LAKE CHARLEVOIX Visioning and Shoreline Protection Project

Local elected and appointed officials around Lake Charlevoix believe that maintaining the water quality of the lake is important for future economic development and quality of life in the region. It is well understood that shoreline development impacts the water quality of lakes and streams as well as the surrounding terrestrial ecosystems, and local governments have a special role to play in ensuring that inland lakes and streams are protected. Water quality protection provides a wide range of community benefits, including preservation of quality of life, wildlife habitat, recreational opportunities, human health, aesthetics, economic vitality and increased property values.

There have been a number of past shoreline studies focused on tools for local governments to protect water quality in the Lake Charlevoix community. In 2014, Enacting Shoreline Zoning Protections Around Lake Charlevoix began a three-year project aimed at protecting the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the 10 jurisdictions surrounding the lake. Led by the Land Information Access Association (LIAA), a non-profit community services organization based in Traverse City, the project team worked with local planning and zoning officials to develop and implement new zoning standards for waterfront properties around the lake. Using an inventory of existing protections as well as past recommendations from previous planning efforts, the project team identified a series of broad recommendations. The steering committee was integral to the process of refining the recommendations to ensure each one was realistic, implementable, and enforceable.

The overall goal of the Enacting Shoreline Zoning Protections around Lake Charlevoix project was to work with local officials to understand, accept, and adopt common shoreline protection zoning standards around Lake Charlevoix with the intent of keeping the Lake clean.

Below are the 2016 Lake Charlevoix Watershed Zoning Recommendations for the local units of government around the lake.

| 2016 RECOMMENDATIONS | |
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| Defined High Water Elevation OHWM | Zoning ordinances will define a High Water Elevation for Lake Charlevoix as 582.35' I.G.L.D. |
| Setback from OHWM | In single family residential areas, zoning ordinances will require shoreline setbacks of at least 50 feet from the High Water Elevation for all principle and accessory structures except for docks, shoreline protection structures, allowed viewing platforms, and stairs to the lake. Shoreline setbacks of 100' will be required when, within 500' feet of the lake, average slopes of the waterfront parcel are greater than 12%, impervious surface coverage is greater than 15%, and/or poor drainage conditions exist. |
| Maximum Impervious Surface Lot Coverage | In single family residential areas, zoning ordinances will establish a 15% maximum for impervious surface coverage on single family residential lots within 500 feet of the High Water Elevation along the shore of Lake Charlevoix. |
| Conditions for Issuance of Zoning Permits | Zoning ordinances will require that all necessary state, federal, and county permits (including Health Department septic permits) be obtained prior to a zoning permit being issued. |

| Formal Planning Commission Site Plan Review | Zoning Ordinances will require formal Planning Commission site plan review for all waterfront property development projects. Site plans should include all information already required for site plan review and the following. Location of the High Water Elevation Location of all setbacks, including the shoreline setback Existing and proposed site topography, shown at a minimum of 2-foot contour intervals Locations of existing and proposed structures and other impervious surfaces Calculations of existing and proposed impervious surface coverage Existing and proposed greenbelt/vegetated buffer strip, including a planting plan |
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| Engineered Stormwater Control Systems | In commercial, mixed-use, and multiple-family residential waterfront areas, zoning ordinances will require an engineered stormwater control system that accommodates all stormwater from on-site impervious surfaces and allows it to percolate prior to flowing into the Lake. |
| Number and Use of Docks | Zoning ordinances will limit the number of docks allowed and number of boats allowed for each waterfront parcel. |
| Keyhole or Funneling Standards Shoreline Protection Structures | Zoning ordinances will specifically prohibit or limit keyhole or funneling practices. Zoning ordinances will prohibit the construction of seawalls in favor of revetments and engineered natural shorelines, except when there is no other practical alternative. |
| Greenbelt/Vegetated Buffer Strips | In single family residential areas, zoning ordinances will require a greenbelt, or vegetated buffer strip, with a minimum depth of 50' for new development or redevelopment on single-family residential lots along the shore of Lake Charlevoix. |
| Specific prohibition of lawn in greenbelt | Zoning ordinances will specifically prohibit the planting of lawns within the greenbelt. |
| Prohibition of pesticides, herbicides, and fertilizers in greenbelt | Zoning ordinances will prohibit the use of pesticides, herbicides, and fertilizers in the greenbelt. |
| Requirement of trees and woody plants in greenbelt | Zoning ordinances will require that trees and woody plants be planted in the greenbelt |
| Viewing platforms in greenbelt | Zoning ordinances will limit the size of waterfront viewing platforms in the greenbelt to 200 square feet or smaller or prohibit the construction of waterfront viewing platforms. |
| Paths through greenbelt to water | Zoning ordinances will allow a single path with a 6' maximum width to the water through the greenbelt, or prohibit the construction of paths in the greenbelt. |
| Maintenance of existing natural shoreline buffers | Zoning ordinances will allow for the maintenance of existing natural shoreline buffers, where they exist. |
| Prohibition of beach sanding | Zoning ordinances will specifically prohibit beach sanding in the greenbelt. |
| Prohibition of alternation of area between water's edge and high water elevation | Zoning ordinances will prohibit the alternation, including replenishment of beach sand, of the area between the water's edge and high water elevation. |

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