TOWN OF OAKLAND COMPREHENSIVE PLAN

A celebration of our town's past and present, and an opportunity to shape its future.

Submitted by the Oakland Comprehensive Plan Committee

2020 | 6 Cascade Mill Road, Oakland, ME 04963

Vision Statement

Where have we been? Where are we now? Where do we want to be?

These are the questions that Oakland residents and business owners have asked themselves over the past two years. Together, we are writing a plan that will guide the community for the next 20 years; we need to know what parts of the past and present we want to keep and what we need to change in order to create a vibrant future.

A S.W.O.T. analysis (strengths, weaknesses, opportunities, and threats) helps us to identify the keepsakes and the necessary changes. When the Oakland Comprehensive Plan committee worked with Oakland residents and business owners on a SWOT analysis for Oakland, we created the matrix you see on the right.

Strengths		**Weaknesses**	
Priority	*Theme*	*Priority*	*Theme*
1	• Low property taxes	1	• Poor perception as a "pass-through" town
1	• Central, convenient location	2	• Lack of cultural events/activities
1	• High-quality school system	3	• Lack of trained workforce -> lack of jobs -> lack of youth
Opportunities		**Threats**	
Priority	*Theme*	*Priority*	*Theme*
1	• Dense, clustered downtown	1	• Changing old mindsets about growth
2	• FirstPark	2	• Lack of adequate labor skills
3	• 4-seasons recreation, broadband	2	• Inability to attract young workforce

Once we identified the strengths we should capitalize on and the weaknesses we should fortify for the future, we engaged in "blue-sky visioning" – an exercise to think outside of the box to consider how to take advantage of the opportunities and minimize the threats we foresee in the future. An exciting range of ideas was brainstormed: revitalizing downtown through activating vacant spaces, adding parks to connect to nature trails, attracting food establishments, and increasing residential density; honing in on Oakland's natural resources and family-friendly culture by increasing recreational opportunities and extending bike trails over railbeds; protecting water quality while capitalizing on the economic boost fishing and lake-based recreation yield for the town; and better promoting Oakland's story and the wonderful cultural and recreational assets it already has.

The wealth of community input and volunteerism has resulted in a Comprehensive Plan that reflects the unique character of Oakland. This would not have been possible without the tireless efforts of our Oakland Comprehensive Plan Committee, to whom we give great thanks: Gary Bowman (Town Manager), Paula Callan, Dan Duperry, Mark Fisher, Donna Griffin, Mary-Anne LaMarre, Shawn Marquis, Mark Rancourt, Cindy Reese, Kelly Roderick, Michael Rossignol, Dale Sturtevant, and Chuck Sweigart,. We are also grateful to Alberta Porter, Oakland Town Historian, for her contributions, and to Garvan Donegan and Elaine Theriault-Currier of Central Maine Growth Council, which serves as Oakland's economic development department, for their facilitation of this planning process.

Clearly, Oakland residents are passionate about their community and see endless potential in our small yet growing town. This Comprehensive Plan has been an important inspiration and foundation for envisioning and implementing our desired future. Yet, it is by no means the end. The success of this plan and of Oakland's future depends on your collaboration and action, and we look forward to working with you to achieve a vibrant future for our town.

Sincerely,

Robert Nutting
Chair, Oakland Comprehensive Planning Committee

Laura Tracy
Vice Chair, Oakland Comprehensive Planning Committee

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i. Public Participation

Throughout the process of putting together its Comprehensive Plan, the Town of Oakland has invited the community to be involved in a variety of ways. Whether residents and business owners could contribute 15 minutes or one Monday evening each month, they took advantage of several opportunities to give input. OCPC would like to thank all volunteers, residents, business owners, and property owners for their thoughtful participation in this process.

The Comprehensive Plan Committee is comprised of 15 volunteers, ranging from educators to retirees to government officials. Each volunteer served on at least one of four sub-committees: 1996 Comprehensive Plan Review; Survey and Public Input; SWOT and Stakeholder Analysis; and Natural Resources. Nine of these members directly drafted and edited the plan.

The sub-committees and the entire Committee convened more than 27 times over the course of two years. All meetings were publicized and open to the public. Several committee meetings welcomed guest speakers who provided expert advice in topic areas relevant to the Comprehensive Plan. Guest speakers included: Chris Huck, transportation planner from Kennebec Valley Council of Governments; Colby College Professor Whitney King, on water quality; Amanda Rector, Maine State Economist; Jonathan Pottle, attorney at Eaton Peabody on tax increment financing; and Amanda Shearin and Jason Seiders from the Dept. Inland Fisheries and Wildlife.

Minutes from each meeting were posted to the Oakland Comprehensive Plan web page (www.centralmaine.org/oakland-comprehensive-plan), where the public could also find information on the Comprehensive Plan, upcoming surveys and public forums, and supplementary materials.

Aside from committee meetings, two public forums were hosted specifically to educate the public on Oakland's Comprehensive Plan process and to collect residents' valuable input on the town's future. The forums in June and December of 2018 were attended by a total of 47 residents and included visioning exercises which inform this plan.

Dec. 2018 Public Forum

In addition to the public forums, residents and business owners could take part in the Oakland Comprehensive Plan survey. The 10-minute survey was mailed to each Oakland address, promoted during Oakland's town festival OakFest, publicized in local newspapers, and available online. The survey earned a 13% response rate (see Appendix 10.1) and many of the responses have been incorporated into this plan.

ii. Goals & Strategies

The OCPC's guiding questions "Where have we been? Where are we now? Where do we want to be?" have informed the thoughtful two (2) year planning process whereby the town respectfully reflected on the biography of the past – both lessons learned and opportunities had. These questions helped the committee to uncover the interconnectedness of Oakland's assets and to determine how the Comprehensive Plan will be used to shape future development and growth in a sustainable and thoughtful manner.

The meaning of these guiding questions reflect the importance of drawing on the past, while focusing on cultivating the community's collection of historically important traditions, natural resources, idyllic lakes and streams, and industries that will continue to make Oakland a breathtaking destination for residents, businesses, students, and visitors. In doing so through the Comprehensive Planning process, the Town of Oakland seeks to be guided into the future by: 1) learning from its history; 2) understanding shorter vs. longer term stability; 3) engaging in deep learning and data-driven analysis on key segments of the community's industries and resources for decision making; and 4) better understanding the relationships between our assets within the dynamic local, regional, and statewide socio-economic and environmental systems.

The goals and strategies for the town are based upon Maine's Growth Management Program and priorities identified by the Town of Oakland, Maine through its comprehensive planning process. The below goals, policies, and strategies incorporate the findings and analyses of the comprehensive plan inventory and public input. In the Plan Implementation & Evaluation Section (Section XIV), each strategy is followed by the persons or groups assigned to implement it and a timeline indicating when tasks should be completed.

This chapter is divided into topic sections that correspond to inventory chapters of the plan. However, as many policies affect other topic sections of the plan, it is important to read and consider all the policies contained in each section as to understand the scope of those policies.

I. Historic and Archaeological Resources

Summary

The town of Oakland has a rich historical background which has shaped the town's identity and helps to inform the town's future. From a diverse manufacturing and agricultural biography to the growth of a tranquil lakeside community, Oakland must look to its past to understand which aspects of town life should be preserved or modernized to reflect our unique sense of place

Key Topics

- Inventory of historic and archaeological assets
- Oakland's economic and demographic transition

- Importance of lakes in the development of Oakland

Goals
Preserve the State's historic and archaeological resources.

Policy
1. Protect to the greatest extent practicable the significant historic and archaeological resources in the community.

Recommended Strategies
1. For known historic archeological sites and areas sensitive to prehistoric archeology, through local land use ordinances require subdivision or non-residential developers to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.

2. Adopt or amend land use ordinances to require the planning board (or other designated review authority) to incorporate maps and information provided by the Maine Historic Preservation Commission into their review process.

3. Work with the local or county historical society and/or the Maine Historic Preservation Commission to assess the need for, and if necessary plan for, a comprehensive community survey of the community's historic and archaeological resources.

II. Water Resources

Summary
Oakland is celebrated for its scenic beauty and idyllic lakes and ponds. Local water bodies and resources provide significant benefits to the town's (and region's/state's) tourism, economy, quality of life, and residential population.

Key Topics
- Overview of Oakland's water bodies
- Threats and protections for water quality

Goal
Protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers and coastal areas.

Policies

1. To collaborate to protect current and potential drinking water sources in Oakland and the surrounding region.

2. To protect significant surface water resources from pollution and improve water quality where needed.

3. To protect Oakland water resources in growth areas while promoting more intensive development in those areas.

4. To minimize point and nonpoint source pollution discharges through the upgrade of existing public sewer systems and wastewater treatment facilities.

Recommended Strategies

1. Adopt or amend local land use ordinances as applicable to incorporate stormwater runoff performance standards consistent with:
    a. Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502).
    b. Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds.
    c. Maine Pollution Discharge Elimination System Stormwater Program

2. Consider amending local land use ordinances, as applicable, to incorporate low impact development standards.

3. Where applicable, develop an urban impaired stream watershed management or mitigation plan that will promote continued development or redevelopment without further stream degradation.

4. Maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms, as necessary.

5. Encourage landowners to protect water quality. Provide local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine.

6. Adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and require their implementation by contractors, owners, and community officials and employees.

7. Participate in local and regional efforts to monitor, protect and, where warranted, improve water quality.

8. Provide educational materials at appropriate locations regarding aquatic invasive species.

III. Natural Resources

Summary

Oakland is known for its scenic beauty due to its pristine natural resources, which include a diverse array of flora and fauna that are supported by an abundance of lakes, ponds, wetlands, rivers, and streams.

Key Topics

- Inventory of the species of special concern and endangered species living in Oakland
- Threats and protections for critical natural resources

Goal

Protect Oakland and State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas.

Policy

1. Protect the town's critical natural resources in the community.

2. To coordinate and collaborate with neighboring communities and regional and state agencies to protect critical shared natural resources.

Recommended Strategies

1. Ensure that land use ordinances are consistent with applicable state law regarding critical natural resources.

2. Designate critical natural resources as Critical Resource Areas in the Future Land Use Plan.

3. Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of

the proposed site design, construction timing, and/or extent of excavation.

4. Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process, consideration of pertinent Beginning with Habitat maps and information regarding critical natural resources.

5. Initiate and/or participate in interlocal and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.

6. Pursue public/private partnerships to protect critical and important natural resources such as through purchase of land or easements from willing sellers.

7. Distribute or make available information to those living in or near critical or important natural resources about current use tax programs and applicable local, state, or federal regulations.

In addition to the above strategies, other habitat management-related recommendations may include:

- Maintain riparian woodland zone within 300 ft. of streams and ponds inhabited by the wooded turtle. Requirements of the zone include: refrain from motorized cutting and/or harvesting activities from April - October, with no activities allowed within 50ft of the high-water line; harvest only during dry or frozen ground conditions; build temporary bridges across streams for motorized vehicles; maintain 60-70% canopy cover within 100 ft of high-water line; and avoid or minimize construction of permanent roads. (BWH rec)
- Maintain 60-70% canopy in the area inhabited by goldie's wood fern.
- Ensure the presence of tall trees in area inhabited by bald eagle.
- Erect signs warning drivers of waterfowl crossing in heavily-trafficked areas.
- Maintain anonymity of endangered plant found in Oakland.
- Maintain habitat blocks and connectors… upgrade road stream crossings (bridges or culverts), minimize roads through wildlife connectors, etc.

IV. Agriculture & Forestry

Summary

Like much of the region, Oakland has important agricultural origins and contains several land areas consisting of "good" farming soils. However, agriculture land use has declined in the 21st century. Currently (2019), the eastern corner on Fairfield Street is being used as farmland for Riverside Farm, Oakland's only active farm. Agriculture continues be an important opportunity and holds a prospect for various economic sectors.

Key Topics

- Overview of agricultural and forestry operations
- Participation in the Tree Growth program
- Threats and protections for farmland and forestry
- Support for existing and new agriculture ventures

Goals

1. Cultivate local food systems
2. Promote buying local foods and enhance opportunities to obtain local food options
3. Protect agricultural resources

Policies

1. Encourage the sustainability of local food systems.

2. Protect natural resources, including lakes, wildlife habitats, woodlands, and groundwater resources while protecting legal public access to outdoor assets.

3. To safeguard lands identified as prime farmland or capable of supporting commercial forestry.

4. To support farming and forestry and encourage their economic viability.

Recommended Strategies

1. Work with local farmers and farms markets to develop avenues for access to locally sourced agriculture options, including opportunities for a local food market downtown.

2. Assess the Farmland Taxation program to ensure the program is supportive of the agriculture sector.

3. Confer with Department of Agriculture, Conservation and Forestry when developing land use regulations pertaining to agricultural management practices to ensure regulations are agriculture friendly.

4. Promote and support food hubs and access to locally sourced produce.

5. Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices as required by 12 M.R.S.A. §8869.

6. Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices.

7. Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.

8. Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.

9. Encourage owners of productive farm and forest land to enroll in the current use taxation programs.

10. Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations.

11. Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.

VI. Population & Demographics

Summary

The town of Oakland's socio demographic profile is reflective of state and regional trends, including an aging population met with a declining population (statewide). However, recently Oakland has been able to push back against state and regional population trends with local population increases, which have largely been a result of the town's residential character, geographic economics associated with its central proximity, and abutting a micropolitan service center city.

Key Topics

- Population trends
- Population impact

Goals

1. Cultivate a robust workforce
2. Attract, retain, and grow a diverse Oakland population base by providing housing options to regional communities and service centers

Policies

1. Promote an economic climate that increases job opportunities and overall economic well-being.

2. Promote and foster cultural attractions and recreational opportunities for all age cohorts.

Recommended Strategies

1. Identify residential land parcels in proximity to transit coordinates to cultivate residential developments that are supportive to a diverse set of age cohorts.

2. Support community events such as 'OakFest" to attract new people to Oakland.

3. Identify and develop downtown initiatives that contribute to quality of life and grow downtown residential density.

4. Host statewide events – (i) sports, fishing; and (ii) health and wellness

VI. Economy

Summary

The Town of Oakland's economy is made-up of small and medium size businesses, including medical, professional business services, manufacturing, and home-based businesses that are located throughout town.

Key Topics

- Major employers
- Economic development plans and incentives
- Revitalization efforts of Oakland's historic downtown district

Goal

Promote an economic climate that increases job opportunities and overall economic well-being.

Policies

1. Enhance the vibrancy and support the revitalization of Oakland's Main Street and downtown district.

2. Promote the expansion of the current economic (tax) base and creation of business and job opportunities.

3. Preserve Oakland's unique character and quality of life.

4. Promote infill development and the development of lands with existing infrastructure, including along Kennedy Memorial Drive and within the downtown district.

5. Promote an economic climate that increases job opportunities and overall economic well-being.

6. To support the type of economic development activity the community desires, reflecting the community's role in the region.

7. To make a financial commitment, if necessary, to support desired economic development, including needed public improvements such a life safety and rescue, domestic infrastructure (e.g. sewer and water), and broadband expansion.

8. To coordinate with regional development corporations and surrounding towns as necessary to support desired economic development.

Recommended Strategies

1. Enact or amend local ordinances to reflect the desired scale, design, intensity, and location of future economic development.

2. Develop a downtown façade & building improvement program.

3. Identify gaps in infrastructure and develop capital investment plan(s).
    a. Plan for and develop infrastructure to support business development, particularly within the downtown and along Kennedy Memorial Drive (KMD)
    b. Develop and grow telematics and broadband infrastructure

4. If public investments are foreseen to support economic development, identify the mechanisms to be considered to finance them (local tax dollars, creating a tax increment financing district, a Community Development Block Grant or other grants, bonding, impact fees, etc.)

5. Diversify the tax base, plug gaps, and identify suitable vacant land parcels for potential development projects, including identify key vacant land parcels and brownfields.

6. Work with current and applicable Oakland stakeholders to develop and implement a downtown beautification plan to make changes to the downtown such as lighting, landscaping, signage, public green spaces, pocket parks, and other placemaking amenities to

help attract new residents, businesses, and visitors.

7. Foster a talented, trained and entrepreneurial workforce.

8. Promote and work collaboratively on community-based events such as OakFest.

9. Support and participate with First Park/KRDA on the expansion of business development.

10. Participate in regional economic development and planning initiatives.

VII. Housing

Summary

Oakland's housing and residential characteristics are a competitive advantage for the municipality. Currently displaying a strong real estate market within the greater Waterville region, Oakland has yielded a low vacancy rate, yet both homeownership and home rentals are more affordable in Oakland than in the county or the state.

Key Topics

- Availability of housing stock
- Affordability
- Seasonality

Goal

Ensure that Oakland has an adequate supply of decent housing for all age cohorts, which is supportive of living-wage jobs and business recruitment & retention.

Policies

1. To encourage and promote adequate workforce housing to support the community's and region's economic development.

2. To support the growth of residential density in Oakland's downtown district.

3. To ensure that land use controls encourage the development of quality affordable and working housing, including rental housing.

4. To encourage and support the efforts of the regional housing coalitions in addressing affordable and workforce housing needs.

Recommended Strategies

1. Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing.

2. Grow residential density in Oakland's downtown district by accessing public-private finance tools and programs.

3. Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas, subject to site suitability.

4. Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition.

5. Designate a location(s) in growth areas where mobile home parks are allowed pursuant to 30-A M.R.S.A. §4358(3)(M) and where manufactured housing is allowed pursuant to 30-A M.R.S.A. §4358(2).

6. Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs.

7. Seek to achieve a level of at least 10% of new residential development built or placed during the next decade be affordable.

VIII. Parks & Recreation

Summary

The Town of Oakland is fortunate to offer a diversity of public recreational opportunities, from boating to hiking. The town's lakes and woodlands provide natural playgrounds, and the school district provides playing fields. As the town's demographic makeup changes, so too must its recreational programs and facilities.

Key Topics

- Inventory of public and private recreational facilities
- Capacity of recreational facilities
- Snow Pond Senior Center

Goal

Promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters

Policy

1. To maintain/upgrade existing recreational facilities as necessary to meet current and future needs.

2. To preserve open space for recreational use as appropriate.

3. To seek to achieve or continue to maintain at least one major point of public access to major water bodies for boating, fishing, and swimming, and work with nearby property owners to address concerns.

Recommended Strategies

1. Create a list of recreation needs or develop a recreation plan to meet current and future needs. Assign a committee or community official to explore ways of addressing the identified needs and/or implementing the policies and strategies outlined in the plan.

2. Work with public and private partners to extend and maintain a network of trails for motorized and non-motorized uses. Connect with regional trail systems where possible.

3. Work with an existing local land trust or other conservation organizations to pursue opportunities to protect important open space or recreational land.

4. Provide educational materials regarding the benefits and protections for landowners allowing public recreational access on their property. At a minimum this will include information on Maine's landowner liability law regarding recreational or harvesting use, Title 14, M.R.S.A. §159-A.

IX. Transportation

Summary

Transportation is critical to movement of goods and people necessary for the development of the economy and for access to property. An understanding of Oakland's transportation system and infrastructure is critical to plan for future economic growth.

Key Topics

- Elements of Oakland's transportation infrastructure
- Inventory of roadways
- Project management and budget
- Use of the transportation system

Goal

1. To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

2. Providing an integrated, efficient and economical transportation system that affords mobility, convenience and safety and that meets the needs of all citizens, including transit–dependent and disabled citizens

Policies

1. Encourage neighborhoods and downtown design features that promote connectivity and public transportation.

2. Provide adequate infrastructure & public services to meet existing & future market demand for the community.

3. To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems.

4. To safely and efficiently preserve or improve the transportation system.

5. To promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.

6. To meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users (motor vehicles, pedestrians, bicyclists).

7. To promote fiscal prudence by maximizing the efficiency of the state or state-aid highway network.

Recommended Strategies

1. Develop or continue to update a prioritized improvement, maintenance, and repair plan for the community's transportation network.

2. Initiate or actively participate in regional and state transportation efforts.

3. Maintain, enact or amend local ordinances as appropriate to address or avoid conflicts with:
    a. Policy objectives of the *Sensible Transportation Policy Act* (23 M.R.S.A. §73);
    b. State access management regulations pursuant to 23 M.R.S.A. §704; and

c. State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. §704-A.

4. Maintain, enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.

XII. Public Facilities

Summary

The Town of Oakland's friendly reputation and cost-effective operations are borne through its 86 employees, 15 facilities, and many departments. As demand for services changes, the Town of Oakland must adapt to ensure residents enjoy a safe, high-quality life in our town.

Key Topics

- Inventory of municipal government departments
- Addressing growth within municipal government

Goal

Plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Policies

1. Provide adequate infrastructure & public services to meet existing & future market demand for the community.

2. To efficiently meet identified public facility and service needs.

3. To provide public facilities and services in a manner that promotes and supports growth and development in identified growth areas.

Recommended Strategies

1. Identify any capital improvements needed to maintain or upgrade public services to accommodate the community's anticipated growth and changing demographics.

2. Locate new public facilities comprising at least 75% of new municipal growth-related capital investments in designated growth areas.

3. Encourage local sewer and water districts to coordinate planned service extensions with the Future Land Use Plan.

4. If public water supply expansion is anticipated, identify and protect suitable sources.

5. Explore options for regional delivery of local services.

6. Convene a Renewable Energy Committee to explore ways in which to reduce reliance on non-renewable sources of energy while generating revenue or reducing expenses.

XI. Capital Investment

Summary

The Town of Oakland is keenly aware that its dependence on local property taxes to finance the operation of local government necessitates fiscal conservatism and cost-efficiency. Large capital projects, including those identified and proposed through this Comprehensive Plan, often incorporate non-municipal debt funding sources so that town residents can benefit while incurring minimal tax burden.

Key Topics

- Financial statistics
- Capital improvement program

Goal

Plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Policies

1. To finance existing and future facilities and services in a cost-effective manner.

2. To explore grants available to assist in the funding of capital investments within the community.

3. To reduce Maine's tax burden by staying within LD 1 spending limitations.

Recommended Strategies

1. Explore opportunities to work with neighboring communities to plan for and finance shared or adjacent capital investments to increase cost savings and efficiencies.

XII. Regional Coordination

Summary

Due to its central geography, Oakland serves as both a hub and spoke within regional service areas of education, emergency response, and economic development. This coordination often results in cost-efficiency while concentrating the services in the areas where Oakland residents live, work, and recreate.

Key Topics

- Oakland's partnership with local municipalities within education, healthcare, emergency rescue, and environmental conservation.
- Importance of regional partnerships for economic development, including KRDA/FirstPark, Central Maine Growth Council, and Kennebec Valley Council of Governments.

Goal

Continue to support regional efforts and partner on regionalization that will benefit all participants.

XIII. Existing Land Use

Summary

The existing and future development of the Town of Oakland is shaped by the natural and physical environment. Geology, topography, soils, groundwater, and current land use patterns are important considerations for planning Oakland's future development.

Key Topics

- Overview of Oakland's geologic and climate considerations
- The characteristics of recent development

Goal

Balancing individual property rights with community interests and goals.

XIII. Future Land Use

Summary

Oakland's future land use plan focuses on promoting development within the identified growth area, which reflects existing development areas, general site suitability, presence of public infrastructure, nature gas, broadband connectivity, and an overall planning strategy of (1) infill development, (2) geographic economics, (3) asset-based economic development, (4) elements of modern day, small town transit orientated development (TOD), and (5) downtown revitalization.

Key Topics

- Overview of Oakland's growth area
- The predicted characteristics of future development

Goal

Encourage and support developments within Oakland's Future Land Use Plan's growth area, including along Kennedy Memorial Drive, Downtown, and FirstPark.

Policies

1. To work collaboratives to coordinate Oakland's land use strategies and plans with other local municipalities and regional land use planning efforts

2. To encourage development and associated financial commitments – where appropriate and feasible – to projects sites that have access to, or in proximity of, public infrastructure (i.e. within Future Land Use Plan's growth area)

3. To support the locations, types, scales, and intensities of land uses that Oakland desires as stated in the intent of the vision statement

4. To establish efficient permitting procedures, particularly in Oaklands growth area

5. To protect critical and delicate rural and waterfront resources from adverse impacts, including impacts of development

Recommended Strategies

1. Collaborate with abutting and neighboring communities to coordinate Oakland-based land use designations and/or regulatory and non-regulatory strategies.

2. Maintain, enact, and amend local ordinances as appropriate to:
    a. Scale, intensity, and location of future development;
    b. Establish or maintain fair and efficient permitting procedures, and explore streamlining permitting procedures in growth area;
    c. Clearly define protective measures for critical natural resources; and
    d. Clearly define protective measures for Oakland's critical rural areas, waterbodies, and waterfront areas.
3. Provide Oakland code enforcement officer and/or applicable Town staff with the tools, training, and support necessary to enforce land use regulations, and ensure that the code enforcement officer is certified in accordance with 30-A.M.R.S. §4451

4. Evaluate the implementation of the Oakland Comprehensive Plan every five (5) years.

I. Historic and Archaeological Resources

"To know the town, you have to get to know the people and what they did." - Alberta Porter, Town Historian

Key Findings of Section

1. Oakland has transitioned from an independent, manufacturing-reliant town to an increasingly residential community tightly intertwined with the economies of Waterville and Augusta.
2. While many vacation accommodations have closed, the lakes remain an important tourist and residential attraction.

Oakland's history lends a profound impact to the town's identity and helps to shape the town's future. As a small town, our sense of character is an important factor in the attraction and retention of residents and businesses. Oakland must look to its past to understand which aspects of town life should be preserved or modernized to reflect our unique sense of place.

I. Historical Overview

First known as Taconnet, a name derived from one of the four tribes of Indians who first occupied the fertile region watered by the Sebasticook, a tributary of the Kennebec River, Oakland's approx. twenty-six square miles were settled by colonists of English descent who came from Massachusetts and New Hampshire in the latter half of the 1700's. The area was first incorporated as Winslow in 1771. In 1872, the area west of the Kennebec effected a peaceful secession and incorporated as Waterville. In 1873, the manufacturers in the western section, who had created a separate center of activity and trade and who were unhappy about taxation, incorporated as West Waterville. In 1883, residents voted to rename their town "Oakland".

Historically, Oakland was known as the ax and scythe capital of New England. When the ax and scythe were replaced in the field by the chainsaw and tractor, these historic tool industries gradually grew obsolete.

In the first half of the 20th century, as many as eleven passenger trains served the Oakland station daily. When Interstate 95 and the automobile replaced passenger rail service, Oakland was no longer a strategic transportation hub. The decline of rail service also changed vacation habits; the automobile increasingly carried shoppers to larger supermarkets, department stores, and destinations in nearby cities. Thus, two crucial elements of Oakland's economy - industry and tourism - were left in a state of flux.

With the decline of the family farm, here as in the rest of the country, Oakland's undeveloped lands (including agricultural fields, forests, and wetlands) and its proximity to Waterville and Augusta made it prime for residential development. Although the presence of new industry and commercial activity has staved off a complete transformation into a bedroom community, Oakland's character is largely residential.

1. Farming

Farming was an important part of life in Oakland throughout much of the Town's history, from the earliest days, when farming was mainly for self-sufficiency, to the mid-20th century, when commercial farms were still common. A corn and string bean cannery on Belgrade Avenue (now the location of a Town park) was a thriving late-summer industry from 1889 to 1953. A creamery on Oak Street served local dairies until mid-20th century, and Rossignol's Dairy on Country Club Road sold its own milk products until the 1980s.

The pressures of centralized agribusiness, Maine's winters, and Oakland's geographic isolation from grain supplies led to the near-extinction of both dairy and poultry farming in Oakland. Today, only three parcels of land are designated for agricultural use.

More so than farms, industry was the powerful economic force in shaping Oakland's economy and unique identity.

2. Industry

Messalonskee Stream, supplied with water from the Belgrade Lakes chain, falls about 120 feet to provide the energy to power Oakland throughout its industrial phase. It was this natural resource which gave birth to Central Maine Power.

Maurice Coughlin, remembering the early twentieth century, comments, "The Messalonskee Stream was the lifeblood of this Town...it was lined with factories."

Initially, perhaps as early as 1790, water power was used for gristmills and sawmills. By 1850, the industrial revolution had arrived in Oakland, necessitating the creation of four dams along the half-mile stretch of the stream below Messalonskee Lake. Industries that flourished and died along the stream include tanneries, furniture and carriage shops, iron foundries, machine shops, boat and casket makers, shingle mills, tool handles, and perhaps most importantly, edge tool manufacturers and woolen mills.

The edge tools, axes, scythes and sickles, were first produced in the 1830s at the final dam near the cascade. The edge tool business blossomed at various sites along the stream during the second half of the 1800s, and Oakland became the ax and scythe capital of New England, if not the United States.

In the words of Michael J. Denis (author of "Some Notes on Industry and Manufacturing on Messalonskee Stream" to which this account is indebted), "The Dunn Edge Tool Company has produced at times 180,000 scythes and 120,000 axes per year; its layout was considered to be among the finest in the world; it was the largest such manufactory in New England, and it produced per year more scythes than any other factory in the world."

In the 1890s, the American Ax & Tool Company was making as many as 145,000 scythes a year near the bridge at School Street alongside the Emerson & Stevens Manufacturing Company, which made edge tools for almost 100 years up until the 1960s. The North Wayne Tool Company, previously Dunn Edge Tool Company, was the last active firm in Oakland, closing in 1967. The last industry along the stream, Cascade Woolen Mill, closed in 1997. Established in 1882, it endured longer than its peers after carving a niche in the complex textiles

industry with custom-woven woolens and blends for outerwear, as well as fabrics for furniture upholstery and office partitions.

The 21st century has seen the resurgence of industry within the precision manufacturing sector, best represented in Oakland by Wrabacon, which produces automation systems. Yet, technology has been the defining growth sector of the 21st century economy. With its strong central geography, Oakland was chosen as the home of FirstPark in 1998, a "smart" business park designed to meet the technological needs of innovative businesses. The park's major tenant is T-Mobile, which employs over 850 staff members.

3. Lakes & Tourism

The importance of lakes in Oakland's economy cannot be overstated. Maine began to attract vacationers around 1870, and by the turn of the century, the Belgrade Lakes region was renowned for its hotels and camps.

Summer camps, which catered to children, adults, and families, began to take root in Oakland in the 1920s. With camps on all of the Town's lakes, seasonal businesses had their best years prior to the time that personal automobiles supplanted passenger trains as the primary mode of transportation to and from the region. Arriving by rail, urban children and families came from out-of-state to vacation here, doubling the population and retail commerce every summer.

When the road systems improved and families began traveling by car, the camp industry declined. Now, with the combined effects of an increasingly mobile population, a steady increase in real estate prices, and a more competitive labor market for summer help, commercial camps have become decreasingly viable as for-profit businesses. While there are fewer facilities for vacationers, Oakland's population still swells in the summer with the arrival of seasonal residents and of children destined for several non-profit children's camps in the town.

4. Transportation

As gleaned above, transportation has been a key factor in Oakland's economic history. The Maine Central Railroad from Portland to Bangor was completed in 1849, and Oakland was the junction between that line and the independent Somerset Railroad, which connected Kennebec, Somerset, and Piscataquis counties, including destinations such as Moosehead Lake.

Passenger transportation by rail lasted until 1957, though it diminished as automobile use gained momentum after World War II. Prior to the mid-1950s, the trains served as the main supply route for Oakland businesses and as an important transportation method for summer visitors.

Since businesses depended upon rail service, Oakland's business district grew around the rail station. Supplies arrived by train and were distributed around town by teams of horses. With a turntable and railcar repair shops located in Oakland, the railroad was a significant asset to the town. Today it is somewhat a cause for concern, both because of the disrepair of the tracks and the potentially hazardous cargoes that roll through Town and along the shores of Messalonskee Lake daily.

Oakland was also served by a trolley line that connected it to Waterville, Fairfield, and to cities

farther afield. With the trolley, Oakland was easily connected with other towns and cities, allowing the exchange of residents and visitors, creating conditions for tourist attractions such as Messalonskee Hall, a big car-barn at the end of Church Street which served as a social and athletic center, and Cascade Park, a musical and theatrical facility.

Fortunately, Oakland has remained well-connected to transportation channels even as rail subsided. Today, Oakland's proximity to I-95, which arrived in the 1960s, is a vital asset for both economic and residential development.

5. Downtown

Upper Mills (now called Haymarket Square), at the junction of Church St. and Water St., served as Oakland's first downtown center. When the railroad was built, downtown shifted to Depot Square on Main St. to take advantage of the flow of goods and people. The vibrant downtown economy encompassed hotels, the Diamond Match factory, banks, groceries, toolmakers, a car dealership, a furniture store, and a barber shop. The summer months doubled Oakland's population, allowing businesses to flourish.

The original influences which contributed to a strong downtown economy, including train service, a large summer colony, and a busy manufacturing sector, have been replaced with new realities: Kennedy Memorial Drive (KMD), the main thoroughfare connecting Oakland with Waterville, has attracted commercial development away from Main St., and both KMD and I-95 make it easier for residents to shop and work in larger cities, creating less need for in-town services. As well, residential development has moved from the town center out into rural fields and by the lake shores. Yet, Oakland's attraction as a place to live will sustain demand for a downtown center with opportunities for dining and recreating.

6. Schools

In 1969, Oakland, Belgrade, and Sidney formed School Administrative District 47, whose high school, Messalonskee High, is located in Oakland. Rome and China later joined. As Oakland increasingly becomes a residential community, one of the most desirable features for residents is the school system. Oakland's residents have rallied behind the schools, and their support has created a school system which is now one of the biggest sources of community pride.

7. Organizations

Before modern conveniences and entertainment options, Oakland residents made their own entertainment, and its quality is fondly remembered. Adult community baseball teams were a spectator sport, and there were locally-produced plays and musicals, movie theaters, dances at Messalonskee Hall, and many thriving civic organizations and smaller clubs. The Town has a fine facility for such activities in Memorial Hall, built in 1870 as a memorial to Civil War veterans.

Today, the Grange, Masons, American Legion, and VFW still meet, and there is a strong and active Lion's Club. The Oakland Area Historical Society maintains the McCartney House Museum on Main Street. Churches have played an important role in the Town's development, and there are several active in Oakland today. Oakland residents continue their support of the public library, which completed an expansion project in 2003 that doubled its size.

8. Government

Oakland's municipal government changed from a system of Selectmen to a Town Council in 1935. A five-person Town Council oversees a Town Manager, and there are approximately 86 additional municipal employees. There is still an annual Town Meeting to approve the municipal budget, though the largest expenditure, education, is approved at RSU 18's annual district budget meeting.

9. Summary

While the latter half of the 20th century witnessed the decline of agriculture, industry, and related businesses in Oakland, there has been increased pressure for residential development. The attractions of the area include the aesthetic virtues of the Belgrade Lakes, the rural New England countryside, a highly regarded school system, and proximity to Waterville, Augusta, and I-95.

Within this pattern of transition, the Oakland Comprehensive Plan provides an opportunity to envision Oakland's upcoming decades. Our roots as a small community with popular attractions lend a rich foundation from which to progress.

II. Protection of Historic Resources

While several of Oakland's historic buildings are listed on the National Register of Historic Places, it is difficult to protect those assets which are not publicly owned nor registered. As the buildings age, private owners may not be able to fund their maintenance and preservation; the Union Meeting House, now the Universalist Church, is one historic asset that has fallen into disrepair and would require community support to preserve it. Yet, without significant funding for preservation and maintenance, historic assets can not be acquired and saved by public or nonprofit owners.

Sidebar 1.1: Oakland's Historic Assets Listed on the National Register

• Pressey House, 287 Summer St. A Greek Revival home in the octagonal mode.

• Memorial Hall, Church Street. A rare commemoration of the Civil War, as statues more often than buildings were erected to remember the War.

• Oakland Public Library, 18 Church Street. Built in 1914 with a grant from the Carnegie Foundation.

However, the Town's subdivision ordinance and accompanying site review application provide parameters for new construction: a new subdivision may not have an "undue adverse effect" on historic sites[1], and any proposal which includes a site registered on the National Register of

[1] Town of Oakland. 2001. "Subdivision Ordinance". Pg. 4. (source).

Historic Places must provide a "protection plan... established in accordance with local, state, and federal regulations"[2].

Future surveys of historic and archaeological sites may yield several new additions to the Register. For example, the following properties retain significant local historic importance: Oakland Hydro Station on the Cascade Mill Road, which powered Oakland's industry; Oakland's oldest public building, the Union Meeting House on 41 Church Street, which housed all churches until it was purchased for the sole use of the Universalist Church in 1859; the Combs House on Belgrade Avenue, which is one of Oakland's oldest homes (1790); and the Macartney House on 25 Main Street, home to the Oakland Area Historical Society and one of Oakland's oldest homes (1812).

In addition, as there have been no surveys of Oakland's archaeological resources, there are no eligible historic archaeological sites documented. According to the Maine Historic Preservation Commission (MHPC), further survey of Oakland's industrial, agricultural, and residential past should pay particular interest to the earliest Euro-American settlement of the Town in the 18th and 19th centuries. All 18 prehistoric archaeological sites in Oakland are located along the shores of Messalonskee Lake (see Map 1: Known Prehistoric Archaeological Sites…); four of these sites are significant enough to be eligible for listing on the National Historic Register. The MHPC recommends that further surveys analyze the shores of East Pond, McGrath Pond, and Salmon Lake.

[2] Ibid, pg. 20-21.

II. Water Resources

"We want to return the lakes to a good iron/aluminum balance." – Dr. Whitney King, Colby College Miselis Professor of Chemistry.

Key Findings of Section

1. All of Oakland's major water bodies are at high risk for development and invasive aquatic plants; fortunately, each water body is stewarded by an active conservation group dedicated to education and preservation of water quality.
2. The recent reorganization of the 7 Lakes Alliance presents additional opportunities for the Town of Oakland to partner with watershed conservation groups to protect many of the town's greatest assets.
3. The East Pond alum treatment, a collaboration between East Pond Association and Colby College, has resulted in significant water quality gains and presents a model for fellow water bodies.

Oakland's lakes and ponds are a treasured source of recreation and beauty, and their value contributes to our tourism economy and residential population. Located within the Belgrade Lakes region, Oakland borders five bodies of water: East Pond, McGrath Pond, Messalonskee Lake, Messalonskee Stream, and Salmon Lake (also known as Ellis Pond). Long a tourist attraction, these ponds and lakes bring vacationers, professional anglers, and campers to Oakland every year, and they offer an attractive reason to become a year-round resident of the Town.

The Town of Oakland balances public access to the lakes and protection from over-development. Members of the public may enjoy access to three of Oakland's water bodies: both East Pond and Messalonskee Lake provide boat launches, and Pleasant Point Park offers a swimming beach on McGrath Pond (see Map 2: Oakland Infrastructure). Yet, all of Oakland's major water bodies are at high risk for development and for invasive aquatic plants (as shown in Table 2.2), necessitating regional collaboration, education, and innovative behavior change to overcome the many challenges threatening the quality of our lakes.

I. Threats to Water Quality

Oakland's water bodies face challenges from point and nonpoint sources of pollution and invasive aquatic plants. Given the water flow between the lakes and ponds which constitute the Belgrade Lakes, regional collaboration and education are critical to the protection of our treasured resources.

Point and Nonpoint Sources of Pollution

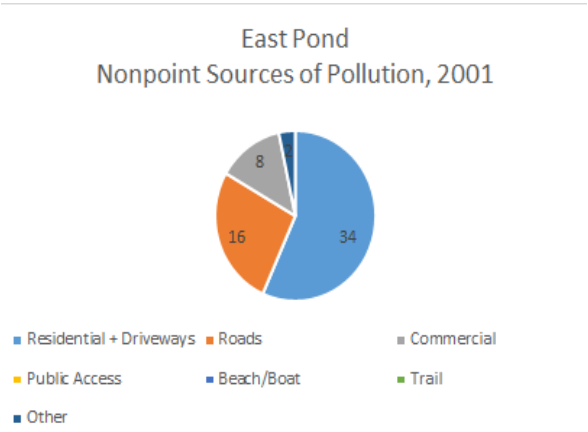
Point sources of pollution, or direct discharges, are dangerous threats to the quality of our lakes and ponds, yet non-point sources of pollution are more numerous and insidious. While the

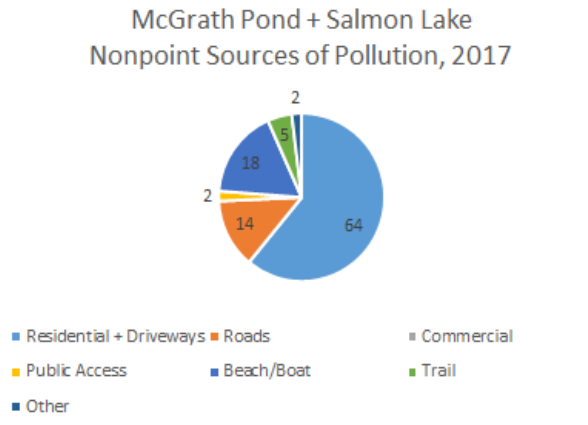
Maine Department of Environmental Protection has identified three wastewater outfalls (point sources) along Messalonskee Stream deriving from Messalonskee Stream Hydro (see Map 3: Oakland Watersheds), the McGrath Pond-Salmon Lake Association, representing two of Oakland's four major water bodies, identified 105 non-point sources of pollution in their 2017 Watershed Survey (see results of nonpoint sources of pollution surveys for all lake associations in Sidebar 2.1).

