



Statewide Standards for Timber Harvesting in Shoreland Areas

Fall 2012

Department of Agriculture, Conservation and Forestry
Maine Forest Service



Statewide Standards for Timber Harvesting in Shoreland Areas

Goal: Single set of standards for timber harvesting operations in shoreland areas, that will:

- apply throughout the state;
- replace current multiple jurisdictions, and,
- establish a single enforcing authority (MFS)



Statewide Standards for Timber Harvesting in Shoreland Areas

- ❖ Municipalities have 3 options:
 - Repeal (Option 1)
 - Adopt identical standards (Option 2)
 - Keep their existing SZ ordinance (Option 3)
- ❖ After the rule takes effect, future ordinance changes must be consistent with statewide standards



Legislation allowing Option 1 and 2 towns to go forward

Municipalities that have repealed their ordinance (Option 1) or adopted an identical ordinance (Option 2) will have Statewide Standards for timber harvesting go into effect January 1, 2013. Towns will be responsible for enforcement of nonconforming ordinances (Option 3).



The Rest of the State

In LURC and municipalities that have not taken action on Statewide Standards old standards remain in place until they take action OR critical mass is reached.

Standards for LURC are not included in this presentation!



Resources

- ❖ MFS wants to give the assistance needed to comply with the rules
- ❖ District foresters and rangers are available to help

Statewide standards website

www.maine.gov/doc/mfs/fpm/swstds/sws.html

- ❖ Copy of the rules
- ❖ Town status
- ❖ Maps (Currently in development will be posted on SWS website when ready)



The Standards

Harvesting - Roads - Crossings

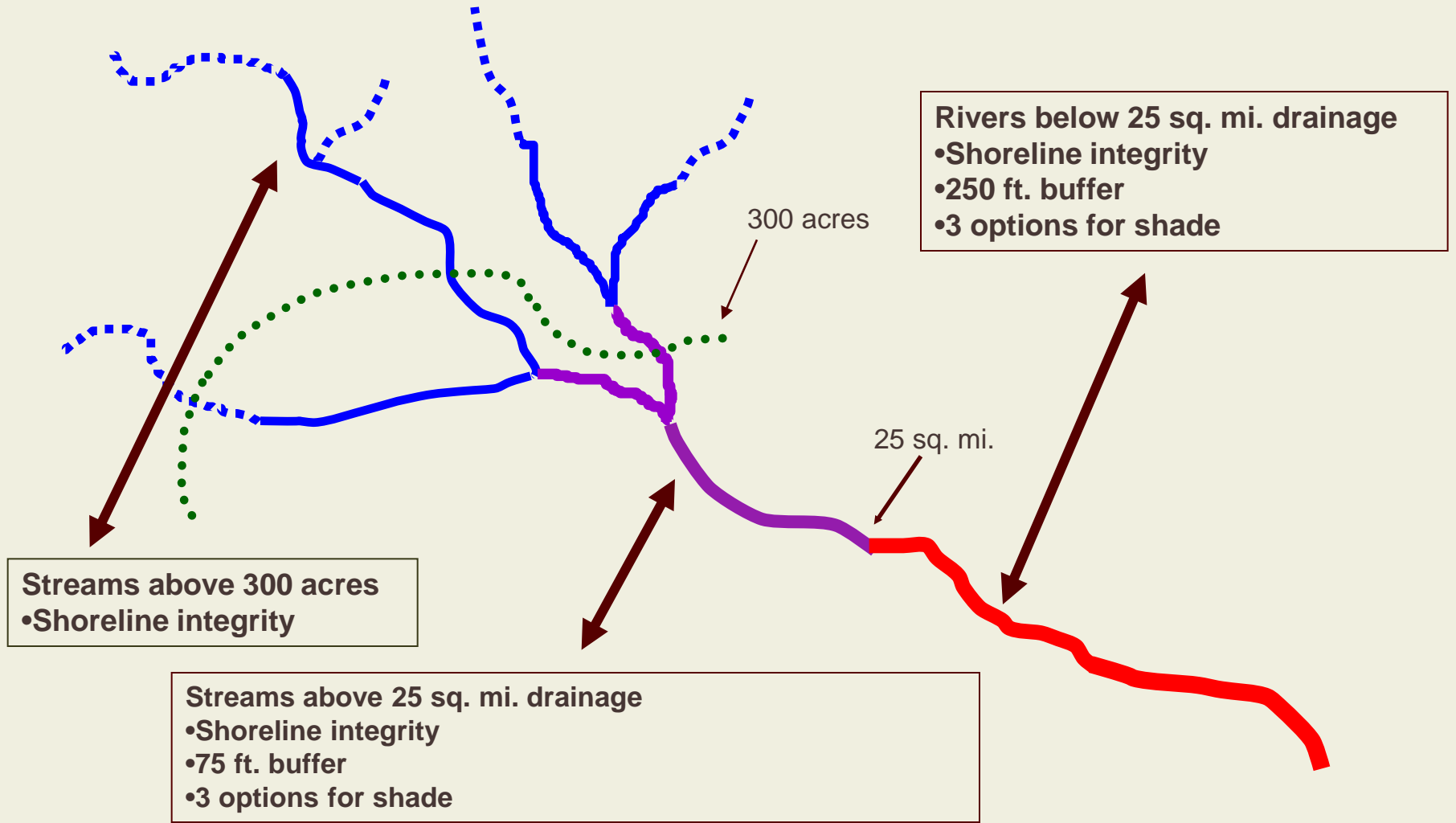
This presentation is an overview of the new Statewide Standards for Timber Harvesting in Shoreland areas. For complete details see the actual rule MFS Chapter 21



