

Ausable Bayfield Conservation Authority

Public Open House – Zurich
Proposed Shoreline Development Guidelines
August 18, 2018



Create Draft Development Guidelines

Form a committee of conservation authority staff and municipal planning staff to review the information from the summer meetings and make recommendations on development policies that need to be updated to account for changes to development pressures since the original Shoreline Management Plan (SMP) was developed.



LAKESHORE DEVELOPMENT GUIDELINES, CONTINUED

SECTION 3.3.7 - Lakeshore Development Guidelines Summary

Development Activity	Lakeshore Area 1 ♦			Lakeshore Area 2 ♦	
	Dune	Flood	Bluff	Dune	Bluff
Existing Developed Lots					
Repairs/maintenance	✓	✓	✓	✓	✓
Interior alterations	✓	✓	✓	✓	✓
Minor additions *	x	x	Conditional ¹	✓ provided no encroachment into Lakeshore Area 1	✓ design is movable
Major additions *	x	x	x	landward of foredune	design is movable
Unattached garages	x	x	x	landward of foredune	design is movable
Rebuilding of dwelling destroyed by forces other than flooding & erosion	✓ if same size and utilizes maximum lot depth (most landward location)			✓ dune - if design minimizes dune impact	✓ bluff - if structure is movable *
Rebuilding of dwelling destroyed by flooding and/or erosion	x	x	x	x	x
Relocation of dwelling away from shoreline	Optional, on the part of the owner; however: recommended			Owner should consider this as a future option, depending on severity of the hazard	
Minor Structures *	x	x	Conditional ²	Conditional ³	Conditional ²
Swimming pools	x	x	x	Conditional ³	✓ Provided drainage is addressed
New septic systems	x	x	x	Conditional ⁴	Conditional ⁴
Decks (existing)					
Repair and maintenance	✓	✓	✓	✓	✓
Decks (new)	x	x	No closer than 3m to top of bank and not connected to dwelling	If landward of the foredune (see Figure 17)	✓
Existing Vacant Lots (infilling)					
New dwellings	x	x	x	Conditional ⁵	Conditional ⁵
Septic systems	x	x	x	Conditional ⁴	Conditional ⁴
New Development					
Creation of New Lot(s) (i.e. severances, subdivisions)	x	x	x	x	x
Technical Severance	✓	✓	✓	✓	✓
Lot Consolidation	✓	✓	✓	✓	✓
Land use designation/zone changes	Support changes to planning documents to Hazard, Natural Environment or Open Space designations			Support changes to planning documents to a lakeshore overlay (subscript "L") designation	
Do not support proposed zoning, land use designation or official plan changes which further intensify land use, i.e. seasonal residential to multi-unit dwelling.					

LEGEND

- ✓ allowed
- x not allowed

♦ on a site-specific basis/study, where calculated erosion rates are low (less than 0.3 m/yr); these boundaries may be adjusted

* refer to Glossary (Appendix A) for full definition

- a minor addition is equal to less than 30% of total existing foundation area

- a major addition is equal to or greater than 30% of total existing foundation area

- a minor structure is a portable building (storage shed, gazebo) with no utilities and maximum size 14 sq. m.

DOES NOT INCLUDE SHORE PROTECTION DEVICES.

- a technical severance is a boundary adjustment where no new lot is created

* movable design considerations are only necessary where long-term erosion rate calculations apply

Conditional¹ - yes, provided calculated erosion rate is less than 0.3 m/yr; slope stability is addressed

Conditional² - yes, provided structure is inland from primary dwelling if calculated erosion rates are greater than 0.3 m/yr

Conditional³ - yes, provided dune restoration is implemented and/or provided no encroachment into Lakeshore Area 1

Conditional⁴ - yes, and it is recommended to be landward of primary dwelling & conforms to setbacks as required under Building Code

Conditional⁵ - yes, provided that building is movable by design, impact to dunes is minimized, and provided that more than 50% of existing lots/parcels in the residential/cottage area are developed

NOTE: Please refer to text in the previous section (3.3.6) for a complete description. All of the above is subject to appropriate setbacks and maximum lot coverage requirements as listed in municipal zoning by-laws.