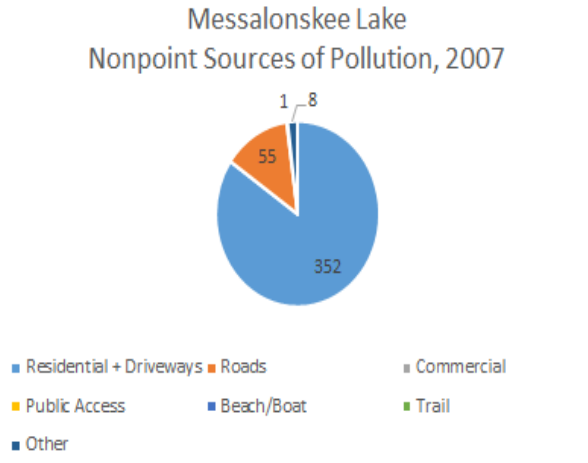
The majority of nonpoint sources of pollution are stormwater runoffs, which carry chemicals and pollutants into our water bodies. The most concerning pollutant is phosphorus; an excess of phosphorus leads to a decline in oxygen, which is necessary for a thriving fish population. Eventually, a lack of oxygen generates algal blooms, which can cause health problems for swimmers and may decrease property values by as much as 30 percent.

As shown in Sidebar 2.1, most nonpoint sources of pollution occur in residential settings. Lawns and driveways often contain pollutants from fertilizers and pesticides, and their slope to the shoreline facilitates the entrance of chemicals into our water bodies. In addition, the erosion of gravel private roads deposits phosphorus-laden soil and automotive oil, grease, and antifreeze into water bodies, suffocating fish and increasing levels of phosphorus.

Sidebar 2.1: Lake Association Survey Results for Nonpoint Sources of Pollution







Invasive Aquatic Plants

Given the interconnectivity of the Belgrade Lakes chain and the ease of public boating access, the threat of invasive aquatic plants taking root in our water bodies is an ever-present concern. While only one of Oakland's major water bodies is infested with an invasive plant, milfoil (see Table 2.2), we must remain vigilant to contain milfoil and prevent its spread. Fortunately, we have had success in the eradication of eurasian water milfoil in McGrath Pond /

Salmon Lake, giving credence to the potential success of best management practices.

Table 2.2: Summary of Quality of Oakland's Water Bodies

Water Body	Classification	Risk from Development[3]	Invasive Plants	Water Quality[4]
East Pond	Impaired	High	No, but at high risk	Poor-restorable
Messalonskee Lake	GPA[5]	High	Variable-leaf milfoil	Moderate-sensitive
Messalonskee Stream	C[6]	N/A	Variable-leaf milfoil	N/A
McGrath Pond	GPA	High	No, but at high risk	Moderate-sensitive
Salmon Lake	Ellis Pond GPA[7]	High	Eradicated Eurasian milfoil 2011-2012[8]	Poor-restorable

Threats to Aquifer Drinking Water Supply
Per the AQUA Index of the Bureaus of Land Resources and Water Quality, there are no significant aquifers in the Town of Oakland.

Threats to Public Water Supply
The Town of Oakland is serviced by MaineWater, a private water utility which derives its drinking water supply from China Lake, located in China and Vassalboro, Maine. The China Lake drinking water supply is filtered by the Kennebec Water District and strengthened with fluoride before delivery by MaineWater.

In 2003, source water assessments of China Lake indicated that the drinking water source had a moderate to high risk of significant contamination. Common contaminants of drinking water sources include: viruses and bacteria, which may originate in sewage plants and septic systems or wildlife and agricultural operations; runoff from industrial or commercial operations containing salt or metal; pesticides and herbicides; and organic chemicals from runoff, septic systems, or petroleum use.

Watershed protection initiatives are enacted by the municipalities of China and Vassalboro, the China Region Lakes Alliance, the China Lake Association, and the Kennebec Water District; in MaineWater's 2017 Water Quality report, the drinking water delivered to Oakland customers

[3] DEP chap. 502
[4] ME DEP, 2016. Maine Stormwater Management Design Manual (source).
[5] ME DEP, 2018. 2016 Integrated Water Quality Monitoring and Assessment Report Appendices, pg. 160. (source)
[6] Maine State Legislature. Water Classification Program. §465. (source).
[7] ME DEP, 2018. 2016 Integrated Water Quality Monitoring and Assessment Report Appendices, pg. 161. (source)
[8] ME DEP, 2018. 2016 Integrated Water Quality Monitoring and Assessment Report. (source)

was found to have met all national primary drinking water standards.

In addition to the drinking supply delivered by MaineWater, the town of Oakland contains eleven public water supply (PWS) sources. The Source Water Assessment Program, an initiative of the Maine Drinking Water Program, assessed each PWS between 2003 - 2012 (see Appendix 2.1 for results). Although this data may be over ten years old, the risk of acute or chronic contamination is based on well type, site geology, and land control, which are still relevant today. Major threats to PWS drinking water supplies include positive coliform tests, lack of ownership of at least a 150-ft radius around the well, and an unknown overburden thickness of bedrock wells.

II. Protection of Water Quality

Oakland is fortunate to have conscientious businesses, residents, and non-profits dedicated to preserving the quality of our water bodies. Private and non-profit efforts complement, and often surpass, public protection measures.

Public Protection Measures

Shoreland zoning[9] is the most powerful public protection measure for our water bodies. As the Town of Oakland's shoreland zoning ordinance[10] is in accordance with the Maine Revised Statutes Annotated (M.R.S.A.), it imposes control on all land within 250 ft. of a normal high-water line of a great pond and of a wetland's upland edge, and within 75 ft. of a normal high-water line of a stream, in order to prevent and control water pollution and erosion, to protect and improve the quality of water and aquatic habitats, and to conserve shore cover and natural beauty.

Major considerations under shoreland zoning include:

- Identification of the following districts to guide land use and reduce its impact on the shoreline: resource protection; limited residential; limited commercial, general development; and stream protection. Includes prohibition of specified commercial operations which frequently use or generate products harmful to the environment.
- Setbacks for new structures and for expansions/relocations of grandfathered, or existing, structures, and setbacks for driveways and roads according to slope, with greater slopes at greater risk for erosion.
- Lot standards, including minimum lot area, minimum shore frontage, and maximum lot portion of non-vegetated surfaces.
- The designation of administrative bodies and processes to ensure compliance.

The Town of Oakland also enforces Maine's Department of Environmental Protection stormwater management law, which provides standards for the quantity and quality of stormwater runoff generated by projects disturbing more than one acre of land.

[9] Maine State Legislature - Mandatory Shoreland Zoning Act (est. 1971). (source).
[10] Town of Oakland, 2014. Shoreland Zoning Ordinance for the Municipality of Oakland. (source).

At the local level, the Town of Oakland's subdivision ordinance, prepared in accordance with M.R.S.A., protects the town's natural resources and water bodies from the impact of a new subdivision. For all site development activities, the ordinance mandates the development of a phosphorus control plan and the use of best management practices to prevent erosion and control stormwater runoff throughout site development and management of stormwater once construction is completed. In addition, the ordinance criteria include site suitability for subsurface wastewater disposal and the project's effect on significant wildlife habitat, as identified by the Town or the Maine Dept. Inland Fisheries and Wildlife.

Private Protection Measures

Each of Oakland's water bodies is managed by active lake associations, and the entire Belgrade Lakes chain is served by the non-profit 7 Lakes Alliance. These private organizations channel financial and volunteer resources into the monitoring, assessment, and improvement of the quality of Oakland's water bodies. From Courtesy Boat Inspections to erosion control, each water body reaps the benefits of several protection projects which remediate and prevent nonpoint sources of pollution. Please refer to Table 2.4 and Appendix 2.2 for a matrix of each lake's protection programs; below is an explanation of each program.

In addition to local organizations, the U.S. Environmental Protection Agency provides municipalities with funding and public outreach tools to educate and encourage citizens to adopt environmentally-friendly behaviors. Sample programs include G3 (Green Streets, Green Jobs, Green Towns) and Soak Up The Rain, which offers free marketing materials and educational tools related to stormwater management. On a statewide level, Think Blue Maine also provides free outreach materials, including pamphlets and YouTube videos, for stormwater management education. The Town of Oakland may consider these programs when setting strategies for protecting the quality and quantity of local water resources.

<u>LakeSmart</u>

Each lake association of Oakland's great ponds is an award-winning partner of LakeSmart, an education and incentive program which assists lakefront homeowners in exercising property management techniques which

Sidebar 2.3: Local Advocacy Groups

The Town enjoys current partnerships and looks forward to future partnerships with several area organizations whose mission is to protect and preserve the water quality of the Belgrade Lakes chain.

7 Lakes Alliance – in late 2018, the Belgrade Regional Conservation Alliance and the Maine Lakes Resource Center merged to create the 7LA, a conservation organization focusing on clean water, well-stewarded lands, and a vibrant economy throughout the Belgrade Lakes chain. Its work has enhanced Oakland's quality of place, and it will provide important research and counsel on water quality, land use, and lake-based economic development. www.7lakesalliance.org

East Pond Association – a vibrant lake association which has demonstrated a strong commitment to innovative water quality improvement projects. EPA is an important partner in attracting and retaining residents and tourists to Oakland. www.eastpond.org

protect water quality. Lake associations share LakeSmart educational tips, tools, and training videos, evaluate shorefront properties, host workshops on LakeSmart techniques and practices, including "Are You Buff Enough?" programming for erosion control, and provide incentives for adopting LakeSmart practices. More information on the LakeSmart program can be found at www.mainelakessociety.org/lake-smart-2.

Courtesy Boat Inspection (CBI)

Courtesy Boat Inspections (CBIs) are a crucial tool for the prevention of the spread of invasive aquatic plants. This volunteer-based front-lines program saves lakes from nearly-irreparable damage; in 2016, CBI inspectors prevented three separate invasive weeds from entering Salmon Lake[11]. CBIs are conducted at all public boat launches in the Belgrade Lakes chain. The umbrella organization 7 Lakes Alliance trains and pays CBI inspectors for all lakes save for Messalonskee Lake, whose lake association Friends of Messalonskee assumes these responsibilities.

McGrath Pond - Salmon Lake Association - representing two of Oakland's four great ponds, neither of which have public access in Oakland, MPSLA is an important source of water quality testing and preservation of the region's natural beauty. www.mcgrathpond-salmonlake.org

Friends of Messalonskee - located within three municipalities, Messalonskee Lake is Oakland's largest lake and the only body of water within its boundaries infested with invasive aquatic plants. FOM has been active in the treatment and containment of existing invasive plants and the prevention of further infestation, making it an important partner for the lake's success. www.friendsofmessalonskee.com

Youth Conservation Corps (YCC)

Since 1996, YCC has performed over 1,400 installations of best management practices throughout the Belgrade Lakes Chain[12]. Managed by the 7 Lakes Alliance, YCC crews conduct on-site erosion consultations and install solutions including: rain/buffer gardens, which capture stormwater; rip-rap, large rocks which reduce erosion from waves; armored ditches, which hold, transfer, and slow the flow of stormwater; water-bars on hiking trails, which prevent wash-outs; turn-outs, which divert water to vegetated areas; erosion-control mulch, which remains in place during rainstorms; infiltration steps, which allow water to penetrate the ground; infiltration trenches, which encourage water to drain into, not flow over, ground soil; and rubber razors, which prevent wash-outs on driveways and dirt roads. Installation labor performed by YCC crews, consisting of high-school and college students, is free of charge; landowners pay only for materials and permit fees.

Invasive Plant Surveys

The 7 Lakes Alliance trains volunteers to perform invasive plant surveys, which allow lake associations to monitor the entire lake area. Kayakers and snorkelers search shorelines to assess the presence of invasive aquatic plants and contain any potential spread. Surveys may be supplemented with the DASH boat (diver assisted suction harvester), which removes milfoil, and digital mapping, as done by Friends of Messalonskee.

[11] McGraw Pond Salmon Lake Association, 2019. "Projects". (source).
[12] 7 Lakes Alliance (2019). "Erosion Control Program". (source)

Partnership with Colby College

We are fortunate to have a world-class undergraduate institution as our neighbor. Colby College has extended its research resources to monitor, assess, and improve water quality in the Belgrade Lakes region. Recent projects include:

- East Pond's alum treatment, a key part of a $1.05 million project addressing internal and external phosphorus load. The application of 120 tons of liquid aluminum is intended to decrease the internal load, or the excess of phosphorus originating inside the lake, by 80-90 percent. Ideally, this treatment and other management strategies will prevent future algae blooms.
- Site surveys for the presence of pharmaceuticals and personal care products (PPCPs) in East Pond (2015) and Messalonskee Lake (2017).

III. Natural Resources

"What I like most about Oakland is its diverse offering of nature, with lakes, ponds, parks, and trails." – Oakland resident.

Key Findings of Section

1. Oakland is home to several species of special concern, though the town is not a focus area nor a rare and exemplary community as defined by Maine's Beginning with Habitat program.
2. While much of Oakland remains rural forests, many species migrate between forests and water bodies, necessitating passage through the increasingly-developed shorelines.
3. Protection measures such as land acquisition and the tree growth program are important tools for the preservation of natural habitats and migration routes.

Oakland's woods, lakes, and shores support deer, waterfowl, turtles, and birds. Our town is home to several species of special concern, as well as one endangered species (see Glossary for definitions). While Oakland does not contain a focus area or a rare and exemplary community as defined by Maine's Beginning with Habitat program, the protection of habitats for the high-value animals and plants with whom we share our community is an important priority for the town. More information on these animals and plants can be found in Map 4: High Value Plant and Animal Habitats and Sidebar 3.1.

I. Threats to Critical Natural Resources

The most effective methods of protecting Oakland's critical natural resources, as described in Sidebar 3.1, are ensuring the presence of respective habitats and minimizing the likelihood of vehicular interactions. While the wetness of many habitats constrains their development, many of Oakland's high-value animals follow migratory patterns between aquatic and terrestrial areas (see Map 5: Undeveloped Habitat Blocks & Connectors and Conserved Lands for an illustration of important habitat blocks and crossings), and their dry connectors and uplands may be vulnerable to development. Even with protection of wet habitats, including shoreland zoning and conservation efforts, all of Oakland's water bodies, as noted in Water Resources, are at high risk of development.

Sidebar 3.1: Important Species of Note in Oakland, Maine

Name: Scarlet Bluet
Latin Name: Enallagma pictum
State Status: Special Concern
State Rank: S2
Habitat and Range: Acidic, sandy ponds with floating vegetation. Ranges from southern Maine to New Jersey.
Description: A damselfly with a one-year lifespan, scarlet bluets live among aquatic vegetation during their nymph stage and mature as adults in upland areas.
Threats: Degradation and destruction of wetlands (ex. off-road vehicle use on pond shores, removal of aquatic vegetation, and improper placement of boat docks) and the loss of nearby upland areas.

Name: Bald Eagle
Latin Name: Haliaeetus leucocephalus
State Status: Special Concern
State Rank: S4b
Habitat and Range: Requires nesting and perching sites in tall trees along estuaries, large lakes, reservoirs, rivers, and some seacoasts. Ranges from Alaska to northern Mexico.
Description: Our national symbol, the bald eagle has made a triumphant recovery from near extinction. The bird of prey weighs between 10-14lbs and feeds on fish and carrion. The bald eagle travels far distances but breeds within 100 miles of where it was raised.
Threats: Destruction of nesting habitats and contamination of food supply.

Of the high-value animals and plants found in Oakland, the wood turtle and scarlet bluet are likely the most at risk due to the relatively developed nature of their habitats, which span both aquatic and terrestrial areas at the northern end of Messalonskee Lake. While a portion of the habitats of both the wood turtle and scarlet bluet is conserved land, the significant automotive and boat traffic in other sections of their habitats poses a considerable threat.

II. Protections for Critical Natural Resources

Shoreland zoning and conservation efforts by both public and private entities are currently the strongest protections for Oakland's critical natural resources.

Shoreland zoning is described in detail in Section II. Water Resources; Oakland's standards are consistent with those of the State of Maine and the town's neighboring communities with whom it shares key water bodies. The standards of the Town of Smithfield and the Town of Belgrade (based on 2018 changes) are closely aligned with those of Oakland. Slight differences exist between Oakland's standards and those of Town of Sidney, which adopted slightly tighter restrictions on certain activities in a resource protection district, and those of the City of Waterville, which mandates smaller signs in a stream protection district.

Other local regulatory measures to protect Oakland's natural resources include the Town's subdivision ordinance (see Section II. Water Resources for more details). Both ordinances enforce the protection of aquatic and terrestrial habitats of high-value animals and waterfowl. At the state level, deer wintering areas (as shown in Map 4: High Value Plant and Animal Habitats) are identified as a significant wildlife habitat and may require a Dept. Environmental Protection permit before any work is done to a site within the wintering area.

In addition to regulation, both government and private organizations have protected Oakland's habitats from development through land conservation, as illustrated in Map 5: Undeveloped Habitat Blocks & Connectors and Conserved Lands. The Town of Oakland owns 218 acres, using a portion of that land for municipal operations, including a landfill, and for public recreation. State-level ownership includes four acres along East Pond, owned by Maine's Dept. Inland Fisheries and Wildlife, and three acres along Messalonskee Lake, owned by Maine's Bureau of Parks and Lands. Privately, 47 acres along Salmon Lake / McGrath Pond are owned by 7 Lakes Alliance, formerly the Belgrade Regional Conservation Alliance.

Name: Wood Turtle
Latin Name: Glyptemys insculpta
State Status: Special Concern
State Rank: S4
Habitat and Range: Slow-moving streams, nearby upland areas including forests and meadows, and riverbanks. Ranges within eastern North America.
Description: One of Maine's rarest turtles, the wood turtle has a unique sculpted shell and orange coloration on its neck and legs. It utilizes both aquatic and terrestrial habitats throughout the year.
Threats: Vehicles and loss of upland habitats.

Finally, through increasing enrollment in Maine's Tree Growth current use tax program, private residents have protected a large swath of a core terrestrial habitat block. In 2018, fifty Oakland parcels representing nearly 3,000 acres were enrolled in the Tree Growth program, which incentivizes landowners to maintain the forested nature of their land. By preserving Oakland's natural wooded areas, residents are protecting important natural resources, including deer wintering areas and habitats for birds, plants, and waterfowl. More information on the Tree Growth program is available in Section IV. Agriculture & Forestry; refer to Appendix 4.3.a for a map of tree growth parcels.

Future protection efforts to address habitat preservation and to maintain safe wildlife connectors will include collaboration with several stakeholders. Given animals' migratory patterns which cross municipal boundaries, the Town of Oakland has a crucial partner in the 7 Lakes Alliance, whose regional lens strengthens the impact of natural resource protection. The organization also has significant research capabilities to employ in the identification of best practices. As well, Kennebec Messalonskee Trails is an important local non-profit engaged in the preservation of natural areas and in the encouragement of responsible public access to these areas. Furthermore, the Town can engage with private residents to encourage them to enroll in, or maintain their enrollment in, the state's tree growth program.

III. Local Scenic Areas

As mentioned above, Oakland does not contain a focus area or a rare and exemplary community as defined by Maine's Beginning with Habitat program. However, the local lakes, ponds, and streams lend beautiful vistas and scenic areas for public view.

Photos of Oakland's beauty are interspersed throughout this Comprehensive Plan, and Appendix 3.2 contains a map of the Kennebec Messalonskee Trails which meander through Oakland's woods and along the town's shores.

Name: Goldie's Wood Fern
Latin Name: Dryopteris goldiana
State Status: Special Concern
State Rank: S2
Habitat and Range: Rich woods occurring mostly on chalk or limestone. Ranges from southeastern Canada to the Carolinas, and includes Tennessee, Iowa, and Minnesota.
Description: Found in only 26 towns in Maine, this tapered plant has large green leaves and a stalk covered in shiny brown scales.
Threats: Loss of habitat and removal of tree canopy.

Name: Withheld due to harvesting concerns
Latin Name: Withheld due to harvesting concerns
State Status: Endangered Species
State Rank: S3
Habitat and Range: Rich, shady northern hardwood forests. Ranges from eastern North America to northern Florida, primarily within the Appalachian region. May reach to west to Manitoba in Canada.
Description: This fleshy-rooted herb is attracted to nutrient-rich soil. It has five elongated leaflets and small yellow-green flowers which become red berries.
Threats: Harvesting and heavy cutting of forest habitat.
Source: Maine Natural Areas Program, Dept. Agriculture, Conservation and Forestry; and Me. Dept. IFW

IV. Agriculture and Forestry

Key Findings of Section
1. Only one agricultural operation remains active in Oakland, though there is interest in community farming and gardening.
2. Approximately 40% of Oakland's eligible property owners are enrolled in the Tree Growth program.

Oakland's history as an industrial and resort powerhouse far overshadows its agricultural and foresting past, and the town's current economy reflects this emphasis. Just two farms are enrolled in the State of Maine current use tax program for farmland (see Appendix 4.2.b), and only one of those farms is currently active. In addition, foresting operations are limited, though many property owners have enrolled in the State's current use program for tree growth.

With such disinterest in professional agricultural and forestry operations within the Town of Oakland, the community has not made it a priority to reserve remaining farmland for agricultural purposes. However, the burgeoning personal interest in community and home gardens and livestock may encourage the use of remaining farmland for residential or communal agricultural practices.

I. Threats to Farmland and Forestry

Most farmland, as identified on Map 6: Agricultural Resources, is not conserved, with the exception being those lots enrolled in the tree growth current use program and Pleasant Point Park, although that land is not used for farming. Farmland in Oakland's northeast corner is located among wetlands, which may limit development on it. Much of the prime and nonprime farmland near the Fairfield border is currently in an undeveloped habitat block, where approximately two parcels are enrolled in the tree growth current use tax program.

The farmland located in the downtown village area has been developed, with just two parcels in the eastern corner on Fairfield Street being used as farmland for Riverside Farm, Oakland's only active farm. Riverside Farm, established in 1990, was once a residential farm and now supports a farmers' market and farm-to-table restaurant.

II. Protections for Farmland and Forestry

The primary method of protecting farmland and forest is the State of Maine's current use tax program. As illustrated in Appendix 4.2, nearly 3,000 acres are enrolled in the farmland or tree growth program. While all Oakland farms are enrolled, approximately 60% of property owners with more than 10 acres of land - which is the minimum threshold for the tree growth program -

are not enrolled in the program. While the tax incentives of the current use program are substantial, property owners must weigh the financial benefits against the required land use restrictions.

Alternatively, the budding community gardens in Oakland may foster new appreciation for the protection of farmland and forest. The Sustain Mid-Maine Coalition, a local advocacy group which works to protect farmland for the sustainable future of the mid-Maine region, has assisted in the construction and maintenance of community gardens at Messalonskee Middle and High Schools. The community gardens feature raised beds and a greenhouse, and offer experiential learning opportunities for Messalonskee students via the Greenhouse and Agriculture Club. Crops include tomatoes, squash, peppers, green beans, lettuce, carrots, corn, basil, garlic, mint, chives, and oregano; produce is often used in school lunches or donated to the local food pantry.

A second indication of growing interest in supporting community agriculture, several respondents to the Oakland Comprehensive Plan community survey cited the desire for a local farmers' market and made-in-Maine retail.

V. Population and Demographics

"Statewide population growth this decade has been slow." – Amanda Rector, State Economist

Key Findings of Section

1. Oakland's population continues to rise, albeit at a decreasing rate.
2. Oakland is home to a larger percentage of households with residents under the age of 18 than both Kennebec County and the State of Maine.
3. Oakland must use the 2020 decennial census figures to prepare for Maine's demographic challenges.

The Oakland Comprehensive Planning Committee was fortunate to host Amanda Rector, Maine State Economist, for an in-depth analysis of statewide and local demographic and workforce trends. Much of this section is informed by Rector's analysis, as well as by U.S. Census Bureau data.

I. Population Trends

After a population boom between 1970-1980, Oakland's population has grown at a decreasing rate every decade (see Table 5.1). In-migration has been a major factor in Oakland's population growth between 2010-2017 and between 2016-2017, which is important because Oakland has more households with residents over 65 years of age than with residents under 18 years of age. The town has consistently outperformed Kennebec County in population growth, and it has a larger percentage of households with residents under the ages of 5 and of 18 than both Maine and Kennebec County.

However, statewide predictions of a stagnating or declining population threaten Oakland's growth, as does the trend of southern migration. While these predictions are based on 2010 census data, and therefore may be outdated, Oakland must brace itself for potential population stagnation or loss. The town's proximity to Waterville, a service center and major component of the Augusta-Waterville micropolitan statistical area (MSA), provides a buffer

Table 5.1: Oakland Population and Rate of Change, 1970-2029

Year	Population	Rate
1970	3,535	
1980	5,162	46%
1990	5,595	8.4%
2000	5,959	6.5%
2010	6,240	4.7%
2019	6,309	1.1%
2029 *(projected)*	6,191	-1.9%

Data sourced from the Maine Dept. Administrative and Financial Services

to population loss, as does the T-Mobile call center, the region's largest employer with over 800 employees, located in Oakland's FirstPark.

Oakland's aging population is likely boosted by its significant seasonal population. Over 10% of Oakland's households are seasonal households, representing retired families enjoying summer camps during Oakland's warm months.

II. Population Impact

The recent population growth, coupled with concerning statewide projections and an aging population, necessitates a flexible approach to managing housing and municipal services. A booming real estate market has put pressure on developers to build new construction in the greater Waterville region, yet new residents may also purchase homes left by Oakland's aging population. The aging population is balanced by a high percentage of households with residents under the age of 18; local school district RSU 18 is currently exploring options to conduct new enrollment predictions. Recent enrollments have outperformed predictions, though those predictions are nearly a decade old and need updates. Oakland remains an attractive place to live in part because of its low mill rate, and so residential development must be constructed to minimize strain on municipal services.

While Oakland is home to the region's largest employer, the T-Mobile call center is located in a business park on the municipal border between Oakland and Waterville, and thus its effect on Oakland's daytime population is limited to a very small portion of the town.

In sum, Oakland has weathered predictions of population decline well, though new census data in 2020 may illustrate more accurately a population stagnation or decline. Thus, the Town has endeavored to enhance its residential and commercial assets to attract and retain residents.

Please see Appendix 5 for population and demographic statistics and comparisons.

VI. Economy

Key Findings of Section

1. Oakland maintains some manufacturing activity and a bustling commercial corridor connecting the town and Waterville.
2. Residents and business owners are active in efforts to revive the town's once-vibrant Main Street.
3. FirstPark, a smart business park located in Oakland, contains the region's largest employer, T-Mobile.

Oakland's economy has experienced significant change from its days as an industrial powerhouse, yet it still retains a manufacturing and technology component. With commerce located on the outskirts of town, the downtown has struggled, and the community has given renewed attention to restoring its once-vibrant Main Street.

I. History of Oakland's Economy

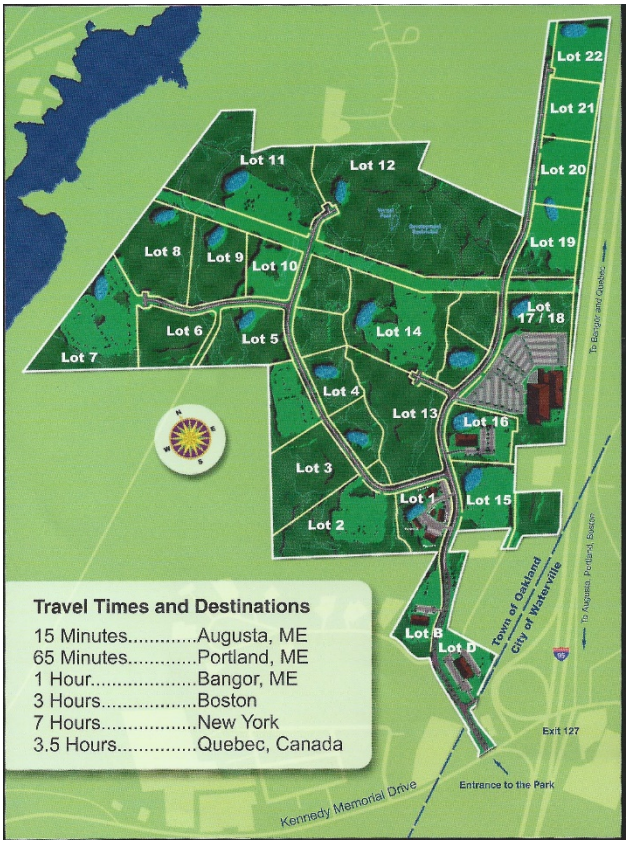
As described in "Historic and Archaeological Resources", Oakland's water resources powered numerous mills and supported many lakeside resorts throughout the 19th and 20th centuries. Trains shipped manufactured goods and brought vacationers. Yet, as mills closed and automobiles supplanted trains, slowing the flow of vacationers and facilitating Oakland residents' commute to larger cities, the town's economy struggled.

Although the local economy declined, Oakland's population has grown steadily throughout the latter half of the 20th century and into the 21st century. As employment opportunities within Oakland dwindled, residents found opportunities in the nearby cities of Waterville and Augusta. The majority of Oakland residents work in healthcare and education (see Appendix 6.1); major employers within these industries include local school district RSU 18, Colby College, Thomas College, MaineGeneral Health, and Northern Light - Inland Hospital. See Figure 6.1 for a description of major employers in Oakland.

Today, Oakland is a largely-residential community, though it retains a few industrial operations and its major transportation corridor, Kennedy Memorial Drive, is lined with commercial activity. The sustainability of Oakland's tax base depends on a healthy balance between residential and commercial land use. One of Oakland's most significant commercial

development of the past two decades is FirstPark, a business park built for 21st century technological needs. The park, located along Kennedy Memorial Drive and Interstate-95, is managed by Kennebec Regional Development Authority, an economic development partnership of twenty-four (24) municipalities.

While the economic power of Oakland's resorts has weakened, the recreational opportunities offered by the great ponds lend themselves well to economic development. Recent visits by Major League Fishing, made possible by the Mid-Maine Chamber of Commerce, have illuminated the economic potential of Messalonskee Lake and other lakes within the Belgrade Lakes chain. With further research, Oakland may find it worthwhile to invest in marina amenities to facilitate a lake-based tourism economy.



FirstPark campus map

Figure 6.1: Oakland's Major Employers

T-Mobile	T-Mobile	The region's largest employer draws its 850+ employees from an approximate radius of 30 miles. The call center continues to hire, and recently announced a workplace minimum wage of $15 per hour.
ENGAGE · CREATE RSU18 STRENGTHEN	RSU 18	With an elementary and junior high school serving Oakland residents and a regional high school serving students from five communities, Oakland's educational system employs over 500 faculty and staff.
Valley Beverage	Valley Beverage	The family-owned beverage distribution company currently employs approximately 50 staff.
WRABACON INC. creative automation	Wrabacon	A growing manufacturer specializing in creative custom automation, Wrabacon currently employs approximately 20 staff.

II. Economic Development

The Town of Oakland has relatively few economic development plans or incentive programs which are currently active. Historically, the community has not designated specific areas for economic development, though the construction of the natural gas pipeline and the creation of

FirstPark generated Tax Increment Financing (TIF) districts and funds to pursue a defined set of economic development priorities. A list of local and/or regional economic development plans and incentive programs, as well as list of Oakland's economic development priorities, is provided in Sidebar 6.3.

1. Current Commercial/Industrial Districts

While the Town of Oakland has not designated specific areas for economic development, the presence of public facilities, proximity to Interstate-95, and heavy traffic directs commercial and industrial development primarily to the Kennedy Memorial Drive (KMD) corridor. Lighter commercial development, including restaurants and shops, are encouraged to locate in Oakland's downtown district.

Both the downtown district and the KMD corridor are growing. Expansions to existing facilities, new construction projects, the establishment of a new information technology (IT) firm, the creation of new retail environments (including Candy Hollow) along downtown Main Street, and the continued growth of precision automation manufacturer Wrabacon, Inc. are all happening within these commercial districts.

Along the KMD corridor, FirstPark is one of the most suitable sites for technology and knowledge-based businesses. With underground fiber and utilities, three-phase power, natural gas, and proximity to Interstate 95, the smart business park is crucial to the region's economic development.

Already home to the area's largest employer, T-Mobile, FirstPark continues to grow by attracting firms in healthcare, technology, and professional services. A recent focus on incorporating mid-Maine's renowned quality of life into the workplace has earned significant media attention and interest from employers and developers.

Sidebar 6.3: Oakland's Economic Development Plans and Priorities

Local + Regional Economic Development Plans and Incentives:

- Kennebec Valley Council of Governments (KVCOG) Comprehensive Economic Development Strategy, 2017 – 2022, found at kvcog.org.
- Tax Increment Financing (TIF) districts:
    - Summit Natural Gas Pipeline – 48 acres along the gas transmission line, running north-south on the eastern side of Oakland.
    - FirstPark: 285 acres abutting KMD and I-95.

Town Economic Development Priorities:

As identified in the TIF development plan

- Support for regional economic development agencies, including Kennebec Regional Development Authority and Kennebec Valley Council of Governments
- Code enforcement for safe, well-maintained commercial and residential properties and an efficient process to facilitate new development.

FirstPark plans to continue this momentum by relaxing strict protective covenants to open the business park to a wider variety of commercial and residential uses. “By broadening our covenants and guidelines, we are embracing more diverse and emerging sectors to locate or expand their business in FirstPark,” explains Jim Dinkle, executive director of FirstPark.

2. Planning for Growth

In order to sustain Oakland’s commercial and industrial growth, public-private partnerships will need to be utilized in order to build-out domestic (or public) infrastructure, such as sewer and water, 3-phase power, natural gas, and broadband connectivity. The build-out would focus on areas along or abutting KMD as well as the downtown district, as large land parcels within these areas are most ripe for commercial and industrial development and thus, most appropriate for infrastructure expansion projects.

3. Economic Development Strategy

Oakland has retained Central Maine Growth Council (CMGC), a leading public/private catalyst and resource for economic development in central Maine, to service as its in-house economic development agency. Oakland and CMGC are dedicated to fostering a robust local and regional economy through successful collaborative partnerships among businesses, governments, academic institutions, health care facilities, arts and cultural agencies and residents primarily in the communities of Fairfield, Waterville, and Winslow which comprise our mid-Maine region. The benefit is a highly desirable place in which to enjoy an outstanding work-life balance.

As result of this partnership, Oakland utilizes CMGC’s planning and economic development services and strategy. As a growing and diverse mid-Maine economy cannot thrive without intentional actions grounded in the strengths and weaknesses of a community, CMGC’s *Strategic Economic Development Plan* is guided by five principles that reflect the SWOT analysis conducted by the Oakland Comprehensive Planning Committee (see page 1). The five principles are designed to address future growth opportunities for Oakland within the context of the regional and state economy and are as follows:

- Cultivate a robust workforce
- Catalyze the emergence and growth of technology and innovation businesses
- Utilize existing land, space, and infrastructure
- Think regionally (and globally), act locally
- Leverage the region’s quality of life and place-based economics

A detailed explanation of each principle is located in Appendix 6.5. These five economic keys will be critical in the following years, but must also be met with strong local, regional, and state partnerships. Such cooperative models are increasingly common; examples include community development corporations; community benefit agreements; public-private partnerships among likeminded organizations, businesses, and the government; tax credit deals, particularly in the energy sector; and the connection of university programs with the business sector’s needs and

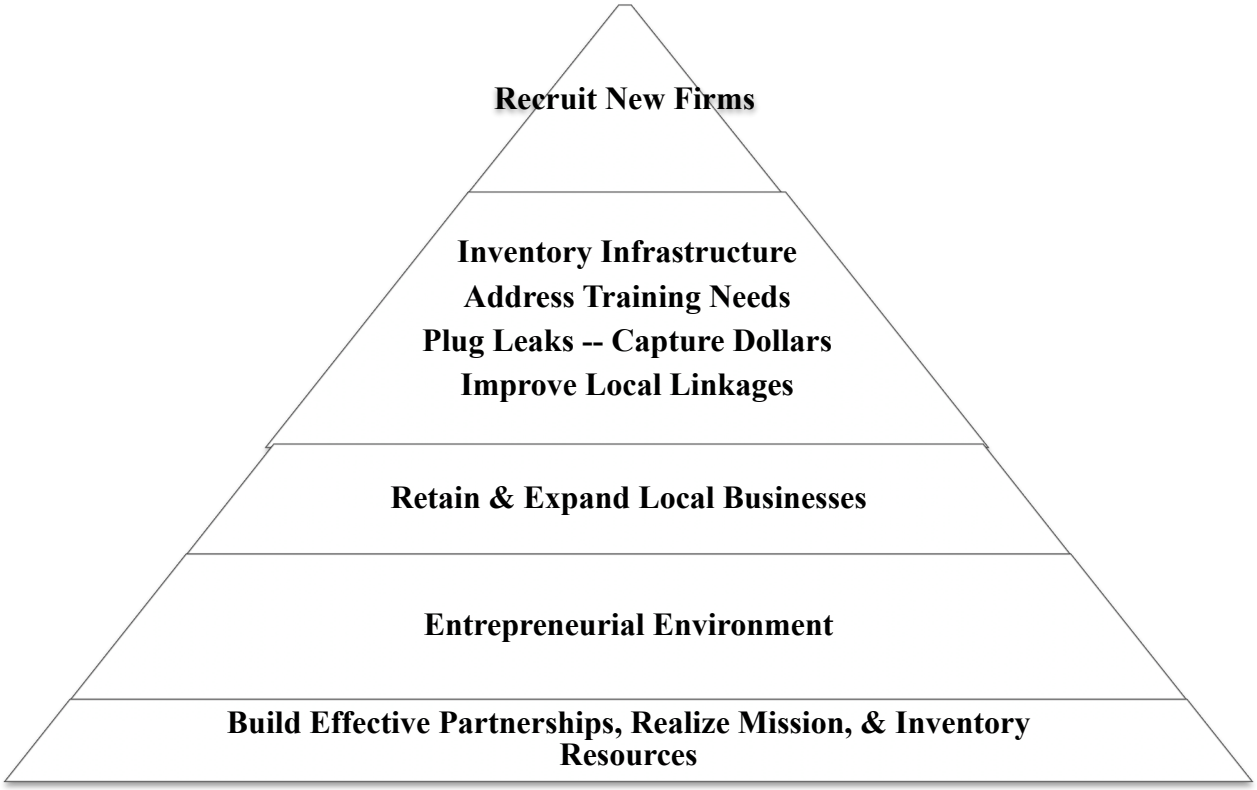
demands. These models will be fundamental in the coming months, and future years, if communities like Oakland wish to capitalize on the emerging growth of the high-tech industries, from Information Technology to Precision Manufacturing.

4. Incentives and Financing Tools

To execute its economic development strategy, CMGC and Oakland will pursue a range of incentives and financing tools. These range from the traditional Tax Increment Financing (TIF) and Community Development Block Grant (CDBG program) to federal grant programs.

Furthermore, CMGC and Oakland will pursue incentives targeted to the innovation, creative, technology, and knowledge-based economy; relevant sectors include life sciences, health care, precision manufacturing, and information technology. These areas are important components of today's modern economic clusters, and a regional focus on innovation will help communities like Oakland to unlock their economic benefits. As a result of this, Oakland's and CMGC's strategy reflects research that indicates that building a research triangle surrounding education, research and development (R&D), and the private sector can have tremendous benefit to the region.

Figure 6.4 Town of Oakland & CMGC Local Economic Development Strategy Hierarchy



Source: From Central Maine Growth Council (CMGC) Economic Development Strategy's Local Economic Development Hierarchy Strategy. Adapted from 'The LED Pyramid," John . Keller et al., Kansas State University.

Feature: Downtown Oakland

"Thank you to all the members of the Flower Project for their continued hard work in making downtown so inviting." – Michael Perkins, Oakland Town Council Chairman.

The opportunity to regain the bustling activity of Oakland's 19th and early 20th century Main Street has ignited efforts to beautify, upgrade, and reimagine Oakland's downtown properties and infrastructure.

With a new concert-ready gazebo in Oakland's Waterfront Park, flower arrangements and painted bicycles placed around Main Street by the Oakland Flower Committee, and plans to explore the expansion of broadband fiber optics into the downtown district, an energized community is envisioning a new life for its town center.

The vision focuses on making downtown Oakland a place where residents and visitors want to stay - recreating, shopping, eating, and interacting with the community. Recommendations for the downtown highlight Oakland's natural assets, including water access and walking trails, with proposals to build public green spaces in the heart of downtown to connect recreational venues in a hub-and-spoke model. A map of downtown Oakland's trail systems is provided in Appendix 3.2. Please refer to Figure 6.6 below for a visual of downtown recommendations.

Figure 6.5: Main Street Quick Facts
Gross acreage: 13.75 acres
Gross sq.ft. facilities: 69,264 sq.ft.
Zoning: none
Median year built: 1954
Average lot size: 0.47 acres
Residential units: 22*
Commercial units: 27*
Civic/Institutional units: 1

Figure 6.6: Public Forum Map of Input on Downtown Oakland

Key:

- = well-liked area
- = area needing improvement
- = public comment
- = major transportation route

VII. Housing

"This year [2019], the town has seen above-average growth in development both residentially and commercially." – David Savage, Oakland Code Enforcement Officer

Key Findings of Section

1. While the Town of Oakland has not established policies to encourage the development of workforce housing, the town's housing stock is more affordable than that of Kennebec County and the State of Maine.
2. Oakland continues to experience growth in housing demand and the conversion of seasonal camps to year-round homes.

Oakland's housing stock outperforms that of Kennebec County and the State of Maine. A strong real estate market within the greater Waterville region has yielded a low homeownership vacancy rate, yet both homeownership and home rentals are more affordable in Oakland than in the county or the state. With a statewide workforce shortage, available affordable housing is an important tool for workforce attraction and retention; while Oakland has not established regulations for the development of workforce housing, the current real estate and demographic market may encourage such policy.

I. Overview of Housing in Oakland

Between 1970 - 2010, Oakland's housing stock doubled. The majority of houses are owner-occupied, single-family homes, and approximately 10% are seasonal. While the median home price in Oakland is higher than in Kennebec County, both homeownership and home rentals are more affordable in Oakland than in Kennebec County and the State of Maine. Homeownership in Oakland is affordable to those earning 80% of the median income (see Appendix VII for more housing characteristics).

Within the context of a strong real estate market and Oakland's attraction as a residential community, many seasonal lakeside camps are being converted to year-round homes. While permanent residency yields economic benefits for the Town, camp roads were not built for year-round use. Significant safety and environmental concerns, including winter access for emergency vehicles and increased erosion, must be considered during the conversion of seasonal camps.