Timber Harvesting Standards

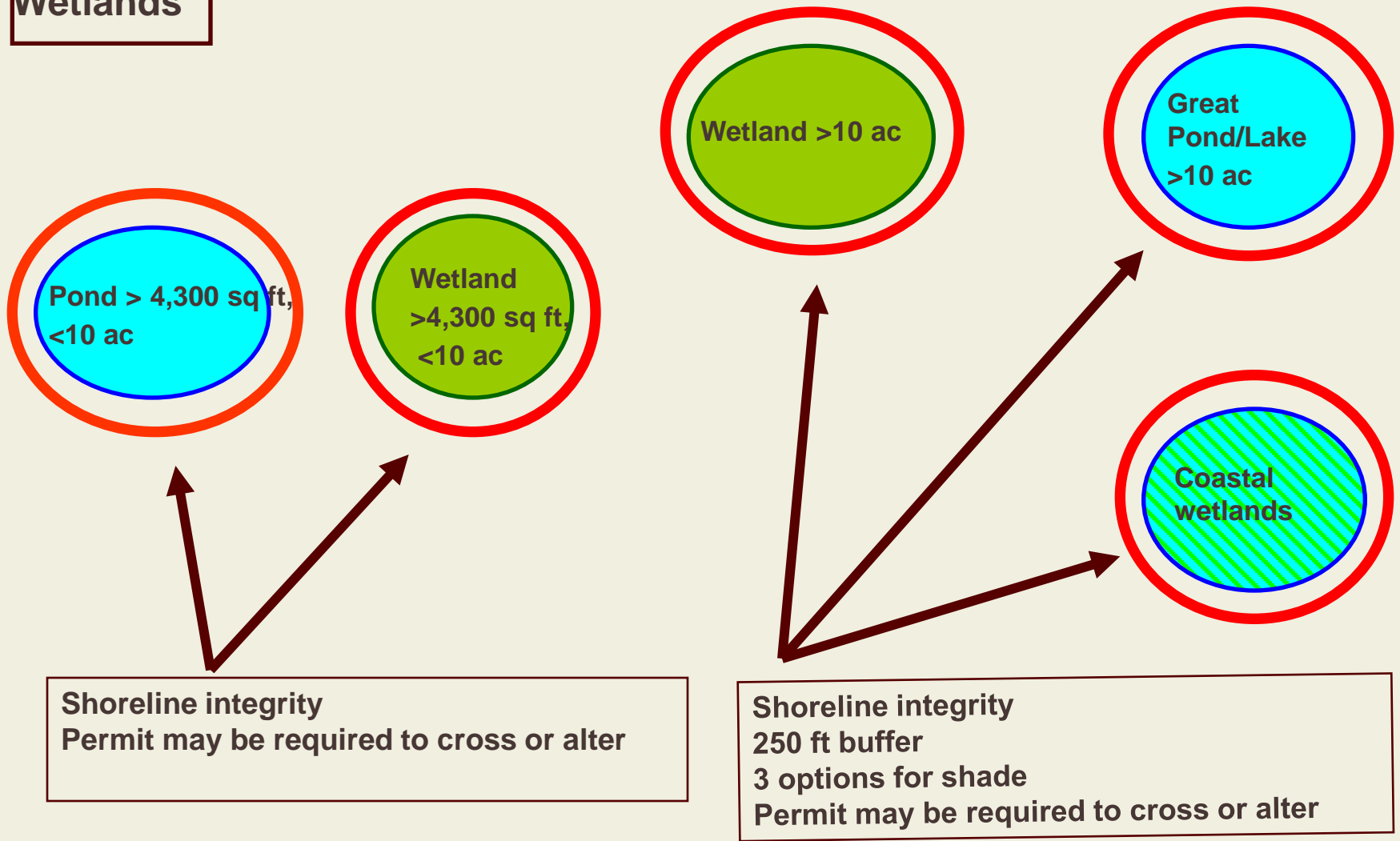


Statewide Standards for Timber Harvesting in Shoreland Areas - Harvesting



Statewide Standards for Timber Harvesting in Shoreland Areas - Harvesting

Wetlands



Key Changes

- ❖ Regulatory thresholds fall at 300 acre and 25 square mile drainage points. Second order stream threshold dropped.
- ❖ Definition of a stream channel is based on physical characteristics.



Stream Channel

❖ **Stream channel**

- Between defined banks
 - Lacks terrestrial vegetation or
 - Exposed parent material bed
- Hydrologically connected to other waterbodies

❖ **Does not include**

- Rills or gullies forming because of accelerated erosion in disturbed soils

Stream Channels



Not Stream Channels





Key Changes

- ❖ Allows 3 options for shade and tree retention:
 - 40% removal;
 - Leave a residual stand with 60 square feet basal area; or,
 - Outcome based proposal from landowner to MFS that provides equal or greater protection than other options
- ❖ Must indicate option choice on Notification (Addendum)



Removals - 250' zones

- A. Harvesting of no more than 40 percent of the total volume (aka Basal Area) on each acre involved of trees 4.5 inches DBH or greater in any 10 year period is permitted OR,**
- B. The residual stand must contain an average basal area of at least 60 square feet per acre of woody vegetation greater than or equal to 1.0 inch DBH, of which 40 square feet per acre must be greater than or equal to 4.5 inches DBH;**
- C. A well-distributed stand of trees which is windfirm, and other vegetation including existing ground cover, must be maintained; and,**
- D. Within 75 feet, horizontal distance, of the normal high water line ... there must be no cleared openings. At distances greater than 75 feet, horizontal distance ...timber harvesting and related activities must not create single cleared openings greater than 14,000 square feet in the forest canopy. Where such openings exceed 10,000 square feet, they must be at least 100 feet apart. Such cleared openings will be included in the calculation of total volume removal.**



Removals - 75' zones

- A. Harvesting of no more than 40 percent of the total volume on each acre involved of trees 4.5 inches DBH or greater in any 10 year period is permitted OR,
- B. The residual stand must contain an average basal area of at least 60 square feet per acre of woody vegetation greater than or equal to 1.0 inch DBH, of which 40 square feet per acre must be greater than or equal to 4.5 inches DBH;
- C. A well-distributed stand of trees which is windfirm, and other vegetation including existing ground cover, must be maintained; and,
- D. There must be no cleared openings.



Outcome Based Option all Zones

An alternative method proposed in an application, signed by a Licensed Forester or Certified Wildlife Professional, submitted by the landowner or designated agent to the MFS and approved by the MFS, which provides equal or better protection of the shoreland area than this rule.



Key Changes

All timber harvesting operations must protect shoreline integrity, regardless of the size of the waterbody, and if any problems are created, they must be corrected by the responsible party.

Shoreline integrity

Disruption of shoreline integrity:

- ❖ Alteration of
 - physical shape, properties, or condition of a shoreline
- ❖ Recognized by
 - compacted, scarified and/or rutted soil, an abnormal channel or shoreline cross-section,
 - in the case of flowing waters, a profile and character altered from natural conditions.



Land Management Road Standards





Applicability

- ❖ ...construction, maintenance, and use of land management roads in shoreland areas



