VIII. TAUNTON RIVER SUBWATERSHEDS: SURVEYS OF MAJOR TRIBUTARIES

Overview

The tributaries to the Taunton River provided rich natural resources for Native People and Colonial Settlers, and still provide rich agricultural soils, rare and pristine habitats and wonderful recreational opportunities for today. Native People set up fish weirs on tributary systems, farmed and managed the land for hunting and gathering. Large settlements were located at the confluence of the tributaries and the Taunton River, which was used as a transportation corridor between coastal and inland villages.

The Taunton River tributaries also provided an ideal location for colonial and industrial development because they provided a power source for mills, and the surrounding wetlands provided resources such as clay for bricks and bog iron for tools. Shortly after European colonization, mills were set up along the tributaries with each community building a grist mill to grind grain and corn, a saw mill to cut lumber, a fulling mill to process cloth, and a blacksmith or iron forge to provide the parts for tools, plows and other household implements. The Taunton River was used as a transportation corridor, moving goods from the tributaries to ports such as Taunton and Fall River. Taunton, Dighton, Berkley, Somerset, Freetown and Fall River all became important shipping areas, with merchants working to bring goods to market.

As a result of this early industrial use, the tributary systems show signs of habitat impairment from dams and shoreline development, but they also provide rich historical resources that preserve the early days of American industry. The tributaries contain many rare and pristine habitats, rare species and cold-water fisheries. The state's largest anadromous fish run is still maintained on the Nemasket River. Recreational opportunities are abundant and many properties have been protected by local municipalities, lands trusts and state agencies.

Shoreline Surveys

The tributary systems of the Taunton River share many of the same outstanding characteristics that make the mainstem of the river suitable for designation as a Wild & Scenic River. Eight of these major tributaries (the Matfield River, Town River, Winnetuxet River, Nemasket River, Forge River, Three Mile River, Segreganset River and Assonet River) were studied through the formation of local volunteer groups (Stream Teams) that conducted visual Shoreline Surveys

of each river. The tributaries were surveyed using methods and protocols from the Massachusetts Riverways Adopt-A-Stream Program in the Department of Fish and Game, which was closely involved in the formation, training and facilitation of each tributary team. Adopt-A-Stream Program staff worked with three Wild & Scenic River Shoreline Survey coordinators who established Stream Teams to conduct visual assessments of the rivers and identify outstanding characteristics in the tributary river communities.

The tributary Shoreline Surveys involved many people from each community including conservation commission members, planners, town administrators, local advocates, local land trust members, river abutters, sportsmen, eagle scouts, college students and professors, and concerned citizens. It was also the intent of the Shoreline Survey process to bring these different groups together around a common issue – the rivers and their protection. We are focused on empowering community members so that they will play a larger role in shaping solutions to the identified threats and will raise the level of awareness about these rivers in their local community.

The management of the tributary systems will have a great effect on protection of the mainstem Taunton River, and many of the threats are similar. While sections V and VI of this document describe the comprehensive strategies to protect wild and scenic values throughout the watershed, the strategies that follow in this section relate to site-specific actions needed on individual tributaries in order to protect or restore ecological functions, aesthetic values, and river access for education and recreation.

New development, larger residential populations and road runoff are increasing the nutrient and bacteria levels in all the tributary systems. As a result, increasing weed growth is threatening biodiversity and fisheries habitat. Increased water use is depleting seasonal flows necessary for ecosystem health. The use of all terrain vehicles (ATVs) is threatening bank habitat and causing disturbance to forested areas on both public and private land.

There is also a general lack of awareness in the tributary communities about the outstanding resource values and the ability to use the river for recreation. There is also a lack of safe access areas for passive recreational uses like fishing, wildlife viewing, etc. There are few canoe launch areas that provide parking and safe access to the rivers, as well as few that provide handicapped access. A summary of each tributary survey is included below. Full Shoreline Survey reports are available from the Southeast Regional Planning and Economic Development District.

