



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

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### **U.S. Fish and Wildlife Service Lake Erie Watersnake Management Guidelines for Construction, Development, and Land Management Activities August 19, 2009**

The Lake Erie Watersnake (*Nerodia sipedon insularum*) is a federally listed threatened species that occurs on the islands in the western basin of Lake Erie. Summer habitat includes cliffs with crevices, rocky shorelines, and rock-filled structures such as docks, breakwalls, and shoreline erosion control structures. Lake Erie Watersnakes forage in Lake Erie for small fish, primarily round goby. Suitable winter hibernation sites include cracks and crevices in bedrock, rocky soils, animal burrows, tree root masses, and human-made structures such as foundations, drainage tiles, and building pads. The Endangered Species Act prohibits “take” of all federally listed species. Take is defined as to pursue, harm, harass, hunt, wound, kill, trap, capture, collect, or to attempt to engage in any of these activities.

The U.S. Fish and Wildlife Service (Service) has developed the following guidelines to assist island landowners in avoiding take of Lake Erie Watersnakes during typical land management activities. However, implementation of these guidelines does not remove legal liability associated with take of a federally threatened species. The Service recommends that anyone planning a development project on the Lake Erie islands contact us early in the planning stages for project design assistance to avoid take of Lake Erie Watersnakes.

#### Excavation

During hibernation, Lake Erie Watersnakes are unable to move and are vulnerable to any disturbance of their hibernation sites. Excavation of any kind in potential suitable winter hibernation habitat within 528 ft (161 m) of shore should be avoided between October 15 and April 15. Activities to be avoided include, but are not limited to, digging foundations, burying utility lines, removing suitable tree roots or hollow tree bases, and destroying suitable human-made structures such as foundations or drainage tiles.

Excavation activities occurring between April 16 and May 31, or between September 15 and October 14 should only be conducted when air temperatures are above 60 degrees Fahrenheit. The construction site should be actively monitored for snakes before and during construction by an individual that can identify a Lake Erie Watersnake.

Any holes or trenches that are dug should be filled in as soon as possible to prevent watersnakes from inadvertently falling into them and becoming trapped. Holes or trenches should be inspected for Lake Erie Watersnakes before being filled.

#### Erosion Control

Mesh or woven erosion control fabrics or blankets should NOT be used to stabilize disturbed areas, as they have been documented to entangle and kill Lake Erie Watersnakes. Loose straw or mulch may be used as an alternative.

### Mowing

Shoreline vegetation is important habitat for Lake Erie Watersnakes, native birds, fish, amphibians, and mammals. It also helps to stabilize banks, prevent erosion, and promote water quality. Landowners are encouraged to avoid mowing within 69 feet (21 m) of the shoreline to protect these important habitat and water quality functions. Mowing between April 15 and September 15 within 69 feet (21 m) of the shore should be completed at dusk, when watersnakes will have taken cover for the night. Mowers should utilize a high setting, and the area to be mowed should be actively monitored for Lake Erie Watersnakes. If Lake Erie Watersnakes are encountered during mowing, activities should cease until the snake has left the area on its own.

### Shoreline Management

The island shoreline as well as shorelines adjacent to interior island ponds, inlets, bays, and marinas, are important habitat for Lake Erie Watersnakes. Excavation or removal of shrubs, standing or downed trees, root masses, animal burrows, piled rocks, cliffs, or bedrock within 69 feet (21 m) of the shoreline, ponds, inlets, bays, and marinas should be avoided.

The Service encourages preservation and construction of shoreline structures with designs beneficial to watersnakes. These include timber or steel crib docks and riprap erosion control structures instead of concrete or sheet steel. Furthermore, any project that will impact the shoreline or waters of Lake Erie must be coordinated with the U.S. Army Corps of Engineers (Corps) to ensure compliance with the Clean Water Act. The Buffalo District of the Corps can be contacted at (716)-879-4330.

### Tree Removal

Tree root masses may provide suitable hibernation habitat for the Lake Erie Watersnake. If you plan to remove trees on your property, the Service recommends that only the above-ground portion of the tree be removed. The root mass should be left underground. Within 69 feet (21 m) of shore, heavy machinery should be limited to paved areas so as not to harm watersnakes that may have retreated under rocks, logs, and other material.

Summary of habitat management practices, timing, and location where applicable.

<b>Time</b>	<b>Location</b>	<b>Recommendation</b>
Oct 15- April 15	Within 528 feet (161 m) of shore	No Excavation.
April 16- May 31	Within 528 feet (161 m) of shore	Excavation only when temperature above 60° F. Mow at dusk, on high setting.
June 1- Sept 14	Within 69 feet (21 m) of shore	Mow at dusk, on high setting. Coordinate all construction and excavation projects along shoreline with Service.
Sept 15- Oct 14	Within 528 feet (161 m) of shore	Excavation only when temperature above 60° F. Mow at dusk, on high setting.

### Further Information

The Service recommends that anyone planning a development project on the Lake Erie islands contact us early in the planning stages for project design assistance to avoid take of Lake Erie Watersnakes. If any of these guidelines cannot be implemented, we recommend you contact the Service. Questions regarding these guidelines should be directed to the Service at (614)-416-8993. Additional information about the Lake Erie Watersnake is also available at our website: [http://www.fws.gov/midwest/Ohio/endangered\\_LEWS.html](http://www.fws.gov/midwest/Ohio/endangered_LEWS.html)