

PROPOSED AMENDMENTS TO THE ORDINANCE RELATIVE TO TIMBER HARVESTING, June 2018

~~Shaded Strike through~~ denotes wording removed

Underline denotes wording added

Asterisks (* * * *) denotes wording before or after

Proposed

2.7 Land Use Chart

ANY USE NOT LISTED HEREIN IS PROHIBITED

C = Conditional Use Review

LPI = Licensed Plumbing Inspector

N = Not Permitted (use not allowed)

P = Permitted (use allowed without a permit, must comply with all applicable land use standards)

R = CEO Review (use must be reviewed by CEO and a permit may be required)

S = Site Plan Review

SD = Subdivision Review

NA = Not applicable

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| | Village Area | Transition Area (2-acre) | Rural Area (2-acre) | Critical Rural Area (5-acre) | Commercial A | Commercial B | Commercial C | Mixed Use | Resource Protection | Shoreland | Little Ossipee | Aquifer Protection District |
|-------------------------------------|--------------|-----------------------------|---------------------|---------------------------------|--------------|--------------|--------------|-----------|------------------------|------------------------|------------------------|--------------------------------|
| Timber Harvesting for Commercial | P | P | P | P | P | P | P | P | R4 <u>P</u> | R4 <u>P</u> | R4 <u>P</u> | P |

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Foot Notes:

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4. ~~If the applicant has retained a forester to manage ALL AREAS to be harvested in the cut (not just in the Shoreland District and Resource Protection), no Planning Board review (i.e. Conditional Use Permit) shall be required. However, the State's Intent to Cut Form must be submitted to the Code Enforcement Officer for review in the Shoreland Districts and Resource Protection District prior to any cutting taking place. Reserved~~

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3.2 Definitions – In this Ordinance, the following terms shall have the following meanings unless a contrary meaning is required by the content or is specifically prescribed.

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Timber Harvesting – The cutting and removal of timber for the primary purpose of selling or processing forest products. ~~In areas outside of the Shoreland and/or Resource Protection District, this term shall not include the harvesting of ten (10) cords or less per year, or up to ten thousand (10,000) board feet of lumber per year. In areas within the Shoreland and/or Resource Protection Districts, this term shall not include the cutting or removal of trees on a lot that has less than two (2) acres within the Shoreland or Resource Protection District. Such cutting or removal of trees within the Shoreland or Resource Protection Districts shall be regulated pursuant to Section 5.20 Clearing or Removal of Vegetation for Activities Other Than Timber Harvesting.~~ “Timber harvesting” does not include the cutting or removal of vegetation within the shoreland zone when associated with any other land use activities. The cutting or removal of trees in the shoreland zone on lot that has less than two (2) acres within the shoreland zone shall not be considered timber harvesting. Such cutting or removal of trees shall be regulated pursuant to Section 5.20, *Clearing or Removal of Vegetation for Activities Other than Timber Harvesting*.

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ARTICLE 5 – PERFORMANCE STANDARDS –

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5.19 Timber Harvesting: ~~The following standards shall govern Timber Harvesting within the shoreland and resource protection areas:~~ **All commercial timber harvesting shall be in accordance with the State of Maine timber harvesting regulations.**

~~**5.19.1 Shoreline Integrity and Sedimentation** – Persons conducting timber harvesting and related activities must take reasonable measures to avoid the disruption of shoreline integrity, the occurrence of sedimentation of water, and the disturbance of water body and tributary stream banks, water body and tributary stream channels, shorelines, and soil lying within water bodies, tributary streams and wetlands. If, despite such precautions, the disruption of shoreline integrity, sedimentation of water, or the disturbance of water body and tributary stream banks, water body and tributary stream channels, shorelines, and soil lying within water bodies, tributary streams, and wetlands occurs, such conditions must be corrected.~~

~~**5.19.2 Slash Treatment** – Timber harvesting and related activities shall be conducted such that slash or debris is not left below the normal high water line of any water body or tributary stream, or the upland edge of a wetland. Section 5.19.2 does not apply to minor, incidental amounts of slash that result from timber harvesting and related activities otherwise conducted in compliance with this section.~~

