



Maine Code Conference 2022 Sebasco Harbor Resort

Chapter 1000 Shoreland Zoning Guidelines

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MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

Protecting Maine's Air, Land and Water

Agenda

9:00 -10:15 - Shoreland Zoning Overview

10:15 –10:45 - Break/ Vendors (Cornelius Room)

10:45 - Noon - Shoreland Field Training (Pine Grove)



Mandatory Shoreland Zoning Act

Legislature first enacted in 1971

BEP & LURC adopt guidelines in 1973

DEP adopt Chapter 1000 Guidelines in 1990

Municipalities adopt Ordinances starting in 1973



Shoreland Zoning Purposes

Protect

- Buildings from flooding
- Lands from erosion
- Historic resources
- Commercial fishing
- Water quality & wetlands
- Fish & aquatic life
- Bird & wildlife habitat
- Property Values

Conserve

- Access to waters
- Shore cover
- Open space



Implementation Roles

Municipality

- Adopts/Amends Ordinance
- Administers Ordinance
- Enforces Ordinance
- Decides administrative and variance appeals



Maine DEP

- Adopts/Amends Chapter 1000
 - * 2006 Mandatory
 - * 2015 Optional
- Approves amendments
- Provides technical advice
- Provides enforcement assistance
- Comments on variances
- **?? NRPA ??**



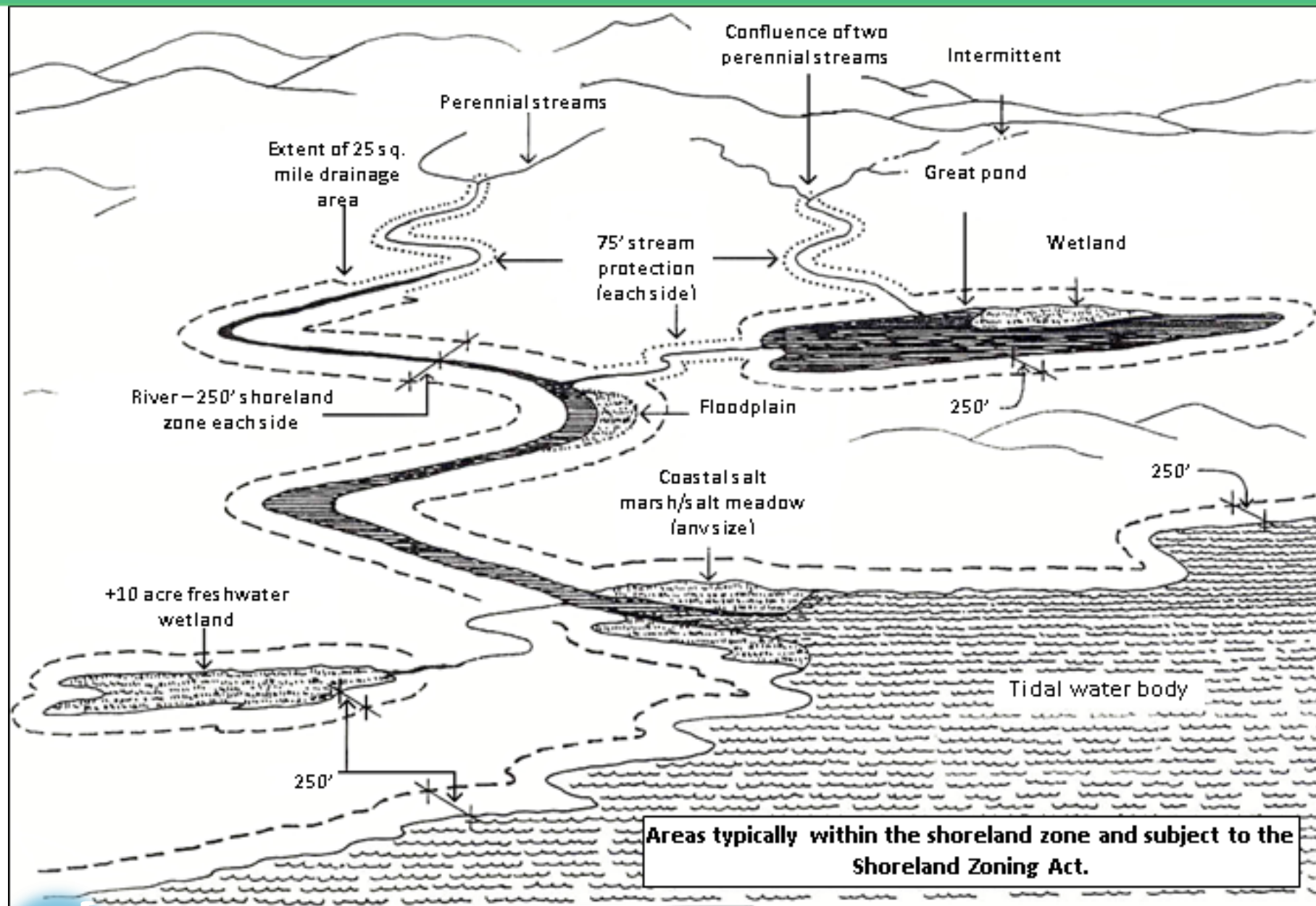
Shoreland Zoning Applicability

- Great ponds
- Streams
- Rivers
- Coastal wetlands
- Freshwater wetlands
- Tributary Streams



(all defined in ordinance, and all but Tributary Streams depicted on zoning map)





Shoreland Zoning Districts

- Resource Protection
- Stream Protection
- Limited Residential
- Limited Commercial
- General Development I & II
- Commercial Fisheries & Maritime Activities



Standards for Districts

GOAL: Promote conformity within district

- Vegetative Standards
- Structural Standards
- Use Standards
- Lot Standards



Vegetation Functions

- Intercept and infiltrate storm water runoff
- Slow and control soil erosion and sedimentation
- Provide bird & wildlife habitat, and shade aquatic habitat
- Keep privacy and conserve natural character of Maine



Shoreline Buffer

- Buffer is area closest to the normal high-water line
- Is an area where vegetation removal is more limited
- Buffer size is determined by District
- Buffer size same as the shoreline setback for structures



Resource Protection Buffer Vegetation Removal Standards

*In a Resource Protection District abutting a great pond, there shall be no cutting of vegetation within 75 feet of the normal high-water line except to remove hazard trees.

*Elsewhere in any Resource Protection District the cutting or removal of vegetation is limited to what is necessary for allowed uses in the District.



Shoreline Buffer Vegetation Removal Standards

Removal of vegetation is limited:

- Within 100ft of great ponds & rivers flowing to great pond
- Within 75ft of other rivers, streams and wetlands
- Within 75ft of tributary streams (in the shoreland zone)
- To canopy openings of less than 250 square feet
- To a single meandering foot path no wider than 6 ft;
- To removing trees and saplings based on a plot/point system;
- To pruning live branches only the bottom third of trees;
- Must retain vegetation under 3 feet, ground covers and duff layer.



