

The Nunckatessett in West Bridgewater and Bridgewater

TOWN RIVER

2003 SHORELINE SURVEY REPORT & ACTION RECOMMENDATIONS



“...The time has also come to identify and preserve free-flowing stretches of our great rivers before growth and development make the beauty of unspoiled waterways a memory.”

President Lyndon Johnson

**Taunton River Wild & Scenic Study
Tributary Component
-Draft-**

Table of Contents

- I. **Project Introduction**
- II. **Maps of the Town River**
- III. **The Nunckatessett: Natural, Cultural, and Historical Attributes**
- IV. **The Survey Project Itself:
Stream Narrative, the Participants,
Sectional Maps, Summary and Findings**
- V. **Town River Action Plan**
- VI. **What's Next?**
- VII. **Attachments: Stream-Team Data Sheets, River Corridor Parkland
System Management Plans**

This Town River Shoreline Survey Tributary analyses was produced through the shared effort of volunteers from all three Bridgewaters as part of the federally funded Taunton River Wild & Scenic Feasibility Study.

Bi-Town Steering Committee Members:

Don Berry, Skip Copeland, Kevin Curry, Veronica Ellis, Chris Iannitelli, Capt. Bob Paccia, Carole Smudin, Paul Von Protz, Ben Walsh, Marlene Howell and Jim Howell

Cover Photo: Hockomock ACEC / Town River looking upstream towards Lake Nippenicket
Photo credit: Jack Manchester

2003 Town River Shoreline Survey Report by Katherine M. Doherty

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Campers from the East Bridgewater YMCA Leadership in Training Program gather at Reynold's Landing.

I. Project Introduction

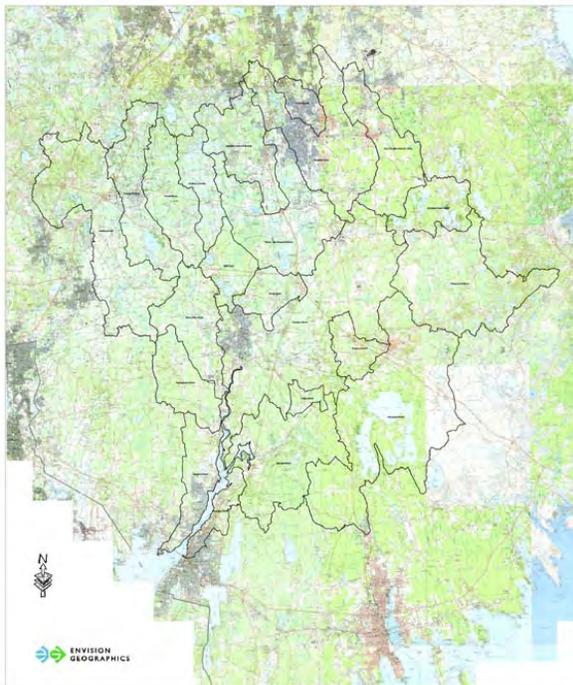
The Federal Wild & Scenic Rivers Act was signed into law in the fall of 1968, establishing a process for preserving and protecting a national network of rivers for the use and enjoyment of future generations. Since then, very few rivers have been identified as possible Wild & Scenic candidates, and fewer still have received congressional consideration and funding for an authorized study.

In 2001 the upper 22 miles of the Taunton – from the confluence of the Town and Matfield Rivers to the Forge River in Raynham - were chosen by Congress for study, and in 2003 Congress also funded a Wild & Scenic River feasibility study on the lower section of the Taunton, to the City of Fall River. The two study groups then merged to become one federally funded Taunton River Wild & Scenic Feasibility Study under the direction of the National Park Service.

If the Taunton River meets the criteria for this Wild & Scenic designation, it will become the third Massachusetts river system to achieve this status, joining the Westfield River and SuAsCo, or the triad of the Sudbury, Assabet, and Concord Rivers.

With its headwaters springing from the Hockomock Swamp, the Nunckatessett, or as we call it today, the Town River in West Bridgewater and Bridgewater, is one of the major tributaries to the Taunton River, and thus became part of this study.

First, some Taunton River Basin background:



Sub-Basins of the Taunton River Watershed

The Taunton River Basin is the second largest watershed in the Commonwealth, a kite-shaped area of 530 square miles dotted with small ponds and lakes woven together by a network of rivers, wetlands, and swamps. It is located directly in the center of Southeastern Massachusetts.

The Town River forms in Bridgewater as outfall from the 17,000-acre Hockomock Swamp, the largest remaining swamp in the state, and meanders its way through West Bridgewater and back into Bridgewater to converge with the Matfield River just upstream from the Route 104 bridge, becoming the Taunton River.

From Bridgewater, the Taunton River is approximately 44 river-miles long, continuing through Halifax, Middleboro, Raynham,

Taunton, Dighton, Berkley and Freetown to its confluence with Mt. Hope Bay in Narragansett Bay, at Fall River and Somerset. In addition to the Town River, there are 24 other tributaries nourishing this majestic Great River.

Situated just 30 miles south of Boston, the meandering, ecologically diverse ‘ Kuttetequat’ or Taunton River is a hidden treasure, an undiscovered gem rich in history and environmental resources, with many, many diverse characteristics.

From Fall River upstream to Dighton, the Taunton is tidal, navigable for pleasure boats, loved by sport fishermen, and enjoyed by swimmers. Further upstream in the agricultural riparian zones, the river is enjoyed for its freshwater fishery, recreational canoeing and kayaking, bird watching, hunting, and even for tenting along the riverbanks. The Taunton River has one of the best anadromous fisheries in the state, its many tributaries brimming with migrating herring each spring.

Historically, the Taunton River and its tributaries were the lifeblood of those who lived near. The Native Peoples used the rivers for thousands of years as their highway, food source, and water supply. Early European settlers farmed riverfront lands and had small settlements in areas where river access encouraged mill development. These mill villages later evolved into the towns and cities that we know today. Above the City of Taunton, riverfront lands were largely bypassed by industrial-era development that transformed most southern New England rivers. Even after World War II as eastern Massachusetts was suburbanized, most towns along the upper portion of the Taunton River remained relatively rural; limited means of access preserved this pristine and scenic river corridor, until now. Now there is great developmental pressure for large, expensive new homes and countless shopping malls as southeastern Massachusetts’s economic mainstay changes from an agricultural base to an urban base, and as the regional transportation system upgrades to meet new demands for goods and services.

Thus, to better understand the whole river system, in 2003 the Taunton River Wild & Scenic Advisory Committee commissioned several tributary shoreline survey studies. This is the report of the **Town River Shoreline Survey**, which was completed in July 2003.

The purposes of this Taunton River Wild & Scenic study are:

- I. To understand and preserve the Taunton River Corridor as an intact river ecosystem and community resource
- II. To develop a strong community and agency coalition for planning and implementing public education, land-use, recreation and conservation strategies
- III. To determine whether the Taunton River should be designated as a component of the National Wild & Scenic Rivers System

The Taunton River Wild & Scenic Feasibility Study Committee appointed Kitty Doherty as Coordinator for the Town River Project. Phone calls were made, local newspapers ran 'Volunteers Wanted' ads, and local Cable TV stations announced the project. Families signed up, and as enthusiasm developed for this hands-on, short-term, fun-with-a-purpose project, friends talked friends into participating.

Since the towns of both West Bridgewater and Bridgewater are 'hosts' