STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY
LAND USE PLANNING COMMISSION
22 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0022

PAUL RICHARD LEPAGE
GOVERNOR

WALTER E. WHITCOMB
COMMISSIONER

DENIAL OF AMENDMENT A TO BUILDING PERMIT BP 15234

The Maine Land Use Planning Commission, through its staff, after reviewing the application and supporting documents submitted by Gregg and Paula Smallwood for Amendment Request A to Building Permit BP 15234, finds the following facts:

1. Applicant: Gregg and Paula Smallwood
   PO Box 343
   Patten, Maine 04765

2. Date of Completed Application: October 14, 2014

3. Location of Proposal: Mount Chase, Town of, Penobscot County
   Taxation Lots #6, #7, and #8 on Plan 11
   As described in a deed recorded in the Penobscot County Registry of Deeds, Bangor, ME in Book 11800, Page 218.

4. Zoning: (D-RS) Residential Development Subdistrict
   (P-FP) Flood Prone Area Protection Subdistrict by Virtue of Section 10.23, C, 2 of the Commission's Land Use Districts and Standards

5. Lot Size: 3.0 Acres (owned)

6. Principal Building: Existing Dwelling (10 ft. by 28 ft. and 14 ft. by 36 ft.)
   w/ Lake-Side Porch (10 ft. by 26 ft.)
   w/ Lake-Side Deck (12 ft. by 20 ft.)

7. Accessory Structures: Existing Garage (20.5 ft. by 24 ft.)
   w/ Attached Shed (9 ft. by 10 ft.)

8. Sewage Disposal: Existing Combined System

9. Affected Waterbody: Lower Shin Pond

   The Commission has identified Lower Shin Pond as a management class 5, resource class 2, accessible, developed lake with the following resource ratings: significant fisheries resources, significant scenic resources, significant cultural resources.

NICHOLAS D. LIVESAY, EXECUTIVE DIRECTOR

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Administrative History

10. The applicants' lot was originally developed with an irregularly-shaped, pre-Commission 10 foot by 28 foot and 14 foot by 36 foot single family dwelling with a 10 foot by 16 foot lake-side porch and 12 foot by 20 foot lake side deck. The lot was also developed with a 20.5 foot by 24 foot garage with attached 9 foot by 10 foot shed of unknown date of construction. In the spring of 2014, the applicants removed the lake-side porch and deck because they were damaged. The dwelling with porch and deck were set back 80 feet from the normal high water mark of Lower Shin Pond, at least 50 feet from Log Haven Road, and at least 15 feet from the property lines. The garage with shed is set back at least 100 feet from the normal high water mark of Lower Shin Pond, at least 50 feet from Log Haven Road, and at least 15 feet from the property lines.

11. On July 16, 2014, staff discovered that the applicants had recently relocated several large boulders to form a retaining wall in front of the dwelling, were actively filling and leveled an approximately 35 foot by 65 foot (2,275 sq. ft.) area within 100 feet of the normal high water mark of Lower Shin Pond, and had recently disturbed and re-graded an approximately 30 foot by 60 foot (1,800 sq. ft.) area within 100 feet of the normal high water mark of Lower Shin Pond, all without prior permit approval from the Commission [Reference: Enforcement Case EC 14-31; Active]. The approximately 4-foot high by 50-foot long boulder retaining wall is setback 54 feet from the normal high water mark of Lower Shin Pond, over 100 feet from Log Haven Road and at least 15 feet from the nearest property boundary line. The wall was not constructed with a layer of geotextile fabric or other suitable material to prevent sediment from washing out from behind the wall. The fill area is located between the retaining wall and the dwelling and also extends to the north as close as 34 feet from the normal high water mark of Lower Shin Pond. The disturbed and re-graded area is located on the south side of the dwelling and extends as close as 15 feet from the normal high water mark of Lower Shin Pond. No erosions control barrier had been installed and none of the filled and leveled area had been stabilized at the time of the inspection. According to photographs submitted with the application, a silt fence was installed and the filled area was mulched prior to July 29, 2014.

12. On July 31, 2014, Building Permit BP 15234 was issued to the applicants for reconstruction of the 10 foot by 16 foot lake-side porch and 12 foot by 20 foot lake side deck in kind and in place.

Proposal:

13. The applicants now seek after-the-fact amendment approval for the vegetative clearing, construction of a 4 foot by 50 foot rock retaining wall, and filling and grading or soil disturbance of approximately 4,075 square feet of their lot within 100 feet of Lower Shin Pond as described in Finding of Find #11, above. The applicants state that the vegetation in front of the dwelling in the filled and leveled area consisted of low bush blueberries and that they removed several dead or dying pine or fir trees in the disturbed and re-graded area, creating an opening in the forest canopy in excess of 250 sq. ft. The applicants propose to restore the natural vegetation by planting 12 blueberry bushes in the newly filled area and 20 fir and pine trees throughout the disturbed and re-graded area and then applying erosion control mulch to the entire area of new soil disturbance, as recommended by the Maine State Soil Scientist. The

applicant has not proposed to remove any of the imported fill material in order to restore the natural grade.