**No cleared openings
greater than 250 square
feet within setback**



Well-Distributed Stand

25x50 plot area

- 24 points for great ponds, and rivers and streams flowing to great ponds
- 16 points for other water bodies and wetlands

DBH (inches)

Points

2<4

1

4<8

2

8<12

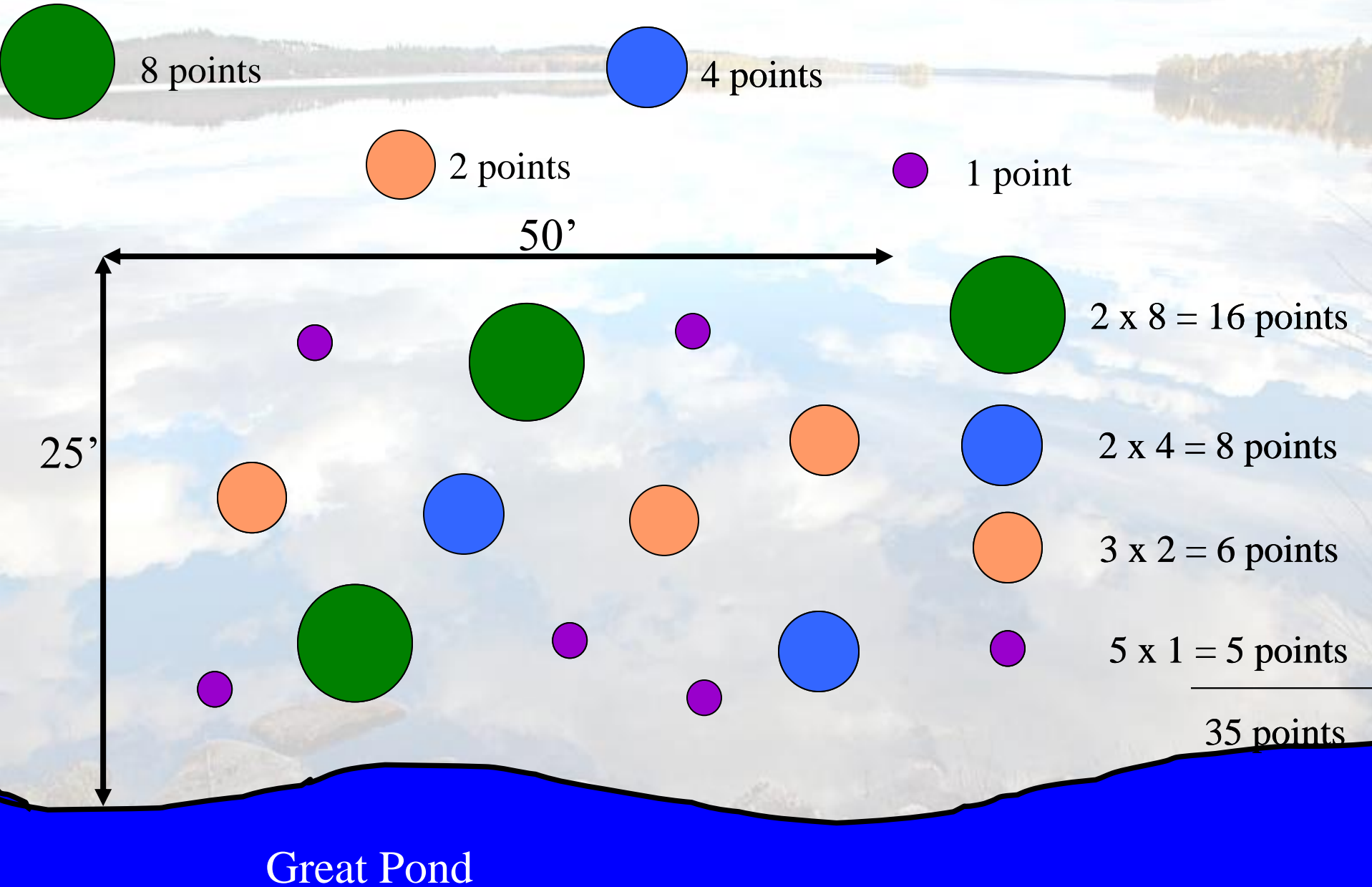
4

12 +

8



Buffer Point System



Applying Buffer Point System

- Plots must be established in area of proposed clearing.
- Plots must be adjacent to and not overlap each other.
- No tree removal from plots not containing the required points unless otherwise authorized by ordinance.
- Where conditions permit, no more than 50% of the points in any plot can consist of trees greater than 12 inches diameter (8 points).
- Must retain 5 saplings per plot.
- Must retain existing vegetation under 3 feet, ground covers and duff layer.



Additional Buffer Vegetation Removal Considerations

- Notwithstanding the above provisions, no more than 40% of the total volume of trees 4 inches or more in diameter, measured at 4.5 feet above ground level, may be removed in any 10 year period.
- Meandering 6 foot wide footpath allowed.
- Pruning branches on bottom third of tree allowed.
- Hazard, Dead & Storm-Damaged Trees can be removed but replanting may be required based on canopy opening created.
- Construction activities must comply with standards in and out of buffer



Buffer cut according to standards...



Vegetated Buffers

Footpath/Staircase



Tree Removal Outside the Buffer

- No more than 40% of the volume of trees four inches or more can be removed in any ten-year period. This includes trees removed in conjunction with the development of permitted uses.

Tree Removal Within Shoreland Zone

- Cleared opening cannot exceed 10,000 sq. ft. or 25% of the lot area (whichever is greater). This includes previously cleared land (except GD & Maritime Districts)



Exemptions from Standards

- Existing cleared areas: maintained but not enlarged
- Public swimming areas
- Agriculture: when BMPs used & standards met
- Brownfields or VRAP projects, Emergency Response
- Removal of non-native invasive vegetation



Question

If a project requires the removal of vegetation in excess of standards can it be approved with a vegetation replanting plan?



Hazard Tree Defined

Definition for hazard tree:

- structural defect...
- under the normal range of environmental conditions, not:
 - hurricanes, hurricane-force winds,
 - tornados, microbursts, or
 - significant ice storm events
- exhibits a high probability of failure...
- will strike a target.
 - Area where personal injury or property damage could occur
 - roads, driveways, parking areas, structures, campsites, and any other developed area where people frequently gather and linger
- also trees that pose imminent risk to bank stability.



Hazard Tree Replanting

Within shoreline buffer:

- Replace tree canopy opening > 250sf
 - new tree growth present or
 - Plant native trees at least 6ft in height and 2" DBH
- No stump removal

CEO may require:

- Professional evaluation
- >1:1 for >8" DBH trees

Outside buffer:

- Replace if tree volume or cleared openings exceeded
- With new tree growth or
 - With native trees at least 2" DBH



Dead Trees

Dead trees – contain no foliage during the growing season:

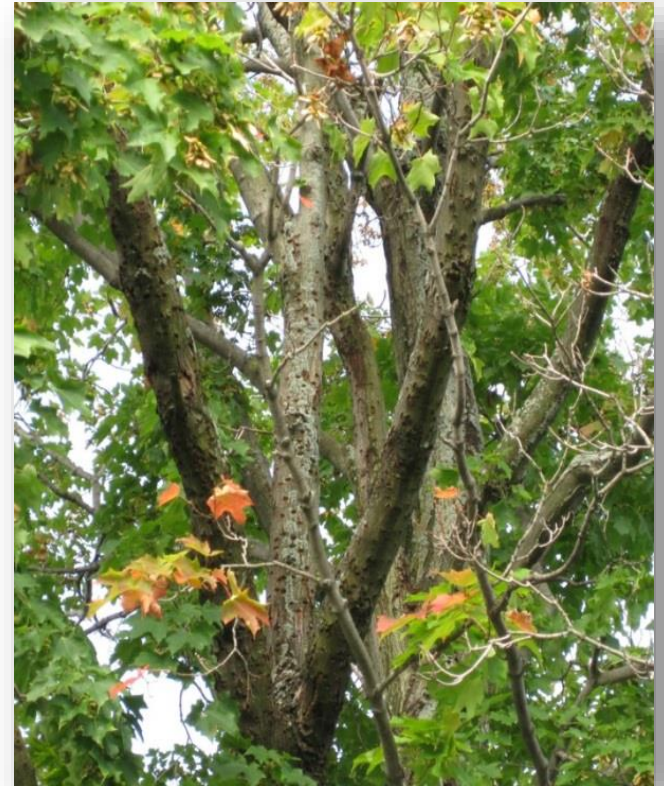
- Removal allowed if dead from natural causes
- No creation of new lawn areas or other permanently cleared areas
- No stump removal