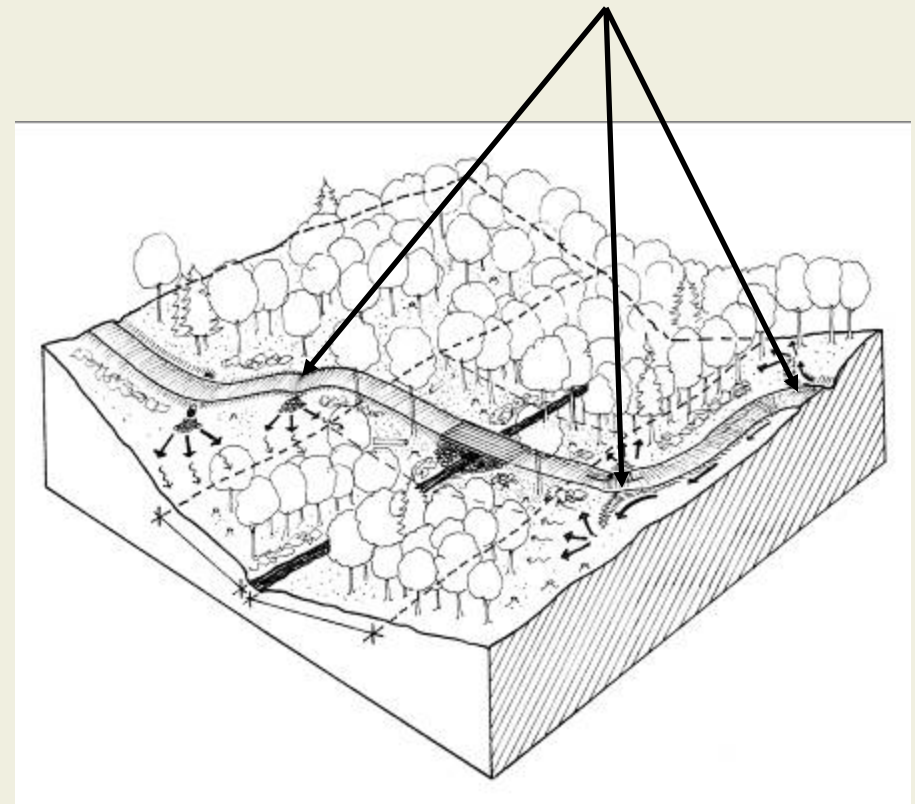
Land Management Road and Maintenance Standards

- ❖ **Land Management Road** means a route or track consisting of a bed of exposed mineral soil, gravel, or other surfacing materials constructed for, or created by, the passage of motorized vehicles and used primarily for timber harvesting and related activities, including associated log yards, but not including skid trails or skid roads.

Design, Construction and Maintenance

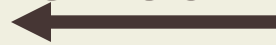
- ❖ Concentrated runoff and sediment can not directly enter the waterbody
- ❖ Water must be diverted through vegetative filter strips

Divert/disperse water outside the filter area





Ditches should not lead directly to the stream



Use turnouts or other measures to get water into vegetated areas



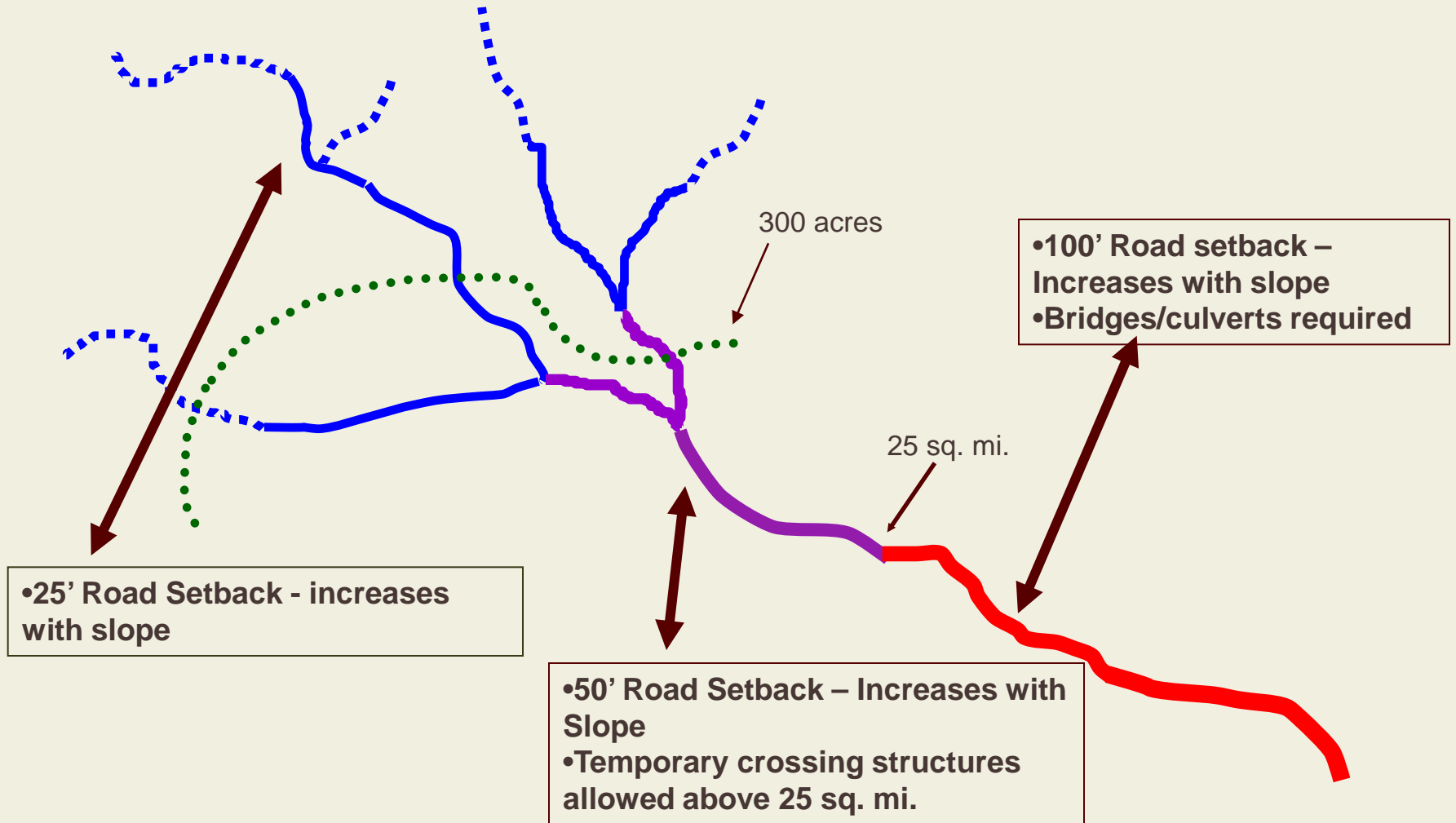


Design, Construction and Maintenance

❖ Required filter strip widths

