

## Indiana Ecozones

Lakes consist of a complex mosaic of habitats and interacting features, including many areas that may need protection. Natural shorelines and areas of shallow water are often the most diverse locations on lakes, harboring the greatest diversity of aquatic plants. Both emergent and submergent species of plants dominate these communities and provide crucial habitat for a variety of fish, invertebrates, amphibians, reptiles, and birds.

In addition to providing habitat, aquatic plants also protect and stabilize the lake bottom and play an important role in water quality. Shorelines and shallow areas without vegetation are often a source of turbidity due to wind and waves churning the sediment. Aquatic plants help soften the effect of waves by absorbing their energy, and their root systems anchor into the substrate and prevent it from eroding.

Boating and mooring along natural shorelines or shallow areas can have direct impacts to these aquatic plant communities. Impacts can include cutting of plants and scouring of substrate by waves, propellers, and anchors. Indirect impacts result from increased turbidity after plants are removed. Water turbidity reduces light penetration and limits the depths at which plants can grow. The development of ecozones can be an option to protect natural shorelines and shallow water areas of lakes in certain circumstances.

Regulations in Indiana Administrative Code 312 IAC 5-6-1 allow for the establishment of special boating zones on public freshwater lakes to govern the operation of watercraft. Ecozones can protect or address unusual conditions or hazards, fish, wildlife, botanical resource management, or the protection of users. Several ecozones have been established to protect natural shorelines and shallow water areas in multiple lakes, including Wawasee, Syracuse, Tippecanoe, James (Kosciusko), Olin, Simonton and Manitou.

Lake associations or other groups interested in exploring the establishment of an ecozone should contact the DNR's Division of Fish & Wildlife at 260-244-6805. Staff within Fish & Wildlife will work with other divisions, including the Division of Law Enforcement, to consult with the local organization and help determine if there is adequate public support.

If the ecozone concept has adequate justification and support, the local organization may present a formal rule-making petition to the Indiana Natural Resources Commission (NRC) as described in <u>Information Bulletin #7</u>. After submission of a petition, the DNR director, in cooperation with the Division of Hearings, will assign a committee to investigate the proposal and report back to the NRC. If rule adoption proceeds, the standard process of public notice and hearings would be completed to gain public input prior to final action.

For more information contact:

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