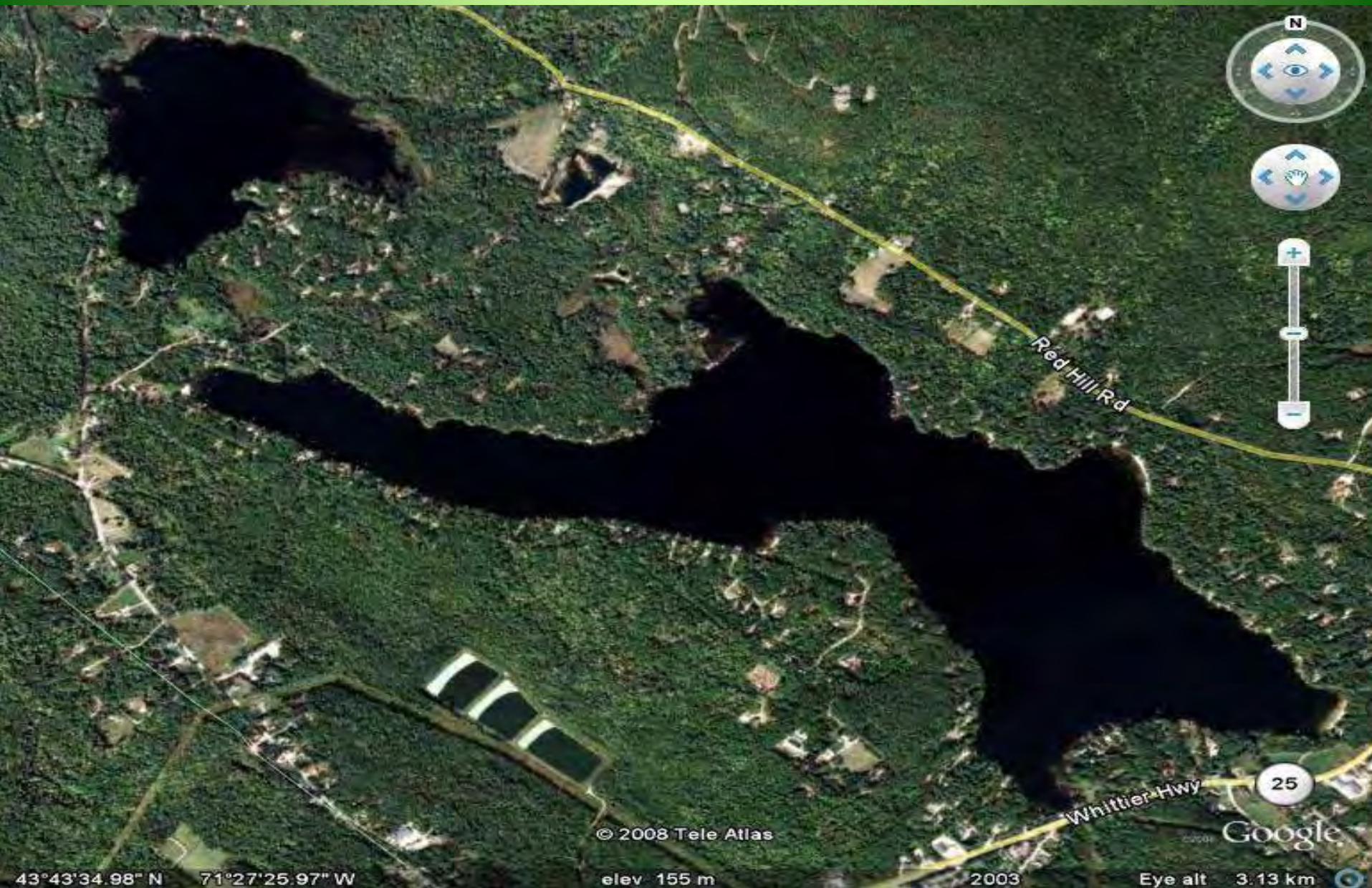
The Comprehensive Shoreland Protection Act (CSPA)

Investment in the Future

Poorly Developed Shoreland




Lodge Dr
Evergreen Dr
Brick Kiln Rd
Red Hill R
Hornbeam Hollow
Kilnwood Landing Rd
Sibley Rd
Coe Point Rd
Dever Rd
Deer Crossing
Westwood Shores Rd
Glidden Rd
© 2008 Tele Atlas
43°43'45.36" N 71°27'40.69" W
elev 168 m
2003
Eye alt

Which waterbodies are protected under the CSPA?

- **Tidal Waters – All waters subject to the ebb and flow of the tide.**
- **All Lakes and Ponds Greater than 10 Acres**
- **Fourth Order and Greater Streams and Rivers**
- **Designated Rivers – including segments less than 4th order**

15 Designated Rivers in NH
RSA 483, *The Rivers Management and Protection Act*

Ammonoosuc River, Ashuelot River, Cocheco River, Cold River, Connecticut River, Contoocook River, Exeter River, Isinglass River, Lamprey River, Merrimack River, Pemigewasset River, Piscatquog River, Saco River, Souhegan River, Swift River.

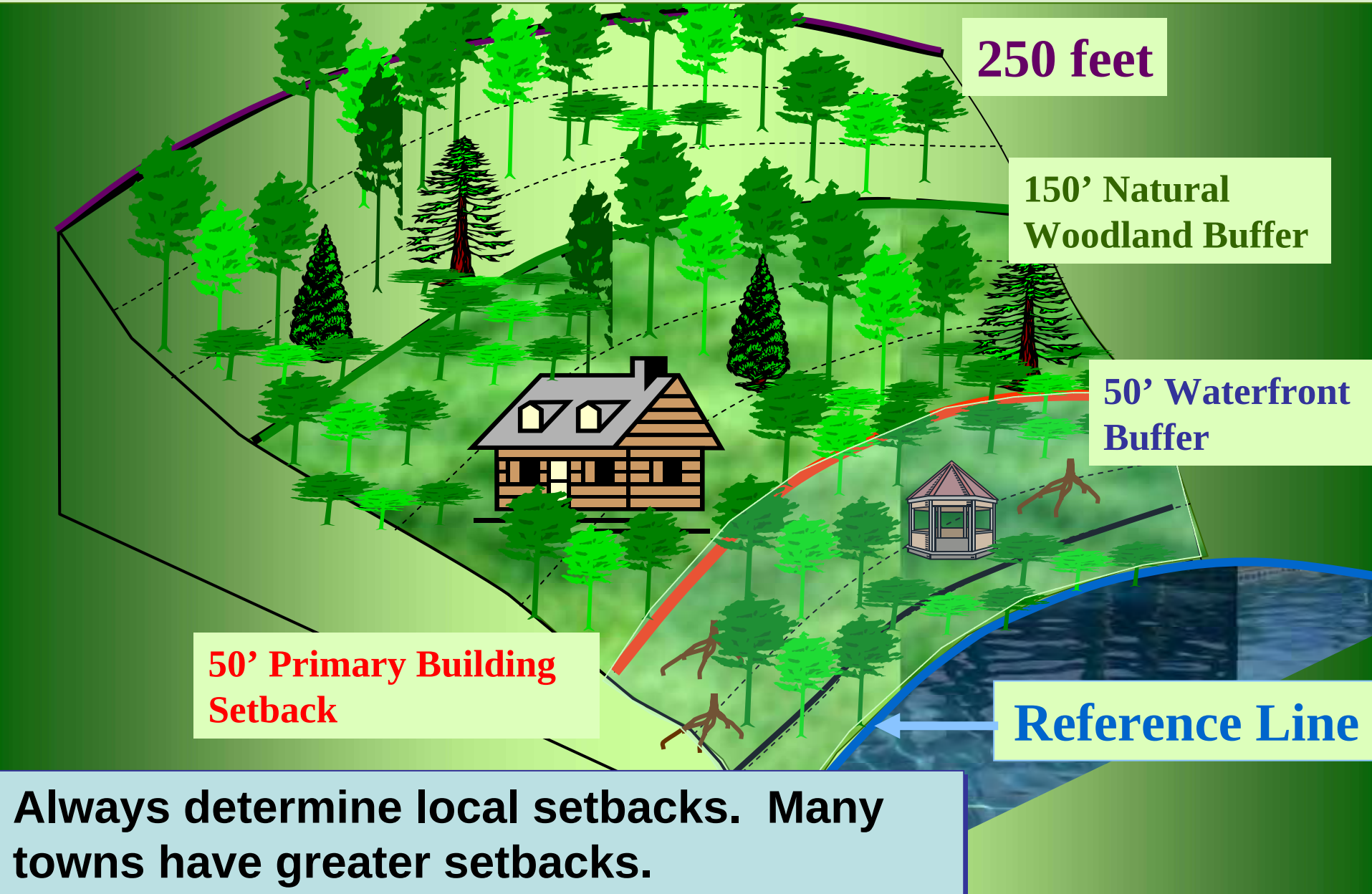
Many Designated Rivers are Protected at the 1st Order Level

Consolidated List of Waterbodies subject to the CSPA

All streams/ rivers jurisdictional under the CPSA.

Rivers and Streams			Lakes and Ponds			
Town	River / Stream Name	Where River/ Stream becomes jurisdictional under the CSPA	Lake / Pond Name	a.k.a.	Size in Acres	Surface Elevation
Acworth	Co[illegible]er - [illegible]ed Segment	From the outlet of Crescent Lake Dam in Acworth to its confluence with the Connecticut River in Walpole.	Crescent Lake		116.2	1215
	[illegible]er - 4th Order	Juncture of Dodge Brook				
	[illegible]Brook	Juncture of unnamed 3rd order stream in Lempster.				
Albany	[illegible]ket Brook	Juncture of Banfield Brook in Madison	Back Pond		10.3	808
	[illegible]ver - [illegible]ated Segment	From its headwaters in Livermore to its confluence with the Saco River in Conway.	Iona Lake	Knowles Pond	74.2	677
		[illegible] in	Big Church Pond	Big Deer Pond	16	1243
			Whitton Pond		142.6	808
			Goose Pond		11.9	701
			Newfound Lake		4106	589.12
		[illegible]ers in [illegible]Franklin.	Bear Hill Pond		33	666
	Suncook River	Outflow of Suncook Lake in Gilmanton	Buck Street Dam (East)		43	287
	Bear Brook	Juncture of Catamount Brook	Catamount Pond	Bear Brook Pond	18	500
			Hall Mountain Marsh Dam		23	700
			Hayes Marsh		120	500
Alstead	Cold River - *Designated Segment*	From the outlet of Crescent Lake Dam in Acworth to its confluence with the Connecticut River in Walpole.	Caldwell Pond		28.4	1271
	Cold River - 4th Order	Juncture of Dodge Brook in Acworth	Cranberry Pond		18.5	1135
			Newell Pond		13.6	1399
			Warren Lake		185.5	1200
Alton	Merrymeeting River	Juncture of Coffin Brook	Alton Power Dam	Wentworth Pond	500	526
			Bear Pond		13	890
			Gilman Pond		32.1	755
			Halfmoon Lake		253	640
			Hills Pond		137.6	809
			Knights Pond		30.9	655
			Marsh Pond		15	590
			Meadows Pond	Meadow Mountain Pond	13.6	681
			Sunset Lake	Places Pond	205	808
			Winnipesaukee Lake		44586	504.32

The Protected Shoreland



Always determine local setbacks. Many towns have greater setbacks.