Storm-Damaged Tree Definition

Definition for storm-damaged tree:

- a tree that is damaged beyond the point of recovery as a result of a storm event.
- Could be uprooted, blown down, lying on the ground, or still standing



Storm-Damaged Tree Replanting

Within shoreline buffer:

- Pruning damaged limbs above 1/3 allowed
- Replace tree canopy opening > 250sf
 - By natural regeneration or
 - With native seedlings or saplings, 1 per 80sf
- No creation of new lawn or other cleared areas
- No stump removal

Outside buffer:

- Replace tree volume or cleared openings
 - By natural regeneration
 - With native seedlings or saplings on 1:1 basis

Regeneration must occur within 1 season



Shoreline Stabilization

Standards:

- Planning board review
- Access by barge if feasible
- Vegetation removal limited
- **Re-vegetation required**



Timber Harvesting

Defined as:

- the cutting and removal of timber for the primary purpose of selling or processing forest products
- Municipal and/or Bureau of Forestry (SWS) administer

Does NOT include removal in the shoreland zone:

- When associated with any other land use activity
- on a lot that has less than 2 acres



Non-Native Invasive Vegetation

Optional exemption from vegetation standards:

- Any wheeled or tracked motorized equipment is operated and stored at least 25ft from the shoreline
 - except allowed on existing structural surfaces within 25ft
- Any removal within 25ft occurs via hand tools
- Replanting required if vegetation standards exceeded



Revegetation Standards

When revegetation is required:

- Professional revegetation plan
- Specific revegetation location and deadline



Vegetation Definitions

Definitions for:

- Sapling – a tree species that is less than 2” in diameter
- Seedling – a tree species that is less than 4.5 ft in height
- Tree – a woody perennial plant that has a well-defined trunk(s) at least 2” in diameter...a more or less definite crown and reaches a height of at least 10ft at maturity



Tree Revegetation

Trees and saplings must be replaced with:

- native species
- saplings at a minimum
- if > 3 planted, then at least 3 different species
- no one species shall make up 50% or more
- shoreline stabilization: re-establishes screening
- survival rate: 80% for 5 years



Shrub Revegetation

Woody vegetation and vegetation under 3 ft, with:

- native species of woody vegetation and vegetation under 3 ft in height as applicable
- quantities and variety sufficient to prevent erosion and provide for effective infiltration of stormwater
- If > 3 plants of woody vegetation, then ≥ 3 species
- no one species of woody vegetation shall be $\geq 50\%$
- survival rate: sufficient to remain in compliance with the vegetation standards for a minimum of 5 years



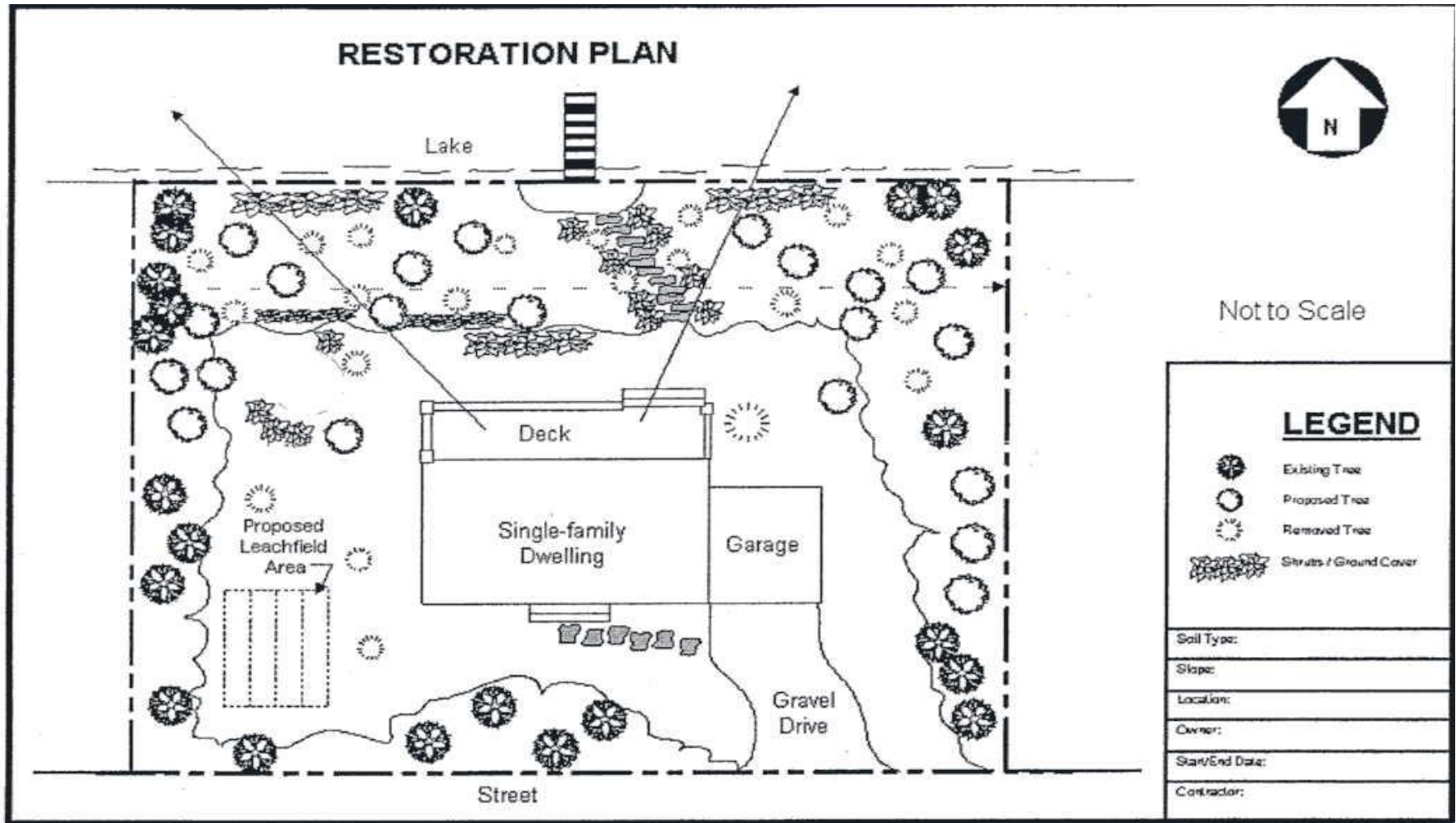
Ground Cover Revegetation

Ground cover must be replaced with:

- native herbaceous vegetation
- quantities and variety sufficient to prevent erosion and provide for effective infiltration of stormwater
 - Where necessary, supplement with mulch 4 inches deep
- Survival and functionality must be sufficient to remain in compliance with the vegetation standards for 5 years



Revegetation Plan



Restored Shorefront



Structures Defined

Anything temporarily or permanently located, built, constructed or erected for the support, shelter or enclosure of persons, animals, goods or property of any kind or anything constructed or erected on or in the ground...