Matfield River, East Bridgewater and West Bridgewater:

Matfield River at High St, Bridgewater
Rachel Calabro

The Matfield River begins with the Salisbury Plain River, and forms the headwaters of the Taunton River along with the Satucket and Town Rivers. It is fairly wide and flat through its lower stretches, and is heavily wooded, with little development along its banks. The Matfield River suffers water quality impacts from the Brockton Wastewater Treatment Facility discharge as well as from large volumes of runoff from the City of Brockton. A large percentage of impervious area in the upper watershed, coupled with stormwater runoff and historic manipulation of the stream channel have cause the Matfield River to display undercut and erosional banks for much of its length. Although the stream banks are wooded, exposed roots, fallen trees and heavy sediment loads were identified along the river during the Shoreline Survey.

Monthly water quality monitoring conducted by the Taunton River Watershed Alliance (TRWA) since 1991 and by the Bridgewater State College Watershed Access lab has shown that both nitrogen and phosphorus levels in the Taunton River and its tributaries have been quite high during the summer months. Overnight sampling of the Matfield River at High Street, the Town River at Hayward Street and the Taunton River at Titicut Street in 1999 confirmed that 78-87% of soluble reactive phosphorus comes from the Matfield River (TRWA monitoring report, 1999-2000). Similarly, the study found that the Matfield River also contributes 88-92% of the nitrate nitrogen entering the upper Taunton River. In the Taunton River system, phosphorus is the limiting nutrient for plant growth in fresh water, while nitrogen is the limiting factor in the estuary. Excessive plant growth caused by elevated nutrient levels lowers the dissolved oxygen content due to plant decay and respiration and limits the aquatic life that can survive in the river.

Biological sampling conducted in 2001 by the Department of Environmental Protection found that the Salisbury Plain River below the Brockton Wastewater Treatment Plant is only 33-38% comparable in species diversity to a relatively unimpacted reference station in the watershed, even though this river reach provides very high quality habitat. Pollution sensitive organisms were virtually absent from this section, suggesting an oxygen stressed community. This indicates that water quality limits the biological potential of this stream section (John Fiorentino, Department of Environmental Protection. Technical Memorandum TM-62-4. Taunton River Watershed 2001 Biological Assessment).

The Matfield River and its tributaries once supported a diverse population of both anadromous and freshwater fish. Alewives once spawned in Robbins Pond on the Satucket River, and both shad and blueback herring found good habitat in the pool and riffle runs on the Matfield River. Beaver Brook and the Salisbury Plain River were once home to native brook trout. Trout Brook, a tributary to the Salisbury Plain still maintains cold water suitable for trout. Removal of a breached dam on the Satucket River and improvement of water quality in the Matfield River would provide good restoration potential for both anadromous and freshwater species in this river.

Some issues identified in the Shoreline Survey include:

- Bank erosion has caused a significant amount of fallen trees and woody debris in the stream, making paddling difficult.
- Sewage odors and chlorine odors have been observed as a result of discharges from Brockton Wastewater Treatment Facility.
- The open space plans for East and West Bridgewater need to be updated for the towns to qualify for Self Help funds.
- Town officials need to be educated about the need to preserve land and importance of riverfront land.

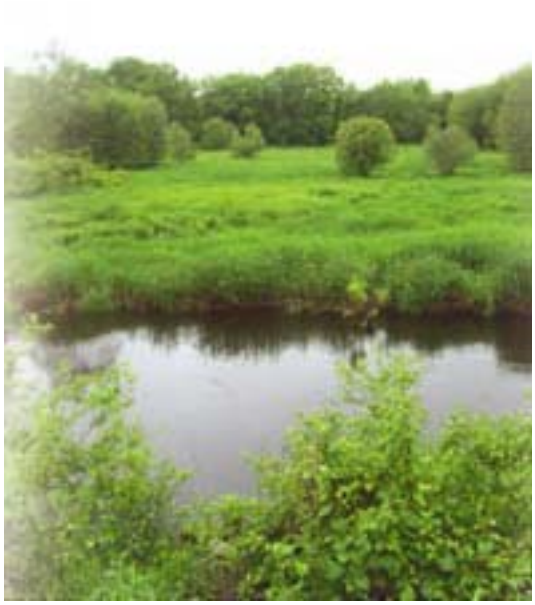
Management Recommendations:

