

4.2 Historical Development

Natural resources have dominated the history of the area that is now the Commission's jurisdiction. Early Indian tribes constructed a number of permanent villages along major rivers near resources and transportation routes. The first settlements by Europeans were isolated outposts producing fish, fur, and timber for distant markets. Settlements were generally limited to the most accessible areas — islands, coastal mainland areas, and lands near navigable rivers.

Much of the area never became heavily settled because, by the time it was opened up for settlement in the 1800s, pioneers were being lured west by the prospect of rich agricultural lands and mining claims. The region's harsh winters, rocky soils and short growing season also discouraged agricultural settlement.

Land ownership in Maine underwent a great transition in the first half of the 1800s. Before gaining statehood in 1820, only nine million acres of the 20 million acres of public domain had been sold or granted to private parties by the Commonwealth of Massachusetts. When Maine became a state, the remaining public lands were surveyed and divided equally between Maine and Massachusetts. The state of Maine granted some land for roads, railroads, schools and colleges during the 1830s and 1840s, both in response to, and to encourage, a growing population and a demand for more and better transportation of forest products. During that same period, many individuals became aware of the importance of Maine's timberlands and a land boom began. By 1847, almost all the public lands in the state had been sold to private interests by Maine and Massachusetts, except for a 1,000 acre public lot reserved in each township. The region's pattern of large landholdings and the development of a papermaking process using wood cellulose were key factors in the emergence of the area in the late 1800s as the principal resource base for Maine's commercial forest industry. The Kennebec, Penobscot and other major rivers provided a means to transport timber and supply power to mills.

The opening of more remote areas to logging also opened them to recreation in the 19th century. People came from the rapidly growing cities of the East to vacation in resorts such as Kineo, Harford's Point and Seboomook, to fish and hunt while lodged at sporting camps, or to take part in camping trips into the heart of the Maine Woods.

One of the most significant changes in the history of the area was the end of log drives in the 1970s, and the related construction of thousands of miles of roads needed to transport wood from the forest to mills and markets. These roads opened up areas previously accessible only by boat or foot. This improved access resulted in scattered, low-density development across the jurisdiction, principally seasonal camps near lakes and other recreational attractions. Improved access also significantly increased use of the area by hunters, anglers, and other recreationists.

Relative geographic isolation, land ownership patterns characterized by large tracts of land held by industrial owners and managed almost exclusively for forest management purposes, and the dominance of a healthy forest products industry strongly influenced land use in this region of Maine. Population and housing growth was slow, characterized predominantly by low-density, low-impact, seasonal development. Most year round development was concentrated around the edges of the jurisdiction leaving large substantially undeveloped blocks of land in the interior. A number of very small communities were established over the years. Some were traditional rural communities with small, year-round populations that worked in forestry, agriculture, or guiding. Others were summer enclaves near lakes and waterbodies. Most of these small communities, many of which still exist today, are located relatively close to public roads and population centers.

The land use pattern evident today bears the imprint of historical land use patterns, but it is changing in a number of noteworthy ways. As described in following sections some of the factors that established the historical land use pattern — geographic isolation, large tracts of land held by industrial owners, and valuation of the land based primarily on its timber production capacity — have changed. Technological advances are encroaching on the region's geographic isolation, making it more attractive as a place to live and visit. Substantial changes in land ownership have created a less predictable environment regarding future land use. Lastly, a more competitive, global wood products industry and steady demand for seasonal residential development are driving closer scrutiny of land values for maximum return.

4.3 The Commission's Regulatory Approach

The Maine Legislature created the Land Use Regulation Commission in 1971 and charged it with applying “principles of sound planning, zoning, and subdivision control” to the jurisdiction. The Commission’s enabling statute is particularly attentive to the treatment of development in the jurisdiction, setting forth the following principles related to development:

- prevent inappropriate uses detrimental to the proper use and value of areas within the jurisdiction;
- prevent intermixing of incompatible activities;
- provide for appropriate uses;
- prevent substandard development;
- encourage well-planned and well-managed multiple use.

In carrying out its mandate, the Commission has always been guided by the premise that most new growth and development should occur in or near areas where development already exists. This idea was first expressed in the Commission’s initial Comprehensive Land Use Plan, adopted in 1976. The premise was based on generally accepted planning principles of concentrating development near services to reduce public costs and minimizing development near productive natural resource-based activities to reduce land use intrusions and conflicts.

The Commission began its regulatory efforts with a land use inventory during the 1970s. This inventory became the basis for zoning in the jurisdiction, utilizing development, management and protection districts. The Commission also established land use standards to minimize undue impacts of development on resources and uses. These zones and land use standards constitute the regulatory foundation of the Commission’s work.

Since then, the Commission has periodically reviewed and revised its comprehensive plan, zoning, and land use standards, usually in response to emerging issues and statutory requirements. It has also developed new tools to improve its approach to guiding development, protecting resources, and controlling conflicts between uses. This section of the Plan outlines the Commission’s current approach to regulating development.

4.3.A Land Use Districts and Standards

The Commission’s enabling statute establishes three major zoning classifications: protection, management and development districts.

Development subdistricts are applied to areas having patterns of concentrated residential, recreational, commercial, or industrial use, and areas identified as appropriate for such development. There are currently six types of development subdistricts that are applied throughout the jurisdiction:

- Residential Development (D-RS), General Development (D-GN), and Planned Development (D-PD) subdistricts, with a few exceptions noted below, allow residential subdivisions and a range of residential uses, the most common form of development.
- Commercial Industrial (D-CI) Subdistrict allows larger-scale commercial/industrial projects.
- Maritime Development (D-MT) Subdistrict reserves working coastal waterfronts primarily for water-dependent uses.
- Planned Development (D-PD) Subdistrict accommodates large scale development that depends upon a particular natural feature or location and therefore may be some distance from existing, developed areas. The large scale development proposed for D-PD zones sometimes includes a mix of uses.

In 2000, the Commission created five new development subdistricts as part of its prospective zoning effort in the Rangeley Lakes Region. Generally, these five subdistricts are variations of existing zones, but incorporate more explicit requirements regarding where they can be applied and what uses are allowed within them. Thus far the Commission has limited the application of these zones to areas undergoing prospective zoning efforts. Further discussion of these subdistricts and the Rangeley Prospective Zoning Plan is located in Appendix D Prospective Zoning Plan for the Rangeley Lakes Region, in this plan.

Protection subdistricts are applied to areas where land use activities may jeopardize identified significant natural, recreational, or historical resources. The Commission allows low density residential development in a number of protection zones. All protection subdistricts, except the Mountain Area Protection (P-MA), Wetland Protection (P-WL), Soils and Geology Protection (P-SG), and Recreation Protection (P-RR) subdistricts, generally allow single and two family dwellings by permit or as special exceptions. The Resource Plan Protection (P-RP) Subdistrict may allow residential subdivisions as part of a concept plan.

Management subdistricts are applied to areas identified as appropriate for commercial forest product or agricultural uses and for which intensive future development is not anticipated. The General Management (M-GN) Subdistrict is the most significant subdistrict in terms of size. The purpose of the M-GN zone is to permit forestry and agricultural management activities to occur with minimal interference from unrelated development. The M-GN zone generally excludes land uses involving large-scale processing of materials, however it allows specific smaller-scale natural resource based processing (e.g. maple syrup processing, small sawmills, and mineral exploration and extraction) and a number of other uses, such as low-impact recreational uses (e.g. sporting camps). The General Management (M-GN) Subdistrict allows single and two family dwellings but generally prohibits subdivision except for level 2 subdivisions (small scale subdivisions that meet certain criteria in the Commission's rules and are located in specified townships).

In addition to zoning the jurisdiction, the Commission maintains land use standards to ensure that development will not adversely affect resources and uses. The land use standards establish dimensional and performance standards for development as well as other land use activities. The zoning districts and land use standards are the primary mechanisms for implementing the Commission's broad goals and policies. This framework has proven to be generally effective in protecting natural resources and separating incompatible uses from one another.

4.3.B Policies and Regulations for Guiding Development

Since its inception, the Commission has recognized the importance of guiding new development to appropriate locations as an effective means of protecting the jurisdiction's principal values and establishing sustainable development patterns. Past and current comprehensive land use plans have expressed two central principles regarding growth and development: (1) discourage growth which results in sprawling development patterns, and (2) encourage orderly growth within and proximate to existing, compatibly developed areas. These principles are based on the Commission's longstanding belief that concentrating growth around existing development will help to protect the resources and values of the jurisdiction, ensure efficient and economical provision of public services, and promote the economic health of development centers. The Commission administers a variety of policies and regulatory tools designed to guide growth as described below. Some of these tools are applied in response to landowner-initiated actions (such as rezonings and concept plans) and others require implementation by the Commission (such as prospective zoning).

“Past and current comprehensive land use plans have expressed two central principles regarding growth and development: (1) discourage growth which results in sprawling development patterns, and (2) encourage orderly growth within and proximate to existing, compatibly developed areas. These principles are based on the Commission’s longstanding belief that concentrating growth around existing development will help to protect the resources and values of the jurisdiction, ensure efficient and economical provision of public services, and promote the economic health of development centers.”

Rezoning Areas for Development

When it first established zoning in the 1970s, the Commission created development subdistricts primarily where development already existed or where landowners had imminent development plans. The Commission delineated 667 Residential Development (D-RS) Subdistricts in 135 minor civil divisions (MCDs) prior to 1975. When the Commission established these development zones, it usually drew the zoning boundaries tightly around developed areas. Development zones generally did not encompass undeveloped land due to the difficulty of predicting future growth areas over such a vast jurisdiction. Consequently,

lands almost always require rezoning to an appropriate development subdistrict prior to use for new intensive commercial, industrial, and residential development.

Rezoning an area to a development subdistrict is usually initiated by the landowner and is reviewed by the Commission based on statutory criteria. The Commission's enabling statute includes criteria specifying that zoning changes must be consistent with the statute, the Comprehensive Land Use Plan, and district boundary standards; satisfy a demonstrated need in the community; and, have no undue adverse impact on existing uses and resources or be more appropriate for the protection and management of existing uses and resources.

With regard to the criterion that zoning changes be consistent with the Comprehensive Land Use Plan, past plans have expressed the need to encourage orderly growth within and proximate to existing, compatibly developed areas particularly near organized towns and patterns of settlement. The Commission's application of this concept has evolved over its history in response to changing trends and growing appreciation for the often counterproductive fiscal and economic impacts of dispersed development. The requirement that new development should be located near existing development is referred to as the "adjacency" principle. The Commission has generally interpreted adjacency to mean that most rezoning for development should be no more than one mile by road from existing, compatible development — i.e., existing development of similar type, use, occupancy, scale, and intensity to that being proposed.

The Commission recognizes that isolated patterns of development in remote locations, such as sporting camps, should not be used as the basis for establishing 'adjacency'. Existing development used to support rezoning should either be of a similar type, use, occupancy, scale and intensity to that being proposed, or a village center with a range of existing uses that the new development zone would complement. The Commission has also consistently maintained that intensive uses, both recreation-based and business, are best located near compatible, developed areas. Areas near population and employment centers with available infrastructure and low resource values are generally the most suitable locations for these uses.

The D-PD and P-RP zones, available for certain types of large-scale, mixed use development waive the adjacency principle under certain circumstances and so provide a significant amount of flexibility regarding location. The adjacency principle is waived for the D-PD zone in order to accommodate development that is dependent on a particular feature. The P-RP zone allows a waiver of the adjacency principle for development proposed as part of a concept plan under certain circumstances.

Concept Plans

Concept plans are a relatively new planning tool that is implemented through a landowner-initiated rezoning action. In 1990, as part of its lake planning program, the Commission established concept plans as an alternative to traditional shoreland regulation — an alternative which was intended to fulfill both public and private objectives. While concept plans were originally conceived as a planning tool for shoreland development, the Commission has since extended their use to backland areas as well. Concept plans are landowner-initiated, long-range plans for the development and conservation of large blocks of shorelands and/or backlands. The plans clarify the long-term intent of landowners, indicating, in a general way, the following: (1) areas where development will be focused; (2) the relative density of proposed development; and (3) areas where significant natural and recreational resources will be protected, as well as the mechanism to protect them.

Concept plans should be prepared for an area large enough to allow for a balance of conservation and development. The area must be of sufficient size and resource value to offer a clear opportunity for public benefit, and are not appropriate for small land areas that offer limited opportunities for development and meaningful conservation. Generally, concept plans involving lakes should encompass all land within 500 feet of the lake to ensure they are comprehensive.

Concept plans require rezoning land to the Resource Plan Protection (P-RP) Subdistrict. After approval of concept plan rezonings, the resource plans govern permitted activities for the life of the plans. Concept plans may have a minimum time frame of ten years, but the Commission discourages plans of less than twenty years duration if such plans propose significant deviations from existing standards. *Additional information pertaining specifically to concept plans is described in Appendix C Land Use Regulation Commission's Lake Management Program of this Plan.*

Concept plans provide a measure of flexibility to landowners in regard to siting development, as the Commission will consider adjusting certain standards, such as the adjacency criterion, provided that any such adjustment is matched by comparable conservation measures. The main value to the Commission of concept plans as a planning tool is the opportunity it provides to secure permanent conservation in areas where substantial development is proposed. The main value to the landowner is the

ability to develop a predictable plan for the future use of their lands and to accomplish proactive zoning. The Commission will encourage the use of concept plans by working to simplify and add as much predictability to the process as possible.

Prospective Zoning

Prospective zoning is a relatively new tool employed by the Commission to proactively direct growth in certain areas of the jurisdiction. As noted above, most development zones in the jurisdiction contain little or no undeveloped land to accommodate future growth, so most new development requires rezoning land to a development zone. Under prospective zoning, the Commission uses information on existing development patterns, natural resource constraints, and recent trends to identify and zone areas appropriate for future growth. This allows the Commission to proactively direct development on a regional level to areas that are suitable based on proximity to development centers and infrastructure. This approach brings more predictability to the permitting process and promotes concentrated economic development in suitable areas. The prospective zoning process also creates an excellent opportunity for public participation by residents, landowners and other interested parties.

Prospective zoning, as applied by the Commission, should fulfill several objectives. It should be easily understood; be applied without significant expansion of staff resources; and, utilize current, realistic, and cooperative planning and regulatory concepts that have the greatest chance of achieving desired results.

Rangeley Prospective Zoning

The Commission undertook prospective zoning for a ten MCD region in the Rangeley Lakes Region in the late 1990s in accordance with its expressed intent to prospectively zone key high growth areas in the jurisdiction. As the Commission's first land use plan for a specific sub-region of the jurisdiction, the Rangeley PZP establishes a long-term vision for the ten MCD region and implements strategies for guiding development to designated areas over a twenty year period.

The Rangeley plan calls for periodic consideration of whether changes or updates to the PZP are necessary. Examination of development patterns in the eight years following the plan's adoption suggests the PZP has been effective in achieving its vision. Year-round development in the region has been focused in the three plantations surrounding Rangeley — Dallas, Rangeley, and Sandy River. The Town of Rangeley continues to function as the economic center, and the new zoning framework appears to be maintaining the diversity of lake experiences in the region. Evaluation of development patterns a decade or more after adoption will better determine the prospective zoning plan's long-term effectiveness. Further discussion of this prospective zoning plan is located in Appendix D Prospective Zoning Plan for the Rangeley Lakes Region in this plan.

Other Prospective Zoning Efforts

The Commission has also applied prospective zoning in the townships of Greenfield, Madrid, and Centerville. These towns deorganized in 1993, 2000, and 2004 respectively, thereby coming under the Commission's jurisdiction. After inventorying the communities' land uses and natural resources, the Commission, with input from the public, identified several areas determined to be most suitable for future residential and village growth. It developed and adopted zoning maps which included development zones that have sufficient undeveloped land to accommodate future growth.

4.3.C Site Review

Most residential uses and structures require a Building Permit (BP) and most nonresidential uses require a Development Permit (DP) or other permit, with the exception of certain forestry and agricultural uses. Through the issuance of BPs and DPs, the Commission conducts detailed site reviews considering such factors as: provisions for fitting the project harmoniously into the existing natural environment; vehicular circulation; access and parking; noise and lighting; soil suitability; waste disposal; water supply and quality; phosphorous control; erosion and sedimentation control; wetland alteration; and dimensional requirements.

This permitting process has two primary purposes: 1) to ensure that development is designed and will be constructed in a way that avoids or minimizes adverse impacts on natural resources, existing uses, public facilities and services, and natural character; and, 2) to ensure that it meets all zoning and other provisions.

4.3.D Subdivision Standards

The Commission adopted subdivision design and layout standards in 2004. These standards were created based on the need identified in the 1997 Plan to provide staff and applicants with clear guidance on how development can best meet the Commission's standards. These standards clarify permitting requirements for certain types of development, facilitate residential

development in certain areas deemed appropriate for it, and promote good subdivision design and layout. They seek to facilitate the process of designing subdivisions that embody sound planning principles. The subdivision design standards specify that new subdivisions must expand existing neighborhoods or create new community centers, and must avoid linear lot configurations along roads and shorelines.

The Commission also revised its regulations to allow residential subdivisions in the General Management Subdistrict in 42 townships, provided the subdivisions meet certain criteria regarding number of lots, total acreage, proximity to roads and compatible development, and natural resource limitations. These subdivisions — referred to in rule as level 2 subdivisions — and those allowed in the P-GP2 subdistrict, are the only subdivisions allowed outside of development zones.

Level 2 subdivisions were created to simplify the permitting process for small-scale subdivisions while guiding new development to appropriate locations in the jurisdiction. The 42 townships generally border organized towns, but also share important characteristics that make them particularly suitable for future development. The primary characteristics are connection to an adjacent service center by a major state route or to areas recognized by the Commission as having special planning needs. Level 2 subdivisions are not allowed in areas prospectively zoned by the Commission because these areas are already governed by a plan to guide new development to appropriate locations.

Since level 2 subdivisions are a relatively new planning tool, the Commission expects to monitor their effectiveness and revise the rules as needed to address changing circumstances and trends.

4.3.E Public Infrastructure and Facilities

Public infrastructure and facilities such as fire stations, public works facilities, solid waste transfer and disposal facilities, schools, and libraries are allowed in the General Development (D-GN) and Residential Development (D-RS) Subdistricts, as well as several development districts applied in prospectively zoned areas.

Utility facilities, which include structures associated with electric, telephone, gas, water, and sewer lines, are allowed by permit in all subdistricts except those which are particularly sensitive to adverse impacts. For example, the Mountain Area Protection (P-MA), Recreation Protection (P-RR), Special River Transition Protection (P-RT), and Wetland Protection (P-WL) subdistricts allow utility facilities only by special exception.

The Commission's review of utility facilities focuses on appropriateness of location. Utility line extensions are carefully evaluated to assess immediate impacts on the site as well as the long-term impacts of bringing utility services into an area. This evaluation is necessary because utility extensions have the potential to magnify the environmental impacts of existing development on surrounding resources, such as lakes, and can spur new development. Service drops, which include utility line extensions of less than 2,000 feet within a five year period, are allowed without a permit provided land use standards are met. The only exception to this is the Semi-Remote Lake Protection (P-GP2) Subdistrict which substantially limits service drops.

State statute and federal regulations limit the Commission's authority over some public utilities, principally telecommunications facilities and certain power lines. Telecommunication facilities, such as cell towers and transmitters, are afforded specific protections under the Federal Telecommunications Act of 1996. Generally, this act restricts state and local governments' ability to regulate telecommunications facilities, particularly if such regulation would have the effect of prohibiting the use.

The Commission's authority over electric power lines is limited in three different ways. A provision in statute specifies that a permit is not required from the Commission if a utility line is reviewed by the Department of Environmental Protection (DEP) and is located in a LURC subdistrict where the use is allowed³. Since most transmission lines cross into organized areas subject to DEP regulation, and utilities are an allowed use in most zones, the Commission may not have jurisdiction to review large transmission lines. Pursuant to state utility law, utility facilities located within a public right-of-way do not require a permit from the Commission.⁴ And lastly, if sought and granted through a petition for exemption to the Maine Public Utilities Commission, transmission lines greater than 100 kV may be partially or wholly exempt, to the extent that the Commission may not prohibit such use, but may impose conditions.⁵

³ 38 MRSA §488, sub§ 9; 12 MRSA §685-B, sub§1-A,B.

⁴ 35-A MRSA §2503(20).

⁵ 12 MRSA §685-A(11).

In addition to reviewing the impacts of proposed public facilities, the Commission also considers the ability of public infrastructure and facilities to meet the needs of proposed residential and nonresidential development. It considers these issues as part of its statutory mandate to apply sound planning principles to the jurisdiction, preserve public health, safety, and welfare, encourage well-planned use of land, and protect cultural and natural resources and values. Applicants generally must show that proposed uses will not burden local public facilities and services such as solid waste disposal, fire and ambulance services, police, and schools.

4.3.F Other Regulatory Programs

Development in the jurisdiction must comply with other state and federal requirements. The Commission works to avoid unnecessary duplication of effort with state and federal regulatory entities, but generally seeks to ensure that other requirements are met as part of its permitting process. For example, water supplies and wastewater disposal systems must comply with other state standards, such as the Maine Subsurface Waste Water Disposal Rules and the Maine Department of Human Services Rules Relating to Drinking Water (10-144A C.M.R. 231). Additional regulatory programs that may apply to development are described briefly in various natural resource sections of this Plan, including Water Resources, Wetland Resources, and Plant and Animal Habitat.

4.4 Economic Trends

The economy of the jurisdiction remains natural resource-based, with a focus on forest products, agriculture and recreation. Many businesses located both inside and outside of the jurisdiction depend on its natural resources, either for raw materials or as a destination for recreational activities.

The forest products industry is the largest single contributor to Maine's economy, and is the backbone of the economy in the jurisdiction. The area provides a continuous stream of raw materials for lumber and paper production. Chipping mills, sawmills and pulp and paper mills of various sizes and types are scattered across the jurisdiction or are located in adjacent towns where they provide employment. Small, specialty wood products manufacturing contribute to the mix as well. Economic activity in the Rim Region⁶ provides the closest approximation of current economic activity in the jurisdiction. The Rim Region is heavily dependent on lumber and paper manufacturing and accounts for nearly 60% of the state's earnings from these sectors. Total earnings from the forest products industry in the region was approximately \$650 million in 2003, the largest single component of the region's total earnings of almost \$4 billion.

The economic environment in which the forest industry operates has changed quite significantly in recent decades, bringing both new opportunities and new challenges. Globalization of wood products has opened new markets, but has also introduced competitors into markets that were previously dominated by Maine industry. Traditional wood products manufacturing facilities in the Northeast have increasingly been at a competitive disadvantage because of their size, age, and relatively high operating costs. Many companies have been forced to choose between upgrading equipment or closing their facilities. In order to stay open, these facilities have had to increase productivity which sometimes means implementing systems that employ fewer people. There have been other structural changes in the industry, including the divestiture of forest land.

Just as there have been challenges, there have been opportunities. New markets for wood pellets and biofuels have opened or are emerging. The forest products industry remains the foundation of Maine's rural economy, but it will continue to face challenges in the foreseeable future as a result of operating within a highly competitive global marketplace.

Tourism and recreation are the next most significant economic forces in the jurisdiction. Statewide, tourism has grown significantly since 1972. In the Rim Region, tourism dollars reached nearly \$150 million in 2003. Between 1990 and 2003, earnings from tourism in the region grew by 25%. The area's natural resources attract a diverse clientele which spends dollars directly on recreational activities and support services such as lodging, food and supplies. Visitors to the jurisdiction come as occasional tourists or seasonal residents to occupy second homes that are typically located close to a recreational attraction. Many visitors are attracted to specific destinations such as ski areas, rafting bases, sporting camps, and campgrounds. Others come to engage in dispersed activities such as hiking, camping, hunting, fishing, and trail riding on ATVs, bikes, horses and snowmobiles. Snowmobiling continues to be a significant job and revenue producer during the winter months. Tourism benefits

⁶ The Rim Region includes Oxford, Franklin, Somerset, Piscataquis, Aroostook, and Washington Counties. It includes some areas that are not in the jurisdiction and excludes some that are (principally Penobscot County which includes the Bangor area). State Planning Office.

the rural economy of the jurisdiction in a number of ways, including supporting local commerce, maintaining the local property tax base, and providing jobs.

Recent years have brought changes in the recreation economy, *as described in more detail in the Recreational Resources section*. Hunting and fishing, which historically generated substantial economic benefit to local communities, have declined recently. Likewise, usage of the Allagash Wilderness Waterway and Baxter State Park in Maine, as well as national parks across the nation, has declined. It is not yet clear if these trends will continue into the future.

Conversely, nature-based tourism is growing rapidly. Nature-based tourism includes activities (organized or independent) focused on wildlife viewing, backcountry trekking and various other recreational experiences. As practiced today, nature-based tourism typically involves a higher level of amenities than historically associated with these activities. Nature-based tourism has been receiving new attention from public, private, and non-profit sectors in programs such as the Maine Nature Tourism Initiative. A number of new cultural and heritage tourism initiatives have been started in or adjacent to the jurisdiction, such as the Maine Mountain Counties Heritage Network, the Downeast Heritage Museum, and hiking trail networks. It remains to be seen whether these and other efforts to expand the tourist economy in and around the jurisdiction can overcome the area's distance from population centers.

Energy production is emerging as another potentially significant economic force in the jurisdiction, with wind power, biomass, biofuels, tidal energy, and other energy sources offering new opportunities to utilize indigenous natural resources. Energy production in the jurisdiction has the potential to support state and local needs but may also be viewed as an export industry serving the energy needs of the greater Northeast area. No data is available on the economic contribution of energy production within the jurisdiction, but current trends suggest that energy production will increase.

The forest industry, recreation, tourism, and energy production bring diversity to the economy of the jurisdiction. The forest industry remains the dominant economic sector, but recreational development, energy, and tourism are growing.

Like the rest of Maine, the economy of the jurisdiction faces new challenges. Some believe that future economic success requires innovation, particularly in areas such as biotechnology, information technology, forest bioproducts, and precision manufacturing. Areas within and adjacent to the jurisdiction have had some success in diversifying the local economies. Northern Maine has had success expanding agriculture into new cold weather crops such as broccoli, and has developed some niche finance and insurance enterprises such as Maine Mutual Group in Presque Isle. The region may be able to take advantage of opportunities in the growing forest bioproducts industry. Several entities in western Maine are exploring various aspects of biomass utilization. Many of these initiatives will be attracted to service centers outside the jurisdiction, but there may be demand for certain resource-based industries located close to the resources of the jurisdiction. Whatever change comes, natural resource-based uses such as forestry will likely continue to be the backbone of the economy.

4.5 Land Ownership Data and Trends

Landowners' objectives and choices have historically played a very significant role in shaping land use patterns in the jurisdiction and are largely responsible for the maintenance of large areas principally for forestry and associated uses. For much of the 20th century, industrial owners were the predominant landowner in the jurisdiction and land swaps or sales took place primarily to consolidate their land holdings.

Beginning just over two decades ago, large tracts of the northern forest began to change hands on a scale that was unprecedented in the recent history of the northern forest. Beginning with the sale of Diamond Occidental lands to an overseas financier in 1986, transactions involving large tracts continued through the 1990s and into the 2000s, driven by several major corporate restructurings and other changes. By 2005, several new trends in landownership were apparent, principally:

- The divestiture of forestland by industrial landowners;
- The purchase of forestland by new types of owners, particularly financial investors; and
- The growing role of conservation owners and easement holders in the northern forest.

The volume and pace of land sales during this period is noteworthy. Ninety-three transactions of 10,000 acres or more (hereafter referred to as "large-scale transactions") took place in Maine between 1990 and August of 2005, involving a total of

17.4 million acres⁷. Many lands were sold more than once, changing hands several times during this fifteen year period. The rate of large scale transactions increased steadily from 1990 through 2005, and has not abated. In fact, the number of transactions in the first half of the first decade of the 2000s exceeded the number of transactions for the entire decade of the 1990s. Land transactions involving parcels of 10,000 – 99,999 acres have increased significantly since 2002. This wholesale restructuring of land ownership has been driven by a variety of factors, including corporate lending practices, changing corporate and real estate tax laws, and industry need for capital.

Areas within the jurisdiction have experienced speculative land buying and transfers from public to private ownership and private to corporate ownership in the past. However, the scale and rate of ownership changes in the past two decades is unprecedented. The ongoing sale and resale of timberland means that the predictability associated with the prior pattern of predominantly industrial ownership appears to be gone.

4.5.A Changing number and types of landowners

One result of the increase in large scale land transactions has been a relatively swift transformation to a more diverse array of timberland owners. The number of timberland owners holding 5,000 acres or more of forestland in the state increased significantly between 1999 and 2006. This reflects the ongoing trend of splitting very large holdings into smaller holdings that began in the 1980s and '90s. There has been a concurrent decrease in average parcel size from 144,000 acres in 1999 to 118,000 in 2005. As of 2005, only two entities owned more than one million acres of forestland in Maine. This represents a significant change from the past, when a majority of lands within the jurisdiction were held by just a few landowners.

In addition to an increasing number of timberland owners, the types of owners are changing. While categorization of landowners is imprecise at best, researchers have nonetheless drawn some conclusions regarding the changed composition of timberland owners. In 1994, industrial owners held about 60% of tracts over 5,000 acres in Maine, about 4.6 million acres. By May of 2005, the industry owned only 15.5% (1.8 million acres), while ownership by financial investors grew from 3% to 32%. Other, relatively new types of timberland owners include logging contractors and conservation buyers. Old-line families continue to play a role, owning about 20 percent of Maine's timberland in large tracts.

The change in type of owner has brought some subtle, yet significant changes to landowner management objectives in some areas of the jurisdiction. Industrial landowners historically held timberland to maintain a steady flow of wood to their paper mills, which were their primary asset. New financial investors such as REITs and TIMOs generally view the timberland itself as the primary asset, which they manage to produce income. Income can be produced through timber sales, sale or lease of recreational or conservation lands, natural resource extraction, and other methods. Parcelization⁸ is one strategy for taking advantage of land price differentials between large and smaller timberland properties and producing income. Larger properties sell at lower per acre prices than smaller properties, so acquiring large properties, dividing them into smaller properties, and selling them for a higher per acre price can generate profits. This practice is a concern if it drives up prices for timberland to levels that cannot be supported by forestland revenues. A Maine Forest Service (MFS) analysis of the relationship between the annual return from sustainable harvest and the appraised value of a northern Maine timberland parcel concluded that, even with favorable financing terms, the returns from sustainable harvests were not nearly sufficient to justify a loan for the appraised value of the land and could not support purchase of the land. Additionally, in a 2005 report on the state of the forest, MFS cited inadequate returns from long term forest management as a key issue that could affect the future of Maine's forests. MFS noted that the financial returns on long term forest management may not justify retaining forest land if other higher value uses, such as development, are an option.

While conservation is not new to the northern forest, conservation buyers are participating in land acquisition on an entirely new, unprecedented scale, driven in part by the active land market in recent decades (see conservation lands in Map 2). In 2006, approximately 1.6 million acres were subject to conservation easements, and conservation entities owned 300,000 acres in fee. In most cases, one of the expressed intents of these conservation purchases is to maintain the land as working forest; however, this is not always the case. The objectives of some conservation buyers do not include active forest management at all. Some conservation buyers manage specifically for recreation, others manage for wildlife; and of course some manage for a variety of objectives. The impact of increased conservation on land use patterns in the jurisdiction remains to be seen. In some instances, conservation efforts will help to support the forest products industry by ensuring the long term maintenance of working forest lands. In other instances, conservation lands will help to ensure the continued protection of important resources and values such

⁷ These figures include lands sold more than once. They also include some transactions involving less than fee interests, such as conservation easements.

⁸ As used here, "parcelization" refers to the practice of dividing one large parcel into numerous smaller parcels, usually for purposes of sale.

as significant habitats and recreational experiences. While no two conservation easements are exactly alike, in most cases they extinguish some or all development rights.

Map 2 – Conservation Lands

Conservation Buyers

The types and objectives of conservation buyers are quite varied. For example, in 1999, the New England Forestry Foundation purchased a conservation easement to the development rights on over 700,000 acres of timberland from the Pingree family. The easement sold the development rights to the land while preserving forestry uses. Other organizations, such as The Nature Conservancy, have purchased conservation easements as well as land in fee to protect specific resources and other values. And individuals have purchased land explicitly for preservation. Though publicly owned land remains a small percentage of the northern forest, the state has increased purchases of conservation land in the region in recent decades and typically manages for forestry and recreational uses.

4.5.B Growing numbers of parcels

Available information on the number of parcels in the jurisdiction is gathered for tax purposes, not for purposes of examining changes in the number of parcels over time. Consequently, the parcel information has significant limitations for examining detailed trends. There have been changes in the way that the information is gathered over time and there is no information available for towns and plantations. However, the information is adequate for examining general trends and when viewed this way, reveals valuable information. In general, there are significantly more parcels in the jurisdiction in 2005 than there were in 1971. These additional parcels could have been created for any number of purposes. They could reflect the division of forest lands, the sale of lease lots, the creation of subdivisions, the creation of conservation parcels, etc.. Map 3 shows the change in number of parcels by township between 1971, 1985 and 2005. Each township is categorized based on the total number of parcels it had in the given year.

Map 3 – Number of parcels by MCD, 1971, 1985 and 2005

The 1971 map shows the large number of townships that contained very few parcels, as denoted by the large amount of light blue. The declining number of darkest purple townships over the subsequent two maps reflects the gradual, yet steady, trend toward increased land divisions in the southern third of the jurisdiction. Between 1971 and 2005, the number of townships with fewer than 10 parcels decreased significantly (approximately 25%). During the same time period, the number of townships with 100 or more parcels increased significantly (over 150%). The growing number of parcels in the southern third of the jurisdiction is noteworthy. As a region noted for the economic contributions of the forest and recreation industries, this trend is a concern if it foreshadows further loss of forestry and associated uses. As stated in a Maine Forest Service report, owners of small parcels of forest land (less than 49 acres) usually own it for purposes other than timber production.

The 2005 data shown in Map 3 shows that about half of the townships continue to have relatively few parcels, reflected in the fact that many townships are still the darkest purple. This pattern is generally consistent with natural resource-based uses which dominate the area. This map does not reveal the exact extent to which the number of parcels in these townships has changed (e.g. some townships may have gone from one parcel to ten parcels).

REIT's and TIMO's

REITs and TIMOs now hold a considerable amount of timberland in Maine and the jurisdiction. Real estate investment trusts (REITs) are companies that manage a portfolio of real estate to earn profits for shareholders. They use investors' capital to acquire or finance diverse forms of real estate, including timberland. The tax code allows these companies to pass earnings directly to shareholders in a way that reduces or eliminates corporate income taxes. Timber investment management organizations (TIMOs) acquire and manage timberland investment properties. Their goal is to optimize financial returns for their clients, who are generally institutional investors (e.g. pension funds, insurance companies, and endowments) as well as individuals. It is generally expected that TIMOs will hold land for shorter periods of time than the timberland owners of the last century. An example of this can be found in Hancock Timber Resources Group's (HTRG) history of timberland acquisition and disposition in Maine. HTRG purchased 683,000 acres of timberland between 1993 and 1997. Hancock sold all of this land between 1995 and 2004.

4.5.C Leased land

The traditional practice of leasing lots is less common than in years past. According to information obtained from Maine Revenue Service tax records, between 1985 and 2005, the total number of leases in unorganized townships decreased from 5,393 to 4,346, a decline of 1,047. This may reflect landowners' preference to get out of the business of managing leases, or could reflect a desire to capture the value of the underlying land. The only area that showed an increase in leases is the Interior area, which includes portions of Aroostook, Somerset, Piscataquis, and Penobscot Counties. This increase in leases in the Interior may reflect landowners' desire to retain maximum control over recreational use in an area that is served almost exclusively by private roads and is dominated by forest management.

4.6 Development Data and Trends 1971-2005

The primary development activities in the jurisdiction are housing, recreation-related commercial development, energy generating and transmission facilities, other commercial and industrial activities, road and infrastructure improvements, and waste disposal facilities. This section of the plan presents data and trends for these types of development.

4.6.A Transportation

Transportation improvements are both a form of development and a prime determinant of where further development will occur. The dominant transportation mode in the jurisdiction is road travel. Public roads in the jurisdiction are fairly limited, while private roads, used predominantly for forest management activities, are more widespread. While accurate numbers are difficult to obtain, approximately 1,500 miles of public roads (according to Maine DOT information) and over 20,000 miles of private roads (according to the 1:100,000 scale U.S.G.S. maps) exist within the area.

Sources of Data

Sections 4.5.B Growing number of parcels and 4.6.B Residential Development Trends rely predominantly on four sources of data: Maine Revenue Service tax records, US Census data, LURC permitting data, and the report 'Patterns of Change' prepared by Planning Decisions.

Maine Revenue Service tax records provide information on the number of parcels and leases in the jurisdiction by minor civil division. This information is gathered for tax purposes, not for purposes of examining changes in the number of parcels over time, so there are limitations to its use for this purpose. For example, the Maine Revenue Service changed the way that it accounted for parcels associated with islands during the 1980s. Consequently, there may be a jump in the number of parcels in a township due to a change in accounting versus a change in the actual number of parcels. Despite these known limitations, the information is adequate for examining general trends.

US Census data provide information on the number of residential dwellings on the ground in the jurisdiction, some characteristics of these dwellings, and population trends. This data is viewed as some of the most reliable and is provided according to census blocks. In the organized areas of the state, these blocks are typically based on minor civil division boundaries. Each town or plantation constitutes its own block or data set. In unorganized areas, these blocks range from a single towns or plantation to dozens of townships. LURC staff modified the data collected according to the census block format to account for changes in the geographic area included in the jurisdiction over time.

LURC permitting data provides information on the number and location (by township) of new dwellings permitted by the Commission. This information represents permitting activity rather than a land use inventory which would reflect what is actually on the ground. There may be discrepancies between permitted dwellings and actual dwellings on the ground depending on whether permitted dwellings were ever built and whether dwellings were built without permits. LURC permitting data also provides information on the number and location (by township) of permits for expansions or reconstructions of existing dwellings.

The report 'Patterns of Change' as prepared by Planning Decisions for the Commission provides information on various trends in the jurisdiction drawing from Census data, Maine Revenue Service tax data, and LURC permitting data.

Because each of these data sources is best used to demonstrate overall trends, the Commission looks at each of them in the context of the others to confirm trends and identify areas for further inquiry.

Public Roads

The area's approximately 1,500 miles of public roads (illustrated in Map 4) include arterial routes that allow relatively high speed travel through the region, collector routes that provide important connections between arterials, and local roads that move traffic within communities and provide access to adjacent properties.

Map 4 – Transportation Infrastructure

Interstate 95 is a limited access four-lane highway that serves as a primary route of travel to the region from points south. The interstate bisects several townships but generally stays to the east of the Central area of the jurisdiction and to the west of the Downeast area. Interchanges in Howland, T2 R8 NWP (near Lincoln), Medway, Sherman, Island Falls, Oakfield, Ludlow and Houlton serve as major gateways to the jurisdiction.

Arterial routes primarily serve the Western Mountain and Downeast areas or pass through townships on the jurisdiction's edge. Significantly, no arterial routes access the heart of the jurisdiction. Major arterial routes within the jurisdiction include State Routes 1, 9 and 201. Minor arterials include Routes 4, 16, and 27 in the Western Mountain area; Routes 2, 2A, and 6 in the Downeast area; and Routes 11 and 161 in the Northern area.

Other state routes serve portions of the jurisdiction, but most of these carry less traffic, functioning more as collector roads than arterials. The remaining public roads within the region are county and local roads, with paved or gravel travel surfaces. Some of these roads serve as important links between state routes; others are more lightly traveled.

Repair, maintenance and snowplowing of public roads are carried out by the State, county, town or plantation government. Funds for major resurfacing and reconstruction projects are allocated by the Maine Department of Transportation.

At this time, there are no plans to construct any new state routes through the jurisdiction, although extending I-95 north from Houlton to Presque Isle and Caribou has been considered. Several years ago the state decided to make substantial improvements to existing east/west highways, resulting in on-going reconstruction projects for major state routes, rather than constructing a new east/west arterial. The main changes to the public road system in the future will most likely occur as the result of improvements made to existing state and county roads. Other improvements may involve the public highways in the jurisdiction that have been designated as state or federal scenic byways (see the Scenic Resources Section for further discussion).

Private Roads

Most of the roads within the jurisdiction are privately owned and maintained. Approximately 20,000 miles of these roads crisscross the area, providing the forest products industry with a vital link between its resource base and markets. Some private roads, such as the Golden Road near Millinocket, the Stud Mill Road Downeast, and the Realty Road in Aroostook County are large, well-traveled thoroughfares that function much like unpaved arterials for logging trucks, recreationists, and local traffic.

Extensive private road construction began after the cessation of the log drives on Maine rivers. Spurred by the rush to harvest trees damaged by the spruce budworm, road construction during the 1980s peaked at an estimated 1,000 miles per year. While the pace of construction has slowed, new private roads continue to be constructed, providing improved access to backcountry areas. Much of this involves construction of spurs and winter roads off of the major access roads. Other road construction activities occasionally entail the reopening of older roads that have not been used since the time of a previous harvest.

Though some of the roads built for logging are gated and others are permanently closed after harvesting, many remain open and available for public use. There is a unique cultural history of public access over private roads in Maine and the jurisdiction, providing access to recreational opportunities, private property, public lands and other uses.

The Commission recognizes that the location of roads shapes development patterns. While most land management roads are initially constructed for forest management activities, some later become access roads for development.

Other Transportation Modes

Rail service, once a major mover of passengers and freight in Northern Maine, now plays a relatively minor transportation role. The Montreal, Maine and Atlantic Railway line runs from Searsport northwest into Canada through Jackman, and from Searsport north to Van Buren. Smaller lines also exist in Eastern Maine and Washington and Penobscot Counties.

Air travel is limited to nonscheduled service to small airfields in gateway communities or on coastal islands and by float plane to lakes and ponds. There are several private airstrips within the jurisdiction (illustrated in Map 4). Some of these private operations have become quite substantial in recent years.

Ferry service is available to Monhegan and Matinicus, two coastal island communities in the Commission's jurisdiction.

4.6.B Residential Development Trends

Summary of Residential Development Trends

The main type of structural development in the jurisdiction today is housing. Residential development typically includes the construction of dwellings, garages, and driveways and/or roads; the clearing and grading of land; and the installation of water and septic systems and utilities. It can also include the construction of other accessory buildings, the installation of docks and communications equipment, and shoreline alteration.

Amount of Development

Housing growth since the inception of LURC in 1971 has been moderate. Between 1971 and 2005, the Commission permitted 8,136 new dwellings, an increase of 66% in the housing stock, using the 1970 Census count of 12,286 dwellings as a baseline. While the 2000 Census data indicate 7,031 new dwellings in the 1970-2000 period, the Commission data indicate that the Commission permitted 6,758 new residential dwellings during this same time period. Given the limitations of precision in the data, the two numbers are consistent. While housing growth, averaged over the period between 1971 and 2005, was moderate, housing growth in the jurisdiction has fluctuated over time with changes in the economy.

Maine is the second most rural state in the United States, behind Vermont (Census data). Excluding areas of the jurisdiction, the State has a housing density of 36 dwellings per square mile. The jurisdiction is the least populated part of this rural state. Until recently, the jurisdiction as a whole had less than one dwelling unit per square mile (0.7 dwellings per square mile in 1970). While the average density of housing units within the jurisdiction is still low, approximately one and a quarter dwellings per square mile in 2005, there is great variability in housing density from one area to another (Census and LURC permitting data). Concentrations of residential development are typically found in LURC's towns and plantations and near organized towns.

Character of Development

The jurisdiction's year round population is growing and in some cases it is growing faster than neighboring organized communities (Census data). Still, the jurisdiction is distinguished by the fact that 70% of its housing units are used seasonally or serve as second homes. This is in striking contrast to the fact that only 16% serve as second homes in Maine as a whole. The demand for seasonal homes in the jurisdiction comes primarily from within Maine. In fact, seventy percent of the seasonal home owners in the jurisdiction are Maine residents. This is a slight decline from the two decades of 1971 to 1991, when 78% of the new dwelling permits in the jurisdiction were issued to Maine residents. Generally, the demand for second homes in the jurisdiction has followed local and regional economic conditions.

The year round homes in the jurisdiction tend to be located near organized areas and are not dissimilar from year round residences in other areas of the state. Seasonal dwellings in the jurisdiction have traditionally been small, single story, uninsulated camps built on posts and lacking utilities.

The last decade has brought noticeable changes in the character of seasonal camps. These changes are evident in the size of new construction as well as improvements and expansions to existing dwellings. While the Commission does not track dwelling size in a way that is easy to retrieve and analyze, the Commission has noted that a considerable number of new dwellings are larger than was historically typical. There is also a trend towards renovating and enlarging existing camps by adding bathrooms, bedrooms, second floors, bunkhouses, and garages. Many of these improvements and expansions are to dwellings located on lakes. Between 1971 and 2005, 7,937 or 45% of all building permits were for expansions to existing dwellings. Between 1971 and 2005, 46% of permits for residential uses were located on parcels within 500 feet of water bodies (Planning Decisions). In some cases, these expansions are occurring on substandard lots.

The jurisdiction's population is growing, in some cases, faster than neighboring towns.

The jurisdiction's population grew from 10,427 in 1970 to 12,120 in 2000, averaging about 5% growth per decade (Planning Decisions). Between 1990 and 2000, the population in most regions in the jurisdiction grew faster than neighboring organized communities (communities within 10 miles of the jurisdiction). 2005 US Census estimates indicate continuation of this trend. The population of the Western Mountains Region of the jurisdiction grew by 17% between 1990 and 2000, accounting for 63% of the jurisdiction's net growth. The Moosehead Region's population grew by 8%. By comparison, organized communities near these two regions experienced a 2% decrease in population growth. The Downeast Region of the jurisdiction grew by 7% while neighboring communities grew by only 2%. The population in the Central Region of the jurisdiction grew by 3% while neighboring communities decreased by 6%, and the Aroostook Region of the jurisdiction decreased by less than 1% while neighboring communities decreased by 16%.

Population trends after 2000 point to continued population growth in the jurisdiction. Since 2000, every region in Maine has experienced significant population growth. Even northern Maine, including Aroostook, Penobscot, and Piscataquis Counties, which lost over 2,800 people between 1995 and 1999, gained 2000 people between 1999 and 2004.

Another change in the character of residential development is that an increasing percentage of dwellings are being constructed or renovated for four season use. Dwellings able to accommodate year-round use are typically constructed with full foundations, indoor plumbing, and insulation. At present, 69% of the dwellings in the jurisdiction are constructed for four season use, up from 52% in the 1990s, 49% in the 1980s, and 53% in the 1970s (Planning Decisions). A shift toward more frequent use and an increased potential for conversion to permanent residences has implications for the provision of public services, such as education and public safety, as well as for surrounding uses and natural resources.

Location and Patterns of Residential Development

In 1970, prior to the creation of the Commission, there were approximately 12,286 housing units in the jurisdiction (U.S. Census). By combining information from the 1970 DOT Maine Road Atlas and 1970 Census, it is possible to illustrate the location, by township, of 76% of the dwelling units that existed in the jurisdiction at that time as shown in Map 5. In 1970, areas of concentrated residential development were generally associated with public roads, high value natural resources, or job centers. There was limited residential development in the interior of the jurisdiction.

Map 5 – Location of Pre-LURC Dwellings

The overall pattern of residential development in 2005 (Map 6) bears some similarity to the pattern that existed in 1970. The densest development is generally close to organized areas, public roads, and high value natural resources. Approximately 79% of the permitted new residential dwellings are located in townships that border organized areas, and 88% of the permitted new dwellings are in townships that are located within 1 mile of a public road (the location of these MCDs is illustrated in Map 7).

However, some aspects of the development pattern deviate from the pre-LURC pattern of development. Between 1971 and 2005, a significant number of the permitted new dwellings are dispersed across the more isolated portions of the jurisdiction. Also, new patterns of concentrated development appeared in townships that had little or no prior development, such as Upper Enchanted, Elm Stream and Connor Townships. Approximately 50% of the permitted new dwellings are located in townships near a service center (minor civil divisions within LURC's jurisdiction where any portion of the MCD is within 12 miles by public road from the edge of a service center, or where approximately 10% or more of the MCD is within 1 mile of such routes). The location of these MCDs is illustrated in Map 7.

Map 6 – Location of Pre-LURC Dwellings and LURC-Permitted New Dwellings

Map 7 – MCDs Within 1 Mile of a Public Road or Within 12 Miles by Public Road from a Service Center

Service Centers

The State Planning Office (SPO) identified service centers are those cities and towns that provide a majority of the state's jobs, commercial activity, and social resources such as higher education and health care (shown in Figure 5 as 'Service Centers'). The methodology for identifying these cities and towns is based on level of retail sales, jobs-to-workers ratio, amount of federally assisted housing, and number of service sector jobs. There are 69 SPO identified service centers in Maine, 15 of which are contiguous to the jurisdiction:

<i>Fort Kent</i>	<i>Madawaska</i>	<i>Van Buren</i>	<i>Caribou</i>	<i>Houlton</i>
<i>Ashland</i>	<i>Lincoln</i>	<i>Millinocket</i>	<i>E. Millinocket</i>	<i>Greenville</i>
<i>Jackman</i>	<i>Rangley</i>	<i>Bethel</i>	<i>Calais</i>	<i>Lubec</i>

Service centers are the economic engines of the state. They are generally the places people go to work and shop. They provide 71% of all jobs, 74% of all service employment, and 77% of all consumer retail sales.

Concentrations of Residential Development near High Value Natural Resources

49% (4,032) of new dwellings permitted between 1971 and 2005 took place in the high value natural resource areas of the Western Mountains and Moosehead Regions (LURC permitting records). These areas have both significant lake resources as well as hillsides offering attractive views of surrounding areas.

In the 1971-2005 period, the amount of shorefront development has been relatively steady across the jurisdiction as a whole. However the trends vary by region. Between 1971 and 2005, permits for residential uses on lakes remained near 33% in the Western Mountains and decreased from 73% to 53% in the Moosehead region.

More recently, as waterfront land becomes less available in some high growth areas, development is moving up the hillsides and ridges in order to take advantage of attractive views. This is particularly evident in the Rangeley Lakes Region (shown in Map 12). In the area shown on the map, the pre-LURC development, represented by black dots, is located along the shoreline. Subsequent development permitted between 1971 and 2005 and represented by red dots, includes additional shoreline development but also includes development located on the hillsides and ridgelines. This new pattern of development is occurring both within and outside of the jurisdiction.

Map 8 – Rangeley Area Pattern of Development

Between 1971 and 2005, 40% (3,295) of the permitted new dwellings were in 17 MCDs, representing 4% of the MCDs in the jurisdiction. The remaining 59% (4,841) of the new dwellings permitted by the Commission are located in 314 of the 459 MCDs or 68% of the MCDs in the jurisdiction. Over half of these MCDs have no public roads and nearly two thirds have fewer than 10 new dwellings.

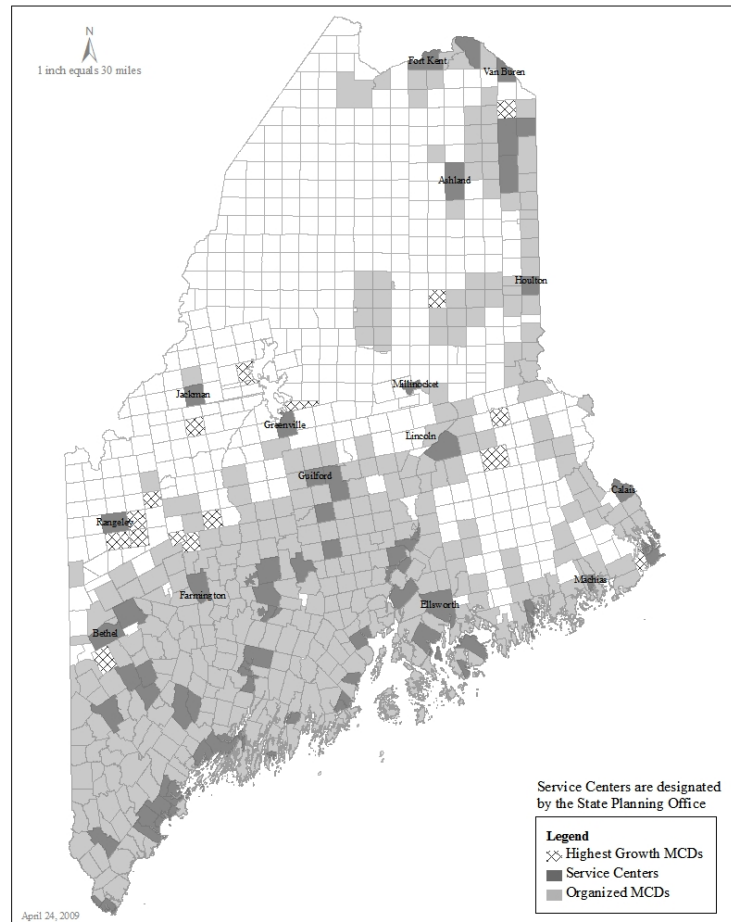
The 17 fastest growing MCDs include: the townships of Albany, Connor, Freeman, Lexington, Prentiss, Rockwood Strip, Salem, Tomhegan, Trescott, and Upper Enchanted; the Towns of Beaver Cove, Lakeville and Mount Chase; and the plantations of Coplin, Dallas, Rangeley, and Sandy River (illustrated in Map 9). The high rate of new residential development in these MCDs is likely due to factors such as proximity to high value natural resources, service centers, and roads, as well as landowner intent. Some of these 17 MCDs experienced high levels of permitting activity due to the presence of high value natural resources. Eight of the 17 MCDs are in the Western Mountains area, an area known for its high value natural resources.

On the other hand, some of the 17 MCDs experienced high levels of permitting activity due to landowner objectives, manifested in land division patterns. Four of the 17 fastest growing MCDs have a history of large lot divisions involving 100 or more lots each. These MCDs include Upper Enchanted (illustrated in Map 10), Prentiss, and Tomhegan Townships and the Town of Lakeville. Even though the large lot exemption for development purposes was eliminated by the Legislature in 2001, the pattern created by large lot divisions continues to influence land use. These divisions created concentrations of development in areas not necessarily suited for this type of use when considering the Commission's goals and policies.

Proximity to service centers has also played a role in the location of residential development in the jurisdiction. Just over half (53%) of the 17 fastest growing MCDs are near (within two townships and connected by a public road) service centers. Conversely, 47% (8) of the townships that experienced a high rate of growth are not proximate to service centers.

Beyond examining development patterns at the jurisdiction level, it is also informative to consider development patterns within townships themselves. Doing so reveals that the development pattern within townships is quite variable. Some relatively high growth townships may have a dispersed development pattern while other relatively low growth townships may have a concentrated development pattern. The opposite may also be true. There is no clear correlation between growth rate and development pattern at the township level. Just as at the jurisdiction level, a variety of factors influence the development patterns within townships including landowner intent (landowner objectives and goals), public access and proximity to natural resources, conservation lands and service centers.

Map 9 – 17 Fastest Growing MCDs



For example, the pattern of residential development (both pre-LURC dwellings and LURC permitted new dwellings) in Coplin Plantation and Wyman Township, both relatively high or moderate growth areas, is fairly concentrated (shown in Map 10). In Wyman Township, this pattern is clearly the result of conservation lands. Most of Wyman Township is conserved by state and federal agencies, so residential development is concentrated on available land along the Route 27 corridor. In Coplin Plantation, the concentration of development appears more to be the result of landowner intent. Most of Coplin Plantation remains in single ownership and has not been divided over the last three decades. The owner's apparent choice not to create residential lots has resulted in most development occurring in east and west portions of the township where other land has been available.

Map 10 – Upper Enchanted Land Divisions

Map 11 – Coplin Plantation and Wyman Township Development Pattern

Conversely, the pattern of residential development (both pre-LURC dwellings and LURC permitted new dwellings) is more dispersed in the townships of Salem and Freeman (shown in Map 11). Between 1971 and 2005, the Commission approved 44 subdivision lots in the two townships. Additionally, between 1985 and 2005, 169 lots were created via one of the exemptions to subdivision law and many of these lots are now populated with houses. In Salem and Freeman the development pattern appears to be the result of landowner intent and the amount of parcelization that has taken place.

Map 12 – Salem and Freeman Townships Development Pattern

Residential Development Occurring Within and Outside of Subdivision Process

As discussed earlier, the Commission permitted 8,136 new residential dwellings in the jurisdiction between 1971 and 2005. The Commission approved 2,494 subdivision lots, relatively few in comparison to building permits, during this same time period.. Considered together, this data indicates that if all such lots have been developed, at most, one third of the new dwellings permitted by the Commission are located on Commission-reviewed subdivision lots. Since subdivision lots can only be created in a development zone, dwellings constructed on these lots must by definition also be located in a development zone⁹.

⁹ This number may include a very small number of subdivision lots in P-GP2 subdistricts.

Figure 1 – Number of New Subdivision Lots and New Dwelling Permits by Five Year Category, 1971-2005

Development Zones

Residential Development (D-RS) and General Development (D-GN) Subdistricts occur throughout the jurisdiction and allow single family residential development as well as residential subdivisions. As discussed previously, the Commission created over 600 Residential Development Subdistricts spread across 135 Minor Civil Divisions during its original zoning process in the mid-1970s (shown in Map 13, as 'Original Residential Subdistricts'). These zones were placed around existing patterns of development, (defined as four or more dwellings within a 500 foot radius).

Since its initial zoning efforts, the Commission has approved 72 landowner-petitioned residential development subdistricts located across 59 minor civil divisions (shown in Map 13 as 'Petitioned Residential Subdistricts'). The location of these development zones was guided by the Commission's current policies for rezoning and not just by pre-existing development patterns.

There are some differences in the location of Commission-created and landowner-initiated zones. Of the 667 Commission created development zones based on existing patterns of development, 43% are near (within two townships of and connected by a public road) a service center (see previous gray box). Overall, these are more dispersed across the jurisdiction, and a greater number of them occur in the interior of the jurisdiction. Conversely, of the 72 landowner-initiated zones, 60% are near a service center. A greater percentage of these subdistricts are near organized areas, and the majority is located along public roads or waterbodies. Still, the locations of these landowner-initiated rezonings reflect not just Commission policies but also market forces and landowner intent.

Map 13 – Residential Subdistricts

Conversely, at least two thirds of the new dwellings permitted by the Commission are not located on subdivision lots. They are located on lots that either existed prior to the Commission (hereafter referred to as "pre-LURC lots"), or were created via an exemption to subdivision law (hereafter referred to as "exempt lots")¹⁰. These developed lots may or may not be located in development zones. Since single family and in some cases two family residential development are allowed in most of the Commission's subdistricts, to include the extensive General Management Subdistrict, these developed lots can be located in any number of the Commission's subdistricts. While the dwellings located on these lots must receive a building permit from the Commission, they do not receive the same type of review that those associated with subdivision receive such as the appropriateness of their location at the regional or jurisdiction level.

It is not possible to determine precisely how many new dwellings were permitted on pre-LURC lots versus exempt lots. Nevertheless, taken together, Maine Revenue Service and LURC permitting information suggests that exempt lot divisions, have been substantial. Between 1985 and 2005, the most significant use of exemptions to subdivision law occurred near organized areas. Five percent of the jurisdiction's townships experienced between 40 and 140 new exempt lots between 1985 and 2005, or the equivalent of two to seven exempt lots per year. All of these townships are either adjacent to or completely surrounded by organized towns. Fewer exempt lots were created in the remainder of the jurisdiction between 1985 and 2005¹¹.

While many of the exemptions to subdivision law were established to facilitate the transfer of lands for forest management or conservation purposes, historically, some of these exemptions, such as the large lot exemption, have been used for development purposes. The legislature found that the use of this particular exemption for development was contrary to the purpose and intent of the exemption and created land use patterns that were out of keeping with sound planning practices. In response, the Legislature modified the large lot exemption so that its use is now limited to agriculture, forestry or conservation.

¹⁰ Some exemptions to subdivision law are located in statute (statutory exemptions) and some are located in LURC rule.

¹¹ This data does not include lots created using the 40-acre exemption or the sale of leased lots.

Subdivision Definition and Exemptions

Subdivision is defined in statute, 12 MRSA section 682(2), as the division of a single lot into three or more parcels within a five year period. Consequently, the division of a parcel into 2 lots every 5 years does not, in most cases, constitute a subdivision and is referred to by the Commission as the '2-in-5 exemption'.

Additionally, pursuant to the Commission's rules and statute, the following divisions are exempt when counting lots for purposes of subdivision:

- (1) Transfer of Lots for Forest Management, Agricultural Management or Conservation of Natural Resources.
- (2) Retained Lots.
- (3) Transfers to an Abutter and Contiguous Lots.
- (4) Divisions by Inheritance, Court Order, or Gifts.
- (5) Conservation Lots.
- (6) Transfer to Government Entity.
- (7) Large Lots Managed for Forest or Agricultural Management Activities or Conservation.

Affordable Housing

Affordable housing is housing that is priced at a level that is affordable to lower and moderate income groups. Housing in much of the jurisdiction has been and remains generally affordable compared to the rest of the state. Nevertheless, housing affordability has become an issue in some areas of the jurisdiction where strong demand or limited housing supply has driven up prices. Lack of affordable housing has both economic and social repercussions. High housing costs may become an impediment to economic growth if workers cannot afford to live in a community. Such costs may also exclude young families from some communities, making it more difficult for them to sustain their year round population over time.

The high housing costs on Monhegan Island Plantation have prevented the in-migration of new year-round residents. Affordability concerns are most acute on the coastal islands, which do not have the option of drawing their workforce from adjacent towns. The ten coastal islands (three of which are within the jurisdiction) for which data are available have a low affordability rating of 0.5 (where 1.0 indicates a more affordable area).¹² A few other areas of the jurisdiction have also experienced problems of affordability (shown in Table 4). The situation appears to be fairly localized in a few seasonal communities possessing outstanding natural resource values and located adjacent to organized towns or service centers. For example, affordability ratings of 0.46 and 0.81 for Rangeley and Greenville respectively indicate a lack of affordability¹³. Because localized areas of the jurisdiction have experienced problems of affordability, the Commission adopted rule changes in 2007 to facilitate the provision of affordable housing.

High housing costs and property taxes in organized communities and employment centers can drive people to move farther out to rural areas. As communities with high value recreational attractions, such as the Bethel, Rangeley, and Greenville areas, experience sustained seasonal home demand, year round residents and some second home buyers will seek affordable land and housing farther afield. This trend could have implications for more rural areas of the jurisdiction and could promote a pattern of dispersed development, resulting in longer commutes/driving time, increased fuel consumption, extension of service areas and infrastructure, and cumulative impacts of development on natural resources and values.

¹² The Affordability Index measures the ratio between how much of a mortgage loan the area's median income can afford divided by the area's median home price. Source: Maine State Housing Authority.

¹³ Maine State Housing Authority. 2005 Housing Facts for LURC Regions, Maine Islands, Greenville, Millinocket, Rangeley. Compiled by MSHA for Land Use Regulation Commission Meeting Housing Panel. August, 2006.

Table 4 – 2005 Homeownership Affordability for Buyers at Median Income

Community or Housing Market	Affordability Index ¹	Median Home Price	Median Income	Income Needed to Afford Median Home Price
Communities				
Greenville	0.81	\$127,500	\$35,948	\$44,604
Rangely	0.46	\$251,250	\$38,243	\$83,826
Counties				
Aroostook County	1.41	\$67,000	\$32,809	\$23,249
Hancock County	0.66	\$196,000	\$41,869	\$63,206
Franklin County	0.84	\$127,000	\$35,930	\$42,752
Knox County	0.69	\$192,875	\$44,005	\$63,675
Lincoln County	0.64	\$209,000	\$43,559	\$68,281
Oxford County	0.88	\$129,900	\$38,123	\$43,510
Penobscot County	0.88	\$132,500	\$39,453	\$44,988
Piscataquis County	1.02	\$92,000	\$31,652	\$30,994
Somerset County	1.14	\$91,500	\$35,153	\$30,898
Washington County	0.89	\$95,000	\$29,105	\$32,723
Labor Market Areas²				
Dover-Foxcroft LMA	1.06	\$86,750	\$30,982	\$29,291
Millinocket LMA	1.81	\$53,950	\$33,440	\$18,488
Coastal Islands ³	0.50	\$272,500	\$42,716	\$85,035
LURC MCDs ⁴	0.68	\$165,000	\$36,554	\$53,498
Maine	0.70	\$184,000	\$43,370	\$61,648

Notes: 1 Affordability Index – the ratio between how much of a mortgage loan the area’s median income can afford divided by the area’s median home price.
2 LMA – Labor Market Area.
3 Based on data for 10 coastal islands, including Criehaven, Matinicus and Monhegan.
4 MCD – Minor Civil Division, based on data for 58 towns, townships and plantations in LURC jurisdiction and 8 organized towns.
Source: Data compiled by Maine State Housing Authority, distributed at LURC meeting, August 2, 2006.

4.6.C Nonresidential Development

The following sections describe the nonresidential development activities or land uses that require a permit from the Commission. These activities are wide ranging and include recreational uses, commercial industrial activities, and government or civic facilities. Some of these activities are allowed in the General Management (M-GN) Subdistrict, while others are only allowed in development zones and thus require rezoning. It is important to note that the permitting data on nonresidential development includes activities that may have been discontinued or changed since the permit was issued. While forestry and agricultural management are the dominant nonresidential land uses in the jurisdiction, many of the associated activities do not require a permit from the Commission and are therefore not included in the following permitting data.

Amount of Nonresidential Development

Between 1971 and 2005, the Commission issued 1,353 Development Permits for new uses or substantial amendments to existing uses. The rate of permitting for nonresidential development activities has more than doubled in recent years. From 1971 through 1991, the Commission issued 629 Development Permits, or approximately 21 permits per year; whereas from 1992 through 2005, the Commission issued 724 Development Permits or approximately 56 permits per year.

Permitted nonresidential development is broadly dispersed across the jurisdiction (shown in Map 14). These development permits are located in 249 minor civil divisions (MCDs), or approximately 55% of the MCDs in the jurisdiction and occur within development subdistricts as well as in other subdistricts, such as the M-GN and certain protection zones.

Map 14 – Development Permits by Category, 1971-2005

A very wide range of land uses and activities is represented in the nonresidential permitting data. These uses can be divided into broad categories, described in Table 5¹⁴. Recreational facilities and commercial service facilities accounted for the greatest number of development permits (62%) between 1971 and 2005. Government/civic and commercial industrial activities experienced the greatest percentage increase in permitting activity during the time period.

Figure 2 – Average Annual Number of Development Permits

Natural Resources

Forest and agricultural management activities are the predominant land use in the jurisdiction. However, most of the activities associated with these land uses are not reflected in the following data because they are exempt from permitting. Many of the natural resource-based activities that do require a permit from the Commission are allowed in the M-GN Subdistrict; however, some of the larger scale or more intensive natural resource-based activities require development zoning.

Some natural resource-based activities in the jurisdiction occur in clusters, while others are more dispersed depending upon the location and distribution of the resource (shown in Map 14 as ‘Natural Resource-Based’). For example, a number of water extraction permits for blueberry crop irrigation purposes are concentrated in the Downeast area. Likewise, several maple sugaring operation permits are found in western areas along the Canadian border. Gravel extraction activities are scattered throughout the jurisdiction. Many gravel pits are small operations allowed in the General Management Subdistrict and used for road construction and maintenance or for general construction in the region.

Maple Syrup Processing

The General Management Subdistrict allows sugar camp operations. This activity includes the construction of sugaring camps and processing of the sap on-site. The Commission has determined that these camps are compatible with the purpose of the M-GN as long as they are used for the intended purpose. The Commission is particularly mindful of the future conversion potential of these facilities to uses that are not necessarily compatible with the purpose and intent of the M-GN zone in which they are located.

Larger extraction operations for gravel or other minerals require development zoning. Although interest in the state’s metallic resources is increasing, commercial mineral extraction plays only a minor industrial role in the jurisdiction. Mineral exploration, however, occurs in a number of areas along with some small-scale gemstone mining, most notably in the Western Mountains area.

Natural resource-based activities in the jurisdiction also include energy generating facilities. The Commission requires development zoning for these due to the large infrastructure generally associated with them. The jurisdiction contains a handful of commercial electric power generating facilities, such as hydropower dams and biomass plants. Interest in wind-generated energy has risen dramatically in recent decades. The technology has improved and costs of wind-generated energy have dropped significantly in the intervening years. Some areas of the jurisdiction have relatively high sustained wind velocities. *Energy facilities are discussed in more detail in Section 5.5, Energy Resources, of this Plan.*

Recreation

Most recreational pursuits in the jurisdiction are low-to-medium intensity activities which require development of few, if any, facilities or support services. Common examples of low intensity recreational facilities are public and private sites for picnicking, launching boats, and swimming; trails for snowmobiling, hiking, cross-country skiing, and snowshoeing; and lodging facilities such as remote rental cabins and sporting camps. Higher intensity recreational facilities include golf courses, rafting bases and ski resorts (See Recreation Section for a more thorough discussion of recreational facilities).

Forty-two percent of development permits issued by the Commission between 1971 and 2005 were for recreation-related activities (both low intensity and high intensity activities). These permitted activities take place across the jurisdiction, confirming that recreation is a widespread and important land use in the jurisdiction. In fact, the data may actually under-represent recreational uses due to the fact that some facilities predate LURC and are not reflected in the permitting files. Also, some recreational uses in Resource Plan Protection or Recreation Protection Subdistricts do not require a development permit and

¹⁴ These categories are used for general planning purposes only.

therefore are not reflected in this data. Lastly, in some cases, a single permit is issued for multiple campsites or rental cabins in multiple townships. Such permits would appear as a single dot in one township on Map 14.

Table 5 – Development Permit Use Categories

Category	Description	Subcategory	Example of land uses	Zoning
Natural Resource	Uses and structures which are resource dependent or linked to the harvest or management of natural resources (does not include any forest or agricultural management activities exempt from the permitting process)	<i>Agriculture/Forestry</i>	agricultural activities, dam/dikes, dri-ki collection, forestry activities	M-GN
		<i>Extraction (water)</i>	non-consumptive water extraction	
		<i>Sugaring</i>	sugar camps and evaporators	Development Subdistrict
		<i>Extraction (mineral)</i>	gravel pits, rock quarries, and clay extraction	
Recreation	Recreational uses which are less intensive in nature	<i>Low Intensity Recreation</i>	boat launches, campsites, campgrounds, gatehouses, recreational lodging facilities (cabins and sporting camps), and trails	M-GN
	Recreational uses which are more intensive in nature	<i>High Intensity Recreation</i>	golf courses, rafting bases, and ski resort facilities	Development Subdistrict
Commercial Services	Uses which offer either a service or retail opportunity	<i>Home Occupations</i>	small engine repairs, craft shops, and saunas	M-GN
		<i>Utility</i>	towers, utility facilities, and radio repeaters	
		<i>Retail/Services</i>	gas bottling, gift shops, antique shops, mobile home sales, salons, laundromats, welding shops, grocery and convenience stores	Development Subdistrict
		<i>Lodging/Restaurants</i>	hotels, motels, pizza and ice cream shops, and lounges	
		<i>Office/Storage</i>	various office uses, storage facilities, and other commercial uses	
		<i>Airstrip</i>	airstrips and hangars	
Industrial	Uses incompatible with residential uses	<i>Landfill</i>	landfills and waste dumps	Development Subdistrict
		<i>Forest Products Processing</i>	mills*, planer or chipper* buildings, and kilns (*size thresholds apply)	
		<i>Mineral Processing</i>	rock crushing and paving plants	
		<i>Not Applicable</i>	churches, fire stations, libraries, salt/sand storage, schools, town garages, and transfer stations	
Government Civic	Development conducted by government agencies, civic groups, church groups, sewer/water districts	<i>Not Applicable</i>	changes in permit conditions or dimensions, time extensions, transfers of ownership, and appeals	All Subdistricts
Administrative	Changes which are not of a material or physical nature	<i>Not Applicable</i>	residential uses (<i>these dwellings are included in Residential Trends</i>)	All Subdistricts
Other	Permits and uses which do not fit into any of the categories above	<i>Not Applicable</i>		

Low intensity recreational uses and facilities such as campsites, campgrounds, sporting camps, and boat launches are more dispersed compared to high intensity recreational uses (shown in Map 14 as 'Intensive Recreation'). This is due in part to the fact that the low intensity facilities are allowed in most management and protection zones as they are considered compatible with the primary purposes of those zones. The number of traditional sporting camps has declined throughout this century, but there has been renewed interest in them and improved coordination and promotion by camp owners. Many of these facilities are marginal, labor-intensive operations. Their future success may be tied to increasing their clientele while maintaining the remote character of the camps and their surroundings.

High intensity recreational facilities, such as golf courses, ski resorts, and commercial rafting bases, tend to be located along highway corridors in areas of high natural resource values. These uses require development zoning. There are clusters of

development permits issued for high intensity recreation around Rangeley, The Forks, south of Jackman, Moosehead Lake and just south of Baxter State Park.

The most intensive recreational development in the jurisdiction is associated with three alpine ski resorts: the Saddleback Mountain Ski Area in Sandy River Plantation near Rangeley, Sugarloaf Mountain Ski Area in Carrabassett Valley, and Sunday River Skiway in Newry and Riley Township. Sugarloaf was once part of an unorganized township that was annexed by the Town of Carrabassett Valley in 1977. However, unorganized communities adjacent to Sugarloaf continue to provide needed support services. Squaw Mountain, a relatively small-scale facility, is located within the jurisdiction near Greenville. Most of these areas border organized areas.

Continued growth by Sunday River, Saddleback and Sugarloaf can be expected as they compete for larger shares of the regional ski market. Downhill ski areas are likely to continue trying to attract more year-round business with activities such as golf, foliage viewing, and mountain biking. Furthermore, extensive residential development is increasingly associated with ski resort development activities.

The white water industry is centered on two outstanding whitewater river segments: the West Branch of the Penobscot River and the Kennebec River Gorge. The industry includes more than ten rafting companies that provide their clientele with food, lodging, equipment, guide services and transportation to-and-from the river. A number of rafting bases have been constructed in the vicinity of these whitewater segments; several are located along Route 201 in The Forks Plantation. *These uses are discussed further in Section 5.9 Recreational Resources of this plan.*

State and private entities are considering areas throughout the state for nature-based tourism. Until recently, tourism in the jurisdiction has taken the traditional form of small-scale, scattered recreation by a relatively small number of people engaged in day trips or low-impact camping. In general, facilities serving these tourists in the jurisdiction have been small lodging and retail establishments. However, interest in nature-based tourism may lead to new proposals, including large-scale destination resorts that offer a broad range of activities, and upgrades of existing uses to provide more amenities and recreational options. These proposals will likely depend upon areas with high scenic or recreational values, where questions of appropriateness of location and impacts upon existing uses, resources, and values are particularly important. *Further discussion of nature-based tourism can be found in Section 5.9, Recreational Resources, of this Plan.*

Similarly, a likely future trend for campgrounds, sporting camps and whitewater rafting operations is diversification into secondary activities as a means of attracting more business. For example, some sporting camps now remain open year-round to cater to snowmobilers and other winter recreationists. Several rafting bases and sporting camps have added campground areas and have dining facilities open to the general public. A number of campground stores cater both to campers and to the public at large. As this trend continues, it may become increasingly difficult to clearly distinguish between different types of recreational facilities and to assess potential impacts.

Commercial Services

Commercial services in the jurisdiction include a wide range of activities and facilities including home occupations, hotels and motels, restaurants, storage facilities, gas stations, gift shops, utilities, and wharfs. Twenty-six percent of the development permits issued by the Commission from 1971 through 2005 were for these types of commercial services (shown in Map 14 as 'Commercial Services').

Restaurants and lodging facilities tend to be located along public roads in areas of high natural resource value. They are located predominantly in townships bordering organized areas, clustered near gateway communities such as Rockwood, The Forks and areas south of Baxter State Park. While commercial services tend to be near organized towns, they are not necessarily near service centers.

Retail facilities and stores, while also located predominantly near organized areas, tend to be more dispersed than restaurant and lodging facilities. These activities tend to be located in areas where other services are not available.

Commercial Industrial Uses

Commercial industrial facilities include airports, landfills, and processing facilities, such as lumber mills and rock crushing plants.

Although commercial industrial facilities constitute a small percentage of nonresidential development permits issued between 1971 and 2005, they represent significant economic activities. Most industry in the jurisdiction is related to wood products or

energy production. Chipping mills and saw mills of various sizes and types operate in a number of townships. The majority of these occur near service centers or major road corridors, such as those located outside of Ashland, Greenville and Fort Kent (shown in Map 14 as 'Commercial Industrial').

The Commission generally seeks to site these facilities close to service centers and similar development centers, in part to provide an employee base and access to services and infrastructure. However, these facilities must also be buffered from residential uses. Balancing these two objectives can be challenging. The Extended Settlement Development Subdistrict, established in the Rangeley prospective zoning plan, was created in part to address this balancing act, although it is only appropriate for smaller scale industrial facilities.

Large gravel pits are considered a commercial industrial use in the jurisdiction. These facilities occur throughout the jurisdiction and are regulated in a unique manner. Due to the fact that they are sometimes located in more remote areas of the jurisdiction, the Commission permits large extraction operations through rezoning to Commercial and Industrial Development (D-CI) Subdistricts, conditioned with dates of expiration. Once the land use activity is complete, the D-CI zoning expires and the area reverts to its original zoning, which is M-GN in most cases. The Commission established temporary D-CI zoning to allow activities that are appropriate on a temporary, not long-term, basis. The D-CI Subdistricts cannot then serve as the basis for a new pattern of development. A few of these D-CI zones, where operations have ceased, have not yet been changed back to their original zoning. Commission staff needs to complete this task.

Government and Civic

Many government and civic facilities fall under the umbrella of public facilities and services and are discussed in the following section.

4.6.D Public Facilities and Services

The jurisdiction is generally characterized by a lack of public services, particularly when compared to the rest of the state. This is due in large part to the jurisdiction's relatively small year-round population and remote location. Public facilities and services that do exist in the jurisdiction include fire and police protection, education, solid waste disposal and public utilities. These facilities and services are most available on the edge of the jurisdiction near organized communities, where the majority of the year-round population resides. In 2000, most of the jurisdiction's year-round residents (70%) lived within 3 miles of an organized town.

In the absence of the municipal form of government, State agencies, county governments and other entities provide services to the unorganized territories (UT). Plantations and towns within the jurisdiction are responsible for either providing their own services or contracting with nearby towns. The following sections describe the type and degree of services that exist in the jurisdiction.

Public Safety

Although a few towns and plantations have their own fire and rescue units, fire protection and emergency services for most unorganized communities are provided through county government, which arranges contracts with neighboring organized towns. Services are typically provided to unorganized areas that are within a reasonable range of available services. A network of EMT stations, hospitals, medical centers, and LifeFlight of Maine provide emergency and medical services. As illustrated in Map 15, most emergency service facilities are located in or near organized areas.

Response time is a critical element of the effectiveness of emergency services and is affected by both travel distances and road conditions. In some instances a critical response time of as little as 15 minutes is important.

Map 15 – Emergency Services

Forest fire protection is provided by the Department of Conservation Maine Forest Service. While the Maine Forest Service tries to contain fire from spreading to nearby areas, its primary obligation is to protect the forest and not to rescue buildings or homes. MFS personnel are not allowed to enter buildings due to a lack of relevant training and equipment. County sheriff departments, the Maine State Police and plantation police are responsible for law enforcement.

Education

Public education for residents of the jurisdiction is available from state-operated schools or adjacent educational units. There were approximately 1,150 students in the unorganized territory in 2008. One hundred sixty-nine of these students attended five state-operated schools in Edmunds, Connor, Sinclair, Kingman, and Rockwood Strip (T2 R1). The remaining 980 students attended schools in organized towns, to which the state paid tuition. Due to low enrollment, the school in Rockwood Strip closed at the end of the 2008-2009 school year. The small number of students and the enormous geographic areas over which they are spread means that the cost per UT student usually exceeds statewide averages. Transportation expenses are double statewide averages for UT students due to the long distances that must be traveled and the high vehicle maintenance and replacement costs associated with traveling over substandard roads.

Slow growth in the jurisdiction's year-round population makes an increase in demand for education facilities unlikely. Should it occur, however, the most noticeable education-related impact of such growth may affect the governments of adjacent, high-growth communities.

Solid Waste Disposal

The disposal of household and commercial wastes is handled in a variety of ways. Towns and plantations run their own solid waste facilities or pay to use facilities in neighboring towns. In the unorganized townships, county commissioners make arrangements for solid waste disposal. Communities on the periphery of the jurisdiction tend to use landfills in nearby organized towns.

However, the jurisdiction is sometimes considered as a potential site for regional and statewide solid waste facilities. This is due in part to the availability of relatively inexpensive land, low population densities, and the closure of town dumps throughout the state. The Commission's policy is to site solid waste facilities close to organized areas rather than in more isolated areas of the jurisdiction. However, the Commission recognizes the need to locate these facilities in areas that have appropriate site conditions, but away from other land uses such as residential development.

There are currently four landfills, some of which are owned and operated by organized municipalities, and fifteen transfer stations, which serve as collection sites for solid waste, located within the jurisdiction. Some of these solid waste handling facilities are facing capacity constraints or other issues.

Water and Subsurface Waste Disposal

Only a small portion of the dwellings and facilities in the jurisdiction are served by public sewer or water. Most of these users are adjacent to larger, organized communities with sewer or water districts. The vast majority of dwellings, businesses, and other facilities draw water from wells, springs, or nearby surface water sources and dispose of sewage in on-site subsurface waste disposal systems or privies.

According to the 1990 Census, 63% of the housing units in the jurisdiction have individual wells, 12% have public water, and 25% have some other form of water supply. The Census also reported that 73% of the units have septic systems, 7% had public sewer, and 21% had another means of waste disposal, most likely, pit privies. It is probable that some of the housing units serviced by "public" facilities rely on shared wells or clustered waste disposal systems.

As of 2003, approximately 140 of the water systems in the jurisdiction were considered "public water supplies" (defined by the number and frequency of water consumers) by the Maine Department of Health and Human Services. These systems serve various uses, such as schools, offices, campgrounds, golf courses, and highway rest stops. The Maine Department of Health and Human Services administers the rules governing public water supplies.

Public Utilities

While most year-round homes have electricity and telephones, a substantial percentage of seasonal homes have neither. These homes are typically located in more isolated areas that are distant from utility distribution lines.

The main distributors of electricity are Central Maine Power Company, Bangor Hydro-Electric Company, and Maine Public Service Company. Several smaller electric utilities provide power as well. The power distribution system is comprised of transmission lines, which transport high voltage electricity long distances, and distribution lines, which deliver power to homes and businesses.

There is limited information on the location of utility distribution lines in the jurisdiction, for a variety of reasons. Many utility line extensions are exempt from Commission review, so the Commission has limited data on these lines. Also, some power providers do not have the capacity to share their data. The data that is available illustrates that public utilities are concentrated along the edge of the jurisdiction and are almost completely absent from the interior. Excepting Interior and Aroostook areas for which data is not available, electric service was provided to more than 8,000 homes and businesses in the jurisdiction in 2004.

Map 16 – Utility Lines and Service Points

The Commission has authority for permitting utility lines only when they are located outside of public rights-of-way. Most utility line extensions permitted by the Commission from 1971 through 2005 are located around the Rangeley, Jackman, and Moosehead areas, and the Downeast area around Vanceboro and Patten. Between 1971 and 1991, the Commission issued 525 permits for utility extensions. Many of these permits were for short connections to existing utility lines. A number were for longer extensions. Since 1992, the Commission has issued approximately 80 permits for utility extensions and an additional 281 service drops for phone service, electric service, or both. The distance qualifying as a service drop was increased from 1,000 to 2,000 feet between these two time periods, thereby explaining the decline in utility line permits.

As utilities seek new customers and camp owners request electric and phone service, applications for future extensions into more remote areas are likely. Extension of utilities into an undeveloped area generally makes it more attractive for year-round development. A more significant, ongoing trend, however, is the extension of electric power to older seasonal developments that previously relied on hand-pumped water and privies.

Fairpoint is the main provider of local phone service, but several smaller independent phone companies provide service as well. While verbal communication remains the most common use of telephones, technological advances are revolutionizing the use of phone lines as a vital link to an expanding communication network. Phone lines, as well as cable and wireless capabilities, are increasingly used for voice, video and data transmission purposes where the infrastructure exists. DSL, or Digital Subscriber Line service, offering high-speed digital communications over typical phone lines, is available in parts of approximately 36 MCDs in the jurisdiction. There are approximately ten wireless communication towers, providing service for cellular phones, etc., located within the jurisdiction as well as at least 50 facilities located outside of the jurisdiction that provide some level of coverage within the jurisdiction. As people become accustomed to having cellular service there will be increased pressure for the development of this infrastructure within the jurisdiction. Advancements in communication technologies provide new economic opportunities to previously isolated areas. These advancements increase employment opportunities for those who wish to live in relatively remote areas and work out of their homes.

Costs Associated with Public Facilities and Services

While Maine statute allows public agencies, including municipalities and counties, the discretion to provide services and facilities in a manner that best fits the geographic, economic, population and other characteristics of communities, county commissioners and local officials generally seek to provide reasonable services to the unorganized territories.

County governments prepare a budget to pay for municipal services provided to the unorganized territories. The Legislature authorizes county budgets as well as the costs of state-provided services, and Maine Revenue Services collects the appropriated funds through UT property taxes. The UT has a much lower mill rate than many organized areas of the state. In some cases, this lower mill rate does not reflect the true cost of providing services in the jurisdiction. To some degree, large landowners subsidize costs for UT residents, and organized areas subsidize part of state-provided services, such as Maine Forest Service fire protection. In 2005, the Legislature established a committee to study the costs of providing services in the unorganized territories. The committee presented its findings and recommendations in a 2006 report titled, State of Maine Report - The Commission to Study the Cost of Providing Certain Services in Unorganized Territories.

In general, communities in the jurisdiction will continue to rely on facilities and services provided by counties and organized towns. Consequently, population and housing growth in the jurisdiction will have impacts on neighboring organized communities. Expectations regarding service levels can magnify these impacts. A slowly increasing size and gradual aging of the jurisdiction's population may lead to increasing demands and expectations regarding public services.

The costs of providing services in rural areas remain modest when services, such as police and fire, are minimal, largely volunteer, or are transferred to another level of government. However, as expectations increase, the costs of providing higher levels of services often rise. Some of these costs may be transferred back to UT taxpayers, remain with organized community taxpayers, or both.

Population Growth and Service Costs

When the population in the UT increases, it can create a burden on service providers in neighboring organized towns. For example, emergency responders from Bethel cover property owners in parts of Albany and Mason Townships. While Bethel taxpayers are currently paying property taxes of \$17.86 per thousand dollars of assessed valuation, property owners in Albany are only paying \$7.21. The nature of development in the UT is changing and some argue that the method of paying for essential services needs to change as well.

Bethel Citizen newspaper article, December 14, 2006

The pattern of population and housing growth in the jurisdiction may influence the degree to which the costs of providing public facilities and services will increase. Studies point to the fact that more dispersed patterns of development can impose higher infrastructure and service costs on municipal governments and their taxpayers. There is often a connection between sprawl and the three primary cost drivers for services: 1) the construction of redundant infrastructure to support dispersing populations; 2) the similar expansion of service-provision areas and routes (lengthening of service routes for police, fire, emergency, road maintenance and plowing); and 3) the maintenance of old under-used service capacity.

Often, it costs more on a per-unit basis to serve families that are widely dispersed than it does to serve families that live in traditional neighborhoods. The costs of dispersing development go beyond fiscal considerations however. There are also costs to air quality, lake water quality, and contiguous wildlife habitat and other natural resources. The Commission will continue to closely monitor patterns of development in light of the public costs of providing services to dispersed development.

4.6.E Areas with Special Planning Needs

The first Comprehensive Land Use Plan, adopted in 1976, identified several areas of rapid growth including the Rangeley Lakes, Moosehead Lake, and Carrabassett Valley areas. Examination of growth trends indicates that these areas have continued to attract development. In fact, several of the 17 fastest growing MCDs discussed in the previous section are located in each of these areas. These areas also possess concentrations of high value natural resources that are potentially threatened by continued high rates of growth. In its planning and zoning efforts, the Commission will pay particular attention to these areas to ensure that development is accommodated without compromising their special qualities.

In addition to these high growth areas, several other areas or communities experienced moderate growth or possess characteristics that make significant future growth likely. Some of these areas have high concentrations of recreational and natural values that may attract development; other communities owe their growth to their accessibility or location near a population or employment center. The Millinocket area is particularly worthy of note because of its abundance of high value resources, its accessibility, role as a gateway to Baxter State Park and surrounding recreational amenities, and proximity to a major job center. The area is also an excellent candidate for regional planning to ensure future growth does not erode its principal values.

Development is likely to continue in most of the areas identified above due to the attractiveness of their resources and their relative accessibility. In planning for future development, the Commission will strongly focus on these areas, particularly high value areas with the greatest growth potential.

Additionally, certain areas, though they may not be high or moderate growth areas, have unique characteristics that are particularly worthy of protection. For example, interior areas support traditional uses that are very important to the economy and culture of Maine in a setting that is quite unique in the Northeast. The principal values of these more remote areas of the jurisdiction are especially sensitive to development and special efforts must be made to make sure that these values are maintained. Even though the interior is not a high growth area, it has experienced steady dispersed development over the past 35 years and is particularly vulnerable to the cumulative impact of incremental development. Consequently, the interior may warrant its own special regional planning effort.

Another area of relatively low growth combined with unique resources is the jurisdiction's coastal islands. These islands warrant special consideration due to the fragility and high value of their natural resources and their consequent attractiveness for future seasonal residential development. Even a relatively low rate of development can have significant impact on island landscapes and resources.

The challenge for the Commission is to accommodate growth in all of these areas without compromising the resources that make them so special. Degradation of their high value resources can adversely affect not only the natural resources themselves but also their economic importance. Directing growth to appropriate locations and balancing development and conservation in these areas are key to maintaining their high values. A more specialized and focused planning and zoning approach is appropriate in these instances.

4.7 Evaluation of Development Trends and the Commission's Approach to Development

4.7.A Evaluation of Development Trends and Impacts

Amount

During the 1971-2005 period, the Commission issued 8,136 permits for new dwellings. This amounts to about 232 permitted new residences per year for the jurisdiction. During that same time period, the Commission issued roughly 40 permits per year for nonresidential structural uses.

The Commission has concluded that this amount of development, by itself, is not a threat to the jurisdiction's values, and that 2,320 new dwellings and 400 nonresidential facilities can be accommodated over the next 10 years without compromising the jurisdiction's values — if they occur in appropriate locations and in a compact development pattern.

Location

Most development has occurred in areas that abut organized communities and near public roads. Nearly 79% percent of the permits for new dwellings issued in the 1971-2005 period were located in communities that abut organized towns and 87% were in townships located within 1 mile of a public road. However, only 49% of new dwelling permits were in townships located near service centers.

A considerable amount of new development has gravitated toward areas with high natural resource values. The Rangeley and Moosehead Lake areas accounted for over 50% percent of the new dwelling permits issued during the 1971-2005 period.

While townships that do not abut organized communities have experienced considerably less growth than areas on the edge of the jurisdiction, the 21% of new building permits that occurred there over the last three decades is still significant. Additionally, some relatively remote townships, such as T41 MD, and Spring Lake Township, experienced considerable development. Some townships, such as Upper Enchanted Township, which previously had no pattern of development, experienced a significant amount of development as well.

Of particular note is the fact that at least two thirds of the new dwellings permitted by the Commission in the 1971-2005 period did not occur on Commission approved subdivision lots but rather on pre-LURC lots and exempt lots.

4.7.B Impacts of Development

Evaluation of Benefits

Development between 1971 and 2005 has provided jobs, housing and improved services and facilities for residents of the jurisdiction. Some development has also supported or enhanced the jurisdiction's principal values. New businesses and facilities related to wood products have reinforced and strengthened the jurisdiction's role as a diverse, working forest.

The development and improvement of sporting camps, campgrounds, individual campsites and boat ramps during the 1971-2005 period have enhanced primitive recreational opportunities, as have the expansion of the private road network. Ski area expansion and the growth of the commercial whitewater rafting industry have supported more intensive recreational uses in particular areas. Tourism is a mainstay of Maine's economy, and recreational development in the jurisdiction has contributed to this sector.

New development has benefited local building contractors and suppliers. Some forms of development, particularly commercial and industrial uses, have generated substantial tax revenues while requiring a minimum of services and facilities.

Residential development has mixed benefits. The construction of year-round dwellings has provided often affordable housing to existing residents and newcomers. New year-round residents can serve to invigorate established communities, buttress the local labor force, and provide clientele to local businesses. Seasonal development can also benefit local retail and service establishments and provide Mainers and visitors with opportunities to enjoy the jurisdiction's outstanding recreational resources.

New residential development is often viewed favorably from a fiscal standpoint because of increased tax revenues. However, in some instances the costs of added services and facilities associated with residential development may offset tax revenues. This may be particularly true with year-round housing requiring a full range of services, including education.

Seasonal housing requiring few services is most likely to yield fiscal benefits. But the location of many seasonal homes away from existing services and facilities increases potential service costs. During the 1971-2005 period, seasonal housing has increasingly been constructed as permanent second homes geared to multi-season use and possible conversion. The fiscal benefits of seasonal housing can therefore be limited or fleeting, particularly second home development in more remote areas.

Remote camps are a form of low-impact seasonal development that may be appropriate in many locations where second homes may not. Under the Commission's rules, remote camps are defined as dwellings "consisting of not more than 750 feet of gross floor area that is not served by any public utilities, except radio communications." These structures may best approximate the primitive hunting and fishing cabins that have long been scattered throughout the jurisdiction. This type of seasonal development is characterized by low service cost and low impacts; at low densities, it may be most conducive to maintaining the values of interior areas.

Evaluation of Adverse Impacts

Some adverse impacts are easy to identify and to avoid or mitigate; others are difficult to recognize or prevent. Full consideration of adverse impacts requires keeping abreast of scientific research and documentation, while recognizing that many impacts are subtle and incremental. Sometimes, by the time degradation of a value is clearly detected, the value may be lost, or remedial action infeasible. The Commission, therefore, will approach the identification of potential adverse impacts with a balance of good science and reasonable foresight.

In evaluating the impacts of development, the Commission has focused on residential construction because it is by far the most common form of structural development in the jurisdiction. The most prevalent type of residential development – second homes – is most likely to be located in areas with high-value resources.

Recreational facilities and other commercial and industrial activities also have potential for significant adverse impacts on the jurisdiction's principal values. However, these types of development are likely to be project specific rather than cumulative. *Further discussion of the potential impacts associated with these larger developments can be found in Sections 5.9, Recreational Resources, Section 5.5 Energy Resources and Section 5.7 Geologic Resources of this Plan.*

The Commission has determined that the development that occurred between 1971 and 2005 had minimal adverse impacts on a number of distinctive natural resources that are clearly tied to a physical feature or location. These resources include deer wintering areas, high mountain zones, a number of remote, pristine ponds, large non-forested wetlands, Class A rivers and selected recreational trails. The most effective method of minimizing adverse impacts on these types of resources is to guide development away from them, and over the past 35 years the Commission has effectively pursued this approach. Landowner stewardship or lack of accessibility has also contributed to the protection of some of these resources.

Not all of the jurisdiction's principal values, however, are linked to a distinct physical feature or location, or confined to a particular zoning district. In fact, as previously mentioned, many values are tied to the maintenance of large blocks of undeveloped forestlands. Values such as fish and wildlife habitat, ecological diversity, water quality and forest resources can be significantly affected by development activities that occur outside of specific protection zones or buffers. Values associated with primitive recreation opportunities and remote, undeveloped character can be similarly affected.

The Commission has determined that the development pattern that has taken place since 1971 is not conducive to protecting these types of values. A significant amount of development occurred in interior areas on lots that received no Commission review as to the appropriateness of their location for future residential growth. The pattern of land division and development

evident in interior areas such as depicted by examples in this plan is clearly less than optimum for preserving the special values of these areas.

The most likely impact on principal values from such patterns of development include:

- Loss of productive forest land and reduction in productivity of forestlands divided into smaller ownerships.
- Conflicts between residential uses and other uses of the forest. Development of remote areas typically resulted in increased nuisance complaints regarding forest practices, recreational use, and wildlife.
- Negative impacts on wildlife habitat and ecological values due to permanent clearing and conversion of land to development, intrusions into riparian zones and other habitat, and increased erosion and sedimentation.
- Degradation of water quality as a result of incremental development in sensitive watersheds or on lakes with high concentrations of existing development.
- Visual impacts on previously undeveloped roadsides, waterbodies, and hillsides.
- Loss of primitive recreational opportunities and natural character values as more remote areas are developed and access is improved.
- Increased demand for community services for dispersed development in more isolated areas, resulting in negative fiscal impacts on communities and taxpayers.
- Rising carbon emissions due to increased vehicular travel between dispersed dwellings and service centers.

The location of most development in townships that abut organized towns is a favorable trend from the standpoint of protecting the values of interior areas. But much of this development occurred in areas with high natural resource values, and impacts on these values need to be considered as well. The Rangeley Lakes and Moosehead Lake areas received considerable development during the 1971 - 2005 period, and will likely continue to be the principal growth areas in the jurisdiction. While well-planned growth is appropriate in these areas, a haphazard growth pattern has the potential to degrade the attractiveness of these areas as recreational centers, and ultimately their tourist based economies.