- Structure does not include subsurface wastewater disposal systems.
- Optional Exemptions: fences, poles, others



Shoreline Setbacks for Structures

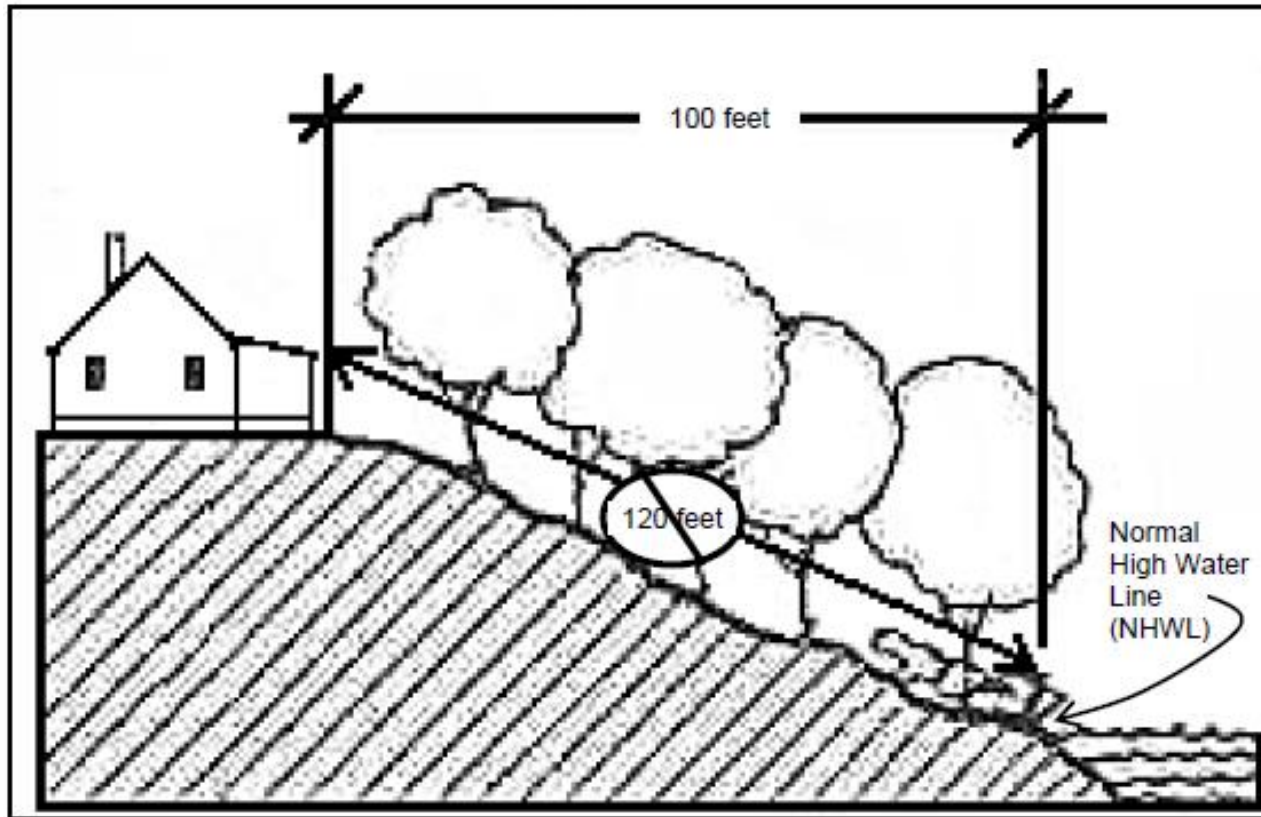
Setback depends on resource, use and district:

- Resource Protection District 250ft
- Great ponds and rivers to great ponds 100ft
- Other rivers, streams and wetlands 75ft
- Tributary streams (within shoreland zone) 75ft
- General Development II District 75ft
- General Development I District 25ft
- Functionally water-dependent uses 0ft



Measuring Setback

Nearest horizontal distance from the shoreline to nearest part of the structure or other regulated area



What about these structures within a setback?

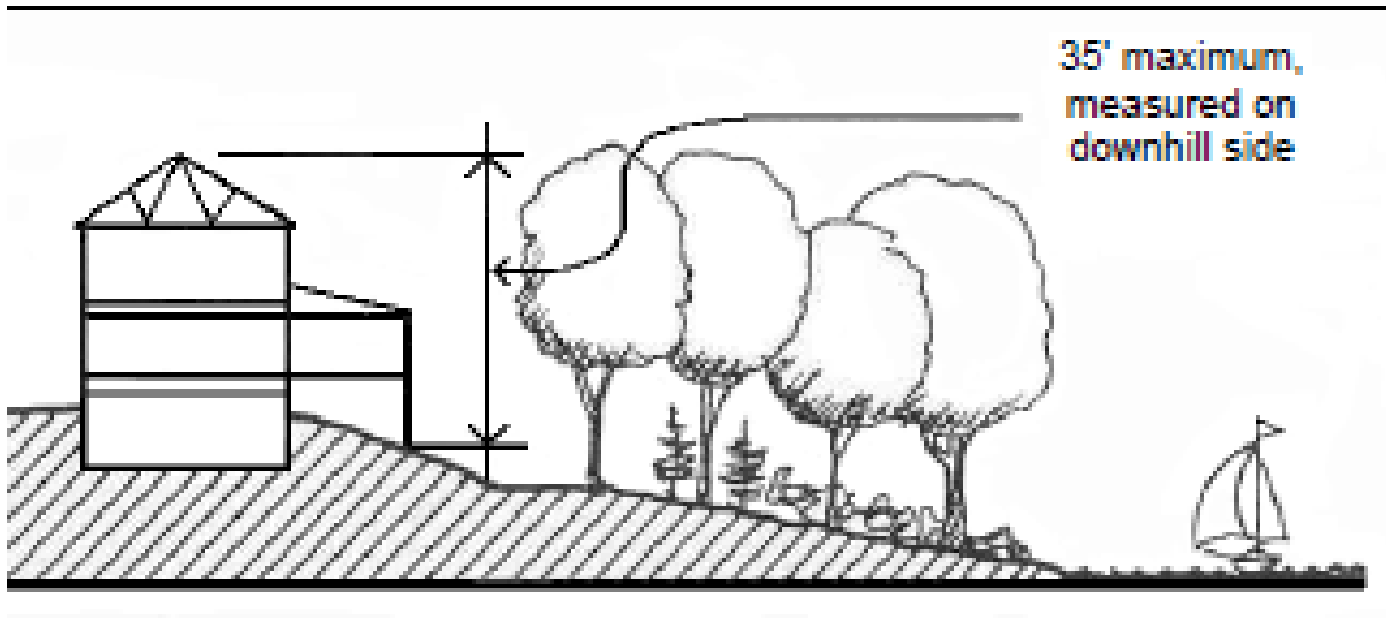
- Kayak/Canoe Rack
- Fire Pit
- Picnic Table
- Dog House
- Tree House
- Solar Panel
- Haul Out
- Grill
- Putting Green



Height of a Structure

Defined as:

- Vertical distance between the mean original (prior to construction) grade at the **downhill** side of the structure and the highest point of the structure



Height Exemptions

Optional exemptions:

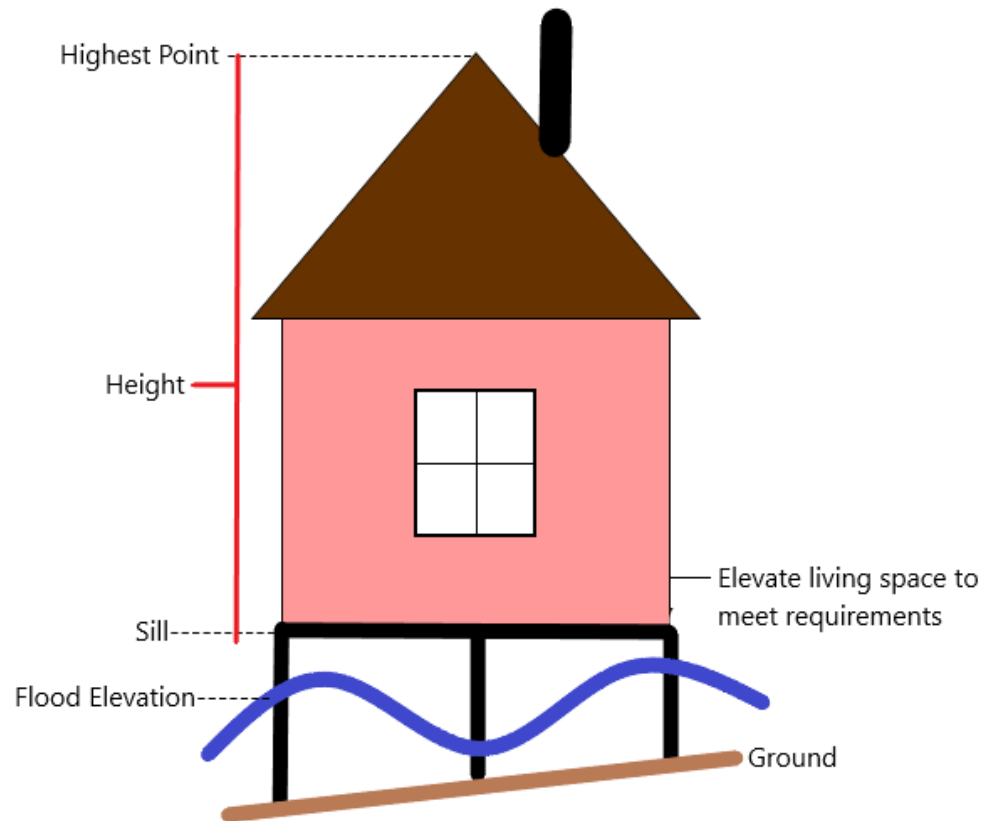
- chimneys, steeples, antennas, and similar appurtenances
- transmission towers, windmills, antennas, and similar structures
- a non-habitable feature such as a cupola, a dome or a widow's walk, provided certain conditions are met



Height of a Structure

Floodplain Exception

Defined:
The vertical distance between the bottom of the sill of the structure to the highest point of the structure.



Height of a Structure

Floodplain Exception

Floodplain exception height definition applies when:

- 1) Structures have been or are proposed to be relocated, reconstructed, replaced or elevated to be consistent with the local floodplain management elevation requirement; and
- 2) are located in an area of special flood hazard.

As long as:

- 1) Legally existing nonconforming principal or accessory structure is raised to, but not above, the minimum elevation necessary to be consistent with the local floodplain management elevation requirement or to 3 feet above base flood elevation, whichever is greater; and
- 2) the structure is relocated, reconstructed, replaced or elevated within the boundaries of the parcel so that the water body or wetland setback requirement is met to the greatest practical extent.



Nonconforming Structures

A nonconforming structure:

- Is a structure that does not meet the required standards, but was established lawfully at the time of construction



Nonconforming Structures

- Legally existing nonconforming structures can be expanded.
- Legally existing nonconforming structures can be maintained.
- Destruction, removal or damage of more than 50% of the market value of a structure requires relocation to meet structure setback to the greatest practical extent.



Expanding Nonconforming Structures



Expanding Nonconforming Structures

Check Ordinance for rule adopted

- 30% expansion in volume and floor area
- Maximum total footprint expansion in percent (30) and/or square feet with height limit based on setback
- Alternative Rule similar to footprint expansion



In-fill Expansions



- Allowed if expansion extends no closer to the shoreline than does any portion of the existing nonconforming structure.
- Cannot create increase in nonconformity to structure height or total footprint of nonvegetated surfaces.

30% Floor Area and Volume Expansion Standards

Expansion is limited:

- To 30% of the floor area, as defined
- To 30% of the volume, as defined
- Based on what existed on 1-1-89, or the date the structure became nonconforming.



Expansion closer to the shoreline is prohibited!



Calculating 30%

Floor Area:

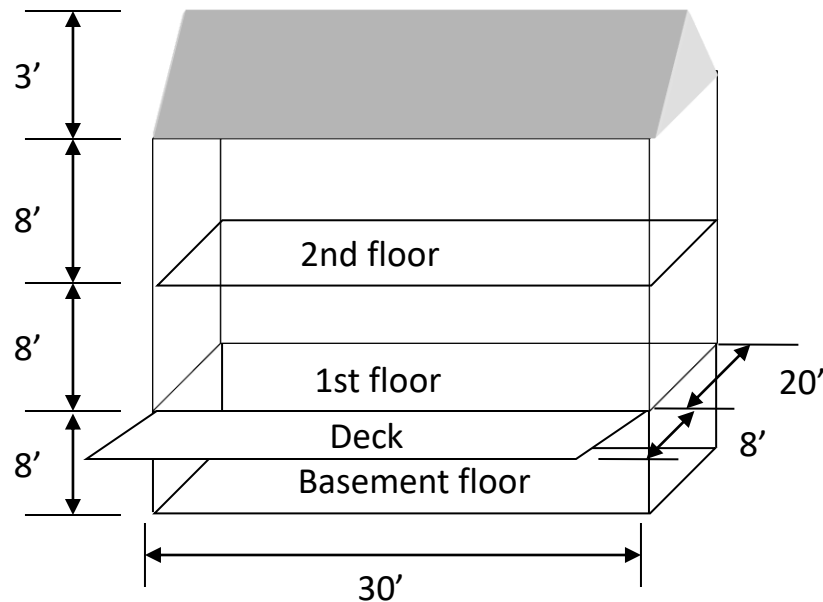
$$3 \text{ floors: } 3 \times (20 \times 30)$$

$$1 \text{ deck: } + (8 \times 30) \\ = 2,040sf$$

Volume:

$$3 \text{ floors: } 3 \times (20 \times 30 \times 8)$$

$$1 \text{ attic: } + \left(\frac{3 \times 20 \times 30}{2} \right) \\ = 15,300cf$$



30% Calculated:

$$\text{Floor area: } 0.30 \times 2040 = 612sf$$

$$\text{Volume: } 0.30 \times 15,300 = 4,590cf$$

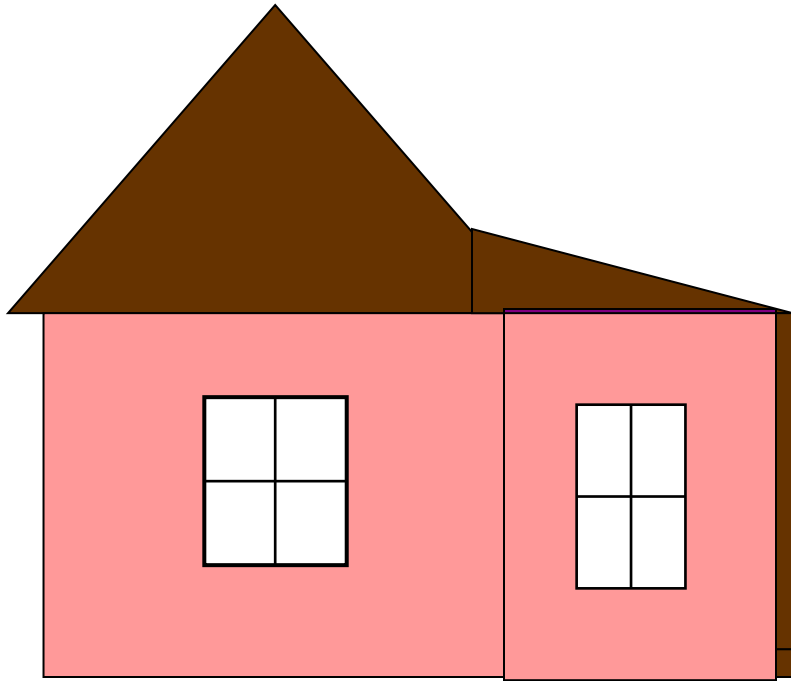
Expansion:

$$1 \text{ room: } 612 \times 8 = 4,896cf$$

$$\text{But volume limited to: } 4,590cf$$



Do Decks and Porches have floor area and volume?



