

L. LAND USE

1. Purpose

This section discusses current and likely future land use patterns in Orland. An understanding of land use trends is very important in determining Orland's ability to absorb future growth. Specifically, this section:

- a. summarizes major categories of land use (residential, commercial, and the like) in terms of estimated acreage and location;
- b. discusses major changes in Orland's land use patterns and how these might affect future land use; and
- c. identifies land areas suitable and unsuitable for the growth likely over the next ten years.

2. Key Findings and Issues

Orland has nearly 28,332 acres of vacant land, about 96 percent of its total land area. About half of the total land area has soils that either have a low potential or very low potential for low density development. There is still, however, ample vacant land with soils well suited for development. Orland thus has an opportunity to grow while still retaining its rural character.

Since a relatively slow growth rate is presently projected for the town over the next ten years, just under 400 additional acres is likely to be converted to developed uses by the year 2008. The challenge facing the town is thus not so much the volume of new development as how and where this development will occur. Specifically, the town will need to address how it wishes to deal with additional commercial development, conversion of farmland to other uses and the nature of new residential development.

3. Public Opinion Survey and Community Workshop Results

Sixty-two percent said that the rural way of life was "very important" and 27 percent said it was important. There were also many comments about the quiet, peaceful atmosphere and the vast areas of woods. While some respondents expressed the need for regulations to retain the rural character, others said they were concerned about excessive regulations.

About 65 percent favored measures to protect forest land and 59 percent supported such measures for farmland. While most respondents favored allowing most types of development (e.g., residential, commercial, light manufacturing) at least somewhere in town, there was less support for heavy industrial operations. Thirty-two percent wanted such uses nowhere in town. However, another 45 percent favored such uses in "designated areas."

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4. Major Categories of Land Use

Orland is a predominantly rural town (see Map 4). Of the approximately 29,000 acres of total land area, just under 1,100 acres (about 4 percent) are in residential uses. This figure is based on an estimated 1,085 year-round and seasonal dwellings in 1998 multiplied by an average lot size of 1 acre. While many homes in town are built on larger lots, the average is used since there could be further subdivisions of the larger lots.

As seen in Table L.1, the other developed-land-use categories account for even less acreage. Commercial uses account for approximately 50 acres. This is based on a rough count of commercial uses during a land use survey by the comprehensive planning committee. This estimate does **not** include home-based businesses.

Table L.1 Existing Land Use, Orland 1998		
Category	Estimated Acreage	Percent of Total Land Area
YEAR-ROUND RESIDENTIAL:		
Single Family	639	2.18%
Mobile Homes	99	0.34%
Multi-Family	0	
TOTAL YEAR-ROUND	738	2.52%
SEASONAL RESIDENTIAL		
Single Family	286	0.98%
Mobile Homes	8	0.03%
TOTAL SEASONAL	294	1.00%
TOTAL RESIDENTIAL	1,032	3.52%
Commercial	50	0.17%
Public	0	
Semi-Public	0	
Industrial	3	0.01%
TOTAL DEVELOPED LAND	1,085	3.70%
Undeveloped Land	28,247	96.30%
TOTAL LAND AREA	29,332	100.00%
SOURCE: Analysis by the Comprehensive Planning Committee and the HCPC.		

Public uses are based on the actual acreage of public land from the tax

assessor's records. Semi-public refers to other tax-exempt uses such as churches and non-profit organizations. These figures are also taken from the tax records. All other land in town is considered undeveloped, including land held in tree growth, farm, and open space taxation since this land is not permanently restricted from development.

5. Land Use Patterns

This section discusses land use patterns in the various parts of town. Specific problems or needs facing each part of town are identified. It is important that these be reflected in the comprehensive plan.

a. The Lakes

Orland's lakes have attracted considerable year-round and seasonal development along their shores. Toddy Pond is particularly heavily developed with relatively few vacant lots. Most of the undeveloped areas have either poor soils and/or steep slopes.

While Alamoosook lake does have some concentrations of development, it also has homes on larger lots, which could be subdivided. Since there are few roads serving most of the undeveloped shorefront areas of this lake, they would be fairly expensive to develop. Most future development is thus likely to take place away from the immediate shorefront.

Many of the smaller ponds have relatively undeveloped shores. In the case of Heart Pond, the undeveloped portion generally has poor soils. Here again, more development may take place in the rest of the watershed. While only a portion of Craig Pond is heavily developed, the undeveloped portion generally has soils with a medium potential for development. Here again, road access presently limits the development potential of these areas.

In planning for the future, it is important to consider lake watersheds as a whole rather than just the waterfront. As mentioned in the *Water Resources* section, activities any place in the watershed could affect phosphorus loading in a lake. As shorefront properties become developed, properties near the water or with good waterviews are likely to become more desirable even if they don't have shorefrontage. Thus, more development could take place in the lake watersheds away from the shore.

b. Routes 1 and 3

While this corridor has maintained a relatively undeveloped appearance, it does have some scattered commercial development as well as limited residential uses. Since Bucksport and Ellsworth have both seen increased commercial development along their portions of this highway, Orland could face more such development in the future. Scattered commercial development along the highway could mean increased traffic congestion and loss of a critical part of the town's rural character. The town needs to decide what steps, if any, it will take to deal with this challenge.

c. The Coastline

The Castine Road area already has substantial development. There are, however, many larger lots that could be subdivided. There are also some vacant lots. While the soils in much of this area are poor, there is an area of medium potential soils adjacent to the South Orland village area. This village thus may have considerable potential for development in the future.

While much of the Leaches Point area has poor soils, there are also concentrations of medium potential soils with larger lots. There is thus the potential of further subdivisions in these areas. As mentioned in the *Marine Resources* chapter, the marine water quality in this area needs improvement. This could affect the development potential of this area.

d. Orland Village

Orland village has many older homes of historic interest. In fact, there have been preliminary discussions with the Orland Historical Society about designating a portion of the village as a National Register Historic District. The village church is a frequently photographed landmark and representative of the highly scenic nature of this part of town.

The recent expansion of the Bucksport sewer into this area eliminated much of the problem posed by malfunctioning septic systems. The area's potential could be further enhanced by development of a park along the Narramisc River. This option has been discussed by various residents in the past.

The village contains a mixture of commercial, residential and public uses. For example, the town office and school are at the edge of the village area. It was once the commercial center of the town, but now has several vacant structures. Two factors that limit its commercial expansion are the lack of parking and high-speed truck traffic.

e. Route 15

This road offers large expanses of soils with medium potential for development. It has many large, cleared parcels that would be easy to subdivide. Since many of these parcels offer good views of the surrounding countryside, they have value as house lots.

Many of these parcels, however, are currently used for farming. Continued development in this area could result in the loss of farmland. Orland shares this area of highly productive farmland with Penobscot and Blue Hill.

Also, since traffic along Route 15 generally travels at high speeds, there is the potential for increased accidents if there are many individual driveways connecting directly to the highway. These problems may worsen when the planned state improvements to this highway are completed and travel speeds increase.

f. Other Major Roads

Most development elsewhere in town has occurred along the major roads. As mentioned under the description of Route 15, this increases the risk of accidents. The major roads, however, are attractive for home buyers since they offer good road access.

There has, however, been less development immediately off these major roads. The town subdivision ordinance could be written to encourage developers to provide lots with a common access road rather than single driveways on the main road. Since such developments normally offer greater setbacks from a main road, they tend to be preferred by potential buyers and they help preserve rural character.

g. Remote Areas

As seen in the land use figures shown Table L.1, the majority of Orland is undeveloped. In some cases, poor soils and the lack of roads make it very unlikely that certain areas will be developed. However, those areas that are accessible by road could see limited residential development.

There could be a number of public service-related costs to continued development in such areas. Extension of bus routes and snow plowing into previously unserved areas are two examples. The cost of such services could exceed the amount of tax revenue generated from any new development. A major subdivision on a back road that has until now carried a light load of traffic, could force the town to assume the cost of major road improvements. Subdividers, however, can be asked to assume the proportionate cost of off-site improvements needed as a result of the development.

h. Great Pond Mountain Area

This is an undeveloped area of approximately 4-square-miles with ample wildlife. Due to its recreation trails, it is accessible to more developed parts of town. The Hothole Pond area is truly wild. A local land trust is working to keep this area in its relatively pristine state. Such undeveloped areas are an important part of Orland's identity.

6. Recent Land Use Changes

Orland has experienced considerable new home construction since 1970 (see the *Housing* chapter). The overall rate of growth in 1980s, however, was slower than in the 1970s. There has also been a gradual increase in commercial development.

a. Residential Development

Orland has not seen much subdivision activity in recent years. As shown in Table L.2, the planning board approved only four subdivisions between 1990 and 1997. All of these subdivisions consisted of three lots. Much of the recent house building has thus been on previously approved subdivisions or on lots not subject to subdivision review. There was greater volume of subdivision activity in the 1970s and 1980s and home building is continuing to occur on these lots.

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Table L.2 Status of Approved Subdivision Lots, 1990-1997			
Year	Number of Subdivisions Approved	Number of Lots Approved	Number of Lots Built
1990	0	0	0
1991	1	3	3
1992	1	3	3
1993	0	0	
1993	0	0	0
1994	0	0	0
1995	0	0	0
1996	1	3	3
1997	1	3	0
Total	4	12	9
SOURCE: Planning board records as compiled by the comprehensive planning committee			

b. Commercial Uses

Most commercial development has taken place along Routes 1 and 3. While it has been relatively small scale when compared to Bucksport or Ellsworth, the planning board reviews commercial proposals on a monthly basis. Many of these are home-based businesses and have a high rate of turnover.

There is also a concentration of commercial development along the Upper Falls Road. The Routes 1 and 3 and 15 intersection presently has limited commercial development, but would appear to have great potential in the future. There are many advantages to clustering commercial development around intersections since traffic generally slows at such areas and roadways are designed to handle turning movements.

c. Other Uses

The predominant use in Orland is still forestry, which accounts for about 80 percent of all land cover. While some open land is used for agriculture, this use accounts for approximately 1.5 percent of land in Orland (see the *Agricultural and Forest Resource* chapter). While no precise figures are available, there has been a gradual decrease in farmland in Orland.

7. Areas Suitable for Growth

While Table L.1 indicates that Orland has ample vacant land, not all of this land is readily developable. The Natural Resources Conservation Service has rated the various soils in town in terms of their potential for low-density urban development (see Table L.3 and the Soils Potential for low density development map at the town office). According to this analysis, there are about 7,800 acres (27 percent of the total land area) with a very low potential for development and 7994 acres with a low potential. There are also about 8,396 acres with a medium potential and 5,116 acres with a high potential.

These soil ratings are based on factors such as soil suitability for septic tank absorption fields, dwellings with basements and local roads and streets. The criteria reflect state-wide standards. There are few areas in the state that don't have at least some soil limitations such as wetness or bedrock near the surface.

Overall, there are more areas with poor soils on the eastern side of town. There are, however, concentrations of better soils in South Orland and along parts of the Ducks Cove and the Upper Falls Roads. As mentioned above, there are good soils along Route 15. There are also concentrations of better soils on the north side of Route 1 in the eastern side of Route 1 and on the southern side adjacent to the Surry Road.

Soils alone, however, should not be considered in determining areas most suited for growth. It is also important to consider access to roads and other services, existing land uses and citizen wishes. Also, even areas less suited for growth can usually accommodate some type of lower density development.

Table L.3 Soil Potential Ratings for Low-Density Development, Orland		
Category	Estimated Acreage	Percent
Very Low Potential	7,814	27%
Low Potential	7,994	27%
Medium Potential	8,398	29%
High Potential	5,116	17%
Very High Potential	0	0%
Total Land Area	29,322	100%
SOURCE: Natural Resources Conservation Service and the Maine Office of GIS		

It must be stressed that the soils information shown on the Soils Potential map is very general. It should not be used as the sole criterion in determining if a parcel is suitable for development since generalized soil surveys are considered accurate for

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parcels greater than five acres. A more detailed soils survey is generally needed to assess site-specific problems on smaller parcels.

8. Projected Land Acreage Needed for Development

A general estimate of the land needed for development between 1998 and 2008 can be made using the dwelling unit projections from the Housing chapter and other expected growth trends. The dwelling unit projections assume that an average of 15 new year-round homes a year. To allow for a faster than expected rate of growth and for any second homes, the plan assumes that 30 units a year will be built. Thus, a total of 300 new homes would be built, each requiring 1 acre of land. This would mean 300 additional acres of residential land by the year 2008 (see Table L.4).

This is a very liberal projection. It is more likely that the actual rate of development will be far below this rate. For planning purposes, however, it is better to plan for high growth than to be left unprepared for a faster than expected growth rate.

Continued commercial development is likely. A maximum of 50 additional acres is assumed to become commercial. Here again, this is a liberal estimate. Some minor expansions in industrial uses are also possible.

One possible change in public acreage would be if the town were to acquire a parcel for a new town office. This, however, would probably consist of no more than a few acres. Thus, no significant change is expected in public acreage. There may also be an increase in conservation land if more properties are placed under conservation easements. There is no way to estimate how many acres would be protected by such easements.

		Estimated New Acreage 1998-2008	Projected Acreage 2008
Description	1998 Acreage		
Residential	1,032	300	1,332
Commercial	50	50	100
Public	0	0	0
Semi-Public	0	0	0
Industrial	3	6	9
Total Developed	1,085	356	1,441
Very Low Potential Soils:	7,814	---	7,814
Vacant-Other Soils:	20,423	---	20,067
Total Land Area	29,322	---	29,322

SOURCE: Projections by the Hancock County Planning Commission

Orland would appear to face two major challenges in preserving its rural character. The first is if there is indeed an increase in commercial development along Routes 1 and 3 and along the Upper Falls Road. The effects of such development can be mitigated by setback requirements, vegetative buffering and similar measures to help keep commercial development attractive. Measures can also be enacted to manage the traffic impact of such development. Major commercial development can also be restricted to certain segments of the highway corridor. Home-based businesses and other small-scale operations, however, could be allowed throughout the corridor

The other challenge is continued development immediately along the major roads. Such development gives a rural town a more developed appearance than is actually the case, since the undeveloped parcels away from the roads are less visible. This problem can be addressed through greater setback requirements from the main roads and cluster zoning standards (if the town chose to enact such standards). Clusters (or open space subdivisions) allow homes to be built on relatively small lots while there is a large, commonly owned area of permanently preserved open space. Clusters can also help slow increases in public service costs, since they have relatively short roads, which reduce road plowing and school bus route costs.