14. The Commission's Land Use Guidance Map for Town of Mount Chase identifies the applicants' property as being within a (D-RS) Residential Development Subdistrict. Additionally, according to the Federal Emergency Management Agency's (FEMA) Flood Insurance Agency (FIA) Flood Hazard Boundary Map (or (FIRM) Flood Insurance Rate Map) for Town of Mount Chase, Penobscot County, the applicants' lot is partially located in an area within the 100 year floodplain (reference the National Flood Insurance Act of 1968 P.L. 90-48, as amended). While the majority of the filling and grading activities are located within the Flood zone area, the applicants' dwelling and other structures are located outside of the Flood zone area.

Review Criteria:

15. Under the provisions of Section 10.23,C,2 of the Commission's Land Use Districts and Standards, the Flood Prone Protection Subdistrict is described as: "Areas located within the 100-year frequency floodplain, also known as areas of special flood hazard, as identified by the Commission after consideration of relevant data including, without limitation, areas determined to be flood prone by state or federal agencies, including the Flood Insurance Studies and accompanying Flood Insurance Rate Maps or Flood Hazard Boundary Maps prepared by the Federal Emergency Management Agency, historical data, and the National Cooperative Soil Survey.

    The areas identified by FEMA as areas of special flood hazard (Zones A, AE, A1-30, VE) on Flood Insurance Rate Maps or Flood Hazard Boundary Maps for townships, plantations, or towns qualify as flood prone areas appropriate for protection within this [Flood Prone Area Protection (P-FP)] subdistrict. The Commission adopts the FEMA maps as listed in Appendix E, and a note on the Official Land Use Guidance Map shall refer to maps so adopted. In any case where the boundaries of the P-FP subdistrict on the Commission map differ from the boundaries of the FEMA zones, the FEMA boundaries shall apply. The FEMA zones shall be regulated according to the provisions of the P-FP subdistrict."

16. 12 M.R.S.A. §682, defines a structure as "anything constructed or erected with a fixed location on or in the ground, or attached to something having a fixed location on or in the ground, including, but not limited, to, buildings, mobile homes, retaining walls, billboards, signs piers and floats".

17. Under provisions of Section 10.26,D,1 of the Commission's Land Use Districts and Standards the minimum setback from waterbodies such as Lower Shin Pond is 100 feet, the minimum setback from roads is 50 feet and the minimum setback from property boundary lines is 15 feet for residential structures.

18. Under provisions of Section 10.11,C,5 of the Commission's Land Use Districts and Standards, the construction of new, detached accessory structures that do not meet waterbody setbacks is allowed with a permit only if the structure cannot be physically sited on the lot to meet the waterbody setback requirement. In this case, the new accessory structure shall meet setbacks to

the maximum extent possible, shall not be located closer to the normal high water mark than the principal structure, shall not be located within 25 feet of the normal high water mark, shall not be located closer than 20 feet to the road in conformance with the provision of Section 10.11,B,6, and shall be of size and height that, when combined with legally existing principal buildings will not exceed the size and height requirements of Section 10.11,C,1,b.

19. Under provisions of Section 10.21,J,3,c,(8) of the Commission's Land Use Districts and Standards, a permit is required for filling and grading of land not in accordance with the standards of Section 10.27,F within a (D-RS) Residential Development Subdistrict.

20. Under the provisions of Section 10.23,C,3,c,(7) of the Commission's Land Use Districts and Standards, a permit is required for filling and grading of land within a (P-FP) Flood Prone Area Protection Subdistrict.

21. Under the provisions of Section 10.27,F, of the Commission's Land Use Districts and Standards, filling and grading activities not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the Subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

22. Under the provisions of Section 10.27,F,5 of the Commission's Land Use Districts and Standards, where filled or graded areas are in the vicinity of water bodies or wetlands such filled or graded areas shall not extend closer to the normal high water mark of flowing, standing, tidal bodies of water, or upland edge of wetlands identified as P-WL1 Subdistrict than indicated in the following table:

Average Slope of Land Between Exposed Mineral Soil and Normal High Water Mark or Upland Edge (Percent)	Width of Strip Between Exposed Mineral Soil and Normal High Water Mark or Upland Edge (Feet Along Surface of the Ground)
10 or less	100
20	130
30	170
40	210
50	250
60	290
70	330

23. Under the provisions of Section 10.27,B of the Commission's Land Use Districts and Standards, vegetative clearing activities not in conformance with the standards of this section may be allowed upon issuance of a permit from the Commission provided that such types of activities are allowed in the Subdistrict involved. An applicant for such permit shall show by a preponderance of the evidence that the proposed activity, which is not in conformance with the

standards of this section, shall be conducted in a manner which produces no undue adverse impact upon the resources and uses in the area.