Lakeshore Development Guidelines

- Provides direction with regard to development proposals within lakeshore hazard areas
- Used for planning and for regulations



Planning Group Composition

- Planning staff representing:
 - Central Huron, Bluewater, South Huron and Lambton Shores, Counties of Lambton and Huron
 - Maitland Valley Conservation Authority
 - Ausable Bayfield Conservation Authority
- Identified challenges
 - Moveable,
 - Land use along the shore has changed substantially i.e. recreational vs. full time etc.
 - The 2000 SMP update primarily to address the amended 1997 Provincial Policy Statement
 - Release of provincial shoreline technical Guidelines (2001)
- Group discussed each of the categories in the existing development chart
- Expanded discussions to include redevelopment and shore protection and septic



Shoreline Hazard Delineation



Shoreline Hazards

- Flooding

- all portions of the shoreline
- not many structures affected

- Setback from 100 year lake level as determined by Ontario Ministry of Natural Resources and Forestry (MNRF) to account for waves and other water related hazards (ice)



Flooding Hazard Limit

15 m for the
Great Lakes

100 Year
Flood level

NORMAL WATER
LEVEL

Flood allowance for
wave uprush and other
water related hazards*



Shoreline Hazards

- Flooding

- All portions of the shoreline
- Not many structures affected

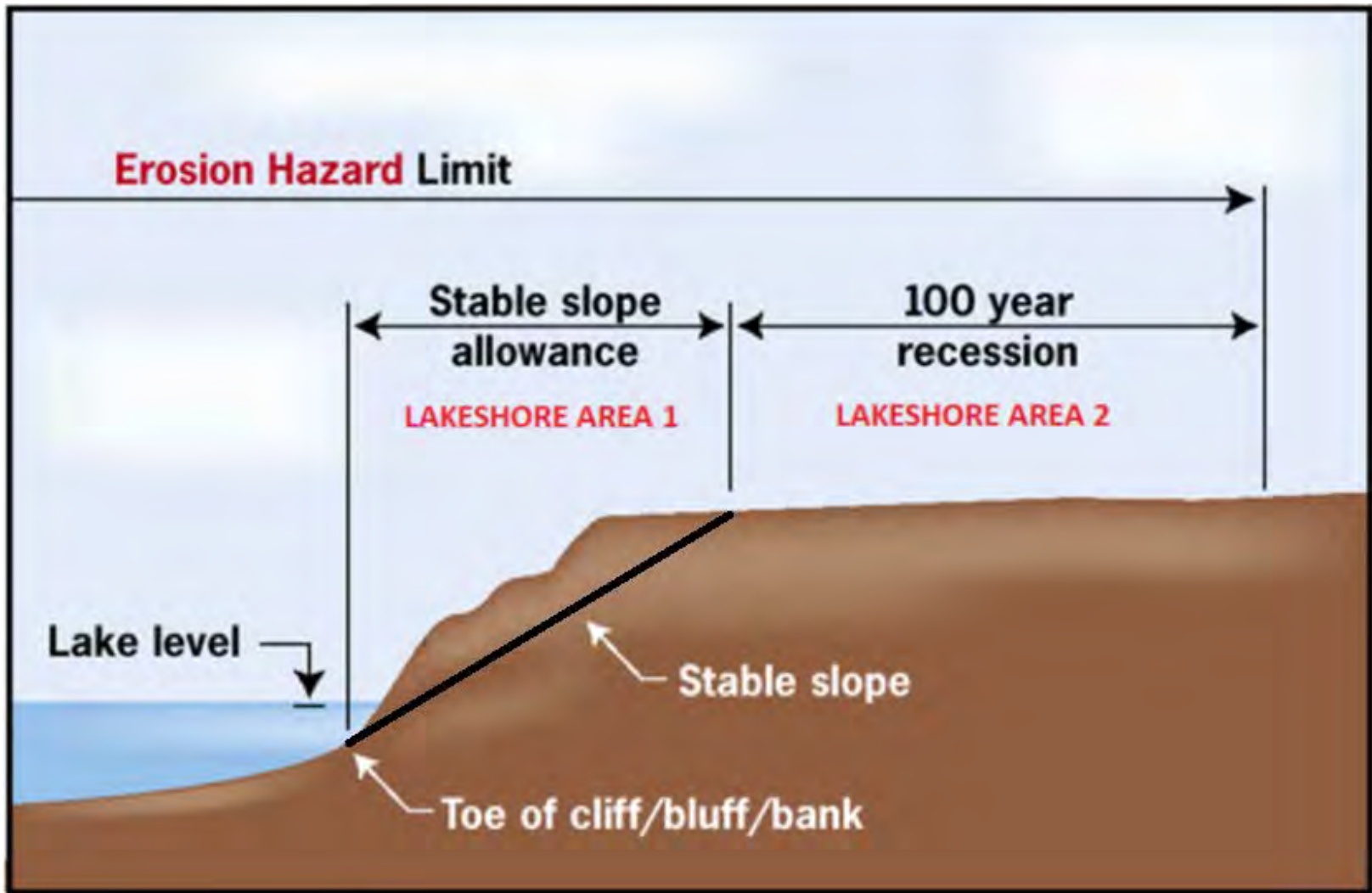
- Erosion

- All portions of shoreline but predominately bluff north of Lake Huron
Primary Water Supply (Port Blake water intake)

- Dynamic Beaches

- South of Lake Huron Primary Water Supply (Port Blake water intake)





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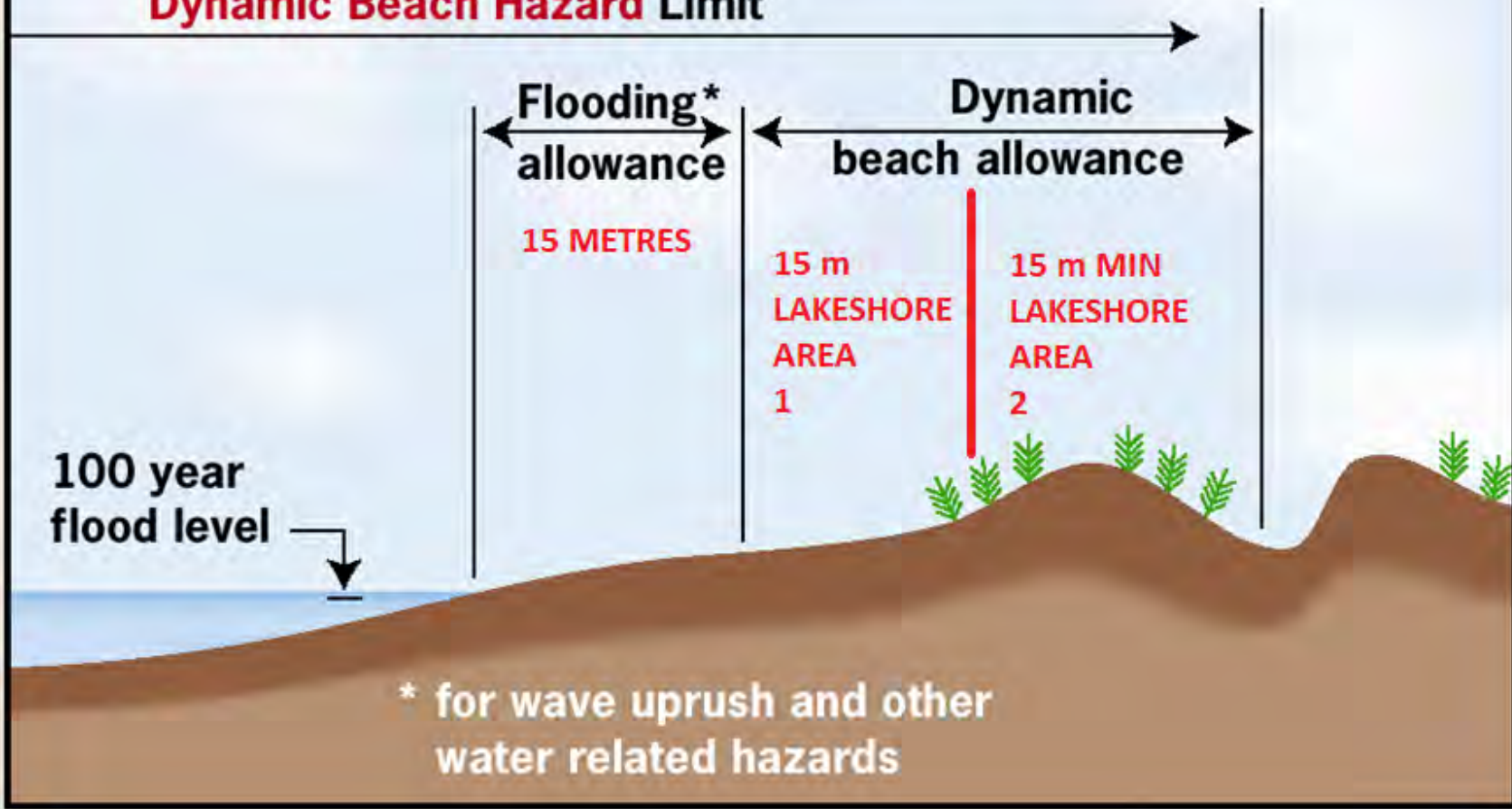