Some of the growth in these areas has occurred in a compact manner near the regional centers of Rangeley and Greenville. Other development has extended into more remote townships, leapfrogged along shorelines, or appeared conspicuously on hillsides overlooking scenic lakes. The most likely impacts on the values of these regions are incremental effects on scenic values and water quality, and reductions in the overall quality of recreational opportunities, particularly on high-value lakes. Loss of some productive forest lands is to be expected in such high growth areas, but a more compact development pattern would have resulted in less impact on these resources.

The degree to which development occurring in the 1971-2005 period actually eroded the jurisdiction's values – either in the interior or in areas abutting organized towns – is open to debate. There will always be honest disagreement about the extent of the problem depending on one's perspective and the degree of conservatism used in evaluating impacts.

The Commission feels that a strong case can be made that elements of the jurisdiction's remote, undeveloped character have been eroded, and that development and division of land in the interior is likely having a negative impact on ecological values and forest resources and on primitive recreational opportunities. In selected high-growth townships that abut organized towns, the Commission believes that some development has had negative effects on the values of special lakes, wildlife and scenic resources.

The most important finding, however, is not indisputable evidence of lost values, but identification of a development pattern that is not conducive to the long-term protection of these values. And as the following evaluation of the Commission's approach to development indicates, this growth pattern is largely avoidable.

4.7.C Evaluation of the Commission's Approach to Development

Many of the Commission's policies and regulations have been generally effective in protecting the values of the jurisdiction. Several deficiencies have been identified, however, that work against the Commission's efforts to "encourage new growth within and proximate to compatible developed areas, particularly towns and communities" and to protect the jurisdiction's principal values.

Strengths of the Commission's Approach

One of the greatest strengths of the Commission's approach is its identification and protection of distinctive or fragile natural resources: deer wintering areas, high mountain zones, Class A rivers, selected high value lakes and most inaccessible ponds, large, nonforested wetlands, and significant recreational trails. Most of these areas are prospectively zoned and buffered from potential development. During the 1971-2005 period, the Commission feels that the values of these resources have been substantially protected. While there may be other important natural resources or physical features that also warrant such high levels of protection, the Commission feels that its general approach to protecting these resources is sound, and adequate for their continued protection.

The Commission's lakes program, adopted in 1990, has generally been successful in ensuring protection of certain pristine lakes and providing guidance on which lakes are most suitable for future development. In this instance, the Commission conducted a comprehensive evaluation of the lakes of the jurisdiction and developed management guidelines based on their values. This approach may provide a model for the protection of coastal islands and other high-value areas.

Another strength of the Commission's approach is its focus on the location of major new development. A weakness of many land use regulations in other parts of the country is their focus on mitigation rather than on location. Under this approach, development is allowed in most locations as long as it satisfactorily addresses site-specific concerns. The eventual result of this type of planning is a sprawling development pattern comprised of individual projects that may not cause site-specific problems, but which, cumulatively, consume open space, irrevocably alter community character and contribute to unforeseen off-site impacts.

Site mitigation is an important tool, but it generally does not assure long-term protection of an area's essential character or of its natural resources. The most effective way to preserve the values of an area is to promote compact development patterns, and the Commission has been at least partially successful in this objective. While the Commission has struggled with the issue of appropriateness of location for some large-scale projects, particularly planned developments in more remote areas and other developments where the adjacency principle cannot be clearly applied, the overall focus on location is a strength which warrants further refinement. The Commission continually looks for ways to improve its regulatory approach.

Weaknesses of the Commission's Approach

The Commission has long recognized the importance of promoting compact development patterns and discouraging sprawl. Yet the application of this principle to all forms of development has been more difficult, and some of the principles and standards the Commission has used to guide growth lack refinement. Four major weaknesses are: (1) the exemption of certain lots from the Commission's subdivision review, (2) the Commission's reactive treatment of rezoning proposals, (3) lack of recognition of local and regional differences within the jurisdiction, and (4) limited control over infrastructure improvements, particularly roads.

Exemptions to the LURC Law

Some statutory exemptions to the LURC law regarding land divisions undermine the purposes of the law and interfere with the Commission's ability to effectively guide growth. The amount of exempt lot division has been substantial since LURC was created in 1971, and represents a significant departure from the historical landownership and development pattern of the jurisdiction. The Commission recognizes that many exemptions to subdivision are practical and beneficial to the management of forestlands and conservation efforts. However, exemptions such as the 2-in-5 exemption (the 2 lots that can be created every 5 years from a single parcel or ownership within each township), when used for development purposes, undermine the Commission's ability to guide growth. The Legislature came to this same conclusion regarding the so-called "40-acre exemption." The 40-acre exemption led to the creation of approximately 2,500 large lots totaling over 125,000 acres prior to 2001. Many of these lots, scattered across the jurisdiction, were subsequently developed and likely are no longer actively managed for timber. Over the last two decades, the Legislature recognized the counterproductive nature of the 40-acre exemption (which was originally created to enable easier exchange of timberland), and enacted changes that restricted creation of large lots for development purposes.

At least two thirds of the dwellings permitted by the Commission since 1971 have occurred on lots that were not reviewed under the Commission's rezoning and subdivision review processes. Instead, they occurred on either pre-LURC lots or exempt lots. Whereas subdivisions and other development requiring rezoning receive Commission review regarding the appropriateness of their location, unregulated lot divisions receive no such review. When dwellings are proposed for exempt lots, the Commission generally limits its review to conformance with dimensional standards and subsurface waste disposal rules.

While the number of dwellings permitted on pre-LURC lots versus exempt lots is not known, data indicates that the number of exempt lots created since 1971 is substantial (exemptions are described in Table 4 in section 4.5.B). More importantly, there is virtually no limit to the number of new lots that can be created via exemptions to subdivision law, particularly the 2-in-5 exemption, over time. Lots created via the 2-in-5 exemption can almost always be developed with dwellings because most of the Commission's zones currently allow single and two family dwellings. There is significant potential for exempt lot creation to increase in light of continuing improvements in road access, changing landowner objectives, rising numbers of landowners, and increased demand for second homes. While the creation and development of exempt lots may be appropriate in some areas of the jurisdiction, it is not appropriate in all areas of the jurisdiction. These factors clearly have the potential to lead to increasing dispersion of development in the jurisdiction and the subsequent erosion of its principal values.

Exempt lots may also create new patterns of development which can become the basis for new development zones. Under the Commission's existing approach, lands rezoned for development generally must demonstrate that they are near existing concentrations of similar development. In most cases, this requirement precludes new subdivisions in remote, undeveloped areas. But developed exempt lots in otherwise remote areas could be used to support such rezonings.

Reactive Approach to Rezoning and Limitations of Adjacency Principle

The Commission's existing zoning framework is largely based on identification of where development exists as opposed to where development is most appropriate. Because of this, most proposals for intensive development require rezoning of land to a Development Subdistrict at the time a proposal for development is made. Since landowners must usually initiate such rezoning proposals, zoning decisions are driven more by landowner preference and constraints than by public policy regarding the most suitable locations for development.

In the past, four basic principles have broadly guided the Commission in evaluating most major development proposals. Those principles are: (1) that most future development should take place within or near compatible developed areas, particularly near towns and communities; (2) that the rezoning should be consistent with other goals and policies of the Comprehensive Land Use Plan; (3) that applicants for rezoning should demonstrate a need for their development in the community or area proposed; and (4) that there be no undue adverse impact on existing resources and uses.

The criterion of demonstrating a need in the community or area is aimed at assuring that the rezoning is truly necessary and not overly speculative. For residential projects, the Commission has historically considered the apparent demand for new housing in a community or area; for nonresidential projects, the need for the services, goods or jobs that would result from the rezoning.

The criterion that new development should be located near existing development is referred to as "the adjacency" principle, and the Commission has generally interpreted it to mean that most rezoning for development should be no more than a mile by road from existing compatible development. The Commission recognizes that there are certain instances in which a greater or lesser distance may be appropriate in measuring distances to existing developments.

The Commission's rezoning process, and particularly the application of the adjacency principle (see Section 4.4.B for an explanation of the adjacency principle) have generally served the Commission well, but they have several deficiencies and these may become increasingly evident in the face of changing conditions and pressures in the jurisdiction.

The Commission has applied the adjacency principle to keep new development close to existing development. However, the current application of adjacency does not necessarily focus development near the most appropriate areas, such as service centers. Rather, it focuses new development near compatible, existing patterns of development, and there are many such patterns in the jurisdiction.

Many of the initial development zones which are scattered throughout the jurisdiction, as well as other 'compatible' patterns of development can serve as the basis for allowing future, 'adjacent' development. When zoning was first adopted for the jurisdiction, development zones were created around clusters of existing development with no consideration of the suitability of areas for future growth. In addition, as previously described, the development of exempt lots has potential to produce other clusters of buildings in remote areas that could be used to support rezoning of adjacent lands. Consequently, new development can be located in areas that are not necessarily optimal locations for growth. The adjacency principle does not distinguish between different areas of the jurisdiction. For example, a rezoning proposal in an area inappropriate for growth might succeed if it is located near a cluster of existing camps, while a similar proposal in Argyle, a few miles from Interstate 95, may fail because there is no existing development in the vicinity.

Once an area is rezoned and developed, it can, in turn, serve as the basis for rezoning other areas within a mile. The adjacency principle, then, has the potential to sanction a leapfrogging effect in which each new development potentially becomes the existing, compatible developed area from which adjacency for the next development can be measured. Consequently, the adjacency principle does not prevent the leading edge of development from moving progressively deeper into undeveloped areas.

The adjacency principle also lacks guidance on what types or intensities of use constitute "compatibly developed areas" and on situations where it may have limited application. Does a cluster of five dwellings, for instance, establish adjacency for a proposed 50-lot subdivision nearby? On smaller coastal islands, using a one mile adjacency threshold may justify rezoning anywhere on the island.

The rezoning criterion that requires demonstration of a need has also been problematic. The subjectivity and relativity of the term "need" makes it difficult to apply in a consistent manner. The criterion has been effective in discouraging wholesale rezoning for speculative purposes, but has been more difficult to apply to smaller projects.

The existing approach to rezoning, which responds to landowner initiatives and relies on the adjacency principle, is understandable in light of the size of the jurisdiction and staffing constraints. However, this case-by-case review of rezoning proposals is increasingly inadequate as the principal tool for guiding growth. The limitations of this approach have become more readily apparent under changing market conditions and landowner objectives and sustained development pressures.

The Commission's regulatory approach must be revised to acknowledge the varying suitability for growth of different parts of the jurisdiction. Some differences in suitability are obvious, others are more subtle. Areas in the interior — distant from population, services, and infrastructure — are clearly not appropriate for intensive growth. However, determinations of suitability for growth are more complex in minor civil divisions near organized communities. For example, some townships near organized towns have few or no public roads. Some have public roads but are not directly connected to service centers by these roads. Others have a small number of public roads but have well-established patterns of higher density development and year-round population. Other factors are also relevant to determinations of suitability for growth. Some areas near organized towns offer high value, remote feeling recreational experiences. Some have high value for natural resource-based uses, such as the economic value of timber that is close to mills and markets. In sum, the current regulatory approach does not fully recognize these types of differences which are important factors in the determination of whether an area is suitable for growth.

Lack of Recognition of Local and Regional Differences

With a few exceptions, the Commission generally applies a "one size fits all" approach to different areas of the jurisdiction. An application for a building permit in Argyle Township, just north of Old Town, for instance, is reviewed in a similar fashion to a permit for a dwelling in an extremely remote area such as Soper Mountain Township. The coastal islands under the Commission's jurisdiction are significantly different than typical inland areas and the Aroostook area is markedly different from the Downeast area, but regulation of and permitting in these areas are essentially the same. The primary focus of all permit reviews is whether the proposal meets the Commission's dimensional requirements and subsurface waste disposal rules. While the Commission's approach is generally successful at considering specific resources and site level review, it is less successful at considering landscape level factors.

For larger scale projects, the Commission performs a more comprehensive review of project impacts, but the process is the same for all areas in the jurisdiction. As the adjacency principle is now applied, the focus is on whether there is existing development in the vicinity, not on the general appropriateness of the area for intensive development.

Use of this type of approach is understandable in light of the immense size of the jurisdiction and staffing constraints. But opportunities exist for refinements in which variations in values between different areas would be more strongly considered. As it now stands, the review process and standards that apply to some communities may, in fact, be overly conservative in light of relatively low resource values and location on the edges of the jurisdiction. In more remote townships, these same procedures and standards may provide insufficient consideration of the impact of the proposed project on principal values.

Unplanned Infrastructure Improvements

Land use is largely dependent on access. Therefore transportation improvements are a prime determinant of where future development will be located. While the original purpose of many roads in the jurisdiction is to access new areas for timber

harvests or to improve hauling routes, these road improvements can also serve as a catalyst for future development, especially if they increase access to areas with high recreational or scenic values. A proposal for a subdivision on one of these roads has to meet the Commission's adjacency criterion, but permits for individual residences on lots exempt from subdivision review do not.

Roads can also affect recreational values. Improved access generally increases use, potentially causing loss of remote values, degradation of high value resources, and management problems for landowners such as vandalism, inadequate sanitary facilities and littering.

Under statute, the Commission has limited control over land management roads in Management Districts. Land management roads must meet a number of guidelines aimed at minimizing environmental impacts, but except in selected protection subdistricts, the Commission does not review the location of land management roads.

The Commission encourages the continued allowance for public access where such access would not have a detrimental impact on resource values. Some haul roads are gated and others permanently closed after harvesting, but most of these roads stay open for public use. In some cases, public opposition can arise over the closing or gating of private roads.

The extension of utilities also has an impact on the location of development and its level of intensity. Extending utility lines into more remote areas can spur new development because of improved marketability of homes with electricity and telephone service. The availability of electricity can substantially increase sewage generation because electric pumps facilitate water use. This is particularly true in old lakeshore developments where camps often have inadequate septic systems, located close to shore on poor soils. The Commission reviews proposals to extend utilities, but determining direct and indirect impacts on the jurisdiction's values has been difficult.

4.8 Central Issue: Location of Development

The Commission has concluded that the principal development issue is not the amount of development taking place in the jurisdiction, but rather where it is located. This conclusion is based on analysis of the pattern and impacts of development that has occurred within the jurisdiction since 1970 and evaluation of the effectiveness of the Commission's policies and regulations in protecting the principal values of the jurisdiction. The most important finding from evaluation of these development trends is not indisputable evidence of lost values, but identification of a development pattern that is not conducive to the long-term protection of these values. Further, the Commission believes considerable opportunities exist for refinements to its approach that would promote a more sustainable growth pattern.

Thirty-five years of Commission permitting data illustrate a development pattern that is more dispersed today than it was in 1970. The impact of over 20,000 dwellings distributed across 10.4 million acres in the jurisdiction and the degree to which the location of this development has eroded the jurisdiction's values — in interior or other areas — is open to debate. There will always be honest disagreement about the extent of the problem. The most important finding from 35 years of data is not indisputable evidence of lost values, but identification of a development pattern that if continued into the future is not conducive to the long-term protection of the jurisdiction's values. Two things are clear: (1) the Commission's existing rules are inadequate to effectively direct development to appropriate areas; and (2) the factors driving development pressures will continue in coming years. Consequently, changes to the Commission's regulatory framework as well as actions by other parties to better direct development will determine whether the jurisdiction's principal values will be maintained.

The issue of dispersing development is not unique to the jurisdiction; it is a trend that is occurring throughout the state and many parts of the country. In many areas, sprawling development has adversely affected both communities and the surrounding countryside. As homes and businesses have moved out into rural areas, villages and downtowns have suffered, both economically and culturally, and distinctive rural areas have been transformed into land consumptive suburbs.

While dispersing residential development is an issue of great concern in many areas, it is of greater concern in an area such as the jurisdiction. This development pattern is even more harmful in an area characterized as the most rural part of a rural state, containing some of the highest natural resource values in all of New England. Other high value resources exist throughout the Northeast, but few occur in settings like the relatively undeveloped, remote, unfragmented landscape that is the jurisdiction. Additionally, the rural nature of the jurisdiction means that it is least equipped with the services and infrastructure typically needed to accommodate development. Some parts of the jurisdiction are adjacent to communities that have services and infrastructure, and thus are better suited to accommodate development than most areas.

The identification of dispersing residential development as the most important issue facing the jurisdiction comes not just from the examination of historical trends, but also from recognition that these trends will continue. Dispersing residential development is likely to become an issue of increasing, not decreasing, magnitude in the years to come. The extent of parcelization in the lower third of the jurisdiction highlights the potential for continued conversion of forest lands to other uses (see Map 3 of Section 4.3). The trend towards smaller parcel sizes in this area of the jurisdiction increases the likelihood that parcels will be converted to other uses such as residential development over time. The full effect of existing parcelization patterns has not yet manifested itself.

The pressure to maximize the asset value of timberland which can lead to breaking forestland into smaller parcel sizes and/or converting it to other uses is expected to continue. The economic and ownership conditions of the past that maintained large contiguous blocks of undeveloped forestland and limited the degree of residential dispersion are changing. The type of landowner in the jurisdiction is changing and with this comes changes in landowner objectives. Gone are the days when industrial owners, whose primary focus was on supplying timber to their mills, were the dominant landowners in the jurisdiction. Financial investors, such as REITs and TIMOs, have replaced industrial owners as the dominant landowners in the jurisdiction (see Section 4.5.A). Financial investors focus on maximizing the asset value of timberlands. Given rising land values and steady demand for recreational property, financial investors are increasingly likely to seek revenue from non-timber sources if they will generate a higher return.

If left unchecked, these pressures will continue to drive a pattern of dispersing residential development. The result will be a loss of Maine's 'quality of place', erosion of the unique economic and cultural role of the jurisdiction, and degradation of many high value natural resources.

The Commission believes that this outcome is avoidable. Development, if appropriately located, can be accommodated without undermining the principal values, degrading important economic values, and unduly burdening taxpayers. However, the Commission's current rules do not ensure this outcome. While the Commission's rules have protected certain discrete resources (such as deer wintering areas, high mountain areas, remote ponds, large nonforested wetlands, Class A rivers and other identified high value resources), they are not adequate to protect those resources and values that are not tied to a distinct physical feature, such as large blocks of undeveloped forestland.

Addressing weaknesses in the Commission's approach is important. However, this plan does not identify one solution that will, by itself, rectify these weaknesses and prevent further dispersion of development. Various strategies have been employed across the country to deal with sprawling development, but their effectiveness varies depending on factors such as the existing regulatory framework, land use patterns, economic forces and public acceptance. The Commission must comprehensively evaluate its own regulatory framework and examine all possible strategies to address this issue. The following sections discuss approaches that could address those weaknesses. All of these approaches share the central goal of directing most development to areas near service centers and comparable areas, and maintaining other areas of the jurisdiction for traditional uses, including forest management.

Addressing the problem of dispersed development in the jurisdiction will require resolve by the Commission, landowners and the public. It will require critical evaluation of the contributing factors discussed below, cooperation among various interest groups, identification of new strategies for directing development, and subsequently, bold actions to implement those deemed most effective. The Commission is committed to acquiring additional data and improving available data in a way that is informative and beneficial to this process. Specifically, land use inventory data and/or improved parcel data may be of great value.

