



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Bruce Rauner, Governor

Wayne A. Rosenthal, Director

June 13, 2016

Mr. Dave Navecky
Surface Transportation Board
Docket No. FD 35952
395 E Street SW
Washington, D.C. 20423-0001

RE: Docket No. FD35952, Great Lakes Basin Transportation, Inc. (GLBT)—Authority to Construct and Operate a Rail Line in Indiana, Illinois, and Wisconsin: Notice of Intent to Prepare An Environmental Impact Statement, Draft Scope of Study, Notice of Scoping Meetings, and Request for Comments on Draft Scope

Dear Mr. Navecky:

In response to your Notice of Intent, The Illinois Department of Natural Resources is pleased to offer the attached comments on the Draft Scope topics of Transportation Systems, Land Use, Recreation, Biological Resources, Navigation, Noise, Cultural and Historic Resources, and Aesthetics.

It is clear the proposed action will produce significant environmental impacts. We hope you find our comments useful in preparation of the Draft Environmental Impact Statement.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne A. Rosenthal".

Wayne A. Rosenthal, Director
Department of Natural Resources

kms:cw:WAR

Transportation Systems:

Direct Impacts:

- Apart from impacts to roads and highways, the proposed railroad will cross a region already traversed by a large number of pipelines at shallow depths carrying volatile and potentially toxic raw materials and refined products, including crude oil, natural gas, and refined fuels such as gasoline and diesel oil. Care will be required during construction to not interfere with or disrupt the operation of such pipelines and to prevent catastrophic spills of their contents which would harm natural resources and local human populations. In particular, the shallow depths at which some pipelines occur may constrain track gradients, so that it may be necessary to raise the track beds for considerable distances on either side of the pipeline crossing to provide a safety factor; this, in turn, may extend impacts related to acquiring soil and rock for the track bed. Some pipelines may be vulnerable to effects from frequent vibrations from passing trains; this aspect should be analyzed.
- Apart from impacts to roads and highways, Northeastern Illinois contains numerous bicycle and pedestrian trails which cost millions of dollars to develop. Wherever the proposed railroad intersects such trails, provisions should be made for trail underpasses or overpasses. Among these are the **American Discovery Trail-North**, which runs from the Quad Cities across Illinois to Indiana and runs concurrently with the **Grand Illinois Trail** along the Illinois River; the **Long Prairie Trail** in Boone County; the **Pecatonica Prairie Path** in Winnebago County; the **Route 66 Trail** in Grundy County; and the **Kankakee River Trail** in Kankakee County.
- The proposed railroad will intersect no fewer than five Interstate Highways in Illinois, plus a number of other important federal and state highways. At each such intersection the potential will exist for the development of Intermodal Transport Centers to shift cargoes from truck-to-rail and from rail-to-truck. The indirect impacts of such facilities should be considered.

Land Use:

- Construction and operation of the proposed railroad will have significant direct effects on land currently used for agriculture and recreation. Farms and recreation lands will be fragmented, potentially rendering current uses economically or practically infeasible.
- Indirect effects will include alteration of tax revenues to local governments, including school districts.
- In Grundy County and DeKalb County, the proposed route will draw near or pass through existing utility-scale wind farms. Construction of the route has the potential to temporarily disrupt energy generation at these facilities through the displacement or disturbance of underground power lines.

Recreation:

- Kankakee State Park (the Park), a property of the Illinois Department of Natural Resources, will be divided by the proposed action. On average, 1.5 million people visit the Park each year.
- On June 3, 2016, the U.S. Dept. of the Interior announced the designation of the entire length of the Kankakee River in Indiana and Illinois as a National Water Recreation Trail. The EIS should consider this fact.
- Existing hiking, biking, snowmobiling, and equestrian trails within the State Park will be truncated unless an alternative is pursued which would allow the trails to remain connected.
- A large campground is located only half a mile west of the proposed route. Given the planned frequency of train traffic day and night, the campground will become an undesirable venue and the value of the State's investment in this form of recreation will be severely diminished. It is possible the campground will have to be relocated to minimize train impacts.
- The success of hunting, fishing, and birdwatching activities by the public will be adversely affected, since habitats will be fragmented by the route and wildlife is likely to be dispersed due to train traffic noise and vibration. All statewide hunting seasons are open within the Park.
- An agricultural lease area within the Park will be diminished or fragmented by the proposed route. This will adversely affect income which supports Park activities and facilities.
- The EIS should consider an alternative of placing the approaches to the Kankakee River crossing underground. The applicant already proposes passing the route beneath the existing grades of the respective State highways, and grade requirements will result in a massive trench through the Park. Portions of this trench could be covered and the lands above it restored to maintain the connectivity of trails and terrestrial natural resources, including wildlife and the vegetative communities. This would greatly moderate adverse impacts which will otherwise result.
- The proposed route will fragment two Conservation Areas in Boone County, owned and operated by the Boone County Conservation District. As with recreational facilities at Kankakee State Recreation Area, hunting, camping, fishing, hiking, biking and other outdoor recreational activities will be severely adversely affected by the physical fragmentation of the parks by the tracks and by the railroad noise.