- Evaluate potential public access sites for canoe launching.
- Develop alternatives for canoe passage at the dam at Paper Mill Village on Plymouth St./Rt 104 in Bridgewater to connect the tributaries to the main stem of the Taunton River.

- Recruit members for the open space committees in both East and West Bridgewater and work with them to evaluate riverfront land and parcel ownership.
- Update the open space plans for both East and West Bridgewater.
- Educate town officials about the importance of riverfront land and the need to protect it.
- Protect historic buildings and artifacts at the Iron Works and create more interpretive signage for the park.
- Submit comments from the Stream Team to the EPA on the NPDES permit for the Brockton wastewater plant and advocate for better management and treatment.
- Continue to monitor water quality and flow in the Matfield River.

Town River, West Bridgewater and Bridgewater:

The headwaters of the Town River, like those of the Forge River, are located in the Hockomock Swamp Area of Critical Environmental Concern (ACEC). This ACEC is comprised of the largest vegetated freshwater wetland system in the Commonwealth. It is the location of at least thirteen rare and endangered species, with archeological sites that are known to span a period of 9,000 years. The swamp is a vast area of wetlands and floodplains that are connected with an underground system of medium and high-yield aquifers. The ACEC spans 16,950 acres across six communities, with about 5,000 acres owned by the Division of Fisheries and Wildlife.



Town River at Hayward St, Bridgewater
Rachel Calabro

Lake Nippenicket, the headwaters of the Town River represents a large potential spawning habitat for alewife. A joint Town River fishery committee has been set up with West Bridgewater and Bridgewater for the protection of herring and other spawning fish. Fish ladders operate at two dams along the Town River, at Iron Works Park and at War Memorial Park.

Several riverfront parks have been protected by the Towns of West Bridgewater and Bridgewater along the Town River corridor. Management plans were written for these parks with funding from the Taunton Heritage River Program. The corridor is also part of the Bay Circuit Trail System and connects to the Wampanoag Commemorative Canoe Trail.

***War Memorial Park*:**

War Memorial Park is the site of the first inland settlement of Old Bridgewater. The first grist mill was built in 1662, and several other mills followed including a blacksmith shop, saw mill, carding mill and fulling mill. This park has over 350 years of history, including Pulpit Rock where Rev. James Keith preached the first sermon to the parishioners of the First Church of Bridgewater in 1663; a 1774 canal, double clapper bridge and triple arch bridge over the Town River; and a canal built in 1827 with the remaining foundations of massive foundries operated by the Ames Shovel Company and the Ames dam at the original diversion of the Town River. The Ames Shovel Company was the first producer of shovels in quantity in the U.S., and they were used across the country. The area was redesigned as a park under the Works Progress Administration by local resident Eveline Johnson during the Depression.

Iron Works Park:

The Town of Bridgewater acquired this site as part of a larger gift of land when Bridgewater Iron Works was closed. It includes 1,350 feet of frontage on the Town River. The site contains the remains of one of the old iron works buildings and a pond that was part of the canal system. A dam at this location requires a canoe portage through the park. There is a fish ladder at the dam for fish passage.

In 1694, the first mill was built on this site to provide a saw and grist mill catering to local farmers. Because the surrounding areas are rich in bog iron, an iron works was soon developed during the early 1700's. Bog iron ore contains about 30%-50% useable iron, created by the interaction of decaying vegetation above iron rich clays with slowly moving water. By 1875 the mill complex ranked as the largest iron company in New England, covering over 70 acres, including worker housing and other support buildings. The Iron Works was chosen for the construction of iron fittings for the USS Monitor and the USS Constitution during the Civil War. It also produced large rendering pots for whale oil for the whaling industry. The plant went through several owners, fell into disrepair and finally closed in 1988. The area is on the National Register of

Historic Places, and the town has worked hard to preserve the area and remove any hazards from the site.

Stiles and Hart Conservation Area:

This 75-acre site was an agricultural fairground with a grand exhibition hall from c1820-1875. From 1895 until the Hurricane of 1938, bricks were made at this location. Clay mining continued at the site until after World War II. Many ponds and piles of defective bricks are still present on the property. The area provides wildlife habitat with vernal pools, ponds and a riparian corridor along the Town River.

Tuckerwood Conservation Area:

Tuckerwood Conservation Area is a wooded wetland area that has over 2000 feet of river frontage, many vernal pools and other wildlife habitat. It is surrounded by residential development, and was historically used for farming. Some trails exist on the property and it is used by walkers and all-terrain vehicles.

References:

Interpreting War Memorial Park, Walter Cudnohufsky Associates, Joan S. Rockwell Associates, December, 2002
Iron Works Park Management Plan and Handbook, Mass Audubon Ecological Extension Service, April 2003
Stiles & Hart Conservation Area Management Plan and Handbook, Natures Refuge Landscape Design, August 2002
Tuckerwood Conservation Area Management Plan and Handbook, Natures Refuge Landscape Design, October, 2002

Management Recommendations:

- Create educational material to educate the public about the river and develop a brochure that connects the municipal and state owned properties to the Bay Circuit Trail System and the Wampanoag Commemorative Canoe Trail.
- Develop educational signage for launching areas and parklands interpreting the history and ecology of the river.
- Improve existing canoe access sites to limit erosion and create new access where appropriate.

- Conduct cleanups at bridge areas and campsites to collect trash and debris.
- Encourage runoff improvements for agriculture, golf course, bridges, parking lots and other sites along the river.
- Investigate pipe discharge from stormdrains and other pipes identified during the shoreline survey.
- Utilize former highway barn driveway on Spring Street as an off-road access to the Town River. This area would offer convenient parking and canoe access to downtown area, and could be further designed to include a pedestrian bridge over the Town River to the Stiles & Hart Conservation Area.

Winnetuxet River, Halifax:

The Winnetuxet River in Halifax is pristine and wild for much of its length. There are few residences or other structures to be seen from the river. Many sections are impenetrable, due to dense growth of buttonbush and other riparian shrubs, as well as downed trees. Wildlife is abundant on the river.

Winnetuxet River at Rt 105, Halifax
Rachel Calabro

Several important open space parcels on the river include the Randall/Hilliard Preserve and the Striar Conservancy, Town land on Wood Street and the Wildlands Trust property south of Thompson St, also a gift of the Striar family. The Striar Conservancy is open to the public with trails and passive recreation, and is owned and managed by the Wildlands Trust of Southeastern Massachusetts. This property has some of the richest wildlife habitat in the Taunton watershed and includes four state-listed rare species (bridle shiner, cooper's hawk, Mystic Valley amphopod, and the spotted turtle).

32% of the Town's land area is under chapter 61, 61A or 61B. The town should examine these properties closely to determine when and how to exercise the right of first refusal for acquisition of ecologically important areas.

Some issues identified in the Shoreline Survey include:

- There are no official canoe access points or fishing access to the river. Access at bridge crossings is steep and dangerous. The best canoeing is from Route 105 downstream to the Taunton River, and upstream from East Street into Plympton.
- There are no Town owned passive recreational facilities located near the Winnetuxet River.
- The river was impassable in several places due to an abundance of buttonbush indicating that flow is likely very low for periods of time.
- There is potential for several properties to be developed soon if they are not protected. This includes the Cumberland Farms land near Walnut St. and Route 105.