Recommended Refinement: Address Effects of Exemptions to Commission's Process for Directing Development

Certain exemptions to subdivision law, coupled with the fact that individual dwellings are allowed in many of the Commission's zones, have contributed to and will likely continue to contribute to a pattern of dispersing development in the future. Most of the Commission's zones allow for single and, in some cases, two family residential development. The extensive general management zone and many protection zones currently allow residential development and cover 84%¹⁵ of the jurisdiction. To date, a significant amount of permitted residential development has occurred on lots that were not part of a Commission approved subdivision. If the Commission is going to effectively guide growth to appropriate areas, and if protection and

¹⁵ This percentage does not exclude fee or easement conservation lands. Some of these conservation lands allow for limited development, others do not.

management zones are going to continue to fulfill their stated purposes, these areas cannot function as holding zones for incremental development. If areas zoned for management or protection of resources are, over time, developed then the Commission's zoning designations become meaningless.

The Commission's overall goal is to direct most development to areas appropriate for growth and to maintain other areas for traditional uses, including forest management. Implementation of this goal and addressing the issue of dispersing residential development will take place through subsequent planning, rulemaking, and other efforts, undoubtedly involving various parties. The issue of dispersing development is one which challenges many rural areas and will not be easily addressed through any identified single action. However, the Commission is committed to exploring a range of options. Options that potentially warrant consideration include:

- Considering more than site specific factors in the permitting of dwellings that are proposed on exempt lots. Considerations such as the nature of road access and proximity to other dwellings could be part of this process.
- Limiting dwellings in some high-value areas in the interior to low impact seasonal camps.
- Creating Incentives for development near service centers and comparable areas (such as an expedited rezoning and subdivision process);
- Prospectively zoning forestry and agricultural areas or other measures to proactively maintain these areas for natural resource-based uses. As part of this effort, the Commission could consider restrictions on the type, density, or scale of development that can occur outside of development zones.

Additional options that warrant exploration and may address the effects of exemptions to the Commission's ability to direct development are discussed in the section 'Guiding Development at the Jurisdiction Level'.

Recommended Refinement: Applying Prospective Zoning

Prospective planning and zoning address several of the limitations of the case-by-case approach to land use regulation, and the Commission will continue to apply regional prospective zoning efforts. Under prospective zoning, the Commission identifies areas within a community or region that are most appropriate for additional growth based on existing development patterns, natural resource constraints, and future planning considerations. These areas are then zoned as development districts, and future growth is facilitated in these zones. This approach makes the development review process more efficient and predictable, and promotes both economic development opportunities and the protection of principal values. The prospective zoning process also creates an excellent opportunity for public participation by residents, landowners and other interested parties.

As discussed earlier in Section 4.3.B of the chapter, prospective zoning has been implemented in the Rangeley Lakes Region. The Commission believes that this effort has generally been effective at achieving the desired results. As part of the Rangeley prospective zoning process, the Commission established several new subdistricts, but limited their use to areas with prospective zoning. It will consider extending the use of these subdistricts to other areas of the jurisdiction, where appropriate.

The Commission will apply prospective zoning in high-growth, high-value regions identified in the section of the Plan on Areas with Special Planning Needs. In these regions, prospective zoning will be used to balance growth and economic development needs with protection of special resource values. The Commission may also apply prospective zoning in areas of the jurisdiction that are currently under less development pressure than the high growth areas, but where existing or future development could undermine the principal values of the jurisdiction. Such areas could include interior regions where the principal values are most sensitive to development. The Commission will consider making the prospective zoning of these areas a priority.

Prospective zoning efforts will not take the place of other efforts to guide development. The prospective zoning process is time consuming. While it establishes a system to effectively guide growth within a region, it does not address the issue of where development is appropriate or inappropriate in the jurisdiction as a whole.

Recommended Refinement: Guide Development at the Jurisdiction Level

While applying prospective zoning at the local or regional level shows great promise, especially in balancing growth and conservation in high-growth areas near organized towns, it has several limitations. First, the process is time consuming and expensive, and, at 2009 staffing and resource levels, it may take several years to comprehensively inventory and zone a single region. By the time the Commission has applied this approach to a relatively small portion of the jurisdiction, a significant amount of additional growth may have occurred, some of it in inappropriate areas.

Second, the process focuses on individual communities or regions, and does not consider the larger issue of where development is most appropriate in the jurisdiction as a whole. The principal values of the jurisdiction differ significantly from township to

township and from region to region, but no specific guidance exists on where development can occur with the least overall impact on these values. Other than regions identified as most appropriate for prospective zoning, there are other communities on the edge of the jurisdiction where development could be accommodated without significant impacts on the jurisdiction's principal values. Yet under the jurisdiction's one-size-fits-all approach, development in these areas is treated in a fashion similar to that in high-value interior areas.

In order for the Commission to effectively plan for future growth and ensure the long-term protection of the jurisdiction's principal values, it will consider improvements to its overall approach in guiding growth on a jurisdiction-wide basis over the next 10 years. The Commission will evaluate the suitability of different towns, plantations and townships for future growth based on their location relative to population and job centers, availability of roads and infrastructure, demand for development, and the type and extent of principal values that they possess.

This broadening in focus will recognize that townships bordering organized areas are not all alike and are not equally suitable for growth. It will also recognize that areas within a single township may have varying suitability for development depending on conditions of access, natural resource sensitivity, economic value for other purposes, recreational values, and other factors. Developing an approach that recognizes these differences is key to success.

The Commission believes that the success of any effort to better guide development at this level will depend on support among diverse interests and strong participation by large landowners. The vast areas of the jurisdiction remaining in unified ownerships offer considerable opportunities for promoting a growth pattern that preserves development opportunities and equity while assuring better long-term protection of principal values. Considerable opportunities may also exist for nonregulatory approaches that provide landowners with flexibility and incentives to pursue voluntary measures.

The Commission will consider incentives for promoting growth in the areas determined to be most suitable and disincentives for development in areas deemed least suitable. There are many potential strategies for concentrating development in appropriate areas near service centers and maintaining interior areas of the jurisdiction for traditional uses. Some of the options are discussed below, although the list is by no means exhaustive. Considerable research will be needed to fully evaluate which options are most appropriate for the jurisdiction given its size and land use characteristics, and the Commission's regulatory framework. The Commission may consider the following: 1) undertaking a broader, jurisdiction-wide prospective zoning process for areas suitable and/or unsuitable for growth; 2) exploring tools such as transfer of development rights programs; 3) facilitating development in areas suitable for growth by exploring the expansion of tools such as level 2 subdivisions; 3) exploring ways to minimize new public infrastructure such as roads; and 4) reviewing the type of residential development allowed in different zones or areas of the jurisdiction. As the Commission moves toward a more refined approach to guiding growth, it must refine, modify, and integrate the adjacency principle into its new approach.

As part of efforts to guide development to appropriate locations, the Commission will discourage development in areas that are not appropriate for growth. One of the Commission's goals is to maintain the forest resource, particularly those lands that are well-suited to natural resource-based uses, in a way that preserves its important values. These values include large-scale commercial forestry, ecological diversity, and recreation in remote settings. The Commission will encourage protection from intensive development for areas of the jurisdiction that are particularly representative of the jurisdiction's principal values, especially lands valued for their remote and relatively undeveloped condition.

The Commission also recognizes the unique 'quality of place' associated with certain areas that have particularly high natural resource values. Some of these areas are experiencing considerable growth pressure because of their attractiveness. The Commission will encourage conservation in these areas to protect their unique qualities. The purpose of conservation will be to protect the character and natural values of these areas in the face of increasing development pressure. The Commission will encourage private and public conservation, and will explore regulatory measures to promote protection of open space.

Recommended Refinement: Improving the Rezoning Approach

While prospective development zoning and other growth management strategies may lessen the need for rezonings over time, there will always be a need to consider proposed rezonings in a timely and equitable manner. Despite the relatively high rate of approvals for rezoning, developers face uncertainty when presenting a request for rezoning because the system requires so many judgments from the Commission as it applies general rezoning criteria. The Commission has developed a rezoning guidance system to help in this regard.

The adjacency principle has been a valuable tool in guiding development and will remain a central consideration in rezonings, but its application will be further refined to promote consistency and good planning. The Commission expects to substantially strengthen and more comprehensively define adjacency and will likely integrate this criterion into its improved approach to guiding growth. The Commission anticipates that this redefinition of adjacency will consider current interpretations of geographic distance and type and scale of development and will incorporate other factors pertinent to identifying the appropriateness of areas for development. For example, the Commission may consider whether the rezoning proposal is proximate to existing service centers or other areas identified as appropriate for future growth. Until such efforts are completed, the Commission will continue to interpret adjacency to mean proximate (within one mile) of existing compatible development. Existing development used to support rezoning should either be of a similar type, use, occupancy, scale and intensity to that being proposed, or a village center with a range of existing uses that the new development zone would complement. Several of the policies of this plan provide more direction on how the adjacency principle would be best applied in different situations.

The Commission has determined that isolated patterns of development in remote locations, such as sporting camps, should not be used as the basis for rezoning adjacent lands for development as that practice can establish conflicting uses. Similarly, the Commission will not consider patterns of development such as those established by large lot exemptions in otherwise inappropriate locations as the basis for adjacency. This exemption was eliminated due to the counterproductive nature of the patterns that it established, and the Commission believes that these patterns should not serve as the basis for future growth in these areas.

The rezoning criterion requiring demonstration of need provides the Commission a powerful tool in evaluating the viability and scope of proposed development. The Commission, however, will assess its use of this criterion with a goal of applying it as consistently as possible. Under the proposed rezoning guidance system, the need criterion is broken down into a number of factors intended to provide a more objective assessment of need. Factors include evaluation of availability of vacant building lots, the amount of land in the area already zoned for the proposed use, and anticipated benefits such as jobs and tax revenues. As the Commission and applicants become more comfortable with this system, it should provide more predictability in the assessment of need. Also, as the Commission gains more experience with the guidance document, revisions may be needed to account for the implications of concept plans and other tools for directing development.

In communities that are prospectively zoned, the areas most appropriate for future growth will be zoned as development districts, eliminating the need for most projects to go through the rezoning process. Requests for rezoning additional lands in these communities will be reviewed with particular care to avoid sprawling development patterns or a mixing of incompatible uses. The adjacency principle would be most applicable in allowing for needed expansions of existing development zones. Broader application of the principle, however, could lead to a proliferation of rezoning that may upset the balance between development and conservation that was a part of the original prospective zoning plan. In these situations, the most important consideration will be whether new areas proposed for rezoning are viable growth centers and consistent with the initial prospective zoning plan.

Recommended Refinement: Considering Infrastructure Improvements

While the Commission believes that the siting of roads can have unforeseen impacts, this plan does not make recommendations to regulate the location of land management roads to control the location of development. The Commission recognizes the importance of the haul road network to the forest products industry, and road siting issues, where identified, will be addressed in a cooperative manner. If the Commission is able to review the location of development on new lots that are now exempt from subdivision review, the issue of roads facilitating scattered development will be at least partially addressed.

The Commission will continue to monitor the location of new land management roads and the closure of existing ones. By conducting a more comprehensive inventory of the jurisdiction's road network, the Commission will be in a better position to track the relationship between road construction and development. There is relatively broad agreement among various interest groups and landowners that additional public roads in the jurisdiction should be minimized to the greatest extent possible.

As described earlier in the Plan, the Commission has control over utility extensions except in public rights of way. However, there are two major policy challenges that the Commission will address. The first is that state and federal laws, as well as the Commission's current rules, make it difficult to restrict the uses of a utility line. For example, the Commission is unable to restrict additional access to a utility line that was constructed for a specific use, even in cases where the secondary use is clearly not appropriate for the location. The second issue is that the Commission's rules do not adequately address how to evaluate whether the extension of a utility line will facilitate inappropriate patterns of development. Utility line rule changes will be discussed concurrently with issues of adjacency and identifying areas most and least appropriate for development, since they are closely related.

4.9 Other Major Issues

Three to four decades ago, the economy of areas in the jurisdiction was overwhelmingly dominated by the forest products industry (i.e. activities associated with harvesting and processing of timber). Other economic activities were largely subordinate and peripheral to forestry and included: seasonal camps, recreational facilities (principally low to medium intensity), and commercial uses oriented toward recreation or general services. The Commission was created against this backdrop in response to a building boom of seasonal camps in the 1960s. As a result, its regulatory framework was designed to address a landscape utilized primarily for timber harvesting (much of which was exempt from regulation) and seasonal residential development located along shorelines.

Since that time, the economy has diversified somewhat. Though still dominated by the forest products industry, the economy now includes a broader range of uses in the jurisdiction. Advances in technology have made grid-scale wind energy projects economically viable in areas of the jurisdiction. Shifts in the type of recreational experiences that people are seeking have resulted in proposals to expand ski areas, build new ecotourism resorts, and construct linked hut and trail networks. At the same time, a strong second home market, changes in land ownership patterns, and other factors have contributed to steady residential development pressure, principally for second homes. Development pressure is no longer limited to shorelines, and now extends to hillsides and ridgelines. Many of these changes were not anticipated when the Commission was created. As a result, some land uses and development impacts in the jurisdiction today are not comprehensively addressed in the Commission's regulatory framework.

Both the nature and scale of land uses in the jurisdiction have changed. The Commission has had to respond to new uses as they emerge and to existing uses as they have evolved. It has revised its rules over the years to accommodate some of these changes, but revisions have typically been limited in scope to address fairly specific issues. Overall, its approach has been largely reactive. The Commission has not yet comprehensively assessed the adequacy of its regulatory framework to address the current economic and cultural environment. As a result, changing land uses continue to strain the capacity of the Commission's regulatory framework.

Examples of how the changing environment is straining the regulatory framework, some general and some quite specific, are described and discussed below, along with options for addressing these issues. The Commission recognizes that even as it updates its framework to reflect today's conditions, tomorrow will bring more unanticipated land uses and pressures. Consequently, it will also consider developing a systematic approach to handling changing land use in this dynamic environment.

4.9.A Economic Development

While the Commission is charged with protecting the values of the jurisdiction, it will ensure that reasonable economic development is accommodated, particularly facilities related to forestry, agriculture or recreation. Considerable opportunities exist for facilitating economic development in appropriate areas, and the Commission will reexamine its standards to assess their effect on economic growth.

The issue most commonly identified as a potential impediment to economic development is the permitting process. The Commission made a significant effort in 1988 to streamline its permitting process by broadening the definition of activities for which permitting would be expedited and has continued to do this periodically since that time. For example, in response to legislation, the Commission implemented an expedited wind power permitting process. The Commission will continue to seek out opportunities for further streamlining. Every effort will be made to make the permit turn-around time no longer than absolutely necessary to complete a thorough review in which the Commission's statutory responsibilities are carried out.

The Commission will continue to expedite the permitting process as much as possible by (1) simplifying application forms, (2) identifying minor activities and alterations for which no permit is required, (3) designating permits which could be issued at the field office level as staffing becomes available to perform such functions, (4) delegating to staff the ability to act on small-scale rezoning proposals within designated growth areas which meet the Commission's rezoning guidelines, and (5) identifying types of uses that could receive accelerated review and approval.

A number of enterprises support or reinforce the principal values of the jurisdiction, and these types of activities will be promoted, not hindered, by the Commission's policies and regulations. Certain facilities, for instance, can provide a means of recreational use with less impact than a large number of individual second homes or camps. In more remote areas, traditional, nonintensive facilities such as sporting camps or primitive campsites are most appropriate, and the Commission's policies and regulations will promote these types of uses.

Traditional sporting camps represent both a recreation asset and a valuable part of the heritage of the North Woods. The Commission's approach to these facilities will recognize their need to adapt to changing economic conditions and their dependence on the remote character of their surroundings. Permitting of reasonable expansions and improvements will be facilitated, with assurances that camps will not evolve into more intensive uses that could have negative impacts on the area. Proposals for other development adjacent to sporting camps will be reviewed with particular care to ensure that values on which the camps depend for their survival are not eroded.

More intensive recreational facilities are most appropriate near developed recreational centers, or as part of well-planned developments in other areas. Both commercial whitewater rafting and downhill skiing provide increased recreational opportunities and considerable economic benefits, but have potential for negative impacts on other principal values. Growth of these industries is best accommodated as expansion of existing facilities or as compact development in identified areas.

The Commission already recognizes the need to provide flexibility in the siting of buildings used in forest management or agricultural activities. These uses are allowed without a permit in the General Management Subdistrict. There may be other buildings related to forestry or agriculture that will be treated in a similar manner.

Other types of businesses that may be inappropriate in interior areas may be suitable in communities that abut organized towns. In developing strategies for guiding growth, the Commission will identify areas where these economic activities can occur with the least impact on principal values. Areas near organized towns, population or employment centers with available infrastructure and low resource values are generally the most suitable locations. For such areas that have not yet been prospectively zoned, the Commission will facilitate development by making it easier for projects proposed for these areas to meet the Commission's rezoning criteria.

In the Commission's rules, there are four different types of development zones that can be created to accommodate new development: Residential Development (D-RS), General Development (D-GN), Commercial Industrial Development (D-CI) and Planned Development (D-PD) subdistricts. While the D-GN subdistrict allows small-scale commercial development, other more intensive development that may also be appropriate in a village area is either not allowed or only permitted by special exception. Creation of a zoning classification or application of zones created as part of the Rangeley Prospective zoning effort that are more conducive to village-type uses would provide additional flexibility in the development of these areas.

Other types of development may have needs or impacts that could be better addressed with a special zoning designation. Solid waste facilities, for instance, are best sited in areas with existing infrastructure, but location within a village area is probably not appropriate. The zoning of most existing gravel pits as Commercial-Industrial subdistricts may also be inappropriate considering the location of these facilities in more remote areas and their ongoing expansion needs.

4.9.B New and Changing Uses

The Commission is increasingly challenged by changes in the type and scale of uses. New uses are being proposed in the jurisdiction (although not necessarily new to other parts of the state), such as commercial water extraction and grid-scale wind power. And certain existing uses, such as campgrounds, are evolving – sometimes changing quite significantly from their traditional form. Some of these uses – new and existing – reflect significant increases in scale and are larger than most prior uses of the jurisdiction.

Whatever form change takes, i.e. as new uses, existing uses that are evolving, or uses that are increasing in scale, the issues from a regulatory perspective are very similar. The most important issue associated with all uses is appropriateness of location, specifically, will the use be located where it will not adversely affect surrounding uses, resources, and values? Since the Commission's zoning framework is its primary tool for guiding the location of various uses, it is necessary to evaluate the effectiveness of the current framework under changing conditions.

As new uses emerge and existing uses evolve, it is particularly important to evaluate the type and scale of uses allowed in the General Management zone since it applies to approximately 80% of the jurisdiction. Uses currently allowed in this zone are generally considered low-impact uses compatible with forest management. However, recent history demonstrates that some uses allowed in this zone can evolve into forms that are no longer compatible with the purpose of the zone or lack standards that would ensure their compatibility. For example, some campgrounds and trails are becoming significantly more intensive than they have been historically. Many modern campgrounds involve substantial land alteration, structures, and traffic. The impacts associated with these highly developed campgrounds are similar to those of uses allowed in Development zones, and are not necessarily consistent with the M-GN zone. The M-GN zone must be reviewed in light of this type of changing land use. It must be re-evaluated to ensure that allowed uses, in their current form, remain consistent with the purposes of the zone. A number of other zones deserve similar review.

The application of the D-PD and P-RP zones also warrant consideration. These zones are available for certain types of large-scale, mixed use development. Both of these zones waive the adjacency principle under certain circumstances and so provide a significant amount of flexibility regarding location. As these zones are used more extensively for a wider mix of land uses, questions arise regarding whether the waiver of adjacency is appropriate in all cases. The adjacency principle is waived for the D-PD zone in order to accommodate development that is dependent on a particular feature. It is a valuable tool that envisions mixed uses and is intended to encourage creative design. However, some uses allowed in D-PD zones are changing in ways that raise the question of whether they are still appropriate for the zone. For example, downhill ski areas which have utilized the D-PD zone are evolving to incorporate a broader mix of uses and include a substantial amount of residential development. Some of this secondary development is not necessarily feature-dependent, but may be linked to the economic viability of the proposed development. The D-PD zone deserves re-evaluation to consider whether location of development is adequately considered in such circumstances.