Biological Resources:

- The proposed action has the potential for significant adverse impacts to biological resources, including fish, wildlife, and natural communities. Fragmentation of habitats and natural communities may be significant.
- The proposed route will cross four major rivers and many lesser streams. This will affect stream beds, channels, and flows, while the noise and vibration of crossing trains are likely to affect the movements and distributions of aquatic life, potentially impeding the movement of aquatic fauna to important spawning and nursery beds, or preventing their use of essential habitats in the vicinity of the crossings. Interference with fish movements may adversely affect the reproductive success and distribution of mussels. Recent research from Alabama on the noise from Interstate Highway bridges demonstrated adverse impacts to fish mating and spawning behavior as far as 12 kilometers downstream. (Holt and Johnston, 2015, *Traffic Noise Masks Acoustic Signals of Freshwater Stream Fish*, Biological Conservation.) Similar or greater acoustic effects may result from this project and should be considered.
- A number of federally-listed and State-listed endangered and threatened species may be taken, and their essential habitats adversely modified, in the course of construction and operation of this action.
 - The entire route of the project traverses the ranges of the endangered **Indiana Bat**, *Myotis sodalis*, and the threatened **Northern Long-Eared Bat**, *Myotis septentrionalis*. While forest habitats have been largely avoided by the proposed route, the possibility remains that summer habitat of each species may be adversely affected in several locations. While the Northern Long-Eared Bat at the federal level is covered by a Section 4(d) Rule which allows incidental taking, no such accommodation is available under State law, which still requires permits for incidental taking of this species.
 - In the Kankakee River, numerous federally-listed and state-listed aquatic fauna are present and may be taken or adversely affected. State-listed endangered or threatened fishes include the **American Eel**, *Anguilla rostrata*; the **American Brook Lamprey**, *Lethenteron appendix*; the **Northern Brook Lamprey**, *Ichthyomyzon fossor*; the **Pallid Shiner**, *Hybopsis amnis*; the **Bigeye Shiner**, *Notropis boops*; the **River Redhorse**, *Moxostoma carinatum*, the **Greater Redhorse**, *Moxostoma valenciennesi*; the **Western Sand Darter**, *Ammocrypta clarum*; the **Starhead Topminnow**, *Fundulus dispar*; the **Weed Shiner**, *Notropis texanus*; the **Blacknose Shiner**, *Notropis heterolepis*; and the **Ironcolor Shiner**, *Notropis chalybaeus*. Endangered or threatened mussels include the federally-listed **Sheepnose Mussel**, *Plethobasus cyphus*; plus the state-listed **Salamander Mussel**, *Simpsonaias ambigua*; the **Purple Wartyback**, *Cyclonaias tuberculata*; the **Spike Mussel**, *Elliptio dilatata*; the **Black Sandshell**, *Ligumia recta*, and the **Slippershell Mussel**, *Alasmidonta viridis*. The Kankakee River also supports the

state-listed amphibian, the **Mudpuppy Salamander**, *Necturus maculosus*; and the semi-aquatic state-listed reptile, the **Blanding's Turtle**, *Emydoidea blandingii*. Small tributaries of the Kankakee in northern Kankakee County support some of the smaller listed fishes and the Slippershell Mussel.