Management Recommendations:

- Designate a public access site along the lower Winnetuxet River near Route 105 or Pratt Street with adequate parking and safe launching.
- Develop passive recreation such as trails and walkways at a town owned site along the Winnetuxet River.
- Determine the status of the Open Space Committee and reactivate this group.
- Investigate creative options for land protection such as deed restrictions or purchase of undevelopable portions of lots, and begin discussions with landowners at key properties.
- Analyze properties in the Chapter 61A/61B program for future right of first refusal decisions.
- Create river crossing signs to identify the river throughout town.
- Investigate changes in flow through long term photo documentation at selected locations or through the use of stream gauges and/or by looking at macroinvertebrates in the river.

Nemasket River, Middleborough

The Nemasket River begins at the outlet of Assawompset Pond. This pond is the largest natural body of fresh water in the state, and provides the state's largest alewife spawning habitat. This complex includes Assawompset, Great Quittacas, Little Quittacas, Long Pond and Pocksha Pond. The water from these ponds is used by the City of Taunton, the City of New Bedford, and the City of Fall River for drinking water. The City of New Bedford owns most of the land surrounding the pond system, however there are still many unprotected parcels. The City of New Bedford also controls the outlet structure at the headwaters of the Nemasket River, and manipulates water flow to the point where the headwaters are often dry in summer months, creating an issue for outward migration of juvenile herring. The first lawsuit against New Bedford for this manipulation was presented in 1903 by Middleborough on behalf of the Municipal Light Commission which generated electricity from the flow of the Nemasket River.

The Nemasket River is connected to the Wampanoag Canoe Passage, which unites the south shore of Massachusetts Bay to Mount Hope and Buzzards Bays. *Namasket* (Nemasket) meaning "place of fish" originally referred to the area of Middleborough and Lakeville. The river was used by Native People for seasonal fishing, hunting and berry gathering. An archaic village structure at the mouth of Assawompsett Pond dates back to 2300 BP. Today, the spring spawning run of alewife and blueback herring up the Nemasket River into the Assawompset Ponds tops one million fish and is the most important fish run in Massachusetts.

Nemasket River at Murdock St, Middleborough *Rachel Calabro*

Muttock Hill, located along the river, was also a settlement for Native People until it was sold in 1734. At this time, the remaining villagers moved to Titicut on the Taunton River. This site was the location of a burial ground as well as the location of a fish weir constructed of willow bark, rushes and grass. When the land at Muttock was sold, a dam was built in the place of the fish weir and a

petition for a slitting mill was presented. The petition for Oliver's Mill was granted only after provisions for passage of fish were provided. Today, Oliver Mills Park provides access to the river and preserves the history of the river.

During the 1870's, a sidewheeler operated on the Nemasket River. This river boat was used for private parties and for tours of the Nemasket River, taking passengers into Assawompset Pond. The first boat was 40 feet long and could hold up to 40 passengers. A second boat, the *Assawompsett*, was about 60 feet long and had a hinged smokestack which could be lowered to allow passage under bridges. These boats operated until the City of Taunton was authorized to build a gatehouse across the mouth of the pond in 1875 and to use the lake for water supply.

Some issues identified in the Shoreline Survey include:

- Weed growth below the Assawompset Pond dam is diminishing the quality of fish habitat.
- Low flow is often observed below the dam when water is held back in the pond.
- There are several perennial tributaries that do not show up on USGS quad maps and are therefore not considered to be under jurisdiction of the Conservation Commission during development decisions.
- Questions were raised about the effect on streams of withdrawal and discharge permits for agricultural lands including cranberry bogs.
- The Plymouth Street Bridge has been closed for years and the town has no money to fix it. The "Bridge Closed" signs continually end up in the river.

