

Appendix B:

Ordinance Recommendations

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Bay Twp. Planning Commission
From: Claire Karner, Community Planner at LIAA
Date: June 7, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

There are many opportunities for local governments to enhance water quality through the adoption of local zoning protections for waterfront properties. To better protect the water quality of Lake Charlevoix and Walloon Lake, the Bay Township Planning Commission could consider prohibiting the use of pesticides in the Natural Vegetative Strip, prohibiting the alteration of the area between the water's edge and the Ordinary High Water Mark, requiring formal Planning Commission site plan review for all waterfront uses, prohibiting keyhole/funneling, and prohibiting the construction of seawalls.

For each of the five ordinance recommendations, there is a brief overview and reasoning behind the ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. A ~~strike through~~ is used for language recommended to eliminate and **redline** for new language.

Recommendation #1: Prohibit the use of pesticides in the Natural Vegetative Strip

[ORDINANCE LANGUAGE]

Article VI: Waterfront Overlay District (p. 34)

6.4 Development Standards

b. Natural Vegetative Strip

9. No supplemental plant nutrients shall be allowed in the natural vegetative strip.¹

Recommendation #2: Prohibit the alteration of the area between the water's edge and the Ordinary High Water Mark

Jurisdiction over inland lake bottomlands between the high water elevation and the water's edge is concurrently held by both the Michigan Department of Environmental Quality and local units of government. Local zoning ordinances can regulate activities that take place in these areas, including the alteration of the ground and the construction of structures. It is recommended that the Zoning Ordinance be amended to prohibit the alteration of the area between the defined high water elevation and the water's edge. The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion.

¹ Language adapted from Evangeline Township Zoning Ordinance, 2008

[ORDINANCE LANGUAGE]

Article VI: Waterfront Overlay District (p. 34)

6.4 Development Standards

b. Natural Vegetative Strip

10. Areas located below the Ordinary High Water Mark shall not be altered.²

Recommendation #3: Require formal Planning Commission site plan review for all waterfront uses.

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

[ORDINANCE LANGUAGE]

Article XII Site Plan Review (p. 55)

12.2 When Required Site plan review and approval is required for the following uses:

- a) For all uses in all zoning districts except as indicated below.
- b) For all special uses in all zoning districts.
Site plans shall be submitted with all applications for special use permits. The review of such site plans shall be concurrent with the Planning Commission's deliberations on the application for special uses.
- c) For PUD's.
A site plan shall be submitted at the time application is made for PUD approval. The review of the site plan shall be concurrent with deliberations on Planned Unit Developments.
- d) For all site condominium and condominium subdivisions subject to the provisions of the Condominium Act (P.A. 59 of 1978, as amended).
- e) For all platted subdivisions subject to the provisions of the Land Division Act (P.A.591 of 1996, as amended).
- f) For all uses in the Waterfront Overlay District.

Recommendation #4: Specifically regulate or prohibit keyhole/funnel development

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel. Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keyholing/funneling is prevented.

[ORDINANCE LANGUAGE]

Article VI: Waterfront Overlay District (p. 34)

6.4 Development Standards

c. Limitation of Funnel Development

- 1. Not more than one (1) single family home or cottage or one (1) condominium unit or one (1) apartment unit shall use or be permitted to use each one hundred (100)

² Language adopted from Charlevoix Township Zoning Ordinance,

feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the Township.³

2. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership, or lease.⁴
3. This restriction shall not apply to a Public Access Site.⁵

Recommendation #5: Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative.

[ORDINANCE LANGUAGE]

Article VI: Waterfront Overlay District (p. 34)

6.4 Development Standards

d. Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.⁶

³ Language adapted from Hayes Township Zoning Ordinance, 2012

⁴ Language adapted from Hayes Township Zoning Ordinance, 2012

⁵ Language adapted from Hayes Township Zoning Ordinance, 2012

⁶ Language adapted from Evangeline Township Zoning Ordinance, 2008

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Scott McPherson, Planning Director, City of Boyne City
From: Claire Karner, Community Planner at LIAA
Date: June 24, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the City of Boyne City Planning Commission on May 16, the following ordinance language has been prepared for planning commission discussion and consideration.

For each of the ordinance recommendations, there is a brief overview and reasoning behind ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strike through~~ for language recommended to eliminate and **redline** for new language.

It should be noted that this draft ordinance language is intended for planning commission discussion and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Conditions for Issuance of Zoning Permits

By requiring that all necessary permits be obtained prior to the issuance of a zoning permit, jurisdictions can be sure that the requirements of all other agencies are being met by the proposed development.

Recommended Edits:

Appendix A Article XXVIII. Administration and Enforcement, p. 190.

Sec. 28.20. – Zoning Permits

- (1) It shall be unlawful for any person to commence excavation for any building or structure or to commence the erection, addition, alteration or repair of any building, structure or parking area or repair or move any building or structure; and no land use shall be commenced until a zoning permit has been secured from the planning director or zoning administrator. Except upon written order of the zoning board of appeals, no such zoning permit shall be issued for any building where the construction, addition, alteration or use thereof would be in violation of any of the provisions of this ordinance.
- (2) Exempted from the zoning permit requirements are facial alterations, structures of 100 square feet or less, installation of siding, windows, doors, shingles, and replacements of existing or deteriorated

materials and ordinary maintenance repairs made on all dwellings and their related outbuildings. This exemption does not eliminate the necessity for compliance with other county, state, or federal permitting requirements.

- (3) A Zoning Permit may not be issued until all other necessary permits required by statute have been obtained or waived with exception of those permits issued by the Charlevoix County Building Department.¹

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans. Boyne City could consider adding language to the section on Preliminary development plan review that the planning commission conduct a preliminary review of site plans for any type of waterfront development, including single family residential.

Recommended Edits:

Article XIX. – Development Plan Requirements

Sec. 19.35. - Preliminary development plan review, p. 110

The development plan approval process includes an optional review of a preliminary development plan by the planning commission. This process is at the option of the planning commission for: development plans affecting over three acres; sites containing floodplains or within the flood hazard zone; sites containing or potentially containing designated/regulated wetlands by the Michigan Department of Environmental Quality; **waterfront sites**; and/or conditional uses and complex commercial development sites.

Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative. Although the City noted that they are already required to obtain many of the permits listed, it is recommended that the Ordinance be updated to explicitly state that.

Recommended Edits

Appendix A Article V Waterfront Residential District Sec. 5.40. - Development requirements, p. 46

F. Additional requirements. The following requirements, unless superceded by the standards of this article, shall be met within a waterfront residential district (WRD):

8. **Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.**²

Appendix A Article VI Multiple Family Residential District Sec. 6.40. - Development requirements, p. 48

¹ Language adapted from Hayes Township Zoning Ordinance, 2009

² Language adapted from Evangeline Township Zoning Ordinance, 2008

The following requirements shall be met within a multiple family residential district (MFRD):

- G. Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.³

Specifically regulate or prohibit keyhole/funnel development

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel. Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keholing/funneling is prevented.