Where is the Reference Line Located?

The Reference Line is Water Body Dependent

For Lakes, Ponds and Artificial Impoundments Greater than 10 acres:

The reference line is the *surface elevation* listed on the Consolidated List of Waterbodies subject to the CSPA.

Consolidated List of Waterbodies subject to the CSPA

Town	Rivers and Streams		Lakes and Ponds			
	River / Stream Name	Where River/ Stream becomes jurisdictional under the CSPA	Lake / Pond Name	a.k.a.	Size in Acres	Surface Elevation
Acworth	Cold River - *Designated Segment*	From the outlet of Crescent Lake Dam in Acworth to its confluence with the Connecticut River in Walpole.	Crescent Lake		116.2	1215
	Cold River - 4th Order	Juncture of Dodge Brook				
	Dodge Brook	Juncture of unnamed 3rd order stream in Lempster.				
Albany	Pequawket Brook	Juncture of Banfield Brook in Madison			10.3	808
	Swift River - *Designated Segment*	From its headwaters in Livermore to its confluen		Knowles Pond	74.2	677
		Juncture of Rawyus Brook and Wonala		Big Deer Pond	16	1243
					142.6	808
					11.9	701
					4106	589.12
					33	666
					43	287
					18	500
			Hall Mountain Marsh Dam		23	700
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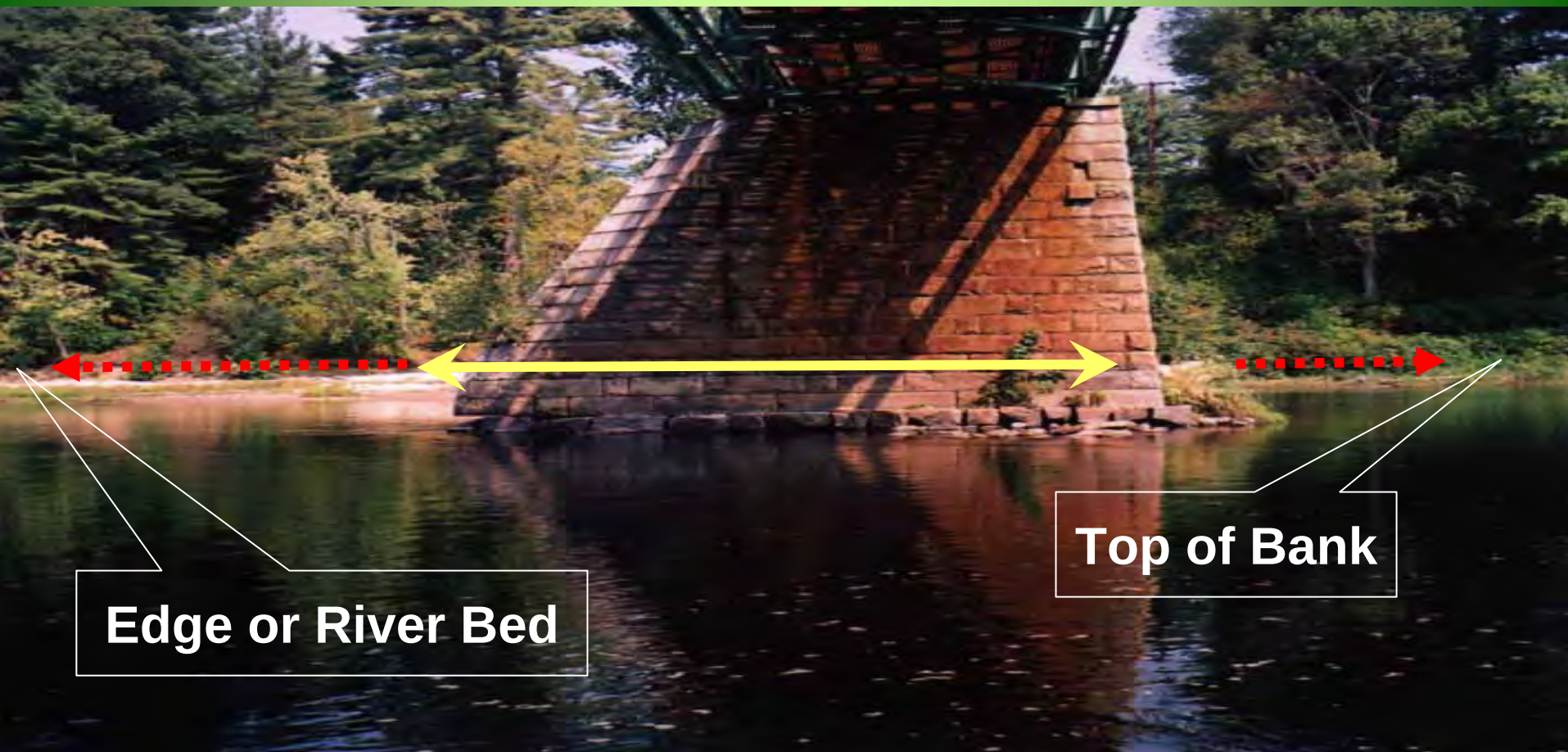
			Meadows Pond	Meadow Mountain Pond	13.6	681
			Sunset Lake	Places Pond	205	808
			Winnipesaukee Lake		44586	504.32

All lakes and ponds jurisdictional under the CSPA.

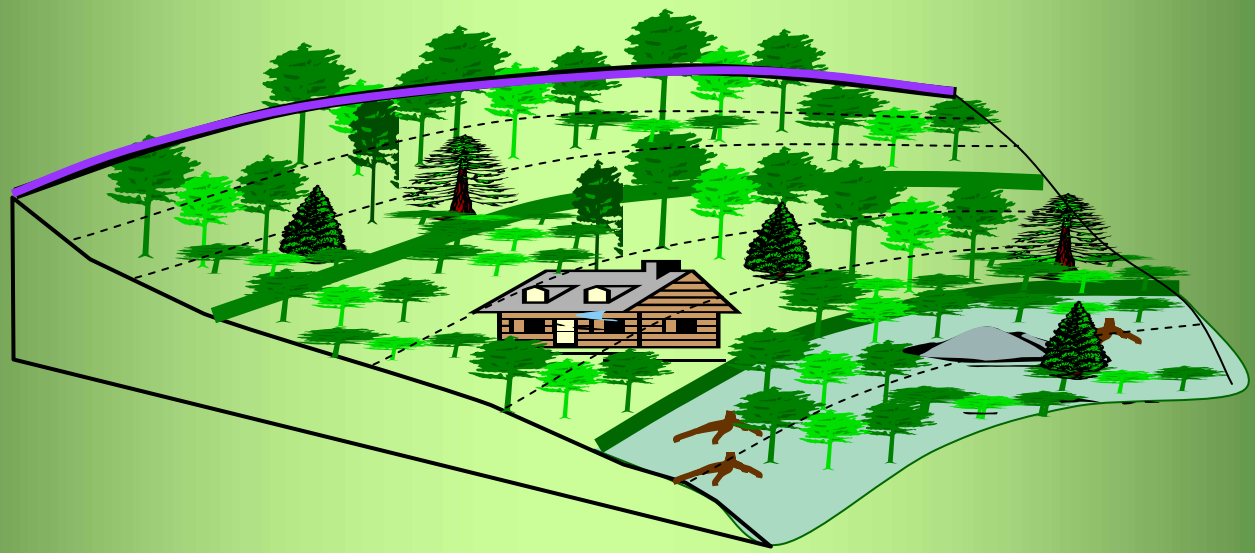
Tidal Areas: Highest Observable Tide Line

Fourth Order and Greater Streams and Rivers and Designated Rivers: The Ordinary High Water Mark

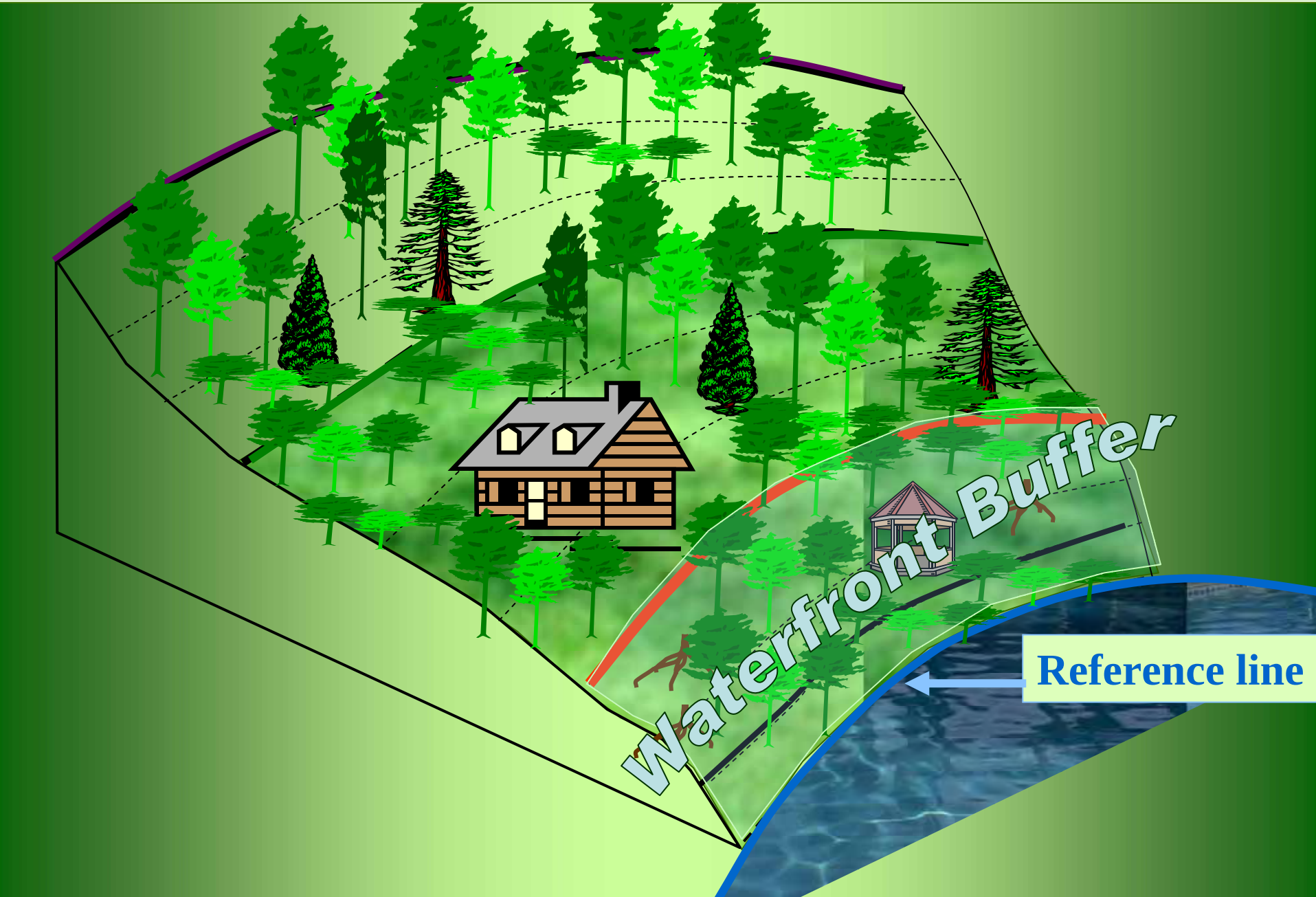


The Waterfront Buffer Area

The Waterfront Buffer Extends 50 Feet Landward from the Reference Line



The Waterfront Buffer



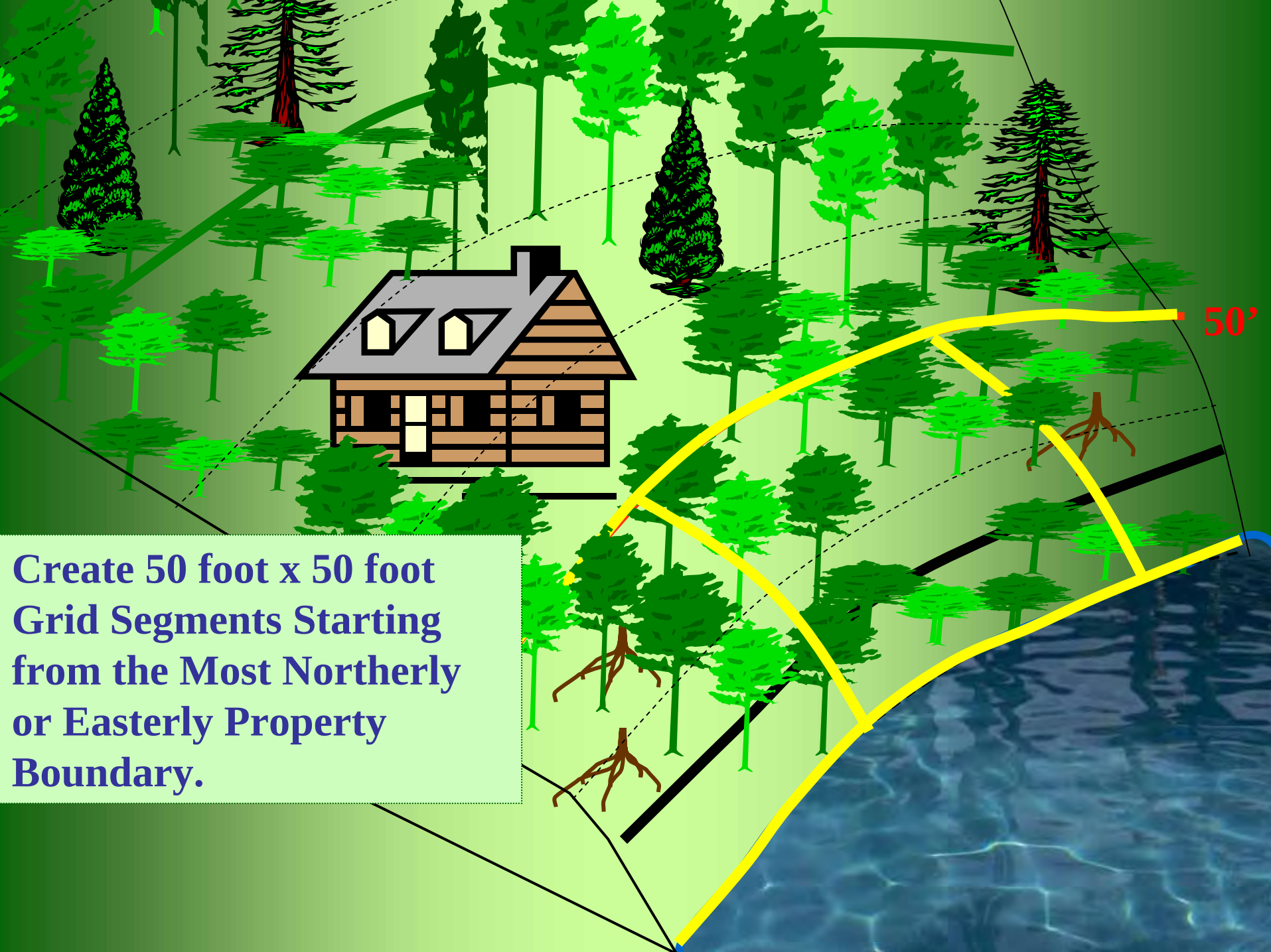
Existing Open Areas and Grandfathered Landscaped Areas and Gardens are not considered natural ground cover.

Within the Waterfront Buffer

- **No stump, root, or rock removals**
- **Trees may be removed in accordance with the grid and point system.**
- **No removal of *natural ground cover* except for:**
  - **A foot path to the water (up to 6’ wide)**
  - **Pruning ground cover that has grown above 3’ as long as the pruning does not kill the plant.**

Undeveloped Lot

Remove Trees and Vegetation in Accordance with the Grid and Point System and Unaltered State Requirements



Create 50 foot x 50 foot Grid Segments Starting from the Most Northerly or Easterly Property Boundary.

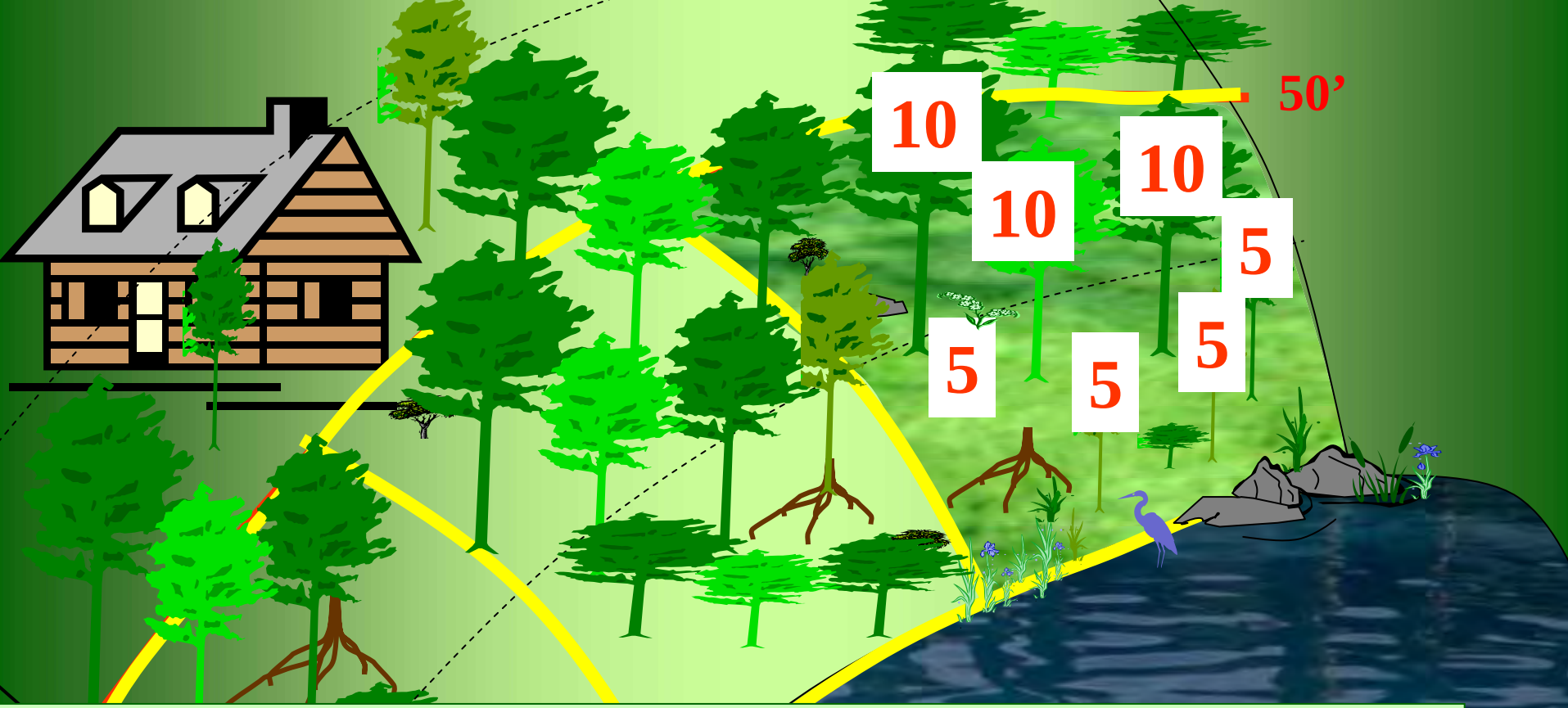
In order for trees to be removed, at least 50 points worth of trees and saplings must remain within each 50 foot x 50 foot grid segment.

***Dead trees are not included in the scoring. They may be removed as long as the stumps and root systems remain intact within the ground.**

Trees are given points according to their diameter 4 ½ feet from the ground (dbh).

Tree Diameter:

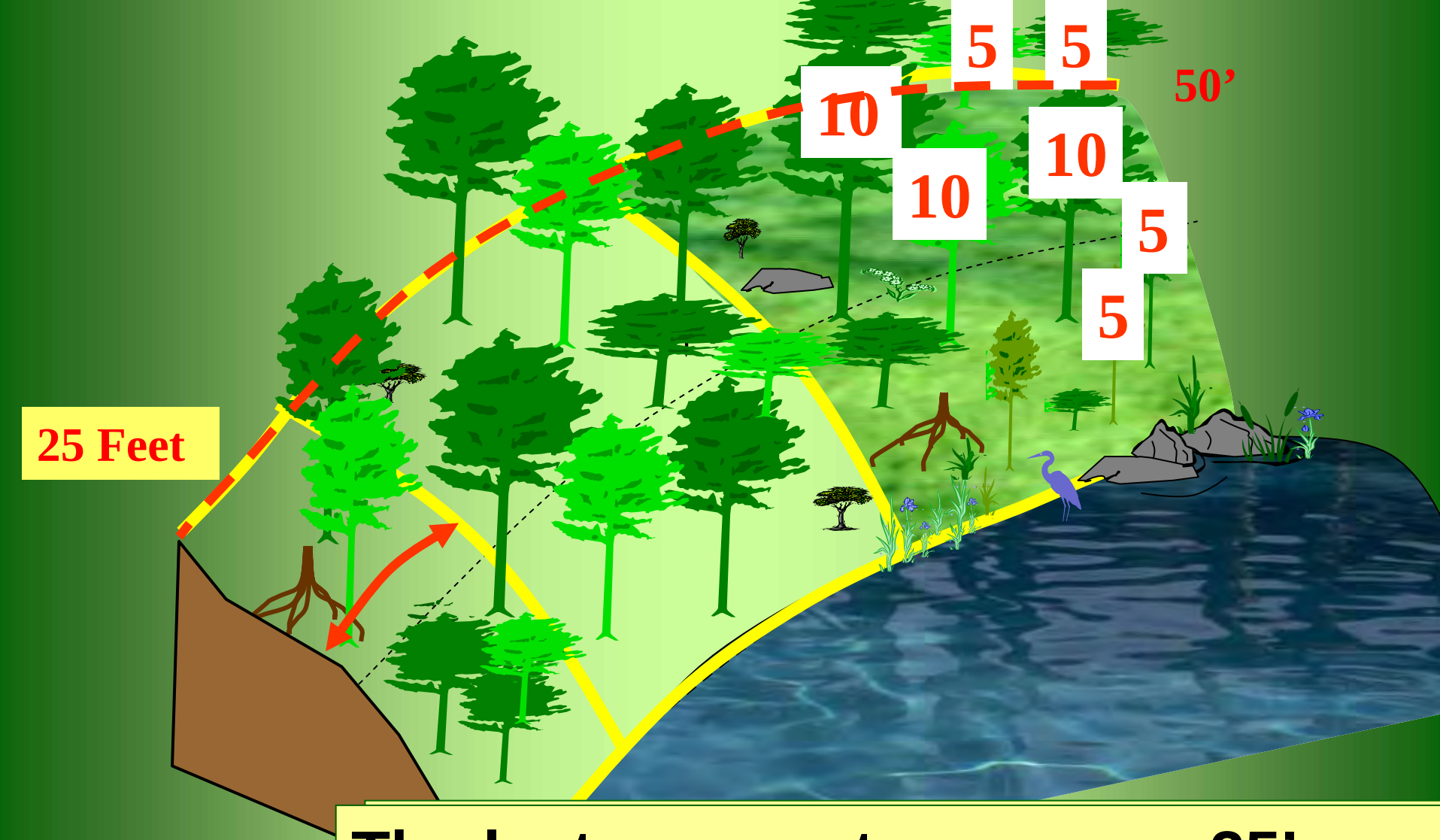
1-6”	= 1 pt
>6-12”	= 5 pts
>12”	= 10 pts



Four, 8” trees, @ 5 pts each = 20 points
Three, 20”trees @ 10 pts each = 30 points

Total 50 points

Remove trees but, allow 50 points to



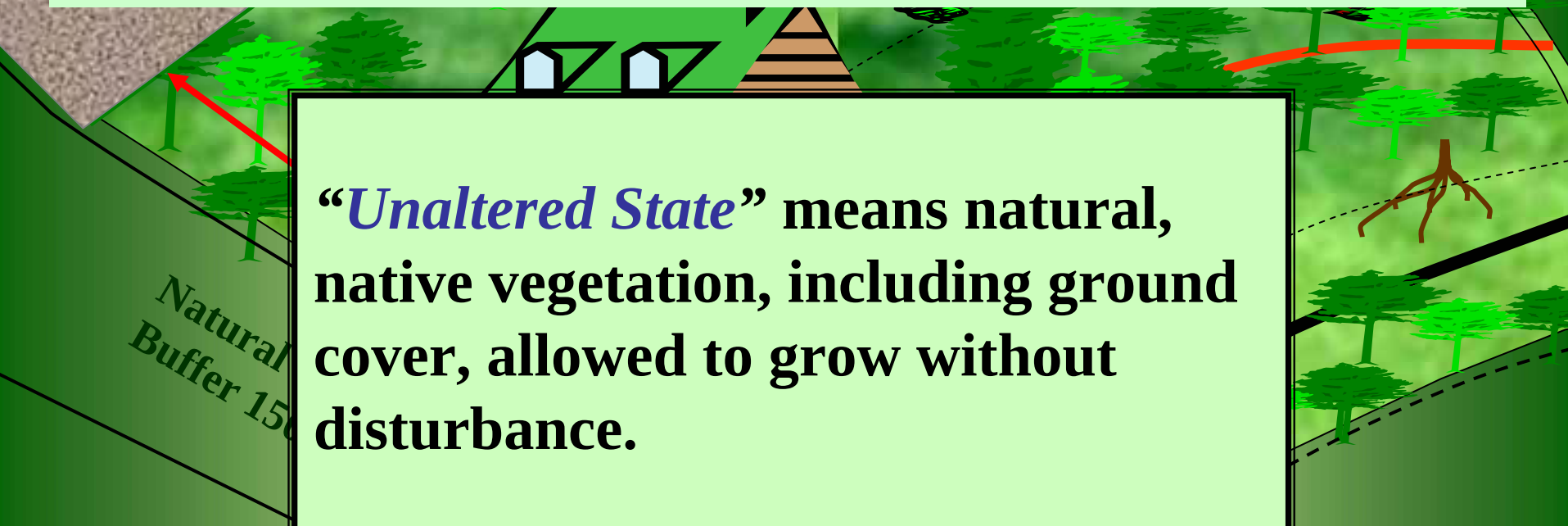
The last segment measures 25’ x 50’ or half a grid segment

Remove trees but, maintain 25


10/07/2008

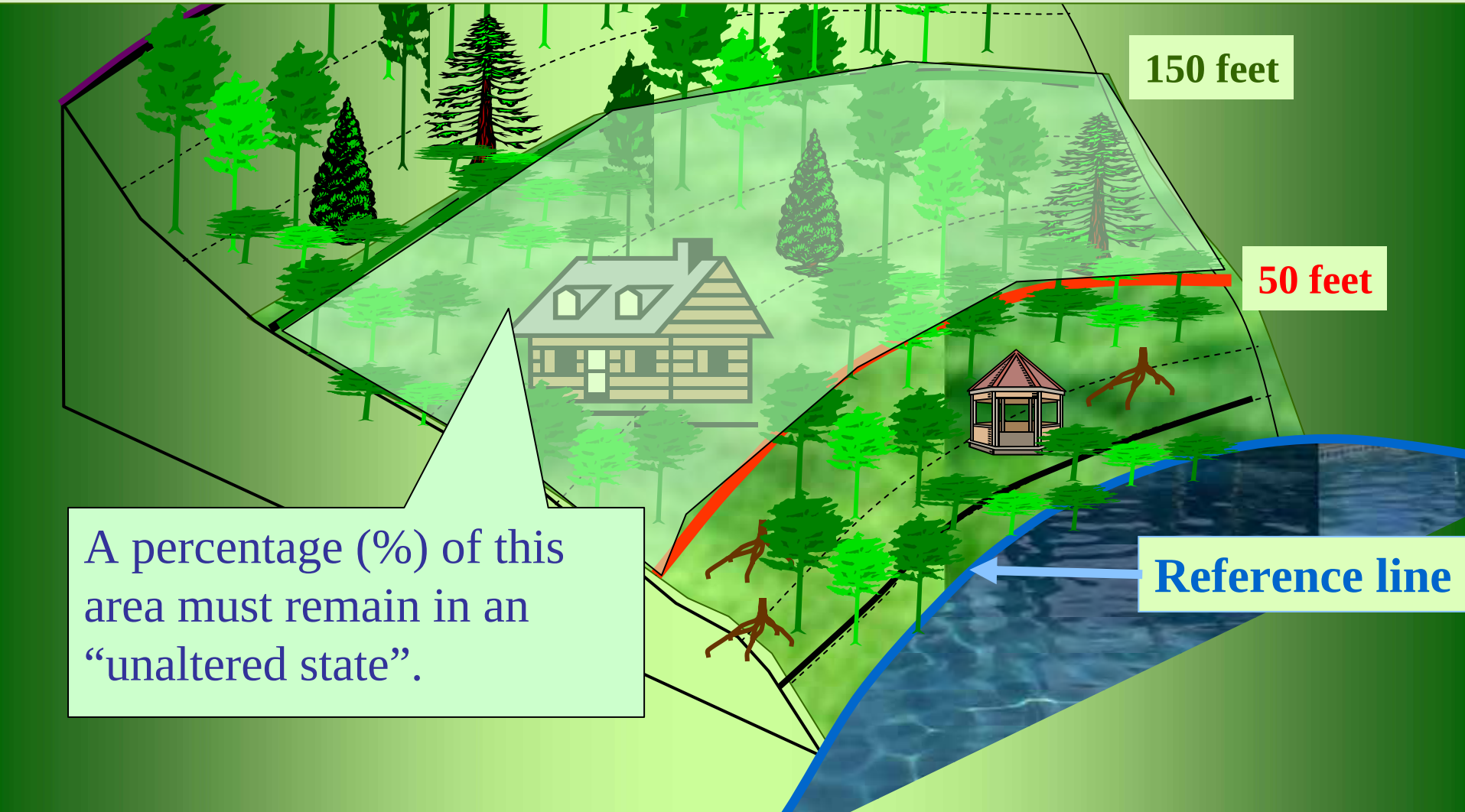
Understanding the *Unaltered State* Requirement

Vegetation Requirements between 50 and150 feet of the Reference Line



"*Unaltered State*" means natural, native vegetation, including ground cover, allowed to grow without disturbance.

The Unaltered State Requirement pertains to vegetation between 50 feet and 150 feet from the reference line.

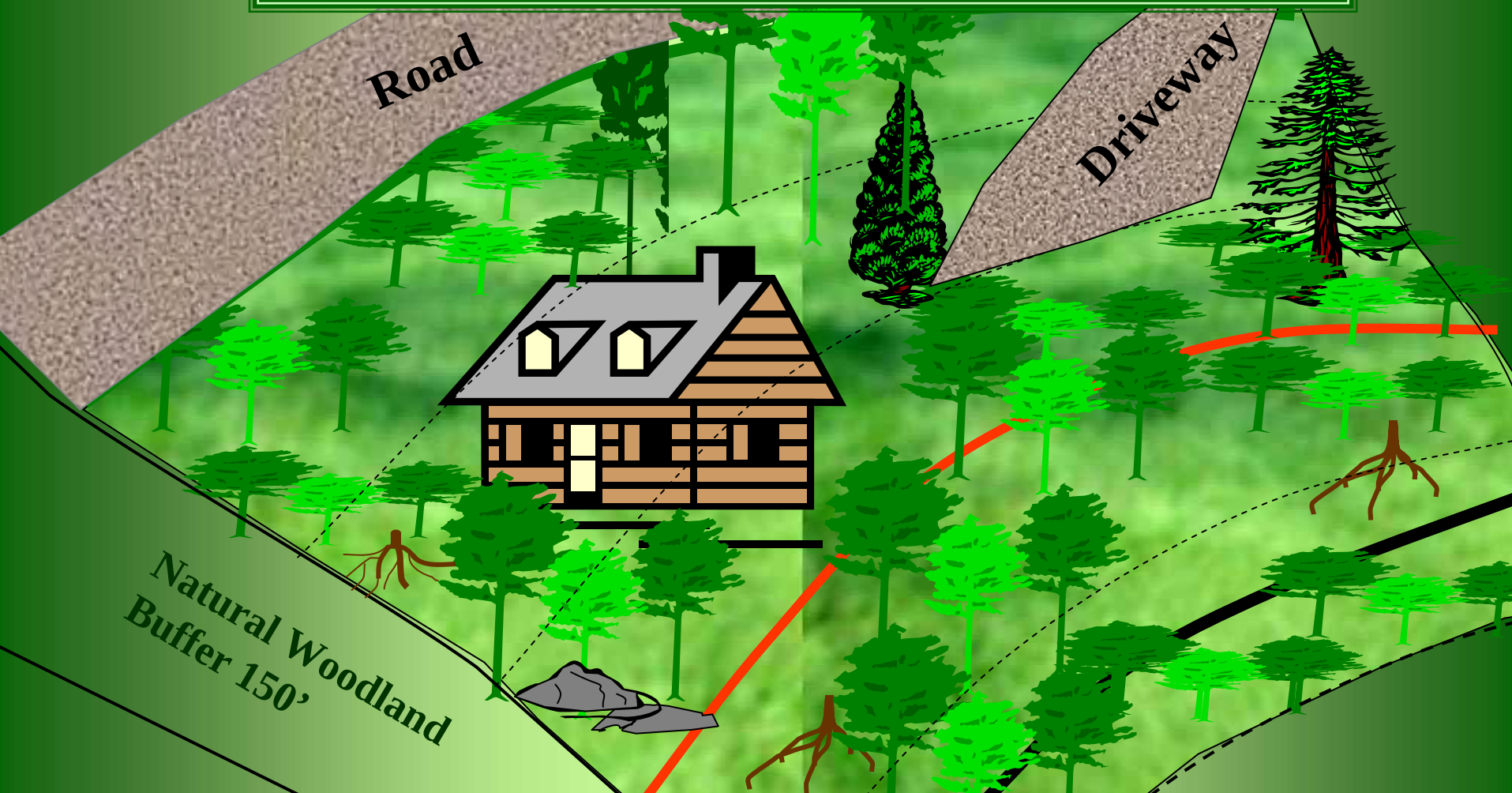


Lawn is *not* considered <u>unaltered area</u>

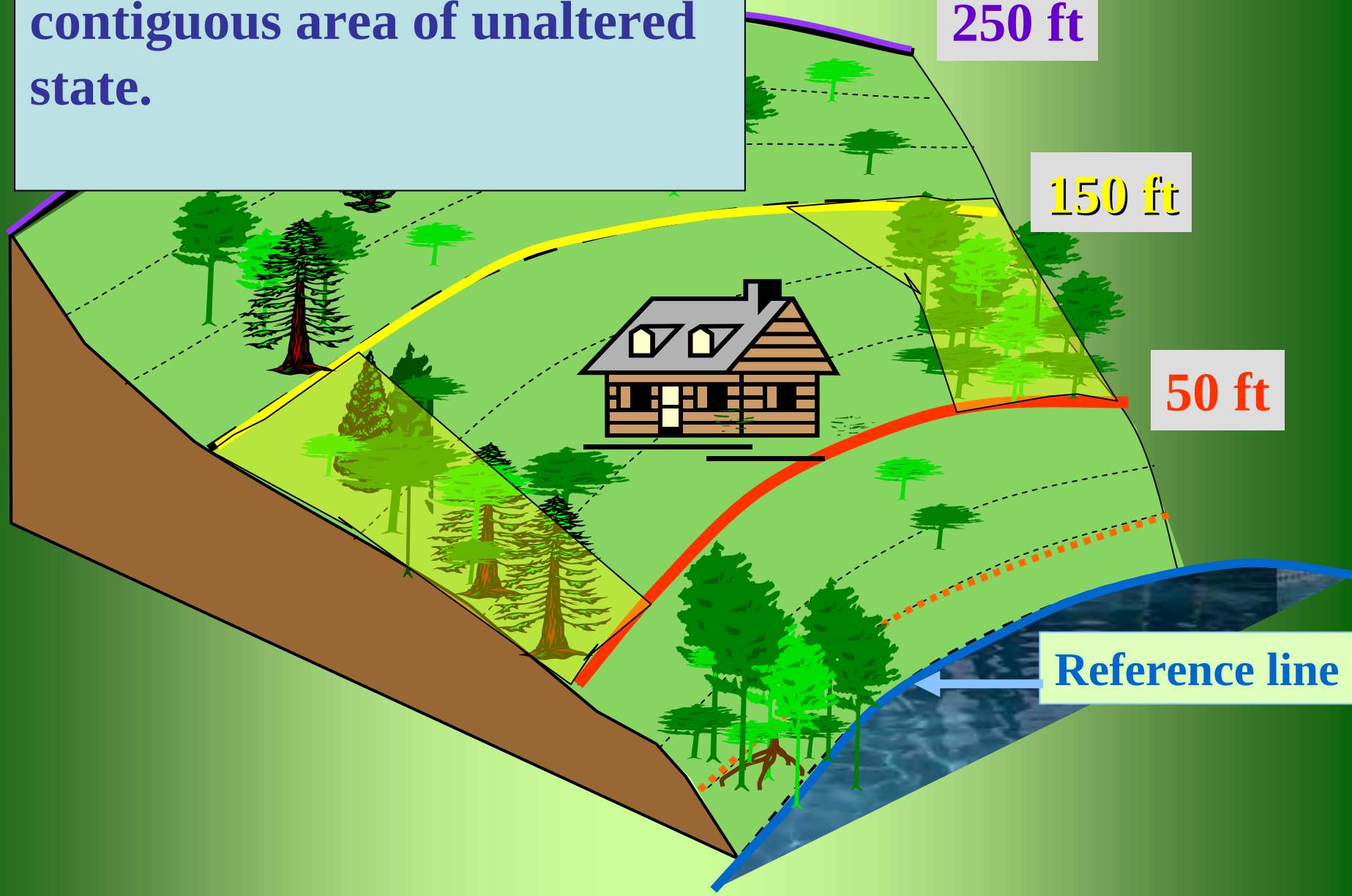
Lawn is an altered surface.

The area above the red line is “unaltered area”

Generally, 25% of the area between 50 ft and 150 ft from the reference line must remain in an unaltered state.

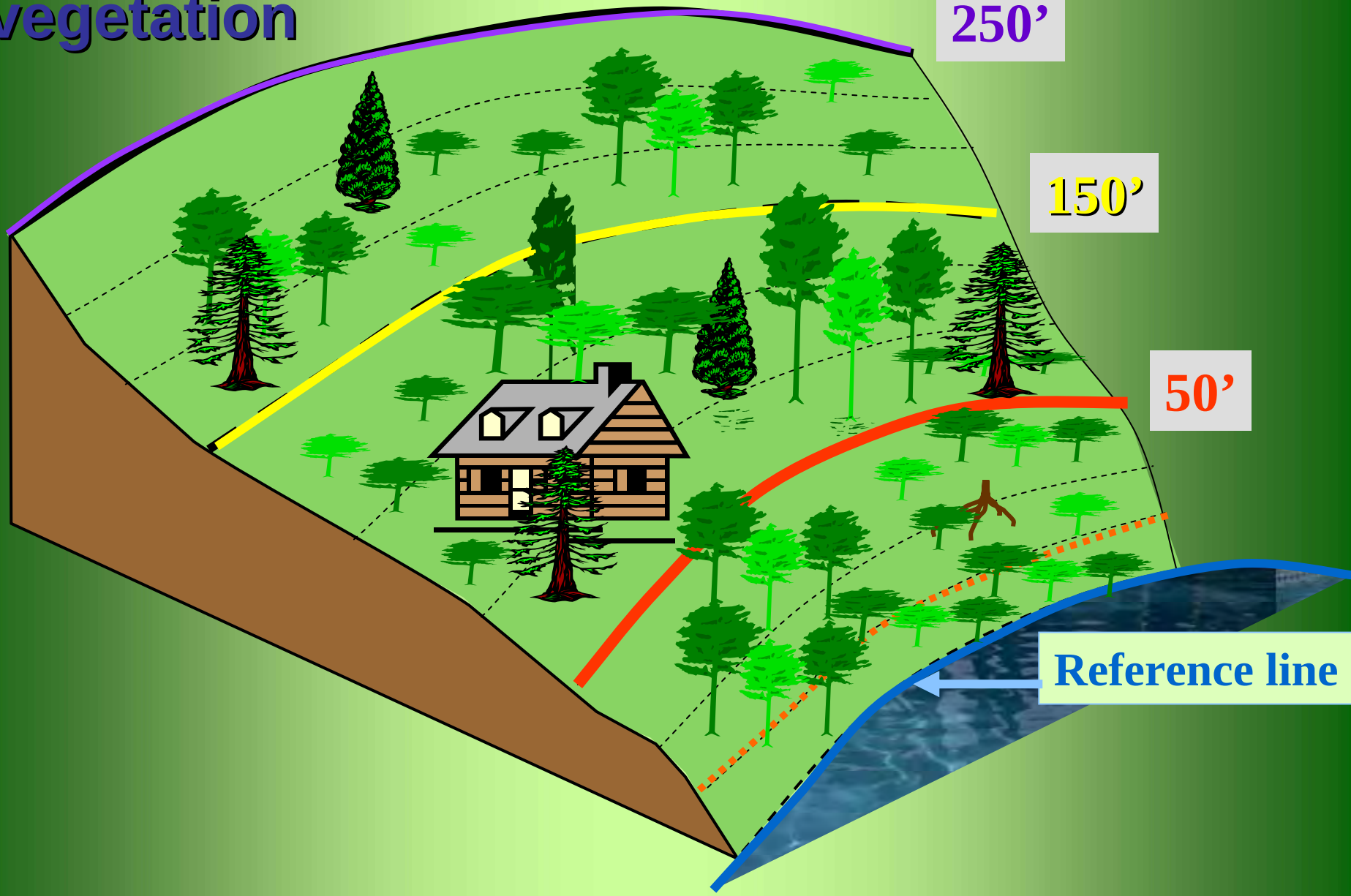


Does not have to be one contiguous area of unaltered state.



Existing Lawns Can be Maintained. Lawn is Considered Altered Area.

Beyond 150 ft no protection is given to vegetation



If in doubt:

ENVIRONMENTAL
Fact Sheet

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

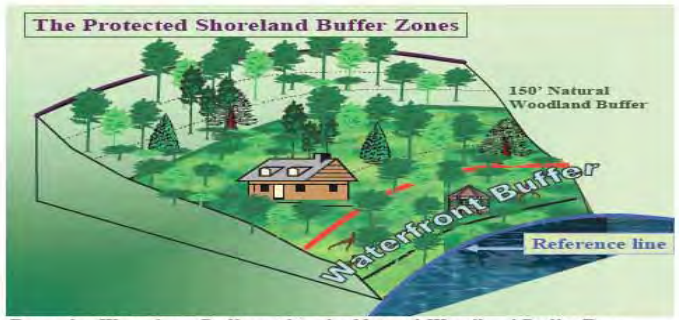
29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

WD-SP-5 2010

Vegetation Maintenance within the Protected Shoreland

Vegetation is a key component in preserving the integrity of public waters and is also a critical element of wildlife habitat. The NH Comprehensive Shoreland Protection Act (CSPA), RSA 483-B, has protected a 150-foot wide natural woodland buffer adjacent to public waters since July 1, 1994. For the purposes of the CSPA, public waters are defined as lakes, ponds and artificial impoundments greater than 10 acres, rivers and streams that are 4th order or higher, designated rivers and all tidal waters. A shoreland impact permit is *not* required to remove vegetation within the protected shoreland but, property owners must operate in accordance with the guidelines below.