~~(a) Slash actively used to protect soil from disturbance by equipment or to stabilize exposed soil, may be left in place, provided that no part thereof extends more than four (4) feet above the ground.~~

~~(b) Adjacent to great ponds, rivers, and wetlands:~~

~~(i) No accumulation of slash shall be left within fifty feet (50'), horizontal distance, of the normal high-water line or upland edge of a wetland; and~~

~~(ii) Between fifty (50) feet and two hundred fifty (250) feet, horizontal distance, of the normal high-water line or upland edge of a wetland, all slash larger than three (3) inches in diameter must be disposed of in such a manner that no part thereof extends more than four (4) feet above the ground.~~

~~5.19.3—Timber harvesting and related activities must leave adequate tree cover, and shall be conducted so that a well-distributed stand of trees is retained. This requirement may be satisfied by following one of the following three options:~~

~~a) Option 1: forty (40) percent volume removal, as follows:~~

~~i) Harvesting of no more than forty percent (40%) of the total volume on each acre of trees four and one-half (4 ½) inches DBH or greater in any ten (10) year period is allowed. Volume may be considered to be equivalent to basal area;~~

~~ii) A well-distributed stand of trees which is windfirm, and other vegetation including existing ground cover, must be maintained; and,~~

~~iii) Within seventy five (75) feet, horizontal distance of the normal high-water line of rivers, streams, great ponds and upland edge of freshwater wetlands, there must be no cleared openings. At distances greater than seventy five (75) feet, horizontal distance, of the normal high-water line of a river or great pond, or upland edge of a wetland, timber harvesting and related activities must not create single cleared openings greater than fourteen thousand (14,000) square feet in the forest canopy. Where such openings exceed ten thousand (10,000) square feet, they must be at least one hundred (100) feet, horizontal distance, apart. Such cleared openings will be included in the calculation of total volume removal. Volume may be considered equivalent to basal area.~~

~~b) Option 2: sixty (60) square foot basal area retention, as follows:~~

~~(i) The residual stand must contain an average basal area of at least sixty (60) square feet per acre of woody vegetation greater than or equal to one (1) inch DBH, of which forty (40) square feet per acre must be greater than or equal to four and one-half (4 ½) inches DBH;~~

~~(ii) A well-distributed stand of trees which is windfirm, and other vegetation including existing ground cover, must be maintained; and,~~

~~(iii) Within seventy five (75) feet, horizontal distance, of the normal high-water line of water bodies, and within seventy five (75) feet, horizontal distance, of the upland edge of wetlands, there must be no cleared openings. At distances greater than seventy five (75) feet, horizontal distance, of the normal high-water line of a river or great pond, or upland edge of a wetland, timber harvesting and related activities must not create single cleared openings greater than fourteen thousand (14,000) square feet in the forest canopy. Where such openings exceed ten thousand (10,000) square feet, they must be at least one hundred (100) feet, horizontal distance, apart. Such cleared openings will be included in the calculation of the average basal area. Volume may be considered equivalent to basal area.~~

~~(c) **Option 3** (Outcome based), which requires: 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 State of Maine Department of Conservation's Bureau of Forestry (Bureau) for review and approval, which provides equal or better protection of the shoreland area than this rule.~~

~~**NOTE:** Landowners must designate on the Forest Operations Notification form required by 12 M.R.S.A. chapter 805, subchapter 5, which option they choose to use. If landowners choose Option 1 or Option 2, compliance will be determined solely on the criteria for the option chosen. If landowners choose Option 3, timber harvesting and related activities may not begin until the Bureau has approved the alternative method.~~

~~The Bureau may verify that adequate tree cover and a well-distributed stand of trees is retained, through a field procedure that uses sample plots that are located randomly or systematically, to provide a fair representation of the harvest area.~~

~~**5.19.4 Skid Trails, Yards and Equipment Operation**— This requirement applies to the construction, maintenance, and use of skid trails and yards in shoreland areas.~~

~~a) Equipment used in timber harvesting and related activities shall not use river, stream, or tributary stream channels as travel routes, except when surface waters are frozen and snow covered, and the activity will not result in any ground disturbance.~~

~~b) Skid trails and yards must be designed and constructed to prevent sediment and concentrated water runoff from entering a water body, tributary stream, or wetland. Upon termination of their use, skid trails and yards must be stabilized.~~