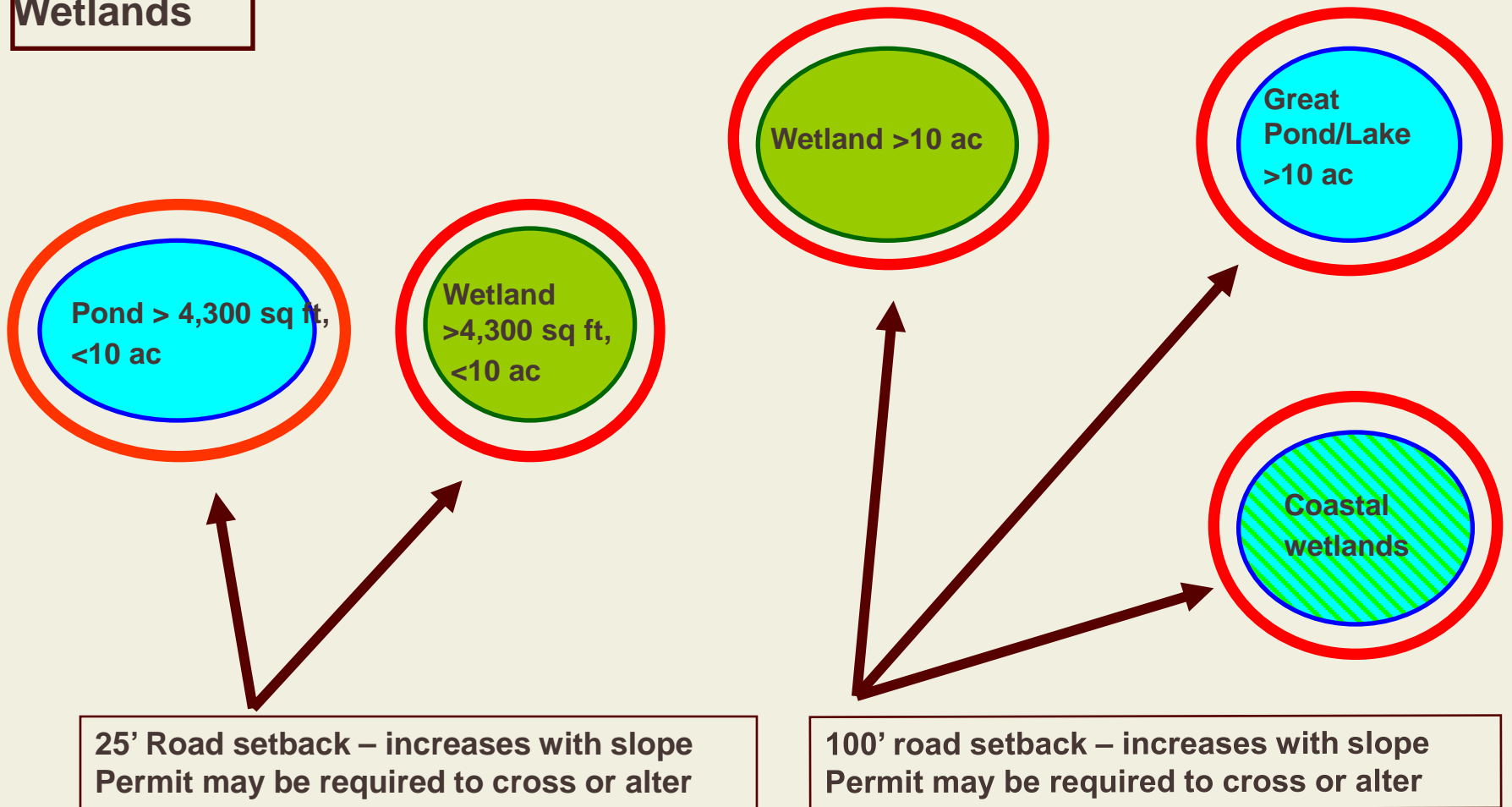
Average slope of land between exposed mineral soil and normal high water line (percent)	Width of strip between exposed mineral soil and normal high water line (feet along surface of the ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