Changes to the CSPA in 2008 modified the way the CSPA protects vegetation. These changes established a new waterfront buffer zone within the larger natural woodland buffer zone. The natural woodland buffer extends 150 feet from the reference line but, the first 50 feet extending landward from the reference line is now considered the waterfront buffer.



Example: Waterfront Buffer within the Natural Woodland Buffer Zone

Vegetation Maintenance within the Waterfront Buffer

Within the waterfront buffer, branches may be trimmed, pruned, and thinned to the extent necessary to protect structures, maintain clearances and provide views. Limbing of branches for the purpose of providing views is limited to the bottom half of trees and saplings to help ensure

Impervious Surface Limitations

Definition – "Impervious surface"

Any modified surface that cannot effectively absorb or infiltrate water.

Examples of impervious surfaces include:

- **Roofs**
- **Decks**
- **Patios**
- **Walkways**
- **Paved-gravel-crushed stone driveways**

Exposed ledge is not considered a "modified surface."

Examples of impervious surfaces include:

Roofs

Decks

Patios

Walkways

Paved-gravel-crushed stone driveways

Impervious Surface Limitations

No more than 30% of the area of the lot located within the protected shoreland may be composed of impervious surfaces.

When a project proposes greater than 20% impervious area:

1.) If any grid segment does not meet the minimum required grid score (50 pts), an equivalent level of protection must be planted to at least meet the required grid score.

2.) A stormwater management plan must be implemented to infiltrate increased stormwater from development.

Examples of Stormwater Management:

Rain Gardens

Dry wells

Drainage Swales

Infiltration Trenches

A Shoreland Homeowner's Guide to Stormwater Management

~ protecting your home & environment ~

NH Department of Environmental Services
29 Hazen Drive, Concord, NH 03301 • 603.271.3503 • www.des.nh.gov

Introduction

The recently revised Comprehensive Shoreland Protection Act (CSPA), which was enacted to help protect the state's surface waters, includes limits on development that contribute to stormwater runoff. If you are a shoreland homeowner, your property may produce stormwater runoff that directly impacts the quality of our public waters. However, you can reduce or prevent polluted stormwater runoff. This guide provides several simple and cost effective practices that shoreland homeowners can install to address stormwater runoff from roofs, patios, lawns and driveways. These practices can be used to meet the provisions of the CSPA. The guide also includes general information about what state environmental permits, if any, are necessary for incorporating these practices.

What is Stormwater Runoff?

Stormwater runoff describes the flow of rainwater or meltwater from snow or ice over the land's surface.

On undisturbed sites, much of the stormwater is intercepted by natural ground cover or is absorbed into the ground. Land clearing and development reduces the capacity of the land to absorb rainwater and snowmelt, which leads to more water flowing over the land and into surface waters.

Polluted stormwater runoff flowing into a storm drain.

As water flows over the land, it picks up exposed soil as well as any chemicals, fertilizers or pollutants that are present. Stormwater carries these polluting substances over impervious surfaces and through storm drains and drainage ditches. Impervious surfaces are surfaces that cannot effectively absorb and infiltrate water. Examples of impervious surfaces include, but are not limited to, roofs, decks, patios and paved, gravel or crushed stone driveways, parking areas and walkways unless designed to effectively absorb and infiltrate water. This flow of stormwater eventually reaches a body of water, where the sediments, nutrients and pollutants are deposited.

10 in One!

Please note that this document is actually 10 articles in one: an introductory document and nine guidance sheets, which may be printed out altogether or separately. They are:

- Introductory Document, 4 pg.
- Dripline Trench, 1 pg.
- Drywells, 1 pg.
- Infiltration Steps - New, 2 pg.
- Infiltration Steps - Retrofit, 1 pg.
- Infiltration Trench, 1 pg.
- Paths & Walkways, 1 pg.
- Rain Barrels, 1 pg.
- Rain Gardens, 1 pg.
- Water Bars, 2 pg.

Pervious materials are not considered when quantifying the imperviousness area of the lot within the protected shoreland.


Pervious asphalt (*top half*) is not considered when calculating the total area of imperviousness of the lot within the protected shoreland.

Shoreland Permitting Process

A permit is required for most *new* construction, excavation or filling activities within the Protected Shoreland.

Shoreland Impact Permit NOT required:

Maintenance, repair, or modification of existing, legal, *primary* or *accessory* structures that do not:

- **Alter the footprint or increase the impervious area of existing structures**
- **Require excavation or filling**

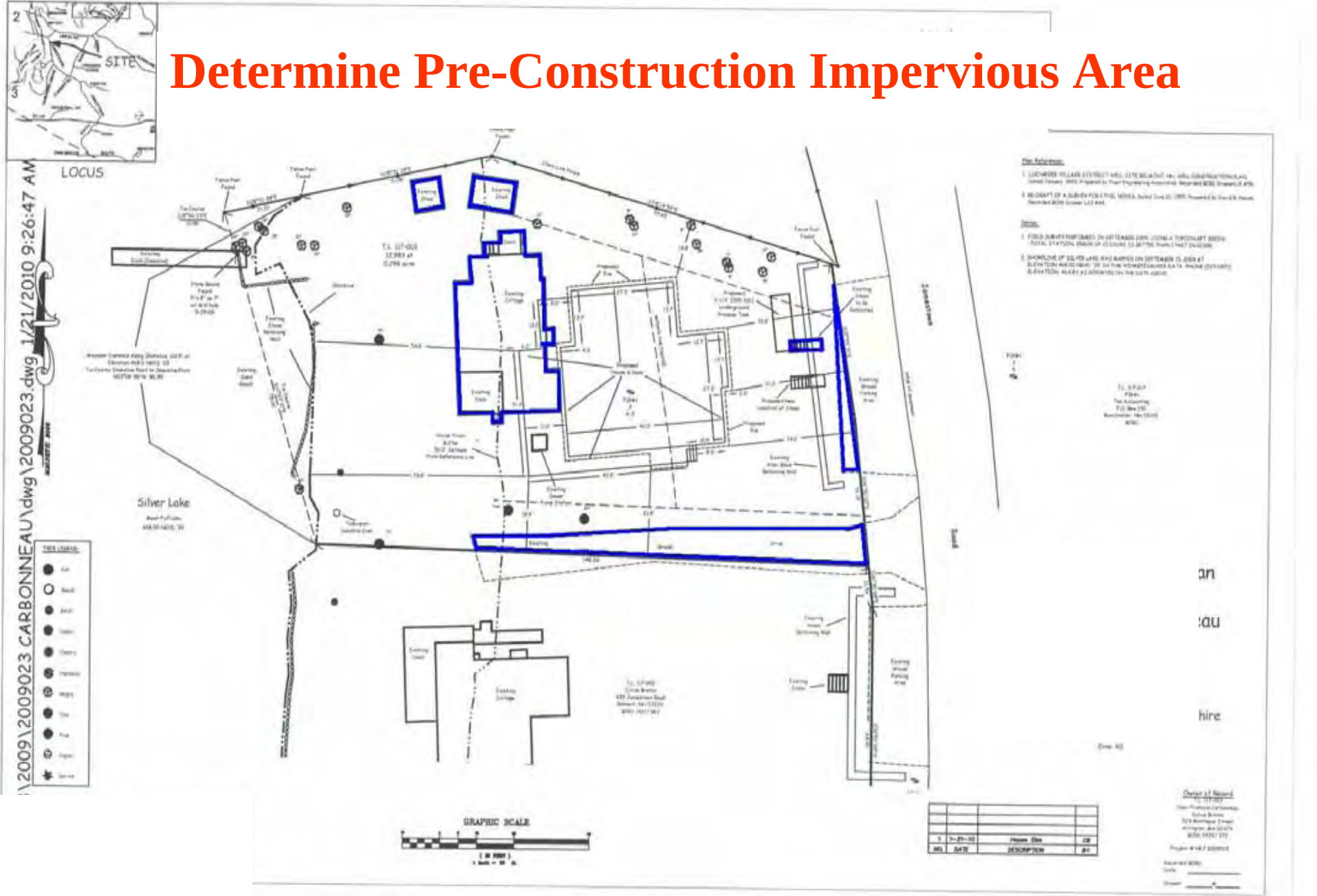
Nonconforming Structures

a. Primary structure does not meet 50 ft setback.
b. Lot within protected shoreland greater than 30% impervious area.

Developing sites with Nonconforming Structures often requires a *redevelopment waiver*.

Project Description: **Remove existing dwelling, construct new dwelling, install stormwater controls and a new septic system.**

Determine Pre-Construction Impervious Area



NEW HAMPSHIRE DEPARTMENT OF Environmental Services

Shoreland Application Worksheet

This form must be submitted to the Department of Environmental Services Wetlands Bureau accompanied with a Shoreland Permit Application

For the purposes of this worksheet, "**Pre-Construction**" impervious areas means all human made impervious surfaces currently in existence on the property, whether to be removed or to remain after the project is completed. "**Post-Construction**" impervious area means all impervious surfaces that will exist on the property upon completion of the project, including both new and any remaining pre-existing impervious surfaces.
All answers shall be given in square feet.

