



BASELINE DEVELOPMENT SCENARIO FOR THE PLUM CREEK MOOSEHEAD PROJECT LANDS

Discussion Paper No. 1

Open Space Institute
Industrial Economics, Inc.

DRAFT -- 15 March 2006

EXECUTIVE SUMMARY

Plum Creek's Moosehead Lake Region Resource Plan is the largest development proposal ever considered by the Land Use Regulation Commission (LURC) in Maine's unorganized territories. The April 2005 proposal (which is now being revised by the company) covers 426,000 acres and includes the proposed subdivision and development of 975 residential lots. Plum Creek is seeking approval of the project from LURC not as part of LURC's traditional zoning and subdivision process but rather as a *lake concept plan*. This paper estimates the amount of potential development on Plum Creek's Moosehead Lake project lands under the various rezoning and subdivision options currently available to landowners in the Maine unorganized territories. The analysis suggests that, applying a mix of these approaches instead of a concept plan over the next 30 years and *assuming no major changes in land use regulations*, Plum Creek would still have the ability to develop between 447 and 800 lots on their Moosehead lands. These totals are fewer than have been initially proposed by Plum Creek in their lake concept plan, but would also require less permanent conservation. The assumption of no major changes in land use regulations is an important qualifier to these estimates. Future changes to existing zoning policies (*e.g.*, prospective zoning for the Moosehead region, legislative changes to the two-in-five provision) are certainly possible and could have substantial impact on Plum Creek's development opportunities on their Moosehead lands.

These are draft discussion papers and are being revised as we receive input on their content. We encourage you to provide us with comments and suggestions on the papers and to indicate your interest in receiving updates by emailing Peter Howell at phowell@osiny.org. We will post revised versions on this website in April.

INTRODUCTION

The Open Space Institute (OSI), in collaboration with Margaret Chase Smith Center at the University of Maine and Industrial Economics Inc., has embarked on a research initiative analyzing Plum Creek Timber Company's Moosehead Plan and potential alternatives to the company's proposal. This discussion paper, the first in the OSI series addressing Plum Creek's proposal, examines the development opportunities potentially available to Plum Creek through traditional zoning and subdivision practices. The results of this work serve as a starting point for the additional analysis of the financial impacts to Plum Creek of proposed and alternative development approaches and the value of the company's conservation commitments. These will be outlined in two subsequent working papers.

As detailed in this paper, there are many assumptions and uncertainties involved in projecting future development patterns in Maine's unorganized territories. It is anticipated that the findings and conclusions of this discussion paper will evolve as more information becomes available and these issues are discussed further. This paper only considers the residential development component of the Plum Creek Moosehead proposal and does not look at other development proposals included in the plan such as resorts, campgrounds, and sporting camps.

Plum Creek's Moosehead Lake Region Resource Plan is the largest development proposal ever considered by the Land Use Regulation Commission (LURC) in Maine's unorganized territories. The April 2005 proposal (which is now being revised by the company) covers 426,000 acres and includes the subdivision and development of 975 residential lots, two resorts, as well as sporting camps, campgrounds, and affordable housing and mill sites. Plum Creek has also proposed a variety of conservation measures, including conservation easements on undeveloped shoreline, protected trail corridors, and 30-year no-development provisions on a large expanse of forestland.

Plum Creek is seeking approval of the project from LURC not as part of LURC's traditional zoning and subdivision process but rather as a *lake concept plan*. LURC established the lake concept plan "as a flexible alternative to traditional shoreland regulation, designed to accomplish both public and private objectives. Lake concept plans are landowner-created, long-range plans for the development and conservation of a large block of shoreland on a lake or group of lakes" (LURC Comprehensive Land Use Plan, 1997). Evolution of lake concept plans has resulted in their use not only on shorelands but on backlands as well.

A key criterion for approval of a lake concept plan is a determination by the Commission "that the plan strikes a reasonable and publicly beneficial balance between development and conservation of lake resources, and that, taken as a whole, the plan is at least as protective of the natural environment as the development, management, and protection subdistricts which it affects."