Deck: Floor Area, No volume

Open Porch: Floor Area, No Volume

Screened Porch: Floor Area,
Possible Volume

Enclosed Porch: Floor Area and
Volume

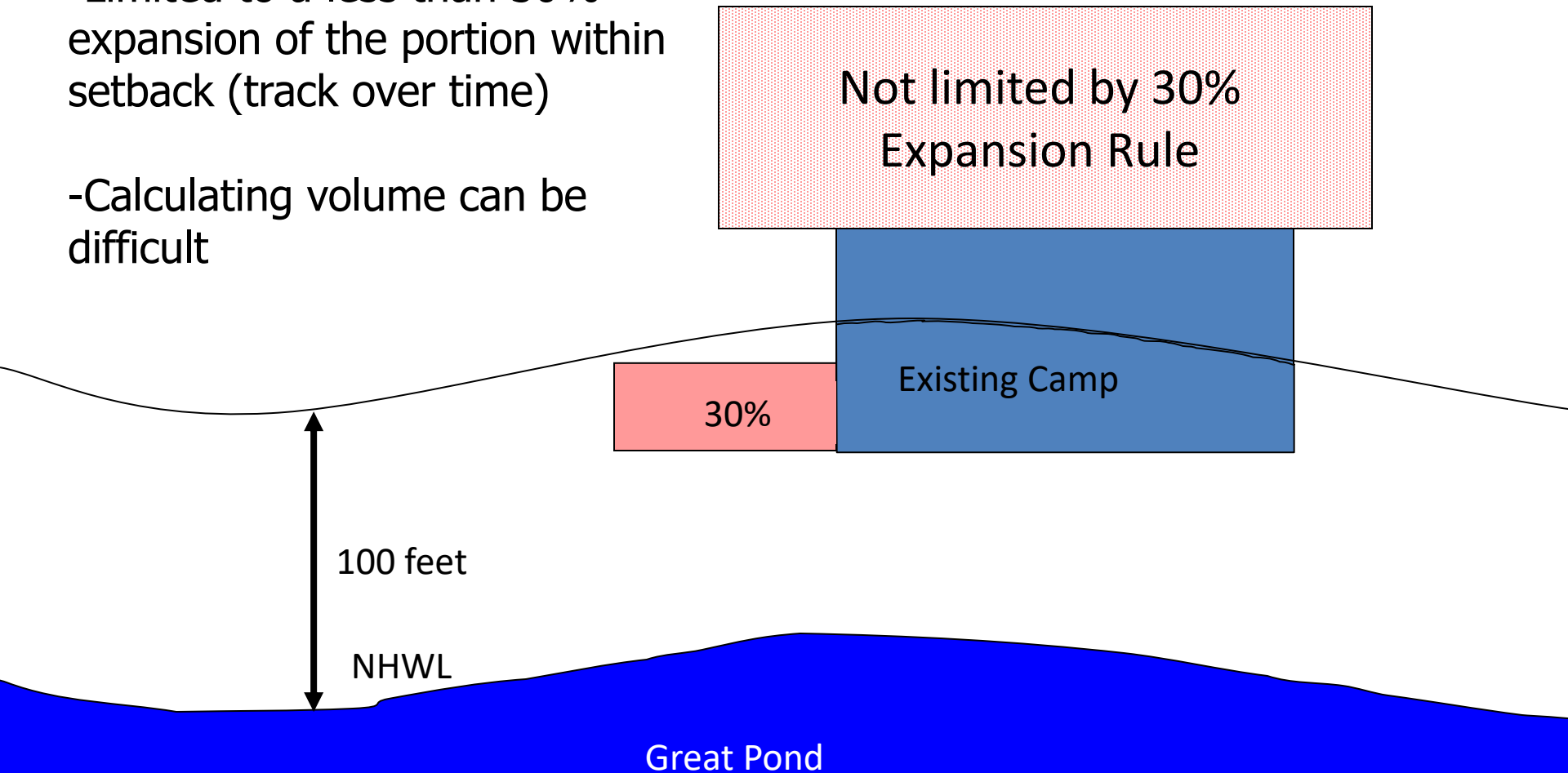




30% Expansion Rule

- Limited to a less than 30% expansion of the portion within setback (track over time)

- Calculating volume can be difficult



Expansions: Footprint and Height

Change from floor area and volume to “footprint” and height- tiered, based on distance from shore

- Landowners choose between the cap limit or 30% for footprint, and existing height or height cap
- Plans recorded at registry of deeds

Municipal officials may choose to:

- Limit expansions by the caps or by 30%, instead of allowing landowner choice
- Allow limited expansions within 25 feet of the shoreline
- Allow limited expansions in Resource Protection District



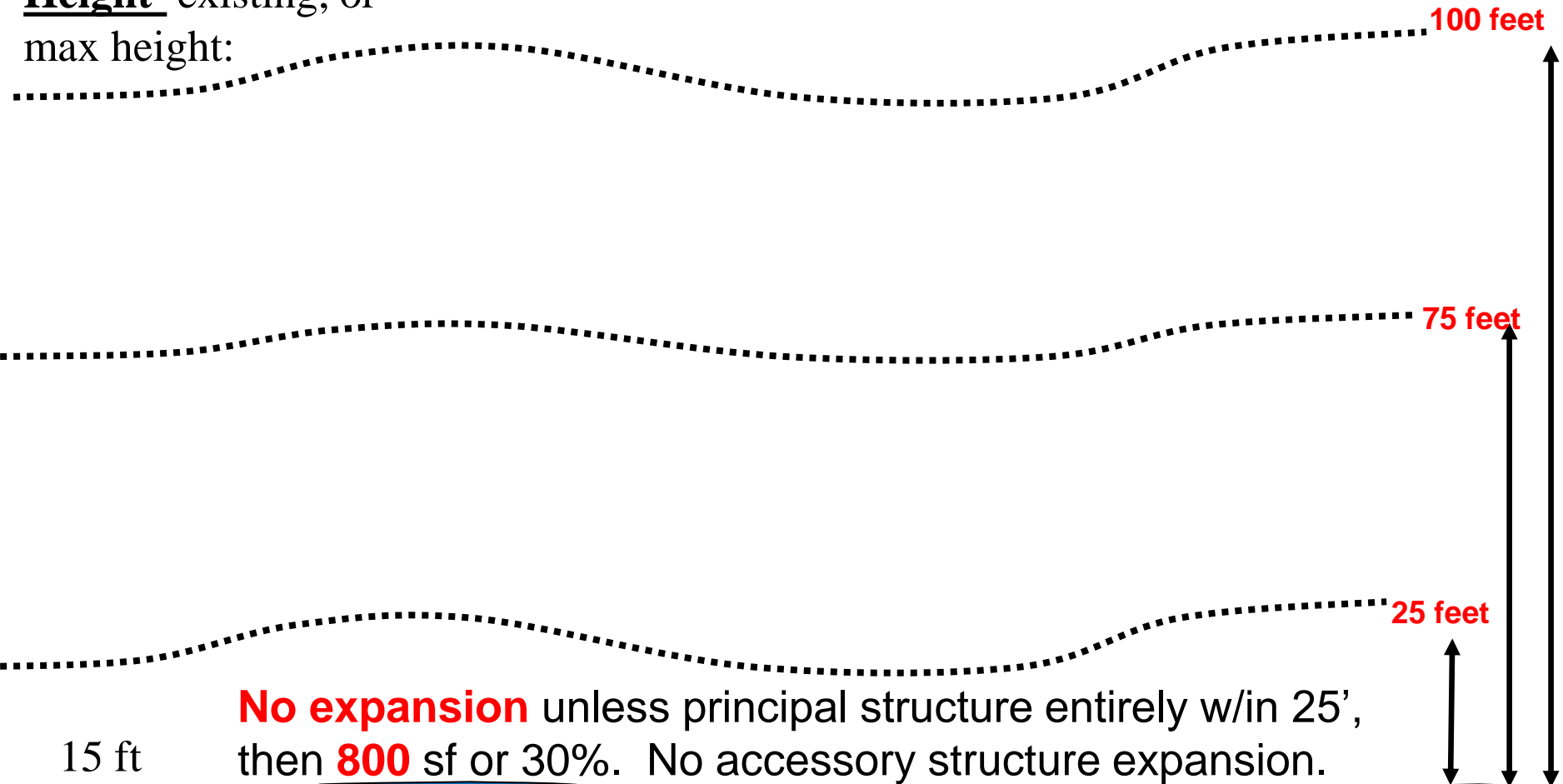
What is “Footprint”?