Recommended Edits:

Appendix A Article V Waterfront Residential District Sec. 5.40. - Development requirements, p. 46

- F. Additional requirements. The following requirements, unless superceded by the standards of this article, shall be met within a waterfront residential district (WRD):

9. Limitation of Funnel Development. Not more than one (1) residential home shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the City. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership or lease. This restriction shall not apply to a "Public Access Site" as hereafter described.⁴

Appendix A Article VI Multiple Family Residential District Sec. 6.40. - Development requirements, p. 48

The following requirements shall be met within a multiple family residential district (MFRD):

- G. Limitation of Funnel Development. Not more than one (1) condominium unit or apartment unit shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the City. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership or lease. This restriction shall not apply to a "Public Access Site" as hereafter described.⁵

³ Language adapted from Evangeline Township Zoning Ordinance, 2008

⁴ Language adapted from Hayes Township Zoning Ordinance, 2012

⁵ Language adapted from Hayes Township Zoning Ordinance, 2012

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Dan Ulrich, Planning Commission Chair, Charlevoix Township
From: Claire Karner, Community Planner at LIAA
Date: April 25, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the Charlevoix Township Planning Commission on March 16, 2016, the following ordinance language has been prepared for planning commission discussion and consideration.

For each of the eight ordinance recommendations, there is a brief overview and reasoning behind ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strike through~~ for language recommended to eliminate and **redline** for new language.

It should be noted that this draft ordinance language is intended for planning commission discussion and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Redefine High Water Elevation

It is recommended that the Zoning Ordinance be amended to define the High Water Elevation of Lake Charlevoix as 582.35' I.G.L.D. This elevation is the highest water level recorded on the lake and historical lake levels have frequently been higher than the defined Ordinary High Water Mark (OHWM). Standardizing a High Water Elevation of 582.35' helps ensure the effectiveness of shoreline buffers around the lake.

Recommended Edits:

Article XIV: Definitions of the Township's Zoning Ordinance, p. 89: ~~Ordinary High Water Elevation Mark – This elevation is the highest water level recorded on the lake and delineating this elevation helps ensure the effectiveness of shoreline buffers around the lake. The boundary of lakes and streams which elevation shall be the elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape; commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. The ordinary high water mark~~ **elevation** for Lake Charlevoix and Lake Michigan shall be, elevation 579.8 Ft **582.35 Ft.** (International Great Lakes Datum ~~—1955~~).

3.13 SHORELINE PROTECTION REGULATIONS, p. 6: C. Regulations. The following shoreline regulations shall apply to all districts except the I-2 Marine Industrial District: 1. Areas located below the ~~Ordinary High Water Elevation Mark~~ (elevation ~~579.8~~ **582.35 I.G.L.D.**) shall not be altered.

Article V: District Regulations of the Ordinance, footnotes on pages 12, 15, and 33: As measured from the ~~ordinary~~ high water ~~elevation mark~~ (**582.35 I.G.L.D.**); see Article III Section 3.13 for shoreline protection regulations applicable to all districts.

Article V: District Regulations of the Ordinance, p. 19: 3. Buffer Yards Required. All PRDs shall provide a minimum buffer yard of 50 feet from street right-of-way lines and property lines and 50 feet from the ~~ordinary~~ high water ~~elevation mark~~ of a lake or stream. Buffer yards shall be landscaped with trees, shrubs and other plant materials that are compatible with local climate, soils characteristics, drainage and available water supply. Maintenance shall be the responsibility of the homeowners association. See Section 3.13 for shoreline protection regulations.

Modify impervious surface coverage standards for waterfront lots

It is recommended that the Zoning Ordinance be amended to limit the maximum allowable impervious surface coverage on waterfront lots to 15%. Reducing the amount of impervious surface coverage on waterfront lots helps reduce the risk of shoreline erosion and the potential for pollutants to enter the lake through stormwater runoff.

Recommended Edits:

3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6: **2. No more than a maximum of 15% or 2,500sq. ft. (whichever is greater) of the lot area on waterfront property may be impervious surface. Impervious surfaces include all areas which prevent the free infiltration of water. The spatial dimensions of existing buildings that encroach on the waterfront, side yard and road setbacks or exceed the maximum allowable impervious surface standards of this district shall not be further expanded.¹**

ARTICLE V DISTRICT REGULATIONS: Add footnotes under each district regulation table indicating a maximum Lakeshore Lot Coverage of 15% (of total impervious surfaces)

Modify Shoreline Protection Regulations

It is recommended that the Zoning Ordinance be amended to include additional shoreline protection regulations for waterfront parcels. Specifically, the recommended additions are:

- The prohibition of the use of pesticides, herbicides, and fertilizers in the Natural Vegetative Strip.
- The inclusion of a requirement that specifically requires the planting of trees and/or woody plants in the shoreline protection zone.
- The inclusion of a requirement that new low-growing plantings within the Natural Vegetative Strip be spaced for complete ground coverage in two years.

Recommended Edits:

¹ Language adapted from Evangeline Township Zoning Ordinance, 2008

3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6: 3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6:

- No supplemental plant nutrients shall be allowed in the shoreline protection zone.²
- The shoreline protection zone shall be planted to a mixture of trees and low growing woody shrub species native to the area and suitable for the site. Trees shall be scattered throughout the strip and sited in a manner what allows for “filter” views of the water from the dwelling.
- Shrubs shall be of sufficient size and planted at spacings that shall provide coverage of the ground within the shoreline protection zone, except as allowed in district regulations for a viewing platform and path, within a period of two (2) full growing seasons.³

Prohibit the sanding of beaches

It is recommended that the Zoning Ordinance be amended to prohibit beach sanding within the shoreline protection zone. The sanding of beaches is often futile due to natural shoreline processes and variation in water levels. Beach sanding can also be detrimental to fish species within lakes when added beach sand covers important lake bottom habitats like gravel, rock, and weed beds.

Recommended Edits:

3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6: 3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6:

No additional fill (except to replenish beach sand, with necessary permits) shall be allowed between the water’s edge and the high water level elevation.⁴

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

Recommended Edits:

Article IX: Site Plan Review of the Zoning Ordinance, p. 59

B. Exemptions. With the exception of lots abutting US-31, M-66, and Boyne City Road where site plans shall be required for all uses, the Planning Commission may exempt the following from site plan review when it determines that the submission of a site plan would serve no useful purpose and the proposed use complies fully with ordinance requirements:

1. Accessory structures no greater than 500 square feet that require no new or additional access to/from public roads. [amended 5/14/07]
2. An enlargement of a principal building by less than 10 percent of the existing gross floor area provided such enlargement will not result in a requirement for additional parking or access to a public road.
3. A change in a principal use where such change will not result in the expansion of an existing structure, an increase in impervious surface, additional access, or other alterations to the existing site conditions.

² Language adapted from Evangeline Township Zoning Ordinance, 2008

³ Language adapted from Evangeline Township Zoning Ordinance, 2008

⁴ Language adapted from Evangeline Township Zoning Ordinance, 2008

4. One and two-family dwellings except that any such dwelling located **on a waterfront parcel** or in a critical dune area shall not be exempt from site plan review.
5. Home-based businesses.