- The Illinois River hosts a number of federally-listed and state-listed aquatic fauna, including the federally-listed **Sheepnose Mussel**, *Plethobasus cyphus*; and the **Scaleshell Mussel**, *Leptodea leptodon*; and the state-listed **Purple Wartyback**, *Cyclonaias tuberculata*. Listed fishes in the Illinois River include the state-listed **American Eel**, *Anguilla rostrata*; the **Pallid Shiner**, *Hybopsis amnis*; the **Blacknose Shiner**, *Notropis heterolepis*; the **Bigeye Shiner**, *Notropis boops*; the **Banded Killifish**, *Fundulus diaphanus*; the **River Redhorse**, *Moxostoma carinatum*, the **Greater Redhorse**, *Moxostoma valenciennesi*; the **Lake Sturgeon**, *Acipenser fulvescens*; and the **Western Sand Darter**, *Ammocrypta clarum*.
- The Fox River near Sheridan, Illinois, supports a population of the state-listed threatened **River Redhorse**, *Moxostoma carinatum*.
- The Rock River supports several state-listed fish and mussels: the **Gravel Chub**, *Erimystax x-punctatus*; the **Lake Sturgeon**, *Acipenser fulvescens*; the **Brassy Minnow**, *Hybognathus hankinsoni*; the **River Chub**, *Nocomis micropogon*; the **American Eel**, *Anguilla rostrata*; the **Black Sandshell Mussel**, *Ligumia recta*; the **Purple Wartyback**, *Cyclonaias tuberculata*; and the **Spike Mussel**, *Elliptio dilatata*.
- The Kishwaukee River supports the following state-listed fish and mussels: the **American Brook Lamprey**, *Lethenteron appendix*; the **Gravel Chub**, *Erimystax x-punctatus*; the **Iowa Darter**, *Etheostoma exile*; the **Black Sandshell Mussel**, *Ligumia recta*; the **Spike Mussel**, *Elliptio dilatata*; and the **Slippershell Mussel**, *Alasmidonta viridis*. The Kishwaukee River also supports the state-listed reptile, the **Blanding's Turtle**, *Emydoidea blandingii*. These species also occur in tributaries of the Kishwaukee River.
- Illinois' major rivers support numerous nesting pairs of the **Bald Eagle**, *Haliaeetus leucocephalus*. The Rock and Kishwaukee Rivers also support nests of the state-listed **Osprey**, *Pandion haliaetus*.
- Paired tracks will fragment numerous habitats with the potential to isolate groups of already small populations of amphibians and reptiles. Turtles are often trapped between rails and die of desiccation. The state-listed **Ornate Box Turtle**, *Terrepenne ornata*, occurs in Kankakee County. Fragmentation and mortality can be minimized or avoided by providing passages through the track ballast, perhaps every hundred yards, between the ties. Such passages have been successful elsewhere in Illinois in reducing mortality and maintaining the gene pools of otherwise isolated populations.

- In Grundy County, the route will encounter the Route 66 corridor, which is a major habitat area for the state-listed **Eryngium Stem-Borer Moth**, *Papaipema eryngii*. This is a candidate for federal listing. The species has a specific host plant, **Rattlesnake Master**, *Eryngium yuccifolium*; large colonies of this plant are essential for the Moth's survival. The frequent passage of trains may result in the deaths of numerous adult moths during its flight period, via collisions.
- Periodically, the federally-listed **Gray/Timber Wolf**, *Canis lupus*, occurs in Northern Illinois. Wolves have been killed in Grundy County, and have been reported in Winnebago and Boone County. No packs are known to exist in Illinois and no specific habitats have been identified. The project is unlikely to pose any threat to this highly-mobile animal.
- The incidental taking of many of these species is likely as a result of the construction and operation of the proposed railroad. Whether federally-listed or state-listed, regulatory compliance with state wildlife laws will be required, in addition to the satisfaction of any federal requirements.
- The project may significantly decrease hunting opportunities for the public at Kankakee River State Park by fragmenting wildlife habitat for Wild Turkey and White-Tailed Deer, and dispersing animals due to the noise of the train traffic. Additional comments related to noise are given under that topic heading.

Noise:

Because the route has been chosen to avoid population centers and existing transportation corridors, the project will introduce significant increases of noise pollution in areas where anthropomorphic noise has little impact or is intermittent. This has a strong potential to influence the distribution of fish & wildlife on the Illinois landscape.