Dynamic Beach

- Area where accumulated sediment continuously moves - unstable
 - Wind
 - Water
 - Changes in the rate of supply



Dynamic Beach Hazard Limit



Draft Development Guidelines



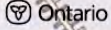
Provincial Technical Guidelines

- Consolidated and released 2001
- Natural hazard areas pose risk to health and safety therefore they are of provincial interest
- Provincial direction for implementation of natural hazard policies
- Used for planning and for regulations



Great Lakes – St. Lawrence River System and Large Inland Lakes

Technical Guides for flooding, erosion and dynamic beaches in support of Natural Hazards Policies 3.1 of the Provincial Policy Statement (1997) of the Planning Act








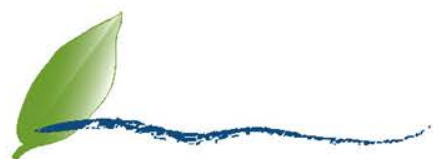
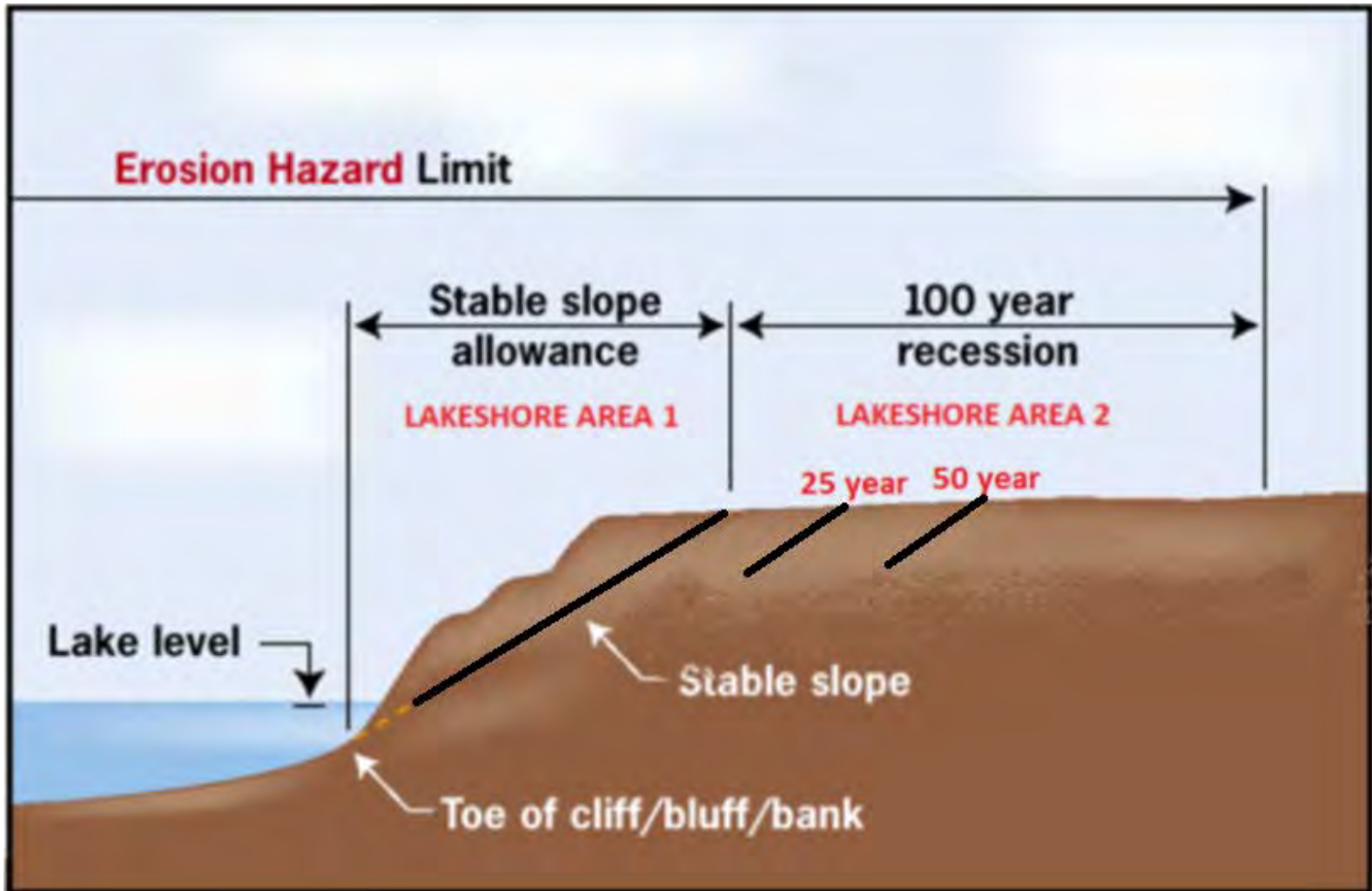






