides that would be used, should the need arise. I hope that you will ask them for more details. As you are aware, the shoreline area is susceptible to mosquitos and black fly infestations. I'm sure that Kohler does not want their guests troubled by these insects and will probably aggressively spray to rid the area of these pests. I am concerned about what, if any, deleterious effects these chemical will have on the environment, humans living nearby and wildlife. Kohler's courses in other parts of the county are really not bordering on a densely populated area, such as would be the case with this course.

In conclusion, I am not against Kohler; they have done much good for Sheboygan county. But I believe the price we will all pay to have another golf course, a course on this environmentally rich land, is too high. And all of this for a sport that is declining in popularity.

Thank you for your attention and the work I know you are putting into this investigation.



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**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 3:24 PM  
**To:** DNR Kohler Proposal  
**Subject:** Apologies  
**Attachments:** Comments to the DNR.docx

I am very sorry. I mistakenly sent you a first draft of a note with my concerns. Attached is the final version, please disregard my previous email.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Friday, July 10, 2015 8:35 PM  
**To:** DNR Kohler Proposal  
**Subject:** AS A LOCAL PROPERTY OWNER, I SUPPORT THE KOHLER GOLF COURSE PROPOSAL

Jay Schiefelbein,

My wife and I own property within a couple of miles of the property that Kohler wants to use for the new golf course. My wife and I support Herb Kohler's effort to build this golf course and the additional economic benefits it will bring to the area.

The Sheboygan area is still depressed for the most part and could use all of the economic benefits available to it.

Most of the people we have talked to that are against this effort have been illegal users of the Kohler private property for years and are upset about the loss of their playground. They are spreading FUD (Fear, Uncertainty, and Doubt) about all of the potential problems and all one had to do is to look how Blackwolf Run and Whistling Straits are maintained and what great economic benefits that they have brought to the area and see how they are run to be reassured about Kohler's commitment to the environment.

One thing that people may not take into consideration is that a developer from Oregon has purchased enough land in the Wisconsin Rapids area to build up to five PGA quality golf courses. That activity could have a significant draw and have a large impact on the golf tourism revenues in the Sheboygan/Kohler/Mosel area.

See: <http://www.jsonline.com/sports/golf/golf-course-visionary-plans-resort-near-wisconsin-rapids-b99145788z1-232685361.html>

Thank you for taking comments prior to the July 14th meeting.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 5:43 PM  
**To:** DNR Kohler Proposal; Thompson, Michael C - DNR; Schiefelbein, Jeremiah J - DNR; Voltz, Jeffrey R - DNR  
**Subject:** Attention DNR: Citizen Input on Kohler proposal  
**Attachments:** 2015 07 24 [REDACTED] input to DNR for Kohler Proposa..docx

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

The Wisconsin Department of Natural Resources must refuse the Kohler Company proposed golf course in the Black River Forest of the Town of Wilson for the following reasons:

1. The proposed project is abutting Lake Michigan, one of the largest bodies of freshwater in the world. Several state, federal, and international treaties have been enacted to protect this precious and unique resource, among them the Great Lakes Compact between the United States and Canada. Would the building of a golf course counter any of these legally binding provisions?
2. The Black River runs through the proposed golf course property. It has already been declared an "impaired navigable waterway" according to the DNR. This designation legally requires the highest national protection. The inevitable drainage of contaminants from the golf course is contrary to this U.S. Geological Survey ruling of the Black River floodplain.
3. There is a substantial acreage of intact wetlands upon the proposed golf course property. Wisconsin law, under the Clean Water Act, requires the protection of all wetlands from contamination, draining, and filling, due to the essential ecosystem functions they provide when in an intact condition, including mitigating floods and droughts, cleaning surface water, and providing percolation for groundwater recharge.
4. The majority of the proposed golf course property is covered in mature, climax, old-growth woodland. Known colloquially as the Black River Forest, this ecosystem is primarily composed of native red pine and white pine species, a combination that is a unique product of the geology along the Lake Michigan shoreline. As such, it is one of the last stretches of this forest left untouched by human encroachment and development projects like the one proposed.
5. The proposed golf course project property contains sensitive dune habitat that has taken hundreds of thousands of years, following the last glaciation, sculpting much of this Great Lakes region, to arrive at its present pristine state of accumulated sands for the occurrence of a thriving, vibrant, and ecologically-balanced juniper species sand dune habitat.
6. The western shoreline of Lake Michigan is an environment critically important to wildlife because it is ecologically considered one of only four flyways through the United States (the East Coast, West Coast, and Great Plains are the other three). As such, any drastic or minor modification of habitat to make way for humans threatens the survival of any North American continental migratory species, whose danger of extinction is heightened as a direct result. Due to this unique location, Wisconsin must safeguard its natural resources to avoid imperiling wildlife species of national and state significance.
7. The Black River Forest provides a habitat extension of wetland, dune, and forest environments for wildlife species who call the Kohler Andrea State Park their home. Any reduction in acreage in an

already strained-for-space collection of ecosystems would completely fragment the protected lands of the park. This would diminish the viability and survival of all species due to the destruction of intact large tracts of undeveloped landscape. The resulting homogenization of habitat would threaten the survival of all park species, requiring a certain range and therefore plunge the park species to the south into danger of extinction from the entire area.

8. The dense undergrowth and lush vegetation of this miniature wilderness provides habitat for potentially undiscovered native species of wildlife. Although several scarce club moss species are easily visible, the often impenetrable cover conceals other life forms of flora and fauna that could be decimated before even being discovered.
9. The Town of Wilson designates this property as P1. This land use classification is for passive outdoor public recreational purposes and therefore would not accommodate the for-profit, ultra-active, commercial use of the property. Under the zoning regulations, this land is not to be built upon, in order to maintain the integrity of the sensitive site as a wildlife and water corridor. However, the proposed golf course plans include the construction of architectural structures in direct contradiction to the only allowable use of parks and protected areas at this location.
10. The Friends of the Black River Forest members have voluntarily created and maintained the woodland trails that snake through the property and provide for biking, birdwatching, hiking, and horseback riding. Approval of Kohler's golf course would erase all the endless hours of hard work that have neither been acknowledged nor compensated for. Would this give Town of Wilson residents' claim to adverse possession?
11. After an extensive tour of the property, a Native American member of the Ho-Chunk Nation found that ancient burial mounds, potentially from several Native American tribes formerly residing in the Great Lakes region, are currently located on the Black River Forest property. Observation of the abundant hills would substantiate this finding, giving Native American Nations burial ground rights because tribal law supersedes commercial development.
12. The plan utilizes State Park land to the south of the proposed golf course to access the property instead of using Kohler land at the north end of the property for access. This easement, if approved, would be contrary to the original intent of Herb V. Kohler, Sr. who gifted land to the state of Wisconsin in the 1965 Warranty Deed. The wording read that this land had to be maintained in perpetuity for the benefit and enjoyment of the public for passive recreation, thereby prohibiting the addition of campgrounds, maintenance sheds, and the like.
13. In addition, Herb V. Kohler Sr. wanted the land currently proposed for the golf course to be maintained as wilderness in perpetuity as well, so the golf course project is diametrically opposed to the original intent for this property. Why should Herb V. Kohler, Jr. be allowed to desecrate the family legacy of safeguarding the land? There is an article in the Sheboygan Press documenting Kohler's attempt to gift all of the Black River Forest land to the State. He only retracted his offer when discovering that campgrounds would be developed on the property.
14. If the proposed golf course project is approved, the effects upon the Kohler Andrea State Park would be total. Since there is only one main entrance leading into the State Park, access to public recreation would be severely hampered in favor of private commercial recreation if Kohler usurps the Park's entry and purpose. In addition, if as planned, a PGA golf tournament would be held at this property north of the park, all access points for residents and visitors to the park could be closed to the public, as is already the case for Whistling Straits in the Town of Mosel. Traffic would be an impossible issue to contend with for all concerned.
15. Any Environmental Impact Statement should include information regarding floral and faunal habitat of the Black River Forest species listed on the Federal Endangered Species Act.

In conclusion, I adamantly recommend refusal of the proposed Kohler golf course in the Town of Wilson. I am in favor of safeguarding the Black River Forest for future generations, while upholding the written mission statement of the Department of Natural Resources, as well as Wisconsin State Statutes.

In addition, I would like to bring your attention to Kohler Company's negative environmental legacy, in particular, the Environmental Protection Agency's Scorecard report at: <http://scorecard.goodguide.com>

1. In a comparison with Rock, Milwaukee, Manitowoc, and Dane counties, Sheboygan County has the greatest overall amount of recognized toxins released to the environment. Sheboygan County releases 546,259 pounds of pollutants. Of these, Kohler Company generates roughly 51,421 pounds of pollutants annually. Thus, Kohler ranks third in Sheboygan County as the most polluting industry. The factories of Kohler Company release benzene, lead, chromium and nickel. Other chemicals include manganese, antimony, copper, zinc, barium and triethylamine.
1. Of the two Environmental Protection Agency recognized superfund sites in Sheboygan County, the Kohler Company landfill is located in Kohler, only 300 feet from the Sheboygan River. The site has been used to dispose of industrial wastes, municipal wastes and foundry sludge. The groundwater beneath is contaminated with cadmium, chromium and phenols and, according to the Environmental Protection Agency, has contaminated drinking water sources.
1. This groundwater feeds directly into an aquifer that is used for drinking. This Sheboygan harbor and river landfill site extends eight miles through the towns of Kohler, Sheboygan and Sheboygan Falls, all within Sheboygan County. This landfill has been leaching heavy metals and PCBs into the Sheboygan River and its two tributaries: the Mullet and Onion Rivers. These contaminants are at such high levels as to initiate a ban on ingesting fish from the Sheboygan River and its tributaries. The site is still being decontaminated through national funding.

This information should prove advantageous in determining the relative merit of any environmental statements provided by Kohler Company during this investigative process undertaken by the Wisconsin Department of Natural Resources at this time. In view of this, all Environmental Impact Statements should be performed by a third party to ensure an unbiased outcome and especially in consideration of the despicable ecological track record and federally recognized contamination of the Kohler Company in Sheboygan County.

July 24<sup>th</sup>, 2015

[REDACTED]  
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Citizen input by [REDACTED] concerning the proposed Kohler golf course vs. the Black River Forest

the destruction of intact large tracts of undeveloped landscape. The resulting homogenization of habitat would threaten the survival of all park species, requiring a certain range and therefore plunge the park species to the south into danger of extinction from the entire area.

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**From:** [REDACTED]  
**Sent:** Wednesday, July 22, 2015 12:56 PM  
**To:** DNR Kohler Proposal  
**Subject:** Attn: Jay Schiefelbein - Letter Opposing Kohler Golf Course Proposal  
**Attachments:** DNR Golf Course Opposition 072215.docx

Dear Mr. Schiefelbein:  
Please read and consider the attached regarding the Kohler Golf Course request in the Town of Wikson.  
Thank you.

[REDACTED]

July 22, 2015

Mr. Jay Schiefelbein  
Wisconsin DNR  
2984 Shawano Ave.  
Green Bay, WI 54313-6727

Re: Opposition To the proposed Kohler golf course in the Town of Wilson

Dear Mr. Schiefelbein:

I am a resident of the Black River neighborhood of the Town of Wilson and I am opposed to the construction of Kohler Company's golf course on Mr. Kohler's 247 acres of the Black River Forest between my neighborhood and the Kohler-Andre State Park. My first concern is the effect on ground water and the aquifer upon which my family depends for our well water.

On a recent episode of "This Old House" on MPTV which featured plumbing problems, the narrator commented a dripping faucet wastes 3,000 gallons of water per year and should be repaired to prevent that waste. If **every one** of the 1,450 households in the Town of Wilson had a dripping faucet, the total waste of water would be 4,350,000 gallons per year. Compared to the possible 40,000,000 gallons of water per year needed to water the plumbing company's golf course, potential household waste, due to defective plumbing, is minor; we are encouraged to eliminate the dripping waste to conserve our water.

That approximate 40,000,000 gallons of golf course water waste would be pumped out of our aquifer with 3 to 5 high capacity, deep wells. My well is 160' deep with the pump at 105' and I have very strong concerns the golf course watering would draw down the aquifer below the 105' of my pump. I live about 500 yards from the northern edge of the proposed golf course, so my family is very close to the danger zone of water problems. In addition, the possibility of radium being brought to the surface from deep wells, such as the City of Waukesha is experiencing, is another concern I hope the DNR will address.

The use of fertilizer, herbicides, and pesticides represent another problem area with the construction of a golf course. Although I have not found references to the amount nor type of fertilizer Kohler plans to use for its golf course, I think any amount of treatment could be harmful to the nitrogen levels in Lake Michigan, potentially causing algae blooms, such as those in Green Bay and in Lake Erie near Toledo, Ohio, disrupting the natural life cycle of the Lake's various plant and animal species. Similarly, herbicides sprayed on the golf course grounds could very possibly have a negative effect of unintended killing of native plants as the water leaches into the Black River and Lake Michigan sand dunes. Insecticides pose a very real threat to the disappearing monarch butterflies, the all-important-to-agriculture bee population, and to the countless small and microscopic animals living in the soil helping to maintain the ecological cycle of the forest.

Aesthetically, the Black River Forest is a rare gem on the Lake Michigan shoreline, unique to our place on the Great Lakes. The dense stand of red pine is breathtaking. The wetlands along the slow-flowing Black River, much larger than the 4 acres Kohler wants to replace elsewhere, cannot be recreated because of the wonderful mix of trees, dunes, river, and flora cannot be found anywhere else. To remove half the trees would create an ecological imbalance, allowing sunlight to dry out the wetlands, eliminate the habitat of foxes, rabbits, deer, opossums, dragonflies, migrating birds, and the bald eagle my wife and I watched fly out of the woods, circle over the Lake and dive into the water to try to catch a fish. Whatever “minimalist” means, destroying 125 acres of mature forest, draining wetlands, re-sculpting sand dunes, and bringing tens of thousands of people to the pristine preserve established by Herb Kohler’s grandfather is **not** a minimal undertaking; it is a major change to our environment. Once the woods are cut down, they cannot be replaced.

The Town of Wilson’s 20-year Comprehensive Plan has established a commercial area near I-43 and Taylor Drive. A park and conservancy area is designated along the Lake Michigan shoreline from the south end of Kohler-Andre State park north to Timberlake subdivision; the proposed golf course is located in the conservancy area, not the commercial area. In no way does a golf course represent a conservancy nor a park – it is purely a commercial venture, intended to make money for its owners. The Comprehensive Plan was written to ensure the residents a pleasant, rustic, relaxing, township – not an area with high automotive traffic and massive parking lots for international golf tournaments.

My wife and I moved here to avoid congestion and crowds of people and to enjoy a natural, wooded setting along the shore of America’s greatest lake, in which to spend our retirement. Please exercise due diligence to review the request by the Kohler Company to drastically interfere with the natural resources of our Town of Wilson, Sheboygan County, and State of Wisconsin environment. Thank you for taking the time to read my letter and consider my remarks.

Sincerely,  
██████████  
██████████  
██████████  
██████████

Present or former member of: Glacial Lakes Conservancy, The Sierra Club, National Parks Conservation Association, and The Wilderness Society.

“Wilderness is not a luxury but a necessity of the human spirit.”  
-Edward Abbey

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**From:** [REDACTED]  
**Sent:** Friday, July 10, 2015 1:53 PM  
**To:** DNR Kohler Proposal  
**Subject:** Black River Golf Course

Dear madam, sir,

As a resident of Wisconsin, I fully support the planning and opening of the Black River Golf Course in Sheboygan County. A new course will keep Wisconsin front of mind as THE Golf Destination in the Midwest. Currently ranked twelfth in the country in a recent survey by Golf.com (<http://www.golf.com/golf-gold/united-states-golf-every-state-union-ranked-its-golffiness>), with the addition of more Championship caliber courses, we would be able to penetrate the Top 10.

This will set our State up for a continuous growth in an industry that has brought so many positives already: from increased tourism, to gainful employment and general goodwill and recognition towards our beautiful Home.

Having worked for the Kohler Co. for a mere four years, I can wholeheartedly share that our vision has always been to provide the leading edge in innovation and sustainability in both product and service by providing a single level of excellence in all that we do – the Black River Golf Course Project exemplifies to a tee.

In ending, I hope we will see the fruition of this plan and be able to say that Wisconsin is and forever will be the Golf State of the Midwest.,

Thank you for your consideration.

[REDACTED]

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 4:10 PM  
**To:** DNR Kohler Proposal  
**Subject:** Comments on EIS for Kohler Golf Course in Sheboygan

July 14, 2015

Dear Mr. Schiefelbein:

I am writing in regard to the Environmental Impact Statement (EIS) which the Wisconsin Department of Natural Resources is preparing for the proposed new Kohler Company golf course, in Sheboygan, Wisconsin. This letter contains a list of subjects which I hope the pending EIS will address.

**Destruction of part of a designated State Natural Area**, specifically, the Kohler Park Dunes Natural Area: Since Kohler Co. proposes to reclaim four acres of this natural area as an easement, I believe destruction of this rare dune environment must be investigated.

2. **Destruction of endangered species**: the endangered lake dune ecosystem is known to be home to several rare plant species, as listed on the website (see below) for the Kohler Park Dunes Natural Area. <http://dnr.wi.gov/topic/lands/naturalareas/index.asp?sna=71>
3. **Destruction of wetlands**: Wetland areas have been identified in the proposed development zone, and the Kohler Co.'s prepared EIS concludes that not much will be missed if these areas are developed. What should be considered is, what will be lost. In this case, it seems that losses in diversity of species, wildlife habitat, human recreation use, and flood containment greatly out-weigh proposed financial gains for one company.
4. **Water quality issues which would result from fertilizer, pesticide and herbicide drain-off and seepage**: The Kohler Co. Wetland Delineation Report states that the land to be used for the proposed golf course drains into the Black River to the west, and into Lake Michigan to the east. This raises concerns about possible increased amounts of nitrate, phosphorous, and harmful chemicals entering the previously mentioned bodies of surface water, and thus local drinking water supplies. Although a deep, artesian aquifer below the proposed development site has been shown to be separated from a shallower aquifer above it by a layer of clay, seepage of harmful substances into both aquifers should still be investigated. In addition, increased contamination of surface water by the subject materials could upset the ecological balance for creatures living in the water. Oxygen depletion and an abundance of artificially-introduced nutrients would create a visible loss of water clarity, and loss of organism diversity.
5. **Water consumption**: A golf course requires copious amounts of water to maintain its lush, artificial landscape. Water drawn from Lake Michigan would not drain back into Lake Michigan because of the nature of the local watershed. If, because of this drainage issue, wells must be used as sources of water, then there is concern that the levels of liquid in underground aquifers will drop. The Black River

residential area, north of the proposed golf course site, draws its drinking water from one of these aquifers. Residents do not want to face a water shortage, or possible contamination (see No. 4, Water quality, above) of their household water source.

**6. Aquatic habitat degradation:** Fertilizer and soil run-off can cause unfavorable changes in nearby underwater environments. This concern was partly covered under No.4, Water quality.

**7. Decreased quality of life for human and animal residents of the area:** Loss of access to a natural area for purposes of recreation or survival, depending on the species, may cause anxiety, depression, loss of habitat (again, depending on the species), and decreased interest in life. For humans, not having a quiet view to contemplate, or a familiar path on which to hike, will certainly cause stress. Increased vehicle traffic in the area will also drastically erode the peace currently enjoyed by people living near the proposed development. Not everybody loves golf; few local residents will appreciate an influx of golfers and the staff needed to help them support their habit.

**8. Items of concern possibly not investigated in an EIS:**

- a. Use of proposed development area by aboriginal inhabitants or visitors to the area
- b. Proposed sewage management, should the facility be built (septic? City sewer? On-site treatment?)
- c. Plans for regular ground and surface water testing, should the facility be built

Thank you for your consideration of these comments.

Sincerely,

A large black rectangular redaction box covering the signature of the sender.

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**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 7:59 PM  
**To:** DNR Kohler Proposal  
**Subject:** Comments on proposed Kohler Golf Course Environmental Impact Statement

I have several objections and unaddressed concerns regarding the Kohler Company's existing Environmental Impact Statement for their proposed golf course in the Town of Wilson as follows:

- The removal of 4 acres of Wisconsin State Park property (which is owned and cherished by the citizens of Wisconsin) and giving it to the Kohler Company for their private use is wrong. It is also against the rules governing the Federal Land and Water Conservation Act (LAWCON). In addition, this action would be contrary to State of Wisconsin rules and past policies against giving away or selling state park property without just cause or need. It seems this action is only being considered because it involves a large, highly influential and wealthy company/family. If any other smaller company, business or an individual had requested state park land for their own private commercial use they would have been turned down immediately. The Kohler company should be treated like anyone else in this regard and not be given special consideration.

There can be no reasonable replacement of this state park property owned by Wisconsin citizens that would be of the same value or greater value for public use and as a result, this request should be denied for private/profit use. Kohler company has several other alternatives that it could use to access their proposed golf course and could build their proposed shop/employee parking area on their own property. There is no reason state park property has to be taken away from public use for this purpose. Obviously Kohler's alternatives would be more expensive for the company but this should not be a consideration for the State of Wisconsin DNR in considering approval of this public land give-away.

- The proposal to allow all of Kohler's private users and employees access to the proposed golf course using the state park's only entrance road, bridge and construction of a large round-a-bout at the park office should not be allowed or even considered. The state park already gets over 430,000 visitors a year as it is with even more traffic increases anticipated in future years. Vehicles and camping units are often lined up in traffic jams from the park office back to the park entrance on Co. Hwy V on busy days and even during some night programs/special events. Adding several hundred (perhaps thousands) of additional vehicles driven by golf course guests, employees, and service vehicles, trucks, semis, etc. makes no sense and should not be allowed. The state park entrance road and bridge was built in the late 1990's specifically for state park day users and campers, not for a private commercial business.
- The proposed golf course would use untold millions of gallons of ground water to both for restrooms, service buildings, guest lodges/restaurants and of course hundreds of acres of thirsty lawn to keep it green. Severe problems with low or dry well levels both for local residents and the state park is almost guaranteed to occur. Run off and ground water contamination from this immense, nearly unregulated water draw, including septic, herbicide, pesticide and fertilizer leaching will be a major problem that will go unregulated and unchecked by anyone. Potential damage/contamination to not only the local area's ground water but also the Black River and Lake Michigan watersheds both of which are adjacent to the proposed golf course. Nobody, not even the DNR or the Dept. of Health, is currently monitoring water and pesticide/fertilizer run off and its effects on the environment in Wisconsin on a regular basis. Despite this, there have been numerous studies conducted around the world that confirm the negative environmental effect of large golf courses as proposed, especially those built on very light soils such as the pure lake sand and exposed wetland/muck as exists on the Kohler Company property in the Town of Wilson.

- The Kohler Company’s plan to denude/cut down/bulldoze at least 50% of the trees/shrubs/vegetation to make way for the golf course fairways (and) to destroy several acres of highly sensitive and rare Lake Michigan sand dune formations and wetland areas is unconscionable. This insensitive and misguided plan should be denied for the sake of the local environment and to protect this rare, undeveloped natural woodland/sand dune ecosystem from complete and irreversible destruction. The wetlands on this property alone should be reason to deny any action that might harm them. These wetlands involve both interdunal as well as swale wetlands which are located between and within ancient Lake Michigan sand dune formations. According to the DNR’s own Bureau of Endangered Resources these sand dune wetlands are the “rarest habitat/ecosystems in the state of Wisconsin”. The area proposed for the golf course was once designated by the DNR as a State Scientific Area when the property was leased to the state as part of Kohler-Andrae State Park. The reason for its protective classification was due to the rare habitat, wetlands and nearly untouched mature woodlands of white pine, beech, and rare Lake Michigan hardwood habitat. Several rare state and Federal threatened species are found on the property including a fragile and near extinct population of the Pitcher’s or Dune Thistle. Other threatened plant species found on this site are Marrum/Beach Grass, Sand Reed Grass, Sand Dune Cherry, Thick-spiked Wheat Grass to name a few. The area is also home to rare wildlife species as well such as the Red-Shouldered Hawk, Beach-Dune Tiger Beetle and a very rare dune moth discovered several years ago by a researcher. In addition, a Bald Eagle nest and a pair of eagles have been active for some time adjacent to the Kohler property in a wooded area along the Black River. The return of this nesting pair of eagles was surely the location of the undeveloped aspect the 200+ Kohler company forest along Lake Michigan. No doubt the eagles will abandon this area if the forest is leveled and the wetlands filled to develop an open golf course area with restaurants, mowing, traffic, and high population of guests using the property.
- According to the approved Town of Wilson’s Comprehensive Use Plan, this property is designated for the “best use” for public recreation, wildlife and nature preservation....as it has been maintained for generations and supported as such by Kohler family members in the past. The current Kohler plan to remove half the forest, fill in acres of rare wetlands and level ancient Lake Michigan sand dune formation just create an exclusive golfing resort for primarily wealthy, non-resident clients does not fit this “best use” in anyone’s imagination. If approved, the vast majority of Wisconsin’s citizens who non-golfer (and even medium-income golfers who can’t afford the fees) will forever be banned from ever enjoying hike through this unique and rare forest/sand dunes refuge and be prohibited from ever walking it’s Lake Michigan shoreline again. Hopefully the Kohler Company will reassess their plan for this property and keep this rare jewel in its natural state for everyone to enjoy. If not, hopefully the Town of Wilson will prohibit its’ development and maintain the areas integrity as a nature preserve for the best use of this property.

Thanks for your consideration of these comments and concerns that I know are on the minds of many individuals not only in the Town of Wilson but the entire Sheboygan/Eastern Wisconsin area.



Former Town of Wilson Resident/ Retired Kohler-Andrae Superintendent 

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**From:** [REDACTED]  
**Sent:** Monday, July 06, 2015 7:58 PM  
**To:** DNR Kohler Proposal  
**Subject:** Comments on proposed Kohler golf course in Sheboygan

Dear DNR,

The first concern I have is that the golf course will be using an immense amount of water for irrigation. Their shallow test wells have apparently shown too much effect on wetlands. The Kohler Environmental Impact Report submitted to DNR states that they intend instead to "pump from the bedrock aquifer" (Section 2.2.2). My first question would be "which bedrock aquifer?" The uppermost bedrock aquifer is the same Silurian dolomite that is used by local farmers all the way up to Door County. It is fractured, allowing rapid transport of water from long distances. This means there is a danger of affecting other wells miles away almost immediately. The DNR has access to computer software that can determine the probability of such well interference, but assumptions will have to be made as to just how fractured that bedrock actually is.

The deeper option for water supply is referred to as the Sandstone aquifer. Reaching the Sandstone aquifer requires drilling through not only the loose material on top and the Silurian dolomite, but another 200 feet or so of dense shale. The Sandstone aquifer is seldom used in Sheboygan County due to the expense of reaching it and the generally poor quality of the water. This water may be fine for irrigation, but would require expensive treatment to make it drinkable. This Sandstone aquifer option does remove most danger of well interference, however. The closest well currently tapping the Sandstone aquifer is probably in Fond du Lac. Sheboygan's Fountain Park fountain used to tap the Sandstone aquifer (Trotta, 2013). For a cross section depicting the relative thicknesses of these aquifer choices, see Atlas HA 731 which I co-authored (1998).

My second concern is for the wildlife in the area. When I served on the Environmental Quality Commission in Mounds View, MN, we studied wildlife corridors in an effort not to disrupt them with new construction. The planned golf course construction certainly looks to me like it will be interrupting pathways for indigenous species. There is danger in separating breeding populations or forcing new pathways closer to highway traffic.

Thirdly, the folks who donated land for Kohler Andrae State Park were not all Kohlers and probably did not have such development in mind.

Best regards,

[REDACTED]  
[REDACTED]  
[REDACTED]

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**From:** [REDACTED]  
**Sent:** Monday, July 13, 2015 10:38 AM  
**To:** DNR Kohler Proposal  
**Subject:** Comments re: proposed Kohler golf course

**We are opposed to the construction of the proposed Kohler golf course in the Town of Wilson, in Sheboygan County.**

This golf course would destroy a beautiful forest, remove sand dune and natural wetlands as well as take a portion of the State Park. We fear the loss of well water and the draining of the aquifer, just to keep an ultra green landscape for golfers. The area is so beautiful right now, that it would be a shame to commercialize this landscape.

Thank you for your consideration.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Wednesday, July 22, 2015 5:42 PM  
**To:** DNR Kohler Proposal  
**Subject:** Comments Town of Wilson Scoping Meeting  
**Attachments:** DNR-Golf Course.docx

Attached is a 9-Page document with comments concerning proposed Kohler golf course in the Town of Wilson.

[REDACTED]



Town of Wilson  
Black River Area

Mr. Jay Schiefelbein  
Wisconsin Department of Natural Resources  
2984 Shawano Avenue  
Green Bay, WI 54313

Mr. Schiefelbein,

I had an opportunity to speak on July 14, at the DNR Public Scoping concerning Kohler Company's proposed golf course in the Town of Wilson. As time was limited to 3 minutes per speaker, I was unable to "flesh out" my concerns in regard to this matter. On behalf of both my wife and myself, I would like to take this opportunity to elaborate.

### **1. Comparison to Whistling Straits**

The construction of Whistling Straits, Kohler Company's golf course in the Town of Mosel differs from the proposed golf course in that the land used for Whistling Straits was essentially being reclaimed. The site had been abandoned by the U.S. government and had been considered a toxic waste dump. It also is not in close proximity to any publically owned park.

The site of Kohler's proposed golf course is pristine wood, wetland, and sand dune along Lake Michigan shoreline south of Sheboygan and is bordered by reportedly one of Wisconsin's busiest state parks. While in the first case anything done to the land was improvement, in the latter it would be destruction and loss of an ecosystem.

Beyond the destruction vs. reclamation of land, there are other considerations regarding the right of Wisconsin state residents to expect that publically owned park lands are not appropriated for private profit.

### **2. Environmental Impact Report**

It seems odd that an Environmental Impact Report was written by a hired contractor rather than an agency dealing specifically with Environmental Science. Perhaps this is not unusual, but for a project of this magnitude it would seem prudent to have input from an independent entity who deals specifically with geological and environmental issues.

### **3. Water Usage**

The amount of water usage is of concern to many, if not all residents residing near the site of the proposed golf course.

In Section 2.3.7, page 10 of Kohler Company's Environmental Impact Report (hereafter simply referred to as EIR), it is stated that potential water usage for a well or wells could reach as much as 25 million gallons/year. The EIR further states that average usage at existing Kohler courses within the past (7) years has been 190,000 gallons/day with a peak of 334,000 gallons/day during the 2012 drought.

Unfortunately, the writer of EIR has chosen two different sets of units (Gallons/day vs. gallons/year) to cite potential water usage. However, making the assumption that a golf year is 182 days, then potential usage during a drought could amount to between 35.6 million to 60.8 million gallons being drawn from the aquifer.

I am not an Environmental or Geological Engineer, but I find it difficult to believe that this amount of water consumption will not have effect on local residential wells. Section 2.2.2, page 8 of the EIR, it is stated, "...operation of the irrigation system is not anticipated to impact adjacent private water supply wells." Within Kohler Company's July, 2015 mailing to Town of Wilson residents, they state that one of the 11 Benefits of the proposed golf course is: "2. Include a well-protection program for Town of Wilson residents as a special insurance."

First off, this is not a benefit. If not for the potential construction of this course, well protection would not be an issue. The inclusion of this stated "benefit" would indicate that there is some concern on the part of Kohler Company regarding the amount of water consumption and this is a means to place positive spin on a potentially disastrous situation.

This amount of water consumption may also adversely affect Kohler-Andrae State Park as well. If the water supply of the park is compromised, will Kohler take responsibility? Or, will park users and taxpayers have to foot the bill for new wells, or connection to the City of Sheboygan's water utility.

While Kohler Company touts their "Well Protection Plan", the residents within the Town of Mosel should be canvassed as to how they were treated by Kohler after Whistling Straits was put into operation. Reportedly, several residents were excluded from assistance by Kohler Company under the flimsiest of excuses.

### **Where will it all go?**

Also, this amount of water must go somewhere. Assuming that some percentage of water sprayed onto the foliage will be lost to evaporation, the remaining percentage will soak into the ground, carrying with it the fertilizers, and herbicides used in daily maintenance of greens and fairways.

As most, if not all of the Black River Area resides on a sand dune, the subsoil may become saturated with this chemical laden water bringing up a minimum of two issues.

- A. How will the subsurface structure be affected by this continuous heavy watering? Will the ground become unstable due to being over-saturated.

- B. Because of the permeability of the subsurface, what effect will this chemically laden water have on both the Black River and Lake Michigan?

Few, if any, Town of Wilson residents are convinced that chemical run-off and groundwater contamination will not occur. This will affect Lake Michigan, the Black River and may also lead to private water supply well contamination.

The Federal Government has admitted that Agent Orange, a herbicide used during the Viet Nam War has caused numerous health problems to those serving in that war. What adverse health problems will chemical contamination cause in Town of Wilson residents if herbicides and pesticides from the proposed golf course leach into residential wells? Particularly children.

#### **4. Well-Protection**

If the proposed golf course project is allowed to move forward, considering the amount of water usage and potential adverse effects this usage may have on resident wells, it would seem prudent to hold Kohler Company responsible with no exclusions, for any water/well losses in the area bounded by:

South: County Highway V and Kohler-Andrae State Park  
North: Weeden Creek Road (EE)  
East: Lake Michigan shoreline  
West: Highway OK.

The fact that Kohler has considered a Well-Protection plan indicates that there is a high risk to Town of Wilson and more specifically Black River area wells.

#### **5. Irrigation Pond**

The EIR states on page 8, Section 2.2.2 that: “An on-site well will pump water from the bedrock aquifer to an irrigation pond for storage and use.” In Section 2.1, on page 7, it is stated that “the largest topographic change will be the excavation of an approximate five-acre irrigation pond.” Thus well water as well as captured rain water will keep this pond filled. However, it would seem that there are points to be considered in this scheme.

- A. If this water is not aerated in some manner, algae will begin forming, providing a breeding ground for airborne pests. This would most likely lead to additional pesticide use.
- B. An open pond will provide a catch-basin for chemical run-off which will further aid in the formation of algae.
- C. Chemicals that either leach into said pond or are introduced become a potential hazard for wildlife that may use the pond as a source of drinking water.
- D. The pond could potentially leak chemically contaminated water into surrounding soil leading to groundwater contamination. Another potential danger to residential wells.

## **6. Septic System**

On page 7, Section 2.2.2 of the EIR, it is stated that “domestic wastewater septic systems will be constructed to provide adequate separation from the shallow groundwater.” Many Town of Wilson residents have been connected to the City of Sheboygan’s sewer system, and no longer have a private septic system.

This leads to several questions:

- A. If town residents have been connected to the City of Sheboygan’s sewer system insuring that all waste water is treated, why then, would Kohler be allowed to construct an independent septic system?
- B. Who will oversee the construction of this system, insuring that it is built to current standards and more importantly, state and national codes?
- C. Who will be responsible for inspecting this system at regular intervals and insuring that it has not been compromised?

## **7. Destruction of Natural Wetlands**

The Wisconsin Department of Natural Resources (hereafter referred to as WDNR) has questioned potential damage to a wetland area on the north side of Sheboygan within an unrelated case. This does however, bring up questions regarding Kohler Company’s proposed golf course.

Point 2.2.4, page 8 of the EIR cites that undetermined amount of “fill” will be required to fill in naturally occurring wetlands. Question: What type of fill, and where would it come from? Contaminated fill will have adverse effects on surrounding soil. How does Kohler Company propose to replace the lost wetlands? More importantly, what type and how much wildlife will be displaced by destruction of wetland areas which cannot be mitigated?

Why would Kohler Company be allowed to tamper with natural wetlands at all?

## **8. Fauna**

The state park has become home to many species of birds and animals. While Kohler Company requires a company issued permit for human usage of their property bordering the state park (the site of the proposed golf course), it seems doubtful that animals and birds respect such ordinance. It is not uncommon to see White Tailed deer, possum, raccoon and red fox in the area. There also have been sightings of grey fox as well. The Black River has been home to snapping turtles in past.

There is a population of Great Horned Owls living in the Black River area, who undoubtedly hunt on Kohler’s property as well as the area immediately north. Sightings of Red-tailed Hawk, American Bald Eagle and condors near park land have been made. The park and surrounding area has also become home to an increasing wild Turkey flock. There are also several woodpecker species living in the area.

Kohler Company's property is but a portion of the entire Black River area. Wildlife moves between the park and remainder of the area at will, dependent on time of year. This brings up another question regarding the proposed golf course. What's Kohler Company's plan for wildlife abatement on their golf course? By Town of Wilson ordinance, there can be no discharging of firearms within the town. If a special permit is awarded, there are residences immediately north of the proposed golf course. Chemical deterrent may lead to other problems.

Also, how will increased vehicular traffic affect wildlife species such as White Tailed Deer and wild Turkey?

Being close to Lake Michigan, Terns are in abundance. Within the past few years, the City of Sheboygan has undertaken several means for forcing them away from the downtown area and south peninsula. An open area such as a golf course may become an idea spot for nesting, similar to what happened in a vacant field southwest of Sheboygan's downtown. It seems unnecessary to remind that Terns are federally protected birds, who serve the area well in spring when large amounts of gnats emerge. By what means will Kohler Company use to deter the Terns? Whistles and other means used to frighten Terns away may become annoying to nearby residents as well.

What effects will the herbicides and pesticides used in maintenance of a golf course have upon Terns as well as other species of birds? How will these chemicals affect the deer, grey and red squirrels, fox, opossum, and other wild mammals? As a state and nation, we almost lost the Bald Eagle due to use of pesticides. How will this proposed golf course be different?