~~e) **Setbacks:**~~

i) Equipment must be operated to avoid the exposure of mineral soil within twenty five (25) feet, horizontal distance, of any water body, tributary stream, or wetland. On slopes of ten (10) percent or greater, the setback for equipment operation must be increased by twenty (20) feet, horizontal distance, plus an additional ten (10) feet, horizontal distance, for each five (5) percent increase in slope above ten (10) percent. Where slopes fall away from the resource, no increase in the twenty five (25) foot setback is required.

ii) Where such setbacks are impracticable, appropriate techniques shall be used to avoid sedimentation of the water body, tributary stream, or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

5.19.5 Land Management Roads — Land management roads, including approaches to crossings of water bodies, tributary stream channels, and freshwater wetlands, ditches, and other related structures, must be designed, constructed, and maintained to prevent sediment and concentrated water runoff from directly entering the water body, tributary stream, or wetland. Surface water on, or adjacent to, water crossing approaches must be diverted through vegetative filter strips to avoid sedimentation of the watercourse or wetland. Because roadside ditches may not extend to the resource being crossed, vegetative filter strips must be established in accordance with the setback requirements in Section 5.19.2.7 of this rule.

a) Land management roads and associated ditches, excavation, and fill must be set back at least:

i) One hundred (100) feet, horizontal distance, from the normal high-water line of a great pond, river, or freshwater wetland;

ii) Fifty (50) feet, horizontal distance, from the normal high-water line of streams; and

iii) Twenty five (25) feet, horizontal distance, from the normal high-water line of tributary streams.

b) The minimum one hundred (100) foot setback specified in Section 5.19.5(a)(i) above may be reduced to no less than fifty (50) feet, horizontal distance, and the fifty (50) foot setback specified in Section 5.19.5(a)(ii) above may be reduced to no less than twenty five (25) feet, horizontal distance, if, prior to construction, the landowner or the landowner's designated agent demonstrates to the Planning Board's satisfaction that no reasonable alternative exists and that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

c) On slopes of ten (10) percent or greater, the land management road setback must be increased by at least twenty (20) feet, horizontal distance, plus an additional ten (10) feet, horizontal distance, for each five (5) percent increase in slope above ten (10) percent.

d) New land management roads are not allowed within the Resource Protection District, unless, prior to construction, the landowner or the landowner's designated agent makes a clear demonstration to the Planning Board's satisfaction that no reasonable alternative route exists outside the Shoreland District, and that the new road must be set back as far as practicable from the normal high water line, and screened from the river by existing vegetation.

e) Ditches, culverts, bridges, dips, water turnouts, and other water control installations associated with roads must be maintained on a regular basis to assure effective functioning. Drainage structures shall deliver a dispersed flow of water into an unscarified filter strip no less than the width indicated in the setback requirements in Section 5.19.5(7). Where such a filter strip is impracticable, appropriate techniques shall be used to avoid sedimentation of the water body, tributary stream, or wetland. Such techniques may include the installation of sump holes or settling basins, and/or the effective use of additional ditch relief culverts and ditch water turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

f) **Road Closeout and Discontinuance**— Maintenance of the water control installations required in Section 5.19.5(e) must continue until use of the road is discontinued and the road is put to bed; by effective installation of water bars or other adequate road drainage structures at appropriate intervals, constructed to avoid surface water flowing over or under the water bar, and extending a sufficient distance beyond the traveled way so that water does not reenter the road surface.

g) **Upgrading Existing Roads**— Extension or enlargement of presently existing roads must conform to the provisions of Section 5.19.5. Any non-conforming existing road may continue to exist and to be maintained, as long as the non-conforming conditions are not made more non-conforming.

Exception— Extension or enlargement of presently existing roads need not conform to the setback requirements of Section 5.19(5)(a) if, prior to extension or enlargement, the landowner or the landowner's designated agent demonstrates to the Planning Board's satisfaction that no reasonable alternative exists and that appropriate techniques will be used to prevent sedimentation of the water body, tributary stream, or wetland. Such techniques may include, but are not limited to, the installation of settling basins, and/or the effective use of additional ditch relief culverts and turnouts placed to avoid sedimentation of the water body, tributary stream, or wetland. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

h) Additional Measures: In addition to the foregoing minimum requirements, persons undertaking construction and maintenance of roads and river, stream, and tributary stream crossings must take reasonable measures to avoid sedimentation of surface waters.