The sheer size and scope of the Plum Creek proposal has generated widespread public interest and significant concerns from a range of organizations and individuals. In considering such a large-scale proposal, it is reasonable to ask what type and amount of development Plum Creek might be able to do on their lands absent a lake concept plan. This issue is of significance not only to the LURC Commissioners who will ultimately decide whether Plum Creek's proposal represents a favorable balance between development and conservation, but also to members of the general public trying to weigh the pros and cons of the project. Regardless of how it may be defined in the media, the issue before LURC and the public is not necessarily one of development versus no development. In all likelihood, if Plum Creek's lake concept plan proposal is turned down or withdrawn, we would expect the company to search out other regulatory avenues to develop portions of their Moosehead area land base.

Trying to determine a “baseline development scenario” (i.e., the term we apply to development that would likely be permitted by LURC without a lake concept plan) is also critical to the financial analysis of alternatives being conducted by the Open Space Institute. As will be discussed in greater detail in OSI Discussion Paper No. 2, we do not expect that Plum Creek will give serious consideration to alternatives that yield a financial return significantly less than what is likely under more traditional development approaches. Consequently, the financial returns under the scenarios discussed in this paper provide an important reference point for any alternatives analysis.

More generally, OSI believes that objective analysis to determine what a baseline development scenario might look like can help provide the appropriate context for consideration of the Plum Creek proposal and alternatives that may emerge. **Nonetheless, we are also very aware that projecting future development patterns and trends across a land ownership in the LURC jurisdiction is an inexact science that relies on numerous assumptions and estimates.** As such, the scenarios discussed below should be viewed as general indicators of development levels rather than firm projections.

DEVELOPMENT OPPORTUNITIES NOT REQUIRING LURC APPROVAL

Two-in-Five Land Divisions

Under Maine Law, landowners in the unorganized territories are permitted to divide their land to a limited extent without first having to obtain subdivision approval from LURC, which can be a difficult and costly process. The so-called “two-in-five” provision defines a subdivision as the creation of three or more lots in any five-year period. This allows a landowner to create two parcels of land in a five-year period without triggering a subdivision, thus the label of “two-in-five.” Traditionally, large landowners have used the two-in-five exemption to occasionally split off a lot here and there across their ownership to create a camp lot or sell a non-strategic parcel.

LURC considers a parcel of land to include all contiguous ownership within a township. Depending on the configuration of the landownership within a township (divisions created by public roads, railroads, great ponds, *etc.*), the landowner may have several parcels within a single township. A landowner may create one new lot in a given five year period on each defined parcel. Under certain circumstances the creation of a second lot may be permitted.¹

When viewed purely as a mathematical exercise, the two-in-five provision can provide the opportunity for large landowners like Plum Creek to create a significant number of lots over time. For example, if a landowner has three distinct parcels within a township, he or she could potentially create at least one lot per parcel every five years, which over 30 years (the length of Plum Creek’s development proposal) would allow for at least 21 lots (3 lots every five years over thirty years and one day) within that township. Large landowners like Plum Creek typically own land in dozens of townships creating the opportunity for substantial numbers of lots across the landscape.

At the request of the Legislature, LURC is currently researching the extent of two-in-five land divisions within the unorganized territories over the past two decades. The final results are not yet available. The preliminary data suggest, however, that aggressive use of the two-in-five provision has been localized. It appears that large landowners, such as Plum Creek, have not used the two-in-five exemption to create

¹ LURC regulations allow a lot retained by the landowner for a period of five years and used solely for forestry, agricultural or conservation purposes to be exempt from the two-in-five calculation.

large developments across their ownerships; rather it has been used for occasional lot divisions. The reasons for this include:

- Landowners do not want to fragment their land base in a way that will disrupt their primary business of timber production;
- Many lots that are legally feasible are not well suited for development and/or have little development value;
- The cost of providing infrastructure (roads and utilities) to scattered lots is prohibitive; and
- Excessive use or abuse of the two-in-five provision would likely result in statutory changes that would limit its use (as occurred when the forty-acre lot exemption was abused) and ultimately harm large landowners.