Ruins at Oliver Mill Park, Middleborough
Rachel Calabro

Management Recommendations:

- Encourage the use of Pratt Farm for environmental education by the schools in the community.
- Provide trail access from the new Middle School.

- Publish an annual town directory detailing educational and recreational programs available and outdoor recreation areas open to the public.
- Designate safe access at either side of Wareham Street for canoe portage.
- Develop a town canoe launch at either Murdock St. or Plymouth St.
- Locate, map and name perennial streams that are not shown on USGS quad maps and make sure that the Conservation Commission uses accurate and up to date maps for decision making.
- Conduct a cleanup of specific areas where debris was found.

Forge River, Raynham:

Raynham is rich in wetland and surface water resources. There are three major swamps that provide rare species habitat and hold important archeological sites. Pine Swamp, which is largely owned by the town, includes a cedar swamp and an old railway right of way. Several town wells are located in this wetland.

Forge River at Rt 44, Raynham
Rachel Calabro

Dead and Titicut Swamps, at the headwaters of the Forge River, are home to several rare species and are part of the larger Hockomock Swamp Area of Critical Environmental Concern (ACEC), the largest vegetated freshwater wetland system in the Commonwealth.

The swamp also acts as a huge reservoir for both regional flood storage and water supply for Raynham and West Bridgewater. Also located within the ACEC are Lake Nippennicket, Gushee Pond, Hewitts Pond, and Nunkets Pond. Several of the impoundments along the Forge River serve as recreational resources for the town, but restrict fish migration due to the presence of dams. Fishways at Kings Pond and Johnsons Ponds would provide an additional 20 acres of spawning area. A small dam is also present behind the Town Recreation Department near Route 104.

Routes of Native People that would have provided access to Lake Nippenickett and other wetland areas are also in the Forge River watershed. A route along Fowling Pond was used extensively and is rumored to be a favorite hunting ground of Metacom (King Phillip). During the colonial period, Leonard Ironworks was established using iron ore from local bogs. This ironworks was the longest continuously operating one of its kind in America and helped start an iron producing region that included Taunton, Norton, Easton and Mansfield. The iron works closed in 1883 after operating continuously for more than 230 years.

Borden Colony, the location of Raynham's recreation complex, is the largest contiguous Agricultural Preservation Restriction parcel in Southeastern Massachusetts. Part of this land is leased to farmers and is still in agricultural use. It also contains an historic poor farm and hiking trails.

Some issues identified in the Shoreline Survey include:

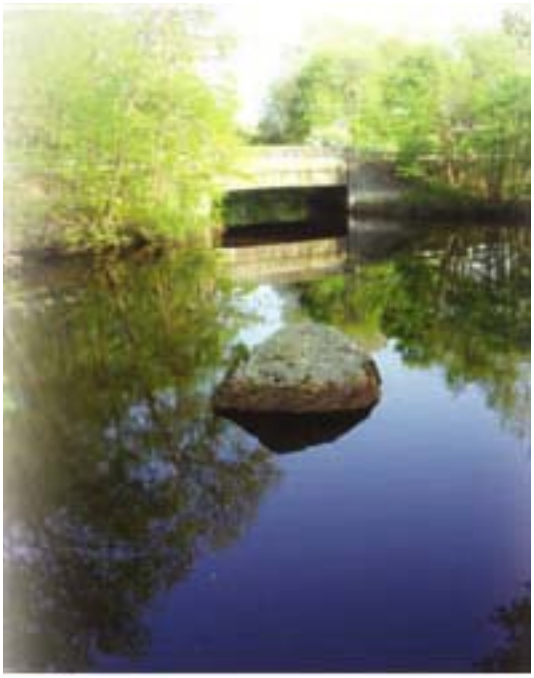
- The Forge River's potential spawning habitat is not being used because of a lack of fish passage at dams.
- Road runoff and nutrient runoff from residences and septic systems is causing weed growth in impoundments.
- Feeding of waterfowl has greatly increased the Canada goose population and is causing nutrient and bacteria issues.
- Several dams are in need of repair
- The heavily developed area near Route 44 is vulnerable to contamination
- There is a perceived lack of public awareness in town about the river and associated natural resources.
- Litter from restaurants along Route 44 and illegal dumping along the tributaries has increased the amount of trash and debris in the Forge River.