## **9. Loss of State Park Land**

As a resident of the State of Wisconsin, and a taxpayer, I strongly object to Kohler Company, a private, for profit entity, taking possession of state owned park lands for a profit making venture.

With that said, it also should be noted that the Land and Water Conservation Fund, Lawcon, should be considered. As the WDNR is undoubtedly aware, Lawcon requires that any land purchased with public funds for public outdoor recreation must be used that way forever, and converting part of an existing park must be approved by the National Park Service.

## **10. Adequacy of Local Roads and Potential Traffic Patterns**

In a letter dated March 13, 2013, written by Kurt Thiede of the WDNR, it is stated that a shared entrance with the then Tented Forest project and the park will cause difficulties for the park, Kohler Company and local residents.

While Section 2.3.4, Page 9 of the EIR suggests that the additional traffic caused by normal course usage and during tournaments will cause no adverse impact, roads within the area should be looked at carefully. County Road V (CR-V) is a two-lane road which currently leads to the park entrance. There is a two-lane intersecting road which is an extension of CR-V later becoming Sheboygan's 12<sup>th</sup> Street. Property opposite of the park at the aforementioned intersection is privately owned.

How would a round-about fit into this area, when there is private land to the northwest, the remainder bounded by parkland, a T formed by two county roads and the park entrance, plus a bridge over the Black River? And, how would this handle a large amount of tournament traffic?

During peak usage, such as a tournament, especially if scheduled during peak park usage, CR-V very well could become congested to a point of grid-lock. Local residents with homes adjacent to CR-V may find it impossible to enter or leave their properties.

Other roads in the area are also two-lane roads, many of which are posted at between 25 – 35 miles/hour. Using these as an alternative to CR-V may lead to similar problems.

Egress to the proposed golf course through the Timberlake subdivision poses the same problems. Indian Mound Road is two lane, bounded by residences on either side. It is posted at 25 miles/hour. Many residents either walk or bicycle on this road. Additionally, there are several families who have homes adjacent to this road with young children. Excessive traffic into the subdivision will disrupt resident's lives both within the subdivision and along Indian Mound Road, plus pose potential for pedestrian fatalities; some of which could be young children.

In all cases, there is no parking along County Roads V, or OK; Stahl Road, or Indian Mound Road.

The most feasible potential entrance into the Kohler Property would be through the entryway the well-drilling firm and other contractors hired by Kohler have used off of County V (12<sup>th</sup> Street) directly in-line with Stahl Road. However, again, Stahl Road is two-lane with adjacent homes which could lead to similar situations as mentioned above.

The town has built up around the Kohler property and now access adequate enough to handle traffic generated by a national golf tournament is currently, it would seem, non-existent.

## **11. Sand Dunes**

While the state park has placed boardwalk to help preserve fragile sand dunes, the proposed golf course appears to have holes 9, 17, and 18 (I believe during my verbal comments, I mistakenly said holes 7, 17, and 18) placed directly on top of where dunes currently exist. The green for Hole 16 seems close to the dunes as well. Please see Exhibit 1.1 attached to this statement.

Mr. Pete Dye, the course designer has been reported as saying, "It's sand. That helps a lot. It's perfect. You can push the sand from (point) A to B and no problem."

Are these pristine sand dunes to become fill for filling in pristine wetland? What will happen to the sand dunes, and any rare flora species growing on or around them?

## **12. Economic Impact**

Economic impact of this proposed golf course would seem to lie outside of the scope of the EIR. However, as Kohler Company chose to present exhibits specifically addressing economic impact, precedence has been established. That, and verbal comments made at the Public Scoping held

the evening of July 14<sup>th</sup> by representatives of Kohler Company and the Sheboygan County Economic Development Corporation have likewise established precedence.

Kohler Company, a paid lobbyist hired by Kohler Company and the Sheboygan County Development Corporation have made statements to the effect that hundreds of jobs will be created with millions of dollars pumped into the local economy. A Kohler produced brochure dated March, 2015 states that “227 FTE (Full Time Equivalent) jobs will be created in Sheboygan County, and \$6.5 million in additional hospitality, retail, food and beverage industries.”

Contrast that with Kohler’s July, 2015 brochure claiming this golf course will, “create hundreds of jobs, increase the local tax base and provide multimillion-dollar local economic boost.”

The Sheboygan County Development Corporation has received in past, funding from Kohler Company, which puts into question their credibility. As for tax base increases, Kohler Company sued the Town of Mosel for lowered taxes on Whistling Straits reportedly due to Kohler Company not making the expected earnings on the course. Town of Mosel capitulated, thus the tax burden was shifted from Kohler Company to the residents of Town of Mosel.

Kohler Company recently sued their own Village of Kohler, a village that for many years was company owned, to reduce taxes on their properties within the village. Kohler Company won in a court of law, thus again shifting the tax burden onto local residents. Increase the local tax base? For whom?

So far, with all of the many claims made, no entity has provided any concrete evidence proving that the proposed golf course will be of economic benefit. Thus far, without any proof to the contrary, the only economic benefit that can be seen is to Kohler Company and “Destination Kohler.” At the very first public Town of Wilson Plan Commission meeting, Jim Richerson, a representative of Kohler Company stated to the effect that this will be a great thing for Destination Kohler. Nothing then was mentioned about the Town of Wilson, the City of Sheboygan or the county.

## **Summation**

It seems clear that the proposed golf course will have a substantial negative environmental impact and should be denied for that alone. The Wisconsin DNR has taken exception with potential destruction of wetlands on the north side of Sheboygan in an unrelated case. The loss of wetlands, potential damage to pristine sand dunes, plus destruction of wildlife habitat and wildlife would seem enough to warrant denial of this proposed golf course.

The right of local individuals to continue to have an adequate supply of clean drinking water should supersede the right of a for profit entity to squander an increasingly valuable resource such as unpolluted water. A resource which if squandered in a manner they suggest, may also adversely affect a publically owned state park. Older residents on fixed incomes, if faced with loss of water supply may also lose their homes.

This is a property geographically situated with limited access. The appropriation of public parkland to create an egress for a privately owned, for profit venture would seem to not be in the public's best interest and seemingly fall outside of Land and Water Conservation Fund guidelines.

As of this point, there is no adequate parking for tournament traffic. Unless Kohler either appropriates or purchases property near the site of the proposed golf course, adequate parking does not exist. All of the roads near the site of the proposed golf course are two lane, asphalt roads and their ability to handle tournament traffic remains unclear. There is also a matter of pollution, and potential destruction of wildlife caused by heavy motor vehicle traffic.

The stated economic benefits have not been substantiated with any hard, irrefutable data. The Sheboygan County Development Corp. has also made statements to this effect, but has not produced any data to back their claims. Due to their relationship with Kohler Company, their credibility is suspect. There has been months of claims, yet, no hard supporting evidence has been exhibited to substantiate any of them.

Thank you for providing this opportunity to express our opinions.

Best Regards,

A solid black rectangular redaction box covering the signature area.

**Attachment**

Potential destruction of Sand Dunes.

**KOHLER CO. PROPOSED GOLF COURSE - TOWN OF WILSON**



Exhibit 1.1 Kohler Proposed Golf Course Taken from a mailing to Town of Wilson residents dated July, 2015

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**From:** [REDACTED]  
**Sent:** Wednesday, July 15, 2015 10:09 PM  
**To:** DNR Kohler Proposal  
**Subject:** comments

As a former resident of the Town of Wilson I am somewhat familiar with this area.

This property belongs to Kohler Co and as long as what they propose is legal they should be allowed to build it. Kohler Co has been shown to be a good steward of the environment with their other golf courses and there is no reason to believe this one would be different. A golf course is not an eyesore and I believe the local residents opposing this are out in left field. The Town of Wilson residents are known for opposing things. Kohler wanted to build a place to put their sand from their business - it did not get approved. A developer wanted to build a shopping mall in the town and that too was nixed. A gold course would bring business into the area and it would be people willing to spend money.

Sincerely,

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 10:54 PM  
**To:** DNR Kohler Proposal; Thompson, Michael C - DNR; Schiefelbein, Jeremiah J - DNR; Voltz, Jeffrey R - DNR  
**Subject:** DNR - Kohler proposal - Citizen Input - Debbie Desmoulin  
**Attachments:** 2015 07 24 Public Input Kohler golf course Debbie Desmoulin.pdf  
**Importance:** High

Dear DNR officials in charge of the Kohler golf course proposal,

I am sending this again with an appropriate subject line in case you didn't see the one I sent earlier.

Attached is my citizen input and I will also copy and paste it to this email for double insurance.

Thank you for your consideration,

[REDACTED]

[REDACTED]

### **Total Opposition to proposed Kohler golf course due to environmental loss of the Black River Forest**

I completely object on so many levels without reservation to the Kohler golf course proposal. The irreversible destruction of the Black River Forest, which is a wildlife refuge forest preserve, complete with wetlands and whole ecosystems, would be completely devastating to the entire area.

The Department of Natural Resources' mission is "to protect and enhance our natural resources". Nothing that Kohler plans with this project would enhance our natural resources. After clear-cutting most of the trees, all of the animals that make the Black River Forest their home would have to relocate, which means that we will be inadvertently killing them off because there are limited natural habitats for them to relocate to. The diversity of plants that grace the forest floor will be sacrificed as well.

The DNR is supposed to protect these natural resources: air, land, water, wildlife, and forests, which are destined to be decimated by Kohler's project. In summary, a golf course replacing the Black River Forest would inevitably destroy the "ecosystems that sustain all life." What worse place to develop a golf course than a wildlife refuge forest preserve that is the Black River Forest?

Kohler Company already chose to build the Whistling Straits golf course on Lake Michigan, but at least, it is to my understanding, it was formerly a property that was NOT a wildlife refuge, contrary to the Black River Forest complete with Indian mounds and wetlands.

Since the DNR's mission is to "ensure the right of all people to use and enjoy these resources" Kohler's private price-prohibitive golf course is diametrically opposed to this goal. Kohler may argue that this is his private property, but he is

requesting to use public land to enter the course, compromising the integrity of our State Park. His request must be totally denied.

The pesticides and herbicides used in golf course maintenance, will inevitably seep into the Black River and Lake Michigan, a major water resource for the whole Midwest, which is already severely compromised. Therefore, this decision needs to be made taking environmental concerns into consideration rather than corporate profit.

Since the DNR vows to “consider the future and generations to follow”, developing yet another golf course on one of our last rich, diverse, wildlife refuges, goes counter to that goal.

Consider the immediate environment surrounding the proposed golf course. Most of those homes rely on well water. Many of the wells surrounding the Whistling Straits golf course further north in the Town of Mosel, are dried up and need to be dug deeper in order to find water.

Kohler Company might also choose to pump water directly from Lake Michigan. Since a golf course is a heavy water-consuming business, this proposal depletes our water supply and in turn, diminishes this precious natural resource.

Considering that this area is rich in wetlands complete with a thriving mosquito population, Kohler Company will want to dry up the wetlands and spray overhead for the comfort of his customers, making the Town of Wilson toxic for those living in proximity, including any remaining wildlife, making this area change from lush wildlife habitat to artificial, sterile “green”.

In conclusion, the only acceptable decision concerning the Black River Forest would be to leave it as is and not develop it at all for private commercial use.

---

**From:** Kramasz, Kathleen M - DNR [<mailto:Kathleen.Kramasz@wisconsin.gov>]

**Sent:** Friday, July 24, 2015 1:37 PM

**To:** [REDACTED]; Thompson, Michael C - DNR <[MichaelC.Thompson@wisconsin.gov](mailto:MichaelC.Thompson@wisconsin.gov)>; Schiefelbein, Jeremiah J - DNR <[Jeremiah.Schiefelbein@wisconsin.gov](mailto:Jeremiah.Schiefelbein@wisconsin.gov)>; Voltz, Jeffrey R - DNR <[Jeffrey.Voltz@wisconsin.gov](mailto:Jeffrey.Voltz@wisconsin.gov)>

**Subject:** questions on commenting

Debbie, the current open comment period is to provide input on the EIS that DNR will be preparing. That's not my part of the review so I am forwarding your information to those who are directly involved in the EIS process. I know that there is a web site set up to provide comments and will see if I can find a link unless one of the others can do so more quickly. They are also the people to ask your questions to about guidelines/limits for commenting.

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Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

**Kathi Kramasz**

Water Regulation and Zoning, Water Division  
Wisconsin Department of Natural Resources  
Phone: (920) 893-8531  
1155 Pilgrim Rd., Plymouth, WI

[kathleen.kramasz@wisconsin.gov](mailto:kathleen.kramasz@wisconsin.gov)



July 24, 2015

**Total Opposition to proposed Kohler golf course due to environmental loss of the Black River Forest**

I completely object on so many levels without reservation to the Kohler golf course proposal. The irreversible destruction of the Black River Forest, which is a wildlife refuge forest preserve, complete with wetlands and whole ecosystems, would be completely devastating to the entire area.

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In conclusion, the only acceptable decision concerning the Black River Forest would be to leave it as is and not develop it at all for private commercial use.

---

**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 12:19 PM  
**To:** DNR Kohler Proposal  
**Subject:** DNR Public Hearing on Proposed Kohler Golf Course

**Public Comment:**

I wish to go on record as being in favor of the proposed Kohler golf course in the Town of Wilson, Sheboygan County, Wisconsin.

Kohler Co. owns the land on which the proposed golf course will be built. The Town of Wilson statutes allow for a golf course under the current zoning held by the Kohler Co along with a Town of Wilson Conditional Use Permit.

I believe that the environmental permit portion for the proposed Kohler golf course lies in the hands of the WDNR. The WDNR is responsible for the final approval and the permitting process for the proposed Kohler Co. golf course., much like getting a state building permit for a commercial building. The WDNR is the expert in the field, they have the final decision and it is the reason for holding this environmental public hearing.

The Kohler Co. has two other golf courses in Sheboygan County which demonstrate the commitment that the Kohler Co. has to being good stewards of the land, and similarly, will do what is environmentally necessary to protect the environment, protect the area through the use of a minimalist golf course design and protect the neighbors by implementing a well-protection program for Town of Wilson residents. The Kohler Co. has provided an in-depth engineering analysis regarding impact on wetland, land use, wildlife habitat, surface and groundwater protection, and more, which again demonstrates their well- protection program for Town of Wilson residents; their respect for dune structures; their desire to have a net increase in protected wetlands; their wish to remove invasive species and add more native plants and grasses; their efforts to control runoff and to employ best practices regarding pesticide and fertilizer use. All of these speak to the reasons that the WDNR should provide the necessary permits needed to construct the proposed golf course.

Once the WDNR has drafted their Environmental Impact Statement and worked through the permit process, then the Town of Wilson Plan Commission and Town Board can begin drafting the Conditional Use Permit which should deal primarily with safety, roads, parking, lighting, emergency response to the golf course, fire protection, and maybe even what the Kohler Co. needs to do if, in the future, they would desire to sponsor a major tournament.

Much has been said about the Town of Wilson 20 Year Comprehensive Plan. I was a member of the Town of Wilson Plan Commission when this document was written and adopted. Some where in the beginning, it states that this is to be used as a "guide". Not to be chiseled in stone, but to be used as a "guide". That is exactly how it should be used in reference to the Environmental Impact Report and the Town of Wilson Conditional Use Permit.

Although this is an environmental public hearing, I believe that a few words need to be said regarding the Economic Impact on the Town of Wilson and the surrounding counties. The proposed Kohler golf course Economic Impact Study reported to have a positive impact on the community by creating 227 new full-time equivalent jobs; have an annual economic impact in Sheboygan County of \$20.6 million and generate more than \$1.1 million per year in new tax revenue which would benefit local, county, and state municipalities. Visitors coming to the area would fill about 22,000 hotel room nights annually and spend \$6.5 million annually on lodging, food, beverages and retail items. The Sheboygan County Economic Development Corporation is in favor of the proposed Kohler Co. golf course and has said that these economic numbers may be on the low side. Without the proposed Kohler Co. golf course, the local community will not gain access to the new jobs and the increased revenue dollars that visitors will bring, and local, county, and state municipalities will lose the additional tax revenue .When all things are considered, the proposed Kohler Co. golf course will have a positive impact on the Town of Wilson and Sheboygan County.

As I said in my opening line above, I am in favor of the proposed Kohler Co. golf course and I cannot understand why everyone would not be in favor, especially when the Kohler Co. owns the land for the proposed golf course.

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 10:50 PM  
**To:** DNR Kohler Proposal  
**Subject:** EIS considerations

Good evening,

As a Sheboygan local, I have a number of concerns regarding the Kohler- proposed Golf Course. Among my concerns are:

- What species of animals and plants currently populate this land?
- Of these species, which are considered endangered, threatened, and/or rare?
- Of these species, which are migratory and rely upon this space to nest, brood, rest, and otherwise live?
- What is the potential loss of life in this area?
- What herbicides, fertilizers, and pesticides will be used on this property?
- What amount of these chemicals will soak into the soil and thus into groundwater, as well as run-off into wetlands, Black River, and Lake Michigan?
- What amount of these chemicals will be ingested by local populations?
- What are the synergistic effects of these chemicals on the environment, including on populations of animals, plants, humans, and other life living on this land and in surrounding communities?
- Why would the Town of Wilson require a well-protection program? Does this imply a negative effect upon water supplies?
- What nesting, brooding, and otherwise living spaces of animals will be disrupted as a part of construction and implementation of golf course, as well the use thereof?
- What wildlife lifestyles will be interrupted and/or disrupted and/or terminated as effects of golf course activity and loss of habitat?
- What invasive species exist on this land? Are humans included?
- Does planting native plants to "preserve" the naturally occurring ecosystem balance the destruction of those same plants and ecosystems?
- What is "natural capital," and how does it manifest?
- What role do forests, wetlands, lakeshore, and other micro-ecosystems have on the communities and land in and around this area?

- What does economic benefit have to do with environmental impact?

Thank you for reaching out to our community and offering us the opportunity to express our feelings in this matter.

Sincerely,

A solid black rectangular box used to redact the signature of the sender.

---

**From:** [REDACTED]  
**Sent:** Wednesday, May 13, 2015 12:45 PM  
**To:** DNR Kohler Proposal  
**Cc:** Timothy Bell; Cathy\_Pollack@fws.gov  
**Subject:** Environmental Impact Report No. 193703078, affects on Pitcher's thistle  
**Attachments:** Cirsium pitcheri Kohler Andrae impact 11 Feb 2015.doc

Mike Thompson

Natural resources region program manager

(414) 303-3408

Dear Mr. Thompson:

We have reviewed the Environmental Impact Report (Project No. 193703078; proposed Golf Course-Town of Wilson -Kohler Co.) for its approach to impacts to the Federal listed Pitcher's thistle (*Cirsium pitcheri*). Please see our comments below, as well as the attached letter sent to Friends of the Black River Forest, on 11 February 2015. Please include them both as comments on the EIR.

The report's assessment of potential impacts on Pitcher's thistle, and proposed solutions are not adequate. The species is specifically addressed twice, as follows:

Section 3.2.1 (Terrestrial Habitat) indicates:

spp.). Areas of unstabilized sand provide habitat for annual dune species, including the Federal listed threatened pitcher's thistle (*Cirsium pitcheri*). These populations are found along the Kohler Property lakeshore.

Section 3.2.5 (Threatened, Endangered, and Rare Species) indicates:

Populations of dune thistle (*Cirsium pitcheri*, State and Federally Threatened plant), [REDACTED]  
[REDACTED]  
[REDACTED] were observed on the Kohler Property with the vast majority occurring in areas outside of proposed development. The potential for minor impacts from the project exists. Although State threatened, endangered, and special concern plants are not protected on private property, Kohler will work with the WDNR to develop mitigation, such as transplanting individual plants to suitable habitat or establishing new populations in suitable areas.

As indicated in the attached February 11, 2015 letter, this information does not address Pitcher's thistle population size nor potential environmental impacts to the population. It also does not address the presence of additional plants in the adjacent Kohler-Andre State Park and potential impacts to this population. It also implies that transplanting could be used to mitigate impact.

Our work with this species has shown that populations require shoreline ecological processes maintained by natural sand dune ecosystems. We have also found that populations with close proximity may rely on gene exchange through pollinators and seed dispersal for population maintenance. We have also found that transplanted plants have relatively low potential for survival and seed production., and thus reduced input to population maintenance.

These issues need to be addressed and expanded in the EIS. Critical questions include 1) what are the size, structure, and dynamics of the Pitcher's thistle populations on property adjacent to the proposed golf course (this includes populations on adjacent dunes and in the adjacent state park)? 2) What environment processes maintain these populations and how do the populations interact (do they comprise a single population), 3) what is the potential for golf course construction and maintenance to alter ecological and bio-chemical processes that maintain these thistle populations and their habitats, including impacts to adjacent habitats (e.g., sand loss or deposition in the state park), 4) what are potential mitigation efforts?

  
Plant Conservation Biologist

The Morton Arboretum

  
Professor of Botany

Chicago State University

February 11, 2015

Friends of the Black River Forest:

We have been studying the ecology of Pitcher's thistle, a federally threatened plant, since the mid 1900s. This plant is federal threatened because of human caused loss of, or damage to, its only habitat, the shoreline dunes of the Great Lakes. As explained below, we feel that the proposed golf course adjacent to Kohler-Andrae State Park could directly and indirectly impact this species and its habitat north of the park as well as within the park.

Our work has included monitoring this species at Kohler-Andrae State Park. Most of the recent monitoring (since 2007) has taken place in the open dunes from the north parking lot south to the Nature Center. However, we have also observed Pitcher's thistle in shoreline dune habitat between the beach and the forest north of the state park boundary. We have not explored this habitat in detail and so cannot not confirm that *Cirsium pitcheri* occurs within the proposed golf course boundary. However, the fairway maps provided

(<http://www.friendsblackriverforest.org/maps.html>), indicate that Pitcher's thistle habitat could be directly impacted by a number of fairways and greens that border the shoreline dunes.

Specifically #17, the northern fairway and green #18, and green #9. The eastern edge of the #8 fairway appears to be in the forest, so not in Pitcher's thistle habitat, but construction of the fairway could impact Pitcher's thistle habitat.

Development of the golf course as planned could impact Pitcher's thistle in multiple ways. As indicated above, it could directly impact thistles occurring in shoreline dunes adjacent to several fairways. This impact could also affect the population within the state park. Because this species occurs in dune habitats that undergo constant change, it depends upon presence of multiple population units that comprise a "metapopulation". These units provide sources of seeds that allow colonization of dune habitats opened by shoreline wind and erosion processes, and replace other habitats that are lost by the same process. As a result, loss of thistles from shoreline habitat north of the park would reduce the size of the local "metapopulation" and reduce or prevent seed movement into the adjacent park. Alteration of the shoreline north of the park could also affect the park habitat for Pitcher's thistle if it alters or prevents sand flow along the long-shore current of Lake Michigan. Also, golf courses are noted for their applications of weed control chemicals. If such chemicals move into the adjacent park, they could negatively affect Pitcher's thistle, as well as other vegetation in the park natural areas.

  
Plant Conservation Biologist

The Morton Arboretum

  
Professor of Botany

Chicago State University

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**From:** Schuller, Daniel J - DNR  
**Sent:** Wednesday, June 24, 2015 8:10 AM  
**To:** Voltz, Jeffrey R - DNR; Thompson, Michael C - DNR  
**Subject:** FW: Kohler-Andrae State Park

Passing on this communication. Not sure if a response is needed.

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**Dan Schuller**

Phone: 608-266-2185

Cell: 608-516-4741

[Daniel.Schuller@wisconsin.gov](mailto:Daniel.Schuller@wisconsin.gov)

---

**From:** [REDACTED]  
**Sent:** Wednesday, June 24, 2015 2:42 AM  
**To:** DNR SECRETARY; Schuller, Daniel J - DNR; [ScottL1.Gunderson@Wisconsin.gov](mailto:ScottL1.Gunderson@Wisconsin.gov); Moroney, Matt S - GOV; Thiede, Kurt A - DNR; Ross, Laurie J - DNR; [Sen.Leibham@legis.wisconsin.gov](mailto:Sen.Leibham@legis.wisconsin.gov); [Rep.Endsley@legis.wisconsin.gov](mailto:Rep.Endsley@legis.wisconsin.gov)  
**Subject:** Kohler-Andrae State Park

Dear decision makers,

If you feel so strongly that Kohler Company can not afford to buy a piece of land for their golf course, and they are in dire need of one, please give them a piece of your personal property for this purpose. Our public lands should not be subjected to this type of misuse and abuse for private profit. Bulldozing, cutting down forests, destroying natural habitats, and sandy beaches is not in the public's best interest. This only benefits Kohler Company. Kohler Company is not your employer, the public is. Kohler Company's request must be denied.

Thank you,

[REDACTED]

---

**From:** Nitschke, Eric A - DNR  
**Sent:** Tuesday, June 30, 2015 10:04 AM  
**To:** Voltz, Jeffrey R - DNR; Thompson, Michael C - DNR  
**Subject:** FW: Kohler-Andrae State Park

Good morning gentlemen,

Please see below for a public comment on the Kohler proposal.

Regards,

Eric

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Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

Eric Nitschke, P.E.  
Secretary's Director – Southeast Wisconsin  
Wisconsin Department of Natural Resources  
2300 N. Dr. Martin Luther King Jr. Drive  
Milwaukee, WI 53212  
Phone: (414) 263-8570  
Fax: (414) 263-8606  
[Eric.Nitschke@wisconsin.gov](mailto:Eric.Nitschke@wisconsin.gov)

---

**From:** Fritz, Jason R - DNR  
**Sent:** Friday, June 26, 2015 10:52 AM  
**To:** Schuller, Daniel J - DNR; Currie, Kimberly - DNR; Olson, Sanjay B - DNR  
**Cc:** Nitschke, Eric A - DNR  
**Subject:** FW: Kohler-Andrae State Park

FYI

**We are committed to service excellence.**

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

**Jason R. Fritz**  
Phone: 608-873-2100  
Cell Phone: 414-303-1466  
[jason.fritz@wisconsin.gov](mailto:jason.fritz@wisconsin.gov)

---

**From:** [REDACTED]  
**Sent:** Wednesday, June 24, 2015 2:54 AM  
**To:** [ScottL1.Gunderson@Wisconsin.gov](mailto:ScottL1.Gunderson@Wisconsin.gov); [Rep.Endsley@legis.wisconsin.gov](mailto:Rep.Endsley@legis.wisconsin.gov); Meyer, Thomas A - DNR; Kramasz, Kathleen M - DNR; Morgen, Carolyn A - DNR; Fritz, Jason R - DNR; Wykle, Matthew L - DNR  
**Subject:** Kohler-Andrae State Park

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Thank you,



---

**From:** [REDACTED]  
**Sent:** Monday, July 13, 2015 5:00 PM  
**To:** Schiefelbein, Jeremiah J - DNR  
**Subject:** Fw: Proposed golf course in Town Wilson

On Monday, July 13, 2015 10:07 AM, [REDACTED] wrote:

Dear Sir:

It's time for the "Friends of Black River Forest" to back off!!! I'm tired of their "scare tactics, fliers, and bullying" that has been going on the last few years.

This is Kohler property, a privately owned parcel. Yes, Kohler wants a few acres of public land for an entrance, but the group shies away from recalling that a huge area of the state park was donated years ago by the Kohlers....hence Kohler Andre State Park.

I have yet to see "shoddy work" done by the Kohlers in respect to any of their outdoor projects such as their golf courses. Yes, having had a permit to walk the trails on this property until such permission was revoked, I saw what this pristine area looks like.

I have no objection to the construction of the golf course.

Thank you for allowing me to share my opinion.

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Tuesday, July 21, 2015 6:32 PM  
**To:** DNR Kohler Proposal  
**Subject:** Golf course

Please do not let this beautiful land be destroyed by a golf course. If there is anything I can do to help stop this please let me know. This is our town and our back yard.

[REDACTED]

Sent on the new Sprint Network from my Samsung Galaxy S®4

---

**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 5:28 PM  
**To:** DNR Kohler Proposal  
**Subject:** Golf Course  
**Attachments:** Golf course.docx

Thank you in advance for reading our letter.

[REDACTED]

July 14, 2015

Jay Schiefelbein  
2984 Shawano Ave.  
Green Bay, WI 54313-6727

I have lived in Black River the majority of my life. In my youth, my friends and I often walked and/or played on the proposed property for the Golf course. My husband and I have lived on South 12<sup>th</sup> Street for the past 31 years. In these years we have witnessed the property becoming overgrown and trees falling down. There are numerous invasive species growing there.

We believe that developing this property can only enhance its beauty and value. The Kohler Company has high standards and does not produce anything that is not of quality. Hence, it would increase the value of our property.

Our house is next to the Riverdale Golf Course. We have never had any problems with our well system. As a matter of fact, our well has Lake Superior water, not Michigan, as many of the wells are in the area.

The "Friends of Black River Forest" have been trying to use scare tactics regarding the use of pesticides/chemicals and loss of water. If we are not mistaken, it is a federal offense to disturb Native American Indian Mounds, interdunal sand dunes and wetland systems. The Kohler Company's plan will not affect these areas.

As with most townships, the job creation along with tourism will help with the Town of Wilson tax base. We heartily approve of the proposed Golf Course. This property belongs to the Kohler Company, not the Friends of Black River Forest.

Sincerely,

A black rectangular redaction box covering the signature area. Two vertical white lines are visible within the redacted area, possibly representing the initials of the signatory.

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**From:** [REDACTED]  
**Sent:** Thursday, July 09, 2015 8:30 PM  
**To:** DNR Kohler Proposal  
**Subject:** golf course

dear, dnr

even though I'm only 11 will you please hear what I have to say about the golf course Kohler wants to build? we go biking along the road that will be the entrance to the golf course all the time but if this happens that road will be way to busy to bike on and we walk and bike on the trails right next to it, plus the road that we live by is close to the golf course and will be used a lot to travel to it so we wont be able to bike on that ether. we also walk our dogs to tarry andre state park and train our dogs on the trails. if this happens it will mess up the habitate for deer, birds and other animals. this is why I don't agree with this progect as it effects us not only in good ways but also bad ways. I hope you take this email into consideration and thank you for reading this,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Tuesday, July 21, 2015 6:46 PM  
**To:** DNR Kohler Proposal  
**Subject:** Golf Course

As a resident of The Black River area My husband and I are against the proposed golf course. We bought in Black River for the nature feel of the neighborhood. This area is very conducive for walking and bike riding. The added traffic that would come to the golf course would be a safety hazard to the residents who enjoy the area. I also feel that it would affect the State Park that is right next door. People come to the lake front for its natural beauty. The average person of this state would lose the chance to enjoy the beauty. The inflated prices that Mr Kohler would charge to golf is unfordable to most area residents.

The impact on the wildlife and environment in the area would be devastating. We need to protect these areas, not give state land to a rich man who buys what he wants by donating to politicians. Please Say no to this Proposal.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Wednesday, July 15, 2015 4:14 PM  
**To:** DNR Kohler Proposal  
**Cc:** Hoekstra J.; Weber Todd  
**Subject:** Kohler Co. - Public Comments

At the Public Scoping Meeting on Tuesday, July 14, at UW-Sheboygan, Jay Hoekstra spoke on behalf of Kohler Co. and as a member of proposed Kohler golf course. Below are the comments Mr. Hoekstra delivered and we are now submitting to DNR.

My regards,

[REDACTED]

**KOHLER CO. COMMENTS – DNR SCOPING MEETING, JULY 14, 2015**

My name is **Jay Hoekstra**, and I am **Hospitality Construction Portfolio Manager with Kohler Co.** I am one of the lead individuals on the proposed Town of Wilson golf course project. I'll be the only one from the project team speaking tonight, so the public can get more time and we can hear more feedback. I'd like to thank you for the opportunity to speak, and I'd also like to thank the public for coming out. Hearings like this are helpful and give everyone an opportunity to offer comments about the project.

Kohler Co. believes that sound business decisions are inherently linked to a strong environmental commitment. That's how our company has done business for more than 140 years. We thank you for giving this project proper scrutiny – it deserves no less.

We welcome a close look at this project because we've taken a close look at this project. Our approach has been thoughtful, with public feedback inspiring a design that preserves the major dune structures and embraces the land's natural contours. Our goal is to have a world-class destination that creates hundreds of jobs and provides multimillion-dollar economic benefits for the region, and to do it in an environmentally responsible manner that will serve the community and preserve the land for generations to come.

The golf course's minimalist design will respect and preserve the natural character of the site while creating a healthier environment. Protected wetland will increase. Invasive species currently choking good plant life will be removed, and we will add more native plants and grasses to preserve naturally occurring ecosystems. We have a strong commitment to best practices regarding pesticide and fertilizer use. All of Kohler Co.'s Sheboygan County golf courses, on average, apply fertilizers at only 20 percent of authorized state and federal levels on fairways. There will be no runoff into the Black River or Lake Michigan.

We're pleased that this project will create public access to the site, which until now has been limited to just a few people with special passes. Being a good neighbor is also important, and we intend to grant a permanent, legally designated lakeshore easement for homeowners in the Timberlake subdivision, once the golf course is built. We have also committed to establishing a well-protection program for all Town of Wilson residents as a precaution and special insurance.

Our plans use an entry that avoids neighboring homes and actually enhances public access to Kohler-Andrae State Park. Our plans also affect about 4 acres of state parkland in an area already used by park staff for maintenance operations and not normally accessed by the public. No public trails will be affected.

Kohler Co. has owned this land for more than 75 years, and we have been part of this community for nearly 150. For this project to work for our company, it has to work for the environment, and it has to work for the community. We appreciate that the DNR is holding this scoping meeting, and we – like you – are interested in hearing what people have to say.

Thank you, again, for allowing me the time to speak and for giving Kohler Co.'s plans a careful and thoughtful look.

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**From:** [REDACTED]  
**Sent:** Thursday, July 23, 2015 5:30 PM  
**To:** DNR Kohler Proposal  
**Cc:** [REDACTED]  
**Subject:** Kohler EIS Scoping Comments - Wisconsin Society for Ornithology  
**Attachments:** WSO Kohler DNR EIS Scoping Comments Final.pdf; Wood\_et\_al\_in\_press\_jpe12492.pdf

Dear Mr. Schiefenbein;

Attached are the comments of the Wisconsin Society for Ornithology, Inc., regarding issues that we recommend be addressed in DNR's pending Environmental Impact Statement on the Kohler golf course proposal.

[REDACTED], Vice President  
Wisconsin Society for Ornithology, Inc.  
[REDACTED]



July 23, 2015

VIA EMAIL to: [DNRKohlerProposal@wisconsin.gov](mailto:DNRKohlerProposal@wisconsin.gov)

Jay Schiefelbein  
Wisconsin Department of Natural Resources  
2984 Shawano Avenue  
Green Bay, WI 54313-6727

Re: Comments of the Wisconsin Society for Ornithology on the scope of the pending environmental impact statement for a Kohler golf course proposed to be developed in the Town of Wilson, Sheboygan County

Dear Mr. Schiefelbein;

I am submitting these comments on behalf of the Wisconsin Society for Ornithology (WSO). WSO is an active, volunteer-based, nonprofit organization established in 1939. We have over 1,400 members throughout Wisconsin. Our mission is to promote the enjoyment, study and conservation of Wisconsin's birds, and we publish a peer-reviewed journal, *The Passenger Pigeon*, on bird research and issues in Wisconsin. WSO provides opportunities for all people to enjoy resident and migratory birds, while being a leading steward of, and ambassador for, Wisconsin birds. Birdwatching is a huge activity in our state. The US Fish and Wildlife Service estimates that over 1.6 million Wisconsinites enjoy watching birds at some level. (U.S. Fish and Wildlife Service 2011)

WSO has an active Conservation Committee that keeps our membership informed of important bird conservation issues, focusing on the state-wide level. These issues can affect bird populations directly or, indirectly, through habitat changes. We work to analyze the issues, provide expert advice, and help develop recommended actions to reduce potential impacts to Wisconsin birds.

The golf course proposed by Kohler here in Sheboygan County is a significant bird conservation issue that it warrants WSO'S concern.



Every spring and fall, tens of millions of migrating birds sweep through the Great Lakes region on their journeys between their breeding and wintering grounds. Because some of these birds may breed as far north as Greenland and the Arctic Ocean and many spend their winters as far south as Central or South America, seldom are these migration flights a one-shot deal; most are multiple-leg trips. To successfully make this journey they need spots, called stopover sites, that can provide them with critical food and shelter. Loss of stopover habitats poses an ongoing threat to migratory bird populations nationwide.

The Great Lakes region poses another challenge for migrating birds. The size of the lakes is a barrier to some migrating birds, while others will readily cross these large expanses. Those that do cross the lakes depend heavily on stopover sites along the shorelines. Birds often migrate at night, and at dawn will make their way towards land to find suitable stopover habitat in which to rest and refuel. Likewise, birds encountering bad weather while crossing the lake will also reverse direction and head for shorelines. Wisconsin birders themselves flock to the western shore of Lake Michigan during spring migration to see these flocks of migrants.

Prior to European settlement, the landscape along the Lake Michigan shoreline was dominated by northern or central hardwood forests, interspersed with a mixture of wetlands, and minor inclusions of other vegetative cover. Today, the landscape is dominated by extensive agricultural lands and human developments. The forest cover that remains is generally fragmented and scattered and housing developments have encroached on many of the remaining forest blocks. Those few undeveloped forest stands are the critical remnants of the migration stopover habitat that once was widespread in this region. The Kohler parcel is one of the few remaining large forest blocks with enough resources to support large numbers of migrants of many species through extended stopovers, which migratory bird biologists refer to as “full service hotels.” (Mehlman et al. 2005)

The DNR's *Ecological Landscapes of Wisconsin* publication says this about the lakeshore landscape in the Sheboygan area:

"The Lake Michigan shoreline is heavily used by migratory birds of many kinds, including waterfowl, loons, grebes, gulls, terns, shorebirds, raptors, and passerines. Many sites along the Lake Michigan shore are popular with birders because of the high diversity of birds and many rarities that can be observed there... Providing and maintaining a sufficient variety and abundance of the habitats needed by these birds is a priority conservation goal."