It is important to note that LURC has little regulatory control over lots created by the two-in-five provision. Consequently, such lot creation can result in scattered, haphazard development patterns that may lead to the construction of camps and houses on high-value, remote lakes or in highly scenic areas. Furthermore, it is reasonable to expect that some lots created under the two-in-five provision would be high-priced “kingdom lots” encompassing entire ponds in order to maximize financial return to the landowners. Under two-in-five divisions, while the pace and amount of development is substantially restricted, the location and impact is not. Furthermore, unlike concept plans, a landowner developing under two-in-five is not required to take any specific conservation measures when creating a lot.

Application to Moosehead Plan Area

According to its own analysis, Plum Creek owns approximately 65 separate parcels within the 29 townships included in the concept plan area. In terms of mathematical possibilities, this would allow the creation of more than 450 lots over a 30-year timeframe. History suggests a more modest use of the two-in-five exemption over large ownerships, however, for the reasons cited above. For the purposes of framing a reasonable baseline scenario, we estimate that Plum Creek could be expected to create between 20 and 40 percent of the hypothetical maximum two-in-five build-out, with lot creation spaced evenly over the 30-year period (and a clear possibility of more lot creation in subsequent years). We would estimate that the majority (75 percent) of the two-in-five lots would be shorefront lots to maximize value. Applying these judgments suggests that Plum Creek would create between 90 and 180 lots over the next 30 years using a two-in-five approach. Since two-in-five lots require no LURC approval, we assume that in the baseline Plum Creek does not create dedicated conservation land as part of this strategy.

DEVELOPMENT OPPORTUNITIES REQUIRING LURC APPROVAL

Adjacent Subdivisions

Within the LURC jurisdiction, subdivisions are only permitted in Development Subdistricts with the exception of Level 2 Subdivisions described below. Generally speaking, LURC has not done prospective zoning for development in the unorganized territories except for the Rangeley Lakes region. Consequently, to seek a subdivision permit for a residential development, landowners must typically first seek approval to rezone land from a Management or Protection Subdistrict to a Development Subdistrict. LURC has numerous criteria that a rezoning petition must meet. The criterion that most significantly

limits the location and size of a subdivision is the so-called “adjacency” principle, which generally only allows rezoning for development within one mile (by road) from existing compatible development (usually an existing Development Subdistrict). The adjacency rule greatly limits the potential location of new subdivisions to a small portion of the jurisdiction. Furthermore, the “existing compatible development” component of the adjacency rule typically limits the size of a subdivision to that which is compatible with nearby development and may limit certain features such as access (water versus road), utilities, and character of development (large year-round homes versus small seasonal camps). This suggests, for example, that if there is an existing development composed of a dozen seasonal camps, LURC is unlikely to approve a proposed 40-lot subdivision nearby.

Application to Moosehead Plan Area

According to a LURC staff analysis completed in 2005 (Moosehead Region Lake Concept Plan – LURC Staff Analysis; January 28, 2005), Plum Creek’s Moosehead region ownership includes lands “adjacent” to existing development on or near four lakes: Moosehead Lake (multiple locations); Brassua Lake (one location), Prong Pond (one location) and Upper Wilson Pond (one location). LURC also raised the possibility of adjacency being met on Penobscot Pond. LURC has since refined its analysis and identified several situations where adjacent subdivisions would likely be seriously restricted in order to meet the requirement for “existing compatible development.” For example, the existing development on Moosehead Lake in Big W Township consists of seasonal camps that have water access only. Consequently, in that area it is likely to prove challenging for a landowner to use the adjacency criteria to create a new subdivision of large homes with road access and utilities.

Plum Creek’s 2005 lake concept plan proposal includes proposed development in numerous locations that do not meet LURC’s adjacency criteria. In addition, the type of development proposed by Plum Creek in certain adjacent locations may not meet LURC’s requirement that such development be compatible with existing development.

One can broadly estimate the additional development that might be reasonably permitted by examining the amount of existing development on these lakes (both on Plum Creek lands and other lands) and LURC’s overall density limits for the water body (1 residential unit per 400’ of shoreline or 1 unit per 10 acres surface water area, whichever is less). Using this approach, we roughly estimate that approximately 90 to 136 shorefront lots and 62 to 94 back lots could be developed over the plan period through creation of adjacent subdivisions. No adjacent subdivision lots were attributed to Brassua Lake. Instead, the potential development of Brassua Lake is considered under the Management Class 3 Lake analysis below.