Specifically regulate number of docks allowed

It is recommended that the Zoning Ordinance specifically regulate the number of docks allowed for each waterfront parcel to help protect water quality by limiting the opportunity for erosion and fuel and chemical pollution from increased boat dockage on the Lake.

Recommended Edits:

3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6: 3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6:

Each legally created lakefront lot shall be entitled to one (1) seasonal dock. A minimum of two (200) hundred feet of frontage is required for a second dock. Each additional dock or boat hoist shall require an additional one (100) hundred feet of water frontage.⁵

Specifically regulate or prohibit keyhole/funnel development

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel. Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keyholing/funneling is prevented.

Recommended Edits:

ARTICLE III GENERAL REGULATIONS, add after 3.13, p. 6:

3.14 Limitation of Funnel Development Not more than one (1) single family home or cottage or one (1) condominium unit or one (1) apartment unit shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the Township. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership or lease. This restriction shall not apply to a "Public Access Site" as hereafter described.⁶

Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative.

⁵ Language adapted from Bay Township Zoning Ordinance, 2011

⁶ Language adapted from Hayes Township Zoning Ordinance, 2012

Recommended Edits:

3.13 SHORELINE PROTECTION REGULATIONS, Part (C) Regulations, p. 6:

Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.⁷

⁷ Language adapted from Evangeline Township Zoning Ordinance, 2008

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Tom Cannon, City Administrator, City of East Jordan
From: Claire Karner, Community Planner at LIAA
Date: August 4, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the City of East Jordan Planning Commission on June 9, 2016, the following ordinance language has been prepared for planning commission discussion and consideration.

For each of the ordinance recommendations, there is a brief overview and reasoning behind ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strike through~~ for language recommended to eliminate and **redline** for new language.

It should be noted that this draft ordinance language is intended for planning commission discussion and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Redefine High Water Elevation

It is recommended that the Zoning Ordinance be amended to define the High Water Elevation of Lake Charlevoix as 582.35' I.G.L.D. This elevation is the highest water level recorded on the lake and historical lake levels have frequently been higher than the defined Ordinary High Water Mark (OHWM). Standardizing a High Water Elevation of 582.35' helps ensure the effectiveness of shoreline buffers around the lake.

Recommended Edits:

Article I Sec. 48-8. Definitions, p. 15

~~Shoreline means the line which separates land from a surface water feature and may be established as a matter of record as the mean level elevation of the surface water or as determined by the legal establishment of the surface water level elevation by the county drain commissioner or the state department of natural resources. For the purpose of this chapter the legally established surface water level elevation shall take precedence, if established, over the mean level elevation.~~

Ordinary High Water Mark (OHWM) means the line between upland and bottomland which persists through successive changes in water levels, below which the presence and action of the water is

common or recurrent so that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the soil and the vegetation. On an inland lake which has had a level established by law, it means the high established level. On a river or stream, the ordinary high water mark shall be the ten year flood limit line. The ordinary high water mark shall be at elevation 582.35 feet (International Great Lake Datum, IGLD) for Lake Charlevoix.¹

Clarification should be made in all areas of the ordinance that reference shoreline setbacks that the setback should be measured from the OHWM. For example, the definition of **Yard, front could be amended to state:*

Yard, front, means the open space between the front street lot line or ~~waterfront-shoreline~~ **Ordinary High Water Mark on shoreline parcels** and the main building in which the principal use is located.

Conditions for Issuance of Zoning Permits

By requiring that all necessary permits be obtained prior to the issuance of a zoning permit, jurisdictions can be sure that the requirements of all other agencies are being met by the proposed development.

Recommended Edits:

Article II Administration and Enforcement Sec. 48-38. Zoning permit

Sec. 48-38. Zoning permit.

(a) Zoning permit requirements. A zoning permit is required for all developments and shall be obtained after the effective date of the ordinance from which this chapter is derived from the office of the zoning administrator or his agent by the owner for the following conditions:

1. The administrative coordination of zoning permits issued by the city and building permits issued by the building inspector shall be in accordance with section 48-193
2. The construction, enlargement, alteration or moving of any dwelling, building or structure or any part thereof, being used or to be used for agricultural, residential, commercial, industrial, public or semipublic purposes.
3. Repairs of a minor nature or minor alterations which do not change the use, occupancy, area, structural strength, fire hazard, fire protection, exits, light, and ventilation of a building shall not require a zoning permit.
4. **A Zoning Permit may not be issued until all other necessary permits required by statute have been obtained or waived with exception of those permits issued by the Charlevoix County Building Department.**²

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan

¹ Language adapted from City of Charlevoix Zoning Ordinance, 2013

² Language adapted from Hayes Township Zoning Ordinance, 2009

review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

Recommended Edits:

Article II Division 2

Sec. 48-70. Developments requiring site plan approval (p. 24)

The following land, building and structural uses require site plan approval:

(1) All principal and special uses and their accessory uses in the R-3, PO, WF, C-1, C-2 and I districts.

(2) All special uses and their accessory uses in all districts.

(3) All planned unit developments (PUDs).

(4) All developments located on waterfront parcels.

(Ord. No. 142, § 22.02, 2-6-1990)

Sec. 48-71. Developments not requiring site plan approval.

Single-family homes and mobile homes located on separate lots or parcels and their accessory uses in the RA, R-1, R-2, R-2A, R-3 and R-4 districts, with the exception of those located on the waterfront, do not require site plan approval.

(Ord. No. 142, § 22.03, 2-6-1990)

Specifically regulate number of docks allowed

It is recommended that the Zoning Ordinance specifically regulate the number of docks allowed for each private residential waterfront parcel to help protect water quality by limiting the opportunity for erosion and fuel and chemical pollution from increased boat dockage on the Lake.

Recommended Edits:

ARTICLE III. DISTRICT REGULATIONS

DIVISION 2. - RA Single-Family Residential District

DIVISION 3. - R-1 Single-Family Residential District

DIVISION 6. - R-3 Multiple-Family Residential District

Language similar to the following could be inserted into each Division listed above in the section that outlines permitted accessory uses: Each legally created lakefront lot shall be entitled to one (1) seasonal dock. A minimum of two (200) hundred feet of frontage is required for a second dock. Each additional dock or boat hoist shall require an additional one (100) hundred feet of water frontage.³

Specifically regulate or prohibit keyhole/funnel development and seawalls.

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel and prohibit new seawalls from being constructed.

³ Language adapted from Bay Township Zoning Ordinance, 2011

Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keholing/funneling is prevented.

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative. We recommend the East Jordan Planning Commission considers limiting keyhole/funnel development and seawalls by creating an additional section in ARTICLE III. District Regulations, DIVISION 1. Generally as is detailed below.