- Footprint - the entire area of ground covered by the structure(s) on a lot, including but not limited to cantilevered or similar overhanging extensions, as well as unenclosed structures, such as patios and decks



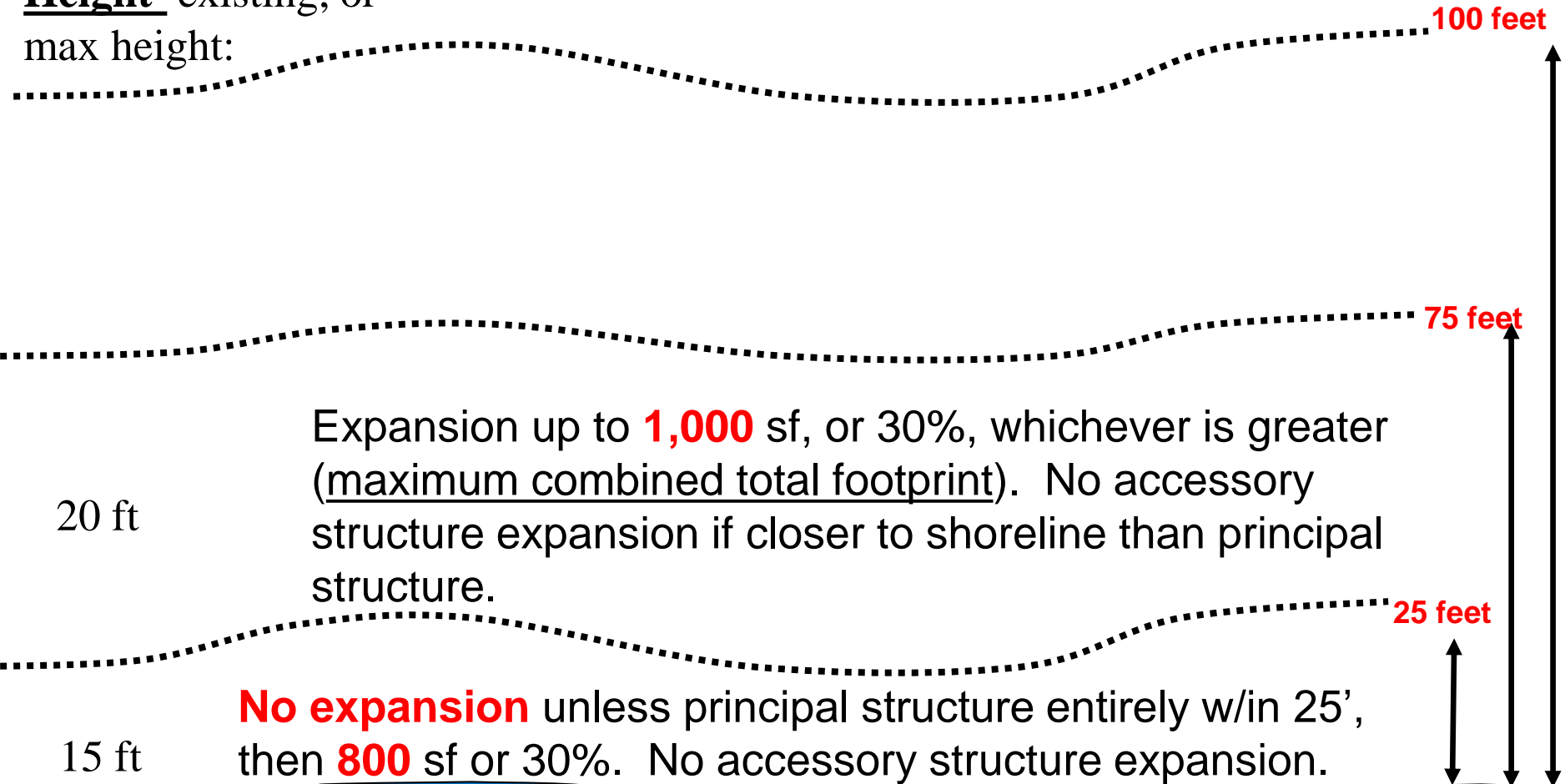
Footprint expansion-highlights

Height- existing, or
max height:



Footprint expansion- highlights

Height- existing, or
max height:



Great Pond

Footprint expansion- highlights

Height- existing, or
max height:

25 ft

Expansion up to **1,500** sf, or 30%, whichever is greater (maximum combined total footprint). No accessory structure expansion if closer to shoreline than principal structure.

100 feet

20 ft

Expansion up to **1,000** sf, or 30%, whichever is greater (maximum combined total footprint). No accessory structure expansion if closer to shoreline than principal structure.

75 feet

15 ft

No expansion unless principal structure entirely w/in 25', then **800** sf or 30%. No accessory structure expansion.

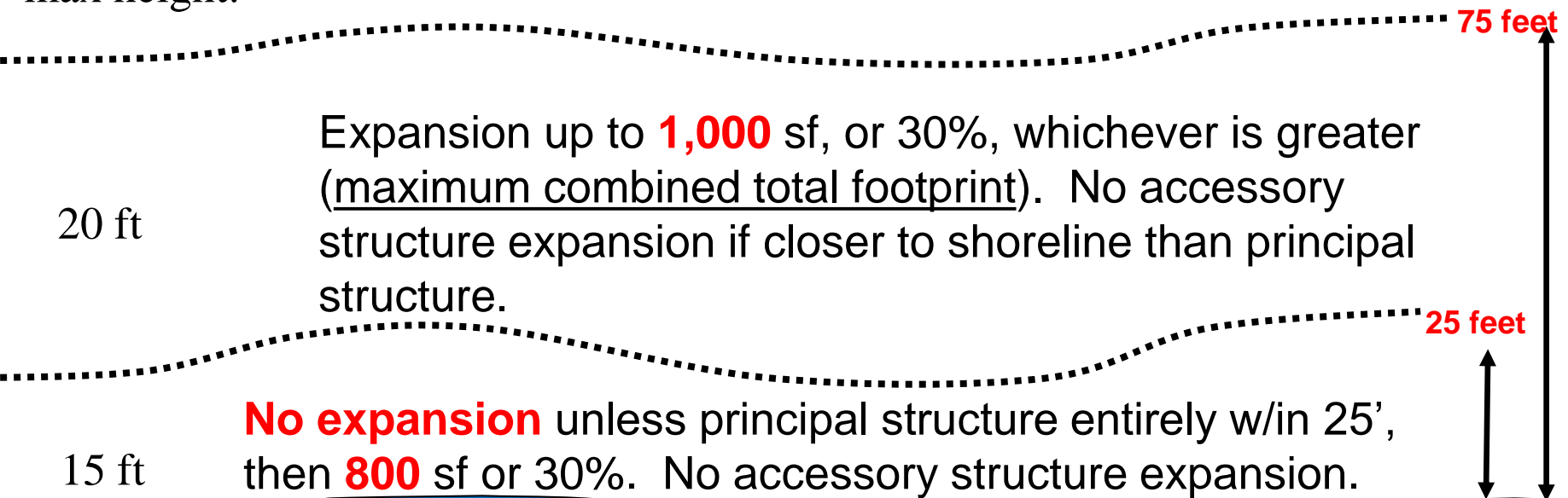
25 feet



Great Pond

Footprint expansion- highlights

Height- existing, or
max height:



