

City of Augusta, Maine
DEPARTMENT OF DEVELOPMENT SERVICES

AUGUSTA STATE AIRPORT
CODE ENFORCEMENT
ECONOMIC DEVELOPMENT



ENGINEERING
FACILITIES & SYSTEMS
PLANNING

Memo

To: Planning Board

From: Matt Nazar, Director of Development Services

Date: August 4, 2016

Re: 1988 GMP reference in Environmental Section of Ordinance

Staff recommends the following changes to the LUO. I strongly recommend removing “policies” and other “commentary” from the ordinance to reduce the possibility that these could be understood to be enforceable standards.

§ 300-506 Environmental resources.

The following policies, written in italics, are from the 1988 Growth Management Plan and are included in this section to guide the Planning Board when reviewing projects. Specific performance standards, when included, are written in the standard typeset.

A. *General.*

- (1) New development shall be sited and designed in a manner that will retain the critical functions and interrelationships of ecological systems, including air, water, land, plant and animal resources.*
- (2) Property owners are encouraged to place conservation easements on lands containing natural resources.*

B. *Plant and animal habitat.*

- (1) Buffers of natural vegetation shall be provided adjacent to all wetlands, deer winter ranges, streams, brooks, and rivers in rural areas identified as critical habitat by the Maine Department of Fisheries and Wildlife. See criteria for designating Resource Protection Districts in § 300-316.1C. (Applicant shall consult with the MDF&W in determining the buffer width.)*
- (2) The impacts on wildlife of siting new roads, subdivisions, and intensive development shall be given scrutiny in rural areas and such uses discouraged in areas important to wildlife.*
- (3) A woodland buffer shall be maintained and enhanced adjacent to all major arterials in rural areas to minimize air pollution, except in areas where other public objectives conflict.*

The planting of air-pollution-resistant trees and the retention of pockets of forestland shall be encouraged in urbanized parts of the City. (See Highway Overlay Standards — Reserved.)

C. Soils:

~~(1) See special standards applicable to shoreland areas.~~

~~(2) On sites with marine clay or presumptuous soil formations, developments shall be designed and located to avoid earth slumping.~~

~~(3) On soils with high erodibility, areas of site disturbance shall be minimized and earthmoving and destabilization shall be conducted using best management practices. See air and water quality standards.~~

~~(4) Prime agricultural soil areas of greater than 10 acres shall be conserved, and the removal of topsoil from them is prohibited. Clustered developments shall be required for subdivisions in these areas so that the prime agricultural soils are retained as open space and conserved through conservation easements. If the site contains entirely prime agricultural soils, actual developable area shall be limited.~~

~~(5) Areas with sand and gravel deposits suitable for mining shall be conserved. Clustered development shall be required for subdivisions in these areas so that the sand and gravel deposits are retained as open space. If the site is entirely sand and gravel deposit, actual developable area shall be limited. See mineral exploration — mineral extraction activities standards.~~

D. Steep slopes:

~~(1) Commentary: The 1988 Growth Management Plan outlines the following policy: "Development, other than passive recreation, on slopes steeper than 15% is discouraged. Such development shall require Planning Board review." The plan also includes suggested buffer widths for protecting streams from construction and developmental activities (Table 9). The following discussion is from Preliminary Land Use Constraints Analysis by Southern Kennebec Valley Regional Planning Commission, June 1976:~~

~~(a) Slopes are commonly placed into categories indicating potential limitations to land use:~~

~~0% to 8% flat to gently sloping land, well suited to most kinds of development.~~

~~8% to 15% gentle to moderate slopes; usually well drained and suited to residential development.~~

~~15% to 25% moderate to steeply sloping land, presenting limitations to development and susceptibility to erosion.~~

~~25% and over very steep slopes, causing difficult construction; erosion problems.~~

~~(b) Stable hillsides represent an equilibrium of the geology, slope, soils, vegetation and precipitation in a particular area. When the balance among these factors is disturbed, the result can be increased erosion through loss of slope and soil stability, greater runoff due to alteration of the natural drainage patterns and degradation of an aesthetic resource because of erosion, removal of vegetation and other factors.~~

~~(e) Erosion depends to a large extent upon the degree of slope, soil type and condition, and vegetative cover. The greater degree of slope, the more susceptible the hillside is to erosion. The length of slope also affects the rate of erosion although to less an extent than the degree of slope.~~

~~(d) Generally, soils with low permeability or with little capability for absorbing or retaining water are more susceptible to erosion. This condition can be exacerbated by loss of vegetative cover. Vegetation aids slope stability through the binding action of root systems as well as by the consumption of water. Disruption and removal of vegetative cover can cause stepped up erosion through the loss of root systems and the saturation of soils by excess water. The increase in water content in the soils, in addition to exaggerating erosion, may contribute to slides or slumps in areas of steep slopes.~~

~~(e) The stability of hillsides depends in part upon a stable drainage system. A mature, vegetated hillside has a relatively stable drainage pattern which changes slowly as gradual erosion alters the slope. This is in contrast to disturbed slopes where loss of vegetation and exposed soils results in runoff seeking new channels of flow.~~

~~(f) The approach to regulation of steep slopes aims at avoiding the hazards described above by maintaining to the extent possible the equilibrium established on hillsides. Three regulatory methods are possible. The first involves slope density provisions. This method defines what degree of developmental density may occur in areas of various slopes. Generally, the greater the slope, the less the area may be developed. The rationale is that, other factors being equal, as slope increases so does potential degradation of the environment through increased probability of runoff, erosion, sedimentation and slope failure. The effect is to encourage development in areas of gentle slopes through restricting development from areas of steep slopes.~~

~~(g) A second regulatory method utilizes performance standards in hillside development.~~

(2) In areas of steep slopes (as defined), the following standards shall apply:

(a) Any application to construct a principal structure on slopes greater than 15% shall be accompanied by an engineered site plan, building plan and a landscape plan developed by a qualified licensed professional, such as, but not limited to, an engineer, architect, or landscape architect. Along with requirements for a site plan outlined in Part 6 of this chapter, the application shall include information on soil type and existing vegetative cover. Such building permit shall not be issued without Planning Board approval.

(b) All development on slopes covered by these standards shall comply with the applicable standards outlined in § 300-514B, Water quality.

(c) See the overlay standards in § 300-529, Capitol View District.

(d) See the special shoreland standards outlined in § 300-528J(3) and O(2)(f) for additional requirements applicable in shoreland overlay districts.

(e) Guiding principles (modified from the Lake County, Illinois ordinance):

[1] Fifteen to less than 20% slope. At least 60% of such areas shall remain as open space. No more than 40% of such areas shall be developed and/or regraded or stripped of vegetation.

~~[2] Twenty to 30% slope. At least 70% of such areas shall remain as permanent open space. No more than 30% of such areas shall be developed and/or regraded or stripped of vegetation.~~

~~[3] More than 30% slope. At least 85% of such areas shall remain as permanent open space. No more than 15% of such areas shall be developed and/or regraded or stripped of vegetation.~~

E. Water resources. See § 300-514, Air and water quality standards.