While conservation is not specifically required for a LURC rezoning or subdivision permit, landowners often incorporate conservation lands in their proposals to help facilitate a favorable response to their development applications. Conservation proposals associated with rezoning petitions and subdivision applications typically protect valued resources in close proximity to the proposed development and tend to be less expansive than the scope of conservation measures generally seen as part of a successful lake concept plan. While recognizing this as a real possibility, absent better information we have not attempted to quantify a specific amount of conservation land to be included with the subdivisions in the baseline.

Development on Management Class 3 Lakes

As part of its Lake Management Program, LURC identified a limited number of the lakes throughout the jurisdiction as “Potentially Suitable for Development.” These so-called Management Class 3 lakes are considered by LURC as those that could be suitable for further development based upon an examination of water quality, access, conflicting uses, shoreland availability, water level fluctuation, location, and

regional considerations. In its comprehensive plan, LURC states that it “supports additional responsible development around Class 3 lakes, yet will take care to ensure that their significant resource values are conserved.” Of particular importance, LURC will waive the adjacency criterion for development proposals on these lakes provided that it can be demonstrated that the lake has no existing or potential water quality problems and that soils are suitable for development. The waiver is strictly limited to shoreland lots and does not include backland acreage.

Application to Moosehead Plan Area

Plum Creek owns substantial shorefront acreage on three of the Class 3 lakes in the Moosehead Region: Brassua Lake (38 miles of shore frontage), Long Pond (13 miles of shore frontage) and Indian Pond (5 miles of shore frontage). The Comprehensive Land Use Plan does not offer clear guidance as to what level of development might be permitted in cases such as Plum Creek's where there is expansive ownership on Class 3 lakes, and there are few precedents on which to draw. The maximum build-out allowed by LURC on Plum Creek lands located on the three Management Class 3 lakes is 723 units. Based on our understanding of the very limited guidance and precedent from LURC addressing development on these lakes, we judge that LURC might permit between 20 percent and 40 percent of this potential build-out spaced over a 30-year period, or between approximately 145 and 290 shorefront lots. We also anticipate that LURC would require meaningful conservation measures to protect important resources associated with the proposed development, although we have not tried to estimate the extent of such conservation commitments.

Level 2 Subdivisions

Level 2 Subdivision is a very new LURC development option that allows small subdivisions in certain designated locations to occur without a zoning change. Level II subdivisions are limited to a maximum of 5 lots, or up to 15 lots if designed as a cluster development. The total size of a Level 2 subdivision is limited to 20 acres (30 acres if a cluster development) and lakeshore frontage is not allowed. Level 2 subdivisions are only permitted in certain townships and must be within 1000 feet of a public road and within one mile of an existing compatible development. Because this provision is so new, there is no experience or precedent to determine how often LURC will allow a landowner to seek Level 2 subdivision permits in an area.

Application to Moosehead Plan Area

Level 2 subdivisions are permitted in five of the 29 townships included in Plum Creek's plan. Plum Creek owns land that appears to meet the requirements for Level 2 subdivision development in four of these townships. LURC regulations permit a landowner to develop a Level 2 subdivision every five years. It is not known whether those areas on Plum Creek's ownership that are potentially eligible for Level 2 subdivisions include suitable and attractive development sites. Assuming that two to three Level 2 subdivisions per eligible area were developed over a 30-year period, it is estimated that between 60 and 100 back lots could be created over a 30-year period. If a Level 2 subdivision is proposed with up to five lots, no conservation is required. If between 6 and 15 lots are proposed, it must be designed as a cluster subdivision, which requires permanent protection of at least 50 percent of the developable land and shoreline.

HISTORICAL DEVELOPMENT TRENDS IN THE REGION AND IMPLICATIONS FOR FUTURE DEVELOPMENT

As described above, under existing regulations Plum Creek has substantial opportunities for development in the Moosehead region even absent approval of a lake concept plan. In most cases, however, these are largely hypothetical rather than assured opportunities, subject to a wide range of site factors and future permitting decisions. Another way to get a feel for the amount of development that might reasonably be expected to occur throughout Plum Creek's ownership absent a 30-year lake concept plan is to look at development in the region over the past 30 years.