5.19.6 Crossings of Waterbodies— Crossings of rivers, streams, and tributary streams must allow for fish passage at all times of the year, must not impound water, and must allow for the maintenance of normal flows.

a) Determination of Flow: Provided they are properly applied and used for the circumstances for which they are designed, methods including but not limited to the following are acceptable as a means of calculating the ten (10) year and twenty five (25) year frequency water flows and thereby determining water crossing sizes as required in Section 5.19.5: The United States Geological Survey (USGS) Methods; specifically: Hodgkins, G. 1999. Estimating the Magnitude of Peak Flows for Streams in Maine for Selected Recurrence Intervals. U.S. Geological Survey. Water Resources Investigations Report 99-4008. 45 pp.

b) Upgrading Existing Water Crossings: Extension or enlargement of presently existing water crossings must conform to the provisions of Section 5.19.5 Any non-conforming existing water crossing may continue to exist and be maintained, as long as the non-conforming conditions are not made more non-conforming; however, any maintenance or repair work done below the normal high water line must conform to the provisions of Section 5.19.5.

c) Other Agency Permits: Any timber harvesting and related activities involving the design, construction, and maintenance of crossings on waterbodies other than a river, stream, or tributary stream may require a permit from the Department of Environmental Protection or the US Army Corps of Engineers.

d) Any timber harvesting and related activities involving the design, construction, and maintenance of crossings of freshwater wetlands, identified by the Department of Inland Fisheries and Wildlife as essential wildlife habitat, require prior consultation with the Department of Inland Fisheries and Wildlife.

e) Notice to Bureau of Forestry: Written notice of all water crossing construction, maintenance, alteration, and replacement activities in shoreland areas must be given to the Bureau prior to the commencement of such activities. Such notice must contain all information required by the Bureau, including:

i) a map showing the location of all proposed permanent crossings;

ii) the GPS location of all proposed permanent crossings;

iii) for any temporary or permanent crossing that requires a permit from state or federal agencies, a copy of the approved permit or permits; and

~~iv) 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 of this Section.~~

~~f) Water Crossing Standards — All crossings of rivers require a bridge or culvert sized according to the requirements of Section 5.19.6(g) below. Streams and tributary streams may be crossed using temporary structures that are not bridges or culverts provided:~~

~~i) concentrated water runoff does not enter the stream or tributary stream;~~

~~ii) sedimentation of surface waters is reasonably avoided;~~

~~iii) there is no substantial disturbance of the bank, or stream or tributary stream channel;~~

~~iv) fish passage is not impeded; and,~~

~~v) water flow is not unreasonably impeded.~~

~~Subject to Section 5.19.6(f)(i-v) above, skid trail crossings of streams and tributary streams when channels of such streams and tributary streams, are frozen and snow covered; or are composed of a hard surface which will not be eroded or otherwise damaged, are not required to use permanent or temporary structures.~~

~~g) Bridge and Culvert Sizing — For crossings of river, stream, and tributary stream channels with a bridge or culvert, the following requirements apply:~~

~~i) Bridges and culverts must be installed and maintained to provide an opening sufficient in size and structure to accommodate ten (10) year frequency water flows, or with a cross-sectional area at least equal to two and one-half (2 1/2) times the cross-sectional area of the river, stream, or tributary stream channel.~~

~~ii) Temporary bridge and culvert sizes may be smaller than provided in Section 5.19.6 (g)(i) if techniques are effectively employed such that in the event of culvert or bridge failure, the natural course of water flow is maintained, and sedimentation of the water body or tributary stream is avoided. Such crossing structures must be at least as wide as the channel and placed above the normal high-water line. Techniques may include, but are not limited to, the effective use of any, a combination of, or all of the following:~~

~~a) use of temporary skidder bridges;~~

~~b) removing culverts prior to the onset of frozen ground conditions;~~

~~c) using water bars in conjunction with culverts;~~

~~d) using road dips in conjunction with culverts.~~

~~iii) Culverts utilized in river, stream, and tributary stream crossings must:~~