24. Under the provisions of Section 10.27,B,2 of the Commission's Land Use Districts and Standards, within 100 feet of the normal high water mark of a body of standing water 10 acres or greater in size:

    a. There shall be no cleared opening greater than 250 square feet in the forest canopy as measured from the outer limits of the tree crown. However, a footpath is permitted, provided it does not exceed six (6) feet in width as measured between tree trunks, and, has at least one bend in its path to divert channelized runoff.

    b. Selective cutting of trees within the buffer strip is permitted provided that a well-distributed stand of trees and other natural vegetation is maintained.

    For the purposes of this section a "well-distributed stand of trees" adjacent to a body of standing water 10 acres or greater in size shall be defined as maintaining a rating score of 24 or more in a 25-foot by 50-foot rectangular area as determined by the following rating system. Near other water bodies, tributary streams and public roadways a "well-distributed stand of trees" shall be defined as maintaining a rating score of 16 or more per 25-foot by 50-foot (1250 square feet) rectangular area as determined by the following rating system.

Diameter of Tree at 4-1/2 feet Above Ground Level (inches)	Points
2.0 to < 4.0	1
4.0 to < 8.0	2
8.0 to < 12.0	4
12.0 +	8

    For the purposes of this section, "other natural vegetation" is defined as retaining existing vegetation under 3 feet in height and other ground cover and retaining at least 5 saplings less than 2 inches in diameter at 4½ feet above ground level for each 25-foot by 50-foot rectangular area. If 5 saplings do not exist, the landowner or lessee may not remove any woody stems less than 2 inches in diameter until 5 saplings have been recruited into the plot. In addition, the soil shall not be disturbed, except to provide for a footpath or other permitted use.

Review Comments:

25. The Department of Inland Fisheries and Wildlife has reviewed the application and submitted the following comments;

    "By removing the sediment traps and filters that are characteristic in the undisturbed area around the pond, runoff laden with sediment and phosphorus flows more directly into the pond,

impacting water quality and fish habitat, especially cold-water fish habitat. Lower Shin Pond is rather shallow (22' deep) and has somewhat marginal water quality to support salmonids presently. However, we are presently managing Lower Shin for high quality landlocked salmon and brook trout fisheries through the use of hatchery fish. Rainbow smelt, an important forage species for landlocked salmon, also occur at Lower Shin and declining water quality is of upmost concern for that species as well.

Any incremental decline in water quality compromises our options for fisheries management and our ability to provide fishing opportunity at Shin Pond. Increasing sedimentation of waterbodies can impact shore spawning rainbow smelt populations by covering gravel with silt, especially where there is some spring influence along the shoreline. Sedimentation also can provide substrate for plant growth, and over time settle into the deeper areas of the lake compromising water quality. Because of the relationship between phosphorus and algae blooms and its effect on water quality, every additional source of phosphorus has negative consequences on water quality and fish habitat and our ability to manage the lake for those species.

All of the above mentioned species require cool, well oxygenated water to thrive and produce desirable fisheries. Any lowering of summer water quality will impact salmonids and should be paramount in our efforts at land use regulation in the setback area around any Great Ponds that support those species."

26. The Maine State Soil Scientist has visited the site and has provided the following observations and comments:

"Observations: I observed a significant amount of relatively recent filling and grading that extended to within a few feet of the lake. One section of the filling and grading within 100 feet of the lake included a relatively steep slope. Another section was relatively flat and ended at a boulder retaining wall, at the top of a short but steep banking. It appeared to me that the sloping area had been previously forested as I noted exposed roots and a few stumps plus a couple of remaining trees. The fill material appeared to be very compact gravelly silt loam which was nearly impervious. A few sprigs of grass were growing on parts of the fill but it was too sparse to protect the soil or slow runoff water. The fill at the base of the slope, near the pond, appeared to end at a very bouldery area. I could see down in between the boulders in some places, [to] a depth of a couple of feet. According to the owner, part of the area filled just above this interface was similarly bouldery. He indicated that he removed the boulders, dug a hole, and then buried most of the boulders in the holes. He then used the soil removed to create the hole as fill on top of the area. A few of the boulders were removed and placed elsewhere on the lot. I could see where runoff was washing from the filled area above, down to the bouldery area where [it] filtered into the boulders and then into the lake. I did not observe any erosion from the flat area that was graded and filled.