II. Population Impact on Housing

While population predictions forecast stagnating or declining population, these predictions are buffered by a significant workforce housing shortage within the greater Waterville region caused by recent economic development growth. To combat this shortage, nearby Winslow has increased the number of zones in which mobile homes are allowed, and the Waterville

Community Land Trust is developing affordable housing in blighted areas around the city. While Oakland has not established regulations to incentivize the development of workforce housing, a list of affordable housing options in Oakland is located in Appendix 7.7.

VIII. Parks & Recreation

"I am so proud that we are able to create new facilities while at the same time maintaining the existing ones to a quality standard. Oakland certainly is on the go and on the grow!" – Eric Seekins, Oakland Recreation Director

Key Findings of Section
1. Oakland's recreational assets include access to each of the town's major water bodies, protected natural trails, private children's camps, municipal parks, and school-owned sports facilities.
2. Demand for recreational programs has grown, particularly for Oakland's senior population.

The Town of Oakland is fortunate to offer a diversity of public recreational opportunities, from boating to hiking. The town's lakes and woodlands provide natural playgrounds, and the school district provides playing fields. While all of Oakland's water bodies are accessible for some uses within the town, the public has indicated desire for further access to our natural gems.

I. Capacity of Recreation Facilities

Oakland's aging population will require a shift in recreational services toward accommodating the senior population. As Eric Seekins, recreation director for Oakland, explains, "although our overall population continues to increase, the number of students in RSU has gone down fairly significantly." The Oakland community has also advocated for additional senior recreational opportunities through several community visioning exercises in conjunction with this Comprehensive Plan, and their successful advocacy is highlighted in Sidebar 8.1.

Oakland's seniors were extremely lucky to find recreational space. "We are extremely inadequate on town-owned facilities, especially activity and kitchen facilities," states Eric Seekins. "90% of what we use are school-owned."

As well as the growing senior population, Seekins recognizes that in-migration into Oakland brings more

Sidebar 8.1: Snow Pond Senior Center

In 2018, Oakland residents Sherry Gilbert and Chuck Pare assembled the Snow Pond Seniors, a volunteer group dedicated to advocacy and programming for senior residents of Oakland.

By January 2019, with Town support the Snow Pond Seniors found a home on 47 Heath Street, the former RSU 18 superintendent's office. Snow Pond Senior Center opened to the public on May 7, offering health and education seminars, games, and fiber arts in a warm, friendly environment.

The center's growing popularity highlights the sense of community and friendship found in Oakland.

demand for recreational opportunities, as new residents coming from larger communities with substantial recreational resources will desire a similarly high level of recreational programming in Oakland.

II. Access to Recreational Areas

Each of Oakland's water bodies are accessible to the public: East Pond has a public boat launch, Messalonskee Lake has a public boat launch and public beach at Oakland's Waterfront Park, and Pleasant Point Park on McGrath Pond has a public beach for swimming.

In addition, Oakland offers several trail systems which are well-maintained and rarely witness any use conflicts. Each school maintains trails on their campuses, and the Town of Oakland maintains the Messalonskee Stream Trail (Appendix 3.2), which follows the picturesque stream for three miles.

These popular recreation areas are municipally-owned or state-owned for the purposes of public recreation. To a degree, traditional public access to private land is somewhat restricted, but most Oakland property owners are convinced of the communal greater good of public recreation. The 7 Lakes Alliance, a local regional conservation organization, is a non-government vehicle for the acquisition of land, and currently owns one parcel of land on Salmon Lake.

A description of Oakland's public and private recreational areas is provided in Appendix 8.1.

IX. Transportation

"The transportation system is an essential element in the development of Oakland." – Chris Huck, transportation planner at Kennebec Valley Council of Governments.

Key Findings of Section

1. Most of Oakland's roadway conditions are rated highly by the Maine Dept. Transportation, though a few bridges are in unsatisfactory shape.
2. Kennedy Memorial Drive is the town's most heavily-trafficked road, though it has significant extra capacity for further development and traffic.
3. Public transportation is extremely limited in Oakland.

Transportation is critical to movement of goods and people necessary for the development of the economy and for access to property. The modern transportation system consists primarily of a road network, though planning for the future means developing a diverse array of transportation options.

I. Elements of Transportation Infrastructure

The major component of the transportation infrastructure is the road system. In terms of usage and maintenance, the system is set up as a hierarchy:

- Federal highways (I-95 in Oakland);
- State highways, maintained entirely by the State of Maine;
- State Aid highways, lower-use state roads structurally maintained by the State, with Town responsibility for winter maintenance;
- Townways, local roads maintained entirely by the Town;
- Private ways, such as camp roads, maintained entirely by non-governmental entities.

An inventory of Oakland's road network is provided Appendix 9.1, and a summary is provided in Sidebar 9.1.

II. Project Management and Budget

The Oakland Town Manager is appointed as Road Commissioner for Oakland. Each year the Town

Sidebar 9.1: Major Components of Oakland's Road Network

State Highways

- Interstate 95 – interchanges in Sidney and Waterville.
- Route 11/137 – the arterial known as Kennedy Memorial Drive carries daily traffic counts (DTC) of 12,500 – 16,000 vehicles.
- Route 23 – known as Water Street in the downtown district.
- Route 11 – Belgrade Avenue's DTC is approx. 2,800 vehicles.

State Aid Roads

- Route 23 – running south-north, Snow Pond Road becomes Fairfield Road, carrying 1,630 – 3,600 vehicles daily.
- Route 137 – Main Street carries 5,550 vehicles per day.
- Route 11 – Church Street carries a slightly smaller DTC than Main Street at 5,286 vehicles.

Manager and the Director of the Public Works Department meet to discuss the Town's road inventory and determine which roads need to be paved for the upcoming season. The Public Works Director plans all ditching and culvert projects for the upcoming summer's work schedule. Road condition determines the amount of attention received by each road; the Town utilizes the MDOT's Local Road Assistance program and reinvests these funds into our road projects annually. Overall, current road conditions in Oakland are in good to excellent shape.

Currently, Oakland budgets approximately $150,000 annually for paving and approximately an additional $50,000 for road rebuilding. At this time, the State of Maine recommends that $360,000 should be set aside annually just for paving for towns of our size, but due to budget restraints, that number has not yet been attainable.

The Oakland Public Works Department has been successful performing road maintenance in-house, which results in significant cost savings to the Town. In 2011, the department rebuilt Summer Street over a four-year time period ending in 2011; the success of this project led to the decision to undertake a total rebuild of the Hussey Hill Road. This project consists of removing the entire road base, re-ditching both sides of the road, and placing underground drainage in the ditches for water removal. New paving is also budgeted for this project. The project began in the summer of 2015 and is expected to be completed in the fall of 2021. A list of DOT maintenance projects within the Town of Oakland is located in Sidebar 9.2.

Sidebar 9.2: MDOT Work Plan
Updated in 2017

Route 137 – bicycle and pedestrian transportation-related project at the intersection of Oak Street, Pleasant Street, and Heath Street for 0.03 of a mile.

Route 23 – repair the wearing surface of a railroad crossing bridge.

Middle Road – ditching and replacing culverts from Dinsmore Road north to intersection with Route 23.

Webb Road - ditching and replacing two culverts. The first culvert is located 0.02 of a mile westerly of the Cottle Road and the second culvert is located 0.01 of a mile westerly of McKenney Lane.

All proposed roads that are designed with the intent of the Town accepting them as town roads are required to be designed by a set of standards that are strictly enforced. These standards can be found in Oakland's Minimum Street Requirements Ordinance. This ordinance sets the standards for right of way (ROW) width, shoulder width, types of material used in roadway construction, sidewalk width, and the width of a buffer strip from the edge of the road for arterial roads, minimum and maximum grade, roadway crown, and so on. The ordinance sets the build standard for all roads that Oakland may accept, including Arterial, Collector, Minor, Primary ROW and Industrial/Commercial Roads.

As stated in the above ordinance, the Oakland Planning Board shall not approve any subdivision plan unless the proposed streets are designed in accordance with Oakland's Street Requirement

Ordinance. However, Planning Board approval does not signify Town acceptance of any street or easement. While subdivisions may contain dead-end streets which are designed as cul-de-sacs or "T"-type turnarounds, the Town may reserve a 50 (fifty) foot easement to provide continuation of the road where further subdivision is possible.

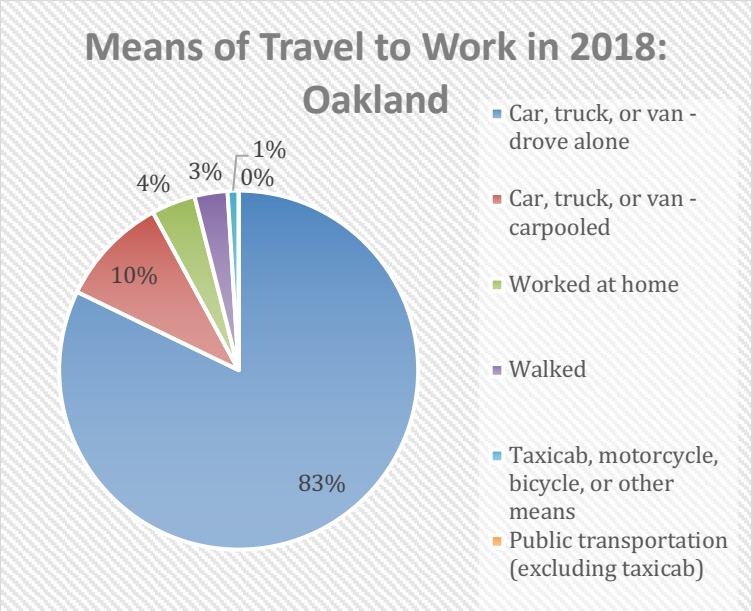
III. Bridges

Bridges are a critical part of the town's transportation infrastructure; so important are they that that most of them are the responsibility of MDOT, even if the bridge is on a town road. The only exceptions are culverts, bridges which span less than 20 (twenty) feet on town roads, and railroad bridges.

MDOT inspects bridges on a periodic basis and may limit weights or close the bridge entirely if it finds serious deficiencies. The information in Appendix 9.2 is taken from the MDOT bridge inventory. From this inventory, it is evident that the Emmerson Stevens Bridge is in the poorest physical condition. Yet, it is likely not high on MDOT's list for improvements, based on its low traffic volumes. The rule of thumb for a bridge's life expectancy is 70 years, so the Emmerson Stevens Bridge is nearing its limit. The Marston Bridge and Railroad Crossing Bridge both predate it by about 13 years, but they have held up much better.

IV. Other Transportation Infrastructure

a. Public Transportation



Although the vast majority of transportation needs are met through private vehicles, Oakland has limited exposure to other forms of transportation, including on-road and alternative modes.

Public transportation is generally not available in Oakland. Kennebec Valley Community Action Program (KVCAP) runs a fixed-route bus service in the Waterville area, but it only touches Oakland near the town boundary on KMD, which is far from residential development. There have been periodic discussions on extending a route into Oakland or into FirstPark, but neither currently exists. All towns with fixed-route service contribute to the service in their annual budgets.

KVCAP also provides on-call bus and van service for social service clients, and this service is available throughout Oakland.

According to the US Census, about one out of every nine Oakland workers carpools to work (see Appendix 9.3). These are all informal arrangements, as there is no organized carpooling activity locally. While the State of Maine runs a ride-matching service ("GoMaine"), only two Oakland residents are signed up. The nearest park-and-ride lot is located in Augusta at the Civic Center. Several attempts have been made to establish a lot along KMD; none have been successful to date.

b. Rail

The main line of the Springfield Terminal (Pan Am) Railroad runs through downtown Oakland. Although there are several sidings and substantial stretches of double- and triple-track in Oakland, there is very limited local use of rail. A major spur branches in Oakland towards Madison and Anson, but it is currently discontinued. A proposal for funding to convert this spur into a multi-use trail has been submitted to Land for Maine's Future Program.

There are advocates for re-establishing passenger rail service through Waterville, but any such move is at least a decade away.

c. Air

The nearest airport to Oakland is LaFleur Airport on KMD in Waterville, which is limited to general aviation. The nearest airport with scheduled passenger service is Augusta State Airport, but most residents would go to Portland or Bangor. There is a seaplane base on Messalonskee Lake, at the end of Aviator Place off of Route 23. The Town does not currently maintain airspace zoning and/or protection ordinances.

d. Pedestrian and Cycling

Oakland has a significant pedestrian network within the downtown area. Sidewalks extend as far as Summer Street on the Belgrade Road, South Alpine on Route 23, Old Waterville Road on KMD, about 0.4 miles up High Street, and just beyond Cascade Mill Road on Fairfield Road. The Town has maintenance responsibility for sidewalks, although there are competitive State programs available for improvements or expansion. The Town is also part of the Kennebec-Messalonskee Trail system, a series of off-road trails, one of which follows Messalonskee Stream upstream as far as KMD with a parking lot at the terminus.

Although bicycles occasionally travel through town, there are no dedicated or designated trails or road routes for bikes.

e. Summary

In summary, there are limited options for alternatives to private cars in Oakland. While this has not been an issue in the past, it may grow to be one, particularly with the increased number of aging baby boomers that will be looking for alternatives to driving their cars everywhere as they become elderly. There is also a greater awareness of the need for physical fitness through recreation, resulting in added demand for walking and biking facilities.

IV. Use of the Transportation System

The most important consideration of transportation infrastructure is the way in which it is used. Traffic flow can be affected by capacity or safety issues, which affect how we plan for system improvements.

The capacity of a road means how much traffic it can carry. Travelers do not want to be on a road when it is at capacity - in most cases, roads begin to feel crowded and uncomfortable at one-half the rated capacity. Although roads have a theoretical “maximum” capacity, that volume is reached only rarely and at isolated times in the most urban situations.

Oakland has none of these situations currently on its road system. Even its busiest road, KMD, operates at less than half capacity, except during the busiest times of the day/year.

Of greater concern is whether traffic growth rates will lead to capacity problems in the future. Although many factors affect traffic levels, the best way to judge is by looking at historical trends (see Appendix 9.5).

It is notable that in most cases, traffic levels have declined over the 18-year period, even though Oakland’s population has increased. In most cases, however, traffic increased from 1996 to 2006. In 2008, a price spike followed by the recession seriously impacted traffic levels everywhere, and perhaps in Oakland’s case by 2014 the town had not yet recovered to its former levels.

Since population and development continue to sprawl into more rural areas, it is not surprising that the roads which serve rural Oakland, such as Smithfield Road and Belgrade Road, did not suffer the same declines as others. However, this time period encompasses the development of FirstPark, which should have generated an increase. This may indicate that most of the employment at FirstPark is arriving from Waterville or Interstate-95 rather than through Oakland.

While traffic levels at Trafton Road remain very low, the development of the new interchange is likely to result in increased traffic flow. Thus, it is worth monitoring growth to see if any changes or repairs need to be made on roads connecting Oakland to Trafton Road.

As noted in "Economy", many significant employers of Oakland residents are located outside of the town; only 15.5% of Oakland residents' jobs are within the town (see Sidebar 9.3). While Oakland is a net exporter of jobs, and only 18% of its jobs are held by Oakland residents, the town still hosts 2,342 jobs. Major sources of employees include Waterville (14%) and Fairfield (7.3%). The two largest employment destinations (traffic generators) are FirstPark and the school complex. In addition, the school complex generates a large number of trips related to students arriving or departing, making it the principal locus for congestion. While the complex can be accessed by several roads, the greatest congestion occurs along Pleasant Street. FirstPark access is controlled by a traffic signal just outside of the Oakland town line.

Sidebar 9.3: Top Work Destinations for Oakland Residents

Destination	#	%
All workers	2,845	
Oakland	441	15.5
Waterville/Winslow	751	26.4
Augusta	431	15.1
Skowhegan	131	4.6
Fairfield	84	3.0

U.S. Census, 2015

While not hosting a single large traffic generator, Main Street contains a sizeable number of individual businesses, making it a congestion source as well. Congestion is amplified by pedestrian activity, driveway entrances, and on-street parking.

The downtown area has been redeveloped to allow businesses to provide adequate off-street parking, though on-street parking is often more convenient. The Town provides a public parking lot on the corner of Main Street and Center Street, which offers 13 spaces. Main Street contains a total of 38 striped parking spaces, mostly angled, although some should not exist because they obscure pedestrian crossings.

In 2016, Main Street was the subject of a safety analysis by MDOT and the Kennebec Valley Council of Governments (KVCOG), as it was identified as the sixth-highest crash location in Kennebec County. Of the eleven (11) crashes in the preceding three-year period, most of them were minor. Five of them resulted from drivers improperly backing out of angled parking. One crash was pedestrian-involved and one was bicycle-involved. The safety analysis recommended that the crosswalks be improved, including visibility, and that the angled parking in front of the grocery store be converted to parallel.

Three other high crash locations have been identified by DOT based on more recent data:

- Middle Road, between Trafton Road and Denise Ave.
- Pleasant Street, between Oak Street and West Pleasant
- The intersection of KMD and Country Club Road

None of these locations have been further studied. When the next analysis is completed in 2019, the Country Club Road intersection may be studied, since half of those crashes resulted in injuries.

X. Public Facilities

"What I like about Oakland is the politeness and friendliness of everyone - the Town Office, Police Dept., Fire Dept., and the road crew are all so helpful." – Oakland resident

Key Findings of Section
1. Oakland provides a high-quality school system that serves as a regional education hub.
2. Demand for affordable, high-speed internet has encouraged the Town to establish the Oakland Broadband and Technology Committee.
3. Demand continues to increase for emergency response and public safety services.

The Town of Oakland enjoys a friendly reputation in its community. In the 2018 Oakland Community Survey (see Appendix 10.1 for full results), approx. 10% of respondents voluntarily listed the service of municipal government employees as an enjoyable part of life in Oakland. The Town employs 86 employees and manages 15 facilities (see Appendices 10.2 and 10.3 respectively for descriptions); these figures do not include educational positions and facilities.

I. Addressing Growth

Oakland has experienced encouraging growth, and many of its public facilities and services are well-equipped to handle further growth. The Town is in a solid financial position and it has continued to increase its services, which most recently include the Snow Pond Seniors Center (see page 48 for more details), the Oakland Business Committee, the new police station, and the new fire station which is currently under construction. Future projects include the renovation of the Town Office, which has outgrown its current facility; the planning phase for such a project will begin after the completion of the fire station.

The most significant inhibitor to commercial growth is the relative lack of domestic infrastructure, including sewer, broadband, and three-phase power. These amenities are crucial to the recruitment and retention of businesses. Accordingly, the Town has established initiatives to propose recommendations for the implementation of these amenities in designated growth areas, including the Oakland Broadband & Technology Committee (see Section B, Broadband for more details).

II. Finance

The Town of Oakland partners with neighboring communities to provide cost-effective services to residents.

The Oakland Fire Department has formal mutual aid agreements with our neighboring communities (Belgrade, Rome, Sidney, and Smithfield) since the 1970s, and recognizes the

Statewide Mutual Aid program. Each department simultaneously receives calls for reported structure fires, which improves insurance ratings, saves on response times, and increases safety, water capacity and manpower. In addition, the Oakland Fire Dept. has written agreements with Fairfield, Waterville, and Winslow Fire Departments to provide assistance on a per-request basis.

Furthermore, the Town of Oakland joins 28 mid-Maine communities in contracting emergency rescue services to Delta Ambulance. The collective pooling of resources allows Delta Ambulance to service communities at a more affordable rate than would be possible for Town-owned emergency rescue.

III. Departments

a. Sewer

In 2012, the Town of Oakland completed the transition of its sewer system to the Waterville Sewerage District (WSD) system. The town's former treatment plant was converted to a pump station, thereby eliminating the discharge of treated sewerage into Messalonskee Stream and instead delivering raw sewerage to the Webb Road sewer piping in Oakland, where it flows into the WSD system en route to the Kennebec Sanitary Treatment District plant. Now, there are no point or nonpoint sources of pollution from Oakland's wastewater disposal system. An additional connection to the WSD existed prior to 2012 on Kennedy Memorial Drive, which is still in use today.

Expenses associated with the connection to the WSD system generated a sewer rate increase in 2015. To keep up with inflation and to allocate funding for maintenance, an insignificant increase will likely be proposed within the coming decade. However, general condition of the system is good. The main pump station was constructed in 2012, and two of the three remote pump stations are fewer than 20 years old. The only issues arise in the spring and fall when water tables are high and there is some leakage through the clay pipes, causing high flows. The KMD connection does not experience these issues, as it is comprised of PVC piping.

Figure 10.1: Oakland Sewer System Quick Facts

Current users	790
Commercial users	83
Residential users	707
% households served	20%
MS4 Community Status	No
Combined Sewer Outflows	None
Avg. Annual Daily Flows (Gallons)	
KMD (2018)	12,000
Webb Road (2018)	257,700
Capacity Available (per WSD contract)	
KMD	84%

While both sewer connections have excess capacity (see Figure 10.1) in their contracts with the WSD system, peak flows during storms use the full capacity of the Webb Road connection. In order to increase system capacity for future development, and in an effort to reduce operational costs, the Town has been working since 2015 to reduce inflow and infiltration of surface runoff and groundwater into the system. The Town has experienced some success, reducing the Webb

Road's average annual daily flow by 7.8 percent and that of KMD by 6.4 percent. Efforts to decrease flows further are ongoing, including the use of annual CCTV camera inspections and flow monitoring to develop a long-term maintenance schedule.

Private septage is regulated through the Town of Oakland's Holding Tank Ordinance and the Sewerage Ordinance, which conforms to the requirements of the Maine State Department of Health and Welfare. Once the public sewer becomes available, the private building sewer will be connected to the public sewer; a private septic system may still be in use until it is no longer in good condition, at which point it must convert to the public sewer system. However, the property will still be assessed for the construction of the sewer line. Respondents to the Oakland Community Survey are divided on the prospect of sewer expansion, though the heavy residential demographic of survey respondents likely skews the favorable view of commercial users.

b. Power and Communications

As is true for many of Maine's small rural towns, the Town of Oakland has access to cable and broadband, though there is insufficient competition to produce affordable services. According to the Federal Communications Commission, Spectrum Communications maintains a monopoly on cable service in Oakland[13]. Fairpoint Communications offers ADSL service, but at one-quarter the speed of Spectrum, it is of poorer quality. Although the average download speeds meet or exceed 25 mbps, the standard definition of broadband, residents report weaker service particularly in more rural and lakeside areas.

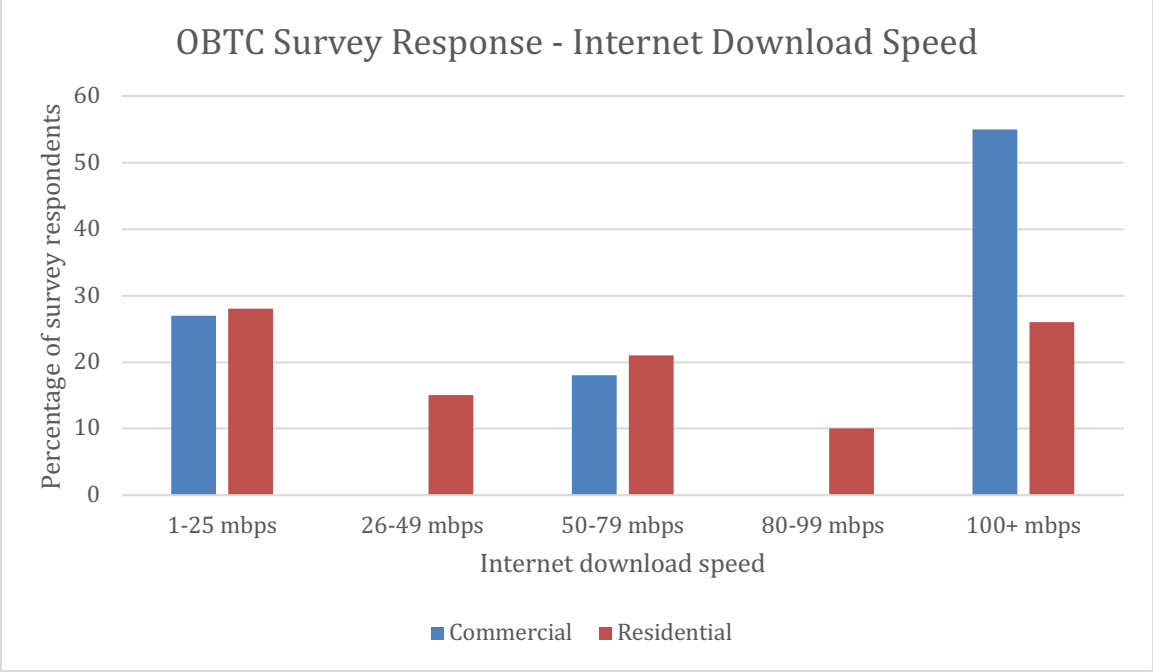
In 2007, the Town of Oakland received a grant from the U.S. Dept. Homeland Security to install fiber optics to municipal facilities, including the Town Office, police station, public library, and public schools. In 2018, the Town of Oakland received an additional grant from the Maine Community Foundation to map fiber optics and broadband infrastructure, with the intent of identifying gaps and exploring how best to extend existing infrastructure to commercial properties, particularly those in the downtown district. Upon receipt of the grant, the Town formed the Oakland Broadband and Technology Committee (OBTC), comprised of business and civic leaders, to implement this work.

Once the current infrastructure was mapped, OBTC conducted its own study to remedy the lack of accurate data on internet speed and price within the downtown commercial core and throughout the town. Important findings include:

- Approx. 31% of the commercial business respondents do not have internet download speeds over 25 mbps, and 75% of these businesses pay more than $100 per month for this substandard service.
- 28% of residential respondents do not have internet download speeds of over 25 mbps.

[13] Federal Communications Commission, 2017. "Fixed Broadband Deployment". (source).

- 75% of downtown business respondents pay over $118/mth for 100mbps of download speed. Two downtown businesses do not have internet service because it is prohibitively expensive.
- Over 70 percent of business respondents indicated that internet service was “very important” in their decision of where to locate their business.
- If they had better internet service, residents would use internet to connect smart home devices and access telehealth services.



OBTC is currently in the process of synthesizing its findings into a series of recommendations to be presented to the Town Council. The report will include case models of other Maine municipal broadband expansion plans, survey response analysis, a review of technology, infrastructure, and ownership models for expansion, an estimation of project budget costs and potential grant funding opportunities to cover those costs.

Given the poor speed and high cost of internet, as well as the essential role internet plays in business location decisions, OBTC recognizes the important of broadband to Oakland’s economic development and will provide recommendations on improving broadband infrastructure along the commercial core of Main Street.

In similar fashion to broadband, access to three-phase power is limited throughout Oakland, but as this time the Town has not identified funding opportunities to help alleviate the cost of expansion.

Sidebar 10.2: Exploring Renewable Sources of Power

Planning for Oakland's future should include a consideration of alternative sources of energy. As public awareness of renewable sources of power sharpens and neighboring towns embark on solar energy projects, Oakland may review its energy needs, assets, and history to determine whether it too will support renewable sources of power.

As Oakland once used the Messalonskee Stream to power central Maine, it may look to its open fields and landfill as potential opportunities to generate both solar power and revenue, as Fairfield and Waterville have done. In addition, Oakland may join dozens of Maine municipalities in realizing cost and energy savings by switching its streetlights to LED lights. As an encouraging first step, in September 2019 the Town approved the construction of a 497,000 kilowatt-hour solar array atop the capped and closed landfill, which is expected to offset all of the Town government's energy consumption.

Given many Oakland residents' enthusiasm for environmental causes, a potential first step would be to convene a Renewable Energy Committee to explore ways in which to reduce reliance on non-renewable energy sources while generating revenue or reducing expenses.

c. Code Enforcement

The Town of Oakland's Sewerage, Holding Tank, and Pre-Treatment Ordinances regulate the disposal of residential, commercial, and industrial septic waste within the municipality. If a property is located within two hundred (200) feet of a public sanitary sewer, the property owner must purchase the installation of suitable toilet facilities to connect into the public sewer[14]. If a public sewer is not available, the property owner may apply for a permit to install a private septic system according to State of Maine requirements, and may begin its use upon inspection of the Town's Plumbing Inspector. If a property owner can not install a private septic system, he or she may install a holding tank, according to the requirements of Oakland's Holding Tank Ordinance. If a public sewer becomes available, the properties within 200 feet must connect to the public sewer within ninety (90) days.

Any public institution, including schools and hospitals, or a cluster of commercial operations must be serviced by a public sewer and connected via manhole. The Superintendent of the Oakland Sewer Department is responsible for this connection.

[14] Town of Oakland, 1975. Sewerage Ordinance, pg. 3. (source).

d. School System

Public education for Oakland residents is provided by Regional School Unit 18/Messalonskee School District (SAD 47), which includes the towns of Oakland, Belgrade, Sidney, Rome, and China. Schools operated by the district are Atwood Elementary (grades K-2), Williams Elementary (grades 3-5), Messalonskee Middle School (grades 6-8), and Messalonskee High School (grades 9-12). Outlying schools include Belgrade Central (grades K-5), James H. Bean School (grades K-5), China Primary School (K-5), and China Middle School (6-8). The total enrollment for the district is 2,647 students with 897 students (34%) representing the town of Oakland. All high school students from the participating communities attend Messalonskee High School, although just a portion of China students attend the high school.

The school system, which employs 558 people, is a high priority of Oakland residents. This is evidenced on an annual basis with the adoption of a fiscally responsible school budget. In the Spring of 2018, the community members of RSU 18 approved a $14 million bond of which $10 million dollars is dedicated to school improvements and $3.9 million is earmarked for a new athletic complex at Messalonskee High School to which the community will have access.

The schools and citizens of Oakland have established several partnerships which benefit the students. The Town provides the two school resource officers that serve Messalonskee Middle School and High School, local donations and fundraising efforts stock in-school food pantries and extend educational and co-curricular activities for the students, and the many student events, including concerts, athletics, art exhibits, plays, and robotic competitions, are well attended by the community. Appreciation for one of Oakland's major employers and residential attractions runs deep in our community.

For more information on the Messalonskee School District, including its history and projected enrollment, please see Appendix 10.3.

e. Emergency Response - Fire

The Town of Oakland's Fire Department is dedicated to providing quality, professional services to protect the lives, property and environment of our community. The department is led by Chief Dave Coughlin and includes one day-time per-diem firefighter/EMT and twenty-five (25) on-call responders (see Figure 10.1 for further detail). Calls for fire-rescue and services within the Town of Oakland are answered at a dispatch center in Waterville, and 911 calls are answered by the Public Safety Answering Point

Figure 10.3: Oakland Fire Dept. Member Response Summary, 2017

Total Incidents: 1,141

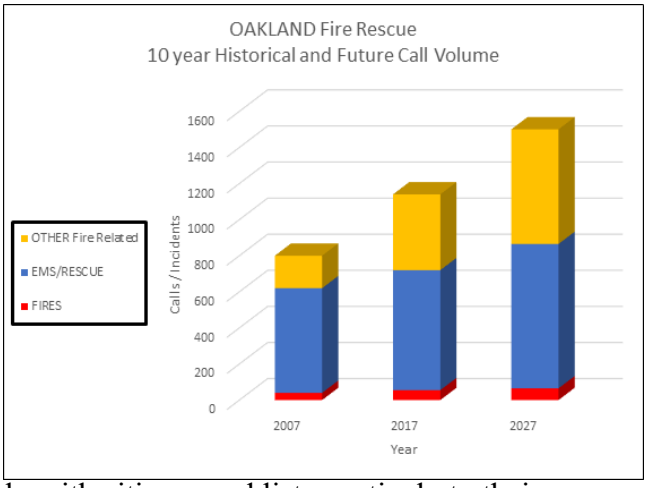
Roster	26
Responded 25 call minimum	18
Responded 60 call min.	12
Responded 100 call min.	11
(includes 3 officers)	8
20% response goal (SOG)	5
On multiple Fire Dept. (shared)	5 (45%)

(PSAP) in Skowhegan, Somerset County. Five towns in northern Kennebec County follow this same arrangement, as Kennebec County abandoned its PSAP. While somewhat complicated, the system is adequate.

In November of 2018, Oakland residents voted 2:1 to build a new fire station on land donated by Messalonskee Hydro. Completed in March 2020, the new 12,400 square foot facility cost just under its budget of approx. $2.6 million, and will be financed via a 30-year municipal bond. The new facility was necessary, as the former station presented significant health and safety issues include non-compliance with numerous OSHA standards, industry recommendations, and NFPA standards. A description of Fire Dept. facilities and equipment is located in Appendix 10.4.

In addition, the new facility will help Oakland Fire Dept. handle increased demand. From 2007 to 2017, call volume increased by 37% (see chart 10.2). For further information on the Oakland Fire Dept., including average response times, please see Appendix 10.4.

Chart 10.4: Oakland Fire Dept. Call Volume



f. Emergency Response - Police

The Town of Oakland's Police Department is centered on community policing, which means that the department seeks to establish positive relationships with residents and work together to develop a sense of safety and security in our community. The department's open-door policy allows it to communicate closely with citizens and listen actively to their comments and concerns.

In 2016, the Oakland Police Department moved from its station in an old farmhouse to a modern police station located next to the Town Office. Barely two years old, the facility was built to accommodate growing demand and is in excellent condition. The department's equipment is also in very good condition, according to Police Chief Michael Tracy. Thus, the police department predicts no capital improvement expenditures will be needed in the near future.

Sidebar 10.5 Oakland Police Department Staff

Full-time officers	10
Reserve officers*	14
Animal control officers	1
Dispatch	1
School resource officers	2

**part-time or auxiliary*

In 2019, the department responded to approximately 7,975 calls for service and an additional 548 business checks and 191 vacant property security checks. As of 2018, the average call response time is under 1 minute and 30 seconds.

G. Emergency Response - Ambulance

The Town of Oakland is located in the service area of Delta Ambulance, Inc. Headquartered at 29 Chase Avenue in Waterville, Delta uses an additional two base locations in Augusta to provide customers in 29 Maine communities with full-service medical transportation and 911 emergency response services. Communities served include: Albion, Augusta, Belgrade, Benton, China, Fairfield, Freedom, Oakland, Palermo, Rome, Sidney, Smithfield, Somerville, South China, Vassalboro, Waterville, Whitefield and Windsor.

With more than 140 health care professionals and a fleet of 14 ambulances and three wheelchair vans, Delta serves approximately 17,500 people each year. Their paramedics and EMTs receive the highest level of training and are available 24 hours a day, seven days a week. There are ten Advanced Life Support (ALS) paramedic ambulances available during the day, and six ambulances overnight along with a supervisor SUV 24/7 (see Appendix 10.5 for a description of Delta services).

In 2017, Delta responded to 585 calls for service in Oakland, treating and/or transporting 480 patients. The average call response time for that same year was 7.95 minutes.

H. Transfer Station

The Town of Oakland's transfer station has recently implemented many improvements which have enhanced residents' experience with the facility. The station added twenty-two (22) new services as of January 1, 2017 which greatly expand the facility's ability to meet customer demand; these services range from PaintCare recycling to ink cartridges to rechargeable batteries. The station has increased recycling opportunities to reduce reliance on waste disposal.

Once a receptacle of municipal solid waste (MSW) for Waterville and Winslow as well as Oakland, the transfer station sent its MSW to the PERC incinerator in Orrington. However, as of April 2018, the transfer station has contracted to send its MSW to FibeRight, a facility which will convert MSW to renewable fuel and energy. Consequently, the Oakland transfer station no longer accepts MSW from Waterville and Winslow, and now sends its MSW to the Norridgewock landfill until FibeRight opens. Therefore, there is excess capacity at the transfer station which will accommodate future growth. The station currently budgets 2,150 tons per year of MSW. Please see Appendix 10.6 for a 5-year summary of the transfer station's annual solid waste management report and commentary on accommodating growth within market conditions.

As of September 2019, the Town of Oakland has approved 497,000 kilowatt-hour solar array to be constructed atop Oakland's capped landfill. The power generated is expected to offset all of the Town's energy consumption.

I. Public Health

The Town of Oakland's Health Officer position merged with the Oakland Fire and Rescue Department, improving response times and increasing response success rates. Significant public health initiatives include bed bug prevention and treatment. In addition, the Town of Oakland employs a full-time recreation director, whose mission is to encourage physical recreation and social interaction, thereby improving public health outcomes. Please refer to "Recreation" section for more details.

Oakland is served by two local nonprofit hospitals in Augusta and Waterville: MaineGeneral Medical Center, a subsidiary of MaineGeneral Health, and Northern Light Inland Hospital, a member of Northern Light Health. A description of these facilities and their services is located in Appendix G.7.1. Within the town of Oakland, a wide array of outpatient services is available; a description of each is available in Appendix G.7.2.

XI. Capital Investment

"It has been stated, that this year [2018] the Town of Oakland has experienced its best financial year in over 30 years." – Gary Bowman, Town Manager.

Key Findings of Section

1. The Town of Oakland is heavily dependent on local property tax, and may consider user and service fees as a way to diversify revenue streams.
2. Oakland's fiscal conservatism has yielded a stable financial position with few long-term debts.

Oakland is heavily dependent on the local property tax to finance the operation of local government. In recent years, the amount of revenue that must be raised through property taxes has increased by almost 28% (2012 to 2017). While this increase was offset somewhat by growth in taxable property, the local tax rate needed to increase to raise the necessary revenue. While the ability of the Town to utilize other sources of revenue is constrained by State law, the possibility of increased application of user and service fees is one possible approach to relieving property tax burdens.

Currently the Town has $1,055,000 in the unassigned Fund Balance account. Conservative management and careful spending have allowed this rainy-day fund to grow to a substantial sum.

I. Financial Statistics

a. Revenues and Expenditures

Revenues increased 27% between FY 13 and FY 18 (see Appendix 11.1), a growth rate which remains just behind expenditures, which increased by 28% over the same six-year period (see Appendix 11.2). The largest revenue sources, property and excise taxes, have grown in proportion to revenues so that they remain a consistent percentage of revenues, necessitating a 19% raise between 2012-2017. As is true in many Maine towns, Oakland's increasing dependence on property tax revenues places a growing burden on town property owners.

While Oakland has welcomed new taxable real estate, this growth has been insufficient to cover rising expenses, the largest of which is RSU 18, which has grown by 43% between FY 13 and FY 18. Thus, Oakland has increased its mill rate to provide the necessary revenues (see Appendix 11.3). For FY 17, the total valuation of the Town's real estate and taxable personal property is approximately $528,551,000. This is based upon a ratio of assessed value to market value of 100% (per cent).

State law limits the ability of the Town to seek alternative approaches to raising revenues. The most feasible method available is the wider application of user fees. For example, the sewer district is operated separately from the municipal budget with the operating costs supported

solely by user fees. Between FY 13 and FY 18, service charge fee revenues grew by 157%, reflecting the increasingly important contribution of service charges to the Town budget.

b. Municipal Debt

The Town of Oakland has few long-term financial obligations as a result of bonded debt. These obligations include:

- For the 2009 construction of a pipeline to Waterville and of a pumping station, the sewer district issued a bond of $2,501,000
- To finance the construction of a new police station in 2016, the Town borrowed $900,000
- The Town's share of RSU #18 debt and capital leases is $10,243,047 as of 6/30/2017
- To finance the construction of a new fire station slated for commencement in 2019, the Town intends to issue a 30-year bond for $2.6 million

Total long-term debt, as of 6/30/2018, equaled just under $2.9 million. Maine State law limits municipal debt to 15% of property valuation, which sets a debt ceiling of $79,282,680 for the Town of Oakland. Clearly, the Town's fiscal conservatism has created an abundance of available debt, generating a stable financial position and capacity to fund capital improvement projects.

III. Capital Investment Program

The Town of Oakland allocates 25% (twenty five percent) of its unspent allocations and 25% (twenty five percent) of its excess revenues from each annual budget to fund its capital improvement account. As of 2018, the capital improvement account held $270,508 in funding.

For capital improvement projects which require larger amounts of funding, e.g. the new fire station, the Town will issue a bond, or will seek grant funding, as it did with the Maine Community Foundation for broadband infrastructure planning. The Town does not currently collaborate with neighboring municipalities for capital improvement funding and usage, though it does share in the usage and funding of some services, including Delta Ambulance. A summary of the capital investment projects identified in this plan is provided in Table 11.1.

Table 11.1 Oakland Comprehensive Plan Proposed Capital Improvement Projects

Capital Improvement Project	Approximate Cost	Funding Sources
Downtown façade and building improvement grant program	$30,000 per year	TIF funds, private philanthropy
Trail extension and connection via a new greenspace	$125,000	TIF funds, private philanthropy
Broadband extension into downtown district	$20,000 per linear mile	ISP vendor investment, grant funding from private, state, and federal entities

XII. Regional Coordination

Key Findings of Section

1. The Town of Oakland has a history of regional cooperation with surrounding communities in order to provide high-quality municipal services and improve the health of the region.
2. The Town provides a high-quality school system that serves as a regional education hub, and the Town collaborates with neighboring municipalities for emergency rescue, economic development, and transportation.
3. Regional sharing of services will likely continue to be important to the town's future growth, including working with economic development organizations such as FirstPark/KRDA, Central Maine Growth Council, and Kennebec Valley Council of Governments.
4. Non-governmental coordination is most prominent in environmental conservation with Oakland lake associations and the 7 Lakes Alliance.

Historic & Archaeological Resources

The Town supports the work of the Oakland Area Historical Society in preserving our rich history. The Town would be willing to work with others, but at this time there are no regional projects planned.

Water Resources

Oakland's water bodies are an important economic driver, and all are shared with neighboring towns. Thus, regional coordination to protect water quality and natural resources is critically important for the success of Oakland.

