

9 Natural Resources



Newport's natural resources are inextricably tied to the natural beauty and sustenance of Aquidneck Island and Narragansett Bay. Narragansett Bay is often noted as Rhode Island's greatest natural resource, as it has provided a way of life for generations of Newporters. Newport's natural resources are not limited to its extraordinary coastline, and its harbor. The city's resources include unique agricultural soils, coastal marshlands, and diverse freshwater and saltwater wetlands. The City of Newport is noted as one of Rhode Island's foremost tourist attractions largely due to its natural assets.

In light of the city's unique role in the state's economy, it is both prudent and necessary to take a more holistic approach to the protection, assessment and enhancement of Newport's natural resources. This broader view includes the city's inventory of fragile natural resources, assessment of the city's mature trees, and protection of Newport's iconic views. This chapter hopes to not only catalog and map Newport's natural assets, but to articulate the role they play in the future health of the city.

9.1 Existing Conditions

Location

Aquidneck Island is located in the 'Seaboard Lowland' or 'Coastal Lowland' in the south and eastern portion Rhode Island. (Source: Lemons, J. Stanley. "Rhode Island." *The New Book of Knowledge*. Grolier Online, 2016. Web. 14 Jan. 2016.)

Situated on the southern end of Aquidneck Island, Newport is bordered by Narragansett Bay on the west, Easton Bay on the east and Rhode Island Sound on the south, which leads to the Atlantic Ocean. Middletown borders Newport to the northeast, forming the immediate land connection to the rest of Aquidneck Island. The city's location along the southern New England coast moderates extreme summer heat as well as low winter temperatures, however its location also exposes the city to near constant wind and, at times, severe coastal storms. The region enjoys four distinct seasons, with generally pleasant temperatures and conditions from mid-April through mid-November.

Geology & Topography

Geologically, Newport's rocky terrain resulted from the Laurentine ice sheet that once covered the land. As the Laurentine ice sheet melted, vast amounts of sand and gravel were deposited in the area. Newport's bedrock is a base consisting of shale, sandstone and conglomerate rock. Outcroppings along the shore, such as along Cliff Walk and Ocean Drive, are geologically and ecologically significant.

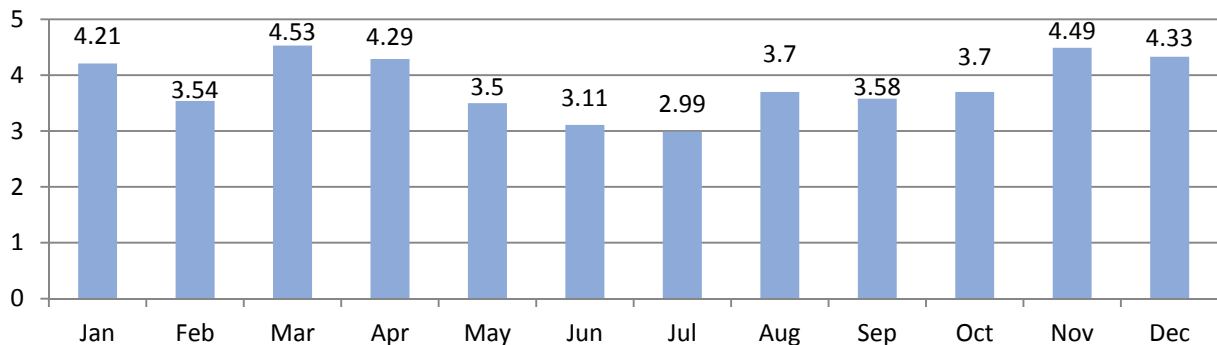
In general, Newport's topography consists of moderate sloped hills extending downward east and west from a central "spine" running along Bellevue Avenue. Elevations range from sea level to a high point of approximately 160 feet in the city's northern portion. Southerly sections of the city are relatively flat open coastal plains, interspersed with a variety of bedrock outcrops, salt and freshwater ponds and coastal escarpments. Newport's geology, combined with the rise in sea level following the retreat of glaciers 10,000 years ago, created deep water harbors, directly accessible to the Atlantic Ocean. These natural conditions have played a significant part in Newport's development.

Climate and Rainfall

Newport experiences a temperate climate that is influenced by the Gulf Stream and is characterized by four distinct seasons. Extreme temperatures are minimized within Newport due to the city’s proximity to the ocean. As such, the city’s average temperature during the summer is 70 degrees and 30 degrees during the winter. (Source: National Ocean and Atmospheric Administration) These relatively mild summer temperatures play a major role in the amount of visitors the city receives from other New England cities, as well as New York City and Washington, D.C., where summer temperatures are usually much higher. Winters in Newport were historically much cooler than they are today. They were characterized by ice floes that would accumulate on the bay. Over the last twenty-five years, however, Newport’s winters have become much milder with little snow accumulation and limited amounts of ice floes.

Figure 9-1 depicts Newport’s average monthly rainfall. Rainfall is distributed evenly from month to month and averages about 46 inches for the entire year. A lush growing season occurs between April and September.

Figure 9-1 – Newport Average Precipitation in Inches



Source: US Climate Data, 2015

Although the six-month period from June 1st to November 30th is considered to be the hurricane season, most hurricanes occur in August, September and October. On the average there is one major hurricane every ten years. In the recent past, Newport was affected by Hurricane Gloria in 1985, Hurricane Bob in August 1991, and most recently Hurricane Sandy in 2012. Newport has not been physically hit by a hurricane in many years.

Often, Newport and the Rhode Island south coast experience gale force winds, heavy rain and flooding—from coastal storms that are not of tropical origin. These coastal storms, called Nor’easters, are hard to forecast and can do as much damage as a hurricane, especially during high tide. In recent years, the frequency of heavy rainfall events has increased, leading to damage from flooding, particularly in low lying areas. Portions of the State received between 15 to almost 20 inches of rain in March of 2010, breaking records set just five years earlier in 2005.

Soils

Soils in Newport are generally derived from unconsolidated glacial till. Layers of tightly packed soil are called hardpan, which affects percolation rates, drainage, runoff, and erosion and can cause septic system failures. According to the Soil Conservation Service, about 90% of the soils on Aquidneck Island can be expected to contain hardpan approximately 20 to 30 inches below the surface. Map 9-1 displays all the soils that make up the City of Newport. Four soil types comprise 75.2% of Newport's soils; these are shown on Table 9-1 in order of decreasing permeability, from rapid to slow.

Table 9-1 – Predominant Soils

| Type | Percent | Acres | Permeability |
|-----------------|---------|-------|---------------------------|
| Newport | 48.5 | 2,415 | Moderate-Moderately Rapid |
| Canton-Charlton | 12.9 | 640 | Moderate-Rapid |
| Pittstown | 12.4 | 620 | Moderate-Slow |
| Stissing | 1.4 | 70 | Moderate-Slow |

Source: USDA, Natural Resource Conservation Service

Newport-type soils, which are excellent for agriculture, are located primarily in the northern and central sections of the City. However, the central and southern portions of the city along Ocean Drive, contain a variety of less permeable soils. These less permeable soils can combine with exposed bedrock and hardpan to provide significant constraints to development.

Agricultural

In order to be consistent with the agriculture goals and policies of the State Guide Plan, Newport’s comprehensive plan addresses agriculture and the methods required to preserve the best farmland and active farms in the State for active agricultural use. The USDA - Natural Resources Conservation Service (NCRS) and the RI Department of Administration have identified those lands in the State that have a combination of physical and chemical features that make them best suited for farming. These important farmlands are subdivided into Prime Farmland (best soils for agricultural use) and Statewide Importance Farmland (other soils that are less well suited for intensive farming but are still valuable for many farm enterprises). As can be seen in Map 9-2, all the identified prime farmland or Statewide Importance Farmland is either developed or serves as active open space. Developments and parks located in areas of agricultural soils include Salve Regina University, Brenton Point State Park, J. Paul Braga Jr. Memorial Field, Miantonomi Memorial Park, and Newport’s Historic Harbor.

Watershed and Water Bodies

Aquidneck Island is part of the Narragansett Bay Watershed in the Narragansett Subbasin. The City of Newport is located within portions of two subareas within the Narragansett Watershed; the Lower East Passage Subwatershed and the Coastal Aquidneck Subwatershed. These watersheds, as well as their associated streams, reservoirs, habitat areas, wetlands, and oak or ruderal (first species to colonize a previously distributed area) forests can be seen on Map 9-3.

Newport Water’s Aquidneck Island water supplies are moderately susceptible to contamination. This is an average ranking for the entire system based on land use and existing water quality. Individual subwatersheds may be more or less susceptible to contamination. Newport Water maintains an active watershed protection program that includes watershed monitoring, land acquisition and retrofitting storm drains to treat runoff (Source: Rhode Island Rivers Council, "Aquidneck Island Watershed" Online, 2016. Web. 14 Jan. 2016). More on Newport’s water supply including techniques for minimizing the negative impacts of development on the watershed can be found in Chapter 12, Water.

Map 9-1

Map 9-2

Map 9-3

Newport's principal water bodies are limited to coastal ponds, including Easton's, Lily and Almy. These are all vulnerable to impacts associated with sea level rise and coastal storm surge, as well as eutrophication, sedimentation, and invasive species. Efforts have been under way to address water quality concerns in Easton's Pond, as well as phosphorous Total Maximum Daily Load (TMDL) management plan project for Almy Pond.

Coastal Marshland

Newport's coastal wetlands play an important ecological and aesthetic role. These resources are especially vulnerable to sea level rise. The Sea Level Affecting Marshes Model (SLAMM) is a simulation of the process in which wetlands are converted and shorelines are modified during consistent sea level rise. As expected, the impacts on wetlands and shorelines vary based on how extensive the sea level rise is. SLAMM maps have been created for Newport's wetlands and shorelines and can be seen on Maps 9-4, 9-5 and 9-6. Each of these depicts wetland and shoreline impacts based on rises in sea level of 1 foot, 3 feet and 5 feet, respectively. The protection of wetland and shoreline vegetation is important for reducing the impacts of sea level rise. The continual protection of such vegetation should be supported, such as the eelgrass restoration at Brenton Cove and The Point.

Sea level rise is having a significant impact on these resources, both in terms of inundation but also by changing the type and character of the ecological communities which depend upon these areas. Evidence has shown that in certain cases these areas are migrating as saline water infiltrates the underlying soils. As this saltwater "lens" pushes farther inland, it can also impact private potable and irrigation wells, particularly during dry periods when excessive pumping can increase infiltration. Planning for these changes must take into account setting aside sufficient viable areas to accommodate migrating salt marsh areas.

The effects of sea level rise on infrastructure can be found in Chapter 13, Natural Hazards and Climate Change.

Floodplains

A floodplain is an area of land that is prone to temporary inundation during times of high water, typically associated with seasonal changes in rainfall and/or snow melt. In essence, floodplains are part of nature's safety buffer, allowing ecosystems to manage the damage and stress caused by severe storms and floods. As a result of their unique characteristics, they have developed equally unique communities of plants and fauna which typically do not thrive in other environments. Long considered waste areas to be filled, people now understand and appreciate their value and the need to protect these important natural resources.

Due to its geology, topography and glacial history, Newport does not contain extensive floodplain farmland. For the most part, Newport's floodplains are fairly localized. The Federal Emergency Management Agency (FEMA) has established 100 and 500 year flood plains for virtually the entire country, including Newport. These maps are used as Flood Insurance Rate Maps (FIRMs) to indicate areas where property owners in communities which participate in the National Flood Insurance Program (NFIP) must meet certain construction and design standards. More rigorous standards apply in coastal "V" zones, which are areas that are subject to high winds and wave action during storms.

A 100-Year flood is a flood that has a 1% chance of occurring in the any 100 year period and a 500-Year flood is a flood that has a .2% chance of occurring in any 500 year period. The 100-Year and 500-Year Flood Zones for Newport can be seen on Map 13-1.

Map 9-4

Map 9-5

Map 9-6

With some notable exceptions, most of Newport's flood plains have been developed (or filled in) for many decades, even centuries. The principal developed areas that are most at risk for flooding include the northern half of Goat Island, the Harbor/Lower Thames area, portions of the Navy base, the area around 3rd Street / Training Station Road, and the Price, Goose and Cherry Necks. "Undeveloped" flood plain areas include the large floodplain extending north from Ocean Drive more or less through the Newport Country Club to Brenton Cove at Harrison Avenue; and Lily, Almy, Easton and Green End Ponds. It is important to note that these ponds are also subject to saltwater wave action. This is a serious threat to the ponds survival due to the fact that they are all freshwater ponds. Newport also receives water from Nelson's and Gardiner ponds in Middletown, which are also threatened by coastal flooding. More information about flooding can be found in Chapter 13, Natural Hazards and Climate Change.

Vegetation

The ecosystem around Newport is a diverse blend of land and water based systems. The habitats present in the city play a key role in supporting both immediate habitat communities, as well as other communities found throughout the Narragansett Bay and beyond.

As large portions of the city have been developed, there is very limited forest cover throughout Newport. In the northern part of the city, forest cover is mostly limited to portions of Miantonomi Memorial Park. There is also limited forest cover located south of the park, just west of Malbone Road and south of Admiral Kalbfus Road.

In the southern portion of the city, mainly in the Ocean Drive, Fifth Ward, and Lily / Almy Pond neighborhoods, there is sparse and naturally occurring ruderal forest cover, though many of the naturally occurring forests have been cleared. Historically, this clearing occurred for either agricultural reasons or development purposes. With only 50 acres of agricultural land remaining in Newport, most of the naturally occurring forest cover has given way to development. Fortunately, with the City of Newport's tree planting program, Newport now has more canopy cover than it did in Colonial times.

The City offers a subsidized tree planting program to residents who are interested in sponsoring city trees. The trees can be located in the public right-of-way or setback on private properties. All public trees planted through this program are managed by the City of Newport Buildings, Grounds & Forestry Division. In addition to private efforts, many beautiful and majestic trees were planted along the public streets leading to the estates, as well as in the city's parks. Newport's trees are not only historic; they mitigate pollution, provide shade from the sun, absorb rainfall, reduce the velocity of stormwater runoff, control soil erosion, and provide energy savings for buildings. As visual amenities, trees are an important contribution to the quality of life as well as property values in Newport.

According to the Open Space Partnership Existing Conditions Report prepared by Sasaki and Associates in 2015, there were an estimated 357 different species of trees documented in the 19th century. This number is estimated to be at least half of what it was then. The most notable tree species that remains in Newport is the Centennial Beeches, of which nearly 400 remain within the city.

Wildlife Habitats

Shellfish

Shellfishing has a long history in Newport and the State of Rhode Island as a whole. The most popular shellfish in the state is the quahog (also known as the hard shell clam) and many residents actively go shellfishing. Other shellfish



A lack of trees and natural environments in general could lead to habitat loss for the birds and other wildlife that call Newport home. Because of this, the limited forest cover in Newport should be preserved and supported. Trees provide numerous ecological benefits and can act as corridors and stepping stones to help support migratory patterns and the movement of wildlife.

present in the area include the soft-shelled clam, surf clam, eastern oyster, scallop, common blue mussel, American lobster, rock crab, Jonah crab, blue crab, European green crab (invasive species), and the Asian shore crab (invasive species). In Newport, shellfishing is prohibited in the areas near Newport Harbor, Coasters Harbor, Brenton Cove, and Easton's Beach due to high levels of bacteria which make shellfish harmful for human consumption.

Squid

Newport also has a rich squid habitat. The most popular squid in Narragansett Bay is the longfin squid. These squid only have a nine month lifespan, but reproduce all year long. Longfin squid are largely available all year round, with the exception of the winter months when they migrate offshore.

Fish

There is a rich blend of different fishes in the waters near Newport. The different species in the area include tuna (albacore bigeye, and yellowfin), blackback flounder, blackfish (also known as tautog), black sea bass, bluefish, crabs, cod, fluke, haddock, John dory, mackerel, mahi mahi, monkfish, polluck, raja (also known as skate wing), scup, striped bass, swordfish, tilefish, and triggerfish. Each fish varies in its seasonal availability, but Narragansett Bay is a rich and diverse ecosystem and is never devoid of life.

Public and Private Conservation Lands

There are a number of both public and private conservation lands throughout Newport. Conservation lands are areas that receive protection due to their natural and/or cultural values. Methods of land conservation typically used in Newport include: land conserved with a Perpetual Conservation Restriction; land conserved with a Deed Restriction; and land held with Conservation Intent Alone. The conservation of land in Newport is provided by a variety of sources from the state and city level as well as the county level which includes the Preservation Society of Newport County and the Aquidneck Land Trust. Notable state conservation lands include Brenton Point State Park, and Fort Adams State Park.

There are also quite a few conservation lands maintained by Newport, with the majority of them being parks. These include Storer Park, Aquidneck Park, Touro Park, Freebody Park, Hunter Park, Miantonomi Memorial Park, and Easton's Beach.

Aquidneck Land Trust

- Founded in 1990, the Aquidneck Land Trust (ALT) is a non-profit organization dedicated to saving the natural character, environmental health, and economic value of Aquidneck Island. ALT protects properties through purchasing conservation easements. These easements protect properties from development and various other threats. ALT focuses on such properties as agricultural land, wildlife habitats, scenic vistas, and outdoor recreation areas conserving water resource areas. These preserved open spaces promote healthy outdoor recreation and help stimulate environmental benefits like carbon sequestration. Island-wide, there are 76 properties protected by ALT, totaling 2,552.72 acres.
- Of the 76 properties protected by ALT, 19 of them are within Newport, totaling 195.73 acres. Many of the properties are parks or nature areas. Also on the list are some of the city's historic estates, as well as Salve Regina University. The 19 protected properties in Newport are listed in Table 9-2. Each protected property is shown with a number that corresponds to their location on Map 9-7. Map 9-6 also displays the locations of the other state and municipal conservation lands within Newport as well as non-governmental organization (NGO) lands. Non-governmental organizations are not affiliated with a government and are generally not for profit.

Table 9-2 – Aquidneck Land Trust Properties in Newport

| Label | Name | Acreage | Label | Name | Acreage |
|-------|-----------------------------|---------|-------|-------------------------------------|---------|
| 1 | Sunset Hills | 5.47 | 2 | Miantonomi Park | 29.78 |
| 3 | Coggeshall School Park | 0.87 | 4 | Braga Park | 8.35 |
| 5 | McCormack Estate | 2.29 | 6 | King Park | 8.05 |
| 7 | Spencer Park | 1.14 | 8 | Salve Regina University / Sulthorne | 12.10 |
| 9 | Morton Park | 2.46 | 10 | John J. Slocum Estate | 2.40 |
| 11 | Almy Pond Conservation Area | 19.66 | 12 | Whitehouse Family | 5.10 |
| 13 | Wild Moor Estate | 14.75 | 14 | Gooseneck Cove | 58.00 |
| 15 | Dockery Estate | 12.57 | 16 | Newport Country Club | 3.33 |
| 17 | Crump | 3.76 | 18 | Rovensky Park | 4.95 |
| 19 | Ocean View | 0.70 | | | |

Source: Aquidneck Land Trust

Scenic Views

Situated at the southern end of Aquidneck Island, Newport has views of the Atlantic Ocean on three of its four borders. Two of the significant viewsheds along the city’s coastline are the Cliff Walk and Ocean Drive. The Cliff Walk, totaling 3.5 miles, extends along Newport’s southeastern coastline, taking in ocean views as well as views of the city’s famous Gilded Age mansions. Ocean Drive provides unforgettable views of Newport’s estates, the Atlantic Ocean, the City’s unique rocky coastline, and inland estuaries. Scenic water views are also found along the Harbor Walk, which is a little over five miles long and winds through Newport’s Historic District.

The scenic views and natural beauty of Newport is at risk to various natural hazards and climate change. The main threats come in the form of coastal erosion, coastal flooding, wind-related storms, and sea level rise. More on these topics can be found in Chapter 13, Natural Hazards and Climate Change.

Map 9-7

Wetlands

There are at least 11 wetland areas in Newport, including swamps, marshes, coastal tidal marshes, and estuarine marshes. All of the wetland areas are located along the Ocean Drive, near the southern end of Lily and Almy Ponds and at the head of Brenton Cove. Because transitional wetlands do not always contain water throughout the year, they are not as easily recognized. Nevertheless, wetlands are known to be extremely fragile; they support important ecosystems when left in their natural state, reduce flooding, remove pollutants, and maintain groundwater supplies. Thus, they are protected by laws that make it illegal to alter them without a permit from RIDEM.

Freshwater

While freshwater wetlands in Newport do not support commercially valuable fish / shellfish populations, Newport's shallow freshwater wetlands are particularly important as buffers around the coastal ponds (Almy and Lily) in the southern part of the city and at the northern end of Easton's Pond. Occurring elsewhere throughout the Ocean Drive neighborhood, wetlands contribute significantly to the diversity of plant life and wildlife in the area as well as its scenic value.