Calculating the Impervious Area Within 250 feet of the Reference Line

	Structure Description	Pre-Construction Impervious Area	Post-Construction Impervious Area	
Primary structure: (Including all attached decks and porches)	House and deck	2,200 sq ft		
Accessory structures: (All other impervious surfaces excluding lawn furniture, well heads, fences and septic systems)	Parking areas	1,000 sq ft		
	Stairs	100 sq ft		
	Shed 1	250 sq ft		
	Shed 2	100 sq ft		
	Total:	3,650 sq ft (A)		(B)

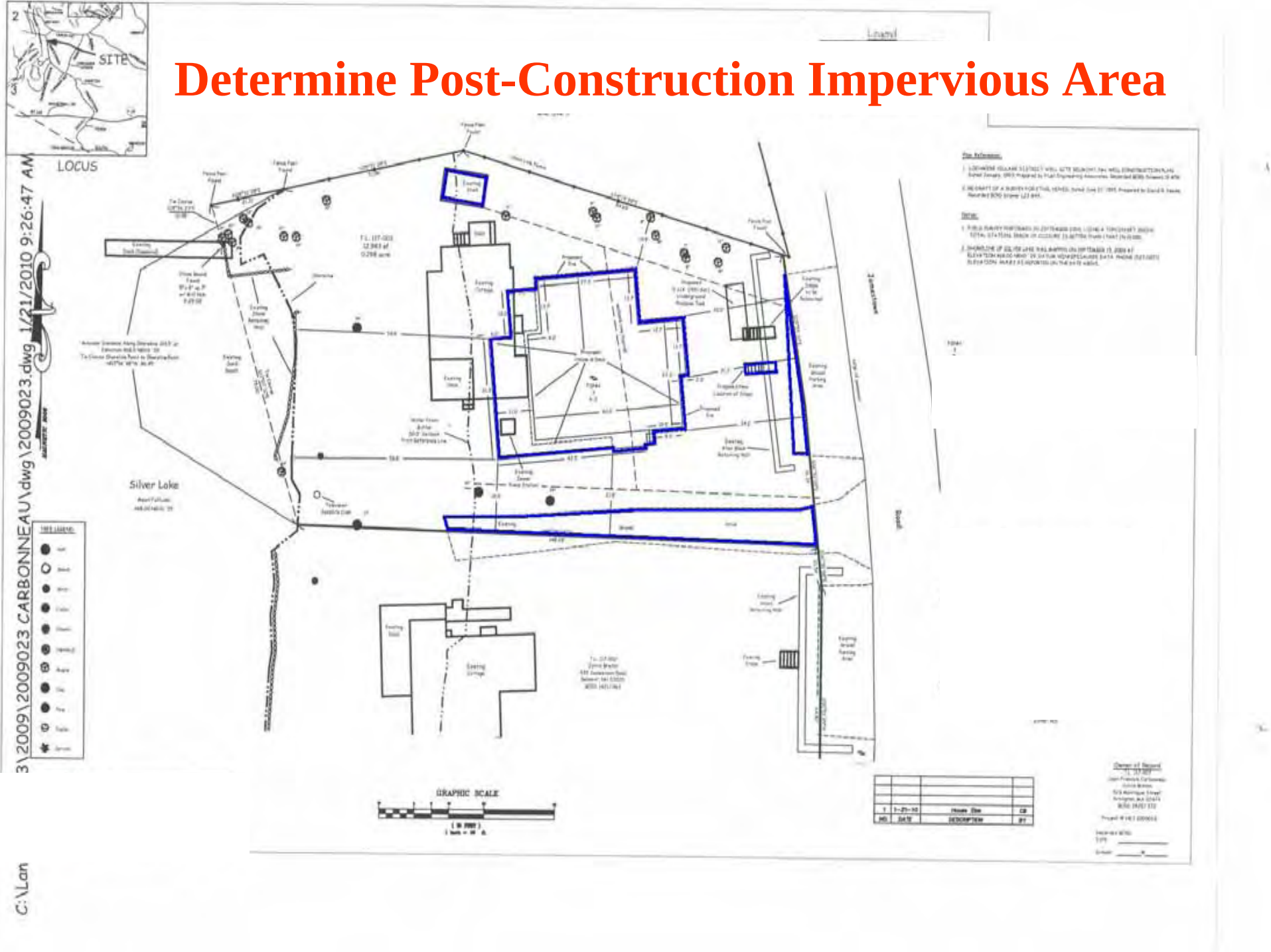
Area of the lot located within 250 ft of reference line: _____ (C)

Percentage of lot covered by **pre-construction** impervious area within 250 ft of the reference line: *[Divide (A) by (C) x 100]* _____ % (D)

Percentage of lot to be covered **post-construction** impervious area within 250 ft of the reference line upon completion of the project: *[Divide (B) by (C) x 100]* _____ % (E)

Note: If the percentage of **post-construction** impervious area is greater than 20% of the lot within the protected shoreland, a stormwater management plan is required pursuant to RSA 483-B:9, V (g)(2)

Determine Post-Construction Impervious Area



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Accessory structures: (All other impervious surfaces excluding lawn furniture, well heads, fences and septic systems)	Parking areas	1,000 sq ft	1,000 sq ft
	Stairs	100 sq ft	100 sq ft
	Shed 1	250 sq ft	0
	Shed 2	100 sq ft	100 s
	Total:	3,650 sq ft (A)	4,400

Area of the lot located within 250 ft of reference line: 20,00

Percentage of lot covered by **pre-construction** impervious area within 250 ft of the reference line: ***[Divide (A) by (C) x 100]*** 18.25 % **(D)**

Percentage of lot to be covered **post-construction** impervious area within 250 ft of the reference line upon completion of the project: ***[Divide (B) by (C) x 100]*** 22.0 % **(E)**

Post-Construction impervious area greater than 20%. Must incorporate stormwater management and address vegetation within the waterfront buffer.

Note: If the percentage of **post-construction** impervious area is greater than 20% of the lot within the protected shoreland, a stormwater management plan is required pursuant to RSA 483-B:9, V (g)(2)

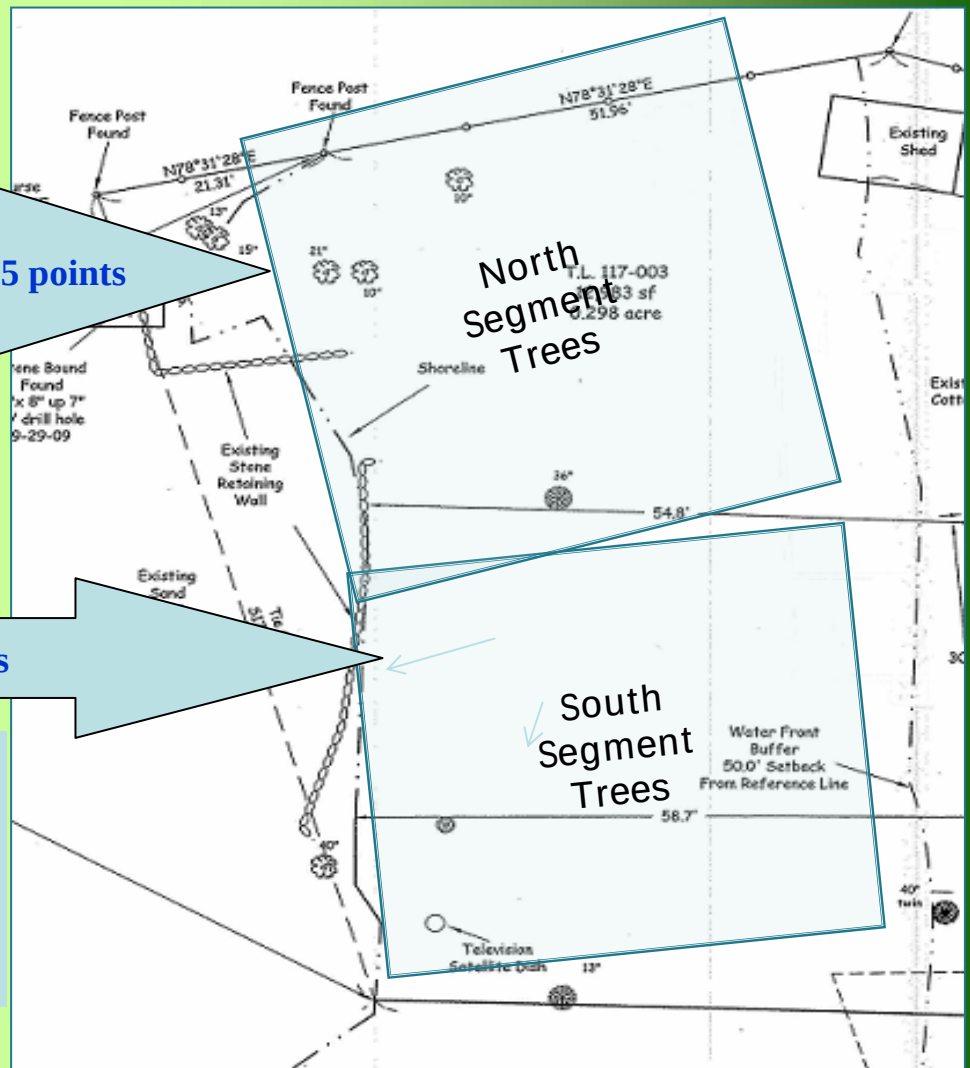
Addressing the vegetation within the waterfront buffer:

If any grid segment does not meet the minimum required grid score (50 pts), an equivalent level of protection must be planted to at least meet the required grid score.

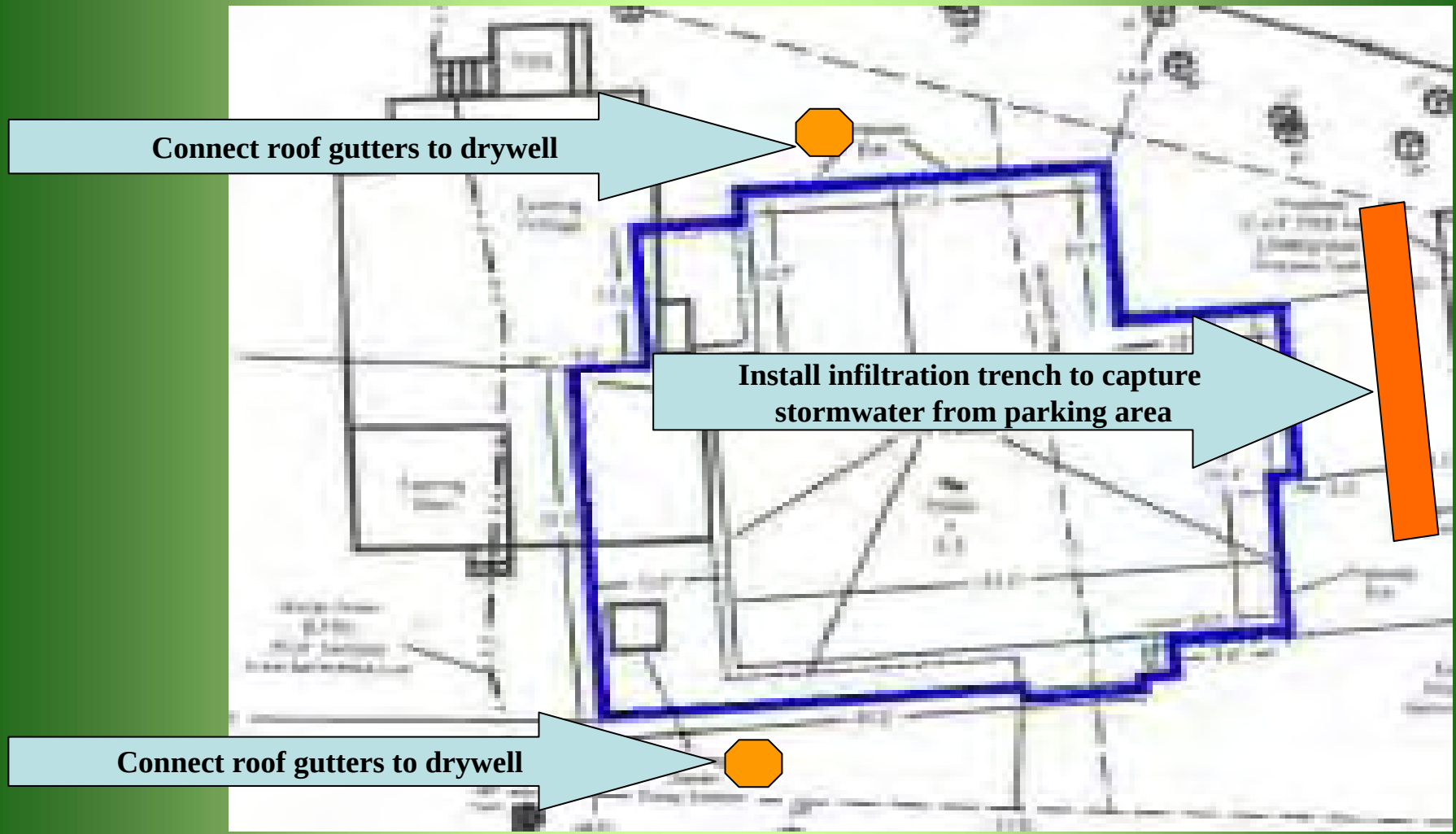
Full 50 x 50 grid segment . Tree and sapling score = 75 points