DNR's *Ecological Landscapes* publication goes on to say that one of the management needs for this lakeshore landscape is to:

"Work with private and public partners to identify and protect additional shoreline forests, as these habitats are in very short supply, public land is scarce, and bird use during migration periods is heavy. Reforestation of some areas along the Lake Michigan shoreline that are used as migratory stopover sites for land birds is generally desirable."

The area south of Sheboygan, including the state park lands, has been recognized by others as an important resource for migratory birds. It's been identified as an Important Bird Area, or IBA, a world-wide program in which Wisconsin participates. This area was recognized as an IBA due to the extensive use by birds as on-shore migratory stopover habitat and off-shore wintering waterfowl habitat. This area has also been identified by the Wisconsin Stopover Initiative as a Tier 1 area, the highest level of significance for migratory bird stopover habitat. (Grveles et al. 2011)

The golf course proposed by Kohler would result in a significant adverse change to the existing forest communities on its 247 acre site. WSO asks that the EIS for this project include a thorough examination of the role this parcel plays as stopover habitat. This examination should include the current condition and stopover habitat value of the Kohler parcel, the change that the proposed golf course would make to that habitat, and the regional significance of this area as critical stopover habitat in an already extensively developed landscape.

### **Potential Project Impacts to Breeding Rare Birds**

This section of our comments focuses on the potential effects of the proposed golf course on rare breeding birds, primarily rare forest birds. By rare birds, we mean state-listed threatened and endangered species, along with other birds identified in Wisconsin DNR's *Wildlife Action Plan* as Species of Greatest Conservation Need, or SGCN. The *Wildlife Action Plan* lists species as SGCN if they "have low or declining populations and are in need of conservation action."

We are hampered in reviewing this project's potential effects on rare birds by the protected nature of information on rare species. Exemptions in Wisconsin's Open Records law restricts public disclosure of information on the locations and populations of threatened and endangered species, and this information has been redacted in the Environmental Impact Report. Thus, WSO does not have access to information on the occurrence of those bird species that are of most interest to us or which may be at greatest risk from this proposal, but we were able to determine the listed bird species that are known to occur in area via the DNR's web-based Natural Heritage Inventory County and Township Tool, and the online database eBird.

According to eBird, 20 SGCN landbird species have been observed in the adjacent forests, shrublands, and grasslands of Kohler-Andrae State park that would be affected by this development. Based on the county-wide listing from the DNR's Natural Heritage Inventory database, there are four threatened forest songbird species, one threatened forest hawk, and one endangered shorebird that potentially could occur in the project area.

The Environmental Impact Report states in Section 2.1 that under the preferred design for the golf course, 50% of the forest cover will be removed, and Section 5.1.3 states that this loss will be irreversible. Figure ES-1 of the report shows that the remaining forest will not be a contiguous block, but will be highly fragmented by the fairways. It has been known since the 1980's that forest fragmentation is detrimental to many species of breeding forest birds, including SGCN species such as Wood Thrush and Hooded Warbler, both of which are found in the state park. One detrimental effect is the creation of edge habitat, where nest predators such as raccoons, skunks, possums, snakes, and invasive Brown-headed Cowbirds are more common than in deep woods. The nest success of breeding birds is reduced, the nests fail entirely, or the nests produce cowbird chicks instead the SGCN species. (Robinson et al. 1985) In addition, some forest-breeding birds are "area sensitive", meaning they require a certain size forest block in order to establish a viable territory and breed successfully. One example is the Ovenbird, which may be found singing in small woodland patches but not successfully breeding there.

The Environmental Impact Report states in section 4.4 that the forest cover remaining after the construction of the course will be comparable to that of the nearby residential developments. This will negatively impact breeding bird populations in the adjacent Kohler-Andrae State Park, in addition to the effects on the Kohler property itself. A recent study by the University of Wisconsin, Cornell Laboratory of Ornithology, and USDA Forest Service, currently in press in the *Journal of Ecological Applications* (Wood et al. 2015, in press), found that housing developments that are adjacent to protected lands reduce the number and abundance of species of greatest conservation need and other habitat specialists within the protected lands, although birds associated with human habitation, such as American Robins, increase. The Kohler (Black River) forest currently buffers Kohler-Andrae State Park from the effects of housing development to the north, but construction of the course and its support facilities (clubhouse, maintenance buildings, rest stations, cart barn, and parking lots) will act like other low-intensity development and affect the bird abundance and diversity in the state park.

The EIS DNR prepares on the Kohler project should include a thorough evaluation of the potential impacts to threatened, endangered, and other SGCN birds that breed in the area of Kohler's proposed golf course. We support the DNR's request for information on breeding and migratory bird surveys that may have been conducted as part of the Environmental Impact Report. We also strongly suggest that formal breeding and migratory bird surveys, following

established protocols, within the park and the Kohler forest will help define the species in greatest conservation need that are likely to be impacted by the permanent 50% loss of forest that will accompany the course construction. A formal survey will also suggest potential strategies to modify or mitigate the impact of the proposal if it is eventually approved. The Department's assessment should also include a review of the published literature on the habitat needs of the SGCN species that breed in or migrate through the area and the impact of the project on that habitat, including the quality of the remaining post-construction forest species composition, tree age diversity, ground cover, etc.

Finally, we urge the Department to thoroughly analyze the cumulative impact of this project on the entire landscape of forest and wetland bird habitat along this important migratory corridor, the western Lake Michigan shoreline, where few intact forests remain. The fragmentation of this forest, together with the past fragmentation of other habitats in the corridor, does not bode well for migratory birds.

Thank you for the opportunity to provide input into the scope of the EIS. Please contact me if you have any questions or if we can be of further assistance. I can be reached at (608) 335-2546 or at [jaegermj@charter.net](mailto:jaegermj@charter.net).

Sincerely,

[REDACTED]

[REDACTED] Vice President  
Wisconsin Society for Ornithology, Inc.

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Received Date : 19-Oct-2014

Accepted Date : 26-Jun-2015

Article type : Standard Paper

Editor: Richard Fuller

**Long-term avian community response to housing development at the boundary of US protected areas: effect size increases with time**

Running head: Refugia-benefit of protected areas lost

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This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/1365-2664.12492

10.1111/1365-2664.12492

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## Summary

1. Biodiversity conservation is a primary function of protected areas. However, protected areas also attract people, and therefore land use has intensified at the boundaries of these lands globally. In the USA, since the 1970s, housing growth at the boundaries (< 1 km) of protected areas has increased at a rate far higher than on more distant private lands. Here, we designed our analyses to address our central hypothesis that increasing housing density in and near protected areas will increasingly alter their avian communities.
2. We quantified the relationship between abundance and richness of protected area avian species of greatest conservation need, land-cover affiliates (e.g. species associated with natural land cover such as forest breeders), and synanthropes (e.g. species associated with humans) with housing density on the boundary of protected areas and on more distant private lands from 1970 to 2010 in three ecoregions of the USA. We accomplished this using linear mixed-model analyses, data from the U.S. Census Bureau and 90 routes of the North American Breeding Bird Survey.
3. Housing density at the boundary of protected areas tended to be strongly negatively related with the abundance and richness of species of greatest conservation need and land-cover affiliates (upwards of 88% of variance explained) and strongly positively related with synanthropes (upwards of 83% of variance explained). The effect size of these relationships increased in most cases from 1970 to 2010 and was greatest in the densely developed eastern forests. In the more sparsely populated West, we found similar, though weaker, associations.
4. Housing density on private lands more distant from protected areas had similar, but more muted negative effects.

5. *Synthesis and applications.* Our results illustrate that as housing density has increased along the boundary of protected areas, the conservation benefit of these lands has likely diminished. We urge conservation planners to prioritize the purchase of private land inholdings in order to maximize the extent of unfragmented natural lands within protected areas. Further, we strongly recommend that land use planners implement boundary management strategies to alter the pattern of human access to protected areas, cluster development to concentrate the footprint of rural housing, and establish conservation agreements through local land trusts to buffer protected areas from the effects of development along protected area boundaries. To maximize the conservation benefit of protected areas, we suggest that housing development should be restricted within 1 km of their boundaries.

**Key-words:** avian abundance, avian richness, BBS, inholding, private land, public land, species of greatest conservation need, synanthrope

### ***Introduction***

Land-use and land-cover change, human population growth, excessive resource use, and climate change are leading drivers of global biodiversity loss (Cincotta, Wisnewski & Engelman 2000; Jetz, Wilcove & Dobson 2007). To stem this loss, laws and regulations have been established to protect biodiversity and critical habitats. One of the most widespread – and arguably the most important – conservation action has been the establishment of protected areas (Gaston *et al.* 2008). Since the founding of Yellowstone National Park in the USA in 1872, protected areas have become the dominate strategy for biodiversity preservation with > 12% of

the global land surface having some type of protected status (Chape *et al.* 2005). However, protected areas also attract humans, and thus land use pressures, such as extraction (Defries *et al.* 2005) and settlement (Wade & Theobald 2009; Radeloff *et al.* 2010) have increased at the boundaries of protected areas throughout the world, often with deleterious effects on protected area conservation (e.g. Woodroffe & Ginsberg 1998; Brashares, Arcese, & Sam 2001).

Globally, land-use pressures at the boundaries of protected areas have greatly intensified since the midpoint of the 20<sup>th</sup> century (Radeloff *et al.* 2010; Laurance *et al.* 2012). For example, over the past 40 years in the USA, rural housing development in the amenity-rich areas associated with inholdings and protected area borders has greatly expanded owing to the phenomenon of ‘exurbanization’ (Wade & Theobald 2009; Radeloff *et al.* 2010). A particular concern with housing growth in and near protected areas in the USA is the intensity and frequency of this land-use pressure since the 1970s. For example, development within 1 km of protected areas has outpaced that on more distant private lands by upwards of 13% of the national average and there are predictions for an additional 17 million housing units to be built from the present to 2030 within 50 km of protected areas (Radeloff *et al.* 2010). Housing development can affect biodiversity by causing both habitat loss and fragmentation (Radeloff, Hammer & Stewart 2005; Piekielek & Hansen 2012), which in turn affects ecosystem processes such as animal migrations (Berger 2004), species dispersal (Fagan, Cantrell, & Cosner 1999), and breeding success (Hansen & Rotella 2002). Therefore, increases in housing development at the boundaries of protected areas threaten to erode their conservation benefit (Brown *et al.* 2014; Wood *et al.* 2014).

In a previous analysis, we determined that protected area avian communities do indeed covary with housing development; species of greatest conservation need showing negative relationships and synanthropes (i.e. native and non-native species associated with humans) showing positive relationships (Wood *et al.* 2014). However, this work was focused on a single year (2000), and provided only a static look at the link between housing density and protected area avian communities. Despite establishing a spatial association between housing development and patterns of protected area avian guild abundance and richness, how this relationship changed over time remained unclear. We investigated how increasing housing density along the boundaries of protected areas and on more distant private lands has affected avian communities in these protected areas. Quantifying this relationship over time is crucial for landscape planning and management purposes because the conservation implications, and their associated costs, will be very different if avian communities have some capacity for adaptation.

Our goal here was to quantify the strength of the relationship of housing density from 1970 to 2010 with protected area avian guild abundance and richness throughout the conterminous USA. Our central hypothesis was that as housing density in and near protected areas has risen in recent decades, it has increasingly altered the avian communities in these protected areas. Based on previous efforts (Wood *et al.* 2014), we predicted that if housing density increased from 1970 to 2010, we would detect increasingly negatively relationships for species of greatest conservation need and land-cover affiliates and increasingly positively relationships for synanthropic species. We had two objectives to address this. Specifically, we quantified: (i) housing density within, and on immediately adjacent private lands of protected areas, (hereafter referred to as housing density at the boundary) and (ii) on private lands more distant from protected area boundaries (hereafter referred to as housing density outside of protected areas)

from 1970 to 2010 versus the proportional abundance and proportional richness of different avian guilds, including a) species of greatest conservation need, b) land-cover affiliates (i.e. bird species associated with a dominant land cover type such as forest breeders), and c) synanthropes.

## *Materials and methods*

### *Study area*

Our study area included 12 Bird Conservation Regions spanning the conterminous USA, which we grouped into three broad ecoregions based on similar land cover composition and avian communities (Fig. 1). Bird Conservation Regions (BCRs) were delineated by the North American Bird Conservation Initiative and have similar climate, vegetation, land use, and avian communities (<http://www.nabci-us.org/bcrs.htm>). We analyzed three ecoregions (Fig. 1): (i) the Appalachian and Northwoods, which included the Boreal Hardwood Transition (BCR 12), the Atlantic Northern Forest (BCR 14), and the Appalachian Mountains (BCR 28); (ii) the Deserts, which included the Great Basin (BCR 9), Sonoran and Mojave Deserts (BCR 33), and the Chihuahuan Desert (BCR 35); and (iii) the Western Mountains and Valleys, which included the Northern Rockies (BCR 10), the Southern Rockies/Colorado Plateau (BCR 16), the Sierra Madre Occidental (BCR 34), the Northern Pacific Rainforest (BCR 5), the Sierra Nevada (BCR 15), and Coastal California (BCR 32).

### *Breeding Bird Survey data*

We gathered breeding bird count data from the North American Breeding Bird Survey (BBS, [Sauer, Hines, & Fallon 2011]). We removed BBS route-year data collected by first-year observers and route-year data collected during poor weather. For each BBS route, we used the

raw count data (abundance), and estimated species richness using COMDYN (Hines *et al.* 1999) to account for detectability issues common in avian surveys. We averaged both abundance and COMDYN-estimated richness (hereafter richness) within a five-year window bracketing each of the following five decadal time steps: 1970, 1980, 1990, 2000, and 2010. The five-year window included the two years before and after each time step. We choose the decadal time steps in order to match the US decadal census housing density data (see below). At the time of analysis, BBS data were not available for 2012. Thus, for the 2010 time step, we averaged bird abundance and richness data in a five-year window from 2007 to 2011.

When > 50% of a BBS route was within the boundaries of protected areas (see protected areas data), we included it in our sample of protected area boundary routes. We used this sampling design to quantify housing density on private-land inholdings and on lands immediately adjacent to protected areas. We only included BBS routes that were surveyed in all five decadal time steps so that we could use a repeated measures sampling design (see statistical analysis). We identified 45 BBS routes at the boundary of protected areas within the three ecoregions that met these criteria (Fig. 1), of which 13 were in the Appalachian and Northwoods region (average area of BBS route within protected area, 68%), 14 in the Deserts region (average 80% within protected area), and 18 in the Western Mountains and Valleys (average 70% within protected area).

Further, we were interested in the effect of housing outside protected areas (i.e. protected area borders or more distant private lands) on protected area avian communities. To measure this, we matched each protected-area BBS route with the nearest private-land BBS route (i.e. < 40% within the boundaries of any protected areas), and calculated the linear distance between pairs using the ‘near tool’ in ArcGIS 10.1 (ESRI California, USA 2012). We used a < 40%

threshold in order to capture housing density surrounding BBS routes that were located primarily on private lands neighboring protected areas, because we hypothesized that the broader modification of the landscape may impact protected area avian communities. Of the 45 private land routes in our analysis, 41 intersected the border of a protected area (see protected areas data), with an average of 23% of BBS route-area located within protected areas. The other four private-land BBS routes (14186, 69035, 72017, and 83184) were completely outside of protected areas. In order to scale the proximity-effect of private-land housing to protected areas, we divided the housing density of the ‘nearest neighbour’ private-land BBS route by the distance between route centroids. We performed this analysis to guard against overestimating the effects of distant high-density housing areas. In the Appalachian and Northwoods, the average distance between pairs was 30 km. In the Deserts, the average distance was 74 km, whereas in the Western Mountains and Valleys, the average distance was 61 km.

To understand how avian communities may be affected by housing development, and to scale the response variables among regions that vary greatly in avian species diversity, we calculated the proportional abundance and proportional richness of three avian guilds per ecoregion. These included (i) species of greatest conservation need (expected negative association with housing density, see Appendix S1 & S2 in Supporting Information), (ii) land-cover affiliates (expected negative association with housing density, Appendix S1, S2), and (iii) synanthropes (expected positive association with housing density, Appendix S1, S2). We considered 282 breeding bird species in all, excluding species that do not breed in our study regions, or are difficult to count with BBS methods (waterfowl, shorebirds, waterbirds, and raptors, Appendix S2). To calculate proportional abundance and proportional richness of an avian guild, we divided guild abundance or richness of each BBS route by the total abundance or

species richness of that route. We checked for correlation between pairs of avian response variables and found that the range of collinearity (absolute value of Spearman's rho) was  $|\rho| = 0.1 - 0.9$  and was strongest in the Appalachian and Northwoods. Nonetheless, we retained each guild for further analyses to understand the relationships of unique components of regional avian communities with the independent housing-density variables.

### *Protected areas data*

We used the USGS National Gap Analysis Program (GAP) Protected Area Database, version 1.2, released in April 2011, for protected areas boundary information, which demarcated private inholdings within the administrative boundaries of public lands (<http://gapanalysis.usgs.gov/padus/>). We grouped public lands by four protected area designations. GAP 1 lands have management plans in place to ensure natural processes are allowed or mimicked to maintain a natural state. These lands accounted for 4% of the area (i.e. the combined 400-m linear buffer surrounding BBS routes) of public-land BBS routes included in our study. GAP 2 lands have similar management plans as GAP 1 lands, except that infrequently used management practices, such as fire suppression, may affect the natural community. These lands accounted for 19% of the area of public-land BBS routes considered in our study. GAP 3 lands provide protection for federally endangered and threatened species, but are subject to resource extraction (e.g. mining) or recreation (e.g. off-road vehicle use). These lands accounted for 64% of the area of public-land BBS routes considered in our study. Most public-land private inholdings occur within U.S. Forest Service lands, and the majority of these are categorized as GAP 3. GAP 4 lands are publicly owned and protected from housing development, but have no known mandate for biodiversity protection. These accounted for 13%

of the area of public-land BBS routes considered in our study. The majority (87%) of public-land BBS routes under consideration in this study were located primarily (> 50% of each BBS route) in GAP 1 -3 lands. Three BBS routes in the Northern Rockies (53003, 53015, and 89007) were primarily (> 50% of each route) situated on Native American lands, which fall under GAP 4 status. However, we included these routes because they were adjacent to other public lands of our study, dominated by natural land cover (> 50% forest or grassland cover, NLCD 2001), and had the necessary bird data across the time series for our analysis. Housing density, which was our independent variable of interest (see below), is restricted on all of the four public lands categories. Further, conversion of natural land cover is restricted on all public lands of this analysis, except GAP 4 lands. Thus, we refer to all public lands as protected areas throughout the manuscript. We considered all lands not included within protected areas boundaries as private.

### *Housing density data*

We obtained housing density (hereafter referred to as housing) data, which includes permanent residences, seasonal housing, and vacation units, from the 2000 US decennial census. These data were processed at the partial block group level, which is the finest resolution unit for which the U.S. Census releases data on the year a housing unit was built (Hammer *et al.*, 2004). The average size for partial blocks throughout the conterminous USA is 2.45 km<sup>2</sup>, with rural partial block groups being larger, on average, than urban ones. We used housing backcasts calculated from the 2000 census data by Hammer *et al.* (2004) for 1970, 1980, and 1990 housing values. For 2010 housing values we used a housing projection calculated by Radeloff *et al.* (2010). We used the backcasting method because US Census data for our earlier time periods are only available at the county level (Hammer *et al.* 2004; Radeloff *et al.* 2005). We summarized

mean housing at the boundary of 400 m of BBS routes using the tool 'zonal stats' in ArcGIS

10.1. Housing at the boundary and outside protected areas was only moderately correlated from 1970 to 2010 in the Appalachian and Northwoods ( $\rho = 0.53$  to  $0.63$ ), the Deserts ( $\rho = 0.33$  to  $0.47$ ), and the Western Mountains and Valleys ( $\rho = 0.53$  to  $0.57$ ). Because the correlations were not strong in any region, we included both variables in analyses to understand effects of local and regional housing development on protected area avian community structure.

### *Statistical analysis*

To quantify the relationship between housing either at the boundary or outside protected areas and the avian community within protected areas, we fit linear mixed-effects models. We fit separate models for each guild and region, using either proportional abundance or proportional richness as the response. In each model, we included the fixed effects of either housing at the boundary or housing-outside protected areas, time step as a repeated categorical variable, the interaction between housing and time step, and a random effect of BBS route. Our models thus fitted a different slope and intercept to the relationship between the avian community and chosen housing measure for each time step, while additionally allowing for a random shift in intercept due to BBS route. We designed our analysis in this way to address our central hypothesis that increasing housing density in and near protected areas will show increasingly negative relationships on species of greatest conservation need and land-cover affiliates (negative statistical interactions over time) and increasingly positive relationships on synanthropic species (positive statistical interactions over time). The number of observations (i.e. BBS routes within protected areas) was low in all ecoregions so we fitted a separate model for housing at the boundary or outside protected areas, rather than combining both fixed-effects in the same model.

We used a *t*-statistic value of 2.0 to assess variable significance of the fixed effect parameters, and a *F*-statistic value of 2.5, derived from an ANOVA test, to identify significant interactions among time-steps. We evaluated pair-wise comparisons of slopes between time-steps using a Markov-chain Monte Carlo simulation with a Bonferroni adjustment of the alpha value ( $\alpha = 0.05/10 = 0.005$ ). We fit linear mixed-effects models using the *lme4* package (Bates et al. 2012), and the Markov-chain Monte Carlo simulation using the *languageR* package (Baayen 2011), in the R statistical software package 2.8.2 (R Core Team 2013).

## **Results**

Housing increased both at the boundary and outside protected areas in all ecoregions from 1970 to 2010 (Fig. 2). Housing at the boundary of protected areas was highest in the Appalachian and Northwoods and lowest in the Deserts and Western Mountains and Valleys (Fig. 2). The pattern was similar for housing outside protected areas, except in the Western Mountains and Valleys, where housing spiked from 1980 to 2010. Ecoregions with the greatest magnitude of relative housing growth at the boundary of protected areas included the Western Mountains and Valleys (129% increase from 1970 to 2010) and the Deserts (83% increase, Fig. 2). Relative housing growth at the boundary of protected areas within the Appalachian and Northwoods was not as strong (43% increase, Fig. 2). Absolute housing growth at the boundary of protected areas (summarized within 400 m of BBS routes) was also highest in the Western Mountains and Valleys (40 units), followed by the Appalachian and Northwoods (22 units), and the Deserts (20 units). The greatest magnitude of relative housing growth outside protected areas occurred again in the Western Mountains and Valleys (265% increase) and the Deserts (142% increase, Fig. 2). Housing outside protected areas in the Appalachians and Northwoods was high in all time steps,

but the magnitude of relative growth was less (62% increase, Fig. 2). Absolute growth outside protected areas was again highest in the Western Mountains and Valleys (69 units), followed by the Appalachian and Northwoods (46 units), and the Deserts (32 units).

The proportional abundance and proportional richness of both species of greatest conservation need and land-cover affiliates were negatively associated with housing at the boundary of protected areas in all ecoregions in all but three time steps (Deserts, proportional richness, species of greatest conservation need, 1980–2000, Fig. 3). These relationships were generally strongest and most consistent in the Appalachian and Northwoods, followed by the Deserts and then by Western Mountains and Valleys. The proportional abundance and proportional richness of species of greatest conservation need and land-cover affiliates was also negatively associated with housing outside protected areas in the Appalachian and Northwoods and Deserts. We found similar patterns for the proportional abundance of species of greatest conservation need in the Western Mountains and Valleys, but the negative association was further reduced relative to the other ecoregions (Fig. 3). Housing outside protected areas was positively associated with the proportional abundance and richness of land-cover affiliates in the Western Mountains and Valleys, which was in contrast to the other ecoregions. The proportional abundance and proportional richness of synanthropes tended to be positively associated with housing at the boundary of protected areas in all ecoregions (the lone exceptions being proportional richness; 1970 and 1980; in the Deserts), with the strongest relationships again in the Appalachian and Northwoods and the Deserts (Fig. 3). This same guild was positively associated with housing outside protected areas in the Appalachian and Northwoods, with a general trend of an increasingly positive relationship from 1970 to 2010 (Fig. 3).

We found significant negative interactions between the slope of the relationship of species of greatest conservation need (proportional abundance and proportional richness) and land-cover affiliates (proportional richness), and significant positive interactions for synanthropes (proportional abundance) with housing at the boundary of protected areas from 1970 to 2010 in the Appalachians and Northwoods (Fig. 3). We did not find the same significant interactions in other ecoregions, possibly because housing was either comparatively lower or located further away from protected areas, therefore likely muting the effects. Nonetheless, the increasingly significant interactions in the Appalachians and Northwoods reflect the pattern in which the relationship between the proportional abundance of species of greatest conservation need and housing at the boundary of protected areas became progressively, negatively, steeper whereas the relationship between the proportional abundance of synanthropes and housing at the boundary of protected areas became progressively, positively, steeper from 1970 to 2010 (Fig. 4). An explanation for these trends is that as housing increased in every decade along the boundary of individual protected area BBS routes from 1970 to 2010, the proportional abundance of species of greatest conservation need declined and synanthropes increased at an increasing rate (Fig. 4). On the other hand, as housing remained low on the boundary of protected area BBS routes from 1970 to 2010, the proportional abundance of the avian guilds remained similar (Fig. 4).

## *Discussion*

Our central hypothesis was that as housing density in and near protected areas has risen in recent decades, it has increasingly altered the avian communities in these protected areas. Specifically, we predicted that rising housing density from 1970 to 2010 resulted in increasingly negative relationships for species of greatest conservation need and land-cover affiliates and

increasingly positive relationships for synanthropic species. Indeed, we found that from 1970 to 2010, increasing housing density at the boundary of protected areas had strong negative relationships with the abundance and richness of avian species of greatest conservation need and land-cover affiliates, whereas this relationship was positive for synanthropes. We also found that increased housing outside protected areas was negatively related with the abundance and richness of avian species of greatest conservation need in the Appalachian and Northwoods and Desert ecoregions. These relationships were, however, always weaker than the effects of housing at the boundary of protected areas. Although we were only able to look at a small percentage of individual BBS routes for our study (45 total routes), our results provide evidence that the increase in housing density in and near protected areas has had increasingly negative impacts for the biodiversity conservation potential of these lands.

Housing development affects biodiversity across broad spatial-temporal scales (Hansen *et al.* 2005; Suarez-Rubio *et al.* 2013). Locally, housing development alters avian communities (Marzluff 2001; Bock, Jones & Bock 2008; Suarez-Rubio, Leimgruber & Renner 2010), negatively impacts breeding success (Hansen & Rotella 2002), and introduces non-native predatory pets (e.g. cats, [Lepczyk, Mertig & Liu 2004]), and invasive species (Gavier-Pizarro *et al.* 2010). Regionally, housing development is associated with road development (Hawbaker *et al.* 2005), fragmentation and habitat loss (Radeloff, Hammer & Stewart 2005), and the homogenization of landscapes, which in turn negatively affects biological diversity (McKinney 2002, 2006; Pidgeon *et al.* 2007, 2014). We build on the previous studies by illustrating that as housing density has risen from 1970 to 2010 in and near protected areas, this has increasingly altered avian communities (both abundance and richness) within these lands in many of the ecoregions of the USA. Thus, an increasing effect size has frequently accompanied the rise in

rural housing development. More broadly, our findings support the notion that intensifying land use at the boundaries of protected areas likely influences biodiversity within their boundaries (Woodroffe & Ginsberg 1998; Brashares, Arcese, & Sam 2001).

A central goal of protected area management is to “protect natural biodiversity along with its underlying ecological structure and supporting environmental process...” (Dudley 2008). Protected areas in the USA have greater amounts of natural land cover (e.g. forest) than surrounding private lands, have high occurrences of migratory birds (La Sorte *et al.* 2015), and support higher abundance of breeding species of greatest conservation need and land-cover affiliates (Wood *et al.* 2014). Synanthropes, which include widespread, adaptable species (e.g. American Robin, *Turdus migratorius*) have expanding population sizes (Sauer, Hines & Fallon 2011) and are most likely to thrive near housing developments (Hansen & Rotella 2002). On the other hand, endemic species and habitat specialists are declining (e.g. Kentucky Warbler, *Geothlypis formosa*, [Sauer, Hines, & Fallon 2011]), and are most at-risk due to housing development in and near protected areas. Protected areas in the USA provide habitat heterogeneity across broad spatial extents and largely limit development within their boundaries (Wood *et al.* 2014). Nonetheless, even marginal increases in housing development pose a threat to the amount of natural land cover, and in turn, the structure and diversity of protected area avian communities (Wood *et al.* 2014). Additionally, even if protected areas have high levels of protection for biodiversity within their boundaries, they are still susceptible to outside land use pressures that threaten their conservation potential (Piekielek and Hansen 2012), and development can occur on private inholdings within protected areas (Radeloff *et al.*, 2010). We extend the previous findings of Wood *et al.* (2014) by documenting the increasingly negative relationship between past increases in housing development at the boundary of protected areas

and avian communities within these protected areas. Here we show the increasing magnitude of these effects in the densely populated eastern USA, with no evidence that bird assemblages are adapting to housing development trends, and hints at the beginning of a possible degradation of avian communities in protected areas in the West. Understanding the nature and strength of this relationship was not possible with the sampling design employed by Wood *et al.* (2014) because prior work analyzed data for a single year only. Further, we found that as housing development has risen on more distant private lands, there were similar, albeit, more muted effects on protected areas avian communities. These findings call to attention the continuing need for protection of more distant private lands to ensure the ecological integrity of protected areas. Based on our results, we provide further information necessary for the management of housing development within and on surrounding lands of US protected areas.

Stemming the effects of housing development on protected-area biodiversity requires targeted conservation actions. The most important management implication from our study reflects the urgent need to limit housing development on privately owned lands within the boundaries of protected areas (i.e. inholdings) and on lands immediately adjacent to protected areas. We urge conservation planners to prioritize buying and conserving inholdings in order to maximize the extent of unfragmented natural lands within protected areas. Our results suggest that even modest housing growth on inholdings of protected areas will negatively impact species of greatest conservation need, and positively affect synanthropes. Further, our findings imply there is no evidence that bird assemblages are adapting to this land-use intensification, which we suggest indicates possible lag effects of housing development on protected area avian communities. The increasing strength of these effects was only detectable over the four-decade period of our study, and therefore our analysis revealed that identifying patterns such as we

Accepted Article

have done here are likely not possible from shorter-term studies (e.g. Wood *et al.* 2014). While rates of relative housing growth on the boundaries of protected areas are high in the western USA, housing density is still comparatively low there. We recommend protected areas in the West, especially where there are substantial inholdings, or plans for development, should be a priority for conservation efforts. Further, a possible tangential benefit to managing housing growth in the wildland-urban interface throughout the West could be reduced economic impacts tied to fuel-wood management and firefighting costs associated with protection of structures. There are far fewer protected areas in the eastern USA compared with the West. That is why we suggest that conservation planners focus efforts on purchasing the remaining inholdings in protected areas in the East.

Furthermore, our results suggest that housing development outside protected areas will likely also negatively affect the conservation benefit of these lands. The most critical step to minimize this effect is to constrain and manage the extent of additional housing developments on neighboring lands of protected areas. Housing growth within 1 km of protected areas has far outpaced the national average (Radeloff *et al.* 2010). While our study was not designed to address the conservation effectiveness of varying buffer-extents of protected areas, we suggest that because housing development has been so strong within 1 km of these lands, development within this buffer should be limited. Our recommendation is precautionary because once homes are built it is not possible to reverse any lasting effects on protected area biodiversity. A recent review of the effects of residential development on biodiversity revealed inconclusive support for mechanisms (e.g. density, extent) in which patterns of housing development affect natural systems (Pejchar *et al.* 2015). Nonetheless, our work here highlights the urgent need to manage

housing developments on private lands adjacent to protected areas in order to maximize conservation of avian communities within protected areas. We recommend that land use planners consider and implement alternative development strategies such as conservation development (Milder 2007; Pejchar *et al.* 2007; Reed, Hilty & Theobald 2014), clustered development (Odell, Theobald & Knight 2003; Vaughn *et al.* 2014), and conservation easements (Rissman *et al.* 2007) in order to conserve natural and unfragmented habitats on private lands that can supplement protected areas in maintaining ecological processes such as migration (Berger 2004). Further, we suggest that local planning jurisdictions attempt to anticipate where future development may occur and to use existing, or pass new, ordinances that incentivize development designs that conservation scientists believe will minimize rural development impacts (see, Reed, Hilty & Theobald 2014). Only after putting such alternative development strategies into practice will we begin to establish a growing set of examples from which to adaptively confirm or refute these expectations. Also, we strongly recommend that land use planners implement boundary management strategies to alter the pattern of human access to protected areas. In addition to proactive development planning, we urge protected area managers to engage the public and private landowners in outreach and education. Such outreach should focus on direct human-wildlife conflicts, indirect conflicts (e.g. pet management), and ways to minimize threats (i.e. invasive plant species) that contribute to the anthropogenic footprint.

### ***Acknowledgments***

We gratefully acknowledge support for this research by the U.S. Forest Service Rocky Mountain Research Station, and the NASA Biodiversity Program. We thank the volunteers who have collected Breeding Bird Survey and housing census data, which have made this study possible.

We thank M. Whittingham, R. Fuller, and two anonymous reviewers for their very helpful comments to improve our manuscript. All authors declare no conflicts of interest with this work.

### ***Data accessibility***

The following data are available from Dryad Digital Repository: doi:10.5061/dryad.c2ss6 (Wood *et al.* 2015).

- Breeding Bird Survey routes.
- Housing Density backcast and forecast data summarized in 400 m buffers from associated inside and outside protected areas Breeding Bird Survey routes.
- National Land Cover Database (2001) proportional land cover summaries in 400 m buffers of inside protected areas Breeding Birds Survey routes.

Proportional richness and proportional abundance of North America Breeding Bird guilds.

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### **Supporting Information**

Additional Supporting Information may be found in the online version of this article:

Appendix S1: Additional materials and methods.

Appendix S2: BBS code, common, and scientific name of 282 bird species from which we created eight bird species groups.

Figure 1. Distribution of 45 North American Breeding Bird Survey (BBS) route centroids located on the boundary of protected areas (red dots) and their associated outside protected area ‘nearest neighbour’ BBS route centroid (black dots). We categorized three ecoregions by a combination of similar Bird Conservation Regions. The Appalachian and Northwoods were composed of the Boreal Hardwood Transition (BCR 12), Northern Atlantic Forest (BCR 14), and the Appalachian Mountains (BCR 28). The Deserts were composed of the Great Basin (BCR 9), Sonoran and Mojave Deserts (BCR 33), and the Chihuahuan Desert (BCR 35), and the Western Mountains and Valleys were composed of the Northern Rockies (BCR 10), the Southern Rockies/Colorado Plateau (BCR 16), the Sierra Madre Occidental (BCR 34), the Northern Pacific Rainforest (BCR 5), the Sierra Nevada (BCR 15), and Coastal California (BCR 32). BBS routes within protected

areas were distributed among four protected area treatments: GAP 1-4. The darker (GAP 1) to lighter (GAP 4) color gradient represents a higher to lower level of protection.

Figure 2. Mean summary  $\pm$  standard error of housing density within and outside protected areas, among three ecoregions of the USA, across five decadal time steps.

Figure 3. Coefficient values, calculated from a linear mixed-model analysis, of the relationship among the proportional abundance and proportional richness of three avian guilds, including Species of Greatest Conservation Need (SGCN), land-cover affiliates, and synanthropes, and the fixed effects of housing at the boundary or outside protected areas (PA) in three ecoregions of the USA. Coefficient values in bolded color indicate significant slope ( $t$ -value  $\geq 2.0$ ). Coefficient values with same letter (A-B) indicate slopes between time steps do not significantly differ ( $F$ -statistic  $\geq 2.5$ ). Pair-wise comparisons of slopes between time-steps were evaluated using a Markov-chain Monte Carlo simulation with a Bonferroni adjustment of the critical alpha value ( $\alpha = 0.05/10 = 0.005$ ).

Figure 4. Scatterplot and associated least-squares fitted line for the proportional abundance of species of greatest conservation need (SGCN), land-cover affiliates, and synanthropes with housing density (Housing) at the boundary of protected areas throughout the Appalachian and Northwoods region across five decadal time steps. Housing density was transformed on the natural logarithmic scale for analysis purposes, and the housing density values on the x-axis represent the exponential value (i.e. back-transform) of the transformed data (-0.5, 0, 0.5, 1, 1.5).

Individual North American Breeding Bird Survey (BBS) routes are identified by unique color classification. Lines with different colors (black or gray) or patterns (solid or dashed) indicate a significant interaction of slopes among time steps based on a linear-mixed model analysis.