In order to accurately evaluate the combined significance of Newport's natural resources, there is the need to have more accurate inventories created and maintained. The removal of a small wetland may seem insignificant by itself, but the accumulated loss of multiple small wetlands can pose a major threat to the balance of natural communities. In addition, maintaining natural resources, such as small wetlands, can have economic and other environmental benefits (such as runoff filtration to reduce pollution).



According to the Natural Open Space Partnership, many of the inlets in the Ocean Drive neighborhood are listed as impaired wetlands. As wetlands provide many benefits for their surrounding communities, they should be preserved at all costs. Should these wetlands be damaged further, increased flooding may occur. Other ecological benefits such as water filtration and groundwater recharge could be lost as well.

Saltwater

The coastline plays a key ecological role in providing habitats for the vegetation and wildlife that flourish in Newport. Similar to freshwater wetland areas, the diversity of plant and animal life in saltwater areas depend on its size. Inlets, coves, and tidal pools along Newport's undeveloped southern coast serve as saltwater nurseries for local wildlife. In addition to serving as important ecological resources for the wildlife, the city's saltwater resources are also appreciated by citizens and visitors as popular recreational sites. A balance between recreational and conservation efforts will be key to ensuring the future of these delicate natural resources.

Harbor and Coastal Resources

Newport Harbor is home to a unique blend of ecological life and commercial, recreational, and water-oriented uses. State law, through the Rhode Island Coastal Resources Management Council (CRMC), requires all coastal communities to formulate a Harbor Management Plan (HMP). The goal of an HMP is to address permitted uses along waterfronts, as well as the issues of water quality, safety, and management. Newport's HMP is currently in the final stages of an update.

The State of Rhode Island has also created a management agency called the Coastal Resources Management Council (CRMC). The CRMC creates different management plans for coastal municipalities and have created one for the western portion of Aquidneck Island. The Aquidneck Island Special Area Management Plan (SAMP) contains various development regulations that are aimed towards ensuring any new developments preserve the natural resources that the coast has to offer.

Issues facing Newport's harbor, and coast in general, are similar to those faced by Newport's scenic views. These issues can be found in Chapter 13, Natural Hazards and Climate Change.

Municipal Natural Resource Protection Measures

The City of Newport has implemented multiple measures to promote and ensure the protection of its precious natural resources. Many of these measures are included in the City of Newport's Code of Ordinances including the Open Space District, the Newport Tree and Open Space Commission and the Critical Area Review – Ocean Drive District.

Open Space District

The Open Space District is intended to preserve and protect the land within the district bounds by restricting the uses that are allowed on it. The approved uses include conservation lands, bird sanctuaries, wildlife preserves, and parks.

Newport Tree and Open Space Commission

This commission is composed of nine members and promotes the conservation, planting, health, and growth of trees within the city, with a special focus on Newport's urban forest. The Tree and Open Space Commission understand the importance and benefits that trees can offer Newport's citizens.

Critical Area Review

The Critical Area Review – Ocean Drive District review process within the City of Newport Zoning Code is designed to protect the unique natural resources located within the Ocean Drive area, which include scenic Ocean Drive, two state parks, and multiple parks managed by the City of Newport. This area contains Newport's greatest amount of natural resources.

The Critical Area Review is a development plan review process designed to protect the unique natural resources of Newport. The intent is to foster sensitive development activity in the southern shoreline area of the city and to minimize adverse impacts of development on such critical natural elements as vegetation, soil erosion, water quality, natural habitats, and scenic quality.

The requirements of this review committee are developed to protect, conserve, and foster the natural, scenic, historical and economic qualities of lands along Ocean Drive. The critical area review process is not intended to deny an applicant a permitted use of the property as established by the zoning code, rather it is intended to review, comment, refine, and develop site design elements which pertain to the physical characteristics of the site and its surrounding environment.

Code Provision 13.09.110

Code provision 13.09.110 is a preservation initiative which pertains to watercourse protection. It states that anyone who owns, or is leasing, property through which a watercourse passes must keep and maintain that portion of the watercourse reasonable clean of trash, debris, excessive vegetation, and other potential pollutants.