Partial 40 x 50 grid segment = 25 points

A 40 x 50 grid segment requires 40 points. Must provide 15 additional points



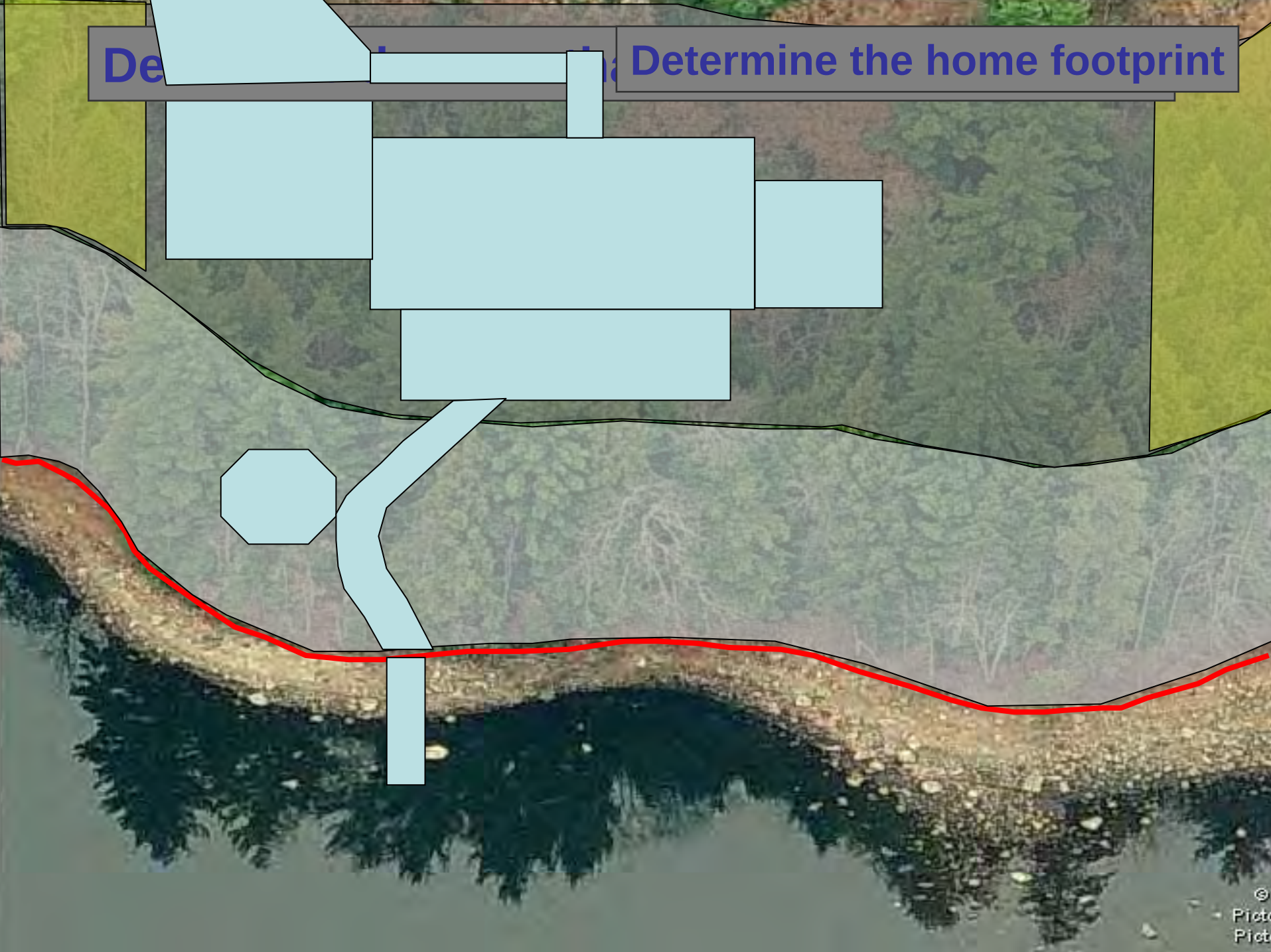
Proposed Stormwater Management Plan:




Undeveloped Lot

Determine Reference Line Location

Determine What Trees will Remain

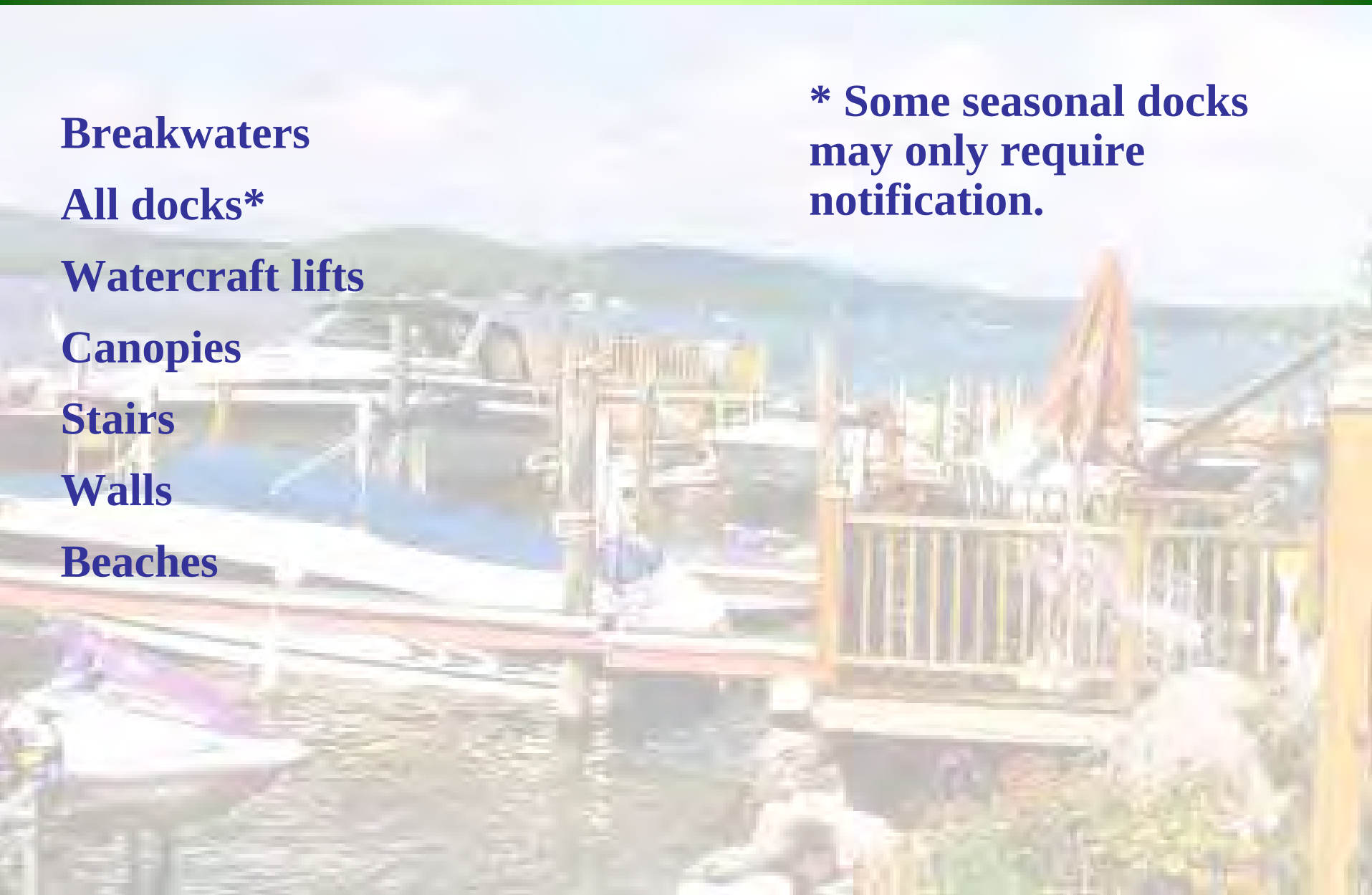

Determine the home footprint

Shoreline and Docking Structures
RSA 482-A

No person shall excavate, remove, fill, dredge or construct any structures in or on any bank, flat, marsh, or swamp in and adjacent to any waters of the state without a permit from the department.

RSA 482-A:3, I

Permits Required for the Following Structures:



Breakwaters

All docks*

Watercraft lifts

Canopies

Stairs

Walls

Beaches

*** Some seasonal docks may only require notification.**

DOCK SIZE

Capacity is a function of average frontage length:

Less than 75 ft	4 ft x 24 ft
75 ft - 149 ft	2 boat slips
150 ft - 224 ft	3 boat slips
225 ft - 299 ft	4 boat slips
300 ft - 374 ft	5 boat slips
375 ft - 450 ft	6 boat slips

Length

Ponds smaller than 1000 acres	30 ft
Ponds larger than 1000 acres	40 ft

Rivers 20 ft per boat slip set parallel to shore


3 Boat Slips

Constructing Beaches:

If a beach is natural, it should not need to be replenished.

- **Sand cannot be place in the water.**
- **New beach construction is limited to the “perched” style.**
- **Size is limited to 20% of frontage up to a max of 50 ft along the shoreline.**
- **Beaches cannot be constructed in slopes steeper than 25%.**
- **Beaches cannot be constructed in wetlands.**


Perched Beach

Links to Source Information

www.des.nh.gov

Google: NH Shoreland Program

Consolidated List of Waterbodies subject to the CSPA

List of Designated Rivers

Current CSPA (RSA 483-B) including amendments

Current Shoreland Rules (Env-Wq 1400)

Frequently Asked Questions About the CSPA

CSPA FACT SHEETS

Jay Aube
Shoreland Program
Outreach Coordinator
jason.aube@des.nh.gov
(603) 271-8176