

5.7 **Phosphorus Control Ordinance (PCO)**

- A. **Purpose** – The purpose of the following Ordinance is to provide protection against additional phosphorus export to Taylor Pond and Lake Auburn from new land uses and changes in existing land uses by ensuring that development within the Watersheds does not generate more phosphorus than the water bodies can handle and by eliminating or reducing existing sources of phosphorus.

Phosphorus, a nutrient, stimulates algal growth, the main cause of water quality decline. The primary source of new and increasing phosphorus loading in Maine lakes is land development - residential, commercial and industrial.

B. **Boundaries and Definitions**

1. **Taylor Pond** – The Taylor Pond Watershed regulated by this Ordinance is all land areas within the direct watershed of Taylor Pond as defined on the attached map entitled “Taylor Pond Watershed Map”.
2. **Lake Auburn** – The Lake Auburn Watershed regulated by this Ordinance is all land areas within the direct watershed of Lake Auburn as defined on the attached map entitled “Lake Auburn Watershed Map”.
3. **Direct Watershed** – Any land area which contributes storm-water runoff by either surface or subsurface flow to Taylor Pond or Lake Auburn without such runoff first passing through an upstream lake.
4. **Phosphorus Export Coefficient (F)** – The amount of phosphorus export from the watershed each year that will produce a 1 ppb increase in the lake’s phosphorus concentration. For Taylor Pond, the phosphorus coefficient is 35.26 lbs/ppb/year; for Lake Auburn, the phosphorus coefficient is 109.9 lbs/ppb/year.
5. **Acceptable Increase in Lake Phosphorus Concentration (C)** – is based upon water quality and Auburn’s selected level of protection. For Taylor Pond the number is 0.75; for Lake Auburn the number is 0.5.

6. **Future Area to be Developed (D)** – This is an estimate of the acreage in Auburn’s share of the direct watersheds that will be developed during the planning period of 50 years. For Taylor Pond, the estimated future developed acreage is 715.3; for Lake Auburn, the estimated future developed acreage is 1,180.0.
7. **Per-Acre Phosphorus Allocation (P)** – This is the acceptable increase of phosphorus export per acre in the watershed as determined by solving the following equation $(P) = (FC)/(D)$. For Taylor Pond, the phosphorus allocation is 0.036; for Lake Auburn, the phosphorus allocation is 0.047.

C. **Applicability** – This Ordinance shall apply to all land areas within the direct watersheds of Taylor Pond and Lake Auburn. The following land uses shall be required to obtain a phosphorus control permit and conform to the standards contained in this Ordinance.

1. Any new building or structure with more than 575 square feet of ground floor area.
2. Any expansions or series of expansions of ground floor area of any existing building which increases the area of the ground floor by more than 30 percent of that which exists at the time of adoption of this Ordinance.
3. Any earth moving, brush and tree cutting which impacts 10,000 square feet or more whether accomplished as a single activity or as a series of activities beginning on the date of adoption of this Ordinance shall only meet the criteria contained in Section 5.7.F.
4. Road or driveway construction and reconstruction and parking area construction which affects more than 1,500 square feet of land area whether accomplished as a single activity or as a series of activities beginning on the date of adoption of this Ordinance shall only meet the criteria contained in Section 5.7.F.
5. All projects for which Special Exception, Site Plan and Subdivision Review is required.

D. **This Ordinance shall not apply to:**

1. Changes of use within an existing structure where no ground

floor expansion and/or road, driveway and parking area expansion is planned.

2. Timber management or harvesting operations conducted according to a management plan prepared and supervised by a registered forester (unless required by Article 5.3) or the Auburn Water District.
 3. Agricultural uses conducted according to a soil and water conservation plan approved by the Androscoggin County Soil and Water Conservation District.
- E. **Best Management Practices** – Agriculture, silviculture, mining, chemical use and storage and waste disposal activities should be conducted in accordance with the Best Management Practices (BMPs) as recommended by the Department of Environmental Protection, the Maine Soil and Water Conservation Commission, the Cooperative Extension Service or other appropriate public service agency. New roads and the reconstruction of existing roads, driveways, drainage diversions, ditches and roadside buffers should be designed for the worst storm conditions in accordance with the Best Management Practices (BMPs) recommended by the Department of Environmental Protection, the Maine Soil and Water Conservation Commission, the Cooperative Extension Service or other appropriate public service agency.
- F. **Erosion and Sedimentation Controls** – A comprehensive erosion and sedimentation control plan, including a proposed program for the maintenance and periodic inspection of all control facilities which will remain after the project is completed and a designation of the responsible party, shall be submitted as follows:
1. **Taylor Pond Watershed** – A plan designed in accordance with the applicable sections of Chapter 8 of the DEP Phosphorous Control and Lake Watersheds: A Technical Guide to Evaluating New Development, the latest edition of the Maine Erosion and sediment Control Handbook and Chapter 32 of the Auburn Ordinances.
 2. **Lake Auburn Watershed** – A plan designed in accordance with the applicable sections of Chapter 8 of the DEP Phosphorous Control and Lake Watersheds: A Technical Guide to Evaluating New Development, the latest edition of the Maine Erosion and Sediment Control Handbook, Chapter 32 of the Auburn

Ordinances and criteria of the Auburn Water District or Commission.

- G. **Submission Requirements** – All projects subject to review under the provisions of this Ordinance shall submit a phosphorus control plan and maintenance provisions meeting the standards set forth in the manual “Phosphorus Control and Lake Watersheds A Technical Guide to Evaluating New Development” (Maine DEP et-al., September 1989 with the Simple Review Method revised in May 1990).

1. **Plan Submission**

Plans shall be submitted and processed in accordance with Article 7 of this Chapter. In addition to the requirements for submission under this Article, the following instruction shall be provided:

- a. A long-term maintenance plan for all phosphorus control measures including provisions for inspection and repair, designation of responsible parties, contractual obligations and proposed deed restrictions.
- b. Hydrologic soil class of all areas to be cleared or where clearing will be permitted, with the area indicated in square feet of each lot using the appropriate method as described in the Phosphorus Control Manual.
- c. All calculations and worksheets in the format of those contained in the Phosphorus Control Manual and detailed construction specifications and diagrams for all control measures.
- d. A comprehensive erosion and sedimentation control plan, designed in accordance with the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices, March 1991 and Chapter 32 of the Auburn Ordinances.

2. **Review Method**

- a. All projects shall use the Standard Review Method and shall conform to the Phosphorus Allocation standard set forth in this Ordinance including the following:

- (1) Expansions of four (4) lot subdivisions which were previously approved using the Simple Review Method.
- b. Projects meeting the following criteria may employ the Simple Review Method:
- (1) Minor Subdivisions with four (4) or fewer lots provided that these developments contain less than 200 feet of new or upgraded roads and/or all driveways serving residential uses are less than 150 feet in length.
 - (2) Activity which includes less than 200 feet of new or upgraded road construction.
 - (3) Commercial and industrial development and expansions of commercial and industrial developments and the expansion of multi-family dwelling units, which involve less than 15,000 square feet of disturbed area.
- c. All other subdivisions including expansions of previously approved 4-lot subdivisions which were reviewed using the Simple Review Method and all other projects shall utilize the Standard Review Method.