9.2 Goals and Policies

Goal NR-1

To acquire, maintain and use accurate and timely data regarding the City's natural resources, their condition, functions and relationships to other resources and the community.

- Policy NR-1.1** The City shall take the initiative to lead and sustain a comprehensive program to create, manage and share data regarding the City's key natural resources through the Geographic Information System (GIS) process.
- Policy NR-1.2** The City shall use accurate and current data regarding its key natural resources in making decisions to establish and adjust programs, policy and other priority actions, in order to anticipate, mitigate, avoid or respond to critical threats to the City's key natural resources.

Goal NR-2

To provide for the effective, long-term preservation and restoration of natural resources.

- Policy NR-2.1** The City shall create and maintain an inventory of notable natural resources located within the city, including location, type, function, ownership, significant flora and fauna and other general attributes.
- Policy NR-2.2** The City shall protect its natural resources and ecosystems as part of the planning and implementation of all City actions.
- Policy NR-2.3** The City shall work in partnership with other regional and statewide interests to evaluate and fund natural resource protection.
- Policy NR-2.4** The City shall monitor recognize and support the interdependence of natural and cultural assets.
- Policy NR-2.5** The City shall protect scenic vistas.
- Policy NR-2.6** Where possible, the City shall institute a 'no mow' policy on city-owned land to provide habitat for beneficial pollinator species.
- Policy NR-2.7** The City shall manage the protection of trees in the city to maintain the city's designation as a designated "Tree City".

Goal NR-3

To enhance the public's understanding of Newport's natural resources.

- Policy NR-3.1** The City shall work with stakeholders and advocates to educate the public and advocate for the protection of natural resources using all available communication tools.
- Policy NR-3.2** The City shall communicate with the public and landscape industry regarding resilient and sustainable methods of landscaping practices.
- Policy NR-3.3** The City shall enhance signage at significant natural resource areas that highlight the importance of the site and the components of each site that make it unique.

Goal NR-4

To fully integrate natural resource protection into all appropriate City plans, policies, regulations, and operations.

- Policy NR-4.1** The City shall manage its natural resources as a strategic asset, with respect to their ecological functions and values, and as a major contributor to the City's economy, health and well-being.
- Policy NR-4.2** The City shall continue to operate major events in ways which avoid damage to the City's natural resources.
- Policy NR-4.3** The City shall develop a Natural Resource Management Plan.

Goal NR-5

To integrate Newport's natural resources as part of the public education curricula.

- Policy NR-5.1** The City shall continue to collaborate with the School Department to fully integrate natural resources education and protection into public school curricula.

9.3 Implementation Actions

The following are the implementation actions for the goals included in the Natural Resources Element.

| Goals & Actions | City Objectives | | | | | | | Priority | Time | Responsibility / CIP | |
|---|-----------------|-----------|-------|-------------|---------------|-------|---------|----------|-------------------------|----------------------|--------------------------------------|
| | Prosperous | Beautiful | Happy | Destination | Collaborative | Smart | Healthy | | | | Resilient |
| GOAL NR-1: To acquire, maintain and use accurate and timely data regarding the City’s natural resources, their condition, functions and relationships to other resources and the community. | | | | | | | | | | | |
| A) Solicit the assistance of private property owners, academic institutions, state agencies, non-profits and others in efforts to acquire regular and reliable data. | | | | | ■ | | | | Mid ———— No Cost | Mid | • EEC |
| B) Provide easy public access to natural resource data via the city web page and Engage Newport. | | | ■ | | ■ | | | ■ | High ———— No Cost | Short | • EEC • Engage Newport |
| C) Use natural resource data to develop and revise City conservation programs and initiatives, including with respect to resiliency oriented economic diversification activities. | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | High ———— \$ | Short & On-going | • Planning and Zoning Board • EEC |
| GOAL NR-2: To provide for the effective, long-term preservation and restoration of natural resources. | | | | | | | | | | | |
| A) Review current documentation regarding conservation easements, Land Use Restrictions, deed covenants, permit conditions and other legal instruments limiting use of the City’s natural resources and if determined insufficient to secure long term protection, identify and deploy potential tools which could provide additional protection. | | | | | ■ | | | ■ | Mid ———— No Cost | Mid | • EEC • City Planner |
| B) Work with public and private sector cohorts, non-profits, major City and regional institutions, academic institutions and others to secure new lands and/or rights. | ■ | ■ | | ■ | ■ | | ■ | ■ | Mid ———— \$-\$\$ | Long | • City Council |