Similarly, the P-RP zone allows waiver of the adjacency principle for development proposed as part of concept plans under certain circumstances. The use of P-RP zoning for concept plans was established as a planning tool in 1990. While the first several concept plans were relatively modest in size, recent concept plans proposed for the P-RP zone are larger in size and scope and include a broader mix of commercial and residential development.

The use of the D-PD and P-RP zones for larger scale development encompassing a broader mix of uses raises questions regarding the potential to impact surrounding uses and resources. These zones should be reviewed to evaluate whether location of development is being adequately considered, e.g. do the waivers of adjacency provided remain appropriate in all circumstances? And are there ways to fine-tune these zones for the changing nature of uses?

The Commission also acknowledges some deficiencies in the types and mix of uses allowed in its various development zones. Most development zones are designed for small-scale uses, and zones that provide more flexibility, such as the D-GN2 and D-ES, are currently limited to Commission-initiated prospective zoning. The establishment of zones that more explicitly accommodate large-scale development, such as some of the prospective zones or a non-feature-dependent planned development zone, would better reflect existing land use demands.

In addition to re-evaluating zones as described above, the Commission will find it necessary to revise its rules periodically to accommodate new uses not currently addressed in any of its zones. For example, commercial water extraction was not explicitly provided for anywhere in rule (i.e. it was not allowed in any zone), but has been found consistent with the M-GN zone as a form of natural resource extraction. The Commission must respond to new uses as they appear, determine where they are appropriate, and make necessary rules changes to accommodate them.

Review and evaluation of the Commission's zoning framework requires ongoing effort. Periodic rule changes are necessary to respond to immediate needs, but more comprehensive evaluations are also needed to ensure that the regulatory framework remains effective and appropriate in the context of current conditions.

Recommended Refinement: Review adequacy of regulatory framework to handle changing uses

The Commission's regulatory framework deserves a comprehensive review to evaluate its effectiveness at adapting to the changing nature and scale of land uses. This review should give special consideration to the adequacy of zoning tools, particularly in regard to guiding location. The goal of this review will be to evaluate the current approach's efficacy at protecting existing resources and values, providing reasonable guidance to applicants, providing for reasonable economic development, and creating a workable and efficient process.

The Commission will review existing zones, considering questions such as where certain zones are appropriate (or not) and which uses should be allowed in them. Review of uses allowed in the General Management zone is particularly important given its purpose and amount of area that it covers. The Commission will also review development zones, prospective zones, and the resource plan zones applied to large scale development proposals. It will update these as needed with the goal of providing appropriate regulatory options for land uses in a dynamic environment.

The Commission will review the D-PD zone in the context of policy and administrative issues that have arisen over the years, including: 1) How should protection of the jurisdiction's remote character be weighed against the zone's provision that allows development where the resource is located (i.e. waiver of the adjacency criterion)?; 2) How should mitigation of development impacts be evaluated, and is off-site mitigation appropriate?; and 3) How should the Commission handle mixed uses in a D-PD when only some of the uses are strictly feature-dependent?

Review of the D-PD zone should also include whether this zone should be made available to large-scale developments that are not feature-dependent. Location must be a serious consideration as part of any proposed change to the D-PD zone. In its current form, the D-PD zone waives the requirement that feature-dependent development be proximate to existing patterns of development. This waiver is granted in acknowledgement that development must be located where the feature is, and the feature may not be proximate to development patterns. This same waiver would not be appropriate for non-feature-dependent intensive development. Consideration should be given to the merits of establishing different applications of the D-PD zone — one for feature-dependent uses and another for uses which are not feature-dependent.

The Commission will also review its rules and guidance regarding concept plans in the context of its past experience with such plans. Review of the concept planning tool will consider some of the key policy and administrative issues that have emerged in concept plans over the last 15 years, including the following: 1) Are landowner-initiated concept plans taking the place of Commission-initiated comprehensive regional planning, and is this a problem from either a policy or administrative perspective?; 2) Should there be any limit to the scale of concept plans (e.g. acres covered, development proposed, proximity/distance from service and organized areas, and related location and/or scale of development issues)?; 3) What are the essential requirements for conservation (i.e. scale, location, and type) that is offered to offset and balance development proposed?; 4) Does the concept plan mechanism provide the appropriate balance between landowner predictability and Commission flexibility to address changing circumstances?; and 5) Is the P-RP Subdistrict the appropriate regulatory vehicle for concept plans? The Commission will update concept plan rules and guidance as needed to address these and other questions.

The Commission will consider allowing applicants to utilize zones established as part of the Rangeley prospective zoning, although it may limit where these zones can be applied. Some prospective zones are a better fit for large-scale development. They allow larger footprints or explicitly contemplate a broader range of commercial and residential uses. Similarly, D-RS2 and D-RS3 provide more specialized residential zones that may be appropriate for resort-affiliated residential development.

The Commission must regularly update its rules to reflect the dynamic economic environment. The need to add commercial water extraction as a permitted use in the M-GN zone is a good example. In addition to these more routine changes, the Commission will also consider whether it is possible to develop a systematic approach for handling new uses that are not explicitly accommodated in its rules. The goal of such an approach would be to minimize delays associated with these situations and to provide clearer guidance to the Commission regarding factors to consider when evaluating the appropriateness of a new use in a zone. The intent would not be to bypass existing policies, rules, and procedures but to facilitate a substantive evaluation of new uses and where they belong in the regulatory framework.

A systematic approach to new uses could result in changes designed to add clarity and definition to existing rules. These changes could facilitate the handling of new uses, while providing a process that incorporates the Commission's policies regarding the location of development and protects the principal values of the jurisdiction. For example, the Commission could, in rule or guidance documents, identify more detailed factors or review criteria to consider when evaluating whether a new use is consistent with the purposes of particular subdistricts and other objectives.

Refinements to the regulatory framework will reflect the Commission's belief that most non-feature dependent development, particularly large-scale, mixed use development, should be located close to economic centers where a work force, services, customers, and infrastructure are available. It should be located near communities so it is connected to the local economy and can efficiently deliver and receive services. Given the nature of the jurisdiction — an area used predominantly for forestry, accessible principally by private roads dominated by logging trucks, and largely distant from population and services — large-scale, intensive development is generally not appropriate in remote locations.

The Commission will attempt to stay abreast of new technologies and be prepared for proposals for new uses, especially ones that are likely to occur in high value areas. The Commission will try to be prepared to devote resources to assess the potential impacts of these new uses and to provide policy guidance on their appropriate development within the jurisdiction prior to acting on major development proposals.

4.9.C Hillside and Ridge Development

The Commission's regulatory framework was developed during the 1960s and 70s – a time when most residential development consisted of recreational camps on lakes. Consequently, the Commission's rules, with regard to residential development, focus on limiting shoreline and waterbody impacts through such standards as vegetative buffers. While shoreland development has continued in recent decades, some development has also moved away from shorelines towards hillsides and ridgelines in response to the lack of available shorefront for development, rising waterfront prices and other factors. The Commission's regulatory framework, while relatively effective at minimizing the impacts of shoreland development, is not currently specific and predictable enough to ensure that the impacts of hillside and ridge development are adequately minimized.

The amount of hillside and ridge development, which is popular due to the scenic views it provides is growing and this trend is likely to continue. This development occurs most commonly in areas with high resource values, such as Rangeley and Greenville where shoreland property is costly or unavailable, and near alpine ski mountains where people seek locations close to the ski slopes. Hillside and ridge development can have significant impacts on the natural resources and character of an area. Houses located on hillsides often have clearing associated with them that makes them highly visible from public roads and waters. Further, the construction of long roads, often traversing steep slopes, necessary to access this development, can cause erosion, generate increased phosphorous, carve up wildlife habitats, and decrease the visual quality of the landscape visible from public roads and waters. While the Commission currently has scenic impact standards that apply to hillside development, these standards are not as prescriptive, and thus not as predictable, as the existing clearing standards which apply along public roads and waters.

Figure 3 – Hillside Development

Recommended Refinement: Develop standards to limit the environmental and visual impacts of hillside and ridge development

The Commission recognizes the environmental as well as aesthetic importance of naturally vegetated ridgelines and hillsides in the jurisdiction and believes they should be maintained to the extent possible. The Commission will develop vegetative clearing standards and other non-vegetative scenic impact mitigation techniques for hillside and ridge development. It will approach this task with the following goals: prevent the erosion and sedimentation often associated with development on slopes; maintain the appearance of the natural landscape as much as possible; prevent breaks in ridgeline vegetation; and limit the visibility of structures, particularly in high profile locations (e.g. areas that are visible from public settings, including public roads and waterbodies). The Commission will integrate this work with its efforts to develop a systematic approach to evaluation of scenic impacts, as described in the Scenic Resources section.

4.9.D Impacts of existing development – nonconforming Uses / Structures

Much of the focus on the Commission's longer range planning efforts is on new development. Expansions and conversions of existing development, however, have the potential to degrade the jurisdiction's values, and the Commission's approach to these uses should be equally protective as its approach to new uses.

Many existing structures, built prior to the enactment of the Land Use Regulation Law, are on inadequately sized lots, have soils unsuitable for waste disposal, or have inadequately designed or located waste disposal systems. When these structures require rebuilding or major renovation, the Commission applies reasonable requirements to upgrade the existing system so that future problems are minimized.

Some landowners have, on their own initiative, reconfigured nonconforming lots to bring them into compliance with current regulations. The Commission recognizes these efforts as being supportive of its own objectives and encourages other landowners to do likewise prior to development, sale or leasing of such lots.

Recommended Refinement: Establish incentives for bringing lots and structures into compliance

The Commission will seek to establish incentives for bringing lots and structures into compliance or closer compliance with current regulations. In these efforts, the Commission is particularly interested in innovative voluntary approaches. The Commission is mindful of issues of fairness and consistent treatment of landowners with nonconforming situations.

The Commission supports traditional uses of the jurisdiction including the traditional sporting camp. In light of the relatively small number of established sporting camps, the frequent nonconforming nature of structures associated with such facilities, and the importance of maintaining the integrity of the facility as a whole, the Commission recognizes the need to deal with nonconforming structures that are part of established sporting camps as special circumstances in considering the rebuilding or expansion of such nonconforming structures.

4.9.E Changing Character of Development

The character of development is changing in unexpected ways, and the Commission finds itself needing to re-assess the adequacy of its rules to protect the distinctive values of the jurisdiction. Seasonal camps are getting larger and are being built for multi-season use. Nonconforming shorefront dwellings are being substantially improved. Both trends have the potential to adversely affect natural resources and values.

Changing character of new development

Section 4.6.B describes an ongoing shift in the type of dwellings constructed in the jurisdiction. Year-round dwellings in the jurisdiction, most of which are located very near organized communities, have always looked quite similar to year-round dwellings in organized areas. However, the “typical camp” in the jurisdiction has historically been a small, single-story, seasonal camp that is built on posts within a fairly small clearing. On lakes, these camps have often been close to the water and sometimes quite visible.

The limited footprint and minimal disturbance associated with these “typical” camps is one of the reasons the jurisdiction still possesses high quality resources, including pristine lakes and the only self-sustaining brook trout population in the Appalachian states. These camps have also been a distinguishing feature of the region, one associated with a rustic lifestyle, self-sufficiency, and appreciation for the outdoors.

The “typical camp” appears to be changing, as reflected in new construction and expansions and upgrades of existing camps. The trend is toward larger houses, many of which (69%) are built for four-season use. More of them have full foundations, two stories, and a larger footprint. The changing nature of development could affect the jurisdiction’s distinctive resources and features. The larger footprints and disturbance associated with more recent development have proportionately greater impacts on natural resources. Larger structures with full foundations generate more runoff. They are often more visible, as shown in Figure 4, and can significantly alter the distinctive character of remote areas. Fire suppression efforts involving larger structures in remote areas are much more challenging. And, increased investment in houses may signal growing interests or changing expectations regarding the provision of services and infrastructure that characterize more developed areas.

Figure 4 – Modern Dwelling

Parts of the jurisdiction look and function very much like adjacent, organized towns. These areas tend to have public roads, access to services, and other features comparable to more populated areas. While these areas have their own unique character, their character is different from that of more remote areas of the jurisdiction. Both are an integral part of the distinctive Maine “brand” highlighted in the 2006 Brookings report, Charting Maine’s Future. However, the character of remote areas is unique in the Northeast and should be maintained.

Conversions of Existing Uses to More Intensive Uses, Particularly on Lakes

For a variety of reasons, including improved road access, many formerly low impact, seasonal structures are being converted to more intensive and/or year-round structures. These conversions have the potential to significantly increase the impact of the use on traditional uses and natural resources, especially where they occur on lakes. This trend manifests itself in expansions of seasonal camps, conversion of seasonal camps to year-round homes, and expansions and changes in use of sporting camps and conversions of seasonal camps to year-round homes.

The changing character of development has a disproportionate impact on lakes with pre-LURC development. Many seasonal camps, built prior to the enactment of the Land Use Regulation Law, are on small, substandard lots, have substandard septic systems, and are very close to the water. For a variety of reasons, including rising waterfront property values and improved road access, a growing number of these small seasonal camps are being expanded to larger, higher impact dwellings. An example of these types of expansions is shown in Figure 5 below.

Figure 5 – Camp Conversion

The Commission revised its rules governing non-conforming uses, structures, and lots in 1999. Nevertheless, the current framework for addressing these expansions does not fully acknowledge the disproportionate impact of the enlarged dwelling, usually on a very small lot, on surrounding resources and values. The new or renovated structures typically generate more septic waste, more surface runoff, and are often much more visible due to the addition of second stories and extensive windows. In addition, existing rules governing non-conformities are time-consuming to administer and have not created the more predictable environment that was intended.

Recommended refinements: Maintain the Traditional Character of Dwellings, Particularly in Areas Distant from Population Centers, Refine Rules Governing Expansions of Nonconforming Shoreland Development

The Commission will consider measures to maintain the traditional character of dwellings in more remote parts of the jurisdiction – areas distant from public roads, services, and population centers. Such measures could include more widespread application of the P-GP2 zone, more rigorous standards for larger houses (to limit environmental and other impacts), additional clearing standards oriented toward screening, stricter height limits, building footprint size limits, standards for exterior siding color and reflectivity, and limiting development in certain areas to traditional remote camps.

The Commission will refine its rules governing expansions of nonconforming shoreland development. Its goals will include respecting the limits inherent in substandard shoreland lots, minimizing adverse impacts on resources and values, and improving predictability. As part of this evaluation, the Commission will strive to be consistent with state guidance provided to municipalities pursuant to the Mandatory Shoreland Zoning Act. The Commission will continue to work to establish incentives for bringing lots and structures into compliance or closer compliance with current regulations. It will also emphasize the need for landowners and potential buyers to have realistic expectations when purchasing non-conforming lots and structures. In these efforts, the Commission will be mindful of issues of fairness and consistent treatment of landowners with nonconforming situations.

As part of this effort, the Commission will consider measures to limit the expansion of non-conforming structures, and to improve environmental and scenic quality as part of proposed expansions, such as establishing vegetative buffers, and using natural colors and non-reflective materials for visible structures.

4.9.F Use of private roads to access development

When the Commission was established, the extensive network of private land management roads that exists today was just beginning to be built. Most of the private land management roads in the jurisdiction were constructed explicitly for forest management activities, a use classification which entitles the landowner to exemptions from certain regulation. Over time, these roads came to be used to access recreational activities and scattered seasonal camps. The increased use of private land management roads to access development and in some cases, the conversion of these roads from land management roads to subdivision roads, raises a number of issues and concerns.

The increasing use of private land management roads, designed for forestry uses, for accessing intensive development, such as subdivisions raises complex issues. Where seasonal camp owners used to traverse the land of one or two landowners, today they may traverse the lands of ten or more landowners, and they may not always have deeded rights-of-way. This raises questions such as: 1) Can public services, including fire, police and ambulance service, be provided effectively and without undue cost over these roads, which are under private ownership and not subject to any design or maintenance standards?; 2) Are consumers fully aware of the implications, and to some degree risk, associated with using a privately owned and maintained land management road as their only means of access to their property?; and 3) Are the interests of private road owners being protected, particularly if they are not aware that their roads are being used to provide access to a large development?

Additionally, land management roads are not subject to the same design and construction standards that internal subdivision roads are. Consequently, these roads may be substandard for the volume of traffic they will receive. Roads designed as occasional haul roads may not safely accommodate the increased volume of traffic associated with residential uses. Furthermore the maintenance costs for most private land management roads falls to the landowners, not those using the roads to access development. As use of these roads increases, maintenance costs will likely increase as well. This burden is often borne by landowners who may not have had any say in the use of their roads for this purpose. This situation may also lead to increased pressure to convert private roads to county roads.

In some cases land management roads are converted to subdivision roads as part of a subdivision proposal. While land management roads are appropriately constructed and sited for forest management activities, they may not be appropriately sited and constructed for the purposes of accessing development. The location of pre-existing roads can constrain good subdivision design and the Commission is often left to weigh the impacts of utilizing an improperly sited road versus relocating a road and disturbing previously undisturbed areas.

There are no ready solutions to the issues raised by the use of private land management roads for accessing development. Due to the policies of land owners, the north Maine woods have a valued 30-plus year tradition of using private roads to access recreational resources and private dwellings. Nevertheless, the issues raised should be considered to ensure that landowner, government, consumer, and environmental interests are protected.

Recommended Refinement: Research Options Regarding Regulation of Road Access for Development

The Commission will research options for addressing issues associated with use of private roads to access development. Those options include: 1) developing notification procedures to ensure landowners are aware of proposals to use their roads to access development; 2) improving education of the public about the status of roads and services in the jurisdiction; 3) requiring disclosure of access conditions as part of subdivision review; 4) limiting the amount of development in areas accessed by private roads; and other alternatives.

Regarding conversion of land management roads to internal subdivision roads, the Commission will consider appropriate road design based on site conditions, not on existing land management road layout.

4.9.G Siting of Waste Disposal, Energy and Utility Facilities

Proposals to site major new waste disposal, energy, or utility-related facilities in more populated areas of the state have been opposed by organized citizen groups concerned about the impact of such facilities on their communities. Because of the jurisdiction's large area and low population density, it is likely to be increasingly viewed as a desirable location for some of these land uses.

A number of power transmission lines cross the jurisdiction. These facilities can significantly affect an area's scenic, remote and other natural values. Utility companies interested in siting new transmission or pipe lines may increasingly look to the jurisdiction for several reasons. First, there are advantages in dealing with one permitting agency rather than a number of organized towns. Second, state laws limiting utilities' eminent domain powers over unwilling sellers makes these companies more likely to choose rights-of-way where there are fewer landowners. Third, the jurisdiction stands between the source (the Canadian provinces) and the need areas.

While the Commission is concerned about the potential site-specific impact of such facilities, it is also concerned that they be located in areas where they will have the least impact on the jurisdiction's principal values. Generally speaking, they are best located in areas on the edge of the jurisdiction with good existing road access but low natural resource values.

In the case of new transmission lines or pipelines, the Commission can minimize their impact by encouraging the siting of these facilities along existing rights-of-way, particularly roads, and discouraging new routes through more remote areas. In the case of radio communication towers, the Commission will ensure that such towers are dismantled and removed from the premises if unused for an extended period. To minimize the number of such towers, the Commission will also ensure that space on new towers is made available to other users where feasible.

Wind power siting has been addressed recently by the Commission. The Commission will need to refine the siting process for small scale wind power projects. The siting of large scale projects has largely already been addressed by public law.