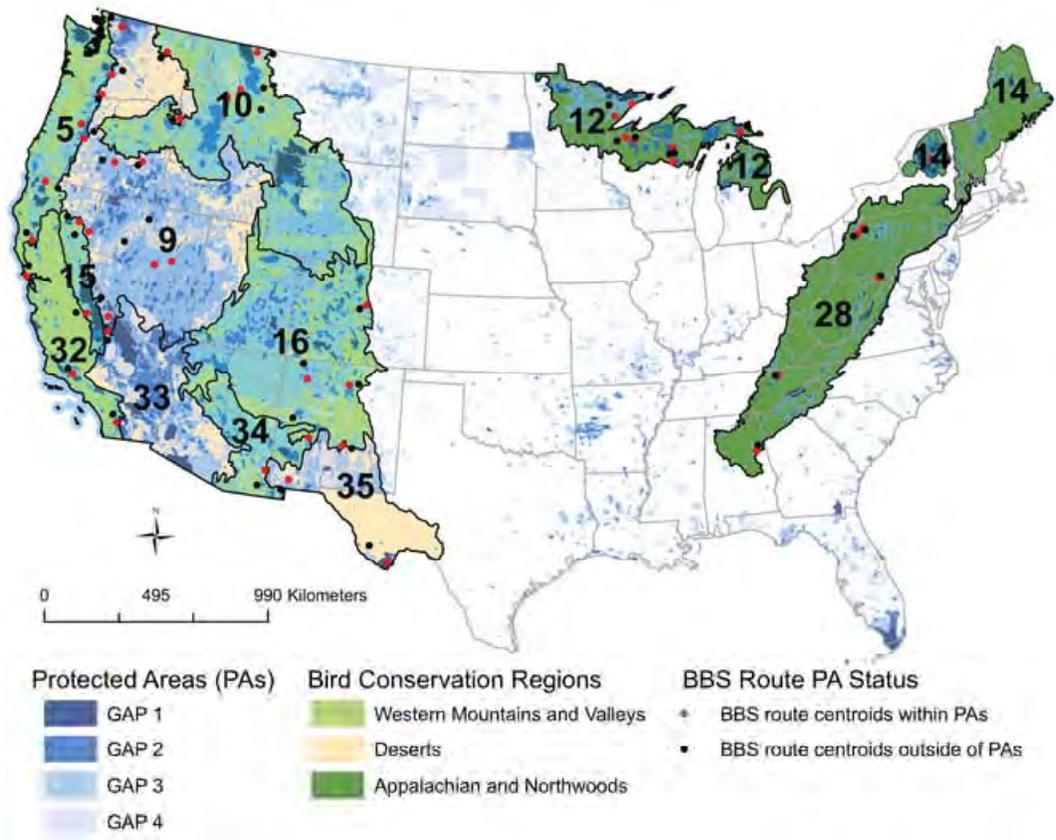


Figure 1

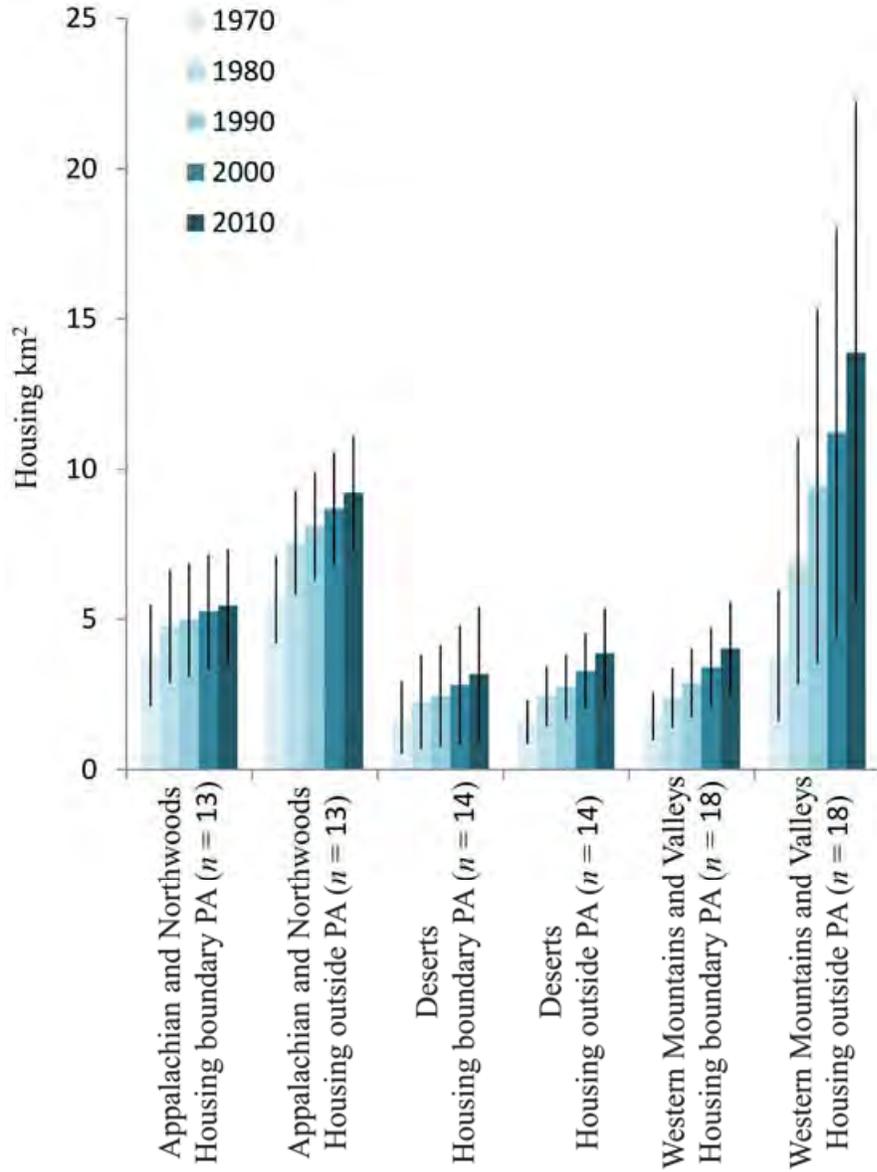


Figure 2

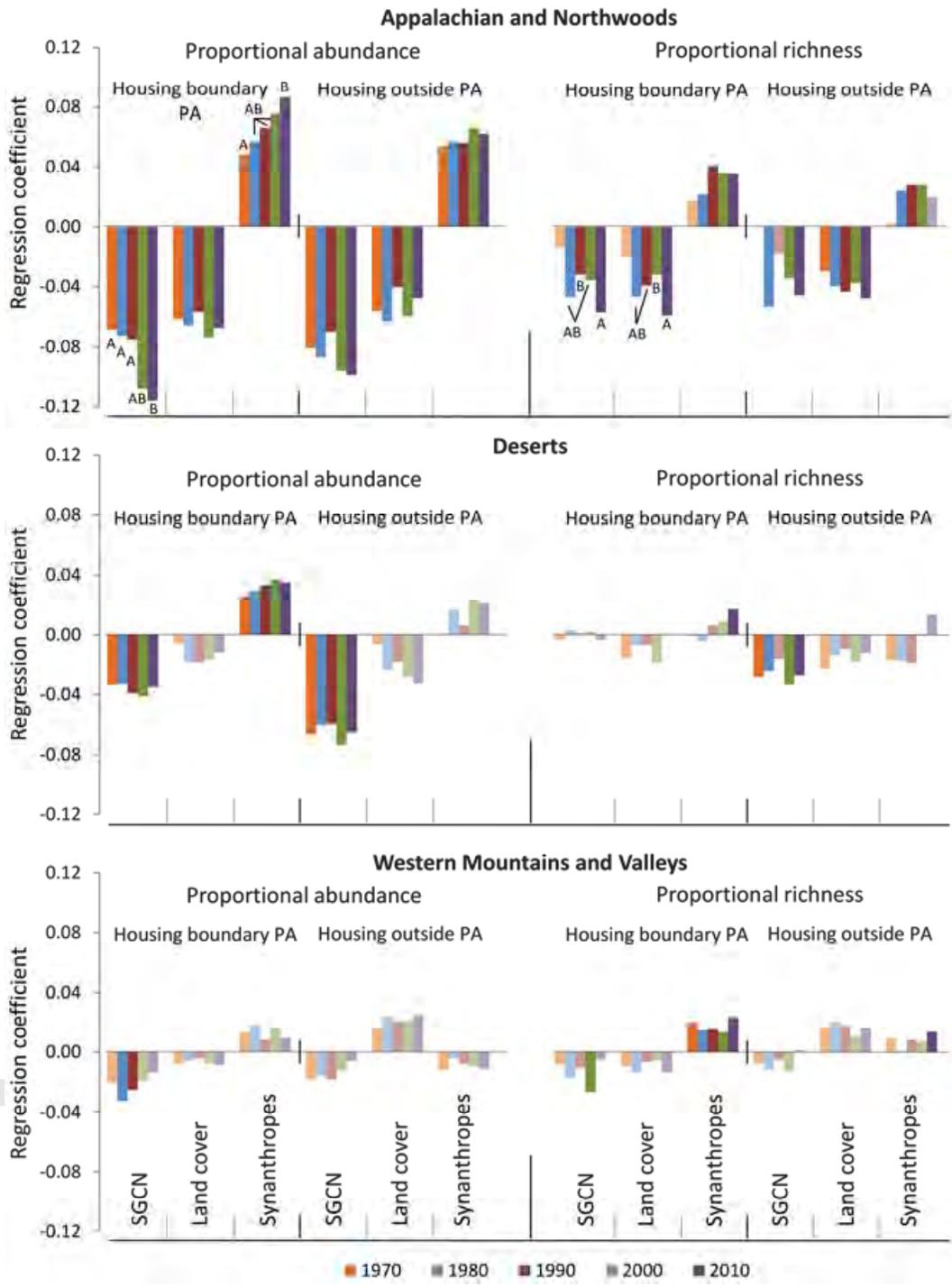


Figure 3

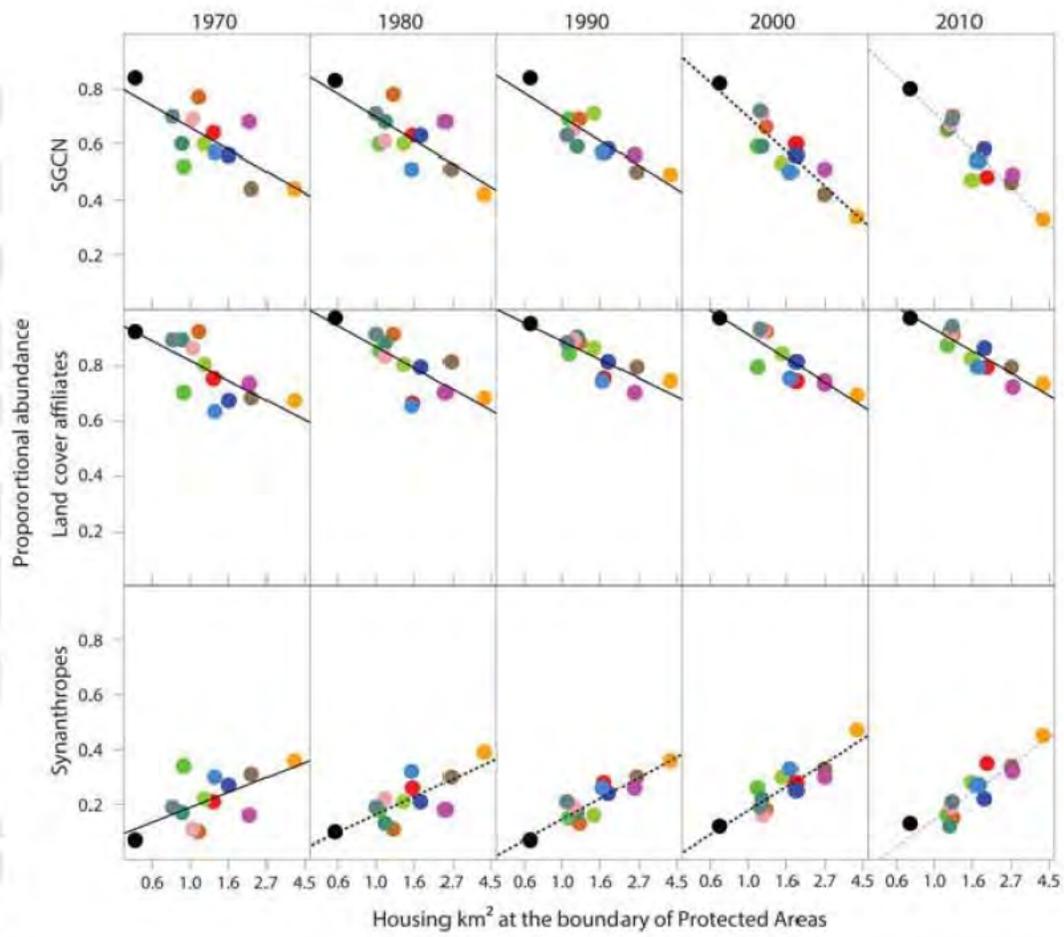


Figure 4

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**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 5:21 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler Golf Course - Town of Wilson

Good Afternoon,

After being bombarded with all of the negative comments/publicity regarding the proposed golf course in the Town of Wilson, I wanted to express my thoughts in support of this golf course and let you know that not everyone living in Black River is against the development of this course.

I've been a resident of the Black River area for nearly my entire life, having grown up on North Evergreen Drive and moving to the South 12<sup>th</sup> Street area after I married. As kids we were fortunate to have played, hiked and investigated many of the wooded areas in the Black River area including part of the area now being proposed for the golf course. I will agree that although the forests are magnificent, I am also aware that this property is currently privately-owned. The "Friends of the Black River Forest" are angry because what they deem to be their "personal park" as they know it, will disappear. As a result they have made several accusations that I would argue to simply be false. They complain of the "deforestation of 247 acres." If Mr. Kohler decided to build a home on his property, wouldn't he have the right to take down trees or change the landscaping, without first obtaining the permission of his neighbors?

Living near Riverdale golf course (for the past 23 years), I have never been in fear of my well running dry or being contaminated with pesticides used on the course itself. Additionally, I can attest to the fact that the Riverdale golf course has never affected the abundance of wildlife in the area. Deer continue to munch on my shrubs and plants, turkeys march through my yard regularly, and we've actually seen a return of hawks, eagles, and turkey vultures within the past several years. Additionally, if golf courses are deemed as terrible neighbors, why then do people pay a premium price to live on property adjacent to golf courses (The Bull, Riverdale, Town & Country, etc.)?

I've found Mr. Kohler and the Kohler Company to be good, responsible neighbors of the community. We hold a land membership to River Wildlife (property owned by the Kohler Company) and my husband frequently walks the trails with our dog. During the winter months, when Blackwolf Run is closed (the Kohler Company golf course which borders River Wildlife), he has walked our dog on the golf cart paths (because of the deep snow in the fields) and has never been told that he was trespassing or "shooed" off the property.

Having this golf course in the Town of Wilson will be a win/win/win situation for all parties. Obviously it's a huge win for the Kohler Company, but it will bring many additional jobs to the area and it will certainly bring more tourists to the area, resulting in more \$\$ spent in the community at area restaurants, retail shops, hotels, etc.

I look forward to seeing the plans for this course move forward. In everything that I have read or observed, I have no doubt that the Kohler Company will follow the letter of the law and will pay heed to the concerns of the citizens of the Town of Wilson when developing and building the course.

Sincerely,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 23, 2015 3:20 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler Golf Course

It is difficult to understand the full scope of the impacts, especially on rare plants and plant communities, because of the amount of text that is redacted. If it is private land, why not allow the public to see the actual names of these rare plants, animals and plant communities??

You should address the precedent that allowing public land to be used for a private enterprise/development for the wealthy.

Were there any deed restrictions on the original land transfer to the state that may restrict this type of use or transfer?

The environmental report indicates that ~ 50% of the forested plant communities will be removed for the golf course development and your letter to the applicants ask them to address several secondary impacts from this large scale change in the environment. In addition I would suggest the following be addressed:

- On page 40 and 48, among other areas this impact is discussed and the suggestion made that wildlife may be displaced. The concept of carrying capacity would counter that w/ the argument that the habitat that they might be displaced to is already fully occupied by the species being displaced. Just conclude that this habitat and its occupants will be lost/gone.
- Larger blocks of contiguous forested habitat along the Lake Michigan shoreline is pretty rare and is important to both migratory and resident/breeding birds.
- The environmental report references other golf courses in Sheboygan County that are owned by the Kohler Company as examples of how they do a good job of management. Is it then relevant to consider their (Kohler Company) insistence that no trees be removed on their land along the Sheboygan River to further characterize and/or remove contaminated sediments (PCBs) because they didn't want to disturb forested habitat in the floodplains. I guess developing a golf course is more important than removing contaminants from the river corridor??
- As indicated in the report, there is a fairly large deer population in the area and they will likely continue to have an impact on their efforts to manage plant communities, including invasive plants. There may well be a need for some type of deer population management plan be implemented in order for them to accomplish their plant management goals & that should be at least mentioned in the EIS.

Good luck w/ this EIS. I don't envy you your job on this one.

Sincerely,

[REDACTED]  
Plymouth

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**From:** [REDACTED]  
**Sent:** Monday, July 20, 2015 6:59 AM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler golf course

Dear DNR representatives:

Our family's cottage at 610 Beach Park Lane is about 700 feet south of the proposed 16<sup>th</sup> fairway and our access to the cottage is through the entrance to Kohler-Andrae State Park. We are the "private parcel" on the materials provided before the UW-Sheboygan forum on July 14. I would like to address just two of the shortcomings of the most recent plan, the impact on water availability and the location of the entrance to the proposed course.

An insurance fund would not compensate people if the water runs out as it did for some property owners near Whistling Straights. My family often entertains at our cottage – if the water runs out when we or any of our neighbors to the north of the proposed course have a house full of guests, what good is an insurance policy? How will campers or day visitors to Kohler-Andrae State Park be compensated if there is no running water? As you know, "showers, flush toilet and laundry facilities are available in the family campground" (per the Kohler-Andrae/DNR web-site).

Insurance claims periods are often long and insurance funds themselves can run dry. Would it take a month to process a claim and then dig a new well? Will the insurance fund or Kohler pay for us and our guests to stay at the American Club, for each day or part of a day when we have no water? If the course is going to use wells, rather than water straight from the lake which was a plan mentioned by Kohler representatives at a meeting last year, the hydrology must be investigated thoroughly and relief provided to people with shallow wells before Kohler builds his course. The public needs an unconditional opinion from a licensed hydrologist that residents' water source will not be interrupted – and there must be recourse against Kohler himself if the wells nevertheless run dry.

Here is another quote from your web-site:

Water resources are the foundation for Wisconsin's economy, environment and quality of life. Managing, conserving and restoring them for the benefit of Wisconsin citizens now and in the future is a big job, and one that DNR staff share with local governments, citizens and businesses.

As to the entrance, entering off County V/12<sup>th</sup> Street at a spot where there are no driveways and no public hiking trails that would be disrupted is far better than coming through the park. The busy times for golfers are the exact times when the park is most busy. The park was at full capacity over the week-end of July 4<sup>th</sup>. Imagine what it will be like if and when Kohler lands a Major, his stated goal. The U.S. Open is in June, and the PGA in August. How are hundreds of thousands of spectators going to get into the course, and what will that do to traffic on roads used by campers at Kohler-Andrae and used by my family and guests to get to our cottage?

We were guaranteed access to our property by the DNR when it moved the entrance to the park from the south and closed and then destroyed the old V Road east of the "new" entrance to the park, which had been our public access. We cannot be made to wait in lines created by golf professionals or tournament spectators – that is not what we agreed. The entrance should be moved to a spot along the V Road (12<sup>th</sup> Street) that will have as little impact on any hiking trails as possible. If there is nowhere to put the entrance that does not dissect hiking trails, which seems unlikely, let Kohler build an underpass or overpass for any hikers to get past his driveway, or use stop signs and caution signs where the trail crosses his driveway. It appears that the entrance off 12<sup>th</sup> Street could easily be south of the current parking lot and trail head(s). Or, north of the parking lot for that matter. A quick visual drive-by will confirm that this is plausible and is better

than tying up the park entrance that my family and our guests use for the access to our cottage, and obviously better for the public using Kohler-Andrae State Park – who as you know pay a fee to do so.

Focusing on these two points does not reflect a lack of concern for the opinions of, as I recall, two professional ornithologists, a geologist, a hydraulics engineer, various people with environmental credentials, and all the homeowners/taxpayers from Black River that were voiced at UW-Sheboygan on July 14, and in other venues, much less the other deleterious impacts that a golf course would have on the Black River forest and surrounding DNR-owned wilderness areas and wildlife refuges.



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**From:** [REDACTED]  
**Sent:** Sunday, July 12, 2015 1:11 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler golf course

I'm interested in the Black River watershed will you be asking questions on the run off of water threw sewer pipes into this waterway. I fish the Sheboygan River in Kohler every year and see a lot of runoff from Black Wolf Run. Are these sewers being checked for pesticides and chemicals they put down. Would this be done at the new course. Will they tell you how many and size of the drains. Thank You [REDACTED]

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**From:** [REDACTED]  
**Sent:** Saturday, July 11, 2015 6:35 AM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler golf course

Dear Jay

I as a neighbor of Whistling Straights . I could not ask for a better one!  
It's a remarkable place . I've lived here all my life and watched it grow.  
They are remarkable stewards of the land , leaders in going green respectful to nature ,wildlife,and there surroundings.

I challenge all businesses to be as conscious about the environment as well as they are.  
Some come close . I just wish more would be as active.

This project will bring the world to our area . What a gift to the community!, I just do not see any negative impact here.

They exceed expectations at every turn and have a record of that.  
This will open a beautiful area for all to enjoy where now they cannot access it.  
We need to live in harmony with our surroundings .if you could introduce a group to me that exceeds there efforts on this . I would like to meet them.

This has been on my mind and I have listened to those who oppose it .  
It is my view to encourage this endeavor.

Respectfully  
[REDACTED]  
Sheboygan County Supervisor

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**From:** [REDACTED]  
**Sent:** Friday, July 10, 2015 8:17 AM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler Golf Course

July 10 2015

To DNR Kohler Golf Course Committee:

I am in favor of the golf course being built in Black River . I feel this is going to be a economic plus for Sheboygan and the surrounding area. It has become apparent that some in the area feel that their rights are being encroached on, but this piece of land that is privately held. Kohler Company offered this land to the State but it was rejected. This land is not going to be taken away, but improved where more people can appreciate it. Let's thank the Kohlers for what they do for all of the Community and State. Instead of fighting to oppose this, work with them to make it a good fit for everyone.

Sincerely

[REDACTED]  
Town of Wilson resident

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**From:** [REDACTED]  
**Sent:** Wednesday, June 24, 2015 2:53 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler golf Course

FYI the Town Wilson-is referring to this property as the Black River Forest which is wrong. My husband and I have owned property on Black River for 20 years and I have never heard of it referred to as Black River Forest until Kohler wanted to build a golf Course. It was called the Black River area. I was told by the State Sheboygan County has no Forestland.  
Regards Cathy Schnur

Sent from my iPhone

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**From:** [REDACTED]  
**Sent:** Thursday, July 16, 2015 8:10 AM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler Golf Course in Black River

I am sorry I could not attend the meeting in Black River. I would like to go on record to say that I vehemently oppose this development. We have precious few natural resources to protect. I hope and pray the community can rally against Kohler Company.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 16, 2015 3:41 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler Golf Course Proposal

I wish to thank the Wisconsin DNR for holding the recent public input session on the proposed Kohler golf course in Town Wilson. While I did not speak at this listening session on July 14th, I would like to make the following comments:

I respect any landowner's right to do what they wish on their own property within the limitations of local and state laws. The Kohler Company appears to have always been cognizant of local residents concerns and done what's best for the land they have developed.

As a resident of the Timberlake subdivision located immediately north of the proposed golf course, I do have some concerns. I have resided in this subdivision for twenty-five years. I am aware of a very thin layer of top soil that covers this area. One only needs to dig down four to six inches on my lot and you will hit what can only be described as white beach sand. I am surprised at the number and variety of trees (some more than 100 years old) and shrubs that do grow on my lot. This layer of sand has been described as varying from twenty to fifty feet thick before one would encounter red clay. If Kohler should develop this area for a golf course, how do they propose to create the conditions to support the turf grass typically seen on golf courses? Lacking any substantial layer of top soil, will it require above average applications of fertilizers? Once any fertilizer application leaches into the sand layer, where does it go? Even though the land parcel being considered measures 247 acres, it is bounded on one side by Lake Michigan and on the other by Black River which itself eventually empties into Lake Michigan.

During my twenty-five year residency in the Black River area, I have observed "inter-dunal" wet lands come and go with the changing rain falls over the years and with variations in the level of Lake Michigan. I am not a hydrologist, but my observations suggest that in years when these wet lands exist into the dryer summer months, Lake Michigan levels have been relatively high as they are this year. In those years when the lake levels are lower, these areas pretty much dry up by mid summer suggesting that the lake level affects the ground water levels within the wooded areas adjacent to the lake. My home's sump pump seldom runs when the lake level is low no matter how much rain we receive in an individual event or in the whole season. Does this suggest that Lake Michigan is intimately connected with this area's near surface ground water? If this is so, should there be concern for the impact of fertilizers, pesticides, and herbicides leaching into this layer of sand and eventually into Lake Michigan?

While this year's Lake water level is a recent high, I have seen it higher in the past twenty-five years. I remember lake front owners placing large stones in front of their beach houses in an effort to minimize erosion effects on their property. Recent wave action has uncovered some of these stones that had been buried in sand for ten years or more. In high water years, I have seen wave action undermining the pine trees growing on the top of the current high dunes until several toppled onto the beach. Eventually we will again see these high water conditions. How will this affect local ground water levels and the movement of leached chemicals to the lake?

Has anyone begun to assess the current state of water quality in Black River? I would think it advisable to establish a base line now before any development is allowed. Such a base line should include samples taken monthly for at least a year to account for variations in seasonal run-off from farms and the surrounding landscapes. This baseline will then provide a fair comparison to judge any future impact of the golf course on this river's water quality.

Thank you for the opportunity to express my concerns,

Respectfully,



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**From:** [REDACTED]  
**Sent:** Monday, July 13, 2015 9:13 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler Golf Course questions

Dear Mr. Schiefelbein,

I am unable to attend the public hearing on Tuesday July 14th regarding the proposed Kohler golf course.

However, I do have several questions I would like to have answered in regards to the impacts this proposed golf course may have on my personal property in the Town of Wilson.

Here are my questions:

- (1) What are the results of the environmental assessment on the Town of Wilson water table?
- (2) What assurances are being given by the Kohler Company if something were to happen to the water table levels?
- (3) If my well would be found to have been contaminated by golf course pesticides/fertilizers/insecticides, what responsibility will the Kohler Company have?
- (4) Does the plan involve taking water from Lake Michigan, the Black River, or just from the Town of Wilson watertable?
- (5) Who is going to provide waste water treatment?
- (6) Is there going to be a posting of the questions and answers from this meeting? If so, where can it be found online?

Thank you for your time.

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**From:** [REDACTED]  
**Sent:** Thursday, July 23, 2015 6:25 PM  
**To:** DNR Kohler Proposal  
**Subject:** Kohler golf course

I live right on 12th street across from proposed golf course site. The golf course would be awful due to high traffic, pollution, nature and animal habitat, deer getting hit more than now, wells being polluted, increased rate of cancer due to this course from water run off and interrupting nature,contamination of land, and less privacy for citizens of the area. Why doesn't he just build a nuclear plant in the wood? does Kohler have any conscience for other peoples rights and regard to this? He must be very greedy. he could build it any where in the world and it has to be across from our house. I will definitely move to Arizona when I retire as an RN if this goes through. People have expensive horses they ride there and I walk my dogs in the woods. It is like a magical forest now. I can not imagine a golf course there. Please stop this from happening, thanks . Barb Van der vaart

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**From:** [REDACTED]  
**Sent:** Monday, June 29, 2015 12:37 PM  
**To:** DNR Kohler Proposal  
**Subject:** New golf course.

I am against any new golf course in this area. Golf courses are closing all over Wisconsin. This area should be left in its natural state. The Kohler Family historically have been good stewards of their land holdings, but these would change that. In the interest of all that live in Wisconsin, no more golf developments. Put people over money. If it happens I'll never buy another Kohler product. Pat Clark - Beaver Dam, WI (and user of the Kohler/Andre Park)

Sent from my iPhone

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**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 2:57 PM  
**To:** DNR Kohler Proposal  
**Subject:** no golf course in Black River

There is no need to install ANOTHER golf course when there is one just blocks from the proposal site. The beaches of a Great lake (Michigan) can not be cut off to public use it is FEDERAL property as is all rivers in the country. The access and use of Federal property isn't something that the rich and entitled can use as their own. We and others enjoy biking and walking on the local streets including South 12th street which may become an high traffic unsafe area.

Thanks for your time,  
[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 2:56 PM  
**To:** DNR Kohler Proposal  
**Subject:** NO GOLF Course

Please, please, please don't allow Kohler Company to destroy the beautiful shore line, beaches and wooded land. There is no need for another golf course in this area, Riverdale is just blocks away. It makes me sick to think about all of the animals and birds that will lose their homes especially the Eagle pair that live here.

Please say no to Kohler golf course, thank-you.

sincerely,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Saturday, June 27, 2015 9:05 PM  
**To:** DNR Kohler Proposal  
**Subject:** No Town of Wilson Golf Course

We live in Black River. Love the area and do not want it spoiled, polluted, wells run dry or nature disturbed for yet another golf course. Golf course fertilizer run off into Black River and into Lake Michigan and our well water. This is a pristine sandy soil nature area for many wildlife. Giving O.K. for this course would be insane.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 16, 2015 5:57 PM  
**To:** DNR Kohler Proposal  
**Subject:** oppose cession of public land

I am writing to let you know I oppose the cession of public land to Kohler for the said golf course project.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 09, 2015 11:37 PM  
**To:** DNR Kohler Proposal  
**Subject:** Opposition to Proposed Kohler golf course  
**Attachments:** Wisconsin Ornithology Statements.doc; dnr-watch-whistlingstraits (1).pdf

Dear Mr. Scheifelbien and Department of Natural Resources,

I am writing to express my opposition to the proposed Kohler golf course. I am opposed to this development because the overwhelming negative impact to the environment far outweighs any promised economic benefit. The land in question is a mature forest and is home to many valuable species of wildlife. It is also very important to migrating birds (in that regard, I am attaching to this letter the comments made at a special town meeting by members of the Wisconsin Ornithology Society). In addition to the destruction of natural habitat, the golf course will instead add very UNnatural herbicides, pesticides, and fertilizers into the ecosystem and Black River/Lake Michigan watershed.

Today we received information from the Kohler Company that claimed that there would be 11 benefits of the golf course. I beg to differ.

1. "Create public access to the site" Having to pay high priced greens fees is NOT PUBLIC ACCESS. Furthermore, Kohler has already demonstrated in its construction of Whistling Straits that it disregards DNR permits and made the public beach access INACCESSIBLE by piling huge boulders into the lake, cutting off public access to the public beach along the golf course. If they did it once, I fear they will do it again. (I am also attaching a document that describes this in more detail)
2. "Include a well-protection program for Town of Wilson residents" WE DO NOT NEED A WELL PROTECTION PROGRAM if there is NO golf course draining our precious aquifer!
3. "Use an entry that avoids neighboring homes to the north" I live to the north of the state park. The only way for there to be access to the property is through STATE PARK Lands. Please, please, please DO NOT give away public lands!
4. "Create hundreds of jobs" I know for a fact that many of those hired to work on the golf course do not reside in our town. They come and work for the golf season and then go south and work at other golf courses during the off season (itinerant workers).
5. "Use a minimalist design" I have (with Kohler's permission, which has subsequently been revoked) walked this land. It is heavily forested. "Minimalist"? Hundreds of acres of trees would have to be removed. That is not minimalist.
6. "Result in a net increase in protected wetland." However, the fact remains that the Black River, a designated impaired waterway will be negatively impacted by this golf course as will THESE wetlands, regardless of the purchase of wetland mitigation.
7. "Remove invasive species" This can be done without constructing a golf course.
8. "Add more native plants and grasses" This is not an acceptable trade off for the destruction of mature trees.
9. "Employ best practices regarding pesticide and fertilizer use" The lake is already suffering from the run off of fertilizers and even "best practice" will add to that negative impact.
10. "Enhance public access to Kohler-Andrae State Park." I go into this park on a daily basis. I have access. The golf course will do nothing to add to my access or enhance it. In fact, additional traffic lanes/roundabouts/golf course signage will have a negative impact on my enjoyment of the park. If the golf course would host tournaments, my access to the park would actually be stymied by the additional traffic such an event would cause.
11. "Adopt LEED greenbuilding standards" Yet any buildings will be depleting natural resources, no matter how "green" they are.

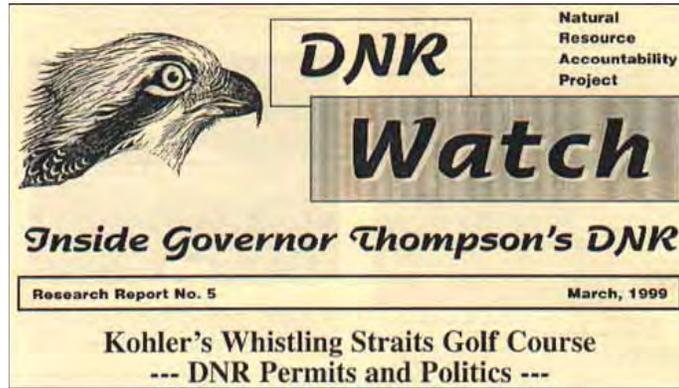
Please protect our natural resources! Please deny the use of public lands for private profit! Please acknowledge that the environmental impact of the proposed golf course is a NEGATIVE IMPACT and permission for the golf course should be denied.

Thank you,  
[REDACTED]

**Peter Blank, WSO conservation chair:** ... I have a Ph.D. in ecology. My research for much of the last 15 years has been on developing recommendations for improving bird habitat. I am here to oppose the building of a golf course in the Black River Forest because it will destroy important bird habitat. Clearing forest land for this golf course will reduce habitat for many of Wisconsin's bird Species of Greatest Conservation Need. These are birds that have low or declining populations in the state and are in need of conservation action. What we know about many species of conservation need is that they often need large areas of habitat, most of them are declining because of habitat loss, and what happens in the surrounding landscape affects if they use certain areas. Because this golf course is set to be developed in and around Kohler-Andrae State Park, this means that what happens to the land adjacent to the park will affect not only the birds on that property, but also in the park. According to e-bird, an online database of bird observations, at least 20 bird Species of Greatest Conservation Need that use forest and shrubland habitats have been observed at Kohler-Andrae State Park. These are exactly the types of habitats planned to be cleared for this golf course. And because we know that the surrounding landscape matters for birds, this means at least 20 bird species already in need of protection could be affected by this development. And once the habitat is gone, it's nearly impossible to get the birds back. I am not just a bird watcher and an ecologist; I'm also a golfer. I've been golfing since I was a kid and would like to see the game of golf grow and thrive. But I believe there are better ways to grow the sport than to destroy precious wildlife habitat. I agree with the Friends of the Black River Forest that golf courses should be built on landfills, old agricultural fields, or areas not particularly valuable to biodiversity. I'm not against building golf courses. But I am against building ones that will take away important habitat for birds. Please tell the Kohler Company to look for another place to build their course. This one is too important for the birds.

**Carl Schwartz, Bird City coordinator:** The issues raised here tonight obviously are of intense local concern, but I want to explain why the Plan Commission's decision on whether to follow its Comprehensive Plan or grant the Conditional Use Permit is of great significance statewide and beyond. That is why I am here both as steering committee chair of the Western Great Lakes Bird and Bat Observatory and as state coordinator for Bird City Wisconsin, which has recognized 81 communities for ... working to protect their birds. The 247 acres in question are part of what has been formally designated by the Wisconsin Bird Conservation Initiative as an Important Bird Area under a worldwide program to identify sites that provide essential bird habitat. Known as the "Harrington Beach-Kohler-Andrae Lakeshore Migration Corridor," this site also has been evaluated under the Department of Natural Resources' Wisconsin Stopover Initiative as an important migratory stopover site for all bird groups. Stopover sites are critical for the long migrations linking breeding grounds as far north as Greenland to wintering grounds as far south as Tierra del Fuego. Birds need suitable habitat where they can rest and refuel to complete their journey. Shoreline habitats are crucial because they provide first landfall for birds negotiating large ecological barriers like Lake Michigan. Our long history of agriculture, residential and commercial land development has left us with precious little remaining forested land along the Lake Michigan coastline. Under the Stopover Initiative, the Wisconsin DNR and The Nature Conservancy catalogued key sites in a broad 2011 report that I am going to leave with the commission. But let me summarize what it had to say specifically in its just completed "Sheboygan Shore Stopover Site Evaluation." The Sheboygan coastal area is an important migratory bird stopover site. According to its habitat models, features identified as high priority for all bird groups (landbirds, raptors, waterfowl, waterbirds and shorebirds) occur in and adjacent to Kohler-Andrae State Park. These features suggest that high concentrations of birds from each group are likely to occur consistently during spring and fall migration. And lest anyone be unmindful of just how important birds are to state residents, the U.S. Fish & Wildlife Service this spring released a report ranking Wisconsin second nationally in the proportion of citizens that are considered birders.