Each water body maintains its own non-profit lake association, which provide education, advocacy, and funding for water quality initiatives and for the preservation of the lakes' economic, ecological, recreational, and aesthetic value. The mission of these lake associations is supported by the 7 Lakes Alliance, an umbrella organization coordinating the water and land conservation projects of the entire Belgrade Lakes chain. Whereas many lake associations are volunteer-based, the 7 Lakes Alliance provides staff support for research, funding lake conservation projects, and deploying the equipment and workforce (e.g. Youth Conservation Corps) to implement these projects. Likewise, The East Pond Alum treatment project has been a collaboration between East Pond Association and Colby College, which has resulted in improved water quality.

In addition to collaborating with these non-profit organizations, the Town complies with and enforces several State rules (Shoreland Zoning, Erosion Control, Stormwater, etc.) and works with the local Water District to preserve the quality of the water we all share.

Natural Resources

The Town supports and works with organizations, such as Sustain Mid-Maine, KMTrails, and Maine Department of Inland Fisheries & Wildlife to conserve and/or preserve land and protect our natural resources.

In addition, the Town has adopted the State's forestry rules so that our timber harvesting rules are consistent with others in our region. The Town would be willing to work with others, but at this time there are no regional projects planned.

Agriculture

The Town supports and works with regional and state organizations, such as Maine Department of Agriculture & Forestry, Maine Farmland Trust, Sustain Mid-Maine, and the Maine Organic Farmers & Growers Association to protect farmland and promote agriculture.

Economic Development

Our businesses and residents work across town boundaries; our region is tightly interconnected so employer, housing, and other economic gains or losses are felt throughout several communities. Thus, it is important that our government work collaborates with other towns as well. To this end, Oakland is a member of the Central Maine Growth Council (CMGC), the Kennebec Valley Council of Governments (KVCOG), and the Mid-Maine Chamber of Commerce (MMCC). Similarly, the Town co-owns FirstPark/Kennebec Regional Development Authority (KRDA), a business park located in Oakland, with twenty-three (23) other towns.

CMGC brings a regional, collaborative approach to business attraction and retention and can expose Oakland properties to a wider array of developers and investors. KVCOG is active in the planning of FirstPark, working to increase employment and traffic to the campus. MMCC promotes Oakland businesses to residents and tourists who frequent any of the 20+ communities served by the Chamber.

Housing

At this time, the Town has no shared regional housing resources. While there are currently no regional projects planned, there have been preliminary regional discussions on the importance and need for variety of new housing units and stock – from senior housing and market rate condos to workforce housing developments.

Recreation

The Town works with both RSU 18 and recreation organizations as well as regional landscape-based conservation organizations. Currently, the Town has ongoing local and regional plans with trail and conservation-based groups, such as KMTrails, to increase the linkage of local trail systems into regional trail feeder “spokes” within the town. Such “hub and spoke” models of trail system development will benefit from Oakland’s strong central geography. Likewise, Oakland has been active in planning for trail systems to be constructed over local railbeds.

Transportation

KVCOG's Community and Economic Development Strategy includes several transportation-related projects which affect Oakland, specifically the I-95 interchange on Trafton Road in Waterville which impacts Oakland roads and commutes. KVCOG also supports the extension of rail and the development of recreational trails connecting Madison to Topsham, which may connect through Oakland.

Although the current transportation routes of Kennebec Valley Community Action Program (KVCAP) only serves Oakland at the municipal line shared with Waterville, the Town does support this shared transportation service, which may become increasingly necessary due to an aging population.

Education

Oakland is the seat of RSU 18 district, making the town a regional education hub. The consolidation of administration and secondary school facilities provides significant financial savings to neighboring municipalities, enhances educational quality, and makes available programs and classes which could not be sustained by smaller student populations.

Emergency Rescue

The Oakland Fire Department has formal mutual aid agreements with neighboring communities (Belgrade, Rome, Sidney, and Smithfield) and recognizes the Statewide Mutual Aid program. Each department simultaneously receives calls for reported structure fires, which improves insurance ratings and response times and increases safety, water capacity and manpower. In addition, the Oakland Fire Dept. has written agreements with Fairfield, Waterville, and Winslow Fire Departments to provide assistance on a per-request basis.

Furthermore, the Town of Oakland joins 28 mid-Maine communities in contracting emergency rescue services to Delta Ambulance. The collective pooling of resources allows Delta Ambulance to service communities at a more affordable rate than would be possible for Town-owned emergency rescue.

XIII. Existing Land Use

Key Findings of Section

1. Oakland's development is patterned as a hub-and-spoke, which has happened organically as the Town does not enact zoning ordinances.
2. Kennedy Memorial Drive, the arterial to Waterville and Interstate 95, is Oakland's most developed road; however, the new highway interchange in Sidney may re-route some traffic to Route 23.

The existing and future development of the Town of Oakland is shaped by the natural and physical environment. Geology, topography, soils, and groundwater inform the use cases of Oakland's landscape, making the following analysis an important consideration for development planning. For a detailed overview of Oakland's geology and climate, please see Appendix 13.A.

I. Summary of Recent Development

Land use in Oakland is a traditional Maine mixture of central urban village and rural outskirts, made up of former farmland and seasonal lakefront dwellings. In recent years, the rural outskirts have seen significant conversion of seasonal lakefront cottages to year-round use and the progressive construction of individual house lots and small commercial enterprises along roadway frontage. A map of existing land use is provided in Map 7: Building A Regional Landscape.

As Oakland residents use both Waterville and Augusta as employment and service centers, the town's main commercial corridor is Kennedy Memorial Drive (KMD), headed east from Oakland's downtown to I-95 and Waterville. However, traffic headed to Augusta may increasingly use Route 23 to access I-95 in Sidney at the new interchange.

Given Oakland's historical role as a freestanding Town with an attractive physical and development environment, its close relationship with both Waterville and Augusta and access to the Belgrade Lakes region generate continued residential development. In 2018, Oakland reported 19 new housing starts (which does not include mobile homes), an increase of nearly 50% over 2017; this trend kept apace in 2019 with 14 new housing permits issued. While some residential development occurs in subdivisions, most occurs lot by lot. A summary of current lot dimensional standards is provided in Appendix 13.3.

II. Considerations for Future Development

As a town with no zoning ordinances, Oakland's vision for residential and commercial

development was neutral. Yet, as the community convenes around a shared vision for their town's future, it has expressed more specific recommendations for development. While most residents still express indifference toward the location of residential development, they believe commercial development should be directed toward downtown and KMD.

Policies that encourage infill development - in downtown and along KMD - would increase vibrancy in downtown Oakland and protect the town's rural nature, which are both stated goals of the community. Some infrastructure currently exists along KMD, and the extension of additional amenities such as sewer would encourage further development of large commercial and industrial facilities.

Administrative capacity to manage land use and development is strong. A new code enforcement officer has assumed his responsibilities with energy, and the planning board has indicated ability to manage increased activity. A summary of existing land use management measures is provided in Appendix 13.4.

XIV. Future Land Use Plan

Key Findings of Section

1. The Town of Oakland's growth area reflects the existence of public infrastructure and existing development trends.
2. The Town applies state and federal land use regulations but does not add a layer of local land use controls via division of the municipality into zones.

Located in the center of the state with access off a key transit corridor (I-95), Oakland boasts rich and diverse land use characters, natural resources, and ideal site suitability for commerce. Amid such strong central geographic economics, the opportunity for Oakland to promote and protect its assets and serve as a state and regional hub in a sustainable land use planning and development approach is truly unique.

The natural landscape via Oakland's geology, topography, soils to subsurface assets present both constraints and opportunities for development. Oakland's future development pattern and growth will be shaped by these and other land use characteristics, which are defined by development blocks concentrated along transit corridors, key gateways, the urban core (i.e. downtown), scenic landscapes, large inland waterbodies and lakes, a dispersal of wetland clusters and fingers, and significant land use coverage comprised of deciduous, evergreen, and mixed forests and scrub/shrub brush landscapes and habitats.

Oakland's future land use plan (please refer to Map 15 for the future land use map) focuses on promoting development within the identified growth area, which reflects existing development areas, general site suitability, presence of public infrastructure, nature gas, broadband connectivity, and an overall planning strategy of (i.) infill development, (ii.) geographic economics, (iii.) asset-based economic development, (iv.) elements of modern day, small town transit orientated development (TOD), and (v.) downtown revitalization. It is projected and encouraged that enterprise and commercial and/or industrial growth will occur in the identified growth area.

To the continue this trend, development and associated infrastructure build-out will necklace along KMD, passing through the town's downtown village gateway(s), and arrive into the urban core of downtown's Main Street. The future land use plan also presents the opportunity for large(r) land parcels abutting, and/or in proximity to, KMD and the downtown area to be most ripe for commercial and industrial development and, likewise, most appropriate for infrastructure expansion projects.

The Town of Oakland does not deploy local land use and control in the form of the division of land areas in zones that would shape criteria related to uses and the numbers and/or types of buildings and associated standards. The Town will continue to closely follow and implement regulatory compliance successfully as it relates to applicable state and federal land use and control issues. Similarly, Oakland and private sector project partners have a history of working successfully on new construction projects and utilizing best management techniques, including having experience with being permitted with full cooperation of the Army Corp of Engineers and the Maine Department of Environmental Protection (MDEP).

I. Does the Future Land Use Plan align and/or conflict with the community's vision statement?
The Future Land Use Plan in aligned with OCPC's vision statement (please refer to page 1), most relevantly with regards to the community's reflection on historical land use characteristics and critical natural resources to guide the town's sustainable land use planning decision making of the future.

II. Is the configuration of the growth area shaped by natural opportunities and/or constraints (i.e. the physical suitability or unsuitability of land for development)? The location of public facilities? The transportation network?
The configuration of the growth area was predominantly created based on the location of Oakland's domestic/public infrastructure (e.g. sewer, water) and past and existing development patterns, which corresponds with Oakland's Main Street, the Downtown District village area, Kennedy Memorial Drive (KMD), and the general I-95 transit coordinator and the highway interchange area along, and abutting, KMD.

Additionally, growth in Oakland will continue to be shaped and impacted by state and federal land use regulations and controls, such as Shoreland Zoning and Floodplain Management.

III. How does the Future Land Use Plan relate to recent development trends?
Oakland's recent development trends and patterns are consistent with the Future Land Use Plan and the identified growth area; the Town has seen an influx of commercial and development activity along KMD, within FirstPark, and the downtown district. Likewise, sites identified for single-family homes and/or a housing subdivision are located throughout the Town, but primarily clustered in the growth area. One of the goals of the Future Land Use Plan is to encourage new development in the growth area.

IV. Given current regulations, development trends, and population projections, estimate how many new residential units and how much commercial, institutional, and/or industrial development will likely occur in the planning period? Where is this development likely to go?
In the next ten years, we predict the development of approximately 30-50 new homes and approximately 10-15 new businesses. Over the last ten years, approximately 80% of our new

development occurred in the growth area. In order to encourage new development to locate in our growth area, new programs, economic development tools (e.g. Façade Program(s), TIF, etc.), and standards will be reviewed for implementation. Similarly, commercial and industrial projects of significance will be steered and incentivized to occur within the town's regional business park (i.e. FirstPark).

V. How can critical natural resources and important natural resources be effectively protected from future development impacts?

New development will have to continue to meet the standards of the Town's Land Use Ordinance, which includes Shoreland Zoning, Floodplain Management, Site Plan Review and Subdivision, as well as any applicable current or future State and Federal regulations.

XV. Plan Implementation & Evaluation

Plan Implementation & Evaluation Key Draft v1.01	
Town Departments, Boards, Committees, etc.	
TC	Town Council
TM	Town Manager
AB	Appeal Board
BAR	Board of Assessment Review
BAC	Budget & Advisory Committee
LRPC	Long Range Planning Committee
PB	Planning Board
RB	Recreation Board
EDC	Economic Development Corporation (e.g. CMGC)
DECD	State of Maine -Department of Economic & Community Development
DBC	Oakland Downtown Business Committee
DH	Town of Oakland - Department Heads
OCPC	Town of Oakland Comprehensive Planning Committee
OBTC	Town of Oakland Broadband & Technology Committee (ad hoc)
OF	OakFest Committee
Programs, Partnerships, & Funding, etc.	
PPF	Public-Private Finance (e.g. Grants, TIF, Municipal, Philanthropic, etc.)
CDBG	Community Development Block Grant
P3	Public-Private Partnership

Plan Implementation & Evaluation *Draft Only 1.01*		
Strategies	**Responsibility**	**Timeline**
Historic & Archaeological Resources		
1. For known historic archeological sites and areas sensitive to prehistoric archeology, through local land use ordinances require subdivision or non-residential developers to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.	**TC, PB, TM**	**Medium-term**
2. Adopt or amend land use ordinances to require the planning board (or other designated review authority) to incorporate maps and information provided by the Maine Historic Preservation Commission into their review process.	**TC**	**Short-term**
3. Work with the local or county historical society and/or the Maine Historic Preservation Commission to assess the need for, and if necessary plan for, a comprehensive community survey of the community's historic and archaeological resources.	**TC, TM, LRPC**	**Long-term**
Water Resources		
1. Adopt or amend local land use ordinances as applicable to incorporate storm water runoff performance standards consistent with State of Maine law	**TC**	**Short-term**
2. Consider amending local land use ordinances, as applicable, to incorporate low impact development standards.	**TC, TM, PB**	**Medium-term**
3. Where applicable, develop an urban impaired stream watershed management or mitigation plan that will promote continued development or redevelopment without further stream degradation.	**TC, PB, EDC**	**Long-term**
4. Maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms, as necessary.	**TC, PB**	**Medium-term**

5. Encourage landowners to protect water quality. Provide local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine.	**TC, PB, TM, RB, EDC**	**Medium-term**
6. Adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and require their implementation by contractors, owners, and community officials and employees.	**TC, TM, PB, EDC**	**Medium-term**
7. Participate in local and regional efforts to monitor, protect and, where warranted, improve water quality.	**TC, TM, EDC**	**Medium-term**
8. Provide educational materials at appropriate locations regarding aquatic invasive species.	**PB, RB, EDC**	**Medium-term**
Natural Resources		
1. Ensure that land use ordinances are consistent with applicable state law regarding critical natural resources.	**PB, TC, EDC**	**Short-term**
2. Designate critical natural resources as Critical Resource Areas in the Future Land Use Plan.	**TC, TB, RB**	**Medium-term**
3. Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.	**TC, PB, TM, EDC**	**Short-term**
4. Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process, consideration of pertinent BwH maps and information regarding critical natural resources.	**PB, TM, EDC**	**Short-term**
5. Initiate and/or participate in interlocal and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.	**TM, PB, EDC**	**Medium-term**
6. Pursue public/private partnerships to protect critical and important natural resources such as through purchase of land or easements from willing sellers.	**PB, RB, EDC, TM**	**Medium-term**

7. Distribute or make available information to those living in or near critical or important natural resources about current use tax programs and applicable local, state, or federal regulations	**PB, RB, TM**	**Short-term**
Agriculture & Forestry		
1. Work with local farmers and farms markets to develop avenues for access to locally sourced agriculture options, including opportunities for a local food market downtown	**TM, DBC**	**Short-term**
2. Assess the Farmland Taxation program to ensure the program is supportive of the agriculture sector	**TM, BAR, DH**	**Short-term**
3. Confer with Department of Agriculture, Conservation and Forestry when developing land use regulations pertaining to agricultural management practices to ensure regulations are agriculture friendly	**PB**	**Short-term**
4. Promote and support food hubs and access to locally sourced produce	**TC, DBC**	**Short-term**
5. Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices as required by 12 M.R.S.A. §8869.	**PB**	**Short-term**
6. Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices.	**TC, PB, TM**	**Short-term**
7. Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.	**TC, PB, TM**	**Medium-term**
8. Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.	**PB, TC**	**Short-term**
9. Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations.	**PB, TC**	**Short-term**
10. Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.	**PB, TC, EDC**	**Medium-term**

Economy		
1. Enact or amend local ordinances to reflect the desired scale, design, intensity, and location of future economic development.	**TC, PB, LRPC, DBC, EDC, TM**	**Short-term**
2. Develop a downtown facade & building improvement program	**TM, DBC, EDC**	**Short-term**
3. Identify gaps in infrastructure and develop capital investment plan	**TC, PB, LRPC, DBC, EDC, TM**	**short-term**
4. If public investments are foreseen to support economic development, identify the mechanisms to be considered to finance them (local tax dollars, creating a tax increment financing district, a Community Development Block Grant or other grants, bonding, impact fees, etc.)	**TC, DBC, EDC**	**Short-term**
5. Diversify the tax base, plug gaps, and identify suitable vacant land parcels for potential development projects	**TM, EDC, LRPC**	**Medium-term**
6. Work with current and applicable Oakland stakeholders to develop and implement a downtown beautification plan to makes changes to the downtown such as lighting, landscaping, signage, public green spaces/pocket parks and other placemaking amenities to help attract new residents, businesses, and visitors	**TM, DBC, EDC**	**Medium-term**
7. Foster a talented, trained and entrepreneurial workforce	**TC, EDC, DECD**	**Medium-term**
8. Promote and work collaboratively on community-based events such "Oakfest"	**TM, DBC, OFC**	**Short-term**
9. Support and participate with First Park/KRDA on the expansion of business development	**TM, EDC**	**Short-term**
10. Participate in regional economic development and planning initiatives	**TM, TC, EDC, LRPC**	**Short-term**
Housing		
1. Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing	**PB, TC**	**Medium-term**
2. Grow residential density in Oakland's downtown district by accessing public-private finance tools and programs	**TC, PB, EDC**	**Medium-term**

3. Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas, subject to site suitability	**TC, PB, EDC**	**Medium-term**
4. Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition	**TM, EDC**	**Long-term**
5. Designate a location(s) in growth areas where mobile home parks are allowed pursuant to 30-A M.R.S.A. §4358(3)(M) and where manufactured housing is allowed pursuant to 30-A M.R.S.A. §4358(2)	**TC, PB**	**Medium-term**
6. Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs	**TC, EDC**	**Medium-term**
Parks & Recreation		
1. Create a list of recreation needs or develop a recreation plan to meet current and future needs. Assign a committee or community official to explore ways of addressing the identified needs and/or implementing the policies and strategies outlined in the plan	**RC, TM**	**Short-term**
2. Work with an existing local land trust or other conservation organizations to pursue opportunities to protect important open space or recreational land	**RC, PB**	**Medium-term**
3. Work with public and private partners to extend and maintain a network of trails for motorized and non-motorized uses. Connect with regional trail systems where possible	**RC, EDC**	**Medium-term**
4. Provide educational materials regarding the benefits and protections for landowners allowing public recreational access on their property. At a minimum this will include information on Maine's landowner liability law regarding recreational or harvesting use, Title 14, M.R.S.A. §159-A.	**RC**	**Long-term**
Transportation		
1. Develop or continue to update a prioritized improvement, maintenance, and repair plan for the community's transportation network	**TC, TM, DH**	**Short-term**
2. Initiate or actively participate in regional and state transportation efforts	**DH, EDC**	**Short-term**

3. Maintain, enact or amend local ordinances as appropriate to address or avoid conflicts with: a. Policy objectives of the *Sensible Transportation Policy Act* (23 M.R.S.A. §73); b. State access management regulations pursuant to 23 M.R.S.A. §704; and c. State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. §704-A.	**TC**	**Medium-term**
4. Maintain, enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections	**TC**	**Medium-term**
Public Facilities		
1. Identify any capital improvements needed to maintain or upgrade public services to accommodate the community's anticipated growth and changing demographics	**TC, ME, EDC**	**Short-term**
2. Locate new public facilities comprising at least 75% of new municipal growth-related capital investments in designated growth areas	**TC, TM**	**Short-term**
3. Encourage local sewer and water districts to coordinate planned service extensions with the Future Land Use Plan	**TM, EDC**	**Medium-term**
4. If public water supply expansion is anticipated, identify and protect suitable sources	**TC, TM**	**Long-term**
5. Explore options for regional delivery of local services	**TC, TM, EDC**	**Long-term**
Capital Investment		
1. Explore opportunities to work with neighboring communities to plan for and finance shared or adjacent capital investments to increase cost savings and efficiencies	**TC, BC, TC, EDC**	**Short-term**
2. Create a grant funding project timeline for key projects	**TM, EDC**	**Short-term**

XVI. APPENDIX

I. History and Archaeological Resources

1.1 Comprehensive Planning Historic Preservation Data Set

MAINE HISTORIC PRESERVATION COMMISSION

Inventory Data for Municipal Growth Management Plans

Resource: __ Prehistoric Archaeological Sites: Arthur Spiess

__ Historic Archaeological Sites: Leith Smith

_X Historic Buildings/Structures/Objects: Kirk Mohney

Municipality: Oakland

Inventory data as of October, 2017:

The following properties are currently listed in the National Register of Historic Places:

Pressey House, 287 Summer Street
Memorial Hall, Church Street
Oakland Public Library, 18 Church Street

The following property is also eligible for listing in the National Register of Historic Places:

Oakland Hydro Station

Needs for further survey, inventory, and analysis:

A comprehensive survey of Oakland's above ground historic resources needs to be undertaken in order to identify other National Register eligible properties.

MAINE HISTORIC PRESERVATION COMMISSION

Inventory Data for Municipal Growth Management Plans

Resource: ____ Prehistoric Archaeological Sites: Arthur Spiess

_X__ Historic Archaeological Sites: Leith Smith

_____ Historic Buildings/Structures/Objects: Kirk Mohney

Municipality: **Oakland**

Inventory data as of **October, 2017** :

To date, no historic archaeological sites are documented for the town:

Needs for further survey, inventory, and analysis:
No professional surveys for historic archaeological sites have been conducted to date in Oakland. Future archaeological survey should focus on the identification of potentially significant resources associated with the town's agricultural, residential, and industrial heritage, particularly those associated with the earliest Euro-American settlement of the town in the 18th and 19th centuries.

MAINE HISTORIC PRESERVATION COMMISSION

Inventory Data for Municipal Growth Management Plans

Resource: _X_ Prehistoric Archaeological Sites: Arthur Spiess

___ Historic Archaeological Sites: Leith Smith

___ Historic Buildings/Structures/Objects: Kirk Mohney

Municipality: **Oakland.**

Inventory data as of **October 26, 2017**:

18 prehistoric archaeological sites are known in the township. All are located on the shorelines of Messalonskee Lake. At least four of these sites are significant (National Register eligible).

Only one professional archaeological survey has been completed (shown in yellow on the accompanying map), for the Messalonskee Lake hydro impoundment. The March 2012 archaeological site map (1/2 km squares) is still current.

Needs for further survey, inventory, and analysis:

Archaeological surveys are needed for the shorelines of East Pond, McGrath Pond, and Salmon Lake.

II. Water Resources

2.1 Maine Drinking Water Program – Source Water Assessment Program Results for Oakland

PWS ID #	PWS Name	PWS Type	Town	Date	Comments	Source ID #	Risk-Well Type & Site Geology	Existing Risk of Acute Cont.	Future Risk
ME0005180	Alden Camps-House	NC	Oakland	5/08/03	Septic system within 300ft of well.	5180101	Low	Moderate	Low
ME0105180	Alden Camps-Shop	NC	Oakland	5/08/03		105180101	Low	Low	Low
ME0094943	Camp Eastwood	NC	Oakland	6/23/09		94943101	Low	Low	Low
ME0200842	Camp Manitou #1	NC	Oakland	5/08/03	Unknown overburden thickness of bedrock well.	200842101	Moderate	Low	Low
ME0000842	Camp Manitou #2	NC	Oakland	5/08/03	Unknown overburden thickness of bedrock well.	842101	Moderate	Low	Low
ME0300842	Camp Manitou #3	NC	Oakland	6/23/09		300842101	Low	Low	Low
ME0000843	Camp Tracy	NC	Oakland	6/22/11	Positive coliform test.	843102	Low	High	Low
ME0005192	Kennebec Mobile Home Park	C	Oakland	5/01/03	Positive coliform test; no legal control of at least 150ft radius of property around the well.	5192101	Low	High	High

ME0091190	Maine Water Co. Oakland Division	C	Oakland		Buys drinking water from Kennebec Water District.				
ME0095007	Shelby's Deli	NC	Oakland		No SWA	95007101			
ME0005209	Waterville Country Club	NC	Oakland	5/08/03	Unknown overburden thickness of bedrock well.	5209102	Moderate	Low	Low
PWS ID Key: C=Community | NC=Non-Community | NTNC=Non-Transient Non-Community									

2.2. Summary of Activities to Monitor, Assess, and Improve Water Quality in Oakland's Water Bodies

Lake or Organization	LakeSmart	Invasive Plant Control	Erosion Control	Colby Collaboration
East Pond	Yes	• Courtesy Boat Inspections (CBI) • Surveys	• Youth Conservation Corps (YCC) • Are You Buff Enough?	• Alum • PPCP research
McGrath Pond / Salmon Lake	Yes	• CBI • Surveys • Eradication of Eurasian milfoil	• YCC (10 sites in 2016) • Are You Buff Enough?	
Messalonskee Lake	Yes	• CBI • Surveys • Mapping • Benthic barriers • Harvesting	• Loon nests	• PPCP research
7LA	N/A	• CBI training • Survey training • Deploy invasive plant patrols	• Manages YCC • Nearly $1mil in projects since 1997	

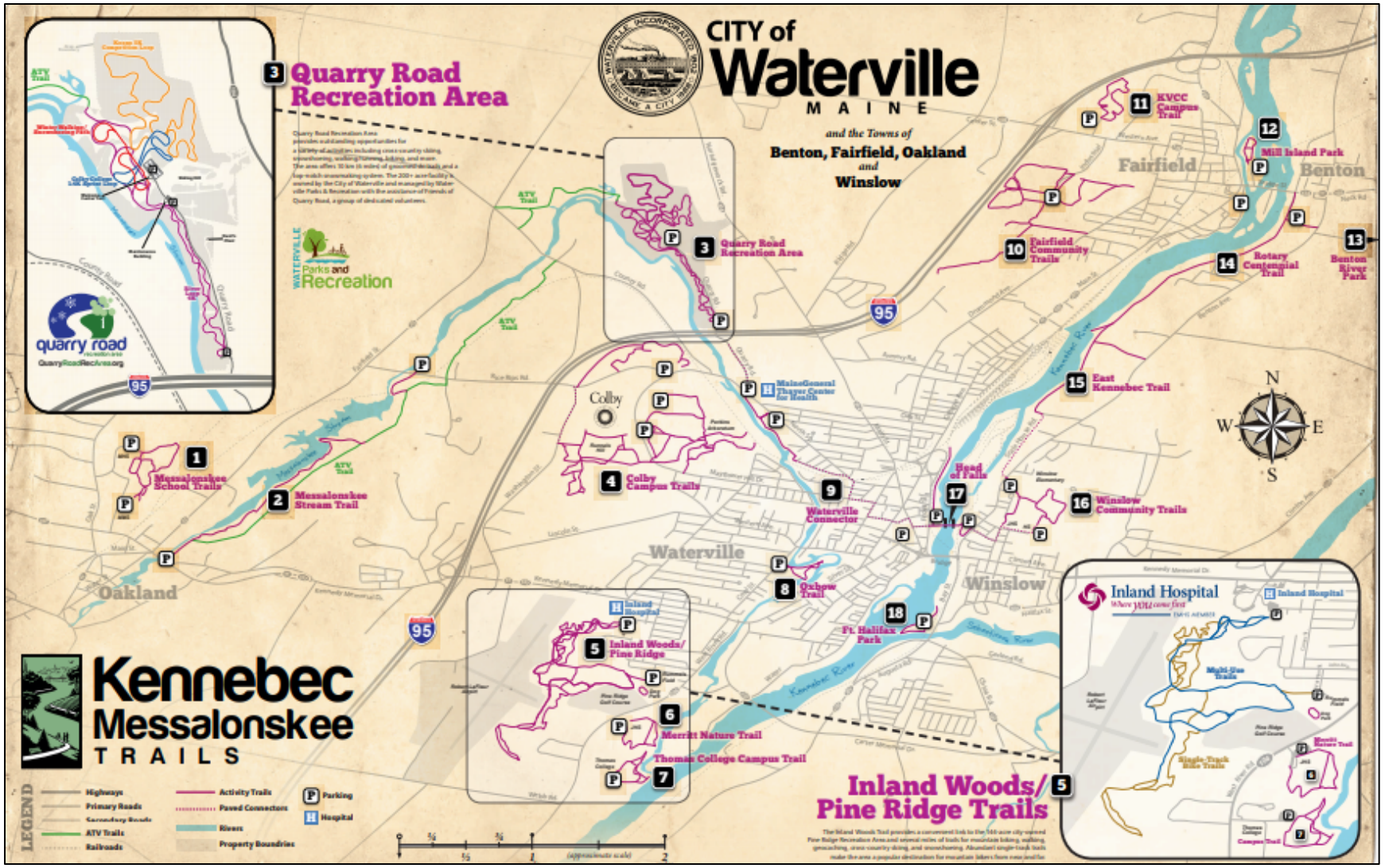
III. Natural Resources

3.1 High-Value Plants and Animals: Oakland, ME

FID	ELCODE	G RANK	S RANK	Source	Name	Status
0	IIODO71090	G3	S2	ETSC Animals	Scarlet Bluet	Species of Special Concern
3	ARAAD02020	G4	S4	ETSC Animals	Rare Animal	Species of Special Concern
4	ABNKC10010	G5	S4B,S4N	ETSC Animals	Bald Eagle	Species of Special Concern
1	PDARA09010	G3G4	S3	NAP Plants	Rare Plant	Endangered Species
2	PPDRY0A0F0	G4	S2	NAP Plants	Goldie's Wood Fern	Species of Special Concern

Source: Beginning with Habitat; IFW

3.2 Map of Kennebec Messalonskee Trails



IV. Agriculture + Forestry

4.1 Summary of Timber Harvest Information for Town of Oakland, 1991-2016

Year	Selection harvest, acres	Shelter-wood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	# Active Notifications	Total Harvest, acres	Change	Rate of Change
1991	377	0	0	377	0	9	377		
1992	578	0	0	578	0	10	578	201	53.3%
1993	180	0	0	180	8	9	180	-398	-68.9%
1994	490	0	0	490	0	10	490	310	172.2%
1995	258	51	0	309	5	11	309	-181	-36.9%
1996	770	25	9	804	0	12	804	495	160.2%
1997	456	30	0	486	0	17	486	-318	-39.6%
1998	627	8	22	657	62	22	657	171	35.2%
1999	553	25	0	578	0	29	578	-79	-12.0%
2000	251	25	0	276	0	27	276	-302	-52.2%
2001	500	20	0	520	25	20	520	244	88.4%
2002	118	0	0	118	34	16	118	-402	-77.3%
2003	141	40	0	181	11	13	181	63	53.4%
2004	53	0	0	53	6	8	53	-128	-70.7%
2005	61	3	0	64	34	10	64	11	20.8%
2006	121	0	0	121	7	12	121	57	89.1%
2007	27	15	0	42	31	13	42	-79	-65.3%
2008	46	8	0	54	0	7	54	12	28.6%
2009	0	60	0	60	0	4	60	6	11.1%
2010	182	0	0	182	0	9	182	122	203.3%
2011	130	20	0	150	4	11	150	-32	-17.6%
2012	138	54	26	218	9	10	218	68	45.3%
2013	32	101	0	133	0	7	133	-85	-39.0%

2014	319.5	175	0	494.5	0	15	494.5	361.5	271.8%
2015	441	0	0	441	0	11	441	-53.5	-10.8%
2016	279.6	15	0	294.6	4	13	294.6	-146.4	-33.2%
Total	7129.1	675	57	7861.1	240	335			
Avg	274	26	2	302	9	13			
Data compiled from Confidential Year End Landowner Reports to Maine Forest Service.									

Source: Department of Agriculture, Conservation and Forestry - Maine Forest Service

4.2 Parcels and Acres Enrolled in Current Use Taxation Program, 2008-2018

4.2.a. Tree Growth Program

Year	# of Parcels	Softwood acres	Mixed wood acres	Hardwood acres	TG Total acres	TG Total Value	Acres First Classified	# Parcels Withdrawn	Acres Withdrawn	Penalties Assessed
2007	45	364	1981	875	3220	$487,284	0	5	11	$10,767
2008	45	364	1980	874	3218	$492,001	0	0	2	$86
2009	44	397	1966	866	3229	$751,239	0	0	0	$291
2010	47	421	1941	896	3258	$760,909	0	4	22	$9,689
2011	46	403	1905	894	3202	$745,825	0	0	5	$5,410
2012	48	337	1577	1156	3070	$718,993	29	0	3	$773
2013	49	337	1574	1179	3090	$732,967	0	0	0	0
2014	49	330	1583	1192	3105	$743,016	0	0	0	0
2015	50	330	1583	1198	3112	$756,684	0	0	0	0
2016	50	330	1583	1198	3112	$1,001,389	0	0	0	0
2017	50	429	1426	1247	3102	$1,027,398	0	0	0	0
2018	50	287	1236	1389	2912	$953,369	0	0	0	0

Source: Town of Oakland Assessing Dept. and Maine Revenue Service

4.2.b. Open Space Program

Year	# of Parcels	Acres First Classified	Total Acres	Total Valuation	Parcels Withdrawn	Acres w.d.	Penalties Assessed
2007	1	0	49	$44,500	0	0	0
2008	2	1.2	50	$65,900	0	0	0
2009	2	0	50	$65,900	0	0	0
2010	2	0	50	$65,900	0	0	0
2011	2	0	50	$80,200	0	0	0
2012	2	0	50	$80,200	0	0	0
2013	2	0	50.39	$80,600	0	0	0
2014	2	0	50	$80,600	0	0	0
2015	2	0	50	$80,600	0	0	0
2016	2	0	50	$66,728	0	0	0
2017	2	0	50.39	$66,743	0	0	0
2018	3	4.08	54.47	$73,432	0	0	0

Source: Town of Oakland Assessing Dept. and Maine Revenue Service

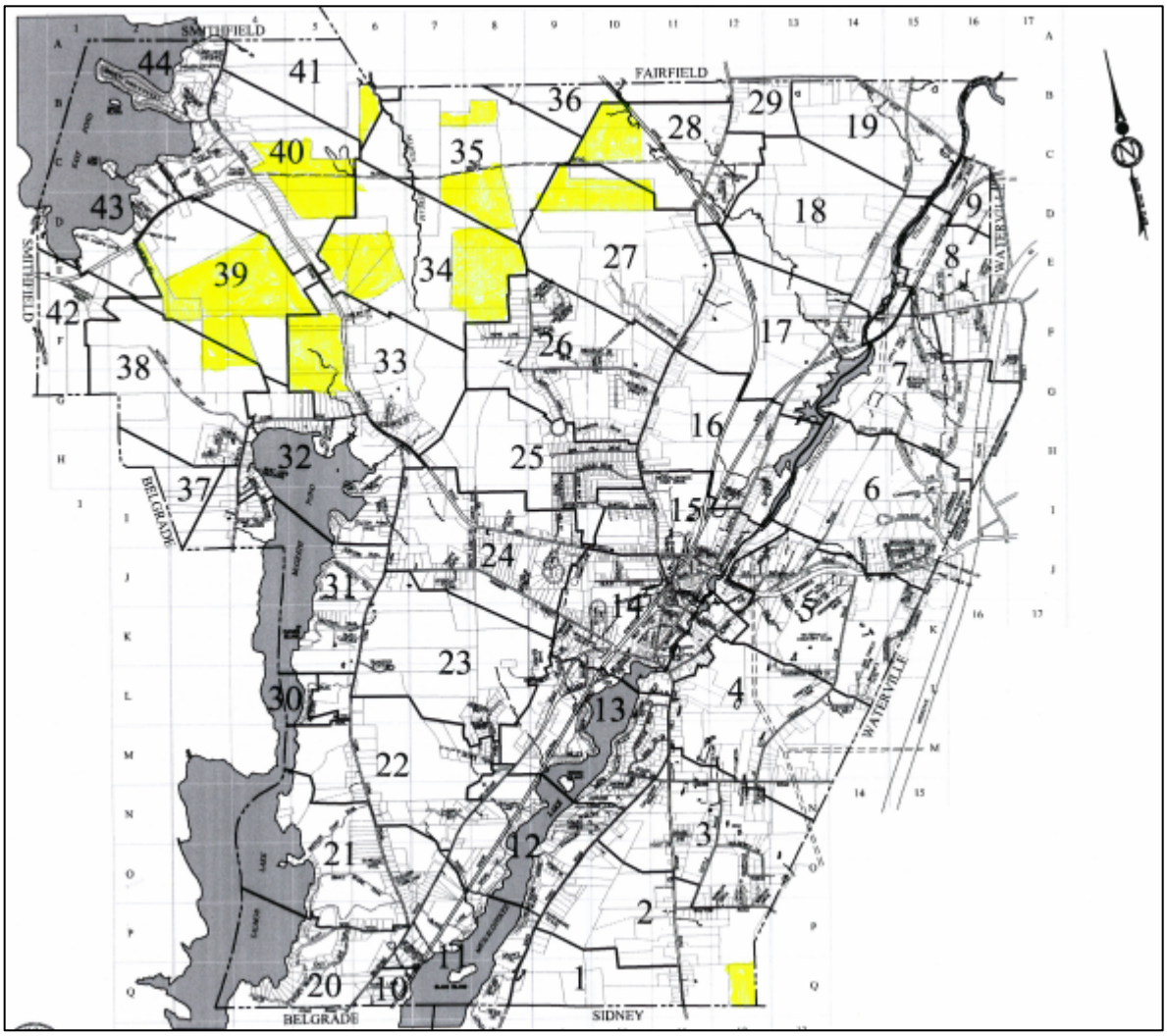
4.2.c. Farmland Program

Year	# of Parcels	Acres First Classified	Cropland Acres	Woodland Acres	Cropland Valuation	Woodland Valuation	Parcels Withdrawn	Acres Withdrawn	Penalties Assessed
2007	6	0	110	28	$37,500	$4,200	0	0	0
2008	6	0	110.7	28.4	$49,140	$4,260	0	0	0
2009	6	0	111	28	$49,140	$7,015	0	0	0
2010	6	0	111	28	$49,140	$7,043	0	0	0
2011	6	0	111	28	$49,140	$7,318	0	0	0
2012	3	0	28	6	$10,500	$1,032	3	107	$6,464
2013	3	0	26	6	$10,500	$1,044	0	0	0
2014	3	0	26	6	$10,500	$1,074	0	0	0
2015	3	0	26	6	$10,500	$1,100	0	0	0
2016	3	0	26	6	$10,500	$1,434	0	0	0
2017	3	0	26.25	6	$10,500	$1,536	0	0	0
2018	3	0	26.25	6	$10,500	$1,578	0	0	0

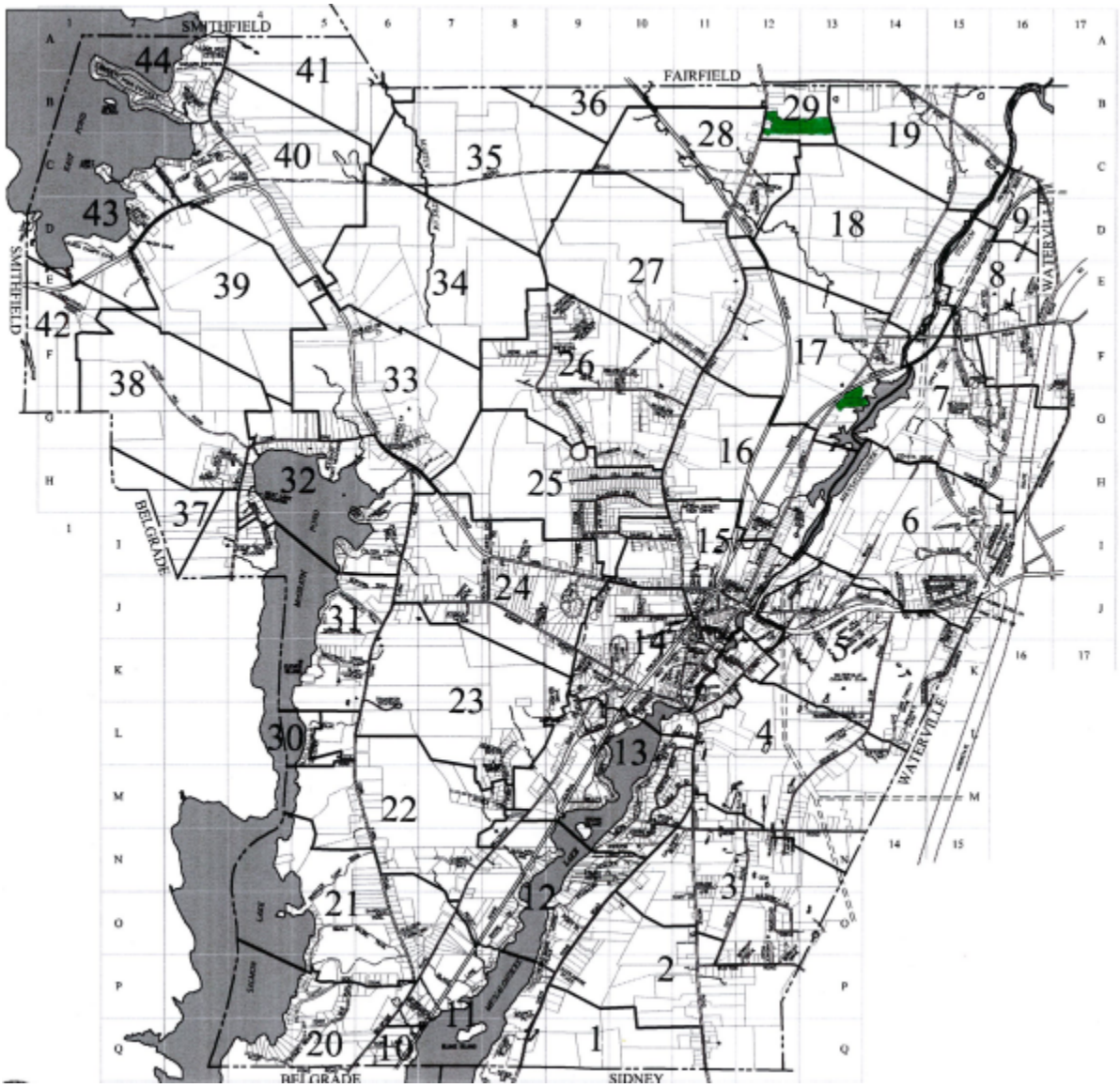
Source: Town of Oakland Assessing Dept. and Maine Revenue Service

4.3 Map of Oakland Parcels Enrolled in Current Use Programs

4.3.a. Tree Growth Program



4.3.b. Farmland Program



4.3.c. Open Space Program

V. Population + Demographics

Please note that data points are based on the 2010 decennial census; accuracy decreases as time passes. The 2020 decennial census will provide a much more accurate account of Oakland's population and demographics, and may require the amendment of Oakland's Comprehensive Plan.