Recommended Edits:

ARTICLE III. DISTRICT REGULATIONS
DIVISION 1. Generally

Sec. 48-202 Waterfront Development

1. Limitation of Funnel Development.
 - a. Not more than one (1) residential home, condominium unit, or apartment unit shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream.
 - b. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the City.
 - c. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership or lease.⁴
2. Prohibition of Seawalls
 - a. Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.⁵

⁴ Language adapted from Hayes Township Zoning Ordinance, 2012

⁵ Language adapted from Evangeline Township Zoning Ordinance, 2008

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Zach Panoff, Interim Planning and Zoning Administrator, City of Charlevoix
From: Claire Karner, Community Planner at LIAA
Date: June 24, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the City of Charlevoix Planning Commission on April 11, 2016, the following ordinance language has been prepared for planning commission discussion and consideration.

For each of the ordinance recommendations, there is a brief overview and reasoning behind ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strike through~~ for language recommended to eliminate and **redline** for new language.

It should be noted that this draft ordinance language is intended for planning commission discussion and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Redefine High Water Elevation

It is recommended that the Zoning Ordinance be amended to define the High Water Elevation of Lake Charlevoix as 582.35' I.G.L.D. This elevation is the highest water level recorded on the lake and historical lake levels have frequently been higher than the defined Ordinary High Water Mark (OHWM). Standardizing a High Water Elevation of 582.35' helps ensure the effectiveness of shoreline buffers around the lake.

Recommended Edits:

Part 1: Introduction 5.12. Definitions N – O, p.13: Ordinary High Water Mark. The line between upland and bottomland which persists through successive changes in water levels, below which the presence and action of the water is common or recurrent so that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the soil and the vegetation. On an inland lake which has had a level established by law, it means the high established level. On a river or stream, the ordinary high water mark shall be the ten year flood limit line. The ordinary high water mark shall be at elevation ~~581.5~~ **582.35** feet (International Great Lake Datum, IGLD-~~1985~~) for Lake Michigan, the Pine River Channel, Round Lake and Lake Charlevoix.

Conditions for Issuance of Zoning Permits

By requiring that all necessary permits be obtained prior to the issuance of a zoning permit, jurisdictions can be sure that the requirements of all other agencies are being met by the proposed development.

Recommended Edits:

Part V Article 16 Section 5.161. Zoning Permits, p. 155.

- (1) No building or structure shall be erected or installed on any lot unless, or until, a zoning (1) permit has been issued by the city for such building or structure. No permit shall be issued by the City of Charlevoix or any official thereof for the construction, erection, alteration, placing or moving of any building or structure on any parcel of land unless such building or structure is designed and the proposed location on its lot, or its intended lot, is arranged to conform with the provisions of this chapter, except that no permit shall be required for alterations which do not result in change in height, floor area, lot coverage, location of walls or other structural alterations.
- (2) A Zoning Permit may not be issued until all other necessary permits required by statute have been obtained or waived with exception of those permits issued by the Charlevoix County Building Department.¹

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

Recommended Edits:

Part IV Article 12: Site Plan Review – Part 5.116. Applicability, p. 125.

5.116. Applicability

- (2) Level “B” Review. The planning commission shall act upon all site plans, other than those provided for level “A” review, in connection with the creation of a use or the erection of a building or structure in any of the following circumstances:
 - a) Any “permitted” use within any zoning district occupying a building of two (a) thousand (2000) square feet or more.
 - b) Any special use in any district.
 - c) Any Planned Unit Development.
 - d) Any site plan on a Waterfront parcel.
 - e) As otherwise required by this ordinance.

5.117. Exemptions

Site plan review shall not be required for a single or two family dwellings on a lot on which there exists no other principal building or use or for any home occupation or accessory building in a single family residential district, with the exception of single or two family dwellings on the waterfront.

¹ Language adapted from Hayes Township Zoning Ordinance, 2009

Specifically regulate number of docks allowed

It is recommended that the Zoning Ordinance specifically regulate the number of docks allowed for each waterfront parcel to help protect water quality by limiting the opportunity for erosion and fuel and chemical pollution from increased boat dockage on the Lake.

Recommended Edits:

Part 1 Article 4 Residential Districts 5.26 Schedule of Uses, p. 24.

Part 1 Article 5 Nonresidential and Mixed Use Districts 5.31 Schedule of Uses, p. 30.

Language similar to the following could be inserted into each table or added as additional notes: **Each legally created lakefront lot shall be entitled to one (1) seasonal dock. A minimum of two (200) hundred feet of frontage is required for a second dock. Each additional dock or boat hoist shall require an additional one (100) hundred feet of water frontage.²**

Specifically regulate or prohibit keyhole/funnel development

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel. Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keyholing/funneling is prevented.

Recommended Edits:

Part III Article 8 General Provisions 5.60. Access, p. 79.

- (1) All lots shall have frontage on a dedicated public or private street.
- (2) A copy of an approved driveway permit from the city, Charlevoix County or MDOT, as applicable, shall be required.
- (3) Multiple-family, commercial, office or industrial developments consisting of multiple buildings need not front each structure within the development upon publicly dedicated streets.
- (4) **Limitation of Funnel Development. Not more than one (1) residential home, condominium unit, or apartment unit shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the City. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership or lease. This restriction shall not apply to a "Public Access Site" as hereafter described.³**

² Language adapted from Bay Township Zoning Ordinance, 2011

³ Language adapted from Hayes Township Zoning Ordinance, 2012

Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative. Currently, the only place in the ordinance where seawalls are referenced is in Part II Article 7, 5.46. Accessory Buildings and Uses – the Section on Boathouses. The planning commission is currently exploring updates to this section on Boathouses to better protect the shoreline and added regulations regarding seawalls would be a strategy to accomplish this goal.

Recommended Edits

Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.⁴ (The Planning Commission will need to identify where in the Zoning Ordinance is the most appropriate place to add seawall language).

Upland Dredging

Although not a strategy explored by the Steering Committee, upland dredging is an issue that has come to the attention of the City of Charlevoix Planning Commission. According to the Michigan Department of Environmental Quality, any dredging below (waterward) of the ordinary high water mark of a lake or stream requires a permit. Excavation on the upland (dry land) within 500 feet of a lake or stream that does not extend below the water table does not require a permit from the DEQ.

Local communities can restrict alteration of the area between the water's edge and the OHWM through their local ordinance. Charlevoix Township has language in their ordinance restricting alteration between the water's edge and the OHWM.

The City could consider not allowing the construction of new boathouses, and grandfather in existing structures. Because of the dynamic nature of shorelines, the area between the water's edge and the OHWM is constantly in flux. The water quality of the lake depends partially on what goes on in that important transition zone.

⁴ Language adapted from Evangeline Township Zoning Ordinance, 2008

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Evangeline Township Planning Commission
From: Claire Karner, Community Planner at LIAA
Date: November 7, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

There are many opportunities for local governments to enhance water quality through the adoption of local zoning protections for waterfront properties. To better protect the water quality of Lake Charlevoix and Walloon Lake, the Evangeline Township Planning Commission could consider prohibiting beach sanding and the alteration of the area between the water's edge and the high water elevation and prohibiting keyhole/funneling.

For each of the three ordinance recommendations, there is a brief overview and reasoning behind the ordinance recommendation as well as draft language for consideration. The recommendations were identified after a meeting with planning commissioners to identify what ordinance amendments would be supported by the commission and the larger community. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. A ~~strike through~~ is used for language recommended to eliminate and **redline** for new language.