**Diane Packett, wildlife ecologist, Wisconsin Stopover Initiative:** As others have said, these lakeshore areas are critically important to the survival of many species of birds that concentrate along shorelines during migration, and they are becoming increasingly rare. Every town has a golf course and more and more towns have a Pete Dye golf course -- there are already two in Sheboygan County -- but few have the pristine lakeshore areas that you have. The golf course designers will tell you that Pete Dye golf courses are environmentally sensitive, designed in harmony with the landscape, that they recycle their water and construct wetlands. What they want is for golfers to have the illusion of being in a forest, preferably a forest with a water view. I received my Master's degree at Purdue University in Indiana, which hosts a Pete Dye championship golf course. I've been on the course because a professor took our class there to demonstrate the lack of biological diversity. They may be beautiful in the way that suburban gardens are beautiful, but no matter how well designed, the wide fairways and greens, the large mowed areas and tree plantings are in no way like a forest. The retention ponds that course designers are so proud of *do not* replicate the functions of a healthy wetland. Once you destroy a wetland or a sand dune, you never get it back, not without many years of work and maintenance and great expense. On the other hand, if the Town of Wilson were to refuse this development, this unique area of shoreline, wetland, and forest will provide much greater return to the town with its natural beauty, cleaner air and water, wildlife conservation, and year-round educational and recreational opportunities for people of all ages and incomes. Your children and grandchildren will appreciate that you resisted pressure and followed your town's comprehensive plan to leave them an oasis in a desert of development and a higher quality of life



<http://www.wsn.org/issues/DNRWatchrpt5contents.html>

Summary <http://www.wsn.org/issues/DNRWatchrpt5.html>

This report analyzes the permit process involved in the construction of the Whistling Straits Golf Course and apparent permit violations by the Kohler Company. It seeks to examine the DNR's performance relative to the enforcement of their own permits as well as the DNR's oversight responsibility for the enforcement of Sheboygan County's Shoreland Zoning Regulations and the Town of Mosel's Conditional Use Permit.

## Introduction

In 1995, the Kohler Company began construction of a links-style golf course in the Town of Mosel in Sheboygan County. The site of this course consists of more than 600 acres and includes two miles of Lake Michigan shoreline. After the requisite public meetings, certain permits were granted to the Kohler Company by the Township, the County and the DNR. Almost immediately these Permits began to be violated seriously and systematically. For nearly two years citizens complained to the DNR that Kohler was in violation of every permit they held. George Meyer's response in April of 1997 was that "My staff are not aware of any current violations of the permits issued." 1

One of the preceding statements is patently false. This report will lay out the facts in an attempt to find the truth.

## The Purpose of this Report

[This is the fifth](#) in a series of reports discussing Governor Thompson's political control over Wisconsin's Department of Natural Resources.

The Governor has now appointed all seven of the citizen members of the Natural Resources Board, which sets policy for the DNR. In the 1995 state biennial budget, the Governor also made the DNR Secretary a political appointment of the Governor, making the Department the subject of serious political influence. In the same budget, the Governor eliminated the Wisconsin Public Intervenor Office which advocated for public rights in natural resources and served as watchdog over the DNR and other government agencies. Subsequent to the Governor gaining this control in 1995, many negative changes have occurred in the DNR.

Each report in this series explores a specific example of these negative changes.

Discussion <http://www.wsn.org/issues/DNRWatchrpt5discuss.html>

In 1995 Kohler began construction. The Approved Grading Plan allowed for the construction of a number of screening berms around the course. Kohler constructed one berm at the north end of the course which was not on the Approved Plan. The berm in question is 800' long and approximately 15' high and includes a concrete bunker-style toilet building.

**Obstructed Public View** --- The northern terminus of this berm comes within several feet of the top of a 60' high, actively-eroding bluff on Lake Michigan at a point where Kohler's property adjoins the neighbor to the north and County Highway LS. The purpose of this berm (it's utility) is to screen the golf course from the highway.(6) This it does. It also obstructs the view of several neighbors as well as obstructing what was one of the most spectacular public vistas on this side of the lake.

**Violated Set-Back Rules** --- This berm and the construction of beach revetments on the lakeshore appear to violate conditions outlined in the DNR's permit #3-SE-95-0445 which said that "Unless specifically authorized, all buildings and other structures must be set back at least 225' from the OHWM (Ordinary High Water Mark) of the lake. A structure is defined as something with shape, form and utility..." (Emphasis is DNR's).

**Altered Work Without Approval** ---This same document clearly states "This permit does not authorize any work other than what you specifically describe in your application and plans...If you wish to alter the project or permit conditions, you must first obtain written approval of the Department."

The project was altered substantially without prior written approval being sought or given. In May of 1996, DNR Southeast District Director Gloria McCutcheon wrote that the berm "Was not on Kohler's original plan."

**Conditional Use Permit Violated** --- The Town of Mosel issued a Conditional Use Permit which also appears to have been violated. This permit "allows construction of only the golf course itself; plans for structures must be approved by the Town Board and a building permit obtained." No such permit was sought or obtained for the building of this berm.

**Destabilized Bluff** --- This permit also stated that "Kohler will stabilize the lake bank along the northern portion of its property near the curve in County Highway LS where the golf course proper meets the property to the north which is not part of the course itself." Shortly after this berm was built Kohler Company's own engineers declared that the bluff had been destabilized at this location.<sup>7</sup> In an internal DNR memo by DNR Engineer Lynn Torgerson, she concurs that the bluff "is in the state of impending failure and ... is expected to fail and is unacceptable."<sup>3</sup> A week later, DNR Southeast District Director Gloria McCutcheon writes that "Our staff does not believe that construction of this berm significantly threatens bluff stability..."<sup>4</sup>

**Obstructed Public Beach** --- The Town's permit goes on to say that "Kohler Company will not place any obstructions over the now existing beach area along the Lake Michigan shore which would prohibit or impede passage." Kohler almost immediately placed enormous boulders directly on the beach right to the water's edge which made passage impossible.

**Violated County Zoning** --- Sheboygan County's Chapter 72 is their Shoreland-Floodplain Ordinance. It requires that "All structures...shall be set back...225 feet from the ordinary high water mark." This 800 foot long berm does not meet this setback requirement.

The Town and County permits are mentioned here because the DNR has oversight enforcement authority. No municipality may create a regulation which is less restrictive than Statewide Shoreland Zoning Regulations. And, "The Department is required by law to oversee the Sheboygan County Zoning ordinance implementation."<sup>9</sup>

When construction of this berm was challenged as being in violation of these permits as well as a possible threat to the stability of the adjacent public highway the DNR required Kohler to do a bluff stability analysis. This was done by Woodward-Clyde Consultants of Middleton, WI and dated 10/18/95. It says in part that the Minimum Factor of Safety (Fs) against shallow slides before berm construction was 1.0 and after berm construction went down to 0.99.

An internal DNR memo dated 11/30/95 written by DNR engineer Lynn Torgerson states in part that "the shallow results may be reason for alarm....Textbooks describe an acceptable Fs as 1.5 or greater, but in the Department's practice we have been using 2.0 in the evaluation of dams and embankments. Fs=1.0 is a slope in the state of impending failure and anything less than 1.0 is expected to fail and is unacceptable."

**Highway Threatened** --- Still the DNR refused to take action against Kohler and on 12/4/95 Gloria McCutcheon, DNR's Southeast District Director wrote "Our staff does not believe that construction of this berm significantly threatens bluff stability..."<sup>4</sup> The key word here is "significantly". If you accept Woodward-Clyde's analysis of a drop from Fs=1.0 to Fs=0.99, the reduction in safety may not seem significant. But when you begin with the fact that the DNR's benchmark

for stability for these structures is 2.0, and the bluff was at half that number to begin with, the issue takes on a different significance entirely. The berm has increased the rate of erosion on Kohler's property and on the adjacent property to the north to the point of causing fresh slides on both properties in 1998. These slides are hastening the undermining of Highway LS.

Kohler's defense is that the berm is not a structure and therefore is not covered under the County's Shoreland Zoning Ordinance. This is an important point and deserves some scrutiny. It has not yet been determined in Wisconsin courts whether or not a berm is a structure, however, 'structure' is defined in several places and the definitions seem to be consistent. NR116.07 (45) defines a structure as "...any man-made object with form, shape and utility, either permanently or temporarily attached to or placed upon the ground..". The DNR's Permit #3-SE-95-0445 says "A structure is defined as something with shape, form and utility..." (emphasis is DNR's).

Sheboygan County's Shoreland Zoning Ordinance defines structure as "Anything constructed, erected, or to be moved from other premises, the use of which requires a permanent or temporary location on or in the ground...". The Town of Mosel's Zoning Regulations define a structure as "Anything constructed or erected, the use of which requires a permanent location on the ground or attached to something having a permanent location on the ground." An Attorney General's opinion from 1950 says that "a structure is a human-made object with shape, form and utility" and is subject to the regulations in shoreland zoning unless it is specifically exempted in NR 115.

And finally, a fundamental rule of legal interpretation is that words used in statutes and ordinances, if not otherwise defined, are to be given their commonly understood meaning. Structure comes from the Latin root *structus* pp. of *struere* which means "to heap together". By any of these definitions this berm qualifies as a structure.

However, Sheboygan County Planning Director Mark Leider took it upon himself to determine that this berm is not a structure as that term is described in their ordinance (see above definition).

Furthermore, no municipality may adopt any Shore- land Zoning regulation which is less restrictive than the DNR's and the DNR's definition in their permit is clear.

DNR District Director Gloria McCutcheon admits in her letters that the berm "was not on Kohler's original plan." Therefore, it is outside the permit. But later she wrote that "Sheboygan County zoning staff ruled that this berm is not a structure, and therefore, is not subject to setback requirements of their ordinance." and "To date, we believe that the Kohler Company has complied with all permit conditions..." 5

**Lack of Enforcement** --- The above evidence makes it clear that this berm is an illegal construction. It has never been approved by any government agency. It is forbidden by the permits. It should not be DNR enforcement policy to look the other way when mandatory permit conditions are violated.

**Public Beach Access Blocked** --- Another flagrant violation of these permits involves the revetments (huge boulder piles) which Kohler placed along the shore of Lake Michigan. Again Kohler and the DNR went through the motions of the approval process. Approval was granted for the construction of numerous revetments separated by stretches of natural beach. 10 One very important condition was that Kohler was allowed to excavate their bluff and place the huge rock revetments landward of the Ordinary High Water Mark (OHWM). The permits also forbid any changes to this plan without prior written approval from the DNR. "The idea behind this shore protection design is not to interfere with the littoral drift process by keeping structural elements landward of the existing toe of the bluff." 12

The revetments which were built bear no resemblance to the ones which were approved. In fact, instead of revetments separated by segments of natural beach, Kohler piled enormous boulders continuously along the shoreline at the north end of their beach, covering the existing beach and making it impassable to the public. Instead of excavating and placing these revetments landward of the OHWM as required, Kohler placed these huge piles of boulders directly on the public beach. That is to say between the waterline and the OHWM. This was undoubtedly done as a cost saving measure for Kohler, and perhaps to keep spectators off the beach.

The result is the unlawful appropriation of a public beach by a private company. Again the DNR refused to take action to bring Kohler into compliance with the conditions of their permits. The Town of Mosel's Conditional Use Permit

specifically forbids this i.e. "Kohler will not place any obstruction over the now existing beach area along the Lake Michigan shore which would prohibit or impede passage."

The public has a constitutional right under the Public Trust Doctrine to have access to this public beach. Neither the Town, the County nor the DNR can give this right away to any private citizen or company. The DNR has abrogated its responsibility to protect the public's interest in this matter.

**Private Citizens Burdened** --- This is an issue custom-made for the former Public Intervenor Office. Without this essential office acting as a watchdog on the DNR it is left to private citizens to sue to regain this public beach. The minimum cost of such a suit has been estimated at \$100,000 and could be twice that amount. If Kohler can use its influence so that DNR ignores its permits, then only an individual or group with very deep pockets can challenge them. So far none have stepped forward.

**Fishing Access Severely Limited** --- Another improper item is included in the Town's Conditional Use Permit: "Kohler Company will provide access to the mouth of Seven Mile Creek during the smelt fishing season for Town of Mosel residents and immediate family members for the purpose of fishing. Kohler Company will be responsible for monitoring access and may limit the number of people fishing at any time to a reasonable number."

Is it possible that public fishing rights enjoyed by all citizens since the time of settlement can be parceled out by a township, excluding all members of the public but the ones named? Is it proper to give a private company responsibility for monitoring access? And what is a "reasonable number?" Could the company say to the public that "anglers interfere with golfers, therefore a reasonable fishing access number is zero?"

**No Public Access Points** --- State law requires that a developer must provide one public access to the shore for every half-mile of shoreline owned. Kohler owns two miles of shoreline but somehow managed to provide only one public access at the southern extremity of its property --- which it has now blocked with a chain and a No Trespassing sign. In fact, two previously existing public access roads were abandoned by the Township at Kohler's request.

**DNR Allowed Inexperienced Inspectors** --- It may also be of interest to examine how the DNR monitors compliance with its permits. This is spelled out in Permit # 3-SE-95-0445, Condition I: "The Kohler Company is required to hire a DNR-approved independent construction inspector to be on site during construction."... Who was this person? What were this person's professional credentials? Was this person on-site? And did this person allow changes to be made in the field? (This would have been allowed under the Permit.)

DNR Secretary George Meyer wrote in a letter dated 4/28/97 that "Department staff realized the need for intensive construction management and oversight of this project." 1 Consequently the DNR allowed Kohler to hire two college students from the UW-Madison to fill this critical position. These students were not on-site during construction, but did visit the site from time to time. They had no professional credentials at the time they performed this job. Mr. Meyer said in the letter mentioned above that "this arrangement has worked well, and the students derived meaningful educational benefits from being involved..." If this does not violate the letter of the permit, it certainly seems to violate the intent of the permit.

**Money Power** <http://www.wsn.org/issues/DNRWatchrpt5money.html>

The evidence suggests that DNR permit and enforcement decisions at Whistling Straits Golf Course could be linked to the political power of campaign donations from Kohler family members, and officials and employees of interlocking business enterprises owned by the Kohler family in Sheboygan and Kohler, Wisconsin.

The Kohler family alone donated \$67,918 to Wisconsin candidates during an eight year period in the 1990s. When combined with close business associates' donations, the total rises to over \$88,569, with \$27,100 of this total going to election campaigns for Gov. Thompson and Lt. Gov. McCallum specifically.

Gov. Thompson now controls DNR decision-making; therefore, Kohler's financing of Thompson's campaigns and Thompson legislative allies' campaigns is significant.

The law firm Quarles and Brady was included in the legislative totals because one of its lawyers, Anthony Earl, served as lobbyist and legal consultant for the Kohler Company in 1995, during the period when the Whistling Straits project was getting underway and DNR permits were being requested. Earl is a former Wisconsin Governor and former Secretary of the DNR.

The law firm DeWitt, Ross & Stevens was included because one of its lawyers, Peter Peshek, was also hired as a lobbyist for Kohler Company during the same time period. Peshek is a former Wisconsin Public Intervenor, skilled at natural resource law and politics. James Klauser, who for years served as Thompson's most powerful staff as Secretary of the Dept. of Administration, also works now as a private attorney in this same lawfirm --- another link to Thompson.

Both law firms were major contributors to Gov. Thompson's election campaigns, which makes their lobbyists particularly effective.

The Milwaukee Journal Sentinel reported on August 9, 1996 that "Kohler Co. officials and family members have contributed heavily to Gov. Tommy Thompson's campaigns since 1987, donating at least \$35,855." This is a different time period than presented in this report, which shows that the pattern of donations extends back to earlier times.

Terry and Mary Kohler have also been major donors in national politics (which Gov. Thompson is also very interested in). Through Windway Capital Corporation, they were the top national contributors to Newt Gingrich's re-election campaigns and his political action committee GOPAC, giving \$816,107 over 10 years.<sup>14</sup> In other words, the Kohlers exert significant power in political circles.

## Conclusion

The DNR is a government agency. Its job, indeed its reason to exist, is the protection of the environment in defense of the public good.

The permits issued for this project seem to be well written with an eye to protecting the public good. The overarching problem here is not in the content of the permits; it is in the enforcement. The DNR says: "Attached is a copy of your permit which lists the conditions which must be followed."<sup>11</sup> These are not suggestions, they are conditions. There are only a handful of citizens in this state who can defy the DNR's authority by accepting these conditions and then ignoring them. The average citizen could go to jail for these infractions or at least be required to come into compliance by undoing an illegal construction. This kind of enforcement on average citizens takes place regularly.

DNR permits have the force of law however the DNR is not required by law to enforce them. Citizens may seek to enforce these permits even if the DNR will not. In fact, a 1998 Wisconsin Supreme Court decision held that the Public Trust Doctrine enables a private citizen to bring an action against a private party when the citizen feels that the party was not sufficiently regulated by the DNR (*Gillen v. City of Neenah*). This puts the citizen in the position of doing the DNR's job. Lacking any help from a Public Intervener, this means that a citizen can buy as much enforcement as he can afford.

## Recommendations

1) **Campaign Finance Reform** --- The special treatment accorded the Kohler Company by elected state officials exemplifies the need for campaign finance reform to protect Wisconsin's natural resources. Wisconsinites who value a clean, healthful environment must demand an electoral system that pays more attention to public good than it does to private donations.

2) **Restore the Public Intervenor Office** --- Before Gov. Thompson and Republicans in the legislature eliminated the Public Intervenor Office in 1995, the Intervenors spent significant time analyzing impacts of shoreline alterations on the environment and representing citizen concerns about those impacts. For decades, the Office was the statewide leader in defending public access rights to the waterfront. The Intervenors must be restored to protect Wisconsin's natural resource base, tourism industry and quality of life.

3) **Restore the Board Appointed DNR Secretary** --- This case is just another serious example of the politicization of the DNR, now that the DNR Secretary is under direct control of the Governor. Wisconsin legislators need to restore the

Department to pre-1995 budget conditions, where the DNR Secretary answered to the 7 independent citizens appointed to serve on the Natural Resources Board --- to help insulate the Department from political influence and favoritism.

4) **Enforce DNR Permits and Access Standards** --- It's clear that DNR must enforce permit conditions once they have been issued; otherwise, such permits are meaningless and make a mockery of DNR --- and of taxpayers' investment and faith in that agency.

In addition, the DNR must enforce Public Trust responsibilities and protect public access to Wisconsin waterfronts for fishing, boating and recreation.

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## Notes

Information for this report was gathered from the Whistling Straits Project File in the Sheboygan County Courthouse and from the Project File at the DNR's Southeast District Headquarters in Milwaukee, including permits, engineering reports, e-mail and other correspondence of citizens and regulators.

Campaign contributions were tallied using the Wisconsin Cooperative Campaign Finance Database, a joint project of Wis. Democracy Campaign and Wis. Citizen Action, funded by the Joyce Foundation. Data were accessed thru individual names and through donors' employers listed on campaign contribution reporting forms.

The campaign finance tables underestimate actual campaign contributions, because of limitations in reporting requirements and alternative methods for funding campaigns. All figures included in this document relating to political contributions should be considered minimal estimates and the actual monetary contributions and political influence may be much greater. Specific data limitations include:

1. **Small Donors** --- Donations of less than \$100 were generally not included, because small donors aren't required to disclose their employers' names.
2. **Unknowns** --- Some donors' links to the Kohler Company couldn't be made, so they weren't included.
3. **Spouses** --- Kohler Company executives may have listed contributions under the spouse's occupation, which would obscure the Kohler Company connection.
4. **Team Approaches** --- Other types of businesses may team up with Kohler Company leaders, and make large parallel contributions when mutual interests benefit. These could include banking, finance, insurance, suppliers, and trucking industries linked with Kohler Co.
5. **Parties** --- Industry leaders can funnel money through the funds of political parties to help specific candidates.
6. **Independent Money** --- The Kohler Company can also spend large amounts of money for "issue campaigns" which benefit specific candidates --- but these "independent expenditures" are not identified in state records as campaign contributions.

For example, in the 1996 state legislative campaign, Wisconsin Manufacturer's and Commerce (WMC) spent \$413,000 attacking six Democratic candidates. WMC refused to name the source of the money, but some of the money could easily have come from companies like Kohler or Vollrath, or Windway Capital. Ordinarily, it is illegal for corporations to donate money directly to Wisconsin candidates. All funds are supposed to come from individuals, parties or PACs and the source of funds must be disclosed. "Issue campaigns" by WMC are a loophole in those rules.

**Other Examples of Kohler Influence** --- Terry Kohler also gave \$82,500 in 1993-9416 and \$145,000 in 1995-9615 election cycles to the national Republican party organization, and several thousand dollars to specific congressional races in other states.<sup>17</sup> Windway Capitol also gave \$100,000 to support Proposition 209 in California to prohibit affirmative action programs in public hiring, contracting and education,<sup>18</sup> and \$10,000 to support Proposition 226 in California for "paycheck protection" which limits the ability of labor unions to raise funds for campaign contributions.<sup>19</sup>

The Kohlers also participate in and donate undisclosed amounts of money to several conservative non-governmental organizations which are politically active through the Free Congress Foundation<sup>20</sup> and the Progress & Freedom Foundation.<sup>16</sup>

### Natural Resource Accountability Project:

[Citizens for a Better Environment](#)

[Clean Water Action Council](#)

[Environmentally Concerned Citizens of Lakeland Areas \(ECCOLA\)](#)

[Northern Thunder](#)

[Sierra Club - John Muir Chapter](#)

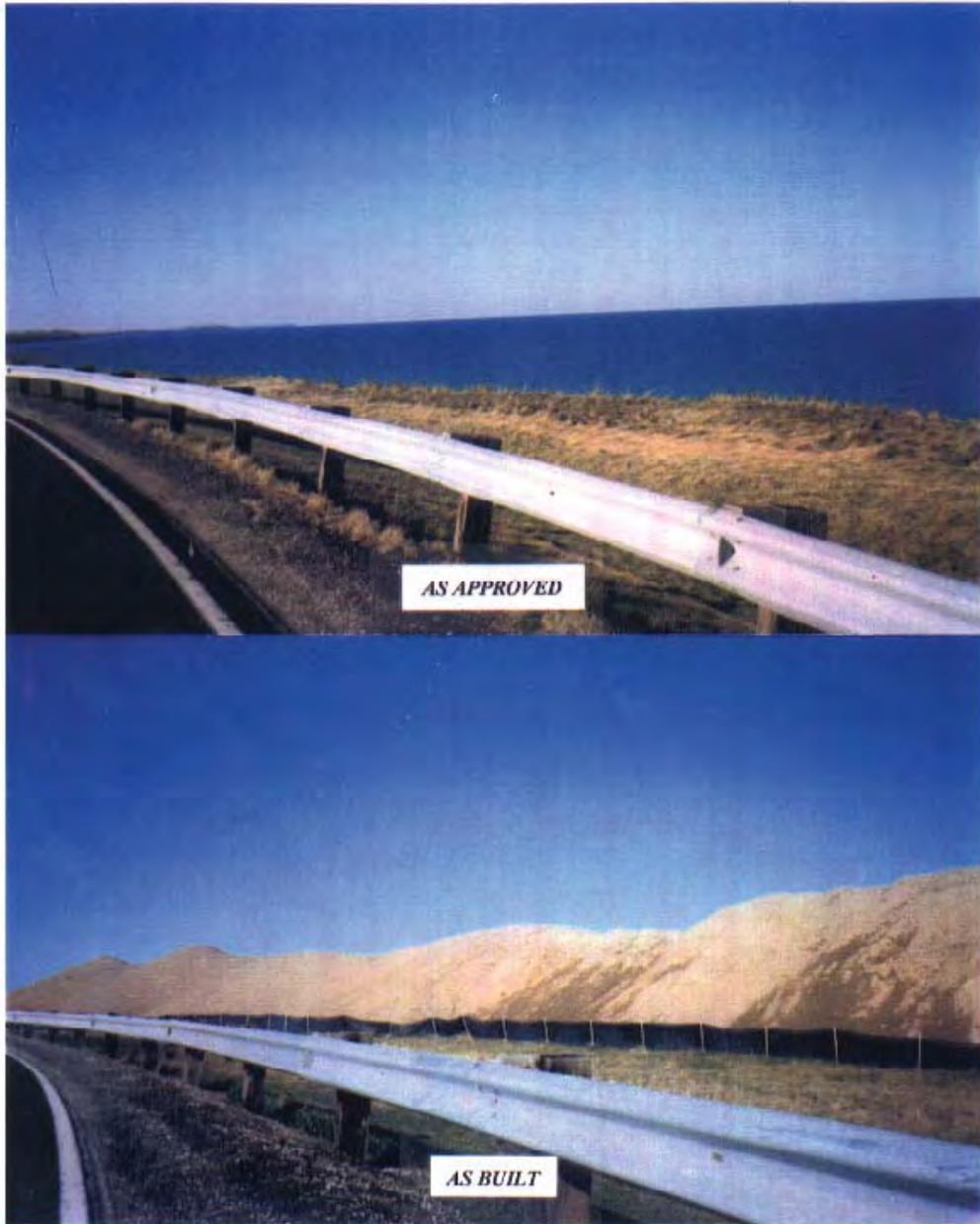
The following two groups also support this issue of DNR Watch:

Lakeshore Fishermen's Club

Wisconsin Fishing Council, Photograph <http://www.wsn.org/issues/DNRWatchrpt5photo2.html>

Before and After - Northern End of Kohler Gold Course before and after construction of the 800 foot long berm obstructing the view of Lake Michigan from Highway LS.

*NORTHERN END OF KOHLER GOLF COURSE AT HAVEN, WISCONSIN  
REF: PERMIT # 3-SE-95-0445 (AND OTHERS)*



Photograph <http://www.wsn.org/issues/DNRWatchrpt5photo6.html>

This month [March 1999], the only public beach access was blocked with a chain and a sign: "NO TRESPASSING - violators will be prosecuted under Wisconsin Statute (#?) Occupant - Kohler Company."



Table - Kohler Family Donations <http://www.wsn.org/issues/DNRWatchrpt5Kohler.html>

<b>Kohler Family Donations</b>	
<i>The following people all contributed to Governor, Lt. Governor, and state Legislative campaigns between 1/1/90 and 10/15/98. (These donations are part of the totals given in the previous table, under the various business connections.) Presented as listed on contributions forms, but duplicate names may represent the same person or couple.</i>	
Kohler, Charlotte M	500
Kohler, Charlotte N	100
Kohler, Frederic	250
Kohler, Herbert	400
Kohler, Herbert Jr.	1,800
Kohler, Herbert V	900
Kohler, Herbert V Jr.	13,600
Kohler, K. David	150
Kohler, Mary	11,380
Kohler, Mary S.	12,780
Kohler, Mary Stewart	100
Kohler, Mr. & Mrs. Terry J.	495
Kohler, Nancy	1,168
Kohler, Pete & Nancy	100
Kohler, Peter	1,300
Kohler, Terry	12,020
Kohler, Terry J.	9,095
Kohler, Terry/Mary	1,000
Kohler, Walter & Mary	30
Kohler, Walter J III	750
<b>TOTAL</b>	<b>67,918</b>
Source: the Wisconsin Cooperative Campaign Finance Database, a joint project of Wisconsin Democracy Campaign and Wisconsin Citizen Action, funded by the Joyce Foundation.	

Table - Spreading Influence <http://www.wsn.org/issues/DNRWatchrpt5spread.html>

## Spreading Influence --- Campaign Donations to Wisconsin Legislative Candidates

Recipients of contributions greater than \$100 from officials or employees of these companies, 1/1/93 thru 8/24/98

CANDIDATES	Vollrath Company	Kohler Company	Kohler General	Windway Capital Corp.	Realties (N. Kohler)	Quarles & Brady Lawfirm	DeWitt, Ross & Stevens Lawfirm	TOTAL
Nos (R)	800	1,533		2,700	600			5,633
Rosenzweig (R)	2,000			2,150		900		5,050
Barry (R)	1,000		450	1,000		950		3,400
Zsen (R)	1,000			2,000				3,000
Lasec, A. (R)	1,000		300	1,450				2,750
Doyle, D. (R)	600	350	500	880	375			2,705
Lebbam (R)	200	500	500	1,275	193			2,668
Griggs (R)		250		2,200		100	100	2,650
Schultz, Dale (R)	1,000			1,000		400		2,400
Meisler (R)	1,000			1,000		200		2,200
Heliman (R)	1,000			1,000		100		2,100
Skindrud (R)	495	400		995		123		2,013
Rosay (R)	1,000			1,000				2,000
Kilian (R)	500		300	500		325		1,625
Metcalf (R)				1,100			300	1,400
Andersson, J. (R)		400		905				1,305
Welch (R)				1,150				1,150
Leyanetz (R)				1,100				1,100
Walizer (R)				1,000				1,000
Laufenberg (R)	495			495		110		1,100
Drzewiecki (R)	500	500					100	1,500
Seaman (R)	500							1,000
Silbaugh (R)		400		500		100		1,000
Van de Water (R)				1,000				1,000
Sykora (R)				935				935
Schafer (R)		400		500				900
Hahn (R)		400		500				900
Moore (R)				685		125		810
Carson (R)				770				770
Otte (R)		100	100	400		100		700
Parzer (R)	100	100		100		300	200	700
Stone (R)		100		500				600
Lazich (R)		100				475		575
Sudler (R)				500			75	575
Petak (R)				100		450		550
Schultz, Dave (R)				500				500
Balsum (R)				500				500
Bluhm (R)				500				500
Huebsch (R)				500				500
Kesner (R)		100		250				350
Kelso (R)	100			100				200
Handrick (R)				100				100
Lammie (D)				100				100
<b>TOTAL</b>	<b>13,290</b>	<b>5,533</b>	<b>2,150</b>	<b>34,470</b>	<b>1,168</b>	<b>4,758</b>	<b>775</b>	<b>61,469</b>

Source: Wisconsin Cooperative Campaign Finance Database, a project of Wisconsin Democracy Campaign and Wisconsin Citizen Action, funded by Joyce Foundation.

Table - Linking the Links <http://www.wsn.org/issues/DNRWatchrpt5links.html>

### Linking the Links

Contributions greater than \$100 from officials or employees of these companies, for political election campaigns.  
Legislative donations --- 1/1/93 thru 8/24/98  
Gov. & Lt. Gov. donations --- 1/1/90 thru 10/19/98

	to Thompson and McCallum	to other candidates
Kohler Company	17,900	5,533
Kohler General		2,150
Realties (Nancy Kohler)		1,168
Windway Capital	5,350	34,470
Vollrath Company	3,850	13,290
<b>TOTAL</b>	<b>27,100</b>	<b>56,611</b>

Source: the Wisconsin Cooperative Campaign Finance Database, a joint project of Wisconsin Democracy Campaign and Wisconsin Citizen Action, funded by the Joyce Foundation.

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**From:** [REDACTED]  
**Sent:** Thursday, July 23, 2015 5:14 AM  
**To:** DNR Kohler Proposal  
**Subject:** Please approve the Kohler Golf Course

The economic impact of the new Kohler Golf Course is huge. It will bring in millions of economic activity and create jobs. The land is currently a seldom used area adjacent to Kohler Andrae State Park. The golf course will provide much better access to this area and use it better.

For years the DNR has owned a golf course at Peninsula State Park without any negative effects to the environment. The new Kohler course will have very little impact also.

I grew up in the Town of Wilson and members of my family still live there. The other Kohler courses have had a positive impact on Sheboygan County.

I urge to approve the new Kohler golf Course.

[REDACTED]

[REDACTED]

Sheboygan

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**From:** [REDACTED]  
**Sent:** Monday, July 13, 2015 6:58 PM  
**To:** DNR Kohler Proposal  
**Subject:** Please Do Not Allow Golf Course to Proceed Further

To Whom it May Concern,

You are most certainly aware of the pros and cons of building yet another Golf Course in Sheboygan County. Please, please, please be men and women of good conscience and let those woods remain unmolested. Thank you for your time!

Sincerely,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 09, 2015 8:25 AM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Golf Course

Jay-  
Thank you for your time and efforts researching the proposed golf course for Kohler. Many will ask, "does Sheboygan County need another golf course?" I would say, Sheboygan can't afford to not have another course. Golf in general brings millions of dollars into the state of Wisconsin each year. The revenues that are generated is incredible considering how short the season is here. Not to mention job creation and additional tax revenues. Kohler has proven with both Whistling Straits being along Lake Michigan and Black Wolf Run having the Sheboygan River run through it, they know how to manage environmental challenges with no negative impact. This is a first class organization with leading edge sustainability programs in place from Factory to Golf Course.

Again thank you for time and efforts.

Regards,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 02, 2015 12:43 PM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Golf Course

Hello,

I hope I can make it. I am at Kohler Andrae today and I feel like I am in northern Wisconsin. I am an avid golfer, but we have enough in Sheboygan! I feel it's so that golfers from other states still come to Kohler and not to the proposed courses at Sand Valley. It would be gorgeous, but we need to save this amazing land.

Sent from my iPhone

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**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 4:47 PM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Golf Course

Good Morning:

I read through the nearly 700-page Environmental Impact Report on this project shortly after it was unveiled. In my opinion, it is solid, it is sophisticated, and, it satisfactorily addresses the environmental concerns I would have as a 40-year Town of Wilson resident and landowner. Further, I live within a mile of the site, on a private well.

I continue to believe the DNR should look favorably upon this project, and I have submitted two letters to support that belief.

Warm regards.

[REDACTED]

[REDACTED]

[REDACTED]

*God Bless You!*

**Mark J. Leider**

*"Lord, suffer me to catch  
a fish so large that even I  
in talking of it  
shall have no need to lie."*

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 1:24 PM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Kohler Golf Course, Town of Wilson, Sheboygan Co.

My first concern regarding environmental impact is the water. This is a huge concern. When the lake wire subdivision starting going in at a quick pace, current residents in the area started experiencing problems with their wells, and some had to have their wells dug deeper. Now we have a subdivision we people still water their grass, despite having a well. A golf course takes an immense amount of water. Again, this is a very serious concern.

My second concern in the wildlife, both plants and animals. Kohler owns the property, and if he strips it all down, the wildlife will be affected, but he is not actually taking a resource from other people, like the water. This still does not make it right. Wilson has a fantastic ecosystem, and it should be protected rather than harmed.

My final concern is the use of the State Park entrance. I am in total disagreement. Kohler Andrae has lots of traffic on it's own. We don't need more going through there during prime season. It's just wrong.

I am against the proposed golf course, and hope the the DNR acts in the best interest of the natural resources.

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Wednesday, July 15, 2015 12:18 PM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Kohler Golf Course

I am a resident of the Town of Wilson and live within a mile of the proposed Kohler golf course. I am clearly in favor of this new golf course and know that Kohler will do what is best for the environment.

Sincerely,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, June 25, 2015 9:19 AM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Kohler Golf Course

Gentlemen,

This communication is regard to the proposed 18-hole golf course on Kohler owned land which would require a 4 acre easement from the State to make the project happen. I currently reside in Michigan but was born and raised in the Black River area and still own a home there. So, my tenure has been one of 65 years in the area. My family has a long list of community involvement in the area, my dad serving many years as its Fire Chief, and my mother and dad with the Black River Advancement Association and Boy Scout organization, with siblings still contributing in a similar fashion today. My initial comment is that the State of Wisconsin should have long ago secured this property when it had the chance. It is one of the very few remaining properties like it on both the Michigan and Wisconsin shoreline surrounding Lake Michigan. Living in Michigan I can attest to the realization that nowhere in Michigan can one walk a coastline such as the one which includes the Kohler property and the Kohler Andre State park. For that reason alone, the DNR should consider denying the request for development, but pollution concerns also potentially weigh heavily on the local area. From my personal aspect, I golf 2-3 times per week, but see absolutely no need for this course in this area given the world class and other fine courses that already exist in the local area.

I am under no delusion however. This is private Kohler property, although I feel the State should make every effort to make it their own or prevent as able, further development on this stretch of coastline. Through my own career I have read and written many environmental impact statements and know that the statement can be written in such a fashion to make most projects happen. I assume Kohler will prevail in this quest as well. So, I would like the DNR to do one simple task. The old saying goes that a picture is worth a thousand words. Bring up Google Earth as take a good look at the property and the impact on this ecosystem in this area.

<https://www.google.com/maps/place/326+Pioneer+Rd,+Sheboygan,+WI+53081/@43.69987,-87.6931742,6845m/data=!3m1!1e3!4m2!3m1!1s0x8804a607ea9e3681:0x2d727dd7494ddbd2!6m1!1e1>

Note the following:

- 1) The wetlands and river course of the Black River from beginning to end. The biologic activity in this river, especially the fish population, has almost disappeared from my youth.
- 2) The power plant to the north of the area. Particulate emissions from what was once a small power plant and now massive at the mouth of the river, are present/visible over most of the homes in the area and into the subject area – already stressing the environment.
- 3) The presence of Riverdale Country Club, an 18 hole course less than a mile from the proposed site provides unnecessary duplication by this project. This course already flows runoff nutrients into a tributary of the Black River. Not a sole cause, but with the area as a whole, including residential developments, and agricultural development a contributing factor.
- 4) The obvious proximity to the existing State Park land, and the obvious need for the state to secure this land for future generations.

The financial might and political influence of the Kohler family is not lost on us. However, I would ask the DNR to look at the “Forest for the Trees” and make a concerted effort to consider this parcel as a jewel in its state park system if possible. As a second option, a private activity less stressful (if any) on the area should be recommended. All in all, this proposed project is a common sense issue. Thank you for your time, thought and consideration.

[REDACTED]

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 09, 2015 6:57 PM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Kohler Golf Course.  
**Attachments:** Kohler Golf Course Editorial (Final Edit).doc; Kohler Golf, Later September.doc

To Whom It May Concern:

I write as a 40-year resident & landowner in the Town of Wilson, and as the retired (after 31 years) Sheboygan County Planning Director. I submit, for the DNR hearing record, the attached two Sheboygan Press editorials that I have prepared and now submit in support of the Kohler permit applications for the subject project.

Warm regards,

[REDACTED]

[REDACTED]

[REDACTED]

*God Bless You!*

**Mark J. Leider**

*"Lord, suffer me to catch  
a fish so large that even I  
in talking of it  
shall have no need to lie."*

[REDACTED]

**To The Press:**

Kohler Company's proposed construction of an 18-hole golf course on 247 acres that it owns along Lake Michigan in the Town of Wilson is a very emotional issue in the Town. I know. I live there. And, I do respect those expressing disparate points of view.

Most folks living within ½ mile of the site do not favor the project. Most folks living beyond that appear to favor the project. That's understandable.