Coastal or Freshwater Wetland, River, Stream, Tributary Stream



Footprint expansion- highlights

Resource Protection District

Height- existing, or
max height:

250 feet

25 ft

Expansion up to **1,500** sf, or 30%, whichever is greater (maximum combined total footprint). No accessory structure expansion if closer to shoreline than principal structure.

75 feet

15 or
20 ft

Same expansion thresholds as for other districts



Great Pond

Reconstruction Standards

In-place reconstruction/replacement if:

- $\leq 50\%$ of the market value of the structure is removed, damaged, or destroyed

Relocation review if:

- $> 50\%$ of the market value of the structure is removed, damaged, or destroyed
- Foundation replaced expanded or new.



How does one consider “*market value*”?

Market value relates ONLY to the value of the non-conforming structure. The structure has the exact same value whether it is located such that there is a ‘million dollar view’, or it is located next to the town landfill.



What else about the 50% market value threshold?

“...which is removed, or damaged or destroyed, regardless of the cause, by more than 50% of the market value of the structure before such damage, destruction or removal...”

- Does NOT take into consideration material or labor costs
- Does NOT apply to basic repair & maintenance (e.g. re-shingling roof)
- Consider all elements of projects (e.g. removing roof, sills due to rot, walls due to mold, windows, doors, etc), but avoid absurdity (e.g. removing 2 coats of paint)!



Relocation Review

When relocation review is required:

- The reviewing authority determines where the existing structure could be relocated to meet the setback to the greatest practical extent

In most municipalities the Planning Board determines whether a structure must be relocated.



Relocation Review

Criteria for making this determination includes:

- Size of the lot
- Slope of the land
- Potential for soil erosion
- Locations of other existing structures (subject and adjacent parcels)
- Existing septic system/on-site suitable soils
- The type and condition of the existing foundation

If you feel it would be helpful, seek opinions from DEP



Relocation Review

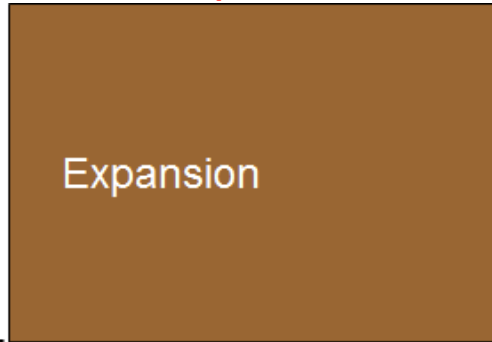
A planning board does **NOT** consider:

- Cost of relocation
- Scenic view impact to landowner or abutters
- Relocation of proposed *expanded* structure- PB only considers relocation of the original structure!
- A proposed expansion to the subject structure (even if it meets the expansion standards)
- Any other factor that is not on the specific list of review criteria in the ordinance except for other ordinance provisions (e.g. road setback)



Relocation First

Example #1



75-foot
setback

Relocation

Original
Location

River

Example #2



75-foot
setback

Relocate original structure
to meet setback

Original Location
Revegetated

River

Not Greatest Practical Extent

Non-vegetated Surfaces- aka: Lot Coverage

Surfaces include:

- Structures
- Driveways
- Parking areas
- Other areas from which vegetation was removed

Optional exemptions:

- Naturally occurring ledge and rock outcroppings on lots existing on 3/24/90
- Public boat launching facilities



Non-Vegetated Surfaces

Total area is limited as percentage of lot area:

- 20% in most shoreland zone districts
- 70% in shoreland zone of coastal wetlands and rivers not flowing to great ponds where district is CFMA or GD



Grass Paver Products- Question

- Can a municipal Code Enforcement Officer or planning board exempt areas using grass paver types of products from the lot coverage limitation?





Grass (?) pavers...



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

www.maine.gov/dep

Question

Can a municipality approve a project based on DEP NRPA permit approval?



Amendment Question

Has your municipal shoreland zoning ordinance been amended to be consistent with the 2015 State Guidelines???

- Section 439-A 4. Notwithstanding....
- Timber Harvest Option 1



Shoreland Zoning Program



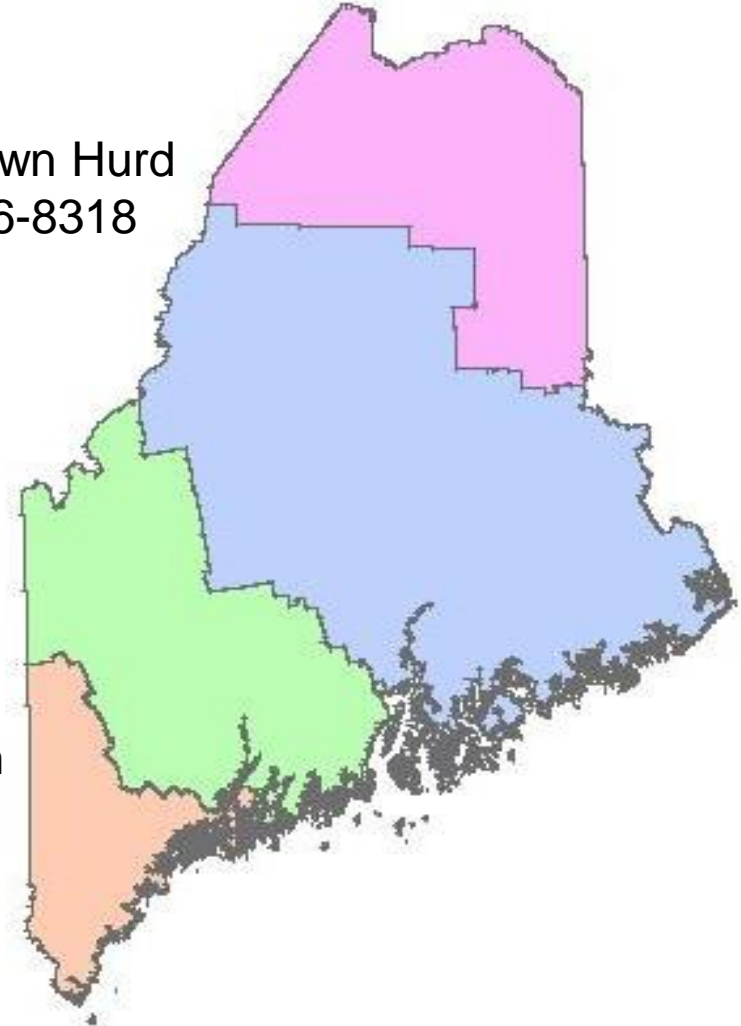
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