Recommendations: It is my opinion that sediment laden runoff is making its way to the bouldery area over the sloping filled section of the lot. The sediment is then able to reach the lake through openings between the boulders. My recommendations for this area are as follows:

1. Remove some of the fill near the boulders where it is the deepest. Do not go below the natural grade of the surrounding land.
2. Place a 6" thick layer of erosion control mulch (stump grindings) over the area to be converted back to forest. This should be at least to the top of the steeper slope and/or edge of driveway.
3. Plant trees in the area covered with erosion control mulch. The trees should be native species (not fruit trees) that will create a duff layer and do well on the site such as cedar, fir, spruce, red maple and white birch.
4. Install a diversion to direct runoff coming from the graded area above the mulch to the natural forested area beside the mulched area.
5. Loam, seed and mulch all graded areas which are not intended to remain impervious (such as driveways) upslope of this area.

As for the filled and graded area in front of the camp that is more or less level, I suspect some of this area was fairly level before the recent grading and filling was done. It ends at a short boulder retaining wall, at the top of a short but steep slope that is much further back from the lake than the sloping filled area beside it. The retaining wall suggests that the recent leveling activity extends beyond where it did originally. This area does not appear to be subject to much runoff and I did not see any evidence of erosion or sedimentation coming from the area. While forested buffer is almost always better for water quality than most any other condition, I do not believe this graded area is a significant threat to water quality of the lake. It should however, be stabilized either by loaming, seeding and mulching or the application of erosion control mulch. You [the LUPC] might also want the retaining wall and fill which extends beyond the original level area removed and reclaimed by placing erosion control mulch on the exposed ground and then planting trees in it."

24. The facts are otherwise as represented in Building Permit application BP 15234, Amendment Request A and supporting documents.

Based upon the above Findings, the staff concludes that:

1. The after-the-fact retaining wall is not in compliance with Section 10.26,D,1 of the Commission's Land Use Districts and Standards in that the wall is located less than 100 feet from the normal high water mark of Lower Shin Pond.

2. The after-the-fact retaining wall is not in compliance with Sections 10.11,C,5 of the Commission's Land Use Districts and Standards in that the wall is located closer to the waterbody than the principal structure.

3. The after-the-fact filling and grading activities are not in compliance with Section 10.27,F of the Commission's Land Use Districts and Standards in that the applicants have not shown by a preponderance of the evidence that the filling and grading within 100 feet of the waterbody will produce no undue adverse impact upon the resources and uses in the area. Specifically, the applicants:
    a. Have not proposed to remove any of the graded material that is near the boulders in the disturbed/re-graded area. Sediment has already begun to fall through openings between the boulders where it would be able to reach lake, which is only 15 feet away. In

addition, the applicants have not shown that smoothing and/or leveling out the grade of the disturbed/re-graded area, by removing and burying boulders, would not result in runoff laden with sediment and phosphorus flowing more directly into the pond, impacting water quality and fish habitat, especially cold-water fish habitat.

b. Have not proposed to remove the fill material that was used to level the area between the boulder retaining wall and the dwelling in order to reestablish the natural grade and forest duff layer. Although, not currently showing signs of erosion, without a barrier like filter fabric behind the boulder wall to prevent fine sediment from washing between and around the boulders, there is still the potential for phosphorus export to the lake and algae blooms. Furthermore, the filtering characteristics of the original undisturbed forested/shrubbery buffer have been compromised by adding fill to this area.

4. The after-the-fact vegetative clearing is not in compliance with Section 10.27,B of the Commission's Land Use Districts and Standards in that the applicants have not shown by a preponderance of the evidence that the vegetative clearing within 100 feet of the waterbody will produce no undue adverse impact upon the resources and uses in the area. Specifically, the forested buffer that the applicant removed served as an important filter for water quality and as a sediment trap for materials that wash down from the upper part of the lot. The proposed revegetation will require time before it would fully protect the area from potential adverse effects.

5. The application does not meet the Criteria for Approval, Section 685-B(4), and is not allowed pursuant to Section 685-C(8), of the Commission's Statute, 12 M.R.S.

Therefore, the Commission, through its staff, DENIES the after the fact amendment request of Gregg and Paula Smallwood for 4,075 sq. ft. of vegetative clearing, filling and grading and soil disturbance within 100 feet of Lower Shin Pond.

Any person aggrieved by this decision of the staff may, within 30 days, request that the Commission review the decision.

DONE AND DATED AT ASHLAND, MAINE, THIS 30th DAY OF OCTOBER, 2014.

By: Billee J. MacLeon
for Nicholas D. Livesay, Executive Director