Clearly, the Town of Wilson, Sheboygan County, and the Wisconsin Department of Natural Resources need to employ due diligence and transparency in their zoning and environmental reviews, and to hold Kohler Company to the highest standard of development. I am confident they will do so.

The fate of this project requires a level-headed, open minded, rational analysis. Decisions based on emotion—whether involving foreign affairs or local land use planning—are nearly always bad decisions.

Some of the opposing comments—while civil—do employ a little misinformation, selfishness, and, to some extent, hysteria.

Selfishness is understandable. Many of us seniors grew up close to undeveloped fields and woodlands. They became ours to explore and defend. When the earthmovers arrived, however, we were crushed, being too young to know that “our playground” was private property and private development its destiny. That's analogous with the Kohler property and its neighbors, who freely encroached, explored, and now defend.

A little hysteria is also evident—claims of all the terrible things that will happen if this golf course is built. Yet, when those things don't happen (as I believe they won't) protesters will likely be off on another mission.

This Kohler tract has been termed both a mature beech-maple forest and a mixed mature hardwoods forest. A mature forest is a least productive forest, and of increasingly limited wildlife habitat value. A managed harvest is probably long overdue, regardless of the golf course's fate.

Many of the expressed environmental concerns are, of course, legitimate, and both Kohler and the regulatory authorities have an obligation to address them. Adjoiners, particularly, need to know how property boundaries will be landscaped.

The “Kohler Nameplate” is one of excellence and integrity, and, its track record with resort and hospitality facilities is exemplary—worldwide. I firmly believe this project would benefit the Town, Sheboygan County, and the State of Wisconsin. Therefore, I agree with the Milwaukee Journal Sentinel's endorsement of this project, and I would encourage our Town of Wilson officials to approve it.

*(Side Note: I'm neither a golfer, nor have any Kohler Co., family nexus).*

  
Town of Wilson

## To The Press:

Several weeks ago in this column, I encouraged our Town of Wilson officials to look favorably upon Kohler Company's proposed 18-hole golf course on 274 acres that it owns north of Kohler-Andrae State Park. (Incidentally, that followed the project's nicely stated endorsement by the Milwaukee Journal Sentinel).

I should note that I am neither a golfer nor have family associated with Kohler Company. I do bicycle through this Kohler-Andrae area frequently.

The Press limited my previous article to 300 words, a third of which I really needed to properly detail my positions, and to avoid the "darts & daggers" I knew would follow.

Recently, two writers have opined: A Mr. Schultz fingered me with his belief that his well will go dry if this golf course is built. Clearly, Kohler will be forced to indemnify any such damages. And, if his well is sand point or shallow, he may benefit from a new, deep drilled well. Further, if he or his neighbors are those who cry that the Black River is already "impaired", they may want to embrace Kohler. Despite the fact that most degradation is due to phosphorus from agricultural runoff, a Kohler golf course will never for long be bisected by a befouled waterway.

The other writer, Mary Faydash, also personally attacked, with continued statements that read like middle school Earth Day essays. She employs all the required buzz words (e.g. ecosystem, aquifer, wetlands, toxins, etc.) even if she understands none of them. You'd think that she was talking about the massive iron mine proposed in northwest Wisconsin. Good grief, I could think of dozens of neighboring land uses more offensive than a golf course. This one is just 274 acres. They're quiet. Players even whisper out there! The highest-end subdivisions around here adjoin them (e.g. Pine Hills, The Bull, Town & Country).

The Kohler opponents, curiously, never speak about another golf course---Riverdale Country Club---which lies in the same Black River watershed and less than one mile away. It has been there for decades, and is very popular. No one has ever filed claims of water well issues, or has anyone measured excessive fertilizer applications affecting water quality. Neither Riverdale nor Kohler will waste fertilizer by allowing it to run into a river. It's simply too expensive! The same could be said of such other popular Sheboygan County golf courses as. Quit Qui Oc, Town & Country, Pine Hills, The Bull, Crystal Lake, and Black Wolf Run. No environmental disasters, despite "The Friends Of..." claims.

Faydash then cites my 1995 regulatory involvement at what is now Whistling Straits. Kohler restored a property abandoned by the U.S. government in 1954, befouled with leaking underground fuel tanks (some simply left full by the Army), cess pools, and garbage dumps (all remediated by Kohler at +\$900,000), and lake bluffs and attendant wetlands eroding into Lake Michigan at 5-40 feet per year (stabilized by Kohler at several millions of dollars). Faydash challenges my unarguable decision of what constitutes a "structure". Whistling Straits is comprised of hundreds of massive berms and bunkers (many much larger than the 15' x 800' Faydash cites). Yet, she apparently deems them "illegal" structures".

The government would never have performed this restoration. From this huge, despoiled area---Camp Haven--- Kohler truly created another "wonder of the world", now renowned worldwide!

It's clear, Chicagoan Faydash wants a splendid place to continue riding her horse.

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**From:** [REDACTED]  
**Sent:** Sunday, July 19, 2015 5:02 PM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed Kohler Golf Course Input

Mr. Jay Schiefelbein,

This letter is in support of the Kohler Golf Course being proposed in the Town of Wilson. We have lived in the Town of Wilson across the street from Kohler Andrae Park for 28 years. The Kohler Company has put together a plan and design that reduces the impact on the environment, has a positive impact on the economy, and addresses the concerns raised by the public. This is a responsible plan and design that will add significantly to the local area. When the Kohler Company does something they do it right as evidenced by their other golf courses and establishments. We encourage you to support the proposal.

Sincerely,

[REDACTED]

---

**From:** [REDACTED]  
**Sent:** Tuesday, July 21, 2015 11:50 AM  
**To:** DNR Kohler Proposal  
**Subject:** PROPOSED KOHLER GOLF COURSE

HERBERT KOHLER AND HIS ASSOCIATES HAVE SHOWN TO HAVE GREAT RESPONSIBILITY IN TAKING CARE OF THE LAND. ALSO, THE IMPACT OF THIS PROJECT TO THE TOWN OF WILSON, SHEBOYGAN COUNTY AND THE STATE IS UNDENIABLY VERY POSITIVE.

ALSO, IT IS HIS LAND

[REDACTED]  
CITY OF SHEBOYGAN

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**From:** [REDACTED]  
**Sent:** Tuesday, July 21, 2015 6:00 AM  
**To:** DNR Kohler Proposal  
**Subject:** Proposed new Kohler golf course

As far as the new proposed Kohler golf course goes. If the DNR has done its work, and there is no environmental impact. Let Kohler build the golf course. Its Kohlers property, not any of the neighbors. These people that all live around there seem to have forgotten. All these years, the neighbors have used that PRIVATE land as their own little playground and Kohler has let them and not said a word. So if everything is OK. Let them build.

And for the record. I am not a golfer and will get no benefit from the course. I am just tired of people trying to tell other people what they can and cannot do with their own property.

Thanks, [REDACTED]

---

**From:** [REDACTED]  
**Sent:** Wednesday, June 24, 2015 8:14 PM  
**To:** DNR Kohler Proposal  
**Subject:** PROTECT OUR ENVIRONMENT AND PRESERVE WISCONSIN'S PUBLIC LANDS!

Dear Mr. Schiefelbein,

The Kohler Company has proposed building a golf course in a pristine forest and sensitive environmental corridor in Sheboygan County, Wisconsin. I am asking the Wisconsin Department of Natural Resources to DENY the Kohler Company's request for an easement across heavily used public recreational lands which are part of the Kohler-Andrae State Park.

I ask the DNR to DENY the Kohler Company's request to build a private maintenance shed on over 12 acres of public land. The DNR must tell the Kohler Company they can NOT destroy wetlands, bulldoze rare dunes along the Lake Michigan shoreline, clear cut over 125 acres of forest and use public lands for a private, for-profit, golf course. The DNR must NOT set a precedent of stealing land from Wisconsin residents and giving to the highest bidder.

I am requesting the Wisconsin DNR to PROTECT OUR ENVIRONMENT AND PRESERVE WISCONSIN'S PUBLIC LANDS.

Thank you for your attention to my profoundly grave concerns.

Sincerely,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Thursday, July 23, 2015 11:25 AM  
**To:** DNR Kohler Proposal  
**Subject:** Protest Kohler golf course proposal  
**Attachments:** Kohler proposdal; Freda's letter to DNR 7-14-15.docx; ATT00001.htm

Jay Schiefelbein  
Wisconsin Department of Natural Resources  
2984 Shawano Avenue  
GreenBay WI 54313-6727

DNR Kohler [proposal@wisconsin.gov](mailto:proposal@wisconsin.gov)

July 22, 2015

I write to express my concerns about the Kohler golf course proposal. First among my concerns is the proposal by Kohler to use State Park land for private purposes and profit, specifically the golf course entrance road roundabout and the associated storage and maintenance buildings, all adding up to approximately four acres. During construction, the entrance roundabout is meant to accommodate not only visitors to the Kohler-Andrae State Park but the golf course construction workers and their light and heavy equipment needed for this massive construction project.

To my mind, the loss of four acres from our public lands is not balanced out by the new public access for golfers who can afford being there or by the new public access to a restaurant overlooking the lake. The entire project is in conflict with the spirit of the park as a natural refuge from commerce.

Another issue of concern to me is what will happen along the beach and unique dunes where some kind of protection will be established to protect the investment from wave action and inevitable erosion. I ask that the DNR investigate the nature of any proposed constructed barriers between the beach and the lake. This is not only to make sure that people who walk along the beach can continue to do so. It is also to learn how the beach barrier construction will look to people in the park or on private lands to the north. People will not want to see a jumble of big boulders at the park boundary or at the boundary of their homes. Further, I ask that the DNR investigate the impacts of a manmade barrier to prevent erosion on the natural processes by which dunes are formed.

The third issue I raise with you is that of the loss of wetlands functions to store stormwater and to cleanse runoff from agricultural lands to the west. Even though the acreage of lost wetlands might be made up with equivalent acreage elsewhere, the fact is that we will lose some capacity to retain floodwaters and to benefit from the cleansing function of natural wetlands.

[REDACTED]

[REDACTED]

Jay Schiefelbein  
Wisconsin Department of Natural Resources  
2984 Shawano Avenue  
GreenBay WI 54313-6727

DNR Kohler [proposal@wisconsin.gov](mailto:proposal@wisconsin.gov)

July 22, 2015

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[REDACTED]

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Tuesday, June 23, 2015 5:25 PM  
**To:** DNR Kohler Proposal  
**Subject:** Public environmental review for proposed Kohler Golf Course  
**Attachments:** Cirsium pitcheri Kohler Andrae impact 11 Feb 2015.doc; Kohler Cirsium impact.doc

Dar Mr Schiefelbein:

Attached are comments sent earlier to Mike Thompson. I re-sending in response to the request for Public comment.

[REDACTED] [REDACTED]

February 11, 2015

Friends of the Black River Forest:

We have been studying the ecology of Pitcher's thistle, a federally threatened plant, since the mid 1900s. This plant is federal threatened because of human caused loss of, or damage to, its only habitat, the shoreline dunes of the Great Lakes. As explained below, we feel that the proposed golf course adjacent to Kohler-Andrae State Park could directly and indirectly impact this species and its habitat north of the park as well as within the park.

Our work has included monitoring this species at Kohler-Andrae State Park. Most of the recent monitoring (since 2007) has taken place in the open dunes from the north parking lot south to the Nature Center. However, we have also observed Pitcher's thistle in shoreline dune habitat between the beach and the forest north of the state park boundary. We have not explored this habitat in detail and so cannot not confirm that *Cirsium pitcheri* occurs within the proposed golf course boundary. However, the fairway maps provided

(<http://www.friendsblackriverforest.org/maps.html>), indicate that Pitcher's thistle habitat could be directly impacted by a number of fairways and greens that border the shoreline dunes.

Specifically #17, the northern fairway and green #18, and green #9. The eastern edge of the #8 fairway appears to be in the forest, so not in Pitcher's thistle habitat, but construction of the fairway could impact Pitcher's thistle habitat.

Development of the golf course as planned could impact Pitcher's thistle in multiple ways. As indicated above, it could directly impact thistles occurring in shoreline dunes adjacent to several fairways. This impact could also affect the population within the state park. Because this species occurs in dune habitats that undergo constant change, it depends upon presence of multiple population units that comprise a "metapopulation". These units provide sources of seeds that allow colonization of dune habitats opened by shoreline wind and erosion processes, and replace other habitats that are lost by the same process. As a result, loss of thistles from shoreline habitat north of the park would reduce the size of the local "metapopulation" and reduce or prevent seed movement into the adjacent park. Alteration of the shoreline north of the park could also affect the park habitat for Pitcher's thistle if it alters or prevents sand flow along the long-shore current of Lake Michigan. Also, golf courses are noted for their applications of weed control chemicals. If such chemicals move into the adjacent park, they could negatively affect Pitcher's thistle, as well as other vegetation in the park natural areas.

[REDACTED]

Plant Conservation Biologist

The Morton Arboretum

[REDACTED]

Professor of Botany

Chicago State University

[Mike Thompson](#)

Natural resources region program manager

Dear Mr. Thompson:

We have reviewed the Environmental Impact Report (Project No. 193703078; proposed Golf Course-Town of Wilson -Kohler Co.) for its approach to impacts to the Federal listed Pitcher's thistle (*Cirsium pitcheri*).

The report's assessment of potential impact's on Pitcher's thistle, and proposed solutions are not adequate. The species is addressed twice, as follows:

Section 3.2.1 (Terrestrial Habitat) indicates:

.....  
spp.). Areas of unstabilized sand provide habitat for annual dune species, including the Federal listed threatened pitcher's thistle (*Cirsium pitcheri*). These populations are found along the Kohler Property lakeshore.

Section 3.2.5 (Threatened, Endangered, and Rare Species) indicates:

Populations of dune thistle (*Cirsium pitcheri*, State and Federally Threatened plant) [REDACTED]

[REDACTED] were observed on the Kohler Property with the vast majority occurring in areas outside of proposed development. The potential for minor impacts from the project exists. Although State threatened, endangered, and special concern plants are not protected on private property, Kohler will work with the WDNR to develop mitigation, such as transplanting individual plants to suitable habitat or establishing new populations in suitable areas.

As indicated in the attached February 11, 2015 letter, this information does not address Pitcher's thistle population size nor potential environmental impacts requirements to the population. It also does not address the presence of additional plants in the adjacent Kohler-Andre State Park and potential impacts to this population. It also implies that transplanting will be used to mitigate impact.

Our work with this species has shown that populations require shoreline ecological processes maintained by natural sand dune ecosystems. We have also found that populations with close proximity may rely on gene exchange through pollinators and seed dispersal for population maintenance. We have also found that transplanted plants have relatively low potential for survival and seed production., and thus reduced input to population maintenance.

These issues need to be addressed and expanded in the EIS. Critical questions include 1) what are the size, structure, and dynamics of the Pitcher's thistle populations on property adjacent to the proposed golf course (this includes populations on adjacent dunes and in the adjacent state park)? 2) What environment processes maintain these populations and

how do the populations interact (do they comprise a single population), 3) what is the potential for golf course construction and maintenance to alter ecological and biochemical processes that maintain these thistle populations and their habitats, including impacts to adjacent habitats (e.g., sand loss or deposition in the state park). 4) what are potential mitigation efforts?

[REDACTED]

Plant Conservation Biologist

The Morton Arboretum

[REDACTED]

Professor of Botany

Chicago State University

cc: Kathy Pollack, US Fish & Wildlife Service.

---

**From:** [REDACTED]  
**Sent:** Thursday, July 16, 2015 5:41 PM  
**To:** DNR Kohler Proposal  
**Subject:** Public input

I would actually be a neighbor to the proposed course and my family and I are 100% for this golf course. It will bring in much needed economic growth and with today's environmental technologies the impact will be minimal.

Sent from my iPad

---

**From:** Savagian, Andrew F - DNR  
**Sent:** Wednesday, July 22, 2015 4:06 PM  
**To:** Thompson, Michael C - DNR  
**Cc:** Schiefelbein, Jeremiah J - DNR  
**Subject:** RE: Got A Kohler Public Comment Mailed To Me

Sure.  
Thanks!

Drew

-----Original Message-----

**From:** Thompson, Michael C - DNR [MichaelC.Thompson@wisconsin.gov]  
**Received:** Wednesday, 22 Jul 2015, 3:52PM  
**To:** Savagian, Andrew F - DNR [Andrew.Savagian@wisconsin.gov]  
**CC:** Schiefelbein, Jeremiah J - DNR [Jeremiah.Schiefelbein@wisconsin.gov]  
**Subject:** RE: Got A Kohler Public Comment Mailed To Me

Drew,  
You can put it in Jim Pardee's cube by the monitor, GEF2 OBSS/7.  
Thanks,  
Mike

**We are committed to service excellence.**

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

**Michael C. Thompson**

Cell Phone: (414) 303-3408

[michaelt.thompson@wisconsin.gov](mailto:michaelt.thompson@wisconsin.gov)

---

**From:** Savagian, Andrew F - DNR  
**Sent:** Wednesday, July 22, 2015 3:50 PM  
**To:** Thompson, Michael C - DNR  
**Cc:** Schiefelbein, Jeremiah J - DNR  
**Subject:** Got A Kohler Public Comment Mailed To Me

Hi Mike,

I got a public comment mailed to me about Kohler – it was addressed to me but the letter is to Jay. I'm assuming they just had my card.

Mike, can I walk this up to you? Where do you sit again?

I will also date stamp it.

Thanks,

Drew

**We are committed to service excellence.**

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

**Andrew Savagian**

Public Affairs Manager - Office of Communication

Wisconsin Department of Natural Resources

Phone: 608-261-6422

Cell Phone: 608-575-3571

Email: [andrew.savagian@wisconsin.gov](mailto:andrew.savagian@wisconsin.gov)



[dnr.wi.gov](http://dnr.wi.gov)



---

**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 2:05 PM  
**To:** DNR Kohler Proposal; Thompson, Michael C - DNR; Schiefelbein, Jeremiah J - DNR; Voltz, Jeffrey R - DNR  
**Cc:** Kramasz, Kathleen M - DNR  
**Subject:** RE: questions on commenting  
**Attachments:** 2015 07 24 Public Input Kohler golf course Debbie Desmoulin.pdf  
**Importance:** High

Dear DNR officials in charge of the Kohler golf course proposal,

Attached is my citizen input and I will also copy and paste it to this email for double insurance.

Thank you for your consideration,

[REDACTED]

[REDACTED]

#### **Total Opposition to proposed Kohler golf course due to environmental loss of the Black River Forest**

I completely object on so many levels without reservation to the Kohler golf course proposal. The irreversible destruction of the Black River Forest, which is a wildlife refuge forest preserve, complete with wetlands and whole ecosystems, would be completely devastating to the entire area.

The Department of Natural Resources' mission is "to protect and enhance our natural resources". Nothing that Kohler plans with this project would enhance our natural resources. After clear-cutting most of the trees, all of the animals that make the Black River Forest their home would have to relocate, which means that we will be inadvertently killing them off because there are limited natural habitats for them to relocate to. The diversity of plants that grace the forest floor will be sacrificed as well.

The DNR is supposed to protect these natural resources: air, land, water, wildlife, and forests, which are destined to be decimated by Kohler's project. In summary, a golf course replacing the Black River Forest would inevitably destroy the "ecosystems that sustain all life." What worse place to develop a golf course than a wildlife refuge forest preserve that is the Black River Forest?

Kohler Company already chose to build the Whistling Straits golf course on Lake Michigan, but at least, it is to my understanding, it was formerly a property that was NOT a wildlife refuge, contrary to the Black River Forest complete with Indian mounds and wetlands.

Since the DNR's mission is to "ensure the right of all people to use and enjoy these resources" Kohler's private price-prohibitive golf course is diametrically opposed to this goal. Kohler may argue that this is his private property, but he is

requesting to use public land to enter the course, compromising the integrity of our State Park. His request must be totally denied.

The pesticides and herbicides used in golf course maintenance, will inevitably seep into the Black River and Lake Michigan, a major water resource for the whole Midwest, which is already severely compromised. Therefore, this decision needs to be made taking environmental concerns into consideration rather than corporate profit.

Since the DNR vows to “consider the future and generations to follow”, developing yet another golf course on one of our last rich, diverse, wildlife refuges, goes counter to that goal.

Consider the immediate environment surrounding the proposed golf course. Most of those homes rely on well water. Many of the wells surrounding the Whistling Straits golf course further north in the Town of Mosel, are dried up and need to be dug deeper in order to find water.

Kohler Company might also choose to pump water directly from Lake Michigan. Since a golf course is a heavy water-consuming business, this proposal depletes our water supply and in turn, diminishes this precious natural resource.

Considering that this area is rich in wetlands complete with a thriving mosquito population, Kohler Company will want to dry up the wetlands and spray overhead for the comfort of his customers, making the Town of Wilson toxic for those living in proximity, including any remaining wildlife, making this area change from lush wildlife habitat to artificial, sterile “green”.

In conclusion, the only acceptable decision concerning the Black River Forest would be to leave it as is and not develop it at all for private commercial use.

---

**From:** Kramasz, Kathleen M - DNR [mailto:Kathleen.Kramasz@wisconsin.gov]

**Sent:** Friday, July 24, 2015 1:37 PM

**To:** [REDACTED]; Thompson, Michael C - DNR ; Schiefelbein, Jeremiah J - DNR ; Voltz, Jeffrey R - DNR

**Subject:** questions on commenting

Debbie, the current open comment period is to provide input on the EIS that DNR will be preparing. That’s not my part of the review so I am forwarding your information to those who are directly involved in the EIS process. I know that there is a web site set up to provide comments and will see if I can find a link unless one of the others can do so more quickly. They are also the people to ask your questions to about guidelines/limits for commenting.

**We are committed to service excellence.**

Visit our survey at <http://dnr.wi.gov/customersurvey> to evaluate how I did.

**Kathi Kramasz**

Water Regulation and Zoning, Water Division  
Wisconsin Department of Natural Resources  
Phone: (920) 893-8531  
1155 Pilgrim Rd., Plymouth, WI

[kathleen.kramasz@wisconsin.gov](mailto:kathleen.kramasz@wisconsin.gov)



July 24, 2015

**Total Opposition to proposed Kohler golf course due to environmental loss of the Black River Forest**

I completely object on so many levels without reservation to the Kohler golf course proposal. The irreversible destruction of the Black River Forest, which is a wildlife refuge forest preserve, complete with wetlands and whole ecosystems, would be completely devastating to the entire area.

The Department of Natural Resources' mission is "to protect and enhance our natural resources". Nothing that Kohler plans with this project would enhance our natural resources. After clear-cutting most of the trees, all of the animals that make the Black River Forest their home would have to relocate, which means that we will be inadvertently killing them off because there are limited natural habitats for them to relocate to. The diversity of plants that grace the forest floor will be sacrificed as well.

The DNR is supposed to protect these natural resources: air, land, water, wildlife, and forests, which are destined to be decimated by Kohler's project. In summary, a golf course replacing the Black River Forest would inevitably destroy the "ecosystems that sustain all life." What worse place to develop a golf course than a wildlife refuge forest preserve that is the Black River Forest?

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The pesticides and herbicides used in golf course maintenance, will inevitably seep into the Black River and Lake Michigan, a major water resource for the whole Midwest, which is already severely compromised. Therefore, this decision needs to be made taking environmental concerns into consideration rather than corporate profit.

Since the DNR vows to “consider the future and generations to follow”, developing yet another golf course on one of our last rich, diverse, wildlife refuges, goes counter to that goal.

Consider the immediate environment surrounding the proposed golf course. Most of those homes rely on well water. Many of the wells surrounding the Whistling Straits golf course further north in the Town of Mosel, are dried up and need to be dug deeper in order to find water.

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In conclusion, the only acceptable decision concerning the Black River Forest would be to leave it as is and not develop it at all for private commercial use.

---

**From:** Christa Westerberg <westerberg@mwbattoorneys.com>  
**Sent:** Friday, July 24, 2015 4:26 PM  
**To:** DNR Kohler Proposal; Schiefelbein, Jeremiah J - DNR  
**Cc:** Mary Faydash (mary.faydash@gmail.com)  
**Subject:** Scoping Comments, Kohler golf course  
**Attachments:** 2 - Bradbury study, Dane Co.pdf; 3 - Docs re tented forest entrance.pdf; Letter to DNR, EIS Scoping comments, 7.24.15.pdf; 1 - Carpenter comments and CV.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

Dear Mr. Schiefelbein:

Please see the attached.

Thank you,

Christa Westerberg  
**McGillivray Westerberg & Bender LLC**  
211 S. Paterson Street, Suite 320  
Madison, WI 53703  
608.310.3564 direct  
608.310.3561 fax

To: Jay Schiefelbein, WDNR  
2984 Shawano Avenue  
Green Bay, WI

24 July 2015

### **Introduction**

I have been asked by the Friends of the Black River Forest to comment on the Stantec Environmental Impact Review for the proposed Kohler Golf Course in the Town of Wilson, Sheboygan County, Wisconsin, and describe the information the DNR should focus on obtaining to develop a complete Environmental Impact Statement for this project. They asked that I particularly focus on the likely fate of the wetlands therein.

My qualifications to do so include a Ph.D. in Land Resources from the UW-Madison, numerous visits to the adjacent Kohler-Andrae State Park and other shoreline natural areas over several decades, leading a Water Resources Management Practicum (Nelson Institute, UW Madison, 1998) which surveyed all the coastal wetlands in Manitowoc County, and teaching the Wetland Ecology course at UW-Madison since 1995. A copy of my CV is attached. To better understand the process by which data were collected and conclusions reached, I reviewed all the documents available to me in chronological order.

My conclusion is that, with respect to the wetlands, sufficient information has been collected to show that there are many wetlands of significance on the site and that the proposed development will have a serious negative effect on almost all of them, either directly or indirectly. The results presented in the WRAM assessment (Appendices E and F) of the Stantec report reached this same conclusion.

In the body of the report, however, the authors report only that “The project will result in less than 5 acres of wetland impacts...” and “Wetland mitigation is planned to offset all wetland impacts, resulting in a net increase in wetlands.” They speculate that the wetlands lost here may be replaced by purchasing mitigation bank credits, “if available” at another site that has been “proposed.”

In contrast to the solid information found largely in the appendices, the report reads less as compilation of that information meant to inform the public and regulators but rather as a public relations piece which touts the putative economic benefits of the project and downplays or ignores the known and/or likely environmental impacts.

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:



Site in current condition



Site with proposed golf course



Whistling Straits golf course

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.

## Specific Comments on the Stantec Environmental Impact Report

Page vi – This graphic should be paired with a “before” image to show the magnitude of change proposed. The later Figure 9E (p. 80) is of such poor resolution that it obscures most of the topography and locations of smaller wetlands that will be impacted. A very sharp plotting of the wetlands on a high-resolution topographic map was included in the Excel report of 9/11/2014 on page 11. I found no comparable map in the 2015 report.

2.2.2 – Here the report reveals that shallow groundwater may occur within three feet of the surface but promises to construct a private septic system that will prevent “adequate separation” from groundwater. In the sandy soils present here and with the large numbers of customers and staff using the facilities, is this really feasible? How long will such a system function, what will be the consequences for the “seepage wetlands” described in the report? The DNR should evaluate where this “seepage” comes from now and how it may be affected by water quality changes likely from a “domestic sewage system.” Since the clubhouse area will likely generate the most septic water, how does that interact with the inter-dunal and ridge and swale wetlands found in that area? These are low-nutrient wetlands, and a small change in that status could result in a complete change of vegetation type or a shift toward more exotic vegetation.

2.2.4 - This section consists of just four sentences, which tell us that “only” five acres of wetlands will be lost, they are not quite sure where yet, and that they will be replaced by more than that number somewhere else. No mention is made of any secondary or indirect effects such as altering infiltration rates, leaching of nutrients, herbicides and pesticides, runoff into sensitive wetlands etc. There are many acres of wetlands on this property, most of them associated with the Black River, and very little development is proposed to affect those. I must presume then that the major impacts on wetlands will be to the rarest types, the seepage swamps, ridge and swale and interdunal wetlands of which there are not many acres and which are small or thin and thus have high edge values, which increases susceptibility to disturbances and alterations. These are likely the same wetland types which are most susceptible alteration of groundwater quantity or quality changes. The DNR should examine these likely impacts in the EIS.

2.3.6 - BMP’s and IPM are meant to reduce damage, and they certainly should be followed; nonetheless, they do not eliminate the side-effects of toxic chemicals or the ecosystem-altering effects of adding nutrients to an oligotrophic plant community. Sometimes they are very successful, and sometime not. They are particularly difficult in sandy soils, as admitted later in the Stantec report. There are often conflicts: the Best Management Practice which quickly takes care of runoff by infiltrating it may be the worst BMP for groundwater. That Kohler uses X percentage of the maximum allowable amount of Y nutrient or pesticide at another golf course provides me no information as to what is likely happen to the rare communities present here. The DNR should study the proposed BMPs and IPM to determine their effectiveness at this site.

2.3.7 - The irrigation issue highlights the unnaturalness of the proposed development within the natural landscape setting. The native plants are quite able to tolerate extended drought but the mostly exotic grasses of the fairways and greens will need frequent watering through much of the summer. Despite the claims that precision watering systems will prevent leaching through the imported soils into the sandy native soils and on down to the wetlands, I am skeptical that this is quite so easy.

Creating an isotropic unit with a bulldozer is very difficult, and aspect (receiving more or less solar energy because of differing slopes) matters for ET (evapotranspiration). If all the nutrients stay in the root-zone reservoir, soon there would be no need to add fertilizer each year, as nutrients would just be recycled. That does not seem to happen at any golf course with which I am familiar.

2.3.8 - This section on Storm Water Management is quite puzzling and should be quite a challenge given the claims put forward in section 2.3.6. Currently, there is very little runoff from the site during the thawed season because the soils are thin and sandy in most places. The requirement that section 2.3.8 claims will be met is to infiltrate 90 per cent of the pre-development rainfall from runoff with no less than 80 per cent of the Total Suspended Solids removed. If 20 per cent of the suspended solids are allowed to be infiltrated, we can assume that likely nearly 100 per cent of the dissolved nutrients and many of the other chemicals will be infiltrated. This is in direct conflict with the claims of 2.3.6 above. The EIS must examine these contradictory statements and the actual environmental impact of stormwater, infiltration, and chemical use.

3.2.3 - This section does a good job generally describing the wetlands found on the site and reveals that 6 of the wetland types have high functional values and three are degraded. Unfortunately, Figure 7 (p. 73), which shows the placement of the plant communities is completely redacted even to the labels. Nonetheless, this information is available in Appendices E and F. With much effort one can find that the high quality plant communities include those classified as inter-dunal, ridge and swale and seepage swamp. Further digging into the WRAM data reveals that these communities are rated as highly likely to be impacted by the project. Here a map which would overlay these communities with the project alterations would be useful; but, lacking that convenience, it can be deduced from comparing Figure 6 (p. 72) and Figure 9E (p. 80) that the major impacts on wetlands will be mostly on the rarest types, which are generally still high quality.

4.5 - While the report continually refers to mitigating, reducing and minimizing impacts, this section only mentions the direct conversion of wetlands and makes no mention of potential secondary and indirect impacts to wetlands except “decreased floral diversity”. The DNR must consider all impacts as to their likelihood, magnitude and to what extent it is feasible to avoid or significantly mitigate their impacts. Mitigation is sometimes helpful but not when its only effect is that the habitat and species degrade a bit more slowly. In this section, the report acknowledges that negative effects will include “Decreased wetland function (wildlife habitat, floristic integrity and groundwater).” These generic negatives need to be spelled out in detail and investigated thoroughly.

This section (Environmental Effects and their Significance) makes no mention of the primary negative effect – alteration of the major landscape, soil and habitat type of much of the property. Essentially this project is an attempt to transform much of a long-established xeric landscape, plant and animal community into a cool-season grassland growing on a veneer of imported soil. The inputs required to create and maintain this unnatural pairing will certainly favor the new community and disfavor the remnant community. An example is the irrigation pond, which is touted as a positive impact. It is hard to believe that there is no mention of secondary effect of green grass and the secondary effect of a pond on attracting nuisance geese. These geese, in turn, spread nutrients wherever they roam and feed not just on lawn grass but also adjacent green vegetation. Anyone familiar with xeric habitat knows that they generally “green-up” early and spend much of their summer dormant. These could be attractive targets for a goose population.

This section makes no mention of the precedent that allowing a landscape transformation in an environmentally rare and sensitive area will provide. Whistling Straits set a partial precedent when they cut down the bluff to create the course; however, in that instance, there was not an extensive rare habitat, a State Park and a State Natural Area involved. If this project is approved, it will certainly send the message that any well-funded project that promises economic benefits need not worry about its effects on the environment, however severe.

5.1 to 5.3 - The most disturbing part of the report I encountered was section 5.1 to 5.3 which purports to evaluate the significance of short- and long-term primary, secondary and cumulative environmental effects. There are a few phrases that admit some negative effects; however, the bulk of the text touts non-environmental items, takes credit for not coming up with a worse plan and takes credit for the efforts of others. One example is claiming as a positive benefit of this project “protecting rare species –redacted–” (p. 58). Since much of the footprint of the golf course is in the zone identified as “rare species habitat,” clearly this project will negatively affect some rare species and their preferred habitats; the information presented indicates so, but in a classic example of “double-speak” it is turned around here to make it sound as though putting in a golf course will benefit rare species. An example of taking credit for the efforts of others is, “...given that the State Park is protected land. This will allow for continued protection of habitat and endangered resources in the area, reducing the cumulative effects to regional populations of flora and fauna.” A truthful statement would be, “this project significantly and permanently adds to the cumulative impacts on certain rare species in the area by reducing the size of an existing contiguous block of rare species habitat.

An EIS is supposed to contain an assessment of the degree of risk and the amount of uncertainty in their assessments. I see no such text in the document. There is only a brief statement that risks will be “minimized.”

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### **Concluding Comment**

I began my college teaching career nearly three decades ago helping teach a class titled, “Environmental Impact Analysis.” In addition to studying methods, we discussed some law, particularly NEPA and WEPA. In my subsequent Wetland Ecology class, we also discuss these two laws. I always emphasize that, in contrast to federal and state statutes and administrative codes, these two laws are not regulatory but rather are intended to reveal as much information as practical concerning an “action” that may result in environmental degradation. The result is supposed to be better decision-making by agencies that enforce laws and regulations and better understanding by the public of what the consequences of certain actions may be. The process works best when there is diligent investigatory work and truthful interpretation of the results of that work.

Were I to grade this EIR, I would give it a B+ for investigation (though much of the source material is not provided) and a D- for communication of the results truthfully. Missing from the investigation was information on the geologic and landscape setting in terms of recent glacial and post-

glacial events which created this unusual area. In addition, some of the hydrogeology information was rather vague (what aquifer will the irrigation water come from?). Missing from the communication aspect of the report was any sense of responsibility to reveal the magnitude and permanence of the alterations proposed, work which the DNR must now perform in its EIS. 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.

Quentin J. Carpenter Ph. D.  
24 July 2015

## BIOGRAPHICAL SKETCH: QUENTIN CARPENTER

Senior Lecturer

Gaylord Nelson Institute for Environmental Studies  
University of Wisconsin  
Madison, WI 53706

quentin.j.carpenter@gmail.com  
(920 723 7067)

### A. PROFESSIONAL PREPARATION

The Ohio State University	Broadfield Biology Education	B.S.	1969
University of Wisconsin-Madison	Land Resources	M.S.	1989
University of Wisconsin-Madison	Land Resources	Ph.D.	1995

### B. APPOINTMENTS

2001- **Senior Lecturer, Nelson Institute**, University of Wisconsin, Madison.  
1993-2001 **Lecturer, Institute for Environmental Studies**, University of Wisconsin, Madison.

### C. PUBLICATIONS

Bart, David, Matt Simon, Quentin Carpenter and Stephanie Graham. 2011. Historical Land Use and Plant-Community Variability in a Wisconsin Calcareous Fen. *Rhodora*: vol. 113, no. 954, pp. 160-186.

Kurtz, Abby McDermott, Jean M. Bahr, Quentin J. Carpenter and Randall J. Hunt. 2007. The Importance of Subsurface Geology for Water Source and Vegetation Communities in Cherokee Marsh, Wisconsin. *Wetlands*: 27:1 pp. 189-202

Kercher, Suzanne M., Quentin J. Carpenter and Joy B. Zedler. 2004. Interrelationships of Hydrologic Disturbance, Reed Canary Grass (*Phalaris arundinacea* L.) and Native Plants in Wisconsin Wet Meadows. *Natural Areas Journal* 24 (4)

Amon, J. P., C. A. Thompson, Q. J. Carpenter and J. Miner. 2002. *Temperate Zone Fens of the Glaciated Midwestern USA*. *Wetlands*. 22:2 pp. 301-31

### D. SYNERGISTIC AND EDUCATION ACTIVITIES

**Memberships:** Ecological Society of America, Society of Wetland Scientists, Natural Areas Association

**Reviewer:** *Wetlands, Restoration Ecology, Plant Ecology, Applied Vegetation Science, Diversity and Distributions*

**Course development:** Designed and still teach two field-oriented ecology courses for the Nelson Institute. The first (in 1993) gives primarily undergraduates experience in designing and executing field ecology research for a real "client," and the second (in 1995) provides upperclass and graduate students the basics of wetland ecology with an emphasis on systems and the potential effects of climate change.

### E. COLLABORATORS AND OTHER AFFILIATIONS

(i) *Collaborators* – I have worked most closely with Joy Zedler (Botany), Jean Bahr (Hydrogeology) and David Bart (Landscape Architecture) -- all are at University of Wisconsin, Madison

(ii) *Thesis Advisor* —I have served on numerous M.S. and Ph. D. committees at the invitation of students conducting research in wetlands. All were at University of Wisconsin, Madison

(iii) *Outreach* -- I frequently advise and cooperate with individuals at the Wisconsin Dept. of Natural Resources, TNC and other NGOs on wetland research, policy and management.