Recommendation #1: Prohibit the sanding of beaches and alteration of the area between the water's edge and the high water elevation.

It is recommended that the Zoning Ordinance be amended to prohibit beach sanding both within the natural vegetation waterfront buffer strip and between the high water elevation and the water's edge. The sanding of beaches is often futile due to natural shoreline processes and variation in water levels. Beach sanding can also be detrimental to fish species within lakes when added beach sand covers important lake bottom habitats like gravel, rock, and weed beds. Jurisdiction over inland lake bottomlands between the high water elevation and the water's edge is concurrently held by both the Michigan Department of Environmental Quality and local units of government. Local zoning ordinances can regulate activities that take place in these areas. It is recommended that the Zoning Ordinance be amended to prohibit the alteration of the area between the defined high water elevation and the water's edge. The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion.

[PROPOSED ORDINANCE LANGUAGE]

Article III: General Provisions Section 3.06 – Natural Vegetation Waterfront Buffer Strip

B. A Natural Vegetation Waterfront Buffer Strip shall meet the following specifications:

7. No sand or fill shall be placed within the Vegetation Waterfront Buffer Strip.

Article III: General Provisions Section 3.07 – Waterfront setback Provision

B. No additional fill ~~(except to replenish beach sand, with necessary permits)~~ shall be allowed between the water's edge and the high water level elevation.

Recommendation #2: Specifically regulate or prohibit keyhole/funnel development

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel. Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keholing/funneling is prevented. The following provisions could be added to each of the 5 waterfront zoning districts:

Glenwood Beach District
Pinehurst Waterfront Residential District
Kriegerville Waterfront Residential District
Springwater Beach District
Walloon Waterfront Residential District

[PROPOSED ORDINANCE LANGUAGE]

Article VI: Zoning Districts and Maps
Development Standards

Limitation of Funnel Development: Not more than one (1) single family home or cottage or one (1) condominium unit or one (1) apartment unit shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the Township. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership, or lease.¹

¹ Language adapted from Hayes Township Zoning Ordinance, 2012

DRAFT 2

Eveline Township Zoning Ordinance

Changes to Waterfront Greenbelt Language

Eveline Township's planning and zoning program supports long term water quality protection. Current waterfront zoning standards were designed to protect water quality and natural waterside landscapes. The Township Planning Commission has been investigating mechanisms for waterfront landowners to make minor changes to the waterfront greenbelt that would allow creation of small water view corridors while not comprising the integrity of the overall waterfront greenbelt. This document first presents the existing greenbelt language found in Zoning Ordinance, Section 4.6 Waterfront Greenbelt. Item B presents suggested changes to the current language. Other language additions include: Waterfront Greenbelt Landscaping Plan Approval Standards; Waterfront Greenbelt Landscaping Plan Data Required; and Circumstances Requiring a Site Plan.

A. Current language in Section 4.6 Waterfront Green Belt (Page 4-3)

4. *All vegetation within a waterfront greenbelt area shall remain in an undisturbed or natural state.*
- a. *Any disturbance within the waterfront greenbelt unless allowed below shall be restored by the owner or his agents.*
 - b. *Trees may not be removed within the waterfront greenbelt area unless specifically allowed by a permit to construct a walkway or deck as provided for in this Section. Minimal selective pruning of trees is allowed in order to afford a view of the water.*
 - c. *Natural ground cover shall be preserved to the fullest extent feasible and where removed it shall be replaced with vegetation that is equally effective in retarding runoff, preventing erosion, and preserving natural beauty.*
 - i. *Where shoreline areas are restored, they shall be landscaped with native, non-invasive landscaping species.*
 - ii. *Invasive and exotic species to be avoided include, but are not limited to, purple loosestrife, reed canary grass, crown vetch, white and yellow sweet clover, Russian Olive, Autumn Olive, and Tartarian honeysuckle. FIND A LIST OF SPECIES*
 - iii. *A combination of grasses, shrubs, and trees shall be introduced in a naturalized planting pattern where native shoreline vegetation does not exist.*

B. Suggested Language Changes

4. All vegetation within a waterfront greenbelt area shall remain in an undisturbed or natural state unless a Waterfront Greenbelt Landscape Plan (WGLP) is submitted to and approved by the Zoning Administrator or Planning Commission.
- a) Any disturbance within the waterfront greenbelt unless allowed below shall be restored by the owner or his agents.
 - b) Trees may not be removed within the waterfront greenbelt area unless specifically allowed by a permit. **Dead trees may be removed.**
 - c) Natural ground cover shall be preserved to the fullest extent feasible and where removed it shall be replaced with vegetation that is equally effective in retarding runoff, preventing erosion, and preserving natural beauty.
 - i. Where shoreline areas are restored, they shall be landscaped with native or non-invasive landscaping species.
 - ii. Invasive and exotic species to be avoided include, but are not limited to, purple loosestrife, reed canary grass, crown vetch, white and yellow sweet clover, Russian Olive, Autumn Olive, and Tartarian honeysuckle.
 - iii. A combination of grasses, shrubs, and trees shall be introduced where native shoreline vegetation does not exist.
 - iv. **A manicured lawn is not allowed within the greenbelt.**
 - v. **Significant trees (12 inches and larger in diameter measured at breast height) shall be preserved.**
 - d) Natural vegetation cover, including trees, shrubs or herbaceous plants shall be maintained on at least eighty percent (80%) of the lake or stream frontage within the waterfront greenbelt. The vegetation on the remaining twenty percent (20%) may be cleared for a single view corridor; or selective trees removed to provide for a filtered view throughout the frontage, provided the cumulative total of the trees removed does not exceed the allowed twenty percent (20%) of the frontage.
 - e) **Maximum width of the greenbelt alteration to provide a view corridor shall be 30 feet on any parcel. Or shall be limited to 20 percent, with clearings limited to 20 feet per 100 feet of shoreline width. clarify**
 - f) Prior to any alteration or removal of trees, shrubs, ground cover or other native vegetation, the items to be altered or removed shall be marked by the applicant and approved by the Zoning Administrator as being in compliance with the landscaping component of the WGLP prior to work commencing to ensure impacts to the shoreline resources are minimized.
 - g) Trees and shrubs marked for removal shall be cut flush with the ground and stumps shall not be removed.

Commented [CK1]: But root systems left intact (as noted below)

Commented [CK2]: Is a manicured lawn allowed on 20% of the frontage? Seems like low lying woody plants and native grasses would still provide for a sufficient view shed and provide water quality benefits.

- h) A single view corridor shall not be located within the side yard setback.
- i) Tree-topping and clear cutting within the waterfront greenbelt is prohibited.
- j) No lawn shall be maintained between the Ordinary High Water Mark and the water's edge.
- k) **No supplemental plant nutrients should be applied** in the waterfront greenbelt.
- l) **No grading, excavation, filling or stump removal shall be allowed in the Waterfront Greenbelt, unless necessary for erosion control and with appropriate state and county permits.**
- m) A corridor view shall be established through selective cutting only after the principal structure has been sufficiently constructed to locate windows, decks or other structure features intended to enjoy and utilize a water view. Prior to cutting or removal of these trees and vegetation, these changes shall be marked by the applicant and approved by the Zoning Administrator as being in compliance with the Waterfront Greenbelt Landscape Plan.
- n) Pruning and removal activities shall be inspected at the discretion of the Zoning Administrator.
- o) The remaining trees and shrubs may be trimmed and pruned to create filtered views to the water from the property.