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Proposed Development Guidelines

Development Activity	Lakeshore Area 1			Lakeshore Area 2	
	Dune	Flood	Bluff	Dune	Bluff
Repairs / maintenance	Yes	Yes	Yes	Yes	Yes
Interior Alteration – where no change in use or increase in living space or occupancy - an increase in living space is considered an addition	Yes	Yes	Yes	Yes	Yes



Proposed Development Guidelines

Development Activity	Lakeshore Area 1			Lakeshore Area 2	
	Dune	Flood	Bluff	Dune	Bluff
Rebuilding of dwelling destroyed by other than flooding and / or erosion – where no change in use or increase in living space or occupancy	Yes – replacement structure shall be no larger than existing and it is moved as far landward as possible			Yes – if design minimizes impact to dune - replacement structure shall be moved as far landward as possible	Yes - replacement structure shall be moved as far landward as possible
Rebuilding of dwelling destroyed by flooding and / or erosion	No	No	No	No	No



Proposed Development Guidelines

Development Activity	Lakeshore Area 1			Lakeshore Area 2	
	Dune	Flood	Bluff	Dune	Bluff
<p>Minor Additions (less than 30%) * Multiple additions permitted up to a maximum of 30% of the initial building size. Beyond 30% is considered a major addition.</p>	No	No	No	<p>Yes - Provided addition is no closer to the lake than the existing structure and has a minimum landward setback of 7.5m from Lakeshore Area 1</p>	<p>Yes - Provided addition is no closer to the lake than the existing structure and has a minimum landward setback equal to the greater of: 1) The 25 year erosion line as measured from Lakeshore Area 1 2) 7.5m setback from Lakeshore Area 1</p>
<p>Major Additions (greater than 30% but less than 100% - greater than 100% shall be considered lot re-development) Multiple additions permitted up to a maximum of 100% of the initial building size. Beyond 100% is considered lot re-development</p>	No	No	No	<p>Yes – landward of the foredune Provided addition is no closer to the lake than the existing structure and has a minimum landward setback of 7.5m from Lakeshore Area 1</p>	<p>Yes – Provided addition is no closer to the lake than the existing structure and has a landward setback equal to the greater of: 1) The 50 year erosion line as measured from Lakeshore Area 1 2) 15m landward setback from Lakeshore Area 1</p>