Plum Creek provides the starting point for such an analysis in its LURC application. Focusing on an area encompassing 59 townships (29 townships that encompass the Plum Creek lands included in the proposed plan and an additional 30 townships beyond the boundaries of the plan), Plum Creek tabulated the number of new residences over the past 30 years and number of new lots created over the past 20 years. The company rationalized use of the larger area because Plum Creek's ownership is so dominant in the project area townships and the company (and the preceding landowners) purposely chose not to actively subdivide and develop these lands. The findings were as follows:

- 1,125 new residences were built over the past 30 years; and
- 1,553 new lots were created over the past 20 years.

In evaluating these numbers, several additional factors need to be considered. An estimated half of the lots that were created and a third of the residences constructed were the result of certain landowners (not Plum Creek or its predecessors) using the so-called "40-acre loophole" to avoid LURC oversight. This exemption in the state's subdivision law has been closed by the Maine Legislature as a result of the egregious abuse that is reflected in these numbers. Dropping the 40-acre lots over which LURC had little control, the figures indicate that approximately 750 new residences have been built over the last 30 years across an area encompassing about 1.4 million acres. An estimated 775 lots were created over this same area over the past twenty years (there is considerable overlap between these and the 750 residences constructed over the past 30 years). Plum Creek's ownership within the Moosehead Plan area encompasses about one-third of the land considered by this analysis. Applying this proportion, one could attribute 250 new residences over the past 30 years to a land base the size of Plum Creek's and 258 lots over the past 20 years. This translates into a rate of 8 to 9 new residences per year and 13 lots per year. Projecting this rate of subdivision and development on the Plum Creek lands out over the next thirty would result in a total of about 250 residences and 390 lots.

While the historical perspective provides some insights into rates of subdivision and development in the region, it should not be used as a strict guide to the future. Factors such as the major shift in forestland ownership and increased market demand for second-home properties will inevitably result in the evolution of new trends. That said, the historical rates of development provide an additional perspective from which to view future development on the Plum Creek lands.

OTHER FACTORS POTENTIALLY AFFECTING PLUM CREEK'S FUTURE DEVELOPMENT OPPORTUNITIES

Relying solely on an analysis of existing LURC policies provides a useful but necessarily imperfect vision of future residential development opportunities available to Plum Creek absent a lake concept plan. Public policy surrounding North Woods issues is continually evolving and there are several ongoing or

planned policy initiatives that could substantially alter the landscape for future development in the Moosehead Lake region.

New Comprehensive Land Use Plan

LURC is in the process of a 10-year update of its Comprehensive Land Use Plan (CLUP), which provides the foundation for future zoning and permitting actions. Recognizing changes to land ownership and increasing development pressures, the Commission is exploring new strategies for guiding and managing development. In fact, it is quite likely that the public interest generated by Plum Creek's Moosehead proposal will have an impact on revisions to the CLUP. It is anticipated that LURC will likely want to expand its capacity to guide and manage growth. At this point in time, however, it is not clear how this may impact the future development potential of Plum Creek's Moosehead ownership.

Moosehead Region Plan – Prospective Zoning

Even before Plum Creek developed its lake concept plan proposal, LURC had plans to develop a prospective zoning plan for the Moosehead Lake region based on the model first implemented in the Rangeley Lakes region. Such a plan would prospectively designate development subdistricts and development standards, while making future zone changes very difficult. The 1997 CLUP update included a Moosehead Plan in its “to do list.” Since Plum Creek unveiled its Moosehead proposal, there has been a growing insistence from various interest groups and individuals for LURC to develop a Moosehead plan. In fact, there was a petition calling for a moratorium on development proposals until such a plan is put in place. While the Commission denied the petition, there does appear to be strong momentum for LURC to embark on a plan in the near future. Such a plan would provide landowners with certainty about where development would and would not be permitted. Whether and how such a plan might affect the Plum Creek's Moosehead development proposal is unclear.