| Goals & Actions | City Objectives | | | | | | | Priority Cost | Time | Responsibility / CIP | |
|--|-----------------|-----------|-------|-------------|---------------|-------|---------|------------------|-------------------------------|----------------------|--|
| | Prosperous | Beautiful | Happy | Destination | Collaborative | Smart | Healthy | | | | Resilient |
| GOAL NR-3: To enhance the publics' understanding of Newport's natural resources. | | | | | | | | | | | |
| A) Make information easily accessed and available to the general public via the City web page and related links, such as Engage Newport. | | | ■ | | ■ | | | ■ | High ———— No Cost | Short | <ul style="list-style-type: none"> • City Council • City Manager • Engage Newport |
| B) Encourage City staff to provide guest lectures at City schools, class field trips to City resource sites, active and on-going relationships between City staff and student environmental clubs and other means of expanding awareness and support for natural resource plans, policies, programs and initiatives. | | | ■ | | ■ | | | ■ | Mid ———— No Cost | Short | <ul style="list-style-type: none"> • City Manager |
| C) Participate in regular meetings with City business owners and interests to educate and inform them of relevant issues, plans, progress, options, resources and other relevant information concerning natural resource protection and management. | ■ | | | | ■ | | | ■ | High ———— No Cost to \$ | Short | <ul style="list-style-type: none"> • City Council • City Manager |
| D) Prepare and make widely available a brochure describing how natural resources benefit the community and the ways that members of the community can become engaged in helping to protect, maintain and enhance Newport's natural resources, and limit source pollutants from entering the water. | ■ | | | | ■ | | | ■ | Low ———— \$ | Mid | <ul style="list-style-type: none"> • City Council • City Manager • EEC |
| E) Continue efforts to use major events as a means of educating citizens about natural resource issues and to engage citizens and patrons in programs intended to minimize the impacts of these events on the community's environmental resources. | ■ | ■ | | ■ | ■ | | | ■ | Mid ———— \$ | Short & On-going | <ul style="list-style-type: none"> • EEC • Tourism Board |
| F) Aggregate data regarding event related environmental programs and incorporate it into data made generally available to the public, but also into the City's educational efforts, open houses, City Council briefings and other educational efforts. | ■ | | | ■ | ■ | ■ | ■ | ■ | Mid ———— \$ | Short & On-going | <ul style="list-style-type: none"> • City Council • EEC • BOE • Engage Newport • Chamber • Tourism Board |

| Goals & Actions | City Objectives | | | | | | | | Priority Cost | Time | Responsibility / CIP |
|--|-----------------|-----------|-------|-------------|---------------|-------|---------|-----------|------------------------|------------------|--|
| | Prosperous | Beautiful | Happy | Destination | Collaborative | Smart | Healthy | Resilient | | | |
| G) In developing City plans, programs, budgets and other City initiatives impacting natural resource issues and assets, actively solicit and engage a broad spectrum of interests in order to provide guidance and definition to such initiatives. | | | | | ■ | | | ■ | High No Cost | Short | <ul style="list-style-type: none"> • City Council • City Manager |
| GOAL NR-4: To fully integrate natural resource protection into all appropriate City plans, policies, regulations, and operations. | | | | | | | | | | | |
| A) Review existing City plans to determine if they sufficiently incorporate natural resource values and strategies, and if not, draft and propose appropriate amendments for formal consideration by applicable City boards/commissions. | | ■ | | | ■ | ■ | ■ | ■ | Mid No cost to \$\$ | Mid | <ul style="list-style-type: none"> • City Council • Planning and Zoning Board • City Manager • EEC |
| GOAL NR-5: To integrate Newport’s natural resources as part of the public education curricula. | | | | | | | | | | | |
| A) Fully integrate the City’s natural resources into the City’s developing Innovation Hub and related economic diversification plans and activities. | ■ | ■ | | | ■ | ■ | ■ | ■ | High \$ | Short & On-going | <ul style="list-style-type: none"> • City Council • Planning and Zoning Board |

Please see the next page.