Proposed Development Guidelines

Development Activity	Lakeshore Area 1			Lakeshore Area 2	
	Dune	Flood	Bluff	Dune	Bluff
Lot redevelopment – i.e. existing structures removed and replaced	No	No	No	<p>Yes</p> <p>Provided proposed development has regard to the size and location of the available developable area and has a minimum landward setback equal to the greater of:</p> <p>1)The lakeward limit of the existing structure</p> <p>2)The landward limit of Lakeshore Area 2 - where insufficient room outside of Lakeshore Area 2 exists, encroachment into Lakeshore Area 2 is permitted, but the development must be as landward as possible and in no instance shall development be less than 15 m to Lakeshore Area 1</p>	<p>Yes</p> <p>Provided proposed development has regard to the size and location of the available developable area and has a minimum landward setback equal to the greater of:</p> <p>1)The lakeward limit of the existing structure</p> <p>2)The landward limit of Lakeshore Area 2 - where insufficient room outside of Lakeshore Area 2 exists, encroachment into Lakeshore Area 2 is permitted, but the development must be as landward as possible and in no instance shall development be less than 15m to Lakeshore Area 1</p> <p>3)The 60 year erosion line as measured from Lakeshore Area 1</p>



Draft Shoreline Protection Guidelines



Draft Development Guidelines – Shore Protection

	Dynamic Beach Area	Bluff Areas
Shore Protection - new	<p>Permitted to protect primary building Must be landward of the location of the 100 year lake level plus 15m wave uprush allowance</p> <p>Protection works for non-essential structures and features, including but not limited to accessory structures (e.g., gazebos, sheds, bunkies, decks, stairs etc.), lawns and/or other landscaping features are not permitted.</p> <p>Application shall include mandatory review / design by qualified Coastal Engineer which shows no negative impacts from the proposed protection works.</p>	<p>Permitted</p> <p>Must be landward of the greater of the following:</p> <ol style="list-style-type: none"> 1) the location of the 100 year lake level or 2) a line connecting the toe of the bluff and /or existing shore protection of the two abutting properties on either side of the subject property or 3) the toe of existing bluff <p>Application shall include mandatory review / design by qualified Coastal Engineer which shows no negative impacts from the proposed protection works.</p>



Draft Development Guidelines – Shore Protection

	Dynamic Beach Area	Bluff Areas
Shore Protection - replacement	<p>Permitted to protect primary building.</p> <p>Must be landward of the greater of the following:</p> <ol style="list-style-type: none"> 1) the location of the 100 year lake level plus 15m wave uprush allowance 2) the existing shore protection being replaced <p>Protection works for non-essential structures and features, including but not limited to accessory structures (e.g., gazebos, sheds, bunkies, decks, stairs etc.), lawns and/or other landscaping features are not permitted.</p> <p>All previous shore protection must be removed from the site and disposed of</p> <p>Review / design by qualified Coastal Engineer which shows no negative impacts from the proposed protection works may be required.</p>	<p>Permitted</p> <p>Must be landward of the greater of the following:</p> <ol style="list-style-type: none"> 1) the existing shore protection being replaced 2) the location of the 100 year lake level 3) a line drawn between the toe of the bluff and /or existing shore protection of the two abutting properties on either side of the subject property 4) the toe of the existing bluff <p>All previous shore protection must be removed from the site and disposed of</p> <p>Review / design by qualified Coastal Engineer which shows no negative impacts from the proposed protection works may be required.</p>
Groynes	Not permitted	Not permitted



Next Steps

- All proposed draft Development Guidelines are posted in room
- Will be posted to website week of August 20, 2018
- Any comments appreciated by September 15th
- ***Not your only chance to comment on draft Development Guidelines***
 - They will be incorporated into the draft Shoreline Management Plan
 - After review by Board of Directors, draft SMP will be released for public comment



Thank you