# **Impacts of Privately Sewered Subdivisions on Groundwater Quality in Dane County, Wisconsin**

**Final Report to the University of Wisconsin Water Resources Institute**

## **Prepared by**

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*This project was supported, in part, by General Purpose Revenue funds of the State of Wisconsin to the University of Wisconsin System for the performance of research on groundwater quality and quantity. Selection of projects was conducted on a competitive basis through a joint solicitation from the University and the Wisconsin Departments of Natural Resources; Agriculture, Trade and Consumer Protection; Commerce; and advice of the Wisconsin Groundwater Research Advisory Council and with the concurrence of the Wisconsin Groundwater Coordinating Council.*

## TABLE of CONTENTS

PROJECT SUMMARY	4
INTRODUCTION	6
<i>Motivation</i>	
<i>Background Information</i>	
<i>Site Selection and History</i>	
PROCEDURES AND METHODS	8
RESULTS AND DISCUSSION	8
<i>Site Geology</i>	
<i>Site Hydrogeology</i>	
<i>General Groundwater Chemistry</i>	
<i>Chemical Variability in Water-Table Wells</i>	
<i>Chemical Variability in Bedrock Wells</i>	
<i>Nitrate Source Identification Using Nitrate-Nitrogen Isotopes</i>	
CONCLUSIONS AND RECOMMENDATIONS	13
<i>Conclusions</i>	
<i>Recommendations</i>	
REFERENCES	15
APPENDIX A	16

## **LIST of FIGURES and TABLES**

Figure 1.	Location, layout, and monitoring well locations for the Savannah Valley subdivision site	7
Figure 2.	General stratigraphic cross section of the Savannah Valley subdivision site	9
Figure 3.	Water table map, December 20, 2002	10
Table 1.	Selected water quality data	10
Table 2.	Selected groundwater chemistry for wells MW-02 and MW-10	12

## PROJECT SUMMARY

- Title:** Impacts of Privately Sewered Subdivisions on Groundwater Quality in Dane County, Wisconsin
- Project ID:** R/UW-OSW-001
- Investigator(s):** Dr. Kenneth R. Bradbury, Hydrogeologist/Professor, Wisconsin Geological and Natural History Survey, University of Wisconsin-Extension  
  
Jeffrey D. Wilcox, Research Assistant, Department of Geology and Geophysics, University of Wisconsin-Madison
- Period of Contract:** July 1, 2001 to June 30, 2003
- Background/Need:** Urban development of rural areas is a significant land-use issue in Wisconsin and in many other parts of the United States. Septic tank and leach field treatment of wastewater can release contaminants such as nitrate, bacteria, viruses, and hazardous household chemicals to groundwater systems, posing potential threats to nearby wells and surface water. Potential groundwater contamination is often cited as justification for discouraging or prohibiting new unsewered rural developments, particularly in environmentally sensitive areas with high water tables or shallow bedrock, yet few field studies are available to document groundwater impacts.
- Objectives:** This project was initiated as a long-term monitoring study to document groundwater conditions before, during, and after construction of an unsewered rural subdivision that employs alternative on-site wastewater treatment technologies.
- Methods:** Site investigations consisted of hydrogeologic studies and water sampling with the goals of understanding the geology of the site, local groundwater movement, and background groundwater quality. Shallow piezometers and deeper bedrock wells were used to characterize the field site and to sample for major ions, indicator species, and atrazine. Isotopes of nitrogen were used to distinguish nitrate sources.
- Results and Discussion:**
- Two aquifers are present at the site – a shallow unlithified aquifer composed of glacial sediment and a bedrock aquifer. Water levels in site wells ranged from 7 to 54 feet below the land surface. Most recharge occurs during the spring months, with declining water levels the rest of the year. During spring recharge, the aquifer responds rapidly to

precipitation, snowmelt, and ground thaw, although the magnitude of this response varies with location across the field site. Prior to subdivision construction almost all of the water samples collected from shallow wells at the Savannah Valley site showed evidence of human impact, as median values of nitrate-N (6.2 mg/L), sodium (17.0 mg/L), chloride (19.3 mg/L), and conductivity (821  $\mu\text{S}/\text{cm}$ ) were much higher than would be expected in an undeveloped area. Significant temporal and spatial variability in groundwater chemistry existed across the field site prior to subdivision construction. This variability can be explained by 1) seasonal variations in recharge, 2) local loading patterns, 3) aquifer heterogeneities, and 4) surface topography. Groundwater nitrate beneath the Savannah Valley subdivision site appears to have originated from both synthetic and organic (cow manure) fertilizers, as the measured  $\delta^{15}\text{N}$  values fall between the typical values for the two sources.

**Conclusions/Implications/  
Recommendations:**

For this study we installed monitoring equipment and acquired nearly two years of groundwater monitoring data prior to the construction of new homes at a rural subdivision site in south-central Wisconsin. The most important finding is the high variability - in both space and time - of groundwater quality across this relatively small subdivision site. Concentrations of chemical parameters just below the water table exceeded drinking water standards for nitrate and atrazine in some wells and showed evidence of land-use impacts (agricultural use and highway salting) in many wells. Concentrations in deeper bedrock wells, although lower and less variable, also showed evidence of impacts from land use. Groundwater monitoring should continue at the Savannah Valley site as the subdivision is developed and septic systems come into use. The background data collected prior to development provides a necessary benchmark against which to compare future land-use impacts.

**Related Publications :**

Wilcox, J.D. 2003. Variability of groundwater chemistry in an agricultural setting and implications for assessing impacts of land use change. University of Wisconsin-Madison. M.S. Thesis. 121p.

**Key Words:**

Groundwater, subdivisions, nitrate, land use

**Funding:**

University of Wisconsin System, Madison Area Builders Association

## INTRODUCTION

### *Motivation*

Urban development of rural areas is probably the most significant land-use issue in Wisconsin and in many other parts of the United States. Although new residential developments near urban centers typically use city water and sewer services, rural developments usually rely on private water-supply wells and on-site wastewater-treatment systems. Conventional septic tank and leach field treatment of wastewater can release contaminants such as nitrate, bacteria, viruses, and hazardous household chemicals to groundwater systems, posing potential threats to nearby wells and surface water. Potential groundwater contamination is often cited as justification for discouraging or prohibiting new unsewered rural developments, particularly in environmentally sensitive areas with high water tables or shallow bedrock.

New on-site treatment technologies have been developed in recent years to more effectively treat domestic wastewater. In 2000, the State of Wisconsin adopted Chapter Comm 83 (Wisc. Adm. Code, 2000), which permits the use of these alternative systems in areas where conventional systems are prohibited. To date, there have been few field studies to assess the performance of these systems.

This project was initiated as a long-term monitoring study to document groundwater conditions before, during, and after construction of an unsewered subdivision that employs alternative on-site wastewater-treatment technologies. This report summarizes the first stage of that project by documenting the preconstruction groundwater conditions that have resulted from previous agricultural land use. It also discusses the implications of these preconstruction results for identifying and interpreting changes that result from conversion of agricultural land to an unsewered subdivision.

### *Background Information*

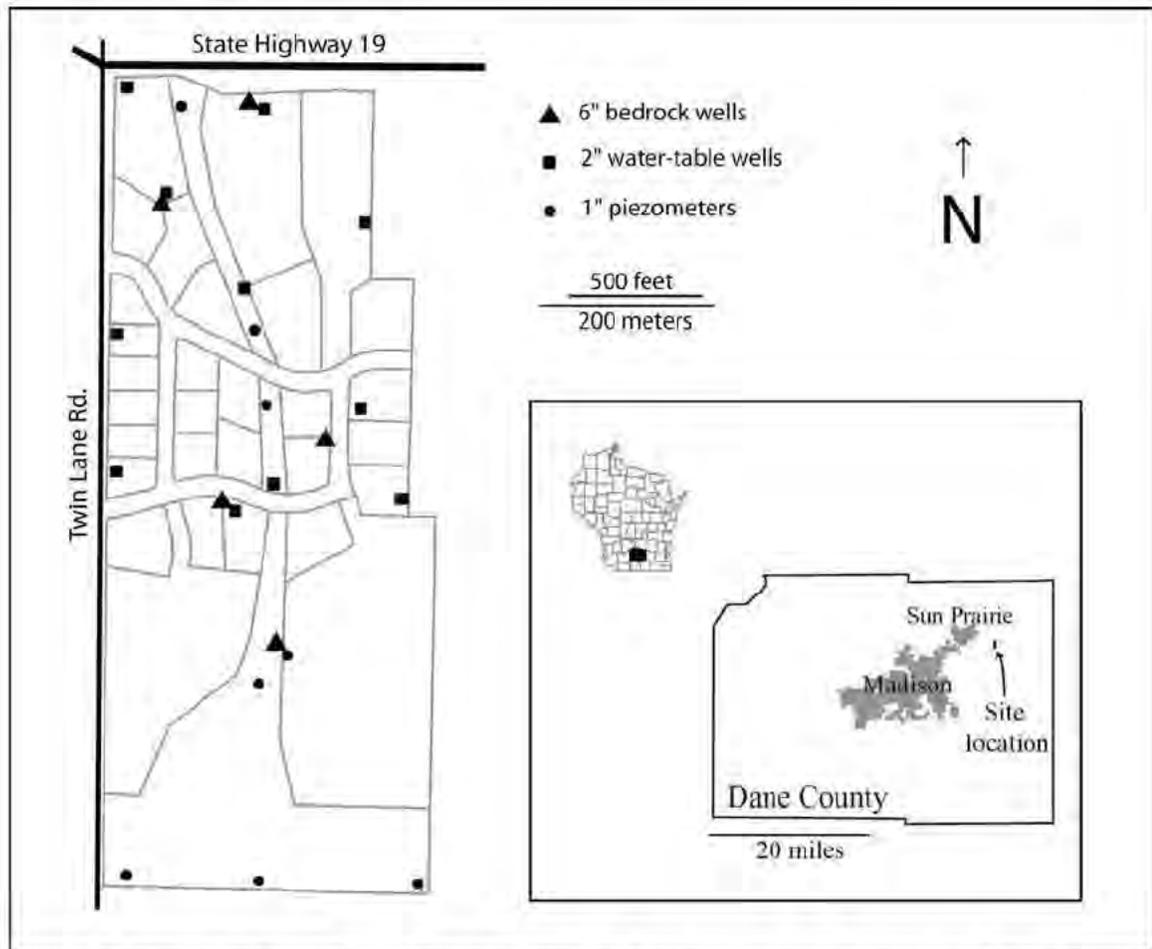
In response to concern over uncontrolled residential development in Dane County, Wisconsin, then-County Executive Rick Phelps issued a moratorium on the construction of new unsewered subdivisions in 1995. This, in effect, limited concentrated residential development to the urban fringe where it is economical to connect to municipal water and sewer systems. As a result, rural development currently accounts for only about one-eighth of new housing units in the county (Preboski, 2003).

In an effort to ease tension over land-use decisions and to address the increasing demand for housing options beyond the urban fringe, current Dane County Executive Kathleen Falk reached a formal agreement with the Madison Area Builders Association (MABA) and the Realtors Association of South Central Wisconsin (RASCW) in 1998. MABA and RASCW agreed to support an open-space referendum to acquire county parklands; County Executive Falk agreed to work with the MABA and RASCW on a pilot rural subdivision project of up to 30 new homes. The terms of the agreement stated that the new homes would use new-technology wastewater-treatment systems and be part of a 10-year groundwater-monitoring project intended to determine the effectiveness of the treatment systems and the impact of rural residential

development on regional groundwater quality. In 2000, the Wisconsin Groundwater Research Advisory Council, with the support of Dane County and the MABA, funded a two-year research study to initiate this long-term monitoring. This report summarizes the initial two-year study. A Master's thesis by Wilcox (2003) contains additional details and data.

### ***Site Selection and History***

In the summer of 2001, Savannah Valley, a 78-acre parcel about 4 miles east of downtown Sun Prairie, Wisconsin, was chosen as the site for this pilot project (Figure 1). The surrounding area is predominantly agricultural, although Drover's Woods, an existing 54-home unsewered subdivision, is located about 1 mile to the east. When selected for this project, the site contained farmed and wooded areas as well as a small wetland. Its agricultural history dates back at least a century, with corn, soybeans, wheat, and hay as the dominant crops in recent years. A drain tile beneath the center of the property empties into a drainage ditch just north of the site. Overall, the site has rolling topography; two glacial kames provide the greatest relief.



**Figure 1.** Location, layout, and monitoring well locations for the Savannah Valley subdivision site.

The final plat for a 30-home subdivision was approved in the summer of 2002. Site improvement began in September 2002, and construction of new homes began in early 2003. Of the 30 lots, 10 will use conventional wastewater-treatment systems; the remaining 20 will use alternative, new-technology treatment designs.

## **PROCEDURES AND METHODS**

Site investigations consisted of hydrogeologic studies and water sampling with the goals of understanding the geology of the site, local groundwater movement, and background groundwater quality. The Wisconsin Geological and Natural History Survey installed 11 water-table monitoring wells in October and November 2001. Eight additional piezometers were installed by the U.S. Geological Survey in December 2002. Six of the water-table wells and five of the piezometers were instrumented with pressure transducers to collect hourly water level and temperature data. Five deep bedrock wells were also installed at the subdivision site using air-rotary techniques. Three of these wells will be converted to private water-supply wells as houses are built, and two will remain as nonpotable monitoring wells. All monitoring well locations are shown in Figure 1. Caliper, gamma radiation, fluid resistivity, and fluid temperature logs were collected for each of the five bedrock wells, and slug tests were conducted in most wells to estimate hydraulic conductivity. Monitoring wells were sampled regularly beginning in late 2001 for major ion concentrations, pH, temperature, and electrical conductivity. Ten private residential wells were sampled from rural homes near the Savannah Valley subdivision site in June 2002. An additional eight private wells were sampled from Drovers Woods subdivision located about a mile to the east. All wells were sampled for atrazine in May 2002, and nitrate-nitrogen isotope analyses were performed on seven water samples collected in October 2002. A rain gauge was installed to collect hourly precipitation data, and a datalogger was used to collect hourly conductivity data from the drain tile effluent.

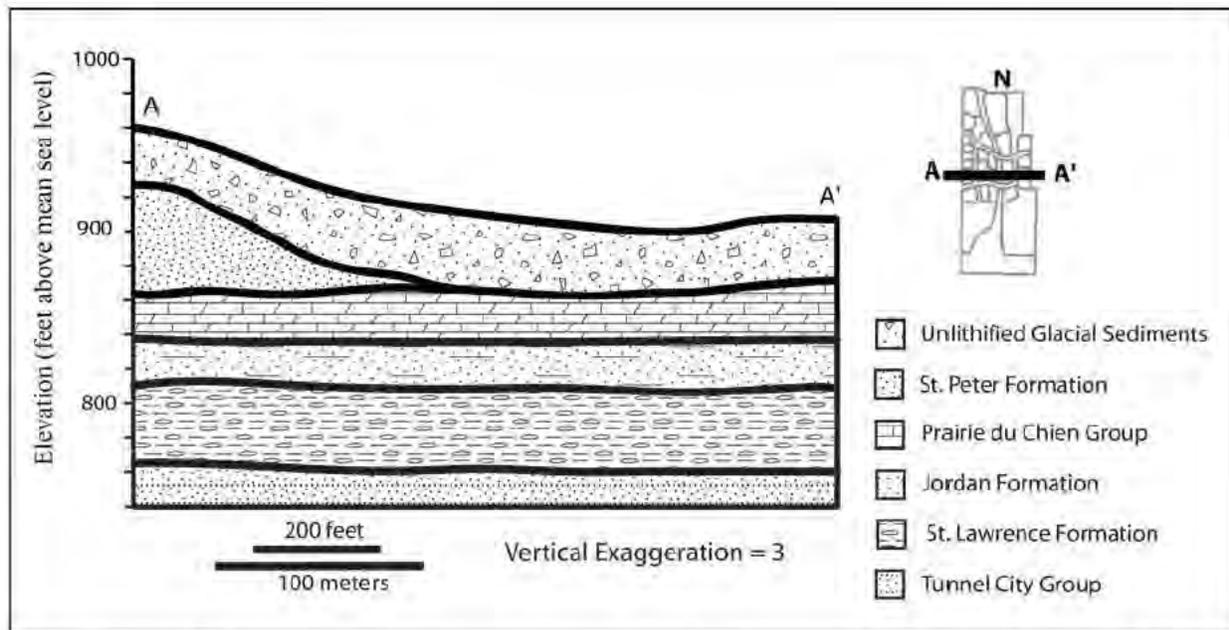
## **RESULTS AND DISCUSSION**

### ***Site Geology***

The site is characterized by a thin (0-5 ft) silt-loam soil overlying a sequence of unlithified glacial sediments belonging to the Horicon Member of the Holy Hill Formation. This unit is composed primarily of sandy gravel and interbedded sands and gravels, although finer sediments are also present. Grain size ranges from fine clays to erratic boulders more than 10 ft wide. A 15 ft thick clay layer at the southern boundary of the site thins northward and overlies coarser sands and gravels. The depth to bedrock ranges from 20 ft along the western ridge to approximately 70 ft below the kames on the northern edge of the site.

The uppermost bedrock unit is the St. Peter Formation, a very clean, fine- to medium-grained sandstone of Ordovician age. The St. Peter is more than 50 ft thick along the western ridge near Twin Lane Road, but absent over the rest of the site, where the uppermost bedrock unit is the Prairie du Chien Group. The Prairie du Chien is a sandy dolomite identified by the presence of oolites and traces of chert (Peters, 2003). The underlying Jordan and St. Lawrence Formations are composed primarily of dolomitic sandstones and together make up the Trempeleau Group. The Tunnel City Group lies below the St. Lawrence and represents the oldest bedrock unit

reached by drilling at the site. It is similarly composed of fine- to medium-grained dolomitic and glauconitic sandstone. Figure 2 is a general cross-section through the Savannah Valley subdivision site showing the approximate thicknesses of bedrock units reached by drilling.



**Figure 2.** General stratigraphic cross section of the Savannah Valley subdivision site.

### ***Site Hydrogeology***

Two aquifers are present at the site - a shallow unlithified aquifer composed of glacial sediment and a bedrock aquifer composed of the bedrock units discussed above. Water levels in site wells ranged from 7 to 54 ft below the land surface. Static water levels obtained from local well construction reports suggest that regional groundwater flow is from west to east. Locally, groundwater flow converges towards a surface ditch just north of the site across Highway 19. The drain tile running beneath the site appears to have minimal impact on groundwater flow, and the tile and the connected drainage ditch were dry for much of the study period. The drain tile was active during the late spring and early summer recharge period and throughout the winter of 2001-2002, and might affect groundwater flow direction during wetter years when the water table is higher. However, during the course of this study, the configuration of the water table remained relatively constant (Figure 3).

Overall, groundwater flow is relatively rapid through the glacial aquifer, with horizontal velocities on the order of 1 to 2 ft/day. Vertical hydraulic gradients between nested wells ranged from -0.03 to -0.20, corresponding to downward velocities of 0.1 to 0.5 ft/day. Hydrographs for the instrumented water-table wells show that most recharge in the unlithified aquifer occurs during the spring months, with declining water levels the rest of the year. During spring recharge, the aquifer responds rapidly to precipitation, snowmelt, and ground thaw, although the magnitude of this response varies with location. In 2002, the shallow aquifer received recharge from mid-February through mid-June; however, after an extremely dry winter, water levels did

not begin to rise significantly in 2003 until May. Water level rise in the shallow bedrock aquifer occurred later and over a longer time than in the unlithified aquifer. Water levels in all monitoring wells were lower in early 2003 than they were at the same time in 2002, which is not surprising because the fall and winter of 2002 were much drier than in 2001.

### General Groundwater Chemistry

Reactions with dolomitic aquifer materials are the primary controls on groundwater chemistry in the area. Most of the water samples contained elevated calcium, magnesium, and bicarbonate concentrations. Elevated concentrations of nitrate, sodium, chloride, sulfate, and atrazine were measured in some of the wells, although concentrations of these constituents were highly variable in space and time. Selected water-chemistry data collected from the three well sets are listed in Table 1; a Master's thesis by Wilcox (2003) contains the complete chemical data set for this project.

Almost all of the water samples collected from shallow wells at the Savannah Valley site showed evidence of human impact; median values of nitrate-N (6.2 mg/L), sodium (17.0 mg/L), chloride (19.3 mg/L), and conductivity (821  $\mu\text{S}/\text{cm}$ ) were much higher than would be expected in an undeveloped area. For comparison, Trojan et al. (2003) found median levels of 0.6 mg/L, 5.6 mg/L, 1.8 mg/L, and 442  $\mu\text{S}/\text{cm}$ , respectively, for these constituents beneath undeveloped forest or preservation areas in the Anoka Sand Plain in Minnesota.

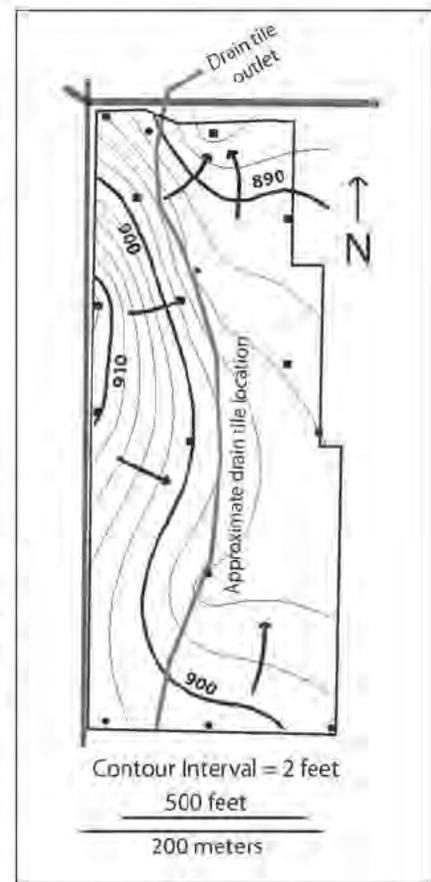


Figure 3. Water table map  
December 20, 2002

Table 1. Selected water-quality data

Parameter	Number of samples	Minimum	Maximum	Average	Standard Deviation
Savannah Valley water table wells					
Nitrate <sup>1</sup>	97	< 0.1	36.4	8.7	7.7
Chloride <sup>2</sup>	97	0.3	414.2	46.9	75.4
Atrazine <sup>3</sup>	11	< 0.1	0.8	0.3	0.3
Conductivity <sup>4</sup>	97	531	1839	904	239
Savannah Valley bedrock wells					
Nitrate <sup>1</sup>	20	< 0.1	12.6	5.2	3.6
Chloride <sup>2</sup>	20	< 0.1	70.0	23.1	21.4
Atrazine <sup>3</sup>	5	< 0.1	0.3	0.2	0.1
Conductivity <sup>4</sup>	20	592	921	754	100
Drovers Woods subdivision residential bedrock wells					
Nitrate <sup>1</sup>	8	< 0.1	8.8	6.3	2.9
Chloride <sup>2</sup>	8	0.3	35.9	19.4	11.3
Conductivity <sup>3</sup>	8	540	823	739	91
Rural residential bedrock wells					
Nitrate <sup>1</sup>	10	0.2	25.6	8.2	8.0
Chloride <sup>2</sup>	10	4.4	76.8	27.6	23.1
Conductivity <sup>3</sup>	10	664	1025	835	148

\* Concentrations are listed as: <sup>1</sup>mg/L nitrate-nitrogen, <sup>2</sup>mg/L, <sup>3</sup> $\mu\text{g}/\text{L}$ , and <sup>4</sup> $\mu\text{S}/\text{cm}$  at 25° Celsius.

Atrazine concentrations measured in the Savannah Valley wells were comparable to those measured in a recent study in Dane County. In that study, atrazine was detected in about 45 percent of rural wells tested, with atrazine and metabolite concentrations of 0.54 µg/L (Dane County Regional Planning Commission, 1999). Chloride and nitrate concentrations measured in many of the Savannah Valley wells also fell within the range of values measured elsewhere in the county. However, concentrations in some wells were much higher, and several wells had nitrate-N concentrations above the federal drinking water enforcement standard of 10 mg/L. It is particularly important to document the preconstruction concentrations of nitrate and chloride because these are among the principal contaminants in domestic wastewater. An understanding of the temporal and spatial variability of these constituents is essential to detect any changes in groundwater chemistry once homes are constructed.

### *Chemical Variability in Water-Table Wells*

Significant temporal and spatial variability in groundwater chemistry existed across the field site prior to subdivision construction. This variability can be explained by 1) seasonal variations in recharge, 2) local loading patterns, 3) aquifer heterogeneities, and 4) surface topography.

**Seasonal recharge.** Seasonal fluctuations in recharge appear to be the major control on temporal variations in groundwater chemistry. As water levels rose rapidly during the spring months, concentrations of nitrate and chloride in many water-table monitoring wells decreased. The “dilution effect” by infiltrating snowmelt and precipitation in spring seems to have the greatest effect where the water table is closest to the ground surface. For example, nitrate-nitrogen levels in MW-11 decreased dramatically following the spring recharge season in 2002, and then rose above 20 mg/L again by the end of summer. Concentrations did not drop as much in May 2003, probably because recharge and dilution were limited during a dry winter and spring. Chloride concentrations in well MW-08 were typically around 100 mg/L. However, concentrations increased dramatically in the early spring 2002 when road salt applied during the previous winter reached the water table. By late spring, chloride concentrations were diluted to well below 100 mg/L before rising again by the end of summer.

**Local loading patterns.** Local loading patterns are a significant control on shallow groundwater chemistry. Fertilizers and road salt were the two local sources of contaminants at this site. Water-table wells at the edge of or beyond the cropped area had consistently lower nitrate concentrations than those in the middle of the fertilized field. Meanwhile, wells drilled near Highway 19 or Twin Lane Road, both of which were salted with NaCl during the winter months, had the highest sodium and chloride concentrations at the site. Both examples illustrate how local loading patterns can affect shallow groundwater chemistry.

**Aquifer heterogeneities.** Small-scale heterogeneities may play a large role in determining the relative distribution of contaminants at this site. For example, two wells (MW-02 and MW-10) are screened at about the same elevation and located along the eastern boundary of the site. However, samples collected from the two wells had distinctly different chemical compositions (Table 2). Levels of nitrate in well MW-02, which is cased in medium to coarse sand ( $K=5.6$  ft/d), were much higher and more variable than in MW-10, which is cased in clay-rich sand ( $K=0.2$  ft/day). It is likely that nitrate applied at the ground surface near both wells has a shorter

transit time to groundwater through the coarse sediments near MW-02. Well MW-10 also had consistently higher sulfate levels than any of the other wells, probably due to the weathering of sulfide minerals in the surrounding clay lens.

**Table 2.** Selected chemical analyses of water samples from wells MW-02 and MW-10<sup>1</sup>.

	NO <sub>3</sub> <sup>-</sup>	Cl <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	Na	K	Hardness	Mn	Fe	Alk	TDS
<b>MW-02</b>	19.5	4.9	5.6	4.3	2.1	378	0.0	0.0	283	556
<b>MW-10</b>	3.4	2.9	58.1	9.9	3.2	338	0.3	0.0	247	497

<sup>1</sup> Concentrations are median values in mg/L, except for hardness and alkalinity (mg/L as CaCO<sub>3</sub>) and NO<sub>3</sub><sup>-</sup> (mg/L as nitrogen).

**Surface topography.** Contaminant concentrations appeared to be elevated at low points in the landscape. Wells located at some of the topographically lowest points of a cropped field had the highest nitrate and atrazine concentrations. One reason for this correlation could be that runoff of applied fertilizers resulted in focused recharge of contaminants at topographic lows. This process has been documented in the sand plains of Minnesota (Delin and Landon, 2002). Another possible explanation is that because the water table is closer to the ground surface at topographic lows, groundwater is more susceptible to contaminants applied at the surface in those locations.

### ***Chemical Variability in Bedrock Wells***

Spatial variations in water chemistry observed for samples from bedrock wells can be related to casing depth and agricultural loading rates. Water from rural residential bedrock wells not located within Savannah Valley or Drover's Woods subdivisions had variable nitrate, chloride, and conductivity levels. For example, nitrate-nitrogen concentrations in these wells ranged over two orders of magnitude (0.2 mg/L to 25.6 mg/L). These bedrock wells have long open intervals and samples from these wells represent an "average" groundwater chemistry over that interval. However, the homes were far enough apart that the wells likely sampled water originating from distinct source areas with varying agricultural loading rates.

Samples collected from residential wells within Savannah Valley and Drovers Woods subdivisions showed less chemical variability. The wells within each of these subdivisions are close together and probably sampled water originating from a common source area. Nitrate-nitrogen concentrations were consistently between 2.0 and 6.5 mg/L in Savannah Valley wells and between 4.0 and 9.0 mg/L in Drovers Woods wells. However, there were two notable exceptions caused by differences in well construction.

Well WS-3 at the Savannah Valley site was cased just into the St. Peter sandstone unit, about 36 ft below land surface. Caliper logs suggest this uppermost unit is highly fractured, and it was difficult to lower a pump down this well due to partial collapse of the well bore. Elevated nitrate-nitrogen and chloride levels in this well suggest that preferential contaminant transport may be occurring in the upper bedrock fractures. Well RW-01 is located in Drovers Woods subdivision. It is cased 208 ft below ground surface, compared to the 40 to 60 ft of casing in the other bedrock wells. This well had undetectable nitrate-nitrogen and by far the lowest chloride concentration. These data suggest that even if groundwater chemistry beneath a rural

subdivision has a uniform vertical profile across the site, differences in well construction can result in significant variations in water quality among private wells.

### ***Nitrate Source Identification Using Nitrate-nitrogen Isotopes***

Nitrate is a key water-quality parameter in this study because it is the most widespread contaminant in Wisconsin and one of the principal contaminants in domestic wastewater. However, because previous agricultural practices at this site have resulted in high background nitrate concentrations, it would be useful if nitrate derived from agricultural sources and could be differentiated from nitrogen derived from residential sources. Nitrogen isotope analyses have been used in many studies as a tool for identifying nitrate sources. The basis for this method is that nitrate derived from different sources will have different  $^{15}\text{N}/^{14}\text{N}$  ratios, which are reported as  $\delta^{15}\text{N}$  in units of “per mil” (‰). Typical  $\delta^{15}\text{N}$  values for human and animal waste nitrate and commercial fertilizers are +10 to +20 ‰ and -2 to +4 ‰, respectively (Aravena et al., 1993). Aravena et al. (1993) used nitrogen isotope analyses to successfully delineate a septic plume in an area with high background nitrate concentrations. In that study,  $\delta^{15}\text{N}$  values within the septic plume (+8.1 to +13.9 ‰) were much higher than those outside the plume (+3.4 to +6.2 ‰).

Groundwater nitrate beneath the Savannah Valley subdivision site appears to have originated from both synthetic and organic fertilizers (such as manure), as the measured  $\delta^{15}\text{N}$  values fall between the typical values for the two sources. The  $\delta^{15}\text{N}$  values of nitrate from the seven wells ranged from +4.2 to +8.9 ‰, with a mean of  $+5.6 \pm 1.7$  ‰. However, the four wells with high nitrate concentrations (>10 mg/L as N) had the lowest  $\delta^{15}\text{N}$  values, ranging from +4.2 to +5.2 ‰. This suggests that the primary source for the highest nitrate concentrations was synthetic fertilizer and not animal waste. The background  $\delta^{15}\text{N}$  values measured in this study were lower than those measured in the septic plume by Aravena et al. (1993). Therefore, further nitrogen isotope analyses should be useful in identifying any future nitrate contamination from on-site wastewater treatment systems once homes are constructed.

## **CONCLUSIONS AND RECOMMENDATIONS**

### ***Conclusions***

For this study we installed monitoring equipment and acquired nearly two years of groundwater monitoring data prior to the construction of new homes at a rural subdivision site in south-central Wisconsin. The most important finding is the high variability - in both space and time - of predevelopment groundwater quality across this relatively small (78 acre) site. Concentrations of chemical parameters just below the water table exceeded drinking water standards for nitrate and atrazine in some wells and showed evidence of land-use impacts (agricultural use and highway salting) in many wells. Concentrations in deeper bedrock wells, although lower and less variable, also showed evidence of impacts from land use. Temporal variability is primarily caused by recharge patterns, because infiltrating precipitation and snowmelt enter the upper aquifer and can either dilute existing concentrations or bring in additional contaminants, depending on local conditions at the surface. Spatial variability is caused by aquifer heterogeneities, nonuniform agricultural loading patterns, and runoff of agricultural chemicals to topographically low points in the landscape. Groundwater quality is much more variable near the water table than deeper in the aquifer; samples collected from bedrock wells are much more

consistent. Well construction, particularly casing depth, apparently controls chemical variability in these wells.

Groundwater at the Savannah Valley site appears to be very vulnerable to contamination from surface and near-surface sources. Groundwater flow at the site is relatively rapid, with estimated horizontal velocities on the order of 1 to 2 feet/day. Vertical groundwater movement is downward, with downward velocities on the order of 0.1 to 0.5 feet/day. Consequently, this site offers an excellent location to evaluate the effects of subdivision development on groundwater because potential impacts at the land surface should appear in groundwater within a few months or years.

The site characterization stage of this project has made it possible to predict the conditions and locations where groundwater will be particularly vulnerable to contamination from on-site wastewater-treatment systems. Wastewater will likely reach the water table more quickly and in higher concentrations in areas where the unsaturated zone is thin and consists of coarse, unlithified sediments. Although focused recharge in topographic lows may dilute wastewater in those areas, contaminants may be transported more quickly to the water table before adequate degradation can occur in the unsaturated zone. Contaminant concentrations across the site will likely be highest during drier seasons and years; decreased precipitation will limit dilution in the aquifer. Therefore, installing additional wells and collecting groundwater samples from the most vulnerable areas of the site during the driest times of the year would provide a “worst-case scenario” for groundwater quality beneath the subdivision.

### ***Recommendations***

The ultimate goal of this project was to identify the effects on groundwater, if any, of replacing agricultural land with an unsewered residential subdivision. The results obtained in the first stage of this study have several implications for the future success of this project.

1. Groundwater monitoring should continue at the Savannah Valley site as the subdivision is developed and septic systems come into use. The background data collected prior to development provides a good benchmark against which to compare future impacts from land-use change.
2. It is essential to distinguish impacts on groundwater chemistry due to land-use change from impacts related to natural or preexisting groundwater variability. Background monitoring requires adequately characterizing spatial and temporal variability in groundwater chemistry using a dense monitoring well network with frequent sampling intervals.
3. Groundwater monitoring at subdivisions should include shallow monitoring wells with short screens if the contaminants of interest are loaded at the ground surface or in the unsaturated zone. Contaminants applied above the water table will reach shallow wells more quickly and in higher concentrations than deeper water-supply wells. Wells with long open intervals monitor the “average” groundwater chemistry over long vertical intervals and might not detect small-scale changes in contaminant concentrations.

4. Identifying changes in groundwater chemistry due to land-use change can be difficult if similar contaminants are associated with both the new and former land use. Two of the principal contaminants in wastewater (chloride and nitrate) were already present in groundwater beneath the Savannah Valley site due to previous agricultural activity. In this case, it may be necessary to consider other contaminants or tracer methods that can differentiate between contaminant sources.
5. It is important to consider how subdivision construction may affect the temporal and spatial variability in groundwater chemistry observed prior to development. Stormwater-management practices may alter the timing or location of recharge and its ability to dilute the upper aquifer. These practices, along with grading and landscaping, will affect surface topography and runoff patterns at the site. Local loading patterns will change as continuous septic system point sources replace a seasonal, nonpoint agricultural source.

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## **APPENDIX A: Awards, Publications, Reports, Patents, and Presentations**

### *Publications*

Wilcox, J.D. 2003. Variability of groundwater chemistry in an agricultural setting and implications for assessing impacts of land use change. University of Wisconsin-Madison. M.S. Thesis. 121 p.

### *Presentations*

Wilcox, J.D., K.R. Bradbury, J.M. Bahr, and C.L. Thomas. 2003. Variability of groundwater quality beneath an unsewered rural subdivision. Geological Society of America Abstracts with Programs (*November 2003*).

Wilcox, J.D., J.M. Bahr, K.R. Bradbury, and C.L. Thomas. 2003. Variability in groundwater chemistry beneath agricultural and rural residential land uses. Wisconsin Ground Water Association Annual Conference Program.

Wilcox, J.D., C.L. Thomas, K.R. Bradbury, and J.M. Bahr. 2003. Spatial and temporal variability of groundwater chemistry beneath agricultural land: Implications for assessing environmental impacts of a new unsewered subdivision. American Water Resources Association – Wisconsin Section 27<sup>th</sup> Annual Meeting Program and Abstracts.

### *Awards*

Jeff Wilcox: Best graduate student oral presentation, 2003 Wisconsin Ground Water Association Annual Conference.

Jeff Wilcox: Best student poster presentation, 2003 American Water Resources Association-Wisconsin Section Annual Meeting.

## Greisinger, Diane D - DNR

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**From:** Hess, Kristin A - DNR  
**Sent:** Thursday, March 14, 2013 7:26 AM  
**To:** Schuller, Daniel J - DNR; Thiede, Kurt A - DNR  
**Subject:** RE: Kohler co. Tented Forest  
**Attachments:** Kohler Letter in Support of Northern Guest Entrance (REVISED).doc

Attached please find the revised letter based upon my discussion with Dan.

Please review and let me know if this is acceptable as revised.