Kiosk at Johnson Pond Park, Raynham
Rachel Calabro

Management Recommendations:

- Develop a town canoe launch and outdoor classroom at Gushee Pond.
- Develop a handicapped access site at Hewitt Pond conservation area.
- Assess dams at Kings and Hewitt Ponds for maintenance and safety issues. There is some erosion of the concrete structure and embankment. The Department of Conservation and Recreation Dam Safety office recommended that they be maintained or removed.
- Look at fish passage options at dams, especially Kings Pond and Johnson Pond and the small dam located behind the Recreation Department.
- Set up a fisheries commission for Raynham.
- Set up a local land trust for Raynham to work on protection of open space.
- Create an educational kiosk as a scout project for Johnson Pond Park (completed in Fall, 2004).
- Put together a packet of educational material for river abutters including information about riverfront buffers, landscaping practices and the rare species and special habitats of the Forge River.
- Improve and develop trail options at Borden Colony APR land.
- Enlist support from the fast food restaurants along Route 44 in cleaning up litter using Highway Department bags.

Three Mile River, Taunton and Dighton:



Three Mile River at Rt 138, Dighton
Rachel Calabro

The Three Mile River flows eight miles from the confluence of the Rumford and Wading Rivers in Norton through Taunton and Dighton to the Taunton River. The Three Mile River has been nominated as a candidate for an Area of Critical Environmental Concern because of its outstanding ecological diversity and natural resources. One of the state's best examples of a silver maple floodplain forest is located on the river, along with many undeveloped uplands and riverbanks. The Taunton Conservation Commission's Boyden Wildlife Refuge provides opportunities for walking along the river and viewing osprey and other wildlife. The river is home to one of the best warm water fisheries and more than half a dozen rare and endangered species of both plants and animals.

Over one thousand acres along the Three Mile River have been protected by municipal and state government and local conservation organizations. Native People's sites are located along the river as well as sites of colonial development and industrial use. Three sites along the proposed ACEC are included on the National Register of Historic Places. The river provides many opportunities for boating and fishing, especially along the lower tidal sections of the river. The Taunton municipal golf course is also located along the river, near the silver maple floodplain forest.

The lower section of the Three Mile River is home to rare freshwater mussels, and has some of the watershed's largest snapping turtles. Fish ladders are present at two of the dams located on the lower river, for anadromous river herring.

Some issues identified in the Shoreline Survey include:

- There are several areas where access could be improved for canoes and kayaks.
- There is no warning system for the Mount Hope Dam, making it hazardous for paddlers.
- There is a general lack of knowledge about the resources of the Three Mile River and its history in the community.
- Areas of trash were identified near businesses along Route 44.

Management Recommendations:

- Use public access cable to show educational videos about issues such as septic tanks, landscaping, and stormwater.
- Organize a cleanup of the area near Route 44.
- Follow plans for creation of local access points and work toward greater use of the river by recreational paddlers.
- Work with dam owners to provide a floating barrier across the top of the Mount Hope Dam in Taunton.
- Support designation of portions of the river as an ACEC.

Segreganset River, Dighton:

The Segreganset River is tidal in its lower reaches. It has a small population of alewives which spawn in an impoundment created by the Town of Somerset for their pumping station. This pumping station provides water to Somerset Reservoir where it is stored for treatment and consumption. The first dam on the Segreganset River, owned by the Town of Somerset, has a functioning fish ladder. Past this first obstruction, habitat is blocked to anadromous fish. Smelt eggs have been observed below the first dam, and historically this river would have provided smelt, blueback herring and possibly shad habitat.