~~a) be installed at or below river, stream, or tributary stream bed elevation;~~

~~b) be seated on firm ground;~~

~~c) have soil compacted at least halfway up the side of the culvert;~~

~~d) be covered by soil to a minimum depth of one foot (1') or according to the culvert manufacturer's specifications, whichever is greater; and~~

~~e) have a headwall at the inlet end which is adequately stabilized by riprap or other suitable means to reasonably avoid erosion of material around the culvert.~~

~~iv) River, stream, and tributary stream crossings allowed under Section 5.19.2, but located in flood hazard areas (i.e. A zones) as identified on a community's Flood Insurance Rate Maps (FIRM) or Flood Hazard Boundary Maps (FHBM), must be designed and constructed under the stricter standards contained in that community's National Flood Insurance Program (NFIP). For example, a water crossing may be required to pass a one hundred (100) year flood event.~~

~~v) Exception: Skid trail crossings of tributary streams, within shoreland areas and wetlands adjacent to such streams, may be undertaken in a manner not in conformity with the requirements of the foregoing subsections, provided persons conducting such activities take reasonable measures to avoid the disruption of shoreline integrity, the occurrence of sedimentation of water, and the disturbance of stream banks, stream channels, shorelines, and soil lying within ponds and wetlands. If, despite such precautions, the disruption of shoreline integrity, sedimentation of water, or the disturbance of stream banks, stream channels,~~

shorelines, and soil lying within ponds and wetlands occurs, such conditions must be corrected.

h) Skid Trail Closeout — Upon completion of timber harvesting and related activities, or upon the expiration of a Forest Operations Notification, whichever is earlier, the following requirements apply:

i) Bridges and culverts installed for river, stream, and tributary stream crossings by skid trails must either be removed and areas of exposed soil stabilized, or upgraded to comply with the closeout standards for land management roads in Section 5.19.6 (i) below.

ii) Water crossing structures that are not bridges or culverts must either be removed immediately following timber harvesting and related activities, or, if frozen into the river, stream, or tributary stream bed or bank, as soon as practical after snowmelt.

iii) River, stream, and tributary stream channels, banks, and approaches to crossings of water bodies and tributary streams must be immediately stabilized on completion of harvest, or if the ground is frozen and/or snow-covered, as soon as practical after snowmelt. If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

i) Land Management Road Closeout: Maintenance of the water control features must continue until use of the road is discontinued, and the road is put to bed by taking the following actions:

i) Effective installation of water bars or other adequate road drainage structures at appropriate intervals, constructed to reasonably avoid surface water flowing over or under the water bar, and extending sufficient distance beyond the traveled way so that water does not reenter the road surface.

ii) Water crossing structures must be appropriately sized, or dismantled and removed in a manner that reasonably avoids sedimentation of the water body or tributary stream.

iii) Any bridge or water crossing culvert in roads to be discontinued shall satisfy one of the following requirements:

a) — it shall be designed to provide an opening sufficient in size and structure to accommodate 25 year frequency water flows;

b) it shall be designed to provide an opening with a cross-sectional area at least 3 1/2 times the cross-sectional area of the river, stream or tributary stream channel; or

c) it shall be dismantled and removed in a fashion to reasonably avoid sedimentation of the river, stream, or tributary stream.

If, despite such precautions, sedimentation or the disruption of shoreline integrity occurs, such conditions must be corrected.

5.19.7 Slope Table: Filter strips, skid trail setbacks, and land management road setbacks must be maintained as specified in Section 5.19.5, but in no case shall be less than shown in the following table:

Average slope of land between exposed mineral soil and the shoreland

| | | | | | | | |
|-----------|---|----|----|----|----|----|----|
| (percent) | 0 | 10 | 20 | 30 | 40 | 50 | 60 |
|-----------|---|----|----|----|----|----|----|

Width of strip between exposed mineral soil and shoreline (feet along surface of

| | | | | | | | |
|------------|----|----|----|----|-----|-----|-----|
| the ground | 25 | 45 | 65 | 85 | 105 | 125 | 145 |
|------------|----|----|----|----|-----|-----|-----|