Commented [CK3]: You could consider completely prohibiting alteration of area between water's edge and high water elevation (which would also eliminate the potential for upland dredging and beach sanding). Charlevoix Twp. has a provision for this.

Can there be a stipulation added to prohibit the construction of seawalls along the shoreline in favor of revetments and engineered natural shorelines, except where there is no other practical alternative?

C. Waterfront Greenbelt Landscaping Plan Approval Standards

The following standards shall be considered by the Zoning Administrator or Planning Commission when reviewing the Waterfront Greenbelt Landscaping Plan submission:

- a) **The Waterfront Greenbelt Landscaping Plan shall demonstrate that the impact to fish, birds, wildlife, native vegetation, and general water quality is minimized by preserving natural habitat;**
- b) **The Waterfront Greenbelt Landscaping Plan shall demonstrate that erosion and sedimentation shall be prevented;**
- c) **The Waterfront Greenbelt Landscaping Plan shall demonstrate that the natural character and aesthetic value of the shoreline is maintained by minimizing the visual impact of the development;**
- d) The Zoning Administrator can review and act upon Waterfront Greenbelt Landscaping Plans for the construction of one single family dwelling, or accessory buildings, or additions to existing single family dwellings, or disturbances of the waterfront greenbelt on parcels with less than 120 feet of Lake Charlevoix frontage. All other Waterfront Greenbelt Landscaping Plans shall be reviewed and acted upon by the Planning Commission.

D. Waterfront Greenbelt Landscaping Plan Data Required

Prior to alteration of greenbelts on waterfront properties located on Lake Charlevoix (all waterfront properties) requires submittal of a Waterfront Greenbelt Landscaping Plan and approval by the Zoning Administrator or the Planning Commission, prior to the start of any of these activities. All applicants shall submit Waterfront Greenbelt Landscaping Plans that contain the following information:

- a) Two complete sets of plans for Zoning Administrator review or 8 complete sets for Planning Commission review.
- b) Show placement of any buildings or other structures, delineates a perimeter line encompassing all proposed activities, identifies the location and extent of the shoreline waterfront greenbelt boundary, and proposed land changes including plantings;
- c) All shoreline types and coastal resources, including but not limited to, bluff ridges, wetland boundaries, ordinary high water mark; and a landscape plan which contains an existing and planned vegetation inventory (trees, shrubs and ground cover, including a written list and map showing the location of trees, shrubs and ground cover, with notes as to the locations of native and non-native species) shall be identified and submitted with the Waterfront Greenbelt Landscaping Plan.
- d) A plan for controlling traffic to the lakefront, detailing construction and maintenance of paths, stairs or boardwalks;
- e) Detailed drawings and descriptions of all temporary and permanent soil erosion and sedimentation control measures, and bank stabilization measures as submitted to the Soil Erosion Control Enforcement Officer;
- f) Detailed drawings delineating areas to be cleared of vegetation before and during development activities, with area calculations and descriptions of the vegetation to be removed, and detailed drawings and descriptions of proposed vegetation restoration for those same areas;
- g) Detailed drawings that show the location of existing structures on the property, as well as dwellings on neighboring parcels;
- h) The Waterfront Greenbelt Landscaping Plan shall identify the location of property, including a full tax identification number, location of the nearest public road intersection, the high water mark, a north arrow and map scale;
- i) The Waterfront Greenbelt Landscaping Plan shall include the name, address, professional status, license number (if applicable), and phone number of the person who prepared the plan along with the date of the original drawing and the date of the most recent revision.

E. Circumstances Requiring a Site Plan

Site plans are required for the following uses:

1. Except as provided herein, all new uses, including single-family and two-family dwellings located on a waterfront lot. Except as provided herein, single-family and two-family dwellings

located on a non-waterfront lot shall not require site plan review.

2. Except as provided herein, **expansion or renovation of an existing use**, including single-family and two-family dwellings located on a waterfront lot. Except as provided herein, the expansion or renovation of single-family and two-family dwellings located on a non-waterfront lot shall not require site plan review.

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Hayes Township Planning Commission
From: Claire Karner, Community Planner at LIAA
Date: November 8, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the Hayes Township Planning Commission on August 16, 2016, the following ordinance language has been prepared for planning commission discussion and consideration.

For each of the three ordinance recommendations, there is a brief overview and reasoning behind ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strike through~~ for language recommended to eliminate and **redline** for new language.

It should be noted that this draft ordinance language is intended for planning commission discussion and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Prohibit the alteration of the area between the water's edge and the high water elevation

Jurisdiction over inland lake bottomlands between the high water elevation and the water's edge is concurrently held by both the Michigan Department of Environmental Quality and local units of government. Local zoning ordinances can regulate activities that take place in these areas, including the alteration of the ground and the construction of structures. It is recommended that the Zoning Ordinance be amended to prohibit the alteration of the area between the defined high water elevation and the water's edge. The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion.

Recommended Edits:

Article III: General Provisions
Section 3.14 Waterfront Regulations

8. The area between the water's edge and the high water elevation shall not be altered.

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

Recommended Edits:

Article V: Site Plan Review

Section 5.03 – Site Plan Review (All Districts)

1. Circumstances Requiring a Site Plan: Site Plans are required for the following uses:
 - A. All new uses and/or structures except one-family or two-family residential units **that are not located on waterfront parcels**, associated accessory structures to one-family or two-family residential units, agricultural buildings in the Agricultural district, accessory buildings as a principal use, provided all requirements are met.
 - B. Expansion or renovation of an existing use, other than one-family or two-family residential use, which increases the existing floor space more than twenty five (25) percent.
 - C. Changes of use for an existing structure or lot.
 - D. Any special use permit.
 - E. Any use requiring off-street parking, as stated in the off-street parking schedule of this ordinance.
 - F. All new waterfront structures, including one-family or two-family residential units**
 - G. Other uses as required by this Ordinance.

Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative.

Recommended Edits:

Article III: General Provisions

Section 3.14 Waterfront Regulations

- 9. Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.¹**

Docks

The Hayes Township Planning Commission also requested that we provide recommendations on regulating docks. Specifically, permanent docks versus seasonal, the appropriate length of docks, and boat parking requirements. Reducing the number of docks and boat storage spaces around the lake improves congestion and aesthetic issues and can help protect water quality by limiting the opportunity for erosion and fuel and chemical pollution from increased boating activity. The steering committee for

¹ Language adapted from Evangeline Township Zoning Ordinance, 2008

this project felt that each jurisdiction should determine what dock and boat standards are appropriate for their specific community. According to water law attorney Clifford Bloom of Law, Weathers & Richardson writing for the Michigan Planning and Zoning News, dock and boat ordinances are police power ordinances, not zoning power ordinances. As such, they can apply to existing uses.