Legislative Changes

There is always a possibility that the Maine Legislature will take actions that substantially alter LURC's ability to control development. The most important recent example of this was the passage of laws eliminating (for the most part) the 40-acre lot exemption, which was being widely abused by a number of land speculators and developers. As mentioned above, the Legislature has already directed LURC to examine the use of the two-in-five provision and report its findings back to the Legislature for possible action. If landowners aggressively take advantage of the “two-in-five” exemption or some other strategy to bypass LURC's regulatory oversight it is likely that the Legislature will respond. While it is impossible to predict whether and how the Legislature might act, it is fair to say that the trend over the years has been to take actions that enhance rather than diminish LURC's ability to guide development.

Public Response to Plum Creek's Proposal

Plum Creek's Moosehead proposal has captured the public's attention more than any other Maine Woods issue in recent years. Regardless of the outcome of the project, it is likely that the ongoing public debate will have a significant impact on future development projects in the unorganized territories, particularly in the Moosehead region. We have already seen evidence of this in the level of attention that has been focused on the Burnt Jacket development proposal on Moosehead Lake. There is no doubt that any future Plum Creek development proposals will undergo a higher level of public scrutiny than they would have previous to the submission of the company's Moosehead proposal.

CONCLUSIONS

Plum Creek Timber Company elected to propose a lake concept plan to the Land Use Regulation Commission that would provide a comprehensive development and conservation plan for their land holdings in the Moosehead region. This discussion paper highlights the fact that Plum Creek could seek to develop their Moosehead area lands using one or more other land division pathways permitted under LURC regulations. The various development strategies described above are not mutually exclusive—several or all of the strategies could conceivably be pursued at once. Combining the various estimates presented above into such a multi-faceted approach suggests that under existing land use policies, and absent an approved concept plan, Plum Creek would still have the ability to achieve a significant level of development on their Moosehead lands. Table 1 presents a comparative summary of the estimated opportunities.

Table 1 Estimated Plum Creek Development Through Existing Zoning and Subdivision Processes		
Lot Type	Plum Creek's April 2005 Proposal	Combined Opportunities Without Concept Plan
Shorefront	575 lots	303 - 561 lots
Back Lots	400 lots	144 – 239 lots
TOTAL	975 lots	447 – 800 lots

Others, particularly those with a specific agenda to advance, could undoubtedly come up with build-out scenarios that would diverge significantly from that presented in this paper. At one end of the spectrum, an analysis determining the hypothetical number of lots that could be created under existing laws and regulations would likely end up with several thousand lots. Alternatively, one could argue that while LURC regulations do permit large landowners to pursue these various development options across their holdings, there is no recent example of a large landowner aggressively pursuing development of their land on several fronts. If the pace of development were to far exceed historic norms, the result could be the type of public resistance that emerged in response to Plum Creek’s initial proposal, which could in turn compel LURC to develop a restrictive Moosehead regional plan or take other actions that will restrict development to historic levels or even less.

Nevertheless, the totals cited above clearly suggest that Plum Creek could potentially develop a substantial number of residential lots with less permanent conservation absent a lake concept plan. There is, however, a high level of uncertainty as to the amount and location of development that Plum Creek may be able to achieve through these other options -- uncertainty which is generally not welcome when planning a company’s financial future. Moreover, the alternatives to a lake concept plan generally require that development occur incrementally over an extended period of time, which lowers the net present value of that development to the company and lessens their ability to take advantage of a hot real estate market, as will be discussed in OSI’s second discussion paper.

From a conservation perspective, it is clear that the two-in-five development option that Plum Creek could pursue would likely result in a scattered piecemeal pattern of development, some of which could occur with minimal LURC oversight in sensitive locations such as undeveloped ponds. The other development options are location-focused and limit the spread of development to outlying areas. In fact,

it appears that some of the development included in Plum Creek's original proposal would not be allowed under traditional zoning and subdivision policies. The lake concept plan requires that landowners provide a balance of development and permanent conservation. Other LURC development options do not require as clear of mandate for permanent conservation set-asides.

We hope that this discussion paper provides readers with a better context for evaluating Plum Creek's proposal and understanding the costs, benefits and risks associated with the company's plan and other alternatives that may emerge in the coming months.

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