Statewide Standards for Timber Harvesting in Shoreland Areas – Roads and Crossings



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Wetlands





Setback exceptions

- ❖ Allows for reductions in setbacks if landowner demonstrates to MFS
 - No reasonable alternative exists
 - Appropriate techniques are used to prevent sedimentation



Significant River Segments – Resource Protection

- ❖ New land management roads are not permitted within the shoreland area along Significant River Segments or Resource Protection Districts unless:
 - Landowner demonstrates to MFS that no reasonable alternative route exists
 - the new road must be set back as far as practicable and screened from the river by existing vegetation.

Maintenance

- ❖ Water control structures must be maintained to assure effective functioning.





Upgrading Existing Roads

- ❖ Extension or enlargement of presently existing roads must conform to standards.
- ❖ Any nonconforming existing road may continue to exist and to be maintained as long as the nonconforming conditions are not made more nonconforming.

Crossings





Applicability

- ❖ Applies to all crossings of stream channels, rivers, ponds, lakes, Great Ponds, nonforested freshwater wetlands, coastal wetlands, tidal waters, and freshwater wetlands identified by the Department of Inland Fisheries and Wildlife as significant wildlife habitat or essential wildlife habitat.



Notification (Addendum)

- ❖ a map showing the location of all proposed permanent crossings;
- ❖ the GPS location of all proposed permanent crossings;
- ❖ for any temporary or permanent crossing that requires a permit from state or federal agencies, a copy of the approved permit or permits; and,
- ❖ a statement signed by the responsible party that all temporary and permanent crossings will be constructed, maintained, and closed out in accordance with the requirements



All Crossings

- ❖ Must allow fish passage at all times of the year, not impound water, maintain normal stream flow.
- ❖ Extension or enlargement of presently existing crossings must conform.
- ❖ Any nonconforming existing crossing may continue to exist and be maintained, as long as the nonconforming conditions are not made more nonconforming; maintenance or repair work done below the normal high water line must conform

Freshwater wetlands

- ❖ Skid trails and land management roads must avoid freshwater wetlands unless there are no reasonable alternatives





Additional permits/consultation

- ❖ Crossings of Significant River Segments and freshwater wetlands identified as significant or essential wildlife habitat may require a permit or consultation with another agency.



Skid Trail Crossings

- ❖ Below 25mi² bridges or culverts required
- ❖ Above 25mi² may use other structures or cross
 - When stream channel is frozen and snow covered
 - Channel is hard surface that will not be damaged
- ❖ But only if:
 - Sedimentation is reasonably avoided
 - No substantial disturbance of the bank or channel
 - Fish passage not impeded
 - Water flow not unreasonably impeded



Skid Trail Crossing Exception

- ❖ Above 300 acres may not conform IF reasonable measures are taken to avoid the disruption of shoreline integrity, sedimentation and disturbance of stream banks



Skid Trail Crossing Closeout

- ❖ Upon completion of timber harvesting or upon the expiration of a Forest Operations Notification, whichever is earlier:
 - Bridges and culverts installed for skid trails must either:
 - comply with the standards for crossings by land management roads or
 - be removed and areas of exposed soil stabilized.
 - Crossing structures that are not bridges or culverts must either:
 - be removed immediately following timber harvesting or,
 - If frozen in as soon a practicable after snowmelt
 - Stream channels, banks and approaches to must be immediately stabilized on completion of harvest, or as soon as practical after snowmelt.