Thanks

**Kris Hess**  
**Attorney**  
**Bureau of Legal Services**  
(608) 266-9454

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**From:** Schuller, Daniel J - DNR  
**Sent:** Wednesday, March 13, 2013 2:48 PM  
**To:** Hess, Kristin A - DNR; Thiede, Kurt A - DNR  
**Subject:** RE: Kohler co. Tented Forest

I left you a voice mail on this today confirming the position we discussed.

 *Daniel J. Schuller*

Director  
Bureau of Parks & Recreation  
Wisconsin Department of Natural Resources  
(☎) phone: (608) 266-2185  
(☎) fax: (608) 267-7474  
(✉) e-mail: [Daniel.Schuller@wisconsin.gov](mailto:Daniel.Schuller@wisconsin.gov)  
Website: [dnr.wi.gov](http://dnr.wi.gov)  
Find us on Facebook: [www.facebook.com/WIDNR](http://www.facebook.com/WIDNR)

**From:** Hess, Kristin A - DNR  
**Sent:** Wednesday, March 13, 2013 10:39 AM  
**To:** Thiede, Kurt A - DNR; Schuller, Daniel J - DNR  
**Subject:** RE: Kohler co. Tented Forest

Jess Barley from Kohler called wanting to know when they might be able to get this letter. They would like to send it to the Town of Wilson as part of their entire package prior to the meeting next week.

Thanks

**Kris Hess**  
**Attorney**  
**Bureau of Legal Services**  
(608) 266-9454

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**From:** Thiede, Kurt A - DNR  
**Sent:** Friday, March 08, 2013 6:55 AM  
**To:** Schuller, Daniel J - DNR  
**Cc:** Gunderson, Scott L - DNR; Currie, Kimberly - DNR; Hess, Kristin A - DNR  
**Subject:** RE: Kohler co. Tented Forest

Dan please review, get me your comments and then I will look it over before returning it to Kris.

Thanks,  
Kurt

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**From:** Hess, Kristin A - DNR  
**Sent:** Thursday, March 07, 2013 9:44 AM  
**To:** Schuller, Daniel J - DNR; Thiede, Kurt A - DNR  
**Cc:** Gunderson, Scott L - DNR; Currie, Kimberly - DNR  
**Subject:** RE: Kohler co. Tented Forest

Dear Dan & Kurt

Yes, I did discuss this issue more fully with Jess yesterday afternoon. Jess assured me that the east-west road to the tent sites is going to be located solely on Kohler property. He did acknowledge that from the aerial site map that it does appear that the service road crisscrosses between our properties. I told him that is why I have been requesting a survey map depicting this area for the last 2 months. His response was "oh." I told him that it was critical that we obtain copies of the surveys as soon as possible to confirm the location of the new east-west service road. I told him that if any portion of that service road is located on Department lands, then we need to have further discussions with regard to the easements. He informed me that he was going to talk to their surveyors and get me a copy of a map as soon as possible.

We also discussed several other items:

1. Kohler wants us to prepare a letter addressed to them stating that the Department will not allow their guest traffic to enter from the south through our main entrance. They would like to include this letter in a packet to the Town of Wilson for their special meeting being held on Tuesday, March 19, 2013 for their conditional use permit application. They would prefer that we do not mention at this time our alternative solution we discussed last week.
2. We also discussed our alternative solution. I told Jess that if the Town of Wilson does not grant their CUP, then because we will not allow all of their traffic for the project to come through our main entrance Kohler will need to revisit alternative entrances. At first Jess said that they would not consider our alternative solution to guest entrance because it was cost prohibitive. However, upon further discussion of the alternative location we were proposing, he said that they would have to think about it. Kohler is still hopeful that they will be granted the CUP with their guest entrance to the north. I told Jess that the Department remains

ready to cooperate with Kohler, but that under no terms could we accept all of their project traffic coming through our main park entrance. Jess said that if their CUP was not approved then either they drop the project entirely or start discussions with us regarding our alternative solution.

3. We then discussed the utility easements again. Kohler is once again willing to run gas in through this utility easement and provide that to our maintenance building. Apparently, their plan for running gas in from the north for their project and then just heating their service building with propane has not panned out as planned. He also said that they realized that providing gas to our maintenance building was something that they promised us and part of the entire package and therefore gas will be part of the utilities located within the proposed utility corridor. Jess said that he would provide me with the names and contacts for all of the utility companies coming in through this 33 foot corridor so I can draft the necessary utility easements and revise the service road easement.

The Town of Wilson Planning & Zoning Committee meeting is normally on the 2<sup>nd</sup> Monday of every month. However, because of the large crowds and the fact that Debbie Taylor is flying in from Scotland to attend this meeting they are having a special meeting for this issue on Tuesday, March 19<sup>th</sup>. Rather than the letter we discussed last week, I have drafted the letter that Kohler is looking for to send to the Town of Wilson before the 19<sup>th</sup> which states our opposition to any relocation of their guest entrance through the park. Please review and comment/modified as you see fit.

Thanks

**Kris Hess**  
**Attorney**  
**Bureau of Legal Services**  
(608) 266-9454

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**From:** Schuller, Daniel J - DNR  
**Sent:** Wednesday, March 06, 2013 2:11 PM  
**To:** Hess, Kristin A - DNR  
**Cc:** Thiede, Kurt A - DNR; Gunderson, Scott L - DNR; Currie, Kimberly - DNR  
**Subject:** RE: Kohler co. Tented Forest

Kris, have you discussed this with Mr. Barley yet? Before we say Yes to this utility easement we should find out if they also need us to approve the east-west road to the Tent sites if it crosses back and forth on Kohler and state park property. If it does it is another 6(f) LWCF issue. There would be three 6(f) conversion sites in total then.

We will need more than a cash payment for replacement compensation. As we discussed in addition we want them to seriously consider locating the service road north instead of starting near our PEVs. Otherwise we will not approve additional customer traffic on this.

 Daniel J. Schuller

Director  
Bureau of Parks & Recreation  
Wisconsin Department of Natural Resources

(☎) phone: (608) 266-2185

(☎) fax: (608) 267-7474

(✉) e-mail: [Daniel.Schuller@wisconsin.gov](mailto:Daniel.Schuller@wisconsin.gov)

Website: [dnr.wi.gov](http://dnr.wi.gov)

Find us on Facebook: [www.facebook.com/WIDNR](http://www.facebook.com/WIDNR)

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**From:** Hess, Kristin A - DNR

**Sent:** Wednesday, March 06, 2013 12:20 PM

**To:** Thiede, Kurt A - DNR; Schuller, Daniel J - DNR; Gunderson, Scott L - DNR

**Subject:** FW: Kohler co. Tented Forest

This is the latest site plan map that Kohler Company provided to me last Friday afternoon.

I am still waiting for Kohler to actually provide a survey of the entire proposed service road for the easement. Thus far, they have only provided the Exhibit B map (which I also received last Friday afternoon) which shows the service road going north and then stopping. However, when you look at their new site plan aerial map, it appears that when the service road turns to the east (towards the lake) that it crisscrosses back and forth over our mutual boundary line and that this road would be located partially on DNR lands and partially on Kohler property.

Also, Exhibit B shows the location of the proposed utility corridor that we discussed last Friday. Please let me know if this is an acceptable location for the utility corridor for gas and electric, as well as "telecommunications, video and information services" that Kohler is now requesting to be added to the utility easement.

**Kris Hess**  
**Attorney**  
**Bureau of Legal Services**  
(608) 266-9454

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**From:** Barley Jess [<mailto:Jess.Barley@kohler.com>]

**Sent:** Friday, March 01, 2013 4:33 PM

**To:** Hess, Kristin A - DNR

**Subject:** Kohler co. Tented Forest

Hi Kris,

Following our phone call, Attached is a copy of our proposed site plan for the tented forest project for your reference.

I also left you a voicemail but when you get a chance, if you could give me a call at 920-912-7693, I wanted to follow up with you on our conversation on the guest entrance traffic issue we have with local plan commission.

Thanks.

**Jess Barley**

Sr. Staff Project Manager - Hospitality

**KOHLER** Hospitality Project Management

444 HIGHLAND DR. MS 201 KOHLER, WI 53044

o: (920) 457-4441 ext. 77616 c: (920) 912-7693 e: [jess.barley@kohler.com](mailto:jess.barley@kohler.com)

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March 13, 2013

Mr. Brett Edgerle  
Kohler Co.  
444 Highland Drive, Mail Stop 201  
Kohler, WI 53044

Re: Kohler Company "Tented Forest" Project  
Guest Entrance Location

Dear Mr. Edgerle:

The Department of Natural Resources is aware of the upcoming March 19, 2013 Town of Wilson Plan Commission meeting in which Kohler Co.'s application for a conditional use permit for your Tented Forest project will be acted upon.

It has come to our attention that local Timberlake subdivision residents are suggesting that all Tented Forest guest traffic be relocated from the proposed north entrance off of Timberlake Road to the south through the main entrance to Kohler-Andrae State Park located off of Beach Park Lane. Please be advised that the Department is exceedingly concerned with any proposed relocation of your guest entrance through our main state park entrance.

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.

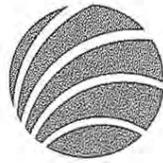
The Department remains committed to work with Kohler Co. regarding your employee entrance via a new service road through the state park. However we cannot consent to any additional guest traffic through our main park entrance for the reasons stated above.

If you have any questions or concerns regarding the Department's position on this matter, please feel free to contact me at 608-266-5833.

Sincerely,

Kurt A. Thiede  
Administrator, Division of Land

cc: Dan Schuller, Bureau of Parks Director  
Scott Gunderson, Executive Assistant  
Bureau of Legal Services



McGILLIVRAY  
WESTERBERG  
& BENDER LLC  
ATTORNEYS

July 24, 2015

*Via Email*

Jay Schiefelbein  
Wisconsin Department of Natural Resources  
2984 Shawano Ave  
Green Bay, WI 54313-6726  
[DNRKohlerProposal@wisconsin.gov](mailto:DNRKohlerProposal@wisconsin.gov)  
[Jeremiah.Schiefelbein@wisconsin.gov](mailto:Jeremiah.Schiefelbein@wisconsin.gov)

*Re: Scoping Comments for the Kohler Golf Course Project Environmental  
Impact Statement*

Dear Mr. Schiefelbein:

On behalf of members and supporters of Friends of the Black River Forest ("FBRF"), this firm submits the following comments and attachments regarding the scope of the Department's environmental impact statement ("EIS") for Kohler's proposed golf course project in the Town of Wilson, Sheboygan County. These comments are supplementary to comments delivered at the informational meeting on July 14, 2015.

As an initial matter, FBRF supports the EIS process for this project. The proposed site includes innumerable sensitive environmental resources, such as high-quality and rare wetlands, coastal forests, dunes, and beach, which provide habitat for migratory birds and rare species. The site also contains numerous cultural resources and burial mounds for Wisconsin's first inhabitants. As such, this site presents numerous challenges for large developments, including the golf course and associated facilities that Kohler has proposed. The EIS process in an appropriate way to for the public and policymakers to investigate and understand the impacts of this project, and to assess whether the necessary approvals can be granted.

The environmental impact report ("EIR") that Kohler has prepared does not fully explore or acknowledge this project's significant environmental and other impacts. It provides some useful data but, overall, is better characterized as advocacy than informational. For example, the EIR portrays the project as much less impactful than Kohler's original site plan, but this is not the proper point of reference: rather, the EIR should examine the impacts of *this current proposal* on the environment. The EIR overemphasizes the project's economic benefits, and supporting documentation for the EIR

is simply referred to and not provided.<sup>1</sup> Necessary details like specific site layouts and conclusive wetland fill numbers are lacking. The EIR does not supply the level of detail commensurate with the complexity and scale of the project required for an EIS under NR 150.30(2), and it is at most only a starting point for the DNR's own review.

To that end, we agree with the DNR's additional requests for information in its May 22, 2015, letter, as appropriate and necessary to evaluate this project. We encourage the DNR to promptly post information it receives on the Department's Kohler golf course website, which will reduce administrative burdens on DNR associated with responding to Open Records requests, and ensure the public has current information.

Beyond the information contained in the EIR and requested in the Department's May 22, 2015 letter, we believe other information is necessary to assess this project. It includes information in the attached comments of Dr. Quentin Carpenter, as well as:

- A complete analysis of surface and groundwater flows at and around the site, to understand above- and below-ground impacts to wetlands, neighboring wells, stormwater runoff, vegetation, and other issues.
- An investigation into the number and nature of area residential wells. One speaker last week stated that many residents have shallow, sand-point wells, that could be negatively affected by groundwater quality and quantity alterations.
- A detailed description of the best management practices and integrated pest management Kohler proposes to use for fertilizers, pesticides, and herbicides, and an analysis of whether they will actually work to protect groundwater quality, surface water quality, native vegetation, and wetlands.
- Details on the proposed "Lake Michigan Observation Tower" and its impacts on the viewshed from Lake Michigan and elsewhere. These impacts have implications under Wis. Stat. Ch. 30 and required considerations for natural scenic beauty.
- An evaluation of Kohler's plans to use septic systems to treat wastewater. The EIR states at page 7 that groundwater is sometimes only three feet from the ground surface, but yet that adequate separation will be maintained from the shallow groundwater aquifer. The DNR should verify this assessment, including whether

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<sup>1</sup> These include Kohler's feasibility studies for water supply (EIR Section 2.2.1), groundwater modeling data (Section 2.2.2), traffic study (Sections 2.3.4 and 3.3.2), testing that purports to support use of conventional septic field systems to treat domestic wastewater (Section 2.3.5), on-site investigation and test borings (Section 2.3.7), stormwater management plan (Section 2.3.8), field study, well logs, well monitoring data, and well pump test reports (Sections 3.1.3, 4.1.3), documentation of vegetation sampling efforts (Section 3.2), wildlife observation surveys, including for endangered and threatened species (Sections 3.2.5 and 4.2.1), and an archeological study (Section 3.3.4). Kohler should provide copies of all of these reports to the DNR to allow for independent assessment and verification.

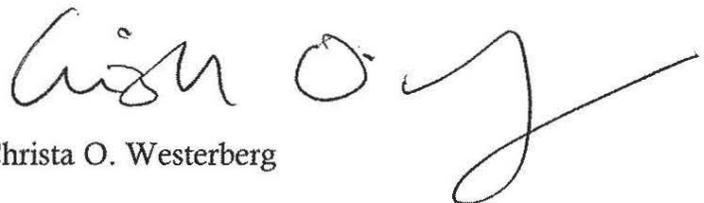
septic will be sufficient to protect groundwater at the outset and over time. Septic systems are known to fail, and especially to impair shallow groundwater aquifers. See attached Bradbury/Wilcox Study. Wastewater management is just one of many infrastructure challenges this project presents.

- The effectiveness of proposed measures to protect sensitive dune and other communities from foot and cart traffic and misplaced equipment. For example, will roped-off areas be enough to keep a golfer who has had a few cocktails from tromping into protected areas to retrieve a wayward ball?
- A study of the current use of the area proposed for Kohler's entrance road and buildings on DNR property. The EIR minimizes the recreational value of this property, but individuals stated last week that they use the property for recreation, such as observing wildlife.
- Kohler emphasizes the value of increasing access for residents of Timberlake subdivision, but this property is already designated as a forest preserve in NR 15.01(16)(b). We understand Kohler has removed signs designating the area as a game refuge under NR 15.01, and the EIS should accordingly evaluate the impact of the loss of this designation.
- The DNR's alternatives analysis should of course examine the "no build" and smaller course options. However, the DNR should evaluate alternatives that do not require an easement across state park property, which is also necessary for the DNR's Section 6f LAWCON conversion application, should it submit one. The EIR only contains one such scenario (Alternative D-7), and while Kohler admits all alternatives are "constructible and viable" (EIR Page 9), its preference is to use state park land. This is in contrast to Kohler's position when it had proposed a "tented forest" for this property. At that time, Kohler asked for and received a letter from DNR stating that use of the state park entrance (which neighbors in the Timberlake subdivision had urged) would not be allowed. (See attached correspondence.) Presumably, nothing has changed, and access through the state park will again be rejected. The EIS should reflect this scenario.

Thank you for the opportunity to provide these comments. Please let me know if you have any questions or need any further information.

Sincerely,

McGILLIVRAY WESTERBERG & BENDER



Christa O. Westerberg

Attachments:

- 1) Comments and C.V. of Dr. Quentin Carpenter
- 2) Bradbury, Kenneth, and Jeffrey D. Wilcox, Impacts of Privately Sewered Subdivisions on Groundwater Quality in Dane County, Wisconsin
- 3) Documents regarding proposed "tented forest" entrance to Kohler Property

cc: FBRF

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**From:** Erin O'Brien <policy@wisconsinwetlands.org>  
**Sent:** Thursday, July 23, 2015 3:11 PM  
**To:** DNR Kohler Proposal  
**Subject:** Scoping Comments  
**Attachments:** WWA Kohler Golf Course Scoping Comments.pdf

Greeting,

Wisconsin Wetlands Association comments on the scope of the EIS for the Proposed Kohler golf course are attached.

Thanks,  
Erin O'Brien

--

Policy Director  
Wisconsin Wetlands Association  
214 North Hamilton Street, Suite 201  
Madison, WI 53703  
608-250-9971  
[www.wisconsinwetlands.org](http://www.wisconsinwetlands.org)



214 N. Hamilton St. #201 Madison, WI 53703  
Phone 608-250-9971 Fax 608-287-1179  
[www.wisconsinwetlands.org](http://www.wisconsinwetlands.org)

July 24, 2015

Jay Schiefelbein  
2984 Shawano Avenue  
Green Bay, WI 54313-6727

Mike Thompson  
Wisconsin DNR  
2300 N Dr Martin Luther King Jr Dr  
Milwaukee, WI 53212

**Re: Scope of EIS for proposed Kohler Golf Course, Town of Wilson, Sheboygan Co.**

Wisconsin Wetlands Association (WWA) is dedicated to the protection, restoration, and enjoyment of wetlands and associated ecosystems through science-based programs, education, and advocacy.

We appreciate the opportunity to provide input on the scope of the Environmental Impact Statement (EIS) for the above-referenced project. We have received numerous calls from members and other individuals concerned about the proposed wetland impacts, particularly impacts to Great Lakes Coastal wetlands, and we share those concerns.

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 adjacent "Kohler-Andrea Dunes Wetland Type" as one of Wisconsin's *Wetland Gems*<sup>®</sup> ([http://wisconsinwetlands.org/Gems/NE5\\_Kohler\\_Andrae\\_Dunes.pdf](http://wisconsinwetlands.org/Gems/NE5_Kohler_Andrae_Dunes.pdf)).

Evaluation of impacts to these wetlands must include a thorough examination of direct (i.e., fill, grading, vegetation removal), indirect, and cumulative impacts. These interdunal and ridge-swale wetlands have formed over time through complex interactions with adjacent uplands, dunes, wind, sand, surface and groundwater, and Lake Michigan itself. Because these wetlands exist as part of an upland/wetland mosaic, and are located in highly permeable soils, they will likely be very sensitive to changes in site hydrology. Considerations of impacts should include, but not be limited to:

*Direct impacts:* Though it is difficult to tell from the maps provided in the EIR, it appears that the proposed access road and clubhouse, as well as proposed fairways #7, 8, 9, and 18 would be located in, or extremely close to, the majority of the interdunal wetlands on the eastern portion of the parcel. The EIS should include detailed maps of proposed facilities and fairways in relation to delineated wetlands *for each alternative evaluated*.

Preserving Wisconsin's Wetland Heritage

*Loss and/or degradation of a rare wetland type:* Evaluation must take into consideration the regional extent of this wetland type, and whether the proposed development will impact a moderate or substantial portion of what remains. Because small changes in adjacent topography or hydrology could have substantial impacts on wetland condition or function, the analysis of impacts must look beyond direct impacts to wetland acreage.

*Site hydrology:* Small wetlands can be particularly sensitive to both increases, and decreases, in the quantity of water received, as well as changes in water chemistry. Additional analysis is needed to understand current hydrologic processes on the site, and how the proposed development will alter surface and subsurface water flowing to and through these wetlands. Elements of the proposed development that will alter site hydrology include but are not limited to: grading and clearing, tree removal, conversion of natural vegetation to turf grass, addition of topsoil, changes in topography, and creation of impervious surfaces.

*Site topography:* Given that the site is relatively flat, a detailed topographic analysis is also needed to improve understanding of site hydrology and how the proposed features will alter drainage patterns.

*Alternatives:* The alternatives examined in the EIR were limited to alternative scenarios for the location of the entrance road and a couple of alternatives for the irrigation pond. The EIR did not include details of the location or extent of wetland impacts associated with each alternative. The EIS should include a more thorough evaluation of design alternatives including full documentation of associated wetland impacts. Given the sensitivity of wetlands on the eastern portion of the site, the EIS should include a discussion of whether the least environmentally damaging practicably alternative is, in fact, also the alternative with the smallest acreage of wetland fill.

In evaluating facility design, we particularly encourage review of alternatives related to the location and size of the clubhouse, the size, location, and need for the irrigation pond, and the size, location and need for what appears to be a driving range (the large rectangular feature near the entryway).

Given the close proximity of this facility to other Kohler owned golf courses, we recommend consideration of whether features such as the driving range and some of the club house amenities are needed at this location or whether this space could be freed up to reduce the need for one or more of the fairways currently proposed for the interdunal area? If the design or configuration of the facilities or fairways are influenced by PGA competition standards these details should be included in the Purpose and Need portions of the EIS.

*Affects of lake levels and flooding:* The proposed project is sandwiched tightly between two dynamic waterways, both of which are subject to significant water level fluctuations. The site is resilient to these changes, in large part, because of the intact native plant communities. The EIS should evaluate how the proposed changes to vegetation in wetlands and uplands will affect the capacity of the land to tolerate future water level changes. This is particularly important to consider with respect to changes in Lake Michigan water levels and impacts to coastal wetlands.

The EIS should also examine how establishment of this facility so close to the floodplain and associated wetlands may impact golf course operations and/or river health during times of heavy rains or high water.

*Wetland Functional Assessment:* The wetland functional assessment provided in the EIR ranks all but 4 of the 81 wetlands on the site as “high” quality. This information should be integrated more prominently in the EIS and given full consideration in the analysis of whether the preferred alternative complies with Wisconsin’s Water Quality Standards for Wetlands under NR 103.

We thank you for your consideration of these comments on the scope of the EIS for this proposed project.

Regards,

A handwritten signature in black ink, appearing to read "Erin O'Brien", is written over a light grey rectangular background.

Erin O'Brien  
Policy Director



KOHLER ANDRAE DUNES WETLAND TYPES

Eric Epstein

Interdunal wetland, marsh, coniferous swamp, alder thicket

SHEBOYGAN COUNTY



KOHLER ANDRAE DUNES

Property Owner: WDNR

Recognitions & Designations: WI State Natural Area, WI Land Legacy Place, WI Coastal Wetland Inventory Primary Site, WI Wildlife Action Plan Reference Site

Funding for this project provided by the Wisconsin Coastal Management Program and the National Oceanic and Atmospheric Administration, Office of Ocean and Coastal Resource Management under the Coastal Zone Management Act, Grant #NA07NOS4190064.



wisconsinwetlands.org

ECOLOGY & SIGNIFICANCE

This Wetland Gem site includes the Kohler Park Dunes State Natural Area located within the Kohler-Andrae State Park. The site is significant because it protects an excellent example of interdunal wetland habitats unique to the Great Lakes region. And Kohler Andrae Dunes is particularly important because it comprises the largest dune complex along Wisconsin's Lake Michigan shoreline, including more than one mile of Lake Michigan beach. The unique interdunal wetlands at Kohler Andrae Dunes provide habitat for many rare plants, some of which are endemic to Great Lakes shorelines.

FLORA & FAUNA

Sand dunes at the site are separated by low, wet swales. These interdunal wetlands are thickly vegetated with lakeshore rush and sedges and some rare plants including slender bog arrowgrass. A variety of plants grow on the dunes and stabilize the sand, including sand reed, marram grass, Canada wild rye, northern wheat grass, common and trailing junipers, sand cherry and willow species. The dunes also support many rare species including the state threatened clustered broomrape, dune goldenrod and dune thistle. The only known population of the state endangered prairie dunewort was once documented on these dunes. At the west end of this site along the Black

River are coniferous swamp habitats dominated by ash and white cedar as well as alder thicket and marsh habitats.

More than 150 bird species are known to use the Kohler Andrae area. During the fall and spring, the area is frequented by a diverse collection of migratory birds, including many species of waterfowl and shorebirds and more than 20 species of warblers. Duck species that stopover at Kohler Andrae include American black duck, northern shoveler, canvasback, greater scaup, lesser scaup, bufflehead and red-breasted merganser. Shorebirds that use Kohler Andrae as stopover habitat include greater yellowlegs, lesser yellowlegs, ruddy turnstone and dunlin. Many birds also live and nest in wetland habitats of this site, ranging from great blue and green herons to American woodcock. The rare red-shouldered hawk also nests in these wetlands and a rare tiger moth has also been documented at the site.

THREATS

Because this Wetland Gem is located within a state park, damage from overuse is of concern. Heavy deer browsing pressure threatens the regeneration of the site's conifer trees. Invasive species, including purple loosestrife, are also a threat. Future invasion by the emerald ash borer beetle threatens the site's ash trees.

ACCESS

A trail with an extensive "cordwalk" provides access to the sensitive interdunal wetlands at this site. For details, visit the State Natural Areas Program website: [dnr.wi.gov/org/land/er/sna](http://dnr.wi.gov/org/land/er/sna). Also visit the Kohler Andrae State Park website: [www.dnr.state.wi.us/org/land/parks/specific/ka/](http://www.dnr.state.wi.us/org/land/parks/specific/ka/).



Greater yellowlegs — Gary Shackelford

Sources:

- Wisconsin State Natural Areas Program (WDNR)
- Coastal Wetlands of Wisconsin's Great Lakes (WDNR)
- Wisconsin Land Legacy Report (WDNR)
- Wisconsin's Strategy for Wildlife Species of Greatest Conservation Need (WDNR)

---

**From:** [REDACTED]  
**Sent:** Friday, July 10, 2015 8:11 AM  
**To:** DNR Kohler Proposal  
**Subject:** Town of Wilson golf course

If you are asking the public for their opinion, I say NO. I do NOT support this project.

We don't need another golf course and the land should be left alone.

A Southside Resident

---

**From:** [REDACTED]  
**Sent:** Wednesday, July 01, 2015 4:16 PM  
**To:** DNR Kohler Proposal  
**Cc:** Vinette  
**Subject:** Town of Wilson Proposed Golf Course

Good afternoon,

As a town of Wilson resident I would like to express my thoughts on the proposed Kohler golf course located along the shores of Lake Michigan in the Town of Wilson.

It is my opinion that Kohler Co. has a proven record of being a sustainable Company. Please take the time to learn about the company's sustainability efforts by visiting [www.corporate.kohler.com/sustainability/](http://www.corporate.kohler.com/sustainability/)

I understand the company intends on removing all evasive plant life and will preserve 50% of the trees currently on the property.

This Golf course will be built as a minimalist design that will preserve the major dune structures of the land and current shoreline.

Thank you for your considerations.

Best regards,  
[REDACTED]

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Tuesday, July 14, 2015 3:40 PM  
**To:** DNR Kohler Proposal  
**Subject:** Town of Wilson proposed Kohler Golf Course

To whom it may concern,

As a resident of the Town of Wilson and living across the street from Kohler Andrae State Park I am writing to give my full support for the proposed golf course. I have seen that Kohler only does first rate projects and I feel that this project will add quite a bit of value to the Town of Wilson. I have listened to both sides in this endeavor and I don't find much credibility in the arguments given against it.

First, Kohler has listened to the towns' people and made changes to plans that will minimize environmental impact to dunes and wetlands. It has been said that the course will pollute Black River with run off and that the wells will be drained by the water use. We have another golf course just a block away and as far as I know these things haven't happened with that course. I trust that Mr Kohler will do all in his power to minimize any adverse effect on the neighboring town.

This area has been called "pristine wilderness" but I have walked through this area and it is not old forest or much different from the other patches of scrub forest that I see around this area. Much of the dissent seems based on the fact that the neighbors have had free rein of Mr Kohler's private property for many years and don't want to lose that. Unfortunately, since there has been such a fight against this project the property has been closed to anyone using it and therefore that benefit has already been lost.

Lastly, I am a strong believer in property rights and this property belongs to Kohler therefore I feel that as long the project meets the town requirements as set forth in law and the requirements of DNR it should be allowed to go forward without interference from those who are against it!

Sincerely,

[REDACTED]

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**From:** [REDACTED]  
**Sent:** Tuesday, July 21, 2015 6:40 PM  
**To:** DNR Kohler Proposal

I live in black river area in Sheboygan and I'm e-mailing you telling you that Kohler should not be able use that land for a golf course! This land is more valuable to the wildlife than it is to the kohler family who are simply out to make more money for themselves. I moved to this area to raise my kids in the nature of wildlife and peaceful nature! This would take all that away and it's not needed. Please take into consideration all of us who lives in that area. We have well water and their pesticides from keeping up the course would end up in my families drinking water as well. I hope you make the right decision and say no to this proposal.

[REDACTED]

Sent from my Sprint phone.

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**From:** [REDACTED]  
**Sent:** Thursday, July 23, 2015 2:36 PM  
**To:** DNR Kohler Proposal  
**Attachments:** DSC\_0679 (4).JPG; eagles nest.jpg

(taken with a log telephone lens)

My wife and I retired to the Sheboygan area and have lived in the Black River forested area for almost 10 years.

I serious concerns about the proposed Kohler Golf Course for a number of reasons and hope all will be considered and addressed in the DNR Environmental Impact Statement for this proposed golf course.

1. This proposed tournament level golf course is very different from the Whistling Straits golf course that was completed a number of years ago. The Whistling Straits course was completed on an old army base whereas this proposal involves deforestation of mature woodland, wildlife habitat It involves disturbing a very unique dunes area and migrating birds passageway. We are very fortunate to have a pair of nesting bald eagles that live within approximately a mile and a half from this site. I see them catching trout and suckers in the spring from the Black River, which will likely be affected by pesticide runoff from this proposed golf course. In the spring I have observed and photographed as many as a dozen different birds in a single morning, as they migrate through this area and our backyards in the first two weeks in May. I have also observed a pair of nesting Great Tits which live near the proposed area. I see them in my backyard year round. They are unique to the United States.
2. The proposed golf course is surrounded to the west and north by significant residential areas, which all have individual wells for drinking water. The potential to have wells contaminated over time by pesticides and or having the aquifer water level significantly drawn down to also affect our wells is a **significant concern** of almost all the homeowners in the area, including myself. The Kohler Company has stated in golf course marketing and informational pieces that they will offer well protection and that the proposed course will not contaminate the Black River, wells or surrounding area from pesticide use common to championship courses. They have not provided any details on how they will accomplish either. I hope the DNR will hold them accountable to these broad claims and require scientific detail on how each of these assurances will be accomplished. While the Kohler Company may have some property rights as far as development, they do not have the right to destroy our wells, make our drinking water unsafe to drink and destroy the value of our properties. There is growing evidence that pesticides are linked to many serious health issues including cancer and autoimmune diseases. At the Scoping Committee presentation a representative from Kohler stated the company would provide well protection in terms of an insurance policy. Again, no details as to what properties would be covered, extent of coverage, necessary paperwork and proof needed to have an affected well covered or claims process involved. Experience with insurance claims and the proof of the quality of the coverage and company is when it comes time to make a claim. I hope the DNR will keep in mind the recent the recent mitigation efforts to clean up the industrial pollution of the Sheboygan River. It is a lot better and cheaper not to let the pollution happen in the first place. Our homes represent a significant investment by all of us living in the area and our properties will significantly depreciate in value and even become almost worthless if we do not have adequate and safe drinking water from our wells.

3. This area represent a very unique dunes area as exhibited by the dunes in Kohler-Andrea State Park. As one speaker at the Scoping meeting pointed out, the dunes are so fragile that visitors to the part are asked to stay on the cord walk trails to protect them, yet this proposed not only disturbs the dunes on the property through the construction, it almost is assured of further disruption through the large numbers of visitors and courted to the area for any major golf tournament. One has to only look at the gallery photos and TV footage of tournaments to illustrate this point. The shoreline along the Black River area, is subject to almost daily variations in beach exposure, erosion and changing high water, depending on the level of Lake Michigan, and the wind directions. When the water is high and winds are out of the northeast wave action takes out the sand and already we see erosion right up to the edge of property yards. Given where some of the greens and fairways are on the proposed drawings it is highly likely that boulders or some type of wall protection will be necessary to protect the easternmost parts of the proposed course.
4. There are significant wetlands throughout this area. The wetlands are very unique to the area and the support they provide to vegetation, wildlife and water purity. Once they are gone the area is adversely affected forever and simply substituting acres someplace else does not mitigate the negative impact.
5. I have great concern about the use of state park land for this project, whether it be through purchase, easement or some other legal tool. It is a bad precedent and has the potential to have an adverse effect on Kohler-Andrea, one of the most popular of the state parks. There are a high number of visitors to this state park every year and these visitors do spend money in Sheboygan and the surrounding area. It is hard to imagine a roundabout for a park entrance and the traffic that will funnel together on a major tournament weekend, which is also prime park camping and visitor time with many of the cars and trucks coming into and leaving the park towing campers. It may be worth the DNR revisiting the Kohler involvement and request to the Department of Transportation to construct on and off ramps for Interstate 43 for use on tournament events at Whistling Straits to deal with traffic problems. Try to imaging this same traffic volume using a shared entrance with the park! The fact that the Kohler Company sees the need to use state park land at all for this project should strongly suggest that they proposal is not a good fit for this property.
6. The Kohler Company has claimed a huge economic impact in terms of creation of jobs and positive impact on the Sheboygan economy, but I have yet to see specific assumptions and methodology used in calculating that impact. While there will no doubt be visitors who will stay at hotels and patronize areas businesses while visiting the proposed golf course, the economic impact should be suspect, unless the company can provide you with the methodology, and assumptions used to calculate their scientific and the methodology and assumptions hold up to proven mathematical and economic modeling methods. I would also suggest that the DNR review the marketing efforts for Whistling Straits. Most promotional material and even TV announcers referred to Whistling Straits being in Kohler, which is simply not true. There appeared to be efforts to brand the Kohler name and exclude the names of local communities like Sheboygan or even Haven, where the course is located. I remember watching announcers on the first PGA televised coverage refer to Whistling Straits being in Haven, Wisconsin. The next day the same announces referred to the course being in Kohler, Wisconsin. It was obvious that the Kohler marketing people had gotten to them and changed the script to better fit their Kohler branding goals. The special on and off ramps on I43 were designed to be used to get people to the course venue as quickly as possible and back on the interstate and on the way home equally quickly, not direct them to businesses in the area. The economic message was clear, spend your money in Kohler or at the PGA venue facilities and then get on your way home as quickly as possible.
7. At the Scoping meeting there were speakers who indicated that this area may have Indian artifacts and possible Indian burial grounds. I have no first hand knowledge of either, but if in fact there are Indian burial grounds on this property the destruction and such sacred ground for a golf course seems

inappropriate. In fact I have to wonder if there might be federal laws that would prohibit their destruction.

As part of your environmental impact review, I strongly urge members of the DNR to visit Whistling Straits for the upcoming PGA tournament and see first hand the impact of such an event on the actual grounds and surrounding area and then try to imaging a similar event on the proposed gold course site and neighboring areas. Unguided observations alone should raise serious environmental impact concerns on top of those I have mentioned.

Overall, I don't think the positives of this golf course proposal outweigh the negative impacts that this proposal will have on the area and I believe that is why so many people in the area do not support it. Many of the negatives have the potential to cause significant and irreversible damage.

Thank you for your consideration.

A black rectangular redaction box covering the signature area.





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**From:** [REDACTED]  
**Sent:** Friday, July 24, 2015 7:56 AM  
**To:** DNR Kohler Proposal  
**Subject:** WDNR Public Comment on Kohler Golf Course  
**Attachments:** CCF07242015.pdf

Mr. Schiefelbein,  
Please see the attached letter for the above subject for your consideration.

[REDACTED]

This e-mail and any attachments may contain privileged or confidential information. This e-mail is intended solely for the use of the individual or entity to which it's addressed. If you are not the intended recipient of this e-mail, you are hereby notified that copying, distribution, dissemination or action taken in relation to the comments of this e-mail, and any of its attachments is strictly prohibited and may be unlawful.



July 23, 2015

Wisconsin DNR  
Attn: Jay Schiefelbein  
2984 Shawano Avenue  
Green Bay, WI 54313-6727

Re: DNR Public Comment on Proposed Kohler Golf Course

Mr. Schiefelbein,

As the President and owner of a third generation family owned business in Sheboygan, I have witnessed the positive impact the Kohler Company has had on Sheboygan County families both economically and with regard to quality of life. The Kohler golf course in the town of Haven, Whistling Straights serves as that proof, as well as the courses at Blackwolf Run in Kohler. I also serve as the Chairman of the Sheboygan County Economic Development Corporation, which consists of local business leaders and elected officials. We were asked to support the project but would not do so until a full economic and ecological impact presentation was given to our board. After the presentation our board gave unanimous approval to support the project. Kohler Company has been very open and transparent with our community, as well as neighbors of the proposed development and has used many of the public comments to modify their plans to address various concerns. This project will have a multimillion dollar impact on our region helping many retail and service businesses, as well as increasing enrollment in our local schools and also having a positive tax impact on our communities.

Kohler Company is the area's largest employer and is a responsible and respectful member of our community. The company has a worldwide presence and a global reputation for doing things the right way. Their intentions to build a public 18 hole golf course in the Town of Wilson using a minimalist design is environmentally responsible. It would be an asset to our community and Wisconsin and we hope the DNR will support it.

Sincerely,

A black rectangular redaction box covering the signature of the sender.

President