The influence of anthropomorphic noise on songbirds is well-documented. Within 500 feet of two-lane highways the reproductive success of territorial males is greatly curtailed, either because their songs cannot be heard by females or because they must shift the tonal frequencies of their songs to avoid human noise interference, and females are not genetically programmed to respond to songs in those ranges.

Many other animals respond to aural or tactile vibrations to find mates, food, or to avoid predators; frequent or sustained human noise renders these necessary tasks more difficult. Survival may require the abandonment of previously habitable territory.

Trains moving at high speed with great frequency will produce both audible and tactile vibrations (*i.e.*, “noise”) through the air, through the soil, and through local waters. Generally, federal and state regulations dealing with noise pollution are designed to avoid physical injury to human beings or to reduce or minimize nuisance to human beings, and seldom or never consider the effects to other organisms. Because many animals are able to perceive sound and vibrations at frequencies and intensities far different from those of humans, who are relatively insensitive, the adverse effects on fish & wildlife, including metabolic stress, will render hundreds of square miles of rural Illinois less welcoming or uninhabitable for many species, with concomitant adverse effects on the biological diversity of natural communities along the length of the proposed railroad.

The effects of noise on non-human receptors should be considered in the EIS.

Navigation:

Two forms of navigation are important on Illinois rivers and streams: commercial and recreational.

The Illinois River is the main thoroughfare of the Illinois Waterway. No other river or stream in the path of the proposed railroad supports commercial navigation. The proposed crossing of the Illinois River must not result in the obstruction of this important commercial artery. Permits from the U.S. Army Corps of Engineers and the Illinois Department of Natural Resources – Office of Water Resources will likely be required for the bridge or bridges.

Parallel to the Illinois River on its north bank is the historic Illinois & Michigan Canal, a relic of early commercial expansion on a par with the Erie Canal, designated as a National Heritage Corridor by the National Park Service and owned by the Illinois Department of Natural Resources. The intersection of the proposed railroad with the Canal must be carefully designed to preserve its structural and historic integrity to the extent possible.

Larger rivers, such as the Kankakee, Fox, and Rock Rivers, support navigation of motorized recreational watercraft used by boaters and fishermen. The use of some river reaches may be temporarily disrupted by bridge construction to carry the Railroad over these rivers.

Smaller streams are used by thousands of paddlers using canoes and kayaks. The crossings of such streams should provide sufficient clearance to allow such craft safe passage without the need to portage over the tracks, which would be dangerous to both boaters and train crews. Such crossings should also be designed to avoid collecting trees, branches, and other debris which would obstruct stream flow as well as watercraft.

Cultural and Historic Resources:

- Illinois & Michigan Canal. The historic Illinois & Michigan Canal runs parallel to the north bank of the Illinois River, and must be crossed by the proposed railroad. In addition to the original prism of the Canal channel itself, the Canal consists of locks, dams, turning basins, the towpath—much of which is now a recreational bicycle and pedestrian trail—the occasional original lock-keeper's houses, and aqueducts which carry the canal over intersecting streams. Some portions of the Canal are dry and some are wet. The Canal has been designated by the National Park Service as a National Heritage Corridor, and it is owned by the Illinois Department of Natural Resources. The crossing must be accomplished with a minimum of disturbance to this historic structure.
- The bluffs and valleys of the major rivers and of many lesser streams are the location of hundreds, if not thousands, of pre-historic and historic human occupations, most of which have not been fully-evaluated for eligibility to be listed on the National Register of Historic Places. This is certainly true of the proposed crossing of the Kankakee River, on land owned by the Department of Natural Resources. Paleontological resources may also be encountered in the extensive excavations required to accomplish the project's goals. The potential exists to encounter human burials. The project must comply with all state laws governing human skeletal remains, and archaeological and paleontological resources.
- The Department of Natural Resources is responsible, through agreement with the State Historic Preservation Officer, for safeguarding cultural and Historic resources on Department-owned lands. Sites located on other public and private lands must be evaluated in coordination with the Illinois Historic Preservation Agency.

Aesthetics:

The project has the potential to adversely affect the aesthetic appeal of the Illinois countryside, especially near rivers and streams, but also wherever “flyovers” require significant changes in gradient on an otherwise relatively flat landscape.

The larger river valleys are the most scenic, and adverse impacts can be expected at crossings of the Kankakee, the Illinois, the Fox, and the Rock Rivers.