Segreganset River at Elm St, Dighton
Rachel Calabro

The Segreganset River has core habitat for the rare bridal shiner and is stocked with trout by the Massachusetts Division of Fish and Wildlife.

Somerset and Dighton were critical areas for native peoples, and one of the most sacred sites, the site of the Council Oak, is still used for ceremonial purposes today. King Philip held council under this oak tree, and the Dighton charter was signed at this site. Several historic mill sites also remain along the Segreganset River, including the Briggs family mill which made tools, picks and shovels. Sawmills, a cotton mill, a flaxseed oil plant, a tannery, tack factories, gristmills and blacksmith shops were also present along the river in the 1800's.
Some issues identified in the Shoreline Survey include:

- Several historical sites on the river should be highlighted.
- River crossing signs should be installed to highlight the Segreganset River
- Not many residents know that the Segreganset is 75% of Somerset's water supply and that Dighton also has wells along the river which cause stress to the river system.
- There is a perceived lack of local knowledge about the outstanding resource values of the river.

Management Recommendations:

- Provide educational opportunities for landowners to learn better maintenance practices on their property.
- Create signage for historical sites and along the river.
- Promote land protection efforts along the river.
- Continue to monitor rare species, flow and fisheries populations along the river.

Assonet River, Berkley and Freetown:

Assonet River, Assonet Village, Freetown
Rachel Calabro

Assonet Neck in Berkley was historically a camp for Native People, used primarily for its proximity to shellfish resources. Several campsites have been identified by archeologists in Berkley, and records show that settlement of the town by European colonists was delayed due to conflicts with the native population. Berkley was abandoned by the colonists during King Phillips War because of its vulnerability to attack. The town remains the smallest in Bristol County and is mostly residential with little commercial business or other infrastructure. In Freetown, Assonet Village hosts historic properties and a local park with canoe launching facilities.

Currently, the only access to the water in Berkley is at Dighton Rock State Park and at an area near Conspiracy Island into the Taunton River. In Freetown, access to the river is available at Jeffrey Lane and Hathaway Park.

The Assonet River has a remarkably intact coastal salt marsh system, and contains the largest contiguous salt marsh in the Narragansett Bay estuary. The river supports a small smelt population, and has potential for further restoration of smelt habitat. Three dams on the river block fish passage, and two of them are in very poor condition. This river represents the best habitat for smelt spawning in the watershed, and removal of these structures could greatly support their restoration. Rattlesnake Brook, a tributary to the Assonet River also has excellent habitat and supports a cold water fishery in its upper reaches where it is bordered by the Freetown State Forest. There are also several historic sites in Freetown including historic cemeteries and mill sites.

Some issues identified in the Shoreline Survey include:

- Increasing development in the estuary has resulted in septic tank problems, increasing runoff and clearing of riverbanks.
- Many homeowners are building large docks near the channel with increasingly larger boats.

- Boaters often flush their bilge tanks into the river, creating oil slicks and other problems.
- A fly ash dump along the river should continue to be monitored for its potential to contaminate the river.
- The town owned conservation area at Porter Pastures has been neglected and a lack of signage discourages use of this area as a canoe launch and recreational area.
- Several historical sites including cemeteries have been neglected and should be highlighted for their historical values.
- The shoreline along the industrial park property that is partially occupied by a Stop & Shop distribution center is in danger of further development. This area contains historical sites of Native People and could provide potential for shoreline recreation.

Management Recommendations:

- Investigate ownership of dams along the river, and evaluate their status.
- Provide education to landowners about management practices for septic system tanks and riverfront land.
- Work with owners of the industrial park to provide shoreline access and protect open space.
- Determine current monitoring efforts for the fly ash dump.
- Work with the Town of Freetown to establish signage for Porter Pastures and conduct a trash cleanup at the site.
- Update the Freetown Open Space Plan.