

# Natural Resources

## Overview

Ogunquit is home to a variety of significant natural habitats, plant species, and wildlife that are important for the town as well as the whole region. Its abundant natural resources, including the Ogunquit and Josias Rivers, estuary, sandy beach, dunes, coastal wetlands, forests, and undeveloped areas, are vital to the town's identity and make it a desirable place to live, work, and visit.

While the inland portion of the town contains important wildlife habitat, significant vernal pools, and forested land, the town's most prominent natural resources are along its coastline and include the beach, dunes, and the estuarine system associated with the Ogunquit River.

Rather than an exhaustive list of all the natural resource features of Ogunquit, the following section highlights those considered to be of significance to both the community and on a regional level. The section also outlines various organizations that contribute to managing these resources and makes note of some of the recreational opportunities afforded by the town's natural spaces. Additionally, it presents regulatory measures the Town has taken, such as Shoreland zoning ordinances, and non-regulatory measures including educational outreach, to protect critical and important natural resources.

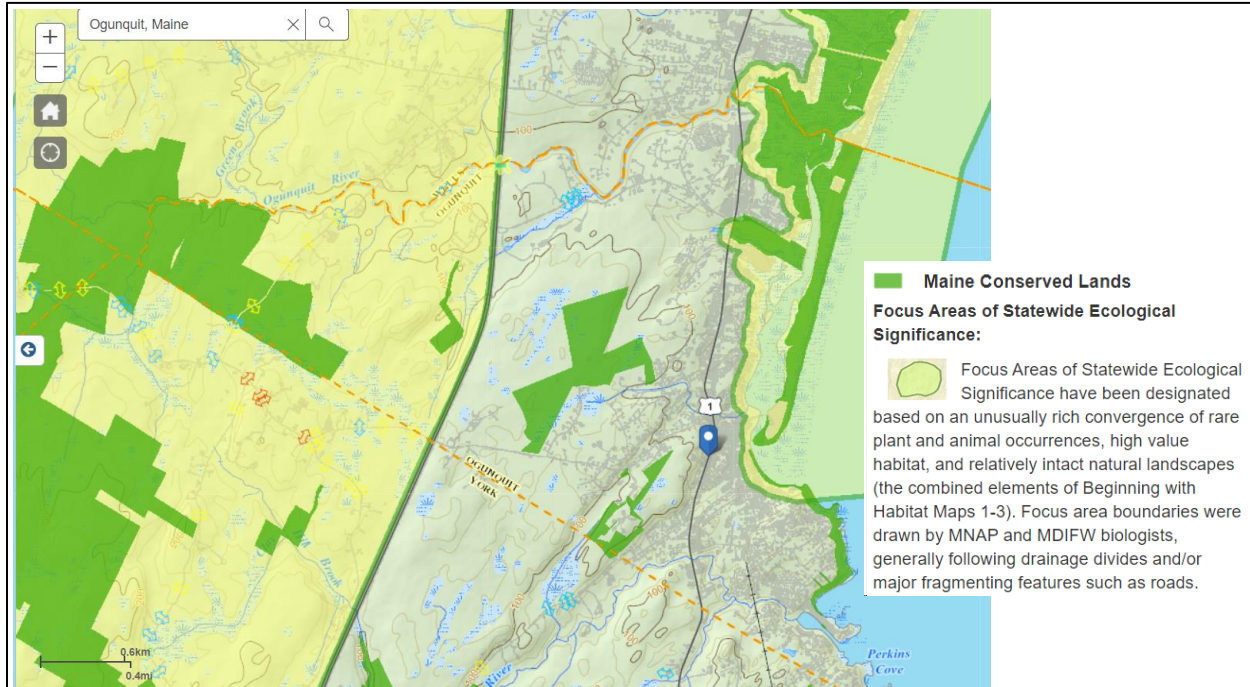
## Wildlife and Plant Habitat

Within the town, there are a number of critical natural resource features which contribute to the rural nature of the community. Data and maps developed through the Beginning with Habitat program (BwH), which is sponsored by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the Maine Natural Areas Program (MNAP), summarize natural areas, high-value plant and animal habitat, and critical resources that are significant for ecological and community health. They illustrate biodiversity within Ogunquit, which can be an indicator of the environmental health of the community. [The BwH maps and data](#) serve as excellent planning tools for land use planning, conservation, and when reviewing development proposals.

Two portions of town, the northwestern area and the area around the Ogunquit River estuary and beach system, are mapped 'Focus Areas of Statewide Ecological Significance'; a designation based on an unusually rich convergence of rare plant and animal occurrences, high value habitat, and relatively intact natural landscapes (*Map 1*). The Focus Area Designation is intended to draw attention to places of special habitat in hopes of building awareness and garnering support for land conservation by landowners, municipalities, and local land trusts.

BwH's "Plant and Habitats" map depicts a hierarchy of habitats and shows the mapped location of various species as well as their status under State and Federal wildlife protection programs. BwH maps illustrate a wide range of high-value plant and animal habitat present in Ogunquit. Large assemblages of rare plants and plant communities are found in and along the barrier beach system in Ogunquit. Ogunquit and Footbridge Beaches and adjacent portions of the Ogunquit

River are mapped coastal wetlands supporting shorebird habitat, including piping plovers and least tern; tidal waterfowl and wading bird habitat; and shellfish growing areas. There are wild brook trout priority areas (spawning areas) in and around Perkins Cove, Josias River, inland portions of the Ogunquit River and its tributaries, and coastline areas adjacent to the Marginal Way.



Map 1 Beginning with Habitat map of conserved lands and designated 'Focus Areas of Statewide Ecological Significance'.  
(Source: Beginning with Habitat)

Large, relatively unbroken blocks of undeveloped habitat are present in Ogunquit, especially west of Interstate-95. These areas can support wildlife with large home ranges, such as moose, deer and fisher cats, as opposed to suburban species, such raccoons and skunks. Unfragmented blocks and connectors between blocks offer valuable opportunities to protect habitat connectivity and preserve a wide range of species in a rapidly developing landscape, locally and regionally. Implications for ecological health and wildlife diversity in the face of development pressure and “sprawl” in these locations may be an important planning concern for the Town.

There are no mapped Great Ponds within Ogunquit, but there is considerable riparian habitat along wetland complexes within the town as well as along the Josias and Ogunquit Rivers and their tributaries. Riparian habitats and buffers function as critical travel corridors for wildlife and contain 75% of all the species diversity in Maine. Several mapped significant vernal pools are within the town boundary, including one adjacent to an inlet of the Ogunquit River near the intersection of Route 1 and Captain Thomas Road and clusters of pools in the northwestern portion of town and southwestern portion along the York border.

While Ogunquit has no lakes or ponds infested with invasive aquatics, the invasive green crab is present in tidal rivers and the ocean. Ogunquit also has invasive vegetation, including bittersweet and knotweed. Ongoing education and outreach about invasive species have increased citizen knowledge about the threats that invasives pose, but additional public education is needed.

It is worth noting that while the beach system is a highly important and popular resource, the northern part of Ogunquit is environmentally significant because of its relationship to the surrounding towns and the Mount Agamenticus region. The significance of this area of Ogunquit is an important consideration for regional environmental health and conservation efforts.

Ogunquit values its natural places and wildlife and follows strict State and local regulations regarding filling or altering wetlands and compliance with zoning setbacks in connection with land development. The Town actively partners with natural resource management agencies and organizations to protect and preserve natural resources. For example, the Town works in collaboration with the Piping Plover and Least Tern Recovery Project to protect habitat for these important bird species. This is a cooperative effort, with Maine Audubon working in partnership with the Maine Department of Inland Fisheries and Wildlife, the U.S. Fish and Wildlife Service, the Maine Bureau of Parks and Lands, and local municipalities to protect and conserve these rare shorebirds.

## Dunes and Shorelands

Ogunquit's barrier beach system is a critical natural resource, as well as cultural asset and economic driver, within the town. Coastal dunes are a buffer against wind erosion, wave overtopping and tidal inundation. They also provide a source of sand to replenish the beach as well as a habitat for birds, small mammals and insects. The dune system at Ogunquit Beach is moderately vegetated, has no houses and protects the estuary on the Ogunquit River.

The Main Beach, Footbridge Beach and North Beach complex is one of the only stretches of largely undeveloped barrier beaches in the State and is owned by the Town, which is unique among southern Maine's sandy beaches. The southwestern end of Main Beach has a municipally owned beach parking lot and several commercial buildings, including hotels, and a section of seawall around that developed area.

The barrier beach and a border strip around the adjacent tidal inlet of the Ogunquit River and associated marsh are zoned as Resource Protection through the Town's Shoreland Zoning Ordinance, meaning the area is currently protected from development. Local shoreland zoning ordinances are consistent with state guidelines, specifying setbacks for structures, permitted uses and lot coverage. Ogunquit's Shoreland Zone encompasses lands lying within 250 feet of the normal, mean high-water line of any river, the upland edge of a coastal wetland, including all areas affected by tidal action, the upland edge of a freshwater wetland, and all land areas within 75 feet of the normal, mean high-water line of a stream.

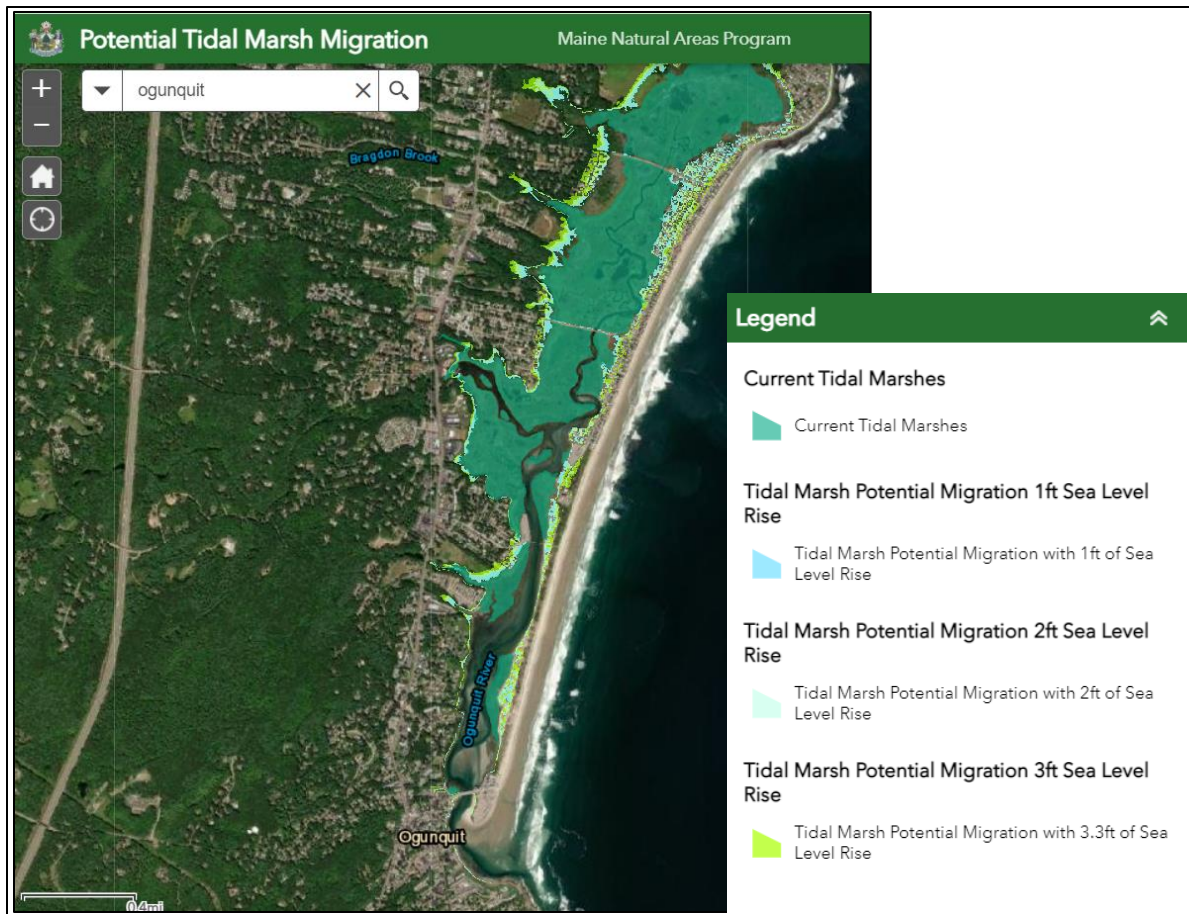
Maintaining the integrity of Ogunquit's coastline is important for an economic standpoint as well as quality of life. While the Town's barrier beach system is not directly at-risk of development

due to current zoning, its health and function are threatened by water quality issues from upstream development, as well as by erosion and sea level rise.

The health of the beach system is vital for wildlife and natural resources and is paramount to the local economy and municipal fiscal health. A 2022 [regional economic resilience planning study](#) conducted by South Maine Planning and Development Commission (SMPDC) found that visitation to Ogunquit's beaches generated over \$2 million annually in parking fees alone, which represents roughly 21% of the municipal operating budget in Fiscal Year 2021. In Ogunquit, 1.6 feet of sea level rise, the amount the Maine Climate Council recommends the state prepare for by 2050, is projected to reduce the townwide dry beach by about 42%.

The Maine Geological Survey (MGS), through the State of Maine Beach Profiling Project and Maine Beach Mapping Program, conducts annual monitoring and profiling of Maine's beach and dune systems. In its [State of Maine's Beaches in 2022](#) report, MGS noted that Ogunquit Beach, in the short-term, experienced strong growth, or accretion, of its dune and beach; the mean dry beach width stayed about the same over the year. The report found that from 2020 to 2021, dry beach width decreased near the river and increased along most of the beach. The MGS report reveals that, over time, some areas of Ogunquit's beaches are eroding while some are accreting. Over the longer-term, between 2007 and 2021, the dune along the parking area south of the Beach Street bridge grew 2 to 4 feet per year, then eroded about the same amount, while north of the Norseman Hotel, the dune grew 2 to 3 feet per year. During that same time period, the beach along the Ogunquit River (near the bridge) grew 3 to 6 feet per year, with most growth concentrated near the inner spit where growth reached 16 feet per year. Farther south, the beach eroded up to about 10 feet per year. Along the beach until the Norseman Hotel, the beach receded approximately 1 foot per year. North of this, the beach grew between 6 and 10 feet per year. The MGS monitoring data and report demonstrate the importance of the Town participating in the Maine Beach Mapping Program so that it has local information about short- and longer-term changes along its vital coastline.

While sea level rise threatens inundation of the beach system, it also has the potential to facilitate the landward expansion, or migration, of tidal marshes. The Maine Natural Areas Program (MNAP) has mapped areas that could support marsh migration with future sea level rise. In Ogunquit, the backside of the barrier beach system and relatively narrow strips along the Ogunquit River estuary have been identified as being able to support future marsh migration (*Map 2*). Protecting these areas will be crucial for ensuring the long-term viability of local tidal marshes, which provide tremendous natural benefits and services including wildlife habitat, flood control, and water quality protection.



Map 2 Areas of potential tidal marsh migration under various sea level rise scenarios. (Source: Maine Natural Areas Program)

The community recognizes that some of its critical natural resources, such as beaches, dunes, and estuary, are threatened by overuse, development, and recreational activities. Measures have been taken to prohibit and/or limit pedestrian and vehicle trespassing on the dunes and in the estuary. Town ordinances have been established to keep dogs and bikes out of these sensitive areas. Additionally, the Town has undertaken educational outreach to protect critical and important natural resources. Ogunquit has partnered with Health Rivers Ogunquit (HEROs), Maine Healthy Beaches, State Department of Environmental Protection (DEP), FB Environmental Associates, Southern Maine Planning and Development Commission (SMPDC), Wells Reserve at Laudholm, Great Works Regional Land Trust; and Town Committees such as Conservation Commission, Sustainability Committee, and Marginal Way Committee to address natural resource and management issues.

## Coastline Resources: Marginal Way

A critical natural resource area of Ogunquit's coastline includes the entire coastline of the Marginal Way, beginning at Oar Weed Cove in Perkins Cove going northward to the Sparhawk Oceanfront Resort on Shore Rd. The area is further bounded by the low water line and includes approximately 13.9 acres. The Marginal Way path offers one of the most accessible and most dramatic panoramas of a rocky coastline in Maine with sedimentary rocks, cross-cutting dykes, and glacial features that represent almost a half billion years of history.

The ledges along the Marginal Way are particularly significant because they provide superb exposures of the Kittery Formation, which is tan, graded-bedded, calcareous metasandstone, purple and green phyllite and a profusion of basaltic dikes. This belt of Ordovician-Silurian rock extends from Kittery to northeast Bangor. Several early recumbent folds in the metamorphosed sedimentary rocks of the Kittery Formation are well displayed. These folds have been subsequently deformed by overturned folds which have well developed axial plane cleavage. The numerous basaltic dikes offer excellent illustration of features of dike emplacement such as chill margins, rock dilation and intrusion sequence. In addition, numerous minor faults cut across the rocks; these faults postdate the basaltic dikes.

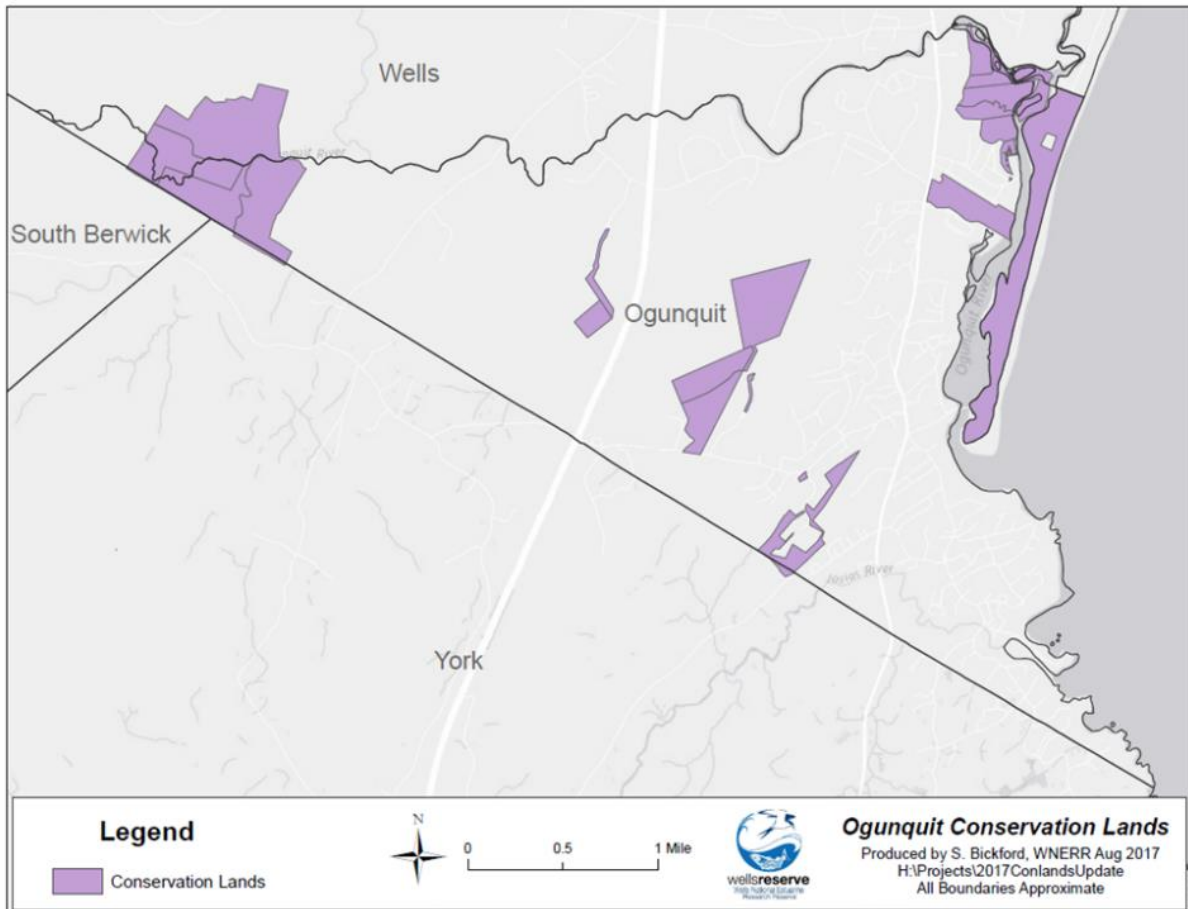
In 2022, Ogunquit's Marginal Way path was officially placed on the National Register of Historic Places by the United States Department of the Interior.

The Marginal Way is a paved five-foot wide, public footpath located in Ogunquit. The path follows beautiful coastal rocky ledges for approximately one and one quarter miles. The picturesque Marginal Way according to the National Register is "locally significant for its association with entertainment recreation and conservation". "The property's donation to the town for public use is a significant example of the preservation of sections of Maine coast for public use during a period of rapid coastal development". Historically several Native American tribes hunted, fished, and grew crops in this area. It is assumed they traveled along this path for many years, moving from ocean cliffs to inland fields and pastures.

Additional information about the Marginal Way can be found in the Historic and Archeological Resources, Recreation, Economy and Transportation Sections of the Comprehensive Plan.

## Existing Conservation Lands

There are pockets of conserved land scattered throughout Ogunquit (**Map 3**). Conservation land is owned and managed by several different entities. The Town itself owns 250 acres of land including the beach (142 acres), and land off Berwick Road which includes approximately 7 acres of land designated as Conservation Land.



Map 3 Conserved lands in Ogunquit. (Source: Wells Reserve)

Great Works Regional Land Trust actively manages conserved lands within the community. Beach Plum Farm (22 acres) is a local treasure providing not only conservation value but a community garden. The Payeur Preserve provides 55 acres of protection for the Ogunquit River Watershed. More than half the Preserve abuts a 35-acre parcel, off Berwick Road, and is marked by stone walls surrounding the historic “Joe Maxwell Field,” including a double stone-walled cattle path. The land contains vernal pools and an open wetland meadow into the Leavitt Stream headwaters. The remainder of the Preserve is 20 acres of forested land just west of the Maine Turnpike and within Great Works’ Mt. Agamenticus Focus Area. This parcel contains the headwaters of Quarry Stream. Both Leavitt and Quarry streams are tributaries to the Ogunquit River. Plans for the future include a possible wildlife-viewing platform in the meadow and

existing walking path, beginning at the existing dog park, which is frequented by many community members. In addition, the Town owns 40 acres north of the Payeur Preserve, which is referred to as Bassett land.

The Great Works Regional Land Trust (GWRLT) purchased, with monetary assistance from the Town of Ogunquit, the Old Boston Land on North Village Road. This 157-acre parcel of land is the largest remaining undeveloped property in the town with over 2000 feet of frontage on the Ogunquit River. Its woodlands, wetlands, historic foundations and cemetery will provide for outdoor recreation and protect water quality. It will be managed by GWRLT and Ogunquit will have easement rights to the land.

The Hilton-Winn Preserve is owned and managed by the York Land Trust and is 175 acres in total, of which 38 acres are in Ogunquit. The area provides significant conservation and recreational value in the northern part of the town on both banks of the Ogunquit River.

## Threats to Natural Resources

Threats to natural resources can include man-made problems, such as development pressure, overuse of the estuary and dunes, non-source pollution, and discarded trash which poses a danger of entrapment and ingestion to wildlife. Natural threats include invasive wildlife and plant species, such as green crab to the shellfish industry, knotweed, bittersweet, floribunda rose, and purple loosestrife. Climate change also poses significant threats to natural resources.

As mentioned previously in this chapter, Ogunquit has no lakes or ponds infested with invasive aquatics, but the invasive green crab which can harm the clams is present in tidal rivers and the ocean. Natural resources along the Ogunquit River Watershed are further threatened by stormwater and erosion.

## Scenic Vistas

Ogunquit has a myriad of scenic areas, including:

- **Ogunquit Beach** is a 3.5-mile stretch of white sand and is consistently voted in the top 10 beaches in the US. Ogunquit has one of the best reliable surfing “breaks” at the mouth of the Ogunquit River on the east coast. There are three public access points to the main beach with parking and restrooms facilities.



- The **Marginal Way**, which was recently added to the National Historic Register, is a 1-mile paved cliff walk along the ocean from Perkins Cove to Shore Road close to the downtown area. Benches are available along the walking path. The Marginal Way Committee has an ongoing program to remove invasive plants along the path and replace them with native plants.
- **Beach Plum Farm Nature Preserve** contains community gardens and a half-mile loop trail leading to the Ogunquit River with a view of the dunes and the Atlantic Ocean.
- **Perkins Cove** was originally a small fishing community and art colony. Currently, the Cove is a quaint area that consists of shops, restaurants and scenic views and remains an active fishing harbor.
- The **Ogunquit River** is a 9.8- mile tidal river. It flows through the Town of Ogunquit and empties into the Atlantic Ocean. The Ogunquit River watershed is rich in rare, diverse and endangered plant and animal species.



*Perkins Cove, Ogunquit*