A model dock ordinance developed for the Michigan Townships Association Convention recommended that communities should require more than eighty (80) feet of continuous frontage on a lake to consider allowing a second dock. Where more than one (1) dock is permitted for a separate frontage, the docks shall be separated by a minimum of thirty (30) feet. This model ordinance also recommends that no dock shall extend more than seventy-five (75) feet into a body of water, measured perpendicularly from the shoreline, unless necessary to reach water with a depth of three (3) feet, and then no further than necessary to reach such depth. All docks shall have a minimum width of two and one-half (2- 1/2) feet, but shall not exceed a maximum width of six (6) feet. Additionally, the model ordinance recommends prohibiting permanent docks. The model ordinance can be downloaded at this link:

http://www.bsmlawpc.com/municipal_law/PDF/Riparian_Water_Law_Articles/MTA_Convention_Outline_Water_Law%20and_Michigan_Townships.pdf

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: Marion Township Planning Commission
From: Claire Karner, Community Planner at LIAA
Date: November 14, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the Marion Township Planning Commission on May 23, 2016, the following ordinance language has been prepared for planning commission discussion and consideration.

For each of the seven ordinance recommendations, there is a brief overview and reasoning behind the ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strike through~~ for language recommended to eliminate and **redline** for new language.

It should be noted that this draft ordinance language is intended for planning commission discussion and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Redefine High Water Elevation

It is recommended that the Zoning Ordinance be amended to define the High Water Elevation of Lake Charlevoix as 582.35' I.G.L.D. This elevation is the highest water level recorded on the lake and historical lake levels have frequently been higher than the defined Ordinary High Water Mark (OHWM). Standardizing a High Water Elevation of 582.35' helps ensure the effectiveness of shoreline buffers around the lake.

Recommended Edits:

Article II: Rules of Construction and Definitions of the Zoning Ordinance, p. II-11

Ordinary High Water Line: The line between upland and bottomland which persists through successive changes in water levels, below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the soil and the vegetation. ~~On an inland lake which has had a level established by law, it means the high established level. On a river or stream, the ordinary high water mark shall be the ten year flood limit line.~~ **This elevation is the highest water level recorded on the lake and delineating this**

elevation helps ensure the effectiveness of shoreline buffers around the lake. The high water elevation for Lake Charlevoix shall be elevation 582.35 Ft. (International Great Lakes Datum).

Modify impervious surface coverage standards for waterfront lots

It is recommended that the Zoning Ordinance be amended to limit the maximum allowable impervious surface coverage on waterfront lots to 15%. Reducing the amount of impervious surface coverage on waterfront lots helps reduce the risk of shoreline erosion and the potential for pollutants to enter the lake through stormwater runoff.

Recommended Edits:

Article V: District Regulations

Section 5.01 -- Single Family Residential District (R-1)

Section 5.01.6 – General Development Provisions

Maximum Impervious Surface Coverage: No more than a maximum of 15% or 2,500sq. ft. (whichever is greater) of the lot area on waterfront property may be impervious surface. The spatial dimensions of existing buildings that encroach on the waterfront, side yard and road setbacks or exceed the maximum allowable impervious surface standards of this district shall not be further expanded.¹

Modify Shoreline Protection Regulations

It is recommended that the Zoning Ordinance be amended to include additional shoreline protection regulations for waterfront parcels. Specifically, the recommended additions are:

- The specific prohibition of lawns within the Greenbelt.
- The inclusion of a requirement that specifically requires the planting of trees and/or woody plants in the Greenbelt.
- The inclusion of a requirement that new low-growing plantings within the Greenbelt be spaced for complete ground coverage in two years.

The addition of these regulations would further increase the effectiveness of the Greenbelt to slow runoff, reduce erosion, and protect the Lake from pollution.

Recommended Edits:

Article III: General Provisions, Section 3.11 – ~~Greenbelt~~ **Shoreline Protection Regulations**

Part 1: Greenbelt

To preserve natural resources, water quality and community scenic and recreational values, a greenbelt shall be established and maintained on all waterfront property. The greenbelt shall include all the land area located within fifty (50) feet of the ordinary high water mark of a lake or a stream abutting or

¹ Language adapted from Evangeline Township Zoning Ordinance, 2008

traversing the property in question. Within the greenbelt, the following development or use restrictions shall apply:

7. Natural vegetation cover, including trees, ~~shrubs or herbaceous~~ and **woody** plants shall be maintained on a least seventy percent (70%) of the lake or stream frontage within the greenbelt, unless a landscape plan is submitted and approved by the Planning Commission. Beach sand, gravel, cobblestone or rock may be substituted for vegetated areas where these materials naturally exist.
9. **No lawns should be established or maintained on the greenbelt.**
10. **Shrubs shall be of sufficient size and planted at spacings that shall provide coverage of the ground within the shoreline protection zone, except as allowed in district regulations for a viewing platform and path, within a period of two (2) full growing seasons.²**

Prohibit the alteration of the area between the water's edge and the high water elevation

Jurisdiction over inland lake bottomlands between the high water elevation and the water's edge is concurrently held by both the Michigan Department of Environmental Quality and local units of government. Local zoning ordinances can regulate activities that take place in these areas, including the alteration of the ground and the construction of structures. It is recommended that the Zoning Ordinance be amended to prohibit the alteration of the area between the defined high water elevation and the water's edge. The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion.

Recommended Edits:

Article III: General Provisions, Section 3.11 – ~~Greenbelt~~ **Shoreline Protection Regulations**
Part 2: Shoreline Alteration and Access

1. **The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion. Areas located below the Ordinary High Water Mark (elevation 582.35 ft.) shall not be altered.³**

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

Recommended Edits:

ARTICLE VI: Site Plan Review, Section 6.03 Site Plan Review (All Districts)

² Language adapted from Evangeline Township Zoning Ordinance, 2008

³ Language adapted from Charlevoix Township Zoning Ordinance, 2007

Required site plans give the Planning Commission an opportunity to review development proposals in a concise and consistent manner. The use of the site plan ensures that the physical changes in the property meet with local approval and that development actually occurs as it was planned and represented by the developer.

1. Circumstances Requiring a Site Plan: Site plans are required for the following uses:
 - A. All new uses and/or structures except one-family or two-family residential units **not located on a waterfront site.**
 - G. All new uses and/or structures on waterfront sites.

Specifically regulate or prohibit keyhole/funnel development

It is recommended that the Zoning Ordinance specifically regulate or prohibit keyhole, or funnel, development where multiple property owners or parcels are allowed lake access on a single waterfront parcel. Keyhole practices can greatly increase the number of docks and motorized watercraft on the lake, increase runoff and pollution, and increase shoreline erosion. By limiting the number of motorized boats that are able to be docked on individual waterfront parcels, water quality can be protected by reducing the potential for fuel and chemical spills. Additionally, congestion and aesthetic issues are reduced when keyholing/funneling is prevented.