Appendix 5.1 Population and Demographic Characteristics, 2019: Oakland, Kennebec County, Maine

	Oakland	Kennebec County	Maine
Population			
Population, 2014-2018 Estimate	6,309	122,302	1,334,212
Population, 2010 Decennial Census (April 1, 2010)	6,240	122,151	1,328,361
Population, percent change: 2010-2019	1.1%	0.1%	1.2%
Age and Sex			
Persons under 5 years, percent	5.7%	4.9%	4.7%
Persons under 18 years, percent	19.2%	19.1%	18.5%
Persons 65 years and over, percent	19.6%	20.6%	21.2%
Female persons, percent	45.8%	51.3%	51.0%
Median age (years) (2018)	46.8	44.3	44.6
Race and Hispanic Origin			
White alone, percent	97.8%	95.8%	94.4%
Black or African American alone, percent	0.0%	0.8%	1.7%
American Indian and Alaska Native alone, percent	0.0%	0.6%	0.7%
Asian alone, percent	0.8%	1.0%	1.3%
Native Hawaiian or other Pacific Islander alone, percent	0.0%	0.0%	0.0%
Two or more races, percent	1.4%	1.8%	1.8%
Hispanic or Latino, percent	0.0%	1.7%	1.8%
White alone, not Hispanic or Latino, percent	97.8%	94.4%	93.0%
Population Characteristics			
Veterans	560	10,304	107,091
Foreign born persons, percent	2.5%	2.4%	3.6%

Source: U.S. Census Bureau, V2019 data

Appendix 5.2 Rate of Change of Population, Oakland

Year	1970	1980	1990	2000	2010	2019	2029 (projected)
Population	3,535	5,162	5,595	5,959	6,240	6,309	6,191
Rate of Change	-	46.0%	8.4%	6.5%	4.7%	1.1%	-1.9%

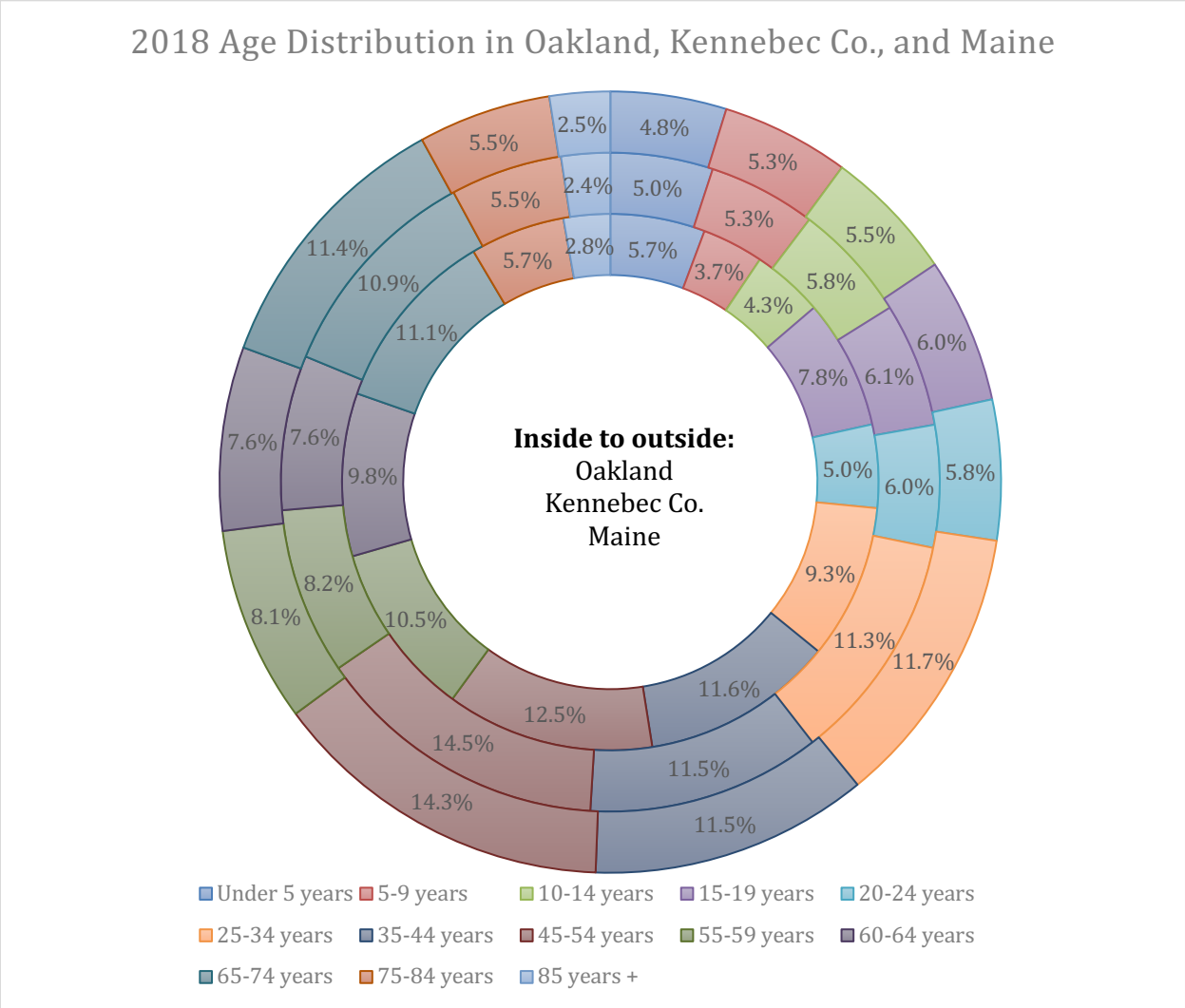
Source: Maine State Economist, Dept. Administrative and Financial Services

Appendix 5.3 Observed and Projected Population of Oakland, Kennebec County, Maine

	Observed		Projected			Total % Change
	2014	**2019**	**2024**	**2029**	**2034**	**2014-2034**
Oakland	6,212	6,309	6,217	6,191	6,133	-1.27%
Kennebec Co.	121,026	122,302	119,557	118,339	116,526	-3.72%
Maine	1,330,256	1,344,212	1,330,903	1,322,023	1,305,910	-1.80%

Source: Maine State Economist, Dept. Administrative and Financial Services, 2014 and U.S. Census Bureau, 2019

Appendix 5.4 Age Distribution, 2018: Oakland, Kennebec County, Maine



Source: American Community Survey, 2014-2018

Appendix 5.6 Marital Status, 2018: Oakland, Kennebec Co., Maine

	Oakland		Kennebec Co.		Maine	
	#	%	#	%	#	%
Males, 15 years and older	2,803		49,243		545,597	
Never married	861	30.7	15,262	31.0	169,473	31.1
Now married, except separated	1,507	53.8	24,581	49.9	285,622	52.4
Separated	12	0.4	304	0.6	4,533	0.8
Widowed	142	5.1	1,616	3.3	16,127	3.0
Divorced	281	10.0	7,480	15.2	69,842	12.8
Females, 15 years and older	2,601		52,854		579,400	
Never married	420	16.1	13,180	24.9	145,182	25.1
Now married, except separated	1,566	60.2	25,220	47.7	286,671	49.5
Separated	13	0.5	510	1.0	6,562	1.1
Widowed	221	8.5	4,724	8.9	54,357	9.4
Divorced	381	14.6	9,220	17.4	86,628	15.0

Source: 2014-2018 American Community Survey

Appendix 5.7 Educational Attainment, 2018: Oakland, Kennebec Co., and Maine

	Oakland		Kennebec Co.		Maine	
	#	%	#	%	#	%
Population 25 years and older	4,599		87,317		967,897	
Less than 9th grade	99	2.2	3,020	3.5	26,431	2.7
9th to 12th grade, no diploma	193	4.2	4,200	4.8	47,995	5.0
High school graduate/ equivalency	1,456	31.7	28,737	32.9	308,013	31.8
Some college, no degree	1,242	27.0	18,439	21.2	189,609	19.6
Associate's degree	440	9.6	9,245	10.6	96,570	10.0
Bachelor's degree	737	16.0	14,553	16.7	190,172	19.6
Graduate degree	432	9.4	9,069	10.4	109,107	11.3
Percent high school graduate or higher		93.7		91.7		92.3
Percent bachelor's degree or higher		25.4		27.1		30.9

Source: 2014-2018 American Community Survey

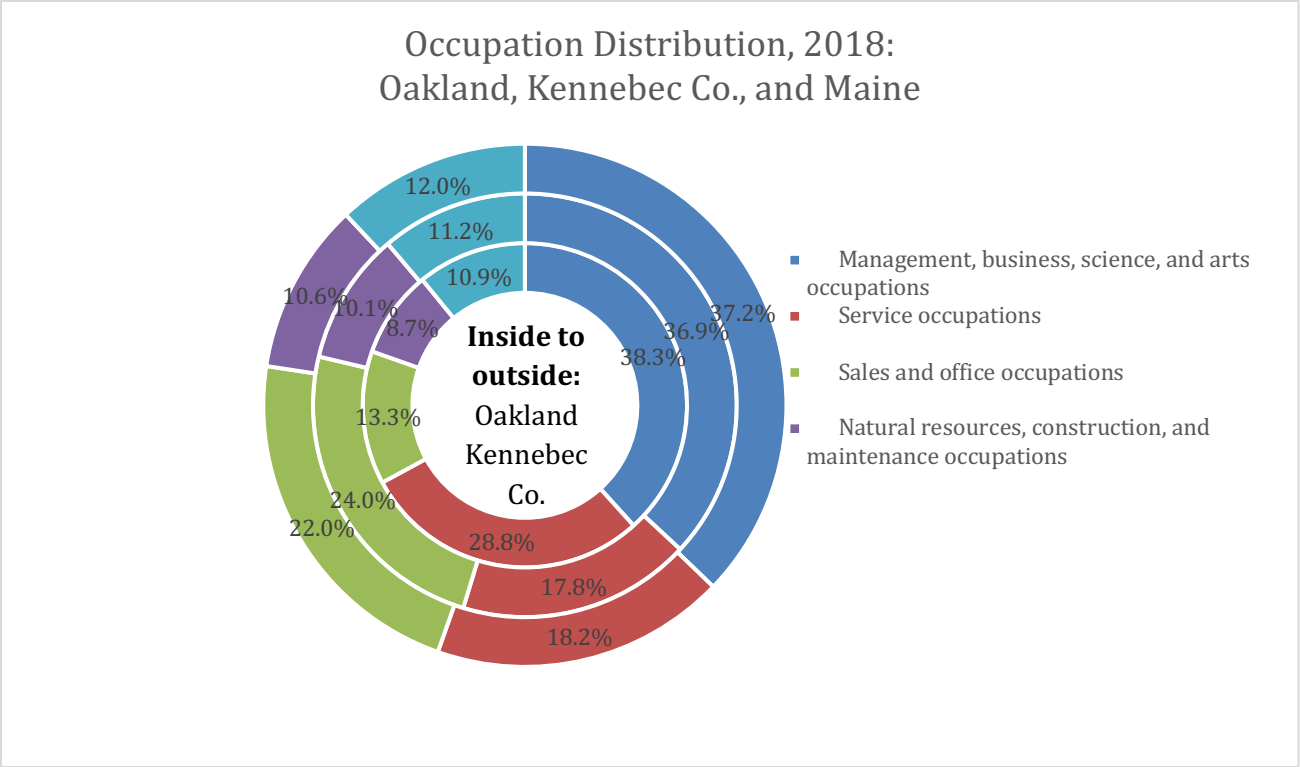
VI. Economy

Appendix 6.1 Employment Status in 2018: Oakland, Kennebec County, Maine

	Oakland		Kennebec Co.		Maine	
	#	%	#	%	#	%
Population 16 years and older	5,337		100,587		1,109,357	
In labor force	3,429	64.2	62,038	61.7	699,180	63.0
Civilian labor force	3,429	64.2	61,956	61.6	697,391	62.9
Employed	3,184	59.7	58,919	58.6	665,188	60.0
Unemployed	245	4.6	3,037	3.0	32,203	2.9
Armed Forces	0	0.0	82	0.1	1,789	0.2
Not in labor force	1,908	35.8	38,549	38.3	410,177	37.0

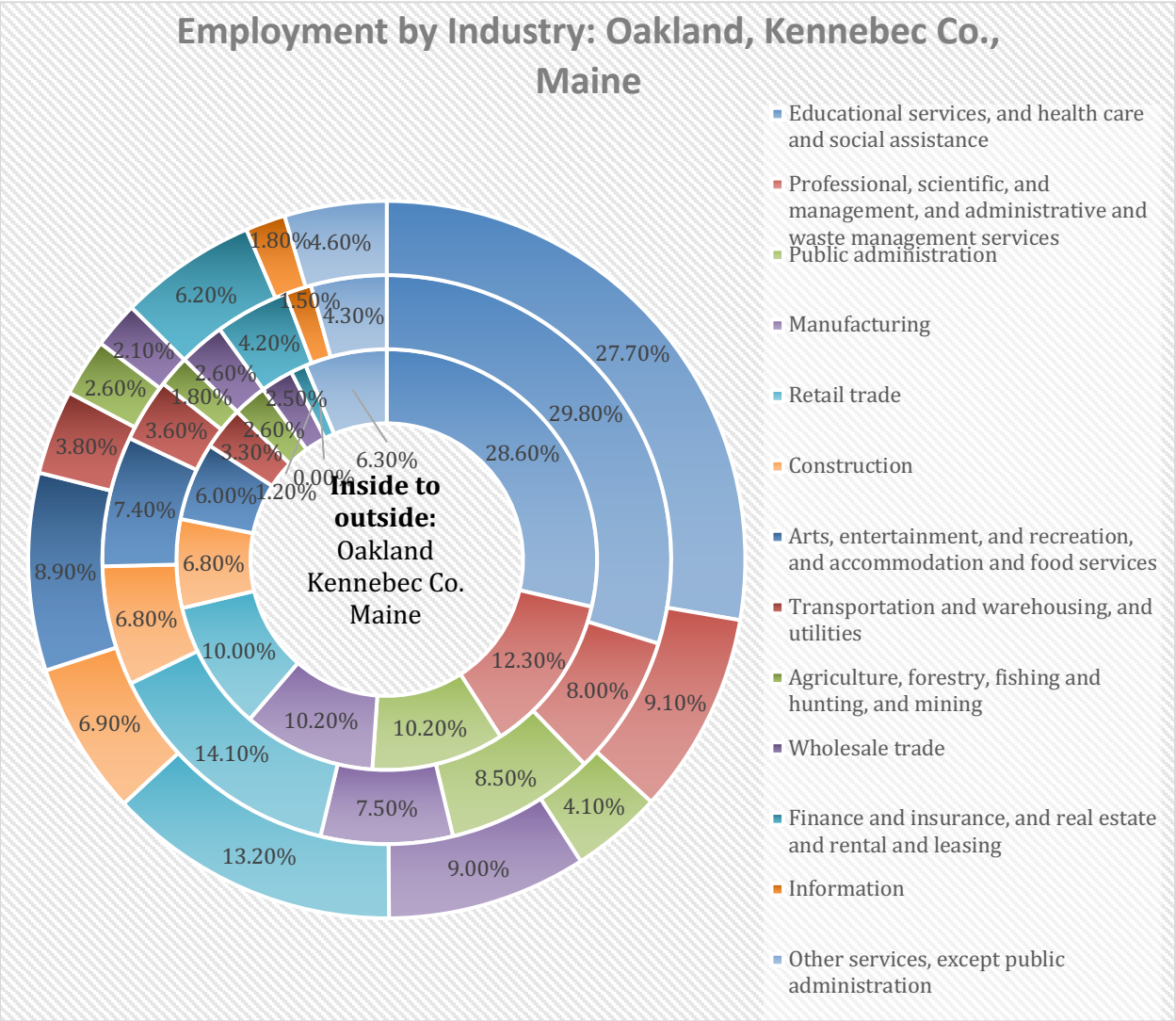
Source: American Community Survey, 2014-2018

Appendix 6.2 Occupation Distribution, 2018: Oakland, Kennebec County, Maine



Source: American Community Survey 2014-2018

Appendix 6.3 Employment by Industry, 2018: Oakland, Kennebec County, Maine



Source: American Community Survey 2014-2018

Appendix 6.4 Household Income in Inflation-adjusted Dollars, 2018: Oakland, Kennebec County, Maine

	Oakland		Kennebec Co.		Maine	
	#	%	#	%	#	%
Total Households	2,587		51,542		556,955	
Less than $10,000	77	3.0	3,261	6.3	33,789	6.1
$10,000-$14,999	145	5.6	2,611	5.1	30,791	5.5
$15,000-$24,999	425	16.4	5,719	11.1	57,009	10.2
$25,000-$34,999	341	13.2	5,906	11.5	55,565	10.0
$35,000-$49,999	218	8.4	7,152	13.9	74,724	13.4
$50,000-$74,999	396	15.3	9,650	18.7	105,575	19.0
$75,000-$99,999	381	14.7	7,087	13.7	74,153	13.3
$100,000-$149,999	374	14.5	6,560	12.7	76,835	13.8
$150,000-$199,999	144	5.6	2,030	3.9	25,562	4.6
$200,000 or more	86	3.3	1,566	3.0	22,952	4.1
Median household income	$54,568		$52,929		$55,425	
Mean household income	$72,569		$67,582		$73,210	
Percentage of families living below federal poverty line		8.7		8.6		7.9

Source: 2014-2018 American Community Survey

Appendix 6.5 Description of Economic Development Principles

Cultivate a Robust Workforce

Growing Oakland's (and the region's) workforce will be critically important to the town's evolution, however this challenge is not unique to just Oakland. Maine's largest economic challenge – Maine's labor economics – must be tackled via multiple strategies, including enhancing the development of pre apprenticeship and apprenticeship programs, partnering with academic institutions, recruitment of "New Mainers" and/or "Boomerangs[15]," focusing on placemaking strategies to growth quality of life, enhancing desirable entrepreneur training, deploying skill building, and creating robust regional workforce and entrepreneurial networks. Likewise, entrepreneurs, young and old, drive innovation in the development and production of goods and services. To continue to develop and attract a well-educated workforce, and compete on a global scale, the region must support entrepreneurship and encourage innovation at all levels of the economy.

Catalyze the Emergence and Growth of Technology and Innovation Businesses

Oakland and Mid-Maine have a real opportunity to become one of the State's major players in healthcare, information technology (IT), agriculture, education, and innovation. Existing clusters of businesses in health and IT can serve to anchor tangible growth, given the right approach.

Utilize Existing Land, Space and Infrastructure

Given the existing infrastructure of Oakland and the region, and the general build-out of the regional communities, and the amount of character and vibrancy derived from the compact nature of the regional serve center's urban core and surrounding communities, a strategy of "in-fill" development – future development on sites previously developed or located within existing development areas with infrastructure – will be most appropriate.

Think Regionally (& Globally), Act Locally

Local municipalities must always consider that they are one component of a large and dynamic economy that stretches across both the Mid-Maine region and throughout the State of Maine. Successful economic development will be grounded in the Town's role and location within the region, instead of resting solely on local needs and opportunities.

Leverage the Region's Quality of Life + Place Based Economics

The State of Maine is, in general, renowned for its scenic beauty, outdoor amenities and quality of life. The Mid-Maine region has its own special attractions within that umbrella and context of Maine's rich and pristine brand history. Focusing and creating a desirable, scenic, and unique sense of place has several economic multipliers that contribute to attracting a talented workforce and businesses.

[15] Individuals originally from Maine that have moved out of state, but move back into Maine for family, quality life, and/or professional opportunities, etc. "Boomerangs" are considered a strategically important and significant workforce recruitment opportunity.

VII. Housing

7.1 Summary Housing Profile

		1970	1980	1990	2000	2010	2018
Total Housing Units		1,537	2,235	2,472	2,847	3,024	3,162
Year-round Occupied Units		1,091	1,783	2,089	2,352	2,543	
% Owner-occupied		n/a	78.8%	78.0%	77.2%	75.9%	84%
Persons per Household		3.24	2.9	2.7	2.53	2.45	
Seasonal Units	#	n/a	339	313	317	343	
	%	n/a	15.2%	12.7%	11.1%	11.4%	
Manufactured Homes	#	n/a	250	450	453	366	
	%	n/a	11.2%	18.2%	15.9%	12.1%	
Median Home Value		n/a	$37,700	$73,500	$85,500	$143,500	$150,100
Local Property Tax on Median Home		n/a	574	838	1,529	1,751	
Decennial Inflation-adjusted change		n/a	n/a	-13%	50%	-14%	

Source: U.S. Census Bureau, 2010, supplemented with American Community Survey 2014-2018

7.2 Change in Total Number of Housing Units, 1980-2018

	Total Number of Units					Net Increase 1980-2018	
	1980	**1990**	**2000**	**2010**	**2018**	**#**	**%**
Oakland	2,235	2,472	2,847	3,024	3,162	948	41.4%
Kennebec County	45,478	51,648	56,346	60,972	62,464	16,747	37.3%
Maine	501,093	587,045	651,901	721,830	739,077	234,618	47.4%

Source: U.S. Census Bureau, 2010 Census and American Community Survey 2014-2018

7.3 Housing Units by Type, 2017

	Oakland			Kennebec County			Maine		
	2013-2017	% of Total Units	% Change 2008-2017	2013-2017	% of Total Units	% Change 2008-2017	2013-2017	% of Total Units	% Change 2008-2017
Total Units	3,183	100%	11.6%	62,225	100%	2.1%	735,711	100%	2.0%
Single Family Units	2,318	72.8%	9.5%	42,180	67.8%	3.0%	517,613	70.4%	3.3%
Owner Occ.	1,673		0.0%	30,302		-1.5%	336,470		0.9%
Renter Occ.	139		-29.8%	3,429		14.4%	38,624		5.4%
Multi-family Units	294	9.2%	-20.8%	14,106	22.7%	1.1%	156,163	21.2%	0.2%
Owner Occ.	75		167.9%	1,651		-11.7%	23,886		0.3%
Renter Occ.	172		-49.9%	10,466		0.5%	105,166		-0.9%
Mobile Home & Other	571	17.9%	56.0%	5,939	9.5%	-1.8%	61,935	8.4%	-3.9%

Source: Maine State Housing Authority, 2017

7.4: Housing Occupancy Characteristics, 2010: Oakland, Kennebec County, Maine

	Oakland		Kennebec Co.		Maine	
	#	%	#	%	#	%
Total Housing Units	3,024	100%	60,972	100%	721,830	100%
Occupied Housing Units	2,543	84.1%	51,128	83.9%	557,219	77.2%
Vacant Housing Units	481	15.9%	9,844	16.1%	164,611	22.8%
For Rent	48	1.6%	1,382	2.3%	15,738	2.2%
Rented, not Occupied	2	0.1%	64	0.1%	1,021	0.1%
For Sale Only	25	0.8%	724	1.2%	9,711	1.3%
Sold, not Occupied	13	0.4%	140	0.2%	2,089	0.3%
For seasonal, recreational, or occasional use	343	11.3%	6,188	10.1%	118,310	16.4%
All other vacants	50	1.7%	1,346	2.2%	17,742	2.5%
Homeowner Vacancy Rate	1.3%		1.9%		2.4%	
Rental Vacancy Rate	7.3%		8.6%		8.9%	

Source: U.S. Census Bureau, 2010

7.4.a. 2018 Updates to Housing Occupancy Characteristics

	Oakland		Kennebec County		Maine	
	#	%	#	%	#	%
Total Units	3,162		62,464		739,077	
Occupied Units	2,587	82% total	51,542	82% total	556,955	75% total
Owner Occupied	2,173	84% occ.	36,443	71% occ.	402,119	72% occ.
Renter Occupied	414	16% occ.	15,099	29% occ.	154,836	28% occ.
Vacant Units	575	18% total	10,922	18% total	182,122	25% total
Homeowner Vacancy Rate		1.7		1.7		1.8
Rental Vacancy Rate		18.7		5.8		6.5

Source: American Community Survey, 2014-2018

7.5: Home Affordability Index, 2019: Oakland, Kennebec County, Maine

	Year	Index	Median Home Price	Median Income	Income Needed to Afford Median Home Price	Home Price Affordable to Median Income
Oakland	2019	1.02	$191,000	$57,225	$56,372	$193,889
Kennebec	2019	1.12	$169,000	$55,895	$49,992	$188,958
Maine	2019	0.90	$225,000	$59,575	$66,044	$202,959

Source: Maine State Housing Authority, 2019

7.6: Rental Affordability Index, 2017-2020: Oakland, Kennebec County, Maine

	Year	Index	Avg. 2 BR Rent (with utilities)	Renter Household Median Income	Income Needed to Afford Avg. 2 BR Rent	2 BR Rent Affordable to Median Income
Oakland	2017	0.93	$858.00	$31,757	$34,306	$794.00
Kennebec Co.	2017	1.12	$149,900	$48,750	$43,557	$167,772
	2020	0.80	$986.00	$31,533	$39,423	$788
Maine	2017	0.93	$197,000	$53,190	$57,089	$183,546
	2020	0.83	$1,062	$35,098	$42,489	$877

Source: Maine State Housing Authority, 2020

7.7: List of Affordable Housing Options in Oakland

Property	Address	Programs	Apartments	Capacity
Cascade Apartments	Heath Road	•Low-Incoming Housing Tax Credit •Accepts Section 8 Housing Choice Vouchers	1BR 2BR 3BR	26 units
Hillside Acres	19 Hill Street	•Section 515 Rural Rental Housing •Accepts Section 8 Housing Choice Vouchers	1BR 2 BR	24 units

VIII. Parks and Recreation

8.1. Description of Oakland's Recreational Facilities

Oakland enjoys a multitude of municipal and private recreational facilities and programs. To coordinate all recreational programming, the Town employs a full-time, year-round Recreational Department. The department coordinates closely with many existing groups and associations in the community to deliver quality programming for a variety of audiences.

A. Municipal Facilities

1. Municipal Playground

In the mid-1980s, the municipal playground was constructed on an 8,100 sq. ft. lot on the west side of Fairfield Street. The site has one half-size basketball court in good condition and an old metal swing set. The Town sexton is responsible for maintenance of the site. This playground is used minimally by local neighborhoods.

2. Municipal Basketball Court

The municipal basketball court is located on Belgrade Avenue Extension on a 2.66-acre lot across the street from the Lakeview Cemetery, the Messalonskee Lake boat launch, and the municipal picnic area. It is a regulation-size court in fair condition, and does not have night lights. The Town sexton is responsible for maintenance of the facility. The court is not used by the Town for recreation programs and appears to receive minimal use.

3. Municipal Tennis Courts

The municipal tennis courts are located on land leased from RSU 18. Two courts are in need of semi-annual resurfacing. Summer months see steady usage.

4. Pleasant Point Park

Pleasant Point Park is a 30-acre park located on some of the finest waterfront on McGrath Pond, at the northern end of the water body. This park is complete with grills, tables, walking trails, a ballfield, and a beautiful swim area. The park is highly used during the summer months by families and individuals. The facility contains 56 parking spaces and one bathroom.

5. Oakland Waterfront Park

The one-acre Oakland Waterfront Park on Messalonskee Lake, accessed by Belgrade Avenue, was constructed in 1985 and is in good condition. The site is used for launching boats by townspeople and area residents, including at least two local marinas that launch boats for testing. There is a public swim area adjacent to the launch that is used heavily during the summer months. Congestion is a problem on hot summer days. The Town sexton is responsible for maintenance of the Oakland Waterfront Park. The facility provides 32 parking spaces, including nine for boat trailers, and two bathrooms.

6. Oakland Waterfront Park Gazebo

Built in 2017, the Waterfront Park Gazebo is a new addition to the Oakland Waterfront Park and its construction cost of $42,000 was funded entirely by private and corporate donations. The Gazebo hosts special functions such as weddings, reunions, public events, outdoor classes for the school system, and a summer music series, among other festivities.

7. Messalonskee Stream Trail

The Messalonskee Stream Trail is a two-mile trail that was created in 2007 along the Messalonskee Stream in Oakland between Kennedy Memorial Drive and the Rice Rips Road. This is a high-use area and draws hikers from all over Central Maine. The trail is accessed by the Oakland Town Office.

8. Memorial Hall

Memorial Hall is used for various public programs and functions, including private dance lessons through a local dance studio.

9. Library

The Oakland Public Library is located at 18 Church Street and serves Oakland, Belgrade, Rome, and Sidney. The Library is publicly operated with a 2018/2019 budget of just under $135,000 in funding. At present, the staff includes a full-time Head Librarian, part-time Assistant Librarian, a part-time Aide, and two part-time substitutes.

In 2003, an addition to the Library, which is over 100 years old, doubled the facility's size by adding three floors. While the original building had the capacity to house 4,000 volumes, by 1996 the building had over 16,000 books. As well, the Library has improved its back and front walkways with pavers, replaced its front stairs with granite, and provided handicap accessible parking and elevator.

The Library offers a Children's pre-school Story-time, Lego Club, and Summer Reading programs for children of all ages. Adult programs of interest include a monthly Book Club, author visits, weekly "Writers Critique" groups, and genealogy.

Additional services include the Interlibrary Loan, home delivery, access to e-books and audiobooks, wireless internet, use of 11 computers, and a color photocopier - all of these offerings are free with an Oakland Library card.

B. School Facilities

1. Messalonskee High School

Messalonskee High School has a variety of facilities used by both the school and a number of local athletic leagues. The high school gym is used by the P.A.L. Saturday Morning Program for grades three through six, by the fifth and sixth grade travel P.A.L. basketball team for practice and games, and by the summer recreational basketball program for grades three through nine.

The Messalonskee High School baseball field is used by the American Legion team for practices and games, the high school softball field is used by the A.S.A Softball program for practices and games, and the field hockey field is used by the Stix Field Hockey Program for some practice and games.

The high school also has public cross-country running trails used by the cross-country team and a lighted football field.

2. Messalonskee Middle School

The outdoor athletic facilities at the middle school consist of a number of fields, several of which provide multiple use. The softball field, which contains one backstop, is used by community leagues; the full-size soccer field serves both boys and girls soccer teams; and the football field is used by the middle school team on weekday afternoons and by the youth community football league during evenings and weekends.

Indoor facilities include a full-size basketball court with bleachers, which is used daily by four school basketball teams from November to mid-February. In addition, an intramural program runs three days per week in March and April. Basketball, floor hockey, volleyball, and indoor soccer are offered inside the facility. Adult education, civic groups, elementary basketball programs, and individuals also use the facility at various times.

3. Atwood/Tapley Elementary School

The fields and gym of the elementary school are used by various youth and adult programs.

4. Summer Recreation

The Oakland Summer Recreation Program serves approximately 250 children, primarily using school facilities. Current staffing includes a full-time director and several part-time summer employees. Along with daily camp activities, the children are provided with field trips and swimming lessons. Weekly sport clinics coincide with the day camp and increase program hours to benefit parents as well as children.

5. Youth Soccer Program

This is a fall soccer program for children in grades k-6. Participation includes youth residing in Oakland, Belgrade, and Sidney.

F. Senior Citizens' Program

Activities are planned twice a month for interested area seniors. These activities include trips, bingo, guest speakers and luncheons.

G. Private Recreational Facilities

The list of privately owned and operated cultural and recreational facilities in Oakland ranges from recreational and social organizations to a guest home and lakefront cabins.

1. Waterville Country Club

The Waterville Country Club, located on Country Club Road, includes an 18-hole golf course open to use by members and guests. The golf course is also used informally for cross-country skiing by area residents.

2. Oakland Snowgoers

The Oakland Snowgoers is a private snowmobile club that owns (with State funds) trail maintenance equipment which is used to groom area snowmobile trails. The club has about 40 members who pay a $10 annual membership fee. The club maintains several trails in the Town, and reports adequate trail conditions. The club has no formal agreements with landowners for trail access.

3. Recreational Rental Camps and Summer Camps

There are two privately owned seasonal cottage rental facilities: Alden Camps on East Pond (eighteen cottages), and Wheeler's Housekeeping Camps on Salmon Lake (six cottages).

Camp Tracy, a seasonal day camp owned and operated by the Waterville YMCA for area children (first through ninth grades), occupies a 68-acre parcel on McGrath Pond. Camp Tracy serves Oakland and surrounding communities and has an extensive swimming program at the Pond. It provides scholarships for some Oakland children.

Other private summer overnight camps for young people include Camp Manitou and Camp Matoaka on East Pond.

IX. Transportation

9.1 Components of Oakland's Road Network

State Highways

Although I-95 runs through a portion of Oakland, it is not accessible within the town. There are two interchanges that influence traffic flows: The Kennedy Memorial Drive (KMD) interchange, just yards from the town line in Waterville, and the Trafton Road interchange, approximately 1.5 miles from town, also in Waterville.

Route 11/137, better known as KMD, is a state highway and the arterial road carrying the greatest volume of traffic into Oakland. It extends approximately 1.6 miles from the town line bordering Waterville to downtown Oakland. An average of 12,500 to 16,000 vehicles travel the road every day. In most places, the road is four lanes, although it has recently been narrowed to three lanes with a center-left-turn over one segment. The speed limit is 35 mph at either end, with a segment at 45 mph in the middle.

KMD is the most heavily developed road in town from a commercial perspective, and one which continues to draw new development. There are already some intersections and driveway entrances with crash histories, and increased congestion from new development could aggravate these problem areas.

Maine's Department of Transportation (MDOT) tracks the status of all state roads with regard to road condition, serviceability, and safety factors and assigns letter grades A-F. KMD ranks highly in all these categories, except for the section at the bottom that crosses Messalonskee Stream, where the bridge condition slightly decreases the score (see "Bridges").

Additional State Highways in Oakland include the Water Street portion of Route 23 and the Belgrade Road portion of Route 11, which technically form one state road through the town. Water Street borders the eastern edge of Oakland's downtown area for 0.63 miles, carrying an annual average traffic load of about 2,800 vehicles per day. Almost all of the frontage is built up, mostly residential except for the post office, a healthcare office, and a few smaller businesses. The speed limit is 25.

MDOT's ratings for Water Street are good, except for the safety rating, which is a "C" due to a crash history. In 2018, MDOT scheduled a repavement project for Water Street and as far south as Middle Road along Snow Pond Road.

Belgrade Road extends from downtown south between Messalonskee and Salmon Lakes, providing access for plenty of camps and homes. Its total distance in Oakland is 3.25 miles. It carries an average of 5,116 vehicles per day at the downtown end, but traffic tails off to the south. MDOT grades road condition and service factors as an "A" and safety as a "B".

State Aid Roads

Route 23 north of town (Fairfield Road) and south of town (Snow Pond Road), Route 11 in town (Church Street), Route 137 west of KMD, Pleasant Street, Middle Road, Trafton Road, and Webb Road.

Fairfield Road (Route 23) runs north out of the downtown for roughly 3.4 miles to the town line. Within the downtown, it serves the fire and police stations and town office. Residential development within the village area is dense, but it thins out considerably as you go north. Commercial development is small and scattered. The road carries about 3,600 vehicles per day at its southern end. Within the village area, the speed limit is reduced from 45 to 35 mph.

Fairfield Road gets an "A" rating for road condition and "B" rating for safety, but a "C" for service, as it is posted for heavy loads for a portion of the roadway.

Snow Pond Road (Route 23) extends south of the downtown for 2.5 miles (including the Libby Hill Road segment) to the Sidney town line. It provides camp access to Messalonskee Lake and residential property. It carries an average of 1,630 vehicles a day, augmented in the summer and reduced in winter. MDOT ranks it very highly on the condition, safety, and service scales.

From the major downtown signal, Route 137 technically turns west onto Main Street, then north on Oak Street, before turning west again onto High Street. Main Street is the original commercial strip of the downtown area, and currently carries about 5,550 vehicles per day. With the speed limit at 25, traffic generally moves more slowly because of the number of commercial access points and on-street parking.

MDOT rates the roadway condition as an "F" due to weakness in the base ("roadway strength") and rates the safety factor a "B" with some concern over its crash history. There are a large number of crosswalks concentrated in the area which, combined with traffic trying to enter, exit, and park, is a formula for conflict.

Church Street (Route 11) links Main Street with Belgrade Road and Snow Pond Road. To the casual driver, it is just an extension of Main Street. There is some commercial use along the road, but it is primarily known as a row of historic homes and civic institutions. The total length of Church Street is 0.45 miles. Traffic averages 5,286 vehicles a day, slightly below that of Main Street. The segment does have a crash history concern, but the MDOT's primary concern is the pavement quality, giving it a "D" grade for condition.

Oak Street links Main Street with High Street. Its length is only 0.2 miles and the speed limit is 25 mph. There is some commercial development along the segment and it provides an important link, carrying an average of 4,890 vehicles per day. MDOT gives Oak Street an "A" in all safety, service, and condition ratings. However, a project proposed for 2019 or 2020 would make intersection improvements at Heath Street to better protect pedestrians.

West of Oak Street, High Street rises out of the downtown area and runs towards Smithfield, becoming Smithfield Road at the edge of the built-up area. At the High Street end, traffic volume is close to 4,900 vehicles per day, but by the time the road crosses over into Smithfield, it is carrying less than 2,500. Total length in Oakland is about 5.5 miles. It is primarily residential,

with some small businesses and institutional uses. It does provide a vital access route from western Oakland, Smithfield, and Rome into Waterville and I-95. MDOT ranks all of the road factors as very good ("A").

Pleasant Street, despite being one of the busiest roads in town, does not have a state route number. DOT does classify it as a major collector, the same as most of the numbered routes. Traffic on Pleasant Street averages 7,510 vehicles per day, making it the second most-travelled road in town behind KMD. However, much of the traffic may be concentrated during specific times of day, e.g. before and after school hours, because the cluster of RSU 18 schools is the dominant land use of just under 0.4 miles of this street. The main line of the Pan Am rail also bisects this road. According to DOT data, the speed limit on this road is 45 mph, but the actual posted limit is 25mph, or 15mph during school hours. DOT gives this road a score of "B", with concerns about rutting, pavement quality, and congestion, especially in the vicinity of the schools.

The remaining roads of state responsibility are clustered in the southeast corner of town, consisting of Middle Road, Webb Road, and Trafton Road. Middle Road runs north-south for about 1.5 miles from Snow Pond Road to the Sidney town line. There is quite a bit of residential development along the road, including into Sidney, leading to an average traffic count of 2,630 per day. Middle Road connects to Webb Road and Trafton Road, making it the access to the new I-95 Trafton Road interchange. Middle Road has some road condition issues, leading MDOT to give it a "C" ranking and post it for weight limits seasonally.

Webb Road connects the Middle Road with West River Road in Waterville, with about one mile of the Webb Road in Oakland. The Oakland portion of it is fairly well built-up with residential development and subdivisions. The road carries 2,700 vehicles per day. It has a seasonal weight limit posting, but is in otherwise good condition.

Trafton Road also connects Middle Road with West River Road, parallel to and 0.8 miles south of Webb Road. More importantly, it provides access to the newly-built I-95 interchange, located 1.5 miles along the road. As a very rural road, it was recorded in 2011 as only carrying 330 vehicles per day, but that number is likely to increase dramatically. The road was so inconsequential from lack of traffic that DOT has not bothered to rate it, but that could change soon. The road is planned for a rehabilitation project in the MDOT work plan for 2019 or 2020.

Town Ways

The Town of Oakland maintains about 34 miles of paved road., and it maintains 0.5 miles of the gravel Thomasville road, which is a public road. Road maintenance performed by the Town ranges from a total rebuild to ditching that improves water management and managing vegetation growth to paving as needed.

Private Ways

Due to Oakland having four lakes located within the town boundaries, there are many miles of private camp roads. The town does not maintain any private roads. Private road maintenance is the responsibility of the camp owner's road association. As most camp roads are gravel, the Oakland Fire Department owns a small 4-wheel-drive fire truck and a 4-wheel-drive rescue

truck. All fire vehicles are equipped with the tools necessary to remove downed trees that may prevent access to fire or rescue calls located on the camp roads. All Oakland Police vehicles are also 4-wheel-drive.

9.2 Bridge Inventory

The Railroad Crossing Bridge, where Route 11 passes over the railroad tracks. This bridge is 173 feet long, constructed of steel girders in 1937. All aspects of the bridge have been rated Good, and it has a sufficiency rating of 72 out of 100.

The South Bridge carries Route 23 over Messalonskee Stream. This bridge is 89 feet long, constructed of steel girders in 1997. The bridge elements are all rated Very Good, and it has a sufficiency score of 83.

The Rices Rips Bridge carries Rices Rips Road over Messalonskee Stream. This 102-foot bridge was built of steel girder in 1962. The bridge itself is rated as Good or Satisfactory, but the channel condition is Poor, which indicates some erosion and undercutting of the footings. However, the overall sufficiency rating is 75.

The Marston Bridge carries County Road over Messalonskee Stream. This 67-foot bridge was constructed of steel girders in 1932. It is generally rated Good, though the substructure is just Satisfactory. The sufficiency rating is 57.

The Dunn Edge Bridge carries Route 11/137 (KMD) over Messalonskee Stream. This is a two-span steel girder bridge is 122 feet long and was built in 1963. The bridge elements are rated Good; the approach is Very Good, and the substructure is Satisfactory, earning an overall sufficiency rating of 75.