Land Management Road Stream Crossings

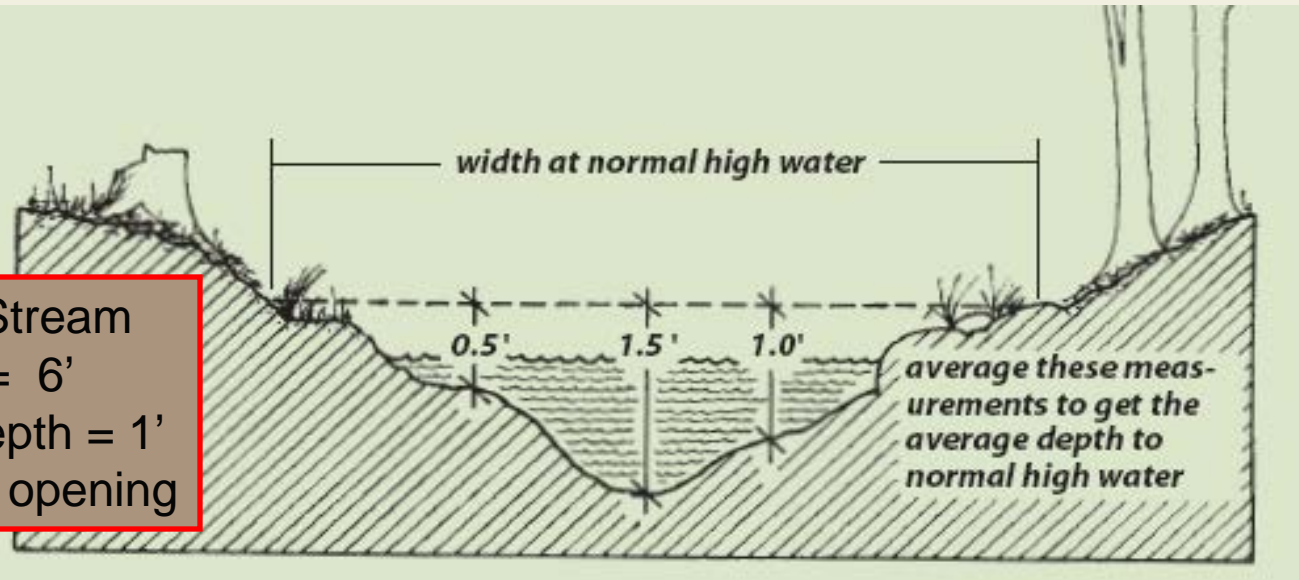
- ❖ Must be designed, constructed, and maintained such that:
 - concentrated water runoff does not enter the water body or tributary stream;
 - sedimentation of surface waters is reasonably avoided;
 - there is no substantial disturbance of the stream bank or stream channel not directly associated with culvert or bridge installation;
 - fish passage is not impeded; and,
 - water flow is not unreasonably impeded.





Land Management Road Stream Crossings - Sizing

- ❖ Bridges and culverts must be sized for 10 year frequency water flows or with a cross-sectional area at least equal to 2 1/2 times the cross-sectional area of the stream channel.



Average Stream
Width = 6'
Average Depth = 1'
 $6 \times 2.5 = 15\text{ft}^2$ opening

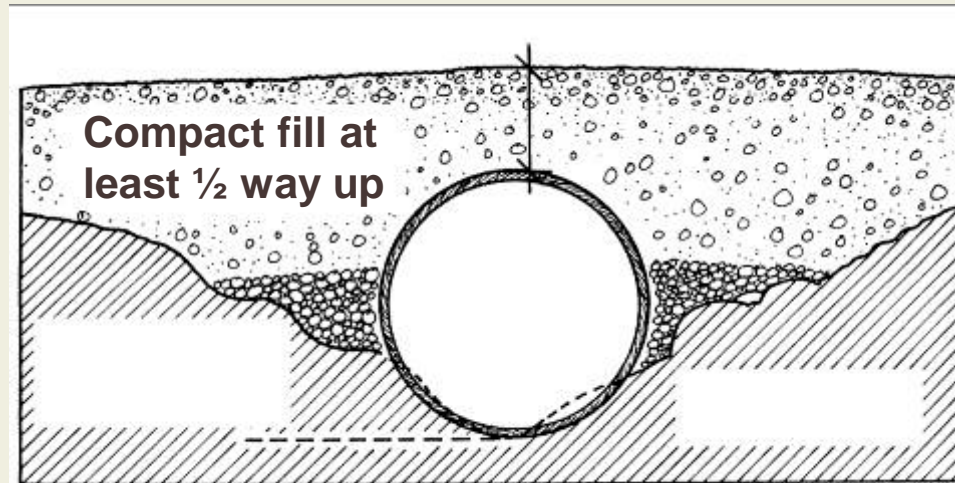
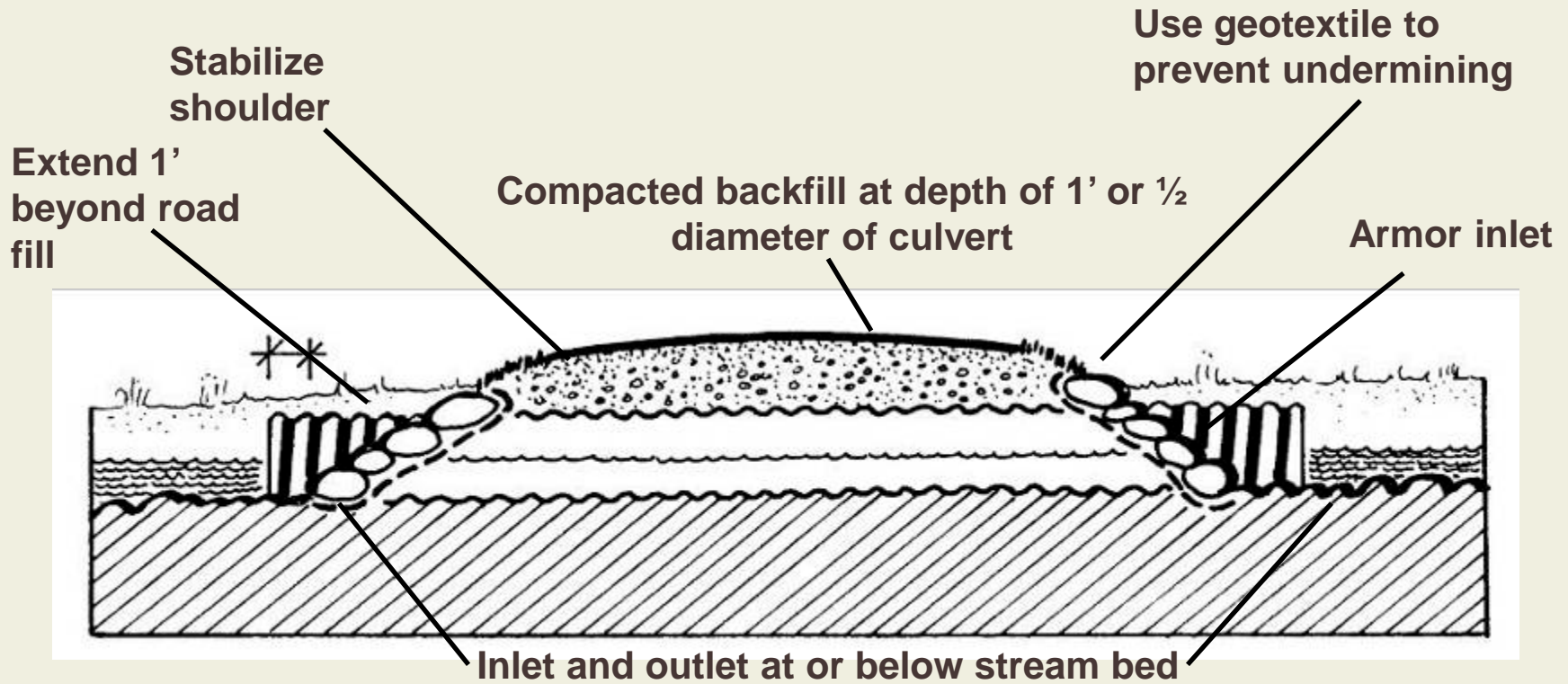


Temporary Land Management Road crossings

- ❖ Temporary bridge and culvert sizes may be smaller if techniques are used that in the event of failure, the natural course of water flow is maintained and sedimentation of the water body is avoided. Such crossing structures must be at least as wide as the channel and, if not culverts, placed above the normal high water line...



Culvert installation



Road closeout and discontinuance

- ❖ Maintenance of the water control installations must continue until use of the road is discontinued and put to bed by:
 - Installation of water bars or other adequate drainage structures
 - Any bridges and culverts must
 - have a cross-sectional area at least 3 1/2 times the cross-sectional area of the stream channel or be sized for a 25 year flow or,
 - be dismantled and removed



Statewide standards website

www.maine.gov/doc/mfs/fpm/swstds/sws.html



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FOR MORE INFORMATION:

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www.maineforestservice.gov