Recommended Edits:

Article III: General Provisions Section 3.11 – ~~Greenbelt~~ **Shoreline Protection Regulations**

Part 2: Shoreline Alteration and Access

2. **Limitation of Funnel Development Not more than one (1) single family home or cottage or one (1) condominium unit or one (1) apartment unit shall use or be permitted to use each one hundred (100) feet of lake or stream frontage as measured along the normal high water mark of the lake or stream. This restriction is intended to limit the number of users of the lake or stream frontage to preserve the quality of the waters, avoid congestion, and to preserve the quality of recreational uses of all waters and recreational lands within the Township. This restriction shall apply to any parcel regardless of whether access to the water shall be gained by easement, common fee ownership, single fee ownership or lease. This restriction shall not apply to a “Public Access Site” as hereafter described.⁴**

Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative.

Recommended Edits:

Article III: General Provisions Section 3.11 – ~~Greenbelt~~ **Shoreline Protection Regulations**

⁴ Language adapted from Hayes Township Zoning Ordinance, 2012

Part 2: Shoreline Alteration and Access

3. Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.⁵

⁵ Language adapted from Evangeline Township Zoning Ordinance, 2008

Enacting Shoreline Zoning Protections around Lake Charlevoix

To: South Arm Township Planning Commission
From: Claire Karner, Community Planner at LIAA
Date: November 14, 2016
Subject: Draft Ordinance Language Recommendations for Lake Charlevoix Project

In an effort to build upon previous shoreline protection work, the *Enacting Shoreline Zoning Protections* project is intended to help protect the water quality of Lake Charlevoix through the adoption of shoreline protection zoning standards in the ten jurisdictions surrounding the lake. Based on feedback from discussions with the South Arm Township Planning Commission on October 11, 2016, the following ordinance language has been prepared for planning commission discussion and consideration. Feedback at the October meeting was made using the adopted zoning ordinance from March of 2001. After that meeting, LIAA staff received a copy of the ordinance that was adopted in January of 2015 to make the following recommendations.

For each of the five ordinance recommendations, there is a brief overview and reasoning behind the ordinance recommendation as well as draft language for consideration. Draft language has been developed using Michigan Department of Environmental Quality best management practices, statewide model ordinances, and ordinances from neighboring communities surrounding Lake Charlevoix. We use a ~~strikethrough~~ for language recommended to eliminate and **redline** for new language.

It should also be noted that this draft ordinance language is intended for planning commission discussion, and any additions or deletions to the existing zoning ordinance should be reviewed by a municipal attorney and may also be amended through the public hearing process.

Modify impervious surface coverage standards for waterfront lots

It is recommended that the Zoning Ordinance be amended to limit the maximum allowable impervious surface coverage on waterfront lots to 15%. Reducing the amount of impervious surface coverage on waterfront lots helps reduce the risk of shoreline erosion and the potential for pollutants to enter the lake through stormwater runoff.

Recommended Edits:

Article IV: Zoning Districts and Regulations, Section 4.05 - Single Family Waterfront Residential District (R-2)

E. Greenbelt Regulations

3. **Maximum Impervious Surface Coverage: No more than a maximum of 15% or 2,500sq. ft. (whichever is greater) of the lot area on waterfront property may be impervious surface. The spatial dimensions of existing buildings that encroach on the waterfront, side yard and road**

setbacks or exceed the maximum allowable impervious surface standards of this district shall not be further expanded.¹

Modify Shoreline Protection Regulations

It is recommended that the Zoning Ordinance be amended to include additional shoreline protection regulations for waterfront parcels. Specifically, the recommended additions are:

- The specific prohibition of lawns within the Greenbelt.
- The inclusion of a requirement that specifically requires the planting of trees and/or woody plants in the Greenbelt.
- The inclusion of a requirement that new low-growing plantings within the Greenbelt be spaced for complete ground coverage in two years.

The addition of these regulations would further increase the effectiveness of the Greenbelt to slow runoff, reduce erosion, and protect the Lake from pollution.

Recommended Edits:

Article IV: Zoning Districts and Regulations, Section 4.05 - Single Family Waterfront Residential District (R-2)

E. Greenbelt Regulations

4. No lawns should be established or maintained on the greenbelt.
5. Shrubs shall be of sufficient size and planted at spacings that shall provide coverage of the ground within the shoreline protection zone, except as allowed in district regulations for a viewing platform and path, within a period of two (2) full growing seasons.²

Prohibit the alteration of the area between the water's edge and the high water elevation

Jurisdiction over inland lake bottomlands between the high water elevation and the water's edge is concurrently held by both the Michigan Department of Environmental Quality and local units of government. Local zoning ordinances can regulate activities that take place in these areas, including the alteration of the ground and the construction of structures. It is recommended that the Zoning Ordinance be amended to prohibit the alteration of the area between the defined high water elevation and the water's edge. The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion.

Recommended Edits:

Article IV: Zoning Districts and Regulations, Section 4.05 - Single Family Waterfront Residential District (R-2)

E. Greenbelt Regulations

¹ Language adapted from Evangeline Township Zoning Ordinance, 2008

² Language adapted from Evangeline Township Zoning Ordinance, 2008

6. The alteration of bottomlands between the water's edge and high water elevation can negatively impact habitat that would be underwater when lake levels are high. It can also increase the risk of shoreline erosion. Areas located below the Ordinary High Water Mark shall not be altered.³

Require formal Planning Commission site plan review for all waterfront uses

Requiring formal site plan review for any waterfront use gives local units of government detailed information and more precise documentation on proposed projects adjacent to the Lake. The site plan review process ensures that each of these projects is meeting the required standards of the ordinance and allows zoning staff to simply verify that development is occurring according to the approved plans.

Recommended Edits:

Article V – Site Plan Review, Section 5.03 - Site Plan Review (All Districts)

A. Circumstances Requiring a Site Plan:

Site plans give the Planning Commission an opportunity to review development proposals in a concise, consistent manner. The use of a site plan insures that physical changes in the property meet with local approval and that building actually occurs as it was promised by the developer. Site plans are required for the following uses:

1. All new development, both permitted uses and special uses, except the following, provided all requirements are met:
 - one-family and two-family residential units **that are not located on waterfront parcels**
 - associated accessory structures to one-family or two-family residential units
 - agricultural buildings in the Agricultural district
2. **All waterfront development and redevelopment.**

Prohibit the construction of seawalls

Seawalls can cause degradation of shoreline areas on the waterside of the wall and additional erosion of adjacent shorelines on either side of the wall. It is recommended that the construction of seawalls be prohibited within the Zoning Ordinance in favor of revetments and engineered natural shorelines, except where there is no other practical alternative.

Recommended Edits:

Article IV: Zoning Districts and Regulations, Section 4.05 - Single Family Waterfront Residential District (R-2)

E. Greenbelt Regulations

7. **Standard sheet piling or concrete seawalls are prohibited except where the applicant can demonstrate to the Planning Commission that no other practical alternative exists.**⁴

³ Language adapted from Charlevoix Township Zoning Ordinance, 2007

⁴ Language adapted from Evangeline Township Zoning Ordinance, 2008