The Penstock Bridge carries Rices Rips Roads over the old aquaduct pipe east of Messalonskee Stream. The steel-arch bridge is only 17 feet long and is on a town road, so it is the Town's maintenance responsibility. The bridge, installed in 1961, has a sufficiency rating of 99.

The underpass carries the Maine Central rail tracks over Broom Handle Road. This bridge is the railroad's responsibility. It is flagged by MDOT because of low clearance under the bridge.

Emmerson Stevens Bridge carries School Street over Messalonskee Stream. This is an 87-foot long steel girder bridge, built in 1950. The superstructure is rated Poor, with other elements rated Fair, giving it an overall sufficiency rating of 40. The bridge is posted for a weight limit.

9.3 Means of Travel to Work, 2018: Oakland, Kennebec County, Maine

	Oakland		Kennebec County		State of Maine	
	Total	%	Total	%	Total	%
Total Workers, 16 years and older	3,142		57,722		651,799	
Car, truck, or van - drove alone	2,612	83%	46,115	80%	511,466	79%
Car, truck, or van – carpooled	299	10%	5,679	10%	62,978	10%
Public transportation (excluding taxicab)	0	0%	73	0%	4,159	1%
Walked	88	3%	2,348	4%	25,602	4%
Other means	28	1%	735	1%	10,069	2%
Worked at home	115	4%	2,772	5%	37,525	6%

Source: U.S. Census American Community Survey 5-year Estimates, 2014-2018

9.4 Travel Time to Work, 2016: Oakland, Kennebec Co., Maine

	Oakland		Kennebec County		State of Maine	
	Total	%	Total	%	Total	%
Workers over 16 who did not work at home	2,958		53,158		604,124	
Less than 5 minutes	129	4%	2,726	5%	30,828	5%
5 to 9 minutes	411	14%	7,037	13%	78,543	13%
10 to 14 minutes	584	20%	7,396	14%	92,837	15%
15 to 19 minutes	319	11%	7,888	15%	92,249	15%
20 to 24 minutes	530	18%	7,482	14%	82,704	14%
25 to 29 minutes	87	3%	4,031	8%	38,815	6%
30 to 34 minutes	570	19%	6,395	12%	67,843	11%
35 to 39 minutes	98	3%	1,740	3%	17,668	3%
40 to 44 minutes	52	2%	1,796	3%	20,759	3%
45 to 59 minutes	93	3%	3,145	6%	42,658	7%
60 to 89 minutes	54	2%	2,611	5%	25,678	4%
90 or more minutes	31	1%	911	2%	13,542	2%

Source: U.S. Census American Community Survey 5-year Estimates, 2012-2016

9.5 Average Annual Daily Traffic – 1996 to 2017

Location	1996	2006	2014	2017	% Change 1996-2014	% Change 1996-2017
KMD east of Country Club Rd.	15,980	15,300	14,830	n/a	- 7.2 %	
Main Street	5,700	5,970	5,210	5,060		-11.2 %
Fairfield Street north of KMD	3,630	3,760	3,390	2,980		-17.9%
Water Street	4,080	3,230	2,740	1,850		-54.7%
Church Street	5,680	6,910	5,120	n/a	-9.9%	
High Street west of Oak	5,430 (1998)	5,960	5,230	n/a	-3.7%	
Route 137 at Smithfield	3,430	3,610	3,460	3,710	8.2 %	
Belgrade Road	4,790 (1998)	4,680	5,990	5,690	18.7%	
Trafton Road	270		330 (2011)	n/a	22.2% (-2011)	

Source: Maine Dept. Transportation - Yearly Traffic Counts

"Average annual daily traffic" (AADT) is the average number of vehicles passing by the counting point each day, regardless of vehicle type. The AADT capacity for two-lane roads is generally 16-21,000, which is slightly lower in downtown areas and significantly higher for a four-lane road like KMD.

X. Municipal Facilities

10.1 Oakland Community Survey Results

Survey QuickFacts:

- Distributed July 2018 – November 2018
- n=397, a 13% response rate
- Average time to complete = 8 minutes

Survey Questions and Responses:

Percentages rounded to nearest percentage. Open-ended and "other" comments are analyzed by category.

1. What do you like most about Oakland?

- Small town feel (48%)
- Friendly community (24%)
- Water resources (19%)
- Serenity and safety (16%)
- Proximity to amenities (16%)
- Municipal government (12%)
- Schools (10%)
- Trails/land (9%)
- Other (3%)

2. What would you improve about Oakland?

- Downtown (34%)
- Traffic (18%)
- Municipal government (18%)
- Zoning and ordinances (16%)
- Recreation (16%)
- Other (15%)
- Water resources (7%)

3. Should the Town of Oakland encourage…

	Yes	No	Undecided
Creation of public greenspace and/or recreational opportunities downtown	71%	13%	16%
Conversion of abandoned railbeds to multi-use trails	83%	7%	10%
New business development	86%	6%	8%
Downtown Improvement Projects	83%	6%	11%
Comments (n=95): recreation (27%), restaurants/business (23%), property maintenance (23%), traffic (11%), municipal government (11%), other (9%), schools (4%), housing (3%), arts + culture (3%), energy (2%).			

4. How important are the following...

	Very Important	Important	Neutral	Not Important
Maintenance of town roads	68%	30%	2%	0%
Police, Fire, Rescue service	74%	22%	4%	.25%
Economic development	42%	46%	11%	1%

Maintenance of public open space(s)	41%	44%	13%	2%
Public access to water bodies and lakes	49%	37%	11%	3%
Development of pedestrian & bike paths/trails	39%	38%	18%	5%

5. Oakland's rate of growth over the past 10 years has been:
- Too slow (20%)
- About right (75%)
- Too fast (5%)

6. Where should residential growth be located?
- Downtown area (10%)
- Scattered about (41%)
- Let the market decide (49%)

7. Where should new business growth be located?
- Downtown area (56%)
- Kennedy Memorial Drive (20%)
- Let the market decide (24%)

8. To what extent do you agree with the following statements:

	Agree	Neutral	Disagree
Sewer and water lines should be expanded to accommodate new development on Kennedy Memorial Drive.	42%	45%	13%
It is important for Oakland's municipal facilities to be in good repair.	85%	15%	1%
The Town of Oakland should act to limit degradation of water bodies.	79%	19%	2%

9. Please indicate if you think there is a need for more job opportunities in your community.
- Yes (74%)
- No (9%)
- No opinion (17%)

10. Please indicate which type of opportunities/businesses are most needed (check all that apply).

Auto repair (13%)	Clerical (16%)	Hardware store (13%)	Pharmacy (7%)
Bar/tavern/club (26%)	Finance/banks (8%)	Laundry service (8%)	Restaurant (79%)
Barber/beauty shop (10%)	General industry (39%)	Light industry (28%)	Specialty retail (37%)
Car sales (1%)	General retail (57%)	Medical/health (25%)	Technology (42%)

Other (20%): Coffee shop/eatery (22%), grocery store/farmers' market (10%), tourism/hospitality (9%), trades (9%), environmental industry (9%), ice cream shop (7%), arts + culture (2%), other (46%)

11. Please indicate which of the following your community needs (check all that apply).

Economic development (59%)	Healthcare facilities (18%)	Public transportation (31%)
Educational & training facilities (29%)	Services for elderly (48%)	Additional parks and recreational opportunities (49%)
Fire station (34%)	Streets/sewer/water (31%)	

Other (13%): Recreational facilities (14%), transportation (14%), municipal facilities (12%), housing (12%), elderly services (10%), schools (10%), energy (8%), other (27%)

12. With which gender do you identify?
- Female (53%)
- Male (40%)
- Neither (0%)
- Prefer not to answer (7%)

13. What is your age?
- Under 18 (1%)
- 18-24 (2%)
- 25-34 (12%)
- 35-44 (15%)
- 45-54 (17%)
- 55-64 (27%)
- 65-74 (17%)
- 75 and older (9%)

14. Which option best describes your residency in Oakland?
- Year-round resident (89%)
- Seasonal resident (7%)
- Non-resident property owner (2%)
- Non-resident business owner (2%)

15. Please indicate if children live in your household.
- Preschool-aged children or younger (8%)
- School-aged children (25%)
- Children over 18 (10%)
- N/A (57%)

16. Please indicate how long you have been a resident of Oakland.
- Less than 1 year (6%)
- 1-5 years (15%)
- 6-10 years (11%)

- 11-19 years (19%)
- 20 or more years (50%)

17. Please indicate your primary occupation.

Agriculture (.27%)	Finance (3%)	Manufacturing (3%)	Technology (4%)
Clerical (2%)	Government (5%)	Medical/health (13%)	Utilities/communications (1%)
Construction (2%)	Homemaker (4%)	Personal services (2%)	Retired (27%)
Education (17%)	Management (5%)	Retail (3%)	Other (8%)

18. Please indicate the highest level of education you have completed.
- Elementary school (1%)
- Secondary school (high school) (27%)
- 2-year college (18%)
- 4-year college (25%)
- Graduate school (29%)

19. Please indicate where you work.
- In my community or within 2 miles of my community. (32%)
- Within 2-10 miles of my community. (26%)
- Within 11-25 miles of my community. (25%)
- Greater than 25 miles from my community. (17%)

20. Please indicate your approximate gross (before taxes) annual family income.
- Under $15,000 (4%)
- $15,001-$29,999 (14%)
- $30,000-49,999 (17%)
- $50,000-$74,999 (21%)
- $75,000-$99,999 (15%)
- $100,000 or more (29%)

21. Is there anything you'd like to see in Oakland that wasn't mentioned in this survey?
- Municipal government (23%)
- Recreation (18%)
- Business (17%)
- Beautification (12%)
- Transportation (8%)
- Natural resources (7%)
- Schools (3%)
- Energy (3%)
- Tourism (1%)
- Housing (1%)
- Other (24%)

10.2 Municipal Government

10.2.a. Municipal Employees

- Administration = 6 employees
- Fire = 27 employees (1 f-t chief, 1 daytime per-diem, 25 paid on-call)
- Buildings & Grounds = 8 employees
- Sewer = 1
- Assessor = 2
- Public Works = 8
- Code Enforcement = 1
- Transfer = 3
- Police = 26 employees, inc. 2 SROs (10 f-t, 14 reserve p-t, 1 animal control, 1 f-t dispatch)
- Recreation = 1
- Library = 3

School Employees:

- 19 administrators
- 227 hourly support staff
- 8 nurses
- 34 support staff
- 242 teachers
- 27 athletic coaches

10.2.b. Municipal Facilities

Governmental

1. Town office - 6 Cascade Mill Road
2. Transfer station - Town Farm Road
3. Buildings & Grounds garage (HQ Old Belgrade Road across from Lakeview Cemetery.)
4. 3 cemeteries
    a. Lakeview - 33 Belgrade Ave
    b. Old - Lakeview Dr
    c. Lewis - 51 Cottle Rd

Public Safety

5. Police dept - 7 Fairfield Street
6. Fire dept
    a. HQ - 11 Fairfield Street
    b. Station 2 - 6 Oak Street
    c. Cascade Storage Building - Railroad Avenue

Municipal Recreation

7. Library - 18 Church St

8. Pleasant Point Park - 59 McGrath Pond Rd
9. Waterfront Park - 22 Old Belgrade Ave
10. East Pond boat launch - East Pond Road
11. Town Farm property - opposite transfer station
12. BBall courts - Belgrade Ave Extension, across from Lakeview Cemetery
13. Playground - west side of Fairfield Street

School Recreation

14. Williams Elementary - 55 Pleasant
15. Atwood Elementary - 19 Heath
16. Messalonskee Middle - 33 School Bus Dr
17. Messalonskee High - 131 Messalonskee High Dr


East Pond
East Pond Boat Launch
137
Pleasant Point Park
Messalonskee High
Messalonskee Middle
Williams Elementary
Municipal Playground
Atwood Elementary
Oakland Fire Dept. HQ
Oakland Fire Sta. 2
Oakland Town Office
Oakland Public Library
Oakland Police Dept.
Town Farm Property
Transfer Station
Buildings & Grounds
Waterfront Park
Old Cemetery
Lakeview Cemetery
Oakland
Lewis Cemetery
Oak St
Church St
Middle Rd
Libby Hill Rd
Oakland Public Facilities Map Key
Government
Public Safety
Municipal Recreation
School Recreation

10.3: Messalonskee School District

10.3.a. History of Messalonskee School District

The Messalonskee School District (SAD 47) was created in 1965 and encompassed the Towns of Belgrade, Sidney, and Oakland. The town of Rome originally paid tuition for all of its students (approximately 130) to attend the district before becoming part of SAD 47. The name Messalonskee was chosen because the original three towns share a common border on Messalonskee Lake.

In 2009, as part of the state wide school consolidation initiative, SAD 47 and the China School District combined to form a new school district, Regional School Unit No. 18 (RSU 18). Our new district has eight school buildings, with four of them in Oakland. The Ralph Atwood School on Heath Street, the Williams Elementary School on Pleasant Street, Messalonskee Middle School on School Bus Drive, and Messalonskee High School on Oak Street.

The Ralph M. Atwood School for Oakland students in grades pre-K through 2 was built in 1956 as the Oakland Elementary School. It was enlarged in 1975 and renamed in 1985. It has sixteen classrooms and a portable building behind the school with three additional classrooms. The Atwood School currently has 220 students.

The Williams Elementary School (Milton LaForest Williams School) is located on 96.4 acres and was built in 1924 as Oakland's high school. It was enlarged in 1947 and 1962. Between 1986-87, the school was renovated and now has fifteen classrooms, one computer room, three special education rooms, one art room, a science lab, one library, one music room, a cafeteria, and a gymnasium. This school for Oakland students grades 3-5 currently has 225 students.

The newest building in our district is the Messalonskee Middle School for grades 6-8, which opened in August 2003. This school has three floors and was designed with a planned extension at the end of the academic wing to allow for future growth through a six classroom addition. The first floor includes 16 classrooms, 2 art rooms, a band room, a chorus room, 2 wedge rooms, a tech team office, a gymnasium and a cafeteria. The second floor consists of 13 classrooms, a computer lab, 2 wedge rooms and the library. The third floor has 14 classrooms, 2 wedge rooms, a tech team office and a student lounge. There are currently 520 students enrolled at Messalonskee Middle School, and they hail from Oakland, Belgrade, Rome, and Sidney.

Messalonskee High School, constructed in 1969, serves 734 students from Oakland, Belgrade, Rome, Sidney, and China. In 1992, a $10 million expansion added 51,000 square feet, renovated existing spaces, and included an 850-seat performing arts center. The high school contains thirty-one (31) classrooms, five science labs, one art room, two home economics rooms, three industrial arts rooms, one music room, one cafeteria, and two physical education areas.

RSU 18 administrative offices are located at 41 Heath Street in the John S. Tapley School, which was built in 1938. This building is adjacent to the Ralph Atwood School and includes the superintendent's office, district business office, special education office, nutrition office, high school alternative education facilities and the school board meeting rooms. The district transportation garage and maintenance facility are both located in Oakland on Williams Ct. The district owns 44 buses, 10 vans, and 7 trucks.

In November of 2017, all five towns in RSU 18 approved a $13.9 million dollar bond for facilities renovations work. Planned renovations are divided into three categories: approximately $5 million for Energy Conservation and Renovation Projects (boilers, windows, roof work, lighting, brick work, etc); approximately $5 million for Capital Improvements, Nutrition, and Fire Safety Projects; and $3.9 million for Athletic Complex Renovations at Messalonskee High School. The athletic renovation project will involve replacing the current football field and dirt track with a new eight lane rubberized track around a new turf field with LED lights that will be available for football, soccer, lacrosse and field hockey.

10.3.b. Projected Enrollment

RSU 18's most recent enrollment projections were published in July 2015 by Planning Decisions, a research and planning consulting firm which has now closed; RSU 18 is currently searching for a new planning firm to project enrollment. The validity of the projections has decreased as the years pass, and the FY18-19 projections are dissimilar to actual enrollment (see chart below). According to RSU 18 Superintendent Carl Gartley, important factors not considered in the 2015 projections include the expansions of MaineGeneral (Augusta) and Colby College (Waterville), leading to growth in bedroom communities, especially that of Sidney, a sending school of RSU 18. While enrollment decline is still projected, it is slower than projected by the study.

Comparison of Projected and Actual Enrollment for 18-19

Grade	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**HS**	**K-12**
Enrollment study prediction for 18-19	56	80	51	62	67	70	59	84	61	269	859
Actual enrollment as of 08/18	69	78	59	48	83	78	62	74	77	287	915
Enrollment Difference	13	-2	8	-14	16	8	3	-10	16	18	56

Source: RSU 18 Superintendent Carl Gartley & Planning Decisions

10.3.c. School Facilities

A. Williams Elementary and Atwood School: physical education fields and playgrounds.

B. Messalonskee Middle School: football field, soccer field, field hockey field, baseball and softball fields, an indoor basketball court located in the gymnasium and the football field is used for lacrosse in the spring.

C. Messalonskee High School: field hockey field, football field and track with grandstand and lighting, boys/girls soccer fields, baseball and softball fields, practice football field, tennis courts, softball field, tennis courts, concession stand and public restrooms.

10.4 Oakland Fire Department

10.4.a. Services

- Fire Suppression
- First Response Emergency Medical Services (EMS)
- Rescue
- Motor Vehicle Accidents
- Extrication of victims (vehicles, machinery etc.)
- Ice & Water Rescues
- Search for persons
- Hazardous Material Operations w/Rescue
- Mutual Aid
- Fire Alarm response
- Carbon Monoxide Alarm response
- Confined Space Rescue
- Emergency Management Planning
- Severe Weather & Natural Disaster Responses
- Health and Safety (Health Office)
- Service Calls
  - Assistance to Residents
  - Parades & Events
  - Fire Stand-by
  - Assist other Government Agencies
  - Assist Police Department
  - Unauthorized Burning
- Public Safety
  - Outdoor burning permits issued
  - Fire Prevention programs
  - CPR Classes
  - Fire Extinguisher training
  - Confined Space training
  - Fire Safety
  - Pre-Planning/Risk Assessment
  - Plans review

10.4.b. Facilities

Headquarters, 11 Fairfield Street

The new Fairfield Street fire station (headquarters) was completed in March 2020, replacing a 4,000 sq.ft. facility that presented several critical safety and efficiency issues, including failure to comply with numerous OSHA, NFPA, and industry standards. The new 12,400 square foot headquarters includes: 14-feet wide bay doors; an exhaust-removal system; a community gathering room; training room; equipment room; commercial-grade kitchen; smart conference room; a bunk room; and multiple bathrooms.

Station 2, Oak Street

Station 2 was built circa 1997 as a citizen driven project to have fire protection on the west side of the railroad tracks. The building has a small furnace room, and a bathroom with a light storage mezzanine and is currently undersized. The building has space deficiencies for how it is currently

used causing a few code violations related to exit paths and access. These issues can be alleviated with the construction of a new fire headquarters by re-assigning apparatus.

The locations of both stations are considered to be central to the community.

Cascade Building (Railroad Avenue)
The Cascade storage building was constructed in the 19th century. The building has poor access with the Artifacts Museum being built in front of the overhead garage door. The Fire Department stores a boat, ATVs, equipment, hazardous material response supplies, and old department records. The Fire Department also stores equipment and supplies at public works, Captain Groder's and the Chief's house.

10.4.c. Equipment
The following is a list of current Fire Rescue Department apparatus and its estimated useful life.

Apparatus and Off-Road Equipment

Truck	Year	Make	Pump (gpm)	Tank (Gal)	Replace Year	Cost Estimate
9-1	2004	E-One	1500	500	2034	$1,000,000
9-2	2003	Ford 550	1000	300	2028	$400,000
9-3	2017	E-One International	1250	2500	2047	$600,000
9-4	2011	E-One International	1500	1000	2040	$600,000
9-5	1993	3/D Ford	1250	1850	2023	$400,000
9-6	2017	Ford F250	N/A	N/A	2027	$60,000
Rescue 4	1997	Ford F 450	N/A	N/A	2019	$200,000
Boat	1996	Tracker 15hp	N/A	N/A	?	No
ATV	1996	Yamaha	N/A	N/A	?	Replacement
Mule	1992	Kawasaki	N/A	N/A	?	Plan

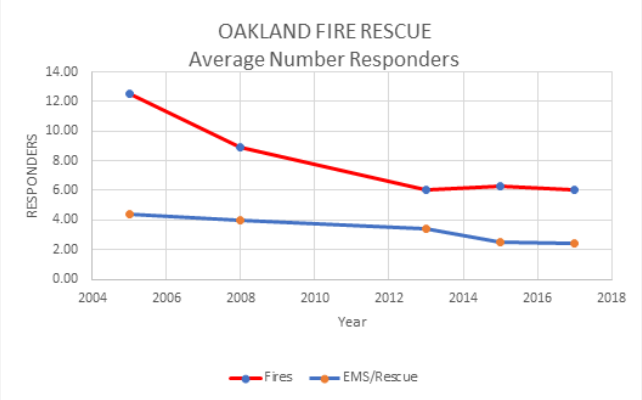
Snow mobile	2002	Polaris	N/A	N/A	?	

10.4.d. Accommodating Growth

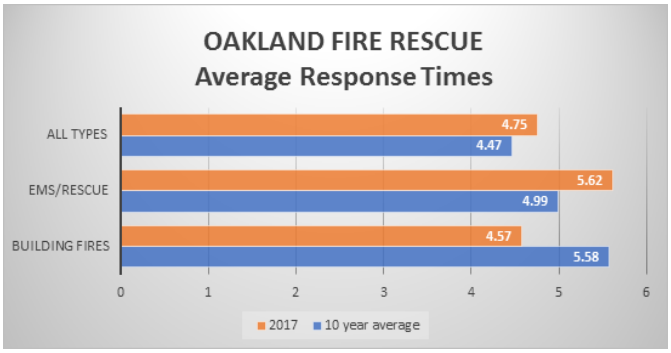
The Fire Department has seen a steady increase in call volume; from 2007 - 2017, calls increased by thirty-six (36) percent. Based on this data and a similar rate of growth for the Town, the Dept. projects an average incident increase of three percent (3%) per year. Factors which would significantly increase call volume include expansion of FirstPark, new housing developments, and increased health care facilities.

Additional Capital Equipment	Year	Replace Year	Cost Estimate	Life Span
Thermal Imaging Camera	2008	2023	$10,000.00	12 to 15 years
Thermal Imaging Camera	2016	2031	$4,000.00	12 to 15 years
Thermal Imaging Camera	2017	2032	$8,000.00	12 to 15 years
Breathing Apparatus (SCBA)	2017	2034	$200,000.00	15 years
SCBA Compressor and Fill Station	2009	2034	$80,000.00	25 years
Firefighting “Bunker” Gear	2007	Varies	$2,500/set	5 to 10 years
Hose	2008	Varies	$26,000.00	20 years
Gear Washer	2008	2028	$8,000.00	15 -20 years
Extrication Equipment	2010	2030	$80,000.00	20 years

While the number of fires remains fairly constant due to fire prevention and smoke alarms, the largest increases in demands for service will be Emergency Rescue calls and other fire-related calls including Hazardous Condition, Good Intent Calls, Severe Weather Calls, and Service Calls. Given the significant time investment made for fire prevention, the Town may consider crafting a fire protection ordinance.



The Department's greatest challenge will be maintaining a reliable response to increasing demand. The average number of responders to a given incident has been decreasing, though the amount of volunteers has remained stable. The increase in demand stems from growth in commercial property in the area of First Park and Kennedy Memorial Drive, two nursing homes, senior and low income housing developments that have all added to the demands of the Fire Department. While staffing has remained stable, the average age is approx. 50 years of age, foreshadowing a staffing decline if younger volunteers do not enroll. Despite the strain on capacity, the 36% increase in call volume has resulted in a 2017 average response time that is at most only 12.6% over the ten-year average.



Potential strategies to increase stand-by coverage and staffing include: offering stand-by stipends for on-call firefighters, as is offered in nearby Clinton; hiring an additional full-time employee or an additional per-diem employee; and/or adding a second per-diem shift for a total of 16 hours of coverage.

Given its staffing, equipment, training, water supply and dispatch services, the Oakland Fire Department is rated as an Insurance Services Office (ISO) class 5/8B department, ranking Oakland 38th out of 665 communities in 2011 when the rating was evaluated.

10.5 Emergency Response – Ambulance

10.5.a. Services

- Routine and critical care transfers to and from the Alfond Center for Health, Thayer Center for Health, Inland Hospital, and any health care facility or private home, regardless of distance or location.
- Wheelchair service providing much needed individualized transportation service to doctors' offices and outpatient clinics
- Emergency and ALS back-up services to surrounding towns and proximate facilities
- Corporate and community educational outreach
- Community Paramedicine
- 12 Lead EKG Monitoring
- Stand by medical coverage for community events

10.6 Oakland Transfer Station

10.6.a. 5-Year Summary of Municipal Solid Waste

Waste Sent for Disposal	**Disposal facility name**	**Tons shipped for disposal/disposed of**				
		2017	**2016**	**2015**	**2014**	**2013**
MSW	PERC	6,712.54*	6,667.55*	2,012.5	2,149.46	
Residue/trash from single stream	Mid-Maine Action Corporation	0.94*	0	0		
CDD**	Landfill on site at Oakland Transfer Station	783.70	448.75	515.23	512.85	
Alternate daily cover	Pine Needle Alternative Cover	4.5	9.0	4.0	6	
TOTAL		7,501.68	7,125.30	2,531.73	2,668.31	
Materials Recycled						
Dual-sort co-mingled containers***	Pine Tree Waste	18.80	18.77	20.23	22.55	
Paper	MRRA, Casella	15.18	20.20	23.34	47.51	
Corrugated cardboard	MRRA, Casella	69.82	59.81	39.64	43.12	46.79
Newspapers and magazines	MRRA	27.07	51.45	24.77	48.12	48.99

Metal cans and aluminum foil	American Iron & Metal	Included in Scrap Metal		50.77	61.35	59.36
Plastics	Casella	10.39	Included in co-mingled		Mixed with glass	22.37 includes glass
Clothing/textiles	Local charity	0.25				
Appliance and other scrap metal	Kennebec Scrap	78.23	73.92	Included in metal cans/aluminum	Included with metal cans and foil	Included with metal cans and foil
Electronics	Electronics End LLC	17.26	1.22	19.49 North Coast Services	32.34	
Rechargeable batteries and cell phones	Call2Recycle	0.05	0.12	0.02	0.04	
Tires		Included in MSW to PERC		1.43 PERC	6.48	1.97
Processed CDD & Landclearing Debris	Sappi Westbrook, Old Castle	1,615.20			1,819.55	196.64
Architectural Paint	PaintCare	6.41				
TOTAL		1,858.66	225.49	179.69	2,081.06	376.12

Annual Solid Waste MGMT Report, Town of Oakland Transfer Station, 2013-2017

10.6.b. Accommodating Growth and Market Conditions

The market for MSW and recycled materials fluctuates heavily. As demand for waste varies, so does the price consumers are willing to pay; the recent notable example of China reducing its need for American waste has made it difficult for transfer stations to find profitable markets to cover operating costs. The Oakland transfer station has taken advantage of its large property to

store its waste material until the market rebounds; as it becomes more difficult to find customers, the transfer station predicts the need for additional storage space to wait out the market lulls.

Given its large size, its own landfill, and its excess capacity, the Oakland transfer station's is an attractive consolidation site for MSW. In the context of fluctuating market conditions, it is far more economical for users of recycled materials, waste, and brush to make few trips to collect sufficient material, whether it is MSW headed to FibeRight or brush ready to be wood-chipped. Contractors are no longer willing to travel to multiple sites with small amounts of material, and so the Oakland transfer station presents a value which could help it weather market downturns.

While additional storage capacity would strengthen the transfer station's ability to wait for paying customers and collect other communities' MSW, its current equipment is in good condition.

10.7 Public Health

10.7.a. Hospitals

Northern Light Health is the most expansive health care system in Maine, stretching from Presque Isle to Blue Hill to Portland.
Northern Light Inland Hospital is located on Kennedy Memorial Drive in Waterville, approximately 3 miles from Oakland's downtown center. Services include acute and critical care inpatient units (48 beds) for adults; ambulatory surgery; birthing center; radiology; rehabilitation; 24-hour emergency care with on-site LifeFlight helicopter pad; and laboratory services. Northern Light Inland has a close relationship with Northern Light Eastern Maine Medical Center in Bangor for access to a higher level of care when needed.

MaineGeneral Health provides a comprehensive array of health care services and is the third-largest health care system in Maine.

The **Thayer Center for Health**, located at 149 North Street in Waterville approximately 3 miles from Oakland, is the largest, most comprehensive outpatient center in Maine. Patients seen in Thayer's emergency department that need to be admitted are transferred by ambulance to **MaineGeneral Hospital** in Augusta.

In 2013, the **Alfond Center for Health** opened as MaineGeneral's new hospital facility in Augusta, merging Waterville's Thayer Hospital with Augusta's MaineGeneral Hospital (formerly on East Chestnut Street). The facility is a 192-bed inpatient hospital, located 15 miles from Oakland.

Both Thayer and Alfond Centers offer 24/7 emergency room services with on-site LifeFlight helicopter pads and a large variety of healthcare services. These include acute and critical care

inpatient units for infants to adults (in Augusta only); advanced surgical services; maternal and child health unit; radiology; laboratory; comprehensive cancer care; comprehensive orthopaedic care; sports medicine; home care and hospice services; two long term care facilities including dementia and residential care; mental health and substance abuse; occupational medicine; hyperbaric oxygen and wound therapy; physician practices; and many more specialty services.

10.7.b. Outpatient Facilities

MaineGeneral operates an outpatient diagnostic center located at 107 FirstPark in Oakland. This site houses an orthopaedic physician practice with co-located physical and occupational therapy and sports medicine services.

Primary Care

MaineGeneral's Oakland Family Medicine is located at 9 Pleasant Street and employs five physicians and two physician assistants to offer comprehensive primary care services to patients of all ages.

Northern Light Inland Primary Care, located at 74 Water Street, employs one physician, one nurse practitioner and one physician assistant.

Dental Care

Dr. Charles Terrio provides dental care services at 825 Kennedy Memorial Drive.

Dr. Rebecca Berry provides dental care services at **Lakes Region Dental Center**, located on 6 Center Street.

Residential Care

Bedside Manor operates two residential memory care homes in Oakland. Located at 461 Belgrade Road and 210 Country Club Road, Bedside Manor offers long term residential care, respite care and adult day services in a secure, private home-like setting.

XI. Fiscal Capacity

11.1 Oakland Revenues FY End 2013 to FY End 2018

(Thousands of dollars; rounded figures)

Revenues	**FY13**	**%**	**FY14**	**%**	**FY15**	**%**	**FY16**	**%**	**FY17**	**%**	**FY 18**	**%**
Property Taxes	6,779	76	7,106	77	7,698	78	7,983	77	8,177	77	8,691	76
Excise, Misc. taxes	1,073	12	1,114	12	1,195	12	1,261	12	1,276	12	1,329	12
Intergovernmental	603	7	468	5	459	5	437	4	531	5	778	7
Charges for service	132	1	227	2	215	2	278	3	320	3	339	3
Other	368	4	255	4	332	3	381	4	313	3	255	2
Total Rev.	**8,955**		**9,170**		**9,899**		**10,340**		**10,607**		**11,392**	

11.2. Oakland Expenditures FY End 2013 to FY End 2018

Thousands of dollars; rounded figures.

Expenses	**FY13**	**%**	**FY14**	**%**	**FY15**	**%**	**FY16**	**%**	**FY17**	**%**	**FY 18**	**%**
RSU #18	3,824	44	4,175	46	4,659	49	4,915	48	5,108	48	5,471	49
Protection	1,526	17	1,541	17	1,599	17	1,492	15	1,488	14	1,704	15
Public Works	857	10	1,028	11	921	10	919	9	1,017	10	912	8
Misc.	707	8	534	6	579	6	966	9	1,062	10	1,072	10
General Gov't	570	8	579	6	612	6	690	7	670	6	683	6
Kennebec County	503	6	503	6	510	5	490	5	504	5	506	5
Sanitation	373	4	384	4	399		390	4	410	4	383	3
Town Prop. Maintenance	198	2	197	2	181	2	202	2	203	2	222	2
Leisure Services	131	1	129	1	135	1	141	1	121	1	145	1
Debt Service	75	0.9							88	0.8	144	1
Total Exp.	**8,764**		**9,070**		**9,595**		**10,205**		**10,671**		**11,242**	

11.3 Town of Oakland Valuation and Mill Rate, 2013-2018

	2013	**2014**	**2015**	**2016**	**2017**	**2018**
Mill Rate	0.01380	0.01475	0.01510	0.01550	0.01640	0.01640
Municipal valuation	$512,488,100	$519,632,100	$527,955,900	$526,391,000	$528,551,200	$541,269,600
State valuation	$490,450,000	$490,100,000	$499,750,000	$506,650,000	$506,000,000	$511,500,000

XII. Regional Coordination

There are no appendices for this section of the Oakland Comprehensive Plan.

XIII. Existing Land Use

13.1. Geologic and Climate Considerations

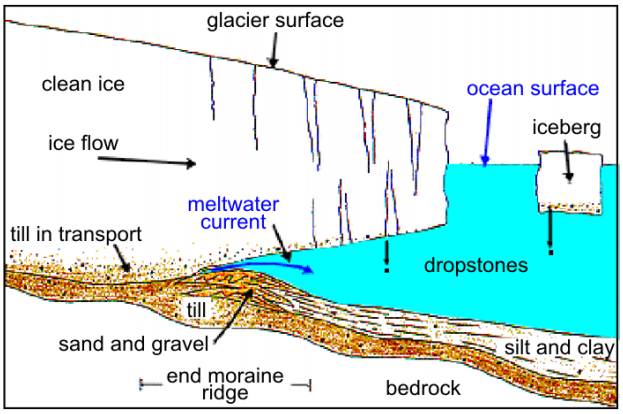
13.1.A. Bedrock Geology

During the Middle Paleozoic Era, representing the period of time from 354 to 443 millions of years ago, large quantities of sandstone and slate were deposited in central Maine[16]. These deposits were due to plate tectonics. Small plate fragments, or "terranes", come from distinct origins yet compose a larger plate[17]. The movement of these plate fragments in the Silurian time (417-443 million years ago) brought limy stratified rock to Oakland, and brought intrusive igneous rock, including granite, to Oakland in the Devonian time (354-417 million years ago)[18]. (Source: Simplified Bedrock Geology Map + non-simplified).

The sedimentary and igneous rock deposited in the Middle Paleozoic Era composes the bedrock of Oakland. There are two distinct units of bedrock in Oakland: the meta sedimentary Sangerville and Waterville Formations. The Formations are characterized by varying widths of bands which generally exhibit a northeast to southwest direction.[19] The ridge lines that define Oakland's watershed boundaries reflect this direction as well.

13.1.B. Surficial Geology

The advance and retreat of the Late Wisconsinan glacier has profoundly affected the Oakland landscape. As the glacier advanced, the ice mass scraped all of the loose soils and geologic material, called till, off the ground's surface; when the glacier began to melt and retreat, it deposited the till on points of high elevation. The melting water then carried the till downhill and deposited it in a stratified sequence, from large boulders to fine particles of clay and silt; glacial lakes formed as till blocked any further drainage. As well, the glacier's massive weight depressed the ground surface to about 400 feet below its present elevation; thus, as it melted, the sea followed the retreating ice margin inland.



Most of Oakland is covered with till; its thickness can locally exceed one hundred feet, though there are numerous bedrock outcrops or thin surficial deposits which are generally less than ten feet thick. As shown in the above-right image, till generally overlies and conforms to bedrock, and may overlie or include sand and gravel.

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[16] Maine Dept. Agriculture, Conservation, and Forestry, 2012. "Bedrock Geologic History of Maine." (source)
[17] Ibid
[18] Maine Geological Survey, 2002. "Simplified Bedrock Geologic Map of Maine" *and* Maine Geological Survey, 1985. "Bedrock Geologic Map of Maine."
[19] 0sberg, P.H., 1988. "Geologic Relations Within The Stat-wacke Sequence in South- Central Maine,"; in Tucker, R.D. and Marrinner, R.G., eds., , Vol. 1, Structure and Stratigraphy, pp. 51-7.

The glacial-marine sands and silty clays of the Presumpscot Formation are located along and adjacent to Messalonskee Lake. This Formation was deposited on the depressed landscape as the Holocene ocean (formed during the last 11,700 years) inundated the land and its melt-water streams blanketed the land with glacial-marine clay and silt. As the glacier continued to retreat, the land slowly rebounded from its sunken stage and once again became exposed to subaerial weathering. Today, these marine sediments occur at low elevations in deposits ranging from twenty to more than one hundred feet. Areas of topographic depression are filled with swamp and tidal marsh organic deposits[20].

13.1.C. Topography

Oakland has a fair amount of relief, as reflected in its elevations map (Map 8) which indicates contours ranging from 150 to 550 feet. The lowest elevation is found east of the village adjacent to Messalonskee Stream. The higher points reflect ridge lines separating the Belgrade Lakes chain. These high points represent areas of elevated bedrock geology and surficial deposits of till.

Steep slopes occur primarily in the northwest part of town adjacent to Howland Hill, Mutton Hill, the hill south of Tyler Corner, the north side of Hussey Hill, and between Salmon Lake/McGrath Pond and Town Farm Road. Some areas along the east side of the Messalonskee Lake and Stream corridor also reflect steep slopes. The elevation of the western area of Oakland generally increases north and inland.

13.1.D. Soils

Soils in the Oakland area are dominated by loam and sand developed from glacial till and meltwater. The soils of glaciofluvial or marine and lacustrine origin and the shallow soils of glacial till or outwash tend to have high water tables.

Drainage in Oakland is generally good, especially north and west of Messalonskee Lake and Stream. Fingers of poorly drained soils generally coincide with smaller streams. Excessively drained soils predominate east of Messalonskee Stream reflecting large areas of Hollis soils. A significant area of variable drainage (Buxton soils) lies immediately adjacent to Messalonskee Stream.

In general, septic suitability is good to excellent in Oakland, especially north and west of Messalonskee Lake and Stream. Poorly suited soils generally reflect the locations of stream areas and pockets of Ridgebury soils. Some pockets of fair suitability exist, primarily Hinckley and Hollis soils east of Messalonskee Lake and Stream.

While agricultural productivity is generally poor, with a few areas of excellent soils for agriculture adjacent to and east of the Messalonskee Lake and Stream, forest productivity is good to excellent throughout most of the Town with fair (Hollis and Suffield soils) areas adjacent to and east of Messalonskee Lake and Stream. Small areas of unsuitable soils are

[20] Reconnaissance Surficial Geology of the Norridgewock Quadrangle, Maine, Open File No. 87-23, Thomas K. Weddle, 1987 and of the Waterville Quadrangle, Maine, Open File No. 86-51, Geoffrey W. Smith, 1986, Maine Geological Survey, Department of Conservation.

present in small scattered pockets of peat.

There are five soil associations that are fairly representative of soils in Oakland. They are listed below and described in detail in Appendix 13.2:

- Hollis-Paxton-Charlton-Woodbridge Association,
- Buxton-Scio-Scantic Association,
- Berkshire-Lyman-Peru Association,
- Scantic-Ridgebury-Buxton Association, and
- Monarda Association

13.1.E. Climate

Oakland has a continental climate with an average winter temperature of 24^{oF} and a summer temperature of 67^{oF}. Average rainfall is approximately 40 inches per year.

The Atlantic Ocean, approx. 35 miles to the east, moderates Oakland's climate, which is most welcome in the summer months when warm southerly winds prevail. In addition, Oakland's many lakes, ponds, and streams cool the local air. In wintertime, cool northerly and westerly winds dominate the climate.

However, it is important to note that the climate in any particular part of town is affected by elevation, changes in slope and orientation of the ground surface, type and moisture of the soil, type and height of vegetation, and distance from water bodies.

Given the abundance of water bodies, many parts of Oakland are subject to periodic flooding, and so the Town has chosen to participate in the National Flood Insurance Program. The Town's Floodplain Management Ordinance complies with the requirements of the National Flood Insurance Act of 1968 and establishes a Flood Hazard Development permit system and review procedure. The floodplain map was updated in June 2011, and is accessible on FEMA's Flood Map Service Center website.

13.2. Soil Associations[21]

13.2.A. Hollis-Paxton-Charlton-Woodbridge Association consists of shallow and deep, somewhat excessively drained to moderately well drained, gently sloping to' moderately steep, moderately coarse textured soils; on hills and ridges. This association is on upland ridges throughout the county, generally at elevations of 200 to 700 feet.

The major soils in this association formed in glacial till. The Hollis soils are shallow and somewhat excessively drained and generally have irregular surfaces. The Paxton and Charlton soils are deep and well drained and have smoother surfaces. In most places, the Paxton soils are intricately intermingled.with the Charlton soils. The Woodbridge soils are moderately well drained and are on the lower end of long slopes and in depressions. The poorly drained Ridgebury soil is of minor extent in this association and occupies low, wet depressions.

[21] U.S. Dept. Agriculture, 1978. "Soil Survey of Kennebec County, ME." (source).

The minor soils are mainly Ridgebury, Buxton, Scantic, Togus, and Hinckley soils.

These soils are mainly in woodland, but many areas are farmed and used for other purposes. The well drained Paxton and Charlton soils are suited to cultivated crops, orchards, and other intensive uses[1]. The Woodbridge soils have some limitations for both farm and nonfarm uses. Many orchards and dairy farms are on this soil association.

13.2.B. Buxton-Scio-Scantic Association are deep, moderately well drained to poorly drained, nearly level to sloping, medium textured soils, in flat areas and near waterways. This association is generally on sloping banks near waterways and on nearly level to gently sloping areas away from streams, along the Kennebec River, Sebasticook River, and other brooks and streams.

The major soils in this association formed in marine and lacustrine sediments. Buxton soils are moderately well drained to somewhat poorly drained. In a typical profile, they have layers of silt loam over silty clay loam underlain by silty clay material. They are adjacent to the well drained Suffield soils and the poorly drained Scantic soils. The Scio soils are moderately well drained. In a typical profile, they have layers of very fine sandy loam over silt loam underlain by alternating layers of silt loam and very fine sandy loam. They are usually adjacent to well drained Hartland soils. Scantic soils are on flats or in depressions.

Of minor extent in this association are Suffield, Hartland, Biddeford, Rifle, and Hollis soils. The soils in this association are used mainly for hay, pasture, or woodland. Wetness and permeability are the major limitations to use for cultivated crops and septic tank absorption fields. Supplemental drainage and erosion control are the major concerns of management.

13.2.C. Berkshire-Lyman-Peru Association are comprised of deep and shallow, somewhat excessively drained to moderately well drained, gently sloping to moderately steep, medium textured .and. moderately coarse textured soils, on hills and ridges. This association is on upland ridges mainly in the northwestern section of the county but also in small areas throughout the county. In many places elevation is 1,100 feet or more.

The major soils formed in glacial till. Berkshire soils are deep, well drained, and are on the tops and sides of the upland hills and ridges. The Lyman soils are shallow to bedrock, somewhat excessively drained, and are also on the tops and sides of ridges. Peru soils are deep, moderately well drained, and are in depressions or at the base or on lower parts of side slopes.

The minor soils are mainly Ridgebury, Scantic, Buxton, and Scio soils.

The less sloping Berkshire soils, if cleared of surface stones, have few limitations for farming. Most of this association is woodland, however, and is suited to that use.

13.2.D. Scantic-Ridgebury-Buxton Association are deep, poorly drained to moderately well drained, nearly level to sloping, medium textured soils in valleys and moderately coarse textured soils in flat area or depressions, on upland ridges. This association occurs throughout the county.

The major soils in this association formed in marine or lacustrine sediments and in glacial till. Scantic and Ridgebury soils are poorly drained. Scantic soils have a profile of silt loam over silty clay loam that is underlain by silty clay. They generally occupy flat areas where runoff of surface water is slow. Ridgebury soils formed in fine sandy loam glacial till. They generally occur in seepage areas on hillsides or at the base of long slopes and in depressions on upland ridges. Buxton soils are moderately well drained to somewhat poorly drained. They have a profile of silt loam over silty clay loam that is underlain by silty clay. They occupy gently sloping to sloping areas near the Scantic soils.

The minor soils are mainly Biddeford, Limerick, Berkshire, Peru, Hollis, Lyman, Togus, Rifle, Saco, Scarboro, Vassalboro, and Winooski soils.

Some areas of these soils are in grassland, but most of the association is in woodland.

13.2.E. Monarda Association consists of deep, poorly drained, nearly level, medium textured soils, on smooth, low upland ridges. This association is in the northeast part of the county.

The Monarda soils formed in silt loam glacial till. They are poorly drained. The more sloping areas are subject to seepage during wet periods because a water table is perched over a fragipan.

The minor soils are mainly Hollis, Woodbridge, Paxton- Charlton, Scantic, Buxton, and Hinckley soils.

Most of this association is in woodland. Some areas have been cleared of surface stones and drained for use as hayland and pasture.

13.3. Summary of Current Lot Dimensional Standards

Type of Subdivision	Sewage Disposal System	Minimum Lot Size	Minimum Road Frontage
Single family	Private	30,000 sq. ft.	150 ft.
Single family	Public	20,000 sq. ft.	100 ft.
Multi-family	Private	In proportion to single-family private sewage, based on 120 gal./bedroom.	
Multi-family	Public	7,500 sq. ft. per unit	50 lineal ft. per unit
Commercial/Industrial	Private	30,000 sq. ft. Max. lot coverage is 80%.	
Commercial/Industrial	Public	No min. specified. Max. lot coverage is 80%.	

Mobile home park	Private	20,000 sq. ft. per unit	100 ft.
Mobile home park	Public	6,500 sq. ft.	50 ft.

Source: Town of Oakland, ME Subdivision Ordinance

13.4. Summary of Land Use Management Ordinances

Automobile Graveyard and Junkyard Ordinance - controls the establishment of automobile graveyards, automobile recycling businesses, and junkyards so that they do not negatively impact the Town's health, safety, general welfare, and property values. The established permitting process regulates the location (e.g. not near wetlands and aquifers, public and civic buildings, etc.), visual appearance, and noise of such businesses.

Floodplain Management Ordinance - requires development located in a special flood hazard area to comply with development standards which prevent structural flotation and collapse; encourage the use of construction materials and methods (including structural elevation) to reduce flood damage; and mandate the design and location of utilities to prevent exposure to water.

Site Plan Review Ordinance - establishes a procedure, the site plan review, to minimize the impact of new non-residential construction on neighboring properties and the municipality. The site plan review addresses the following environmental and planning issues: noise, stormwater, groundwater, erosion, phosphorus, waterbody protection, traffic, parking, signs, light and glare, scenic resources, historic and archaeological resources, significant aquatic and wildlife resources, and other natural resources.

Shoreland Zoning Ordinance[22] - establishes development controls on all land within 250 ft. of a normal high-water line of a great pond and of a wetland's upland edge, and within 75 ft. of a normal high-water line of a stream, in order to prevent and control water pollution and erosion, to protect and improve the quality of water and aquatic habitats, and to conserve shore cover and natural beauty.

Within these areas, the ordinance established the following districts to guide land use and reduce its impact on the shoreline, from most to least restrictive: resource protection; limited residential; limited commercial; general development; and stream protection. Setbacks, vegetation, lot standards, and the prohibition of specific commercial operations are regulated within each district.

[22] Shoreland Zoning Ordinance for the Town of Oakland (last amended February 26, 2014). (source).

Subdivision Ordinance - minimizes the impact of new residential subdivisions on neighboring properties and the municipality. Review criteria range from air and water pollution to burden on municipal services, from traffic congestion to impact on natural beauty and historical character.

XVI. Glossary

Endangered Species - Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.

High-crash Location - A site in which there have been eight or more crashes over the previous three years, and where the total number of crashes are greater than would be expected based on traffic volumes.

Laissez-faire - Hands-off; let the free market decide.

Moderate-sensitive - A rating for water quality which reflects: average clarity; average phosphorus and chlorophyll concentrations; and high potential for internal recycling from the bottom sediments.

Poor-restorable - A rating for water quality which reflects: poor clarity; high phosphorus and chlorophyll concentrations; supportive environment for blue green algal blooms; and good prospects for restoration.

Riparian Woodland - Forests and wooded areas on the shores of natural bodies of water.

S2 Ranking - Species is imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.

S3 Ranking - Species is rare in Maine (20-100 occurrences).

S4 Ranking - Species is apparently secure in Maine.

Species of Special Concern - Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.

Till - Loose to very compact, poorly-sorted, massive to weakly stratified mixture of sand, silt, and gravel-size rock debris deposited by glacial ice. Locally includes lenses of waterlaid sand and gravel.

Waterbody Classification: C (River) – According to the State of Maine Department of Environmental Protection, Class C waters are subject to the fewest use restrictions and have lower water quality than Class A and B waters. However, the quality of Class C waters may still be good, though there is greater risk that water quality will deteriorate. Classification is assessed every two years, and changes to a waterbody's classification require an action by the Maine State Legislature.

Waterbody Classification: GPA (Freshwater Lake/Pond) – GPA is the only classification for freshwater lakes and ponds. It indicates that there is little threat to water quality because

damaging activities, including waste discharge, are prohibited. Classification is assessed every two years, and changes to a waterbody's classification require an action by the Maine State Legislature.

Waterbody Classification: Impaired - Does not meet the GPA classification. Water quality may be degraded by a nutrient imbalance, pollutants and waste discharge, or the presence of invasive species. Classification is assessed every two years, and changes to a waterbody's classification require an action by the Maine State Legislature.

XVIII. Maps

Please note that all maps are available for view at the Oakland Town Office. They appear in the section below as references, but their size may render them inconvenient for planning purposes. If viewing this as a digital PDF, you may click on the links below to access a PDF of each map.

List of Maps

1. Known Prehistoric Archaeological Sites and Areas Sensitive for Prehistoric Archaeology in Oakland
2. Oakland Infrastructure
3. Oakland Watersheds
4. High-Value Plant and Animal Habitats: Oakland
5. Undeveloped Habitat Blocks & Connectors and Conserved Lands: Oakland
6. Oakland Agricultural Resources
7. Building A Regional Landscape: Oakland
8. Surficial Geology: Waterville Quadrangle
9. Oakland Development Constraints
10. Wetlands Characterization: Oakland
11. Water Resources & Riparian Habitats
12. Natural Resource Co-Occurrence: Oakland
13. Oakland – 2020 Public Water System
14. Oakland – 2020 Public Sewer System
15. Oakland Existing Land Use Map – Cover – 2018
16. Oakland Existing Land Use Map – 2018
17. Oakland Future Land Use Map

Known Prehistoric Archaeolgical Sites* and Areas Sensitive for Prehistoric Archaeology* in

Oakland

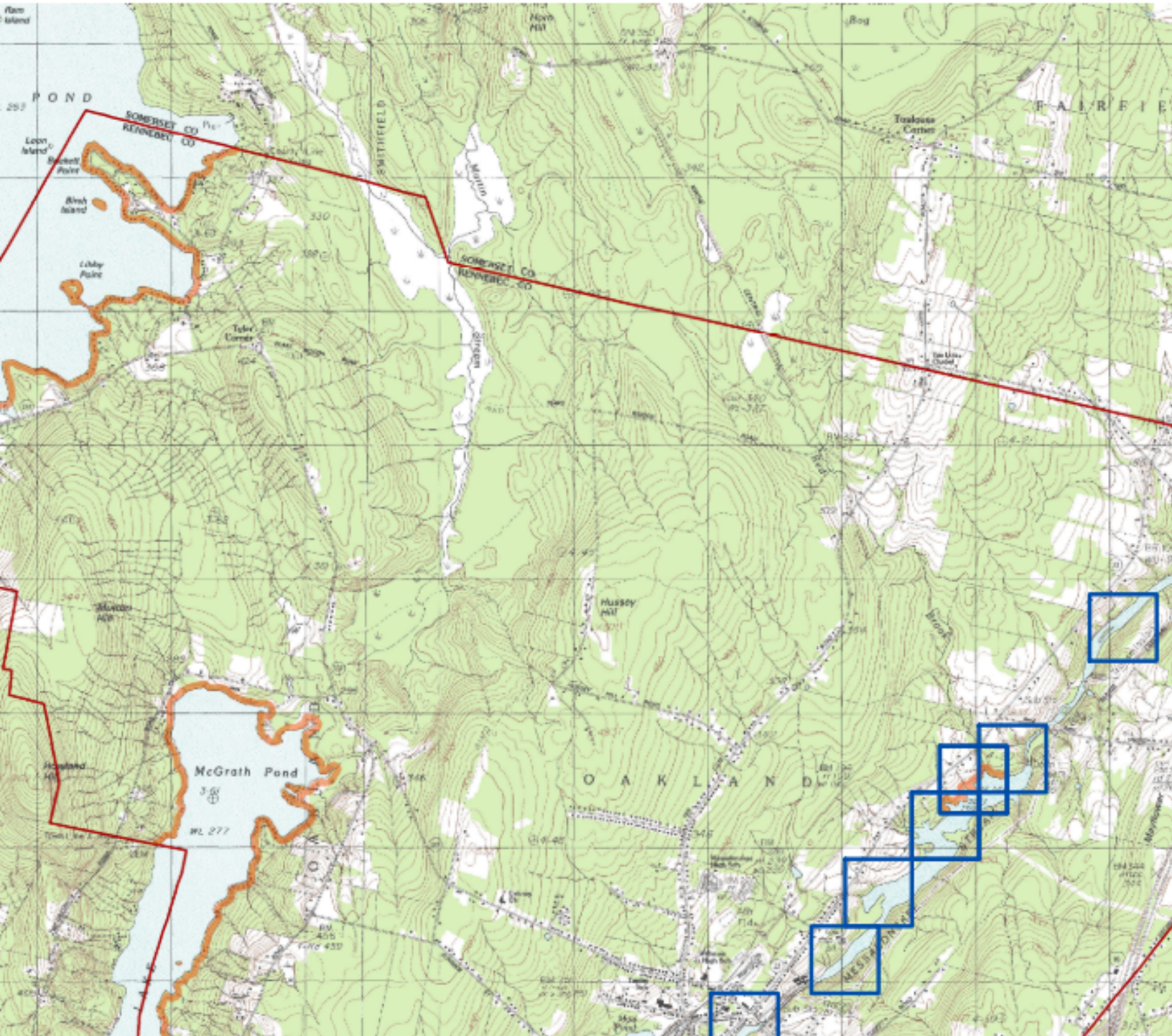
information provided by Maine Historic Preservation Commission March 2012

*dated material subject to future revision
map 1/1

Areas sensitive for prehistoric archaeology

1/2 k square intersecting a known prehistoric archaeological site.

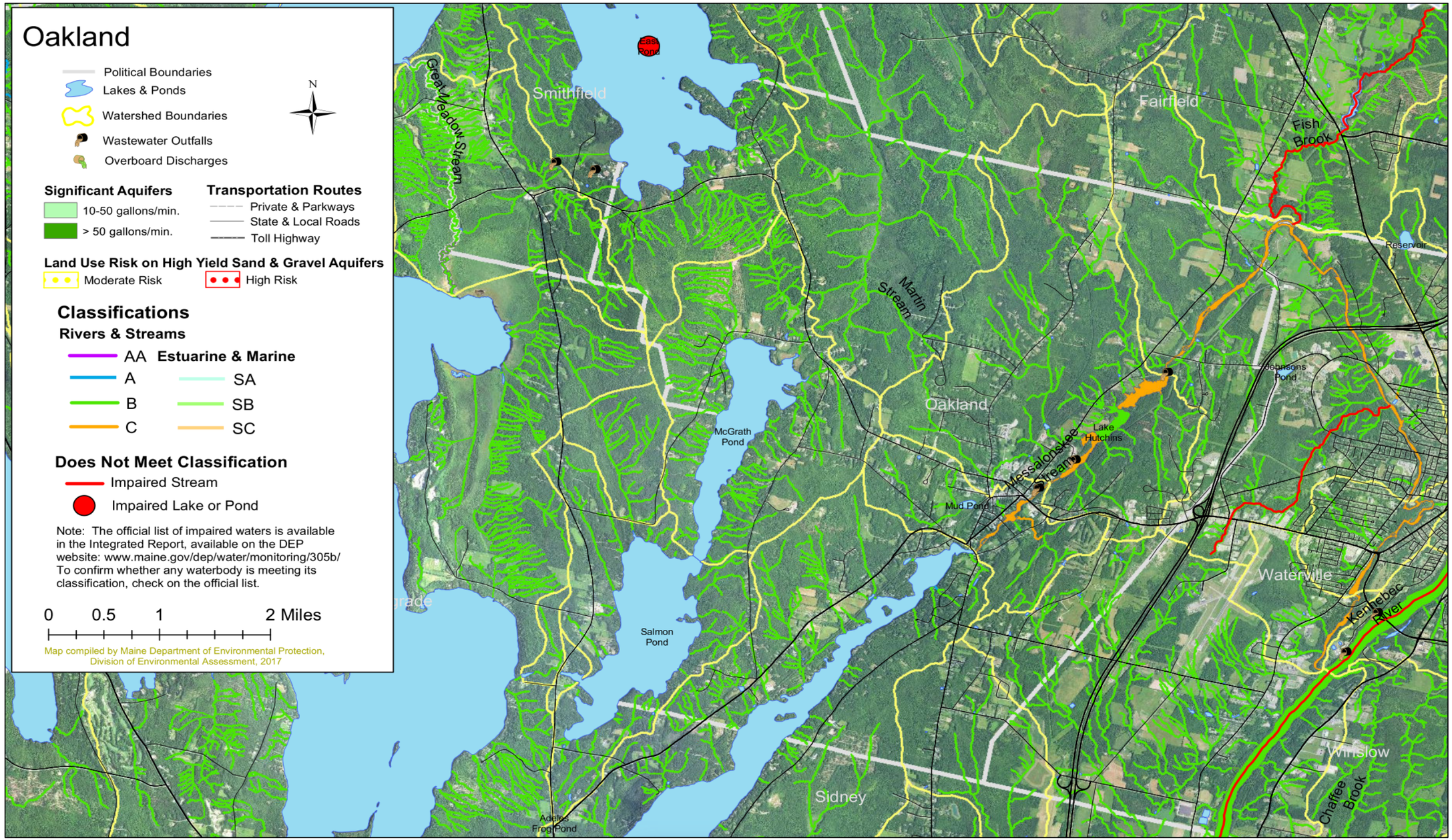
There are no known historic archaeological sites in the town of Oakland at this date



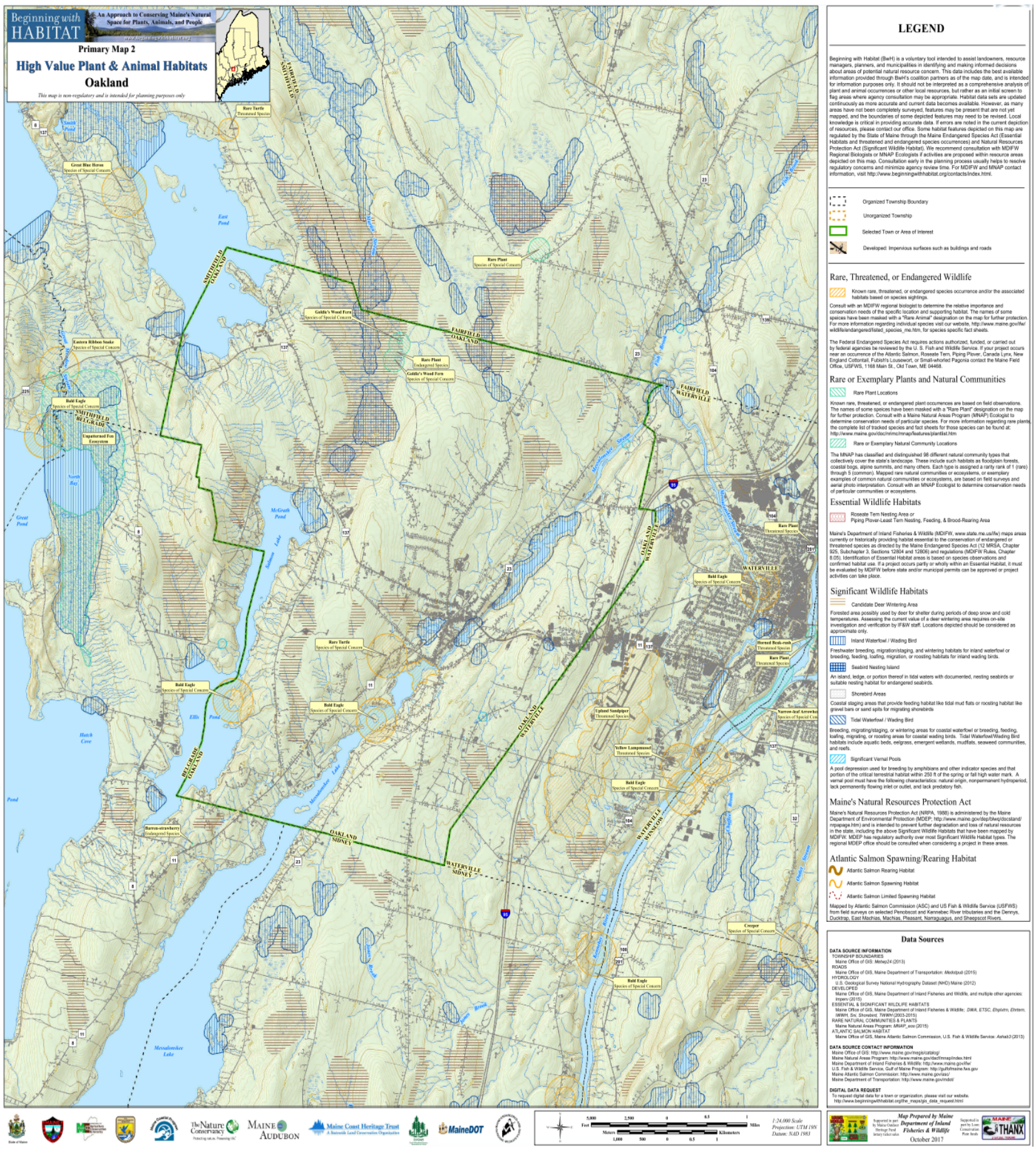
V2.02

p 2. Oakland Infrastructure

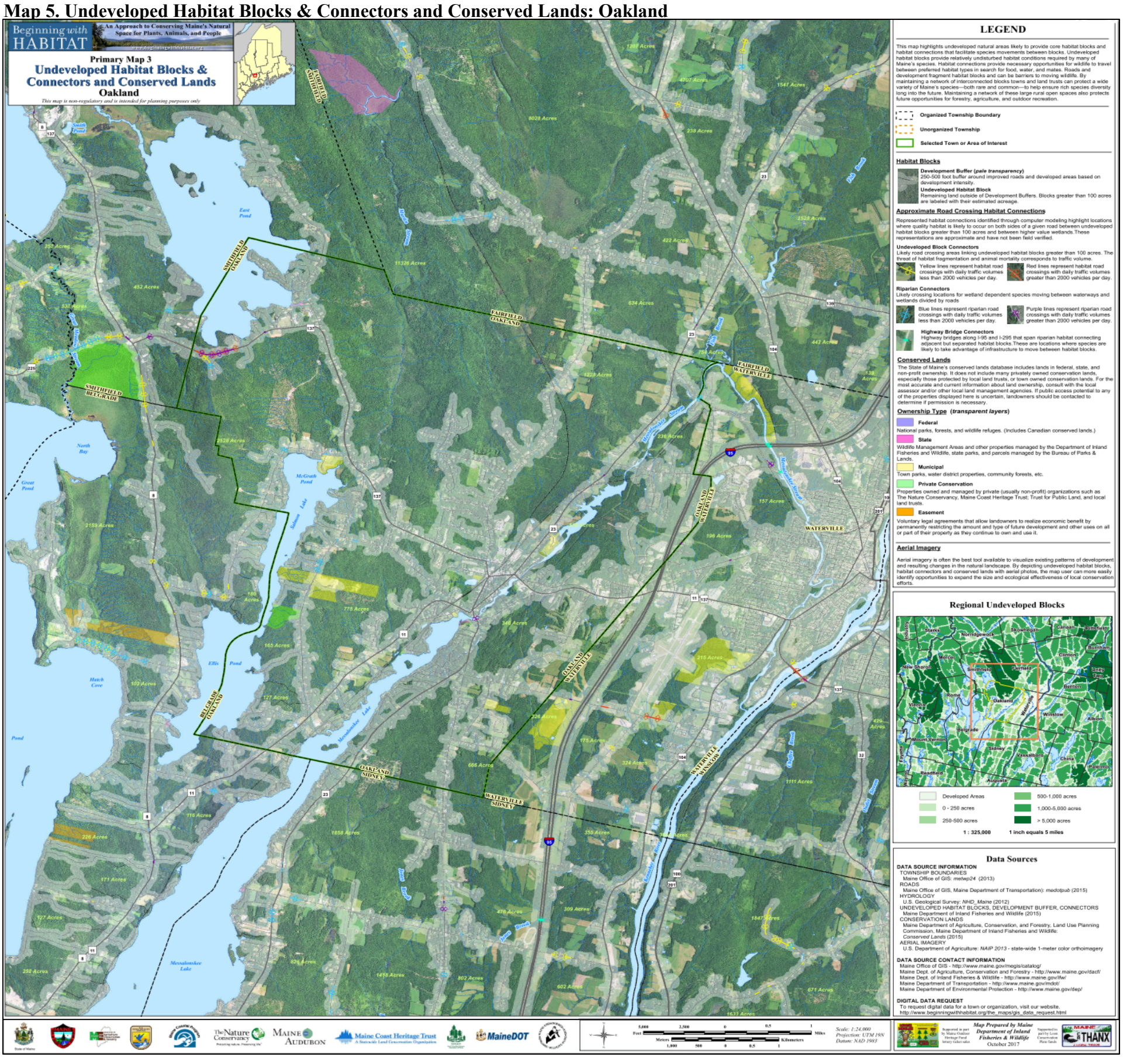
Map 3. Oakland Watersheds



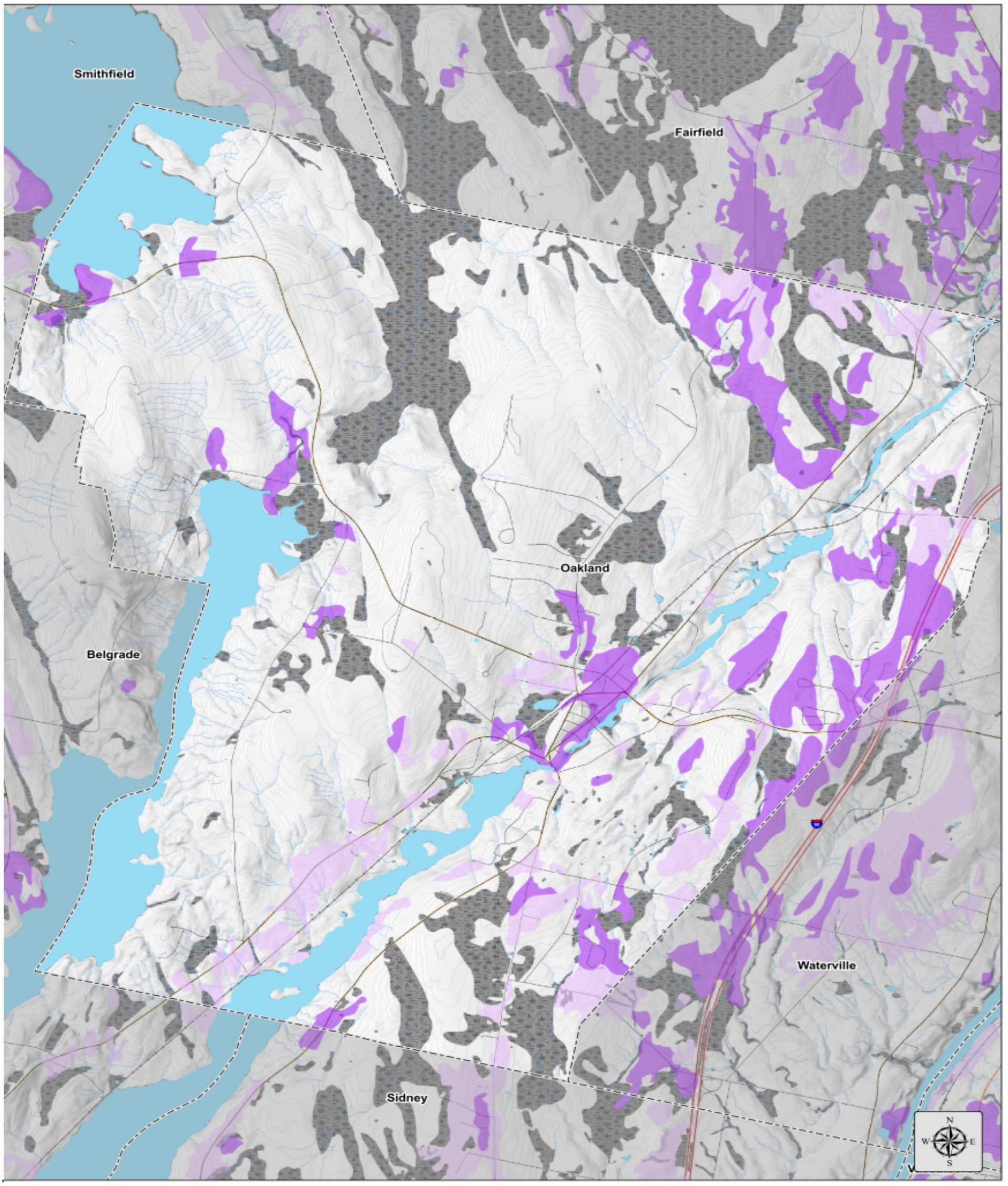
Map 4. High-Value Plant and Animal Habitats: Oakland

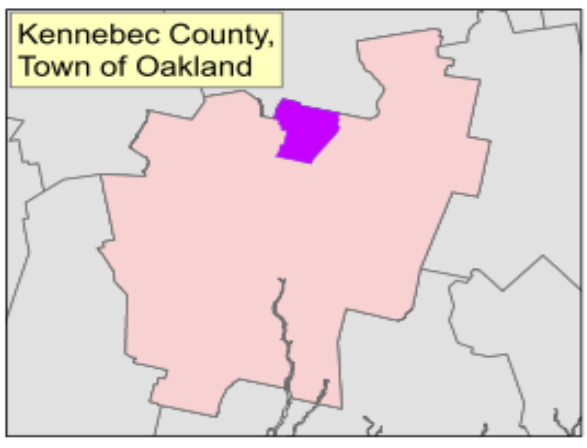


Map 5. Undeveloped Habitat Blocks & Connectors and Conserved Lands: Oakland



Map 6. Oakland Agricultural Resources





Oakland Agricultural Resources

Source Data: USDA, MEGIS, Maine DACF
Projection: UTM, NAD83, Zone 19, Meters
Produced by: Municipal Planning Assistance Program, DACF
October 2017

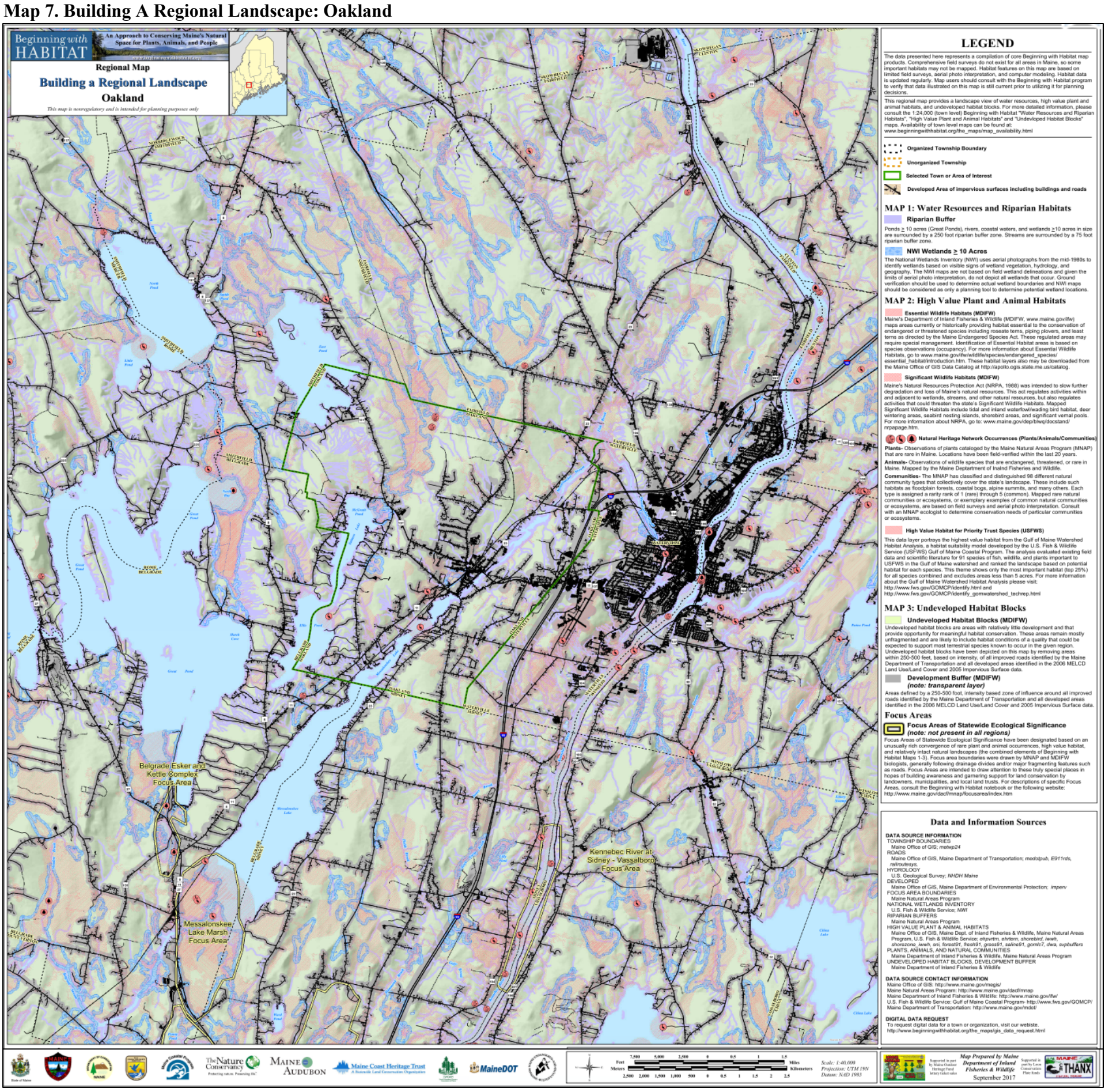
maine Agriculture Conservation & Forestry

0 1 2 Miles

Legend

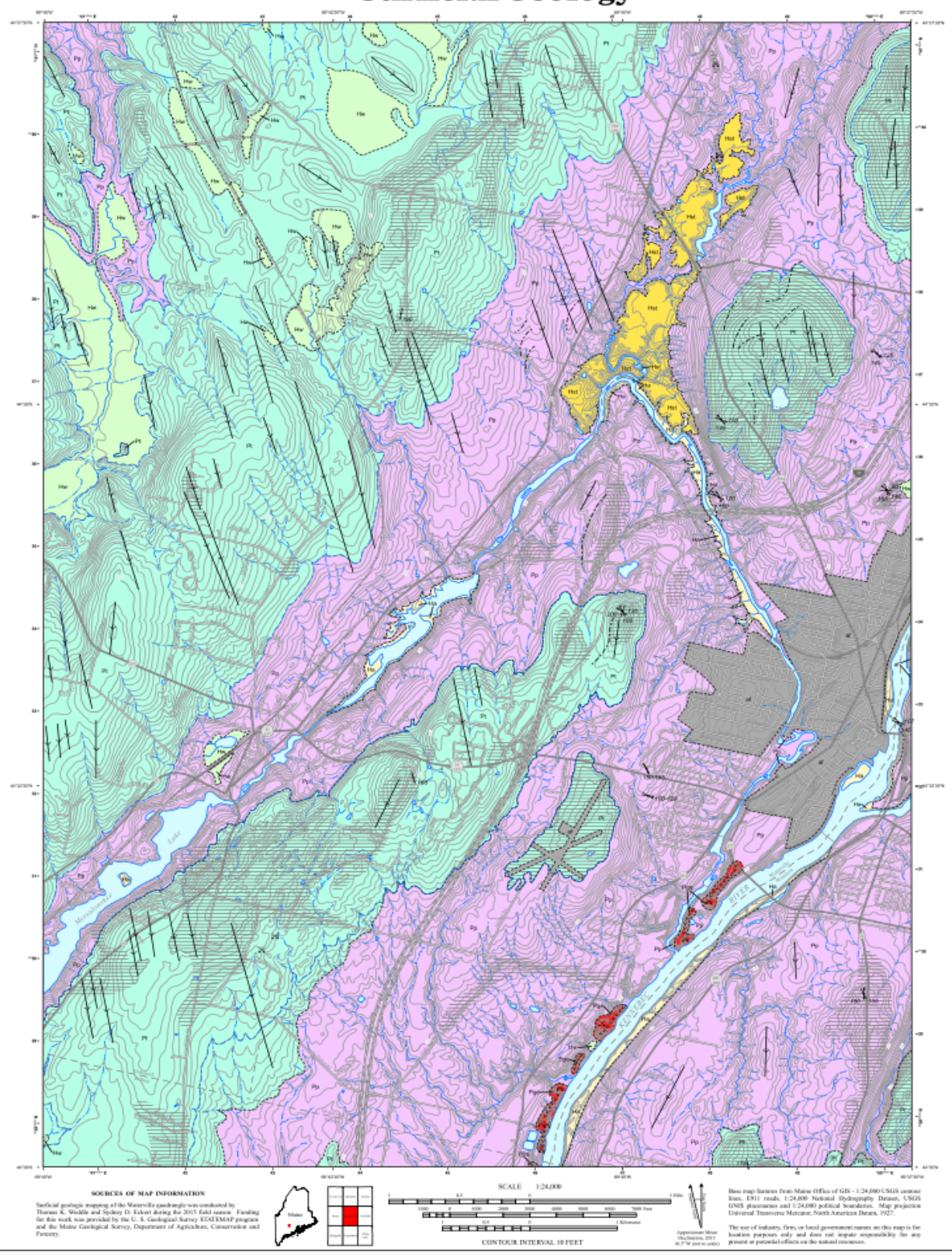
- Municipal border
- Farmland of statewide importance
- Prime farmland
- Rivers/Streams
- Waterbody
- Wetlands

Map 7. Building A Regional Landscape: Oakland



Map 8. Surficial Geology: Waterville Quadrangle

Surficial Geology



Waterville Quadrangle, Maine

Surficial geologic mapping by
Thomas K. Weddle and Sydney D. Eckert

Digital cartography by
Amber T. H. Whittaker

Robert G. Marvinney
State Geologist

Cartographic design by
Christian H. Halsted

Funding for the preparation of this map was provided in part by the U.S. Geological Survey STATEMAP Program, Cooperative Agreement No. G15AC00181.

Maine Geological Survey
Address: 93 State House Station, Augusta, Maine 04333
Telephone: 207-287-2801 **E-mail:** mgs@maine.gov
Home page: www.maine.gov/dacf/mgs/

Open-File No. 16-8
2016

SOURCES OF MAP INFORMATION

Surficial geologic mapping of the Waterville quadrangle was conducted by Thomas K. Weddle and Sydney D. Eckert during the 2015 field season. Funding for this work was provided by the U. S. Geological Survey STATEMAP program and the Maine Geological Survey, Department of Agriculture, Conservation and Forestry.

SCALE 1:24,000

CONTOUR INTERVAL 10 FEET

Base map features from Maine Office of GIS - 1:24,000 USGS contour lines, E911 roads, 1:24,000 National Hydrography Dataset, USGS GNIS placenames and 1:24,080 political boundaries. Map projection Universal Transverse Mercator, North American Datum, 1927.

Approximate Mean Declination, 2015 16.7° W (not to scale)

The use of industry, firm, or local governmental names on this map is for location purposes only and does not impute responsibility for any present or potential effects on the named resources.

Note: The first letter of each map unit indicates the general age of the unit:
H = Holocene (postglacial deposit; formed during the last 11,700 years).
Q = Quaternary (deposit of uncertain age; usually late-glacial and/or postglacial).
P = Pleistocene (deposit formed during glacial to late-glacial time, prior to 11,700 yr B.P. [years before present]).

Hs **Stream alluvium** - Sand, gravel, and silt deposited on flood plains. May include organic wetland deposits or unidentified some of the mapped wetland areas along streams.

Hst **Stream terrace** - Fluvially deposited sand, silt, gravel, and occasional muck on terraces cut into glacial deposits.

Hw **Wetland deposits** - Peat, muck, silt, and clay in poorly drained areas. Map unit may also include some alluvial sediments along stream valleys.

Pp **Presumpscot Formation** - Glaciomarine silt, clay, and sand deposited on the late-glacial sea floor. This map unit commonly overlies the irregular surface of glacial till in a complex manner, so it is likely to include areas of till exposed at the ground surface.

Pge **Esker deposits** - Ridges of sand and gravel deposited by glacial meltwater streams in subglacial tunnels. Borrow pit symbols indicate depletion of the esker system deposit.

Pt **Till** - Loose to very compact, poorly sorted, massive to weakly stratified mixture of sand, silt, and gravel-size rock debris deposited by glacial ice. Locally includes lenses of waterlaid sand and gravel.

af **Artificial fill** - Variable mixtures of earth, rock, and/or man-made materials used as fill for roads. Usually shown only where large enough to affect the contour pattern on the topographic map.

Thin drift - Areas with ruled pattern indicate areas where outcrops are common and/or surficial sediments are generally less than 10 feet thick (mapped partly from aerial photos).

Disturbed earth - Areas where original topography has been altered by excavation.

Contact - Boundary between map units. Most contacts are approximately located and therefore indicated by dashed lines.

Marine limit - Approximate elevation of high stand of sea level at approximately 13,000 years before the present.

Former marine shoreline - Subtle erosional scarp parallel to contours below the marine limit, formed by shoreline erosion during falling sea level. Interpreted from lidar imagery.

Axis of esker - Alignment of symbols shows trend of esker. Chevrons point in direction of former glacial meltwater flow.

Fluted landform - Narrow ridge shaped by flow of glacial ice. Symbol indicates length and direction of the ridge crest.

Glacial striation - Arrow shows ice-flow direction(s) inferred from striations on bedrock. Dot marks point of observation. Number is azimuth (in degrees) of flow direction. At site where two sets of striations are present and relative ages could be determined, the flagged arrow indicates the older flow direction.

Borrow pit, active

Borrow pit, inactive

USES OF SURFICIAL GEOLOGY MAPS

A surficial geology map shows all the loose materials such as till (commonly called hardpan), sand and gravel, or clay, which overlie solid ledge (bedrock). Bedrock outcrops and areas of abundant bedrock outcrops are shown on the map, but varieties of the bedrock are not distinguished (refer to bedrock geology map). Most of the surficial materials are deposits formed by glacial and deglacial processes during the last stage of continental glaciation, which began about 25,000 years ago. The remainder of the surficial deposits are the products of postglacial geologic processes, such as river floodplains, or are attributed to human activity, such as fill or other land-modifying features.

The map shows the areal distribution of the different types of glacial features, deposits, and landforms as described in the map explanation. Features such as striations and moraines can be used to reconstruct the movement and position of the glacier and its margin, especially as the ice sheet melted. Other ancient features include shorelines and deposits of glacial lakes or the glacial sea, now long gone from the state. This glacial geologic history of the quadrangle is useful to the larger understanding of past earth climate, and how our region of the world underwent recent geologically significant climatic and environmental changes. We may then be able to use this knowledge in anticipation of future similar changes for long-term planning efforts, such as coastal development or waste disposal.

Surficial geology maps are often best used in conjunction with related maps such as surficial materials maps or significant sand and gravel aquifer maps for anyone wanting to know what lies beneath the land surface. For example, these maps may aid in the search for water supplies, or environmentally important deposits such as sand and gravel for aggregate or clay for bricks or pottery. Environmental issues such as the location of a suitable landfill site or the possible spread of contaminants are directly related to surficial geology. Construction projects such as locating new roads, excavating foundations, or siting new homes may be better planned with a good knowledge of the surficial geology of the site.

SOURCES OF RELATED INFORMATION

Weddle, Thomas K., 2016, Surficial materials of the Waterville 7.5' quadrangle, Maine: Maine Geological Survey, Open-File Map 16-7, scale 1:24,000.

Neil, Craig D. (compiler), Locke, Daniel B. (mapper), 2000, Significant sand and gravel aquifers in the Waterville quadrangle, Maine: Maine Geological Survey, Open-File Map 00-30, scale 1:24,000.

Thompsen, Woodrow B., 2015, Surficial geology handbook for southern Maine: Maine Geological Survey, Bulletin 44, 97 p.

Thompsen, W. B., and Borns, H. W., Jr., 1985, Surficial geologic map of Maine: Maine Geological Survey, scale 1:500,000.

REFERENCES

Anderson, R. G., 1973, Report on Quaternary field mapping in the Biddeford area: unpublished reconnaissance field maps and handwritten report, archived at the Maine Geological Survey.

Jong, R. S., 1980, Small push moraines in central coastal Maine: M. S. thesis, Ohio University, 75 p.

SURFICIAL GEOLOGY OF MAINE

Continental glaciers like the ice sheet now covering Antarctica probably extended across Maine several times during the Pleistocene Epoch, between about 2.5 million and 11,700 years ago. The slow-moving ice superficially changed the landscape as it scraped over mountains and valleys (**Figure 1**), eroding and transporting boulders and other rock debris for miles (**Figure 2**). The sediments that cover much of Maine are largely the product of glaciation. Glacial ice deposited some of these materials, while others washed into the sea or accumulated in meltwater streams and lakes as the ice receded. Earlier stream patterns were disrupted, creating hundreds of ponds and lakes across the state. The map at left shows the pattern of glacial sediments in this quadrangle.

The most recent "Ice Age" in Maine began about 30,000 years ago, when an ice sheet spread southward over New England (Stone and Borns, 1986). During its peak, the ice was several thousand feet thick and covered the highest mountains in the state. The weight of this huge glacier actually caused the land surface to sink hundreds of feet. Rock debris frozen into the base of the glacier abraded the bedrock surface over which the ice flowed. The grooves and fine scratches (striations) resulting from this scraping process are often seen on freshly exposed bedrock, and they are important indicators of the direction of ice movement (**Figure 3**). Erosion and sediment deposition by the ice sheet combined to give a streamlined shape to many hills, with their long dimension parallel to the direction of ice flow. Some of these hills (drumlins) are composed of dense glacial sediment (till) plastered under great pressure beneath the ice.

A warming climate forced the ice sheet to start receding as early as 21,000 calendar years ago, soon after it reached its southernmost position on Long Island (Ridge, 2004). The edge of the glacier withdrew from the continental shelf east of Long Island and reached the present position of the Maine coast by about 16,000 years ago (Borns and others, 2004). Even though the weight of the ice was removed from the land surface, the Earth's crust did not immediately spring back to its normal level. As a result, the sea flooded much of southern Maine as the glacier retreated to the northwest. Ocean waters extended far up the Kennebec and Penobscot valleys, reaching present elevations of up to 420 feet in the central part of the state.

Great quantities of sediment washed out of the melting ice and into the sea, which was in contact with the receding glacier margin. Sand and gravel accumulated as deltas (**Figure 4**) and submarine fans where streams discharged along the ice front, while the finer silt and clay dispersed across the ocean floor. The shells of clams, mussels, and other invertebrates are found in the glacial-marine clay that blankets lowland areas of southern Maine. Ages of these fossils tell us that ocean waters covered parts of Maine until about 13,000 years ago. The land rebounded as the weight of the ice sheet was removed, forcing the sea to retreat.

Meltwater streams deposited sand and gravel in tunnels within the ice. These deposits remained as ridges (eskers) when the surrounding ice disappeared (**Figure 5**). Maine's esker systems can be traced for up to 100 miles, and are among the longest in the country.

Other sand and gravel deposits formed as mounds (kames) and terraces adjacent to melting ice, or as outwash in valleys in front of the glacier. Many of these water-laid deposits are well layered, in contrast to the chaotic mixture of boulders and sediment of all sizes (till) that was released from dirty ice without subsequent reworking. Ridges consisting of till or washed sediments (moraines) were constructed along the ice margin in places where the glacier was still actively flowing and conveying rock debris to its terminus. Moraine ridges are abundant in the zone of former marine submergence, where they are useful indicators of the pattern of ice retreat (**Figure 6**).

The last remnants of glacial ice probably were gone from Maine by 12,000 years ago. Large sand dunes accumulated in late-glacial time as winds picked up outwash sand and blew it onto the east sides of river valleys, such as the Androscoggin and Saco valleys (**Figure 7**). The modern stream network became established soon after deglaciation, and organic deposits began to form in peat bogs, marshes, and swamps. Tundra vegetation bordering the ice sheet was replaced by changing forest communities as the climate warmed (Davis and Jacobson, 1985). Geologic processes are by no means dormant today, however, since rivers and wave action modify the land (**Figure 8**), and worldwide sea level is gradually rising against Maine's coast.

References

Borns, H. W., Jr., Doner, L. A., Dorion, C. C., Jacobson, G. L., Jr., Kaplan, M. R., Kreutz, K. J., Lowell, T. V., Thompson, W. B., and Weddle, T. K., 2004, The deglaciation of Maine, U.S.A., in Ehlers, J., and Gibbard, P. L., eds., Quaternary Glaciations – Extent and Chronology, Part II: North America: Amsterdam, Elsevier, p. 89-109.

Davis, R. B., and Jacobson, G. L., Jr., 1985, Late-glacial and early Holocene landscapes in northern New England and adjacent areas of Canada: Quaternary Research, v. 23, p. 341-368.

Ridge, J. C., 2004, The Quaternary glaciation of western New England with correlations to surrounding areas, in Ehlers, J., and Gibbard, P. L., eds., Quaternary Glaciations – Extent and Chronology, Part II: North America: Amsterdam, Elsevier, p. 169-199.

Stone, B. D., and Borns, H. W., Jr., 1986, Pleistocene glacial and interglacial stratigraphy of New England, Long Island, and adjacent Georges Bank and Gulf of Maine, in Sibrava, V., Bowen, D. Q., and Richmond, G. M. (editors), Quaternary glaciations in the northern hemisphere: Quaternary Science Reviews, v. 5, p. 39-52.

Figure 1: "The Bubbles" and Jordan Pond in Acadia National Park. These hills and valleys were sculpted by glacial erosion. The pond was dammed behind a moraine ridge during retreat of the ice sheet.

Figure 2: Daggett's Rock in Phillips. This is the largest known glacially transported boulder in Maine. It is about 100 feet long and estimated to weigh 8,000 tons.

Figure 3: Granite ledge in Westbrook, showing polished and grooved surface resulting from glacial abrasion. The grooves and shape of the ledge indicate ice flow toward the southeast.

Figure 4: Glaciomarine delta in Franklin, formed by sand and gravel washing into the ocean from the glacier margin. The flat delta top marks approximate former sea level. Kettle hole in foreground was left by melting of ice.

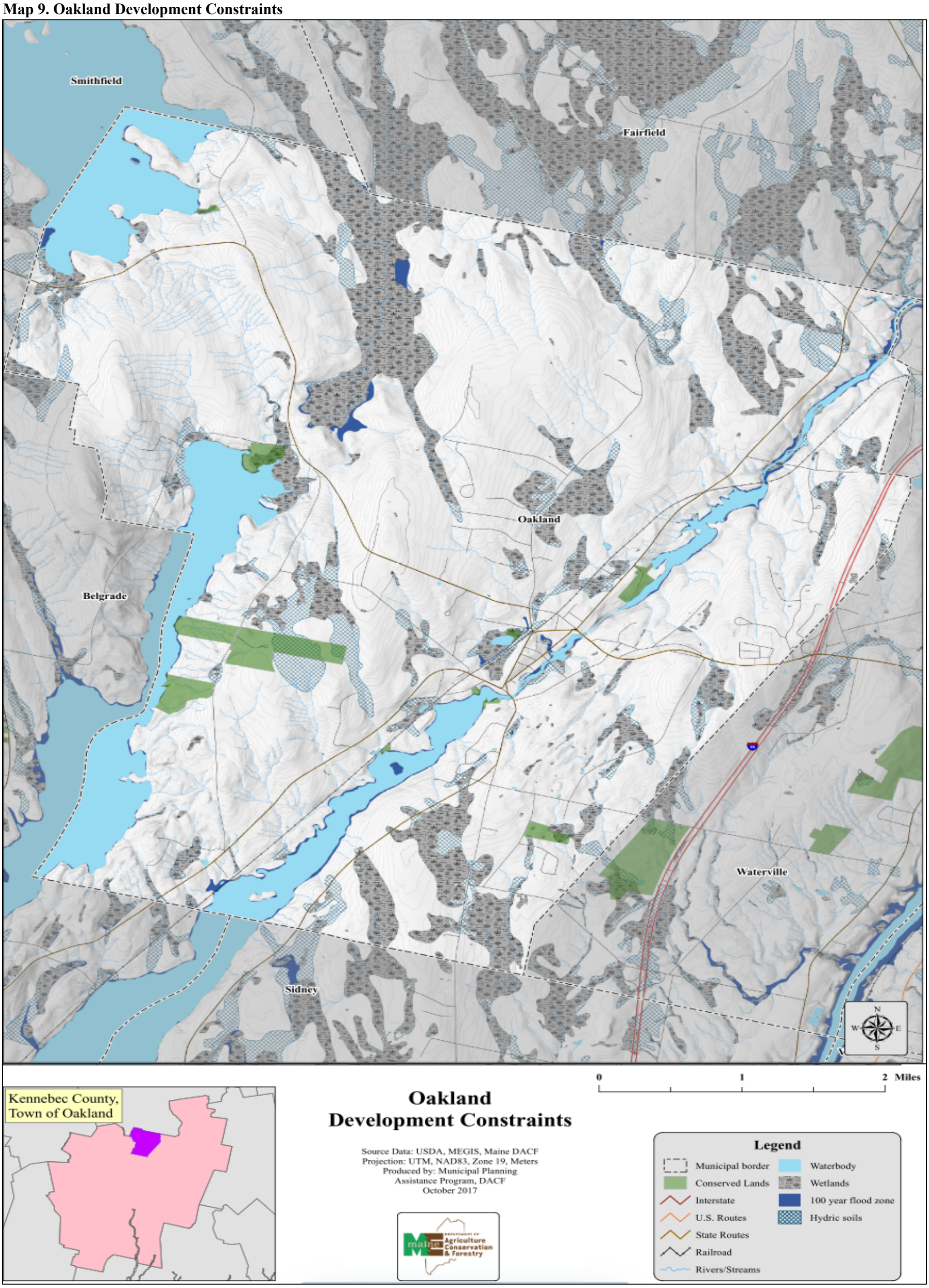
Figure 5: Esker cutting across Kezar Five Ponds, Waterford. The ridge consists of sand and gravel deposited by meltwater flowing in a tunnel beneath glacial ice.

Figure 6: Aerial view of moraine ridges in blueberry field, Sedgwick (note dirt road in upper right for scale). Each bouldery ridge marks a position of the retreating glacier margin. The ice receded from right to left.

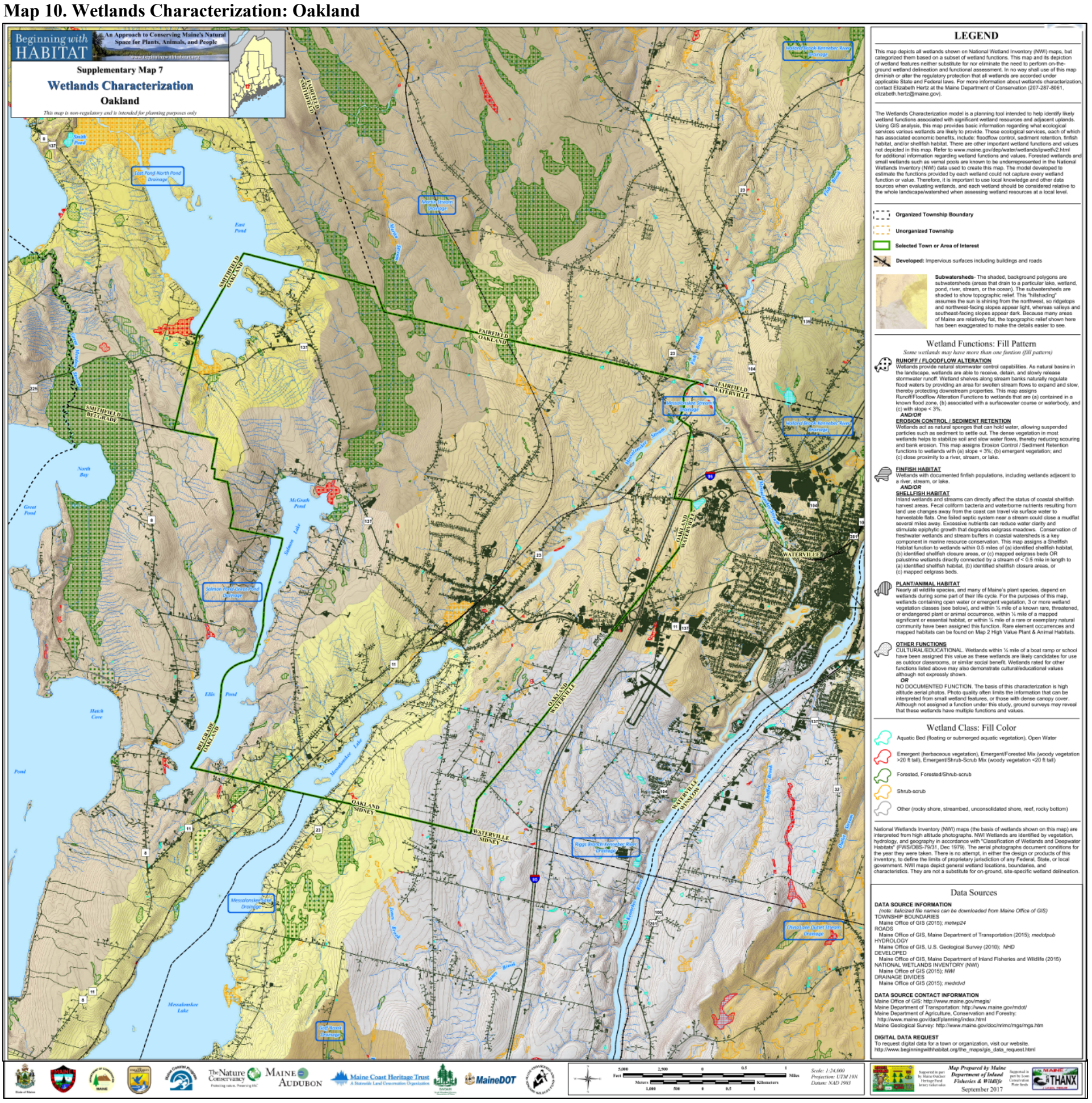
Figure 7: Sand dune in Wayne. This and other "deserts" in Maine formed as windstorms in late-glacial time blew sand out of valleys, often depositing it as dune fields on hillsides downwind. Some dunes were reactivated in historical time when grazing animals stripped the vegetation cover.

Figure 8: Songo River delta and Songo Beach, Sebago Lake State Park, Naples. These deposits are typical of geological features formed in Maine since the Ice Age.

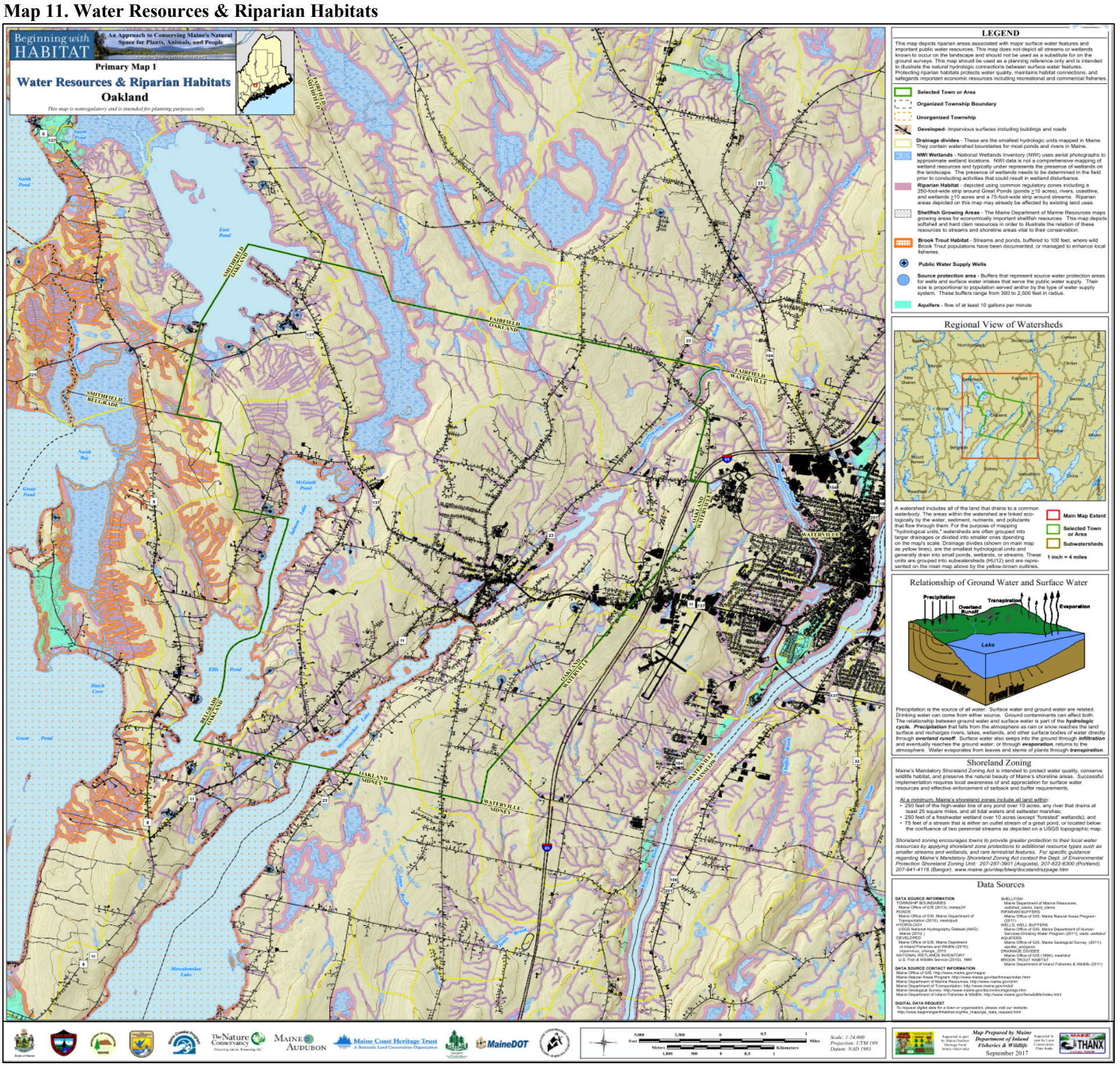
Map 9. Oakland Development Constraints



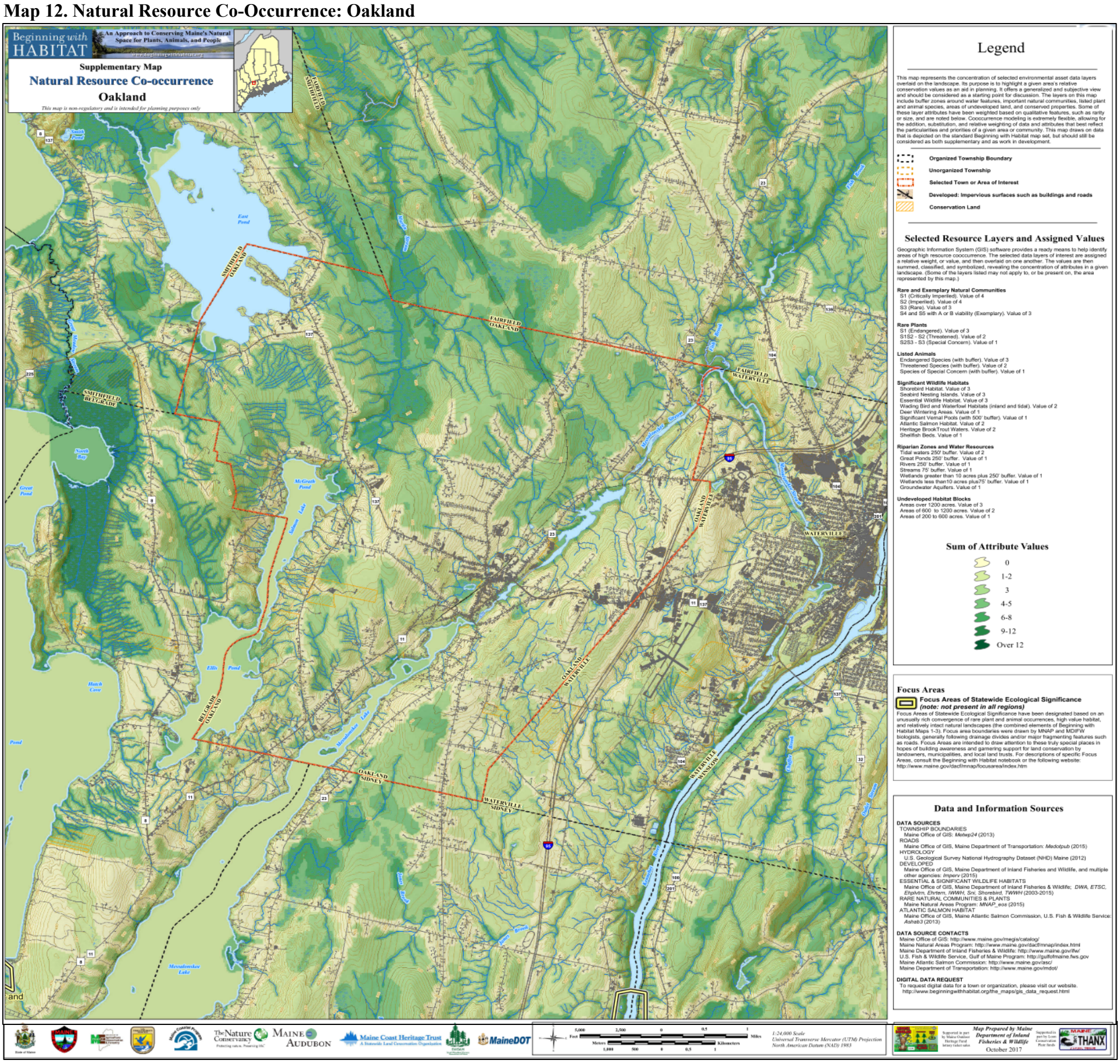
Map 10. Wetlands Characterization: Oakland



Map 11. Water Resources & Riparian Habitats



Map 12. Natural Resource Co-Occurrence: Oakland



Map 13. Town of Oakland – 2020 Public Water System

Town of Oakland

Kennebec County, Maine

Public Water System
2020 Comprehensive Plan

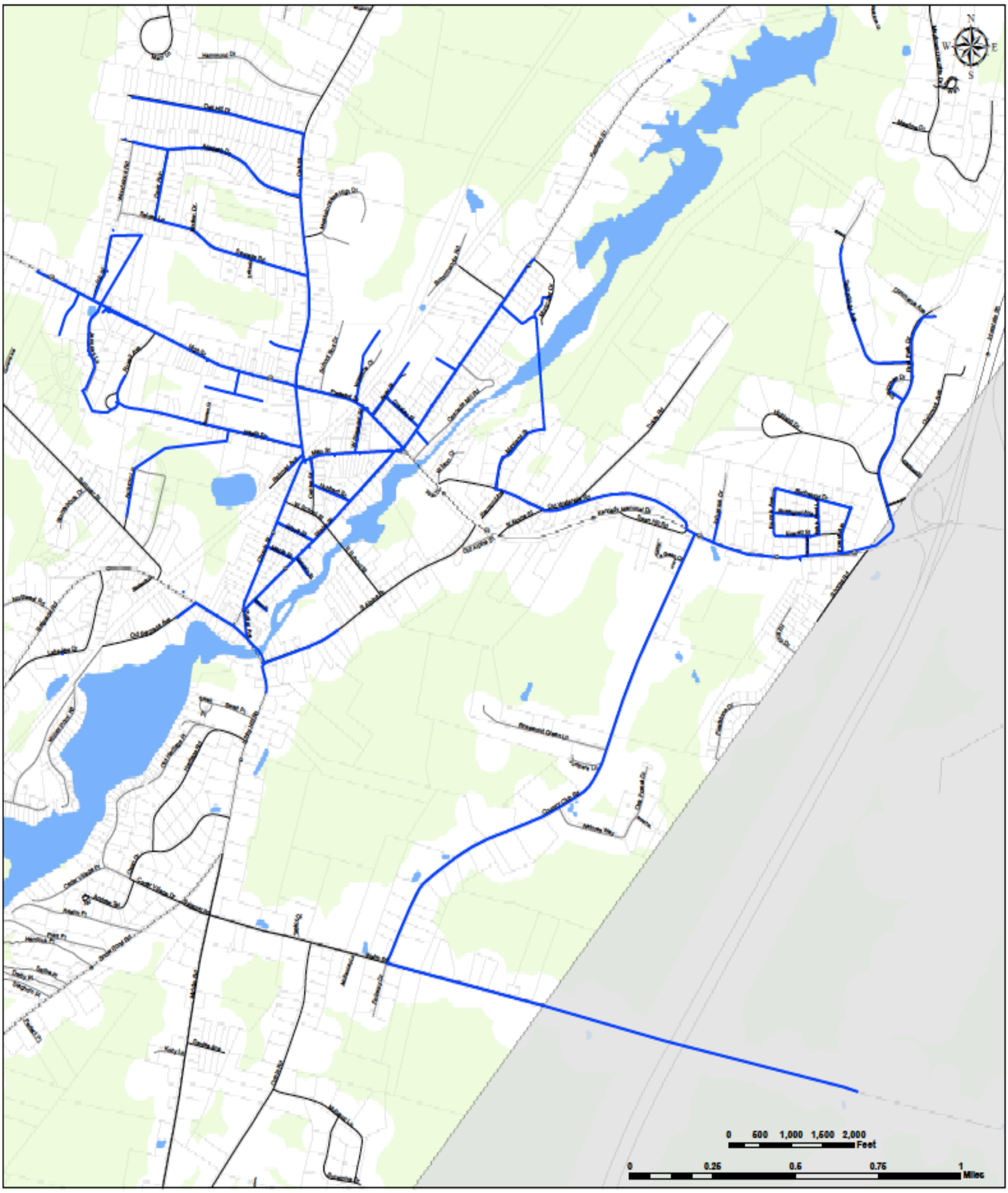
Map Legend

- Roads
- Private Roads
- Lakes, Ponds & Rivers
- Water Lines
- Hydrants
- Tanks

Kennebec Valley Council of Governments
Regional service, local results

Neither KVCOG nor the Town of Oakland assume any liability for the data delineated herein. All information depicted on this map is for planning purposes only and non-regulatory. Boundary data is based on digital sources and may differ from ground-based observations.
Data Sources: Maine Office of GIS, Maine DOT Created 08-2020 by JG

Map 14. Town of Oakland – 2020 Public Sewer System



Town of Oakland

Kennebec County, Maine

Public Sewer System
2020 Comprehensive Plan

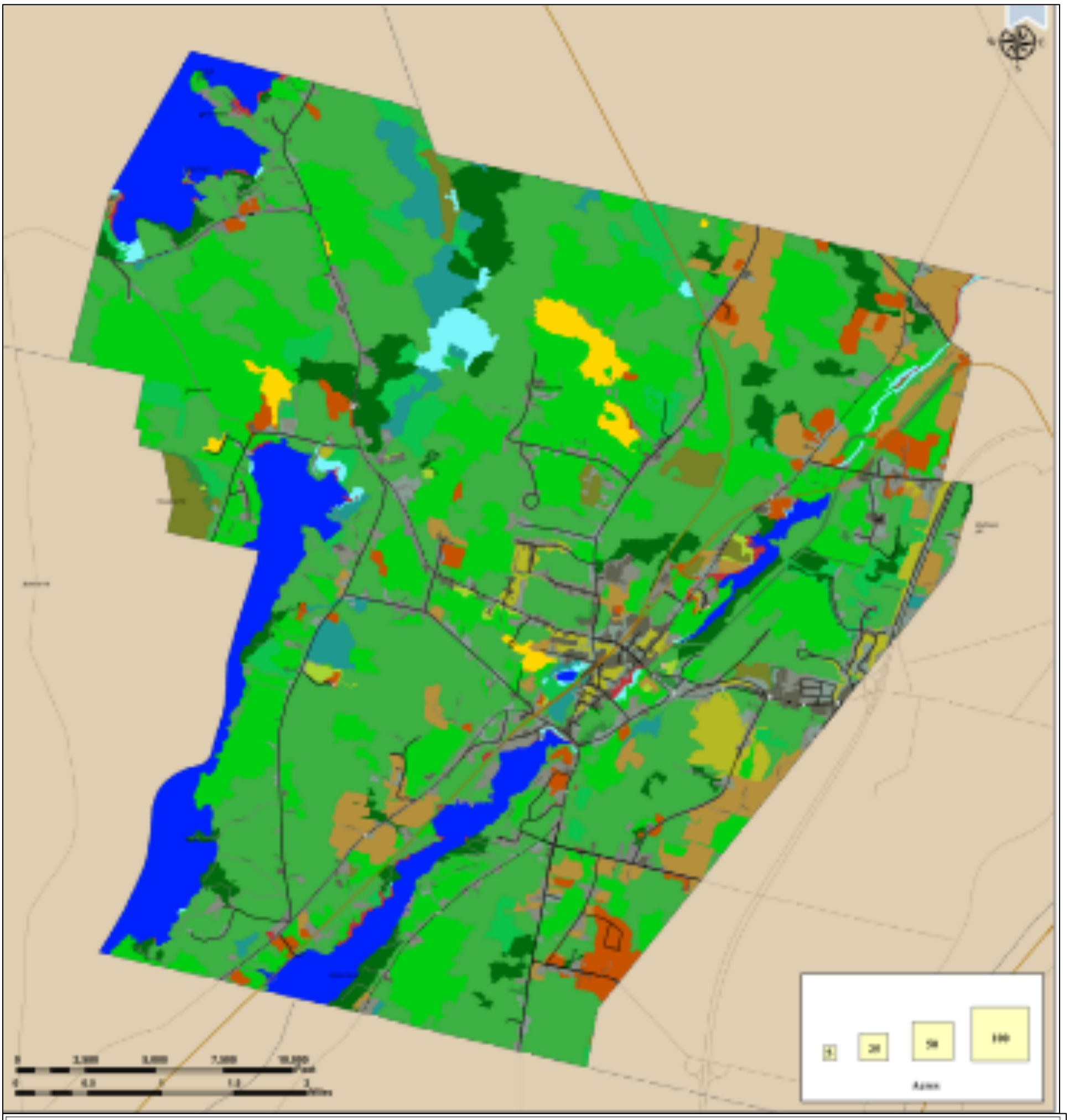
Map Legend

- Roads
- Private Roads
- Lakes, Ponds & Rivers
- SewerLines

Kennebec Valley Council of Governments
Regional service, local results

Neither KVCOG nor the Town of Oakland assume any liability for the data delineated herein. All information depicted on this map is for planning purposes only and non-regulatory. Boundary data is based on digital sources and may differ from ground-based observations.
Data Sources: Maine Office of GIS, Maine DOT Created 08-2020 by JG

Map 15. Oakland Existing Land Use Map – 2018 Cover



Town of Oakland

Kennebec County, Maine

Existing Land Use
2018 Comprehensive Plan

Kennebec Valley Council of Governments
Regional service, local results

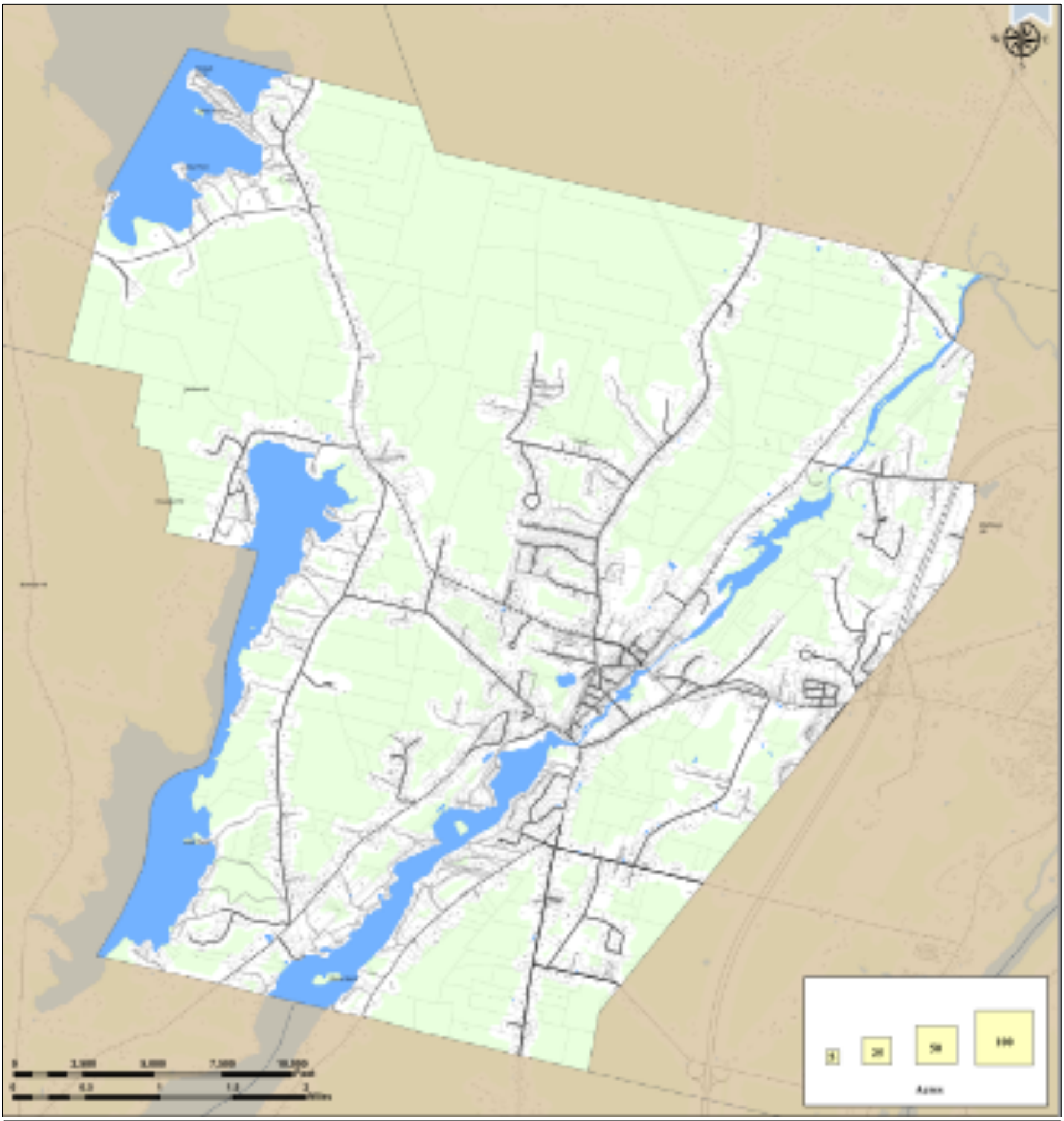
Map Legend

- Roads
- Private Roads
- Rail Line

2 Developed, High Intensity
3 Developed, Medium Intensity
4 Developed, Low Intensity
5 Developed, Open Space
6 Cultivated Crops
7 Pasture/Hay
8 Grassland/Herbaceous
9 Deciduous Forest
10 Evergreen Forest
11 Mixed Forest
12 Scrub/Shrub
13 Wetland Forest
15 Wetlands
16 Road/Runway
19 Unconsolidated Shore
20 Bare Ground
21 Open Water
24 Light Partial Cut
25 Heavy Partial Cut
26 Regenerating Forest

Neither KVCOG nor the Town of Oakland assume any liability for the data delineated herein. All information depicted on this map is for planning purposes only and non-regulatory. Boundary data is based on digital sources and may differ from ground-based observations.
Data Sources: Maine Office of GIS, Maine DOT Created 03-2018 by JG

Map 16. Oakland Existing Land Use Map – 2018



Town of Oakland

Kennebec County, Maine

Existing Land Use
2018 Comprehensive Plan

Map Legend

- Roads
- Private Roads
- Lakes, Ponds & Rivers
- Undeveloped Land
- Tax Map Parcels
- Building Footprints

Kennebec Valley Council of Governments
Regional service, local results

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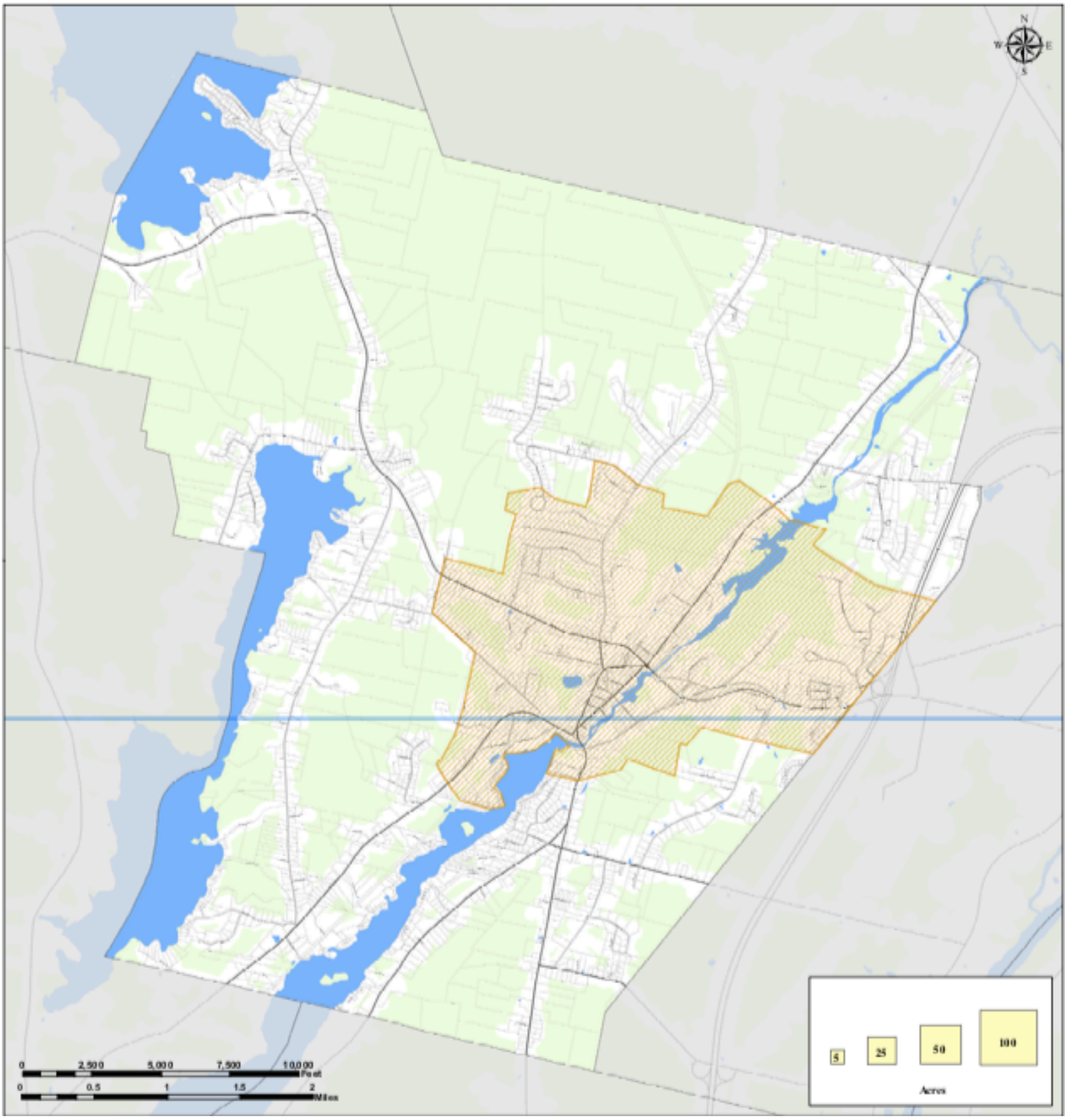
Data Sources: Maine Office of GIS, Maine DOT Created 03-2018 by JG

Map 17. Oakland Future Land Use Map



Please note the following:

1. Growth Area is shaded in yellow.
1. This map is intended for planning purposes only.
2. The Growth Area boundary line is only an approximation.
3. The Growth Area coverage area corresponds to the proximity of existing public infrastructure, including sewer and water.
4. This map is not a zoning map, nor does it constitute zoning.

Map 17.a Expanded View of Growth Area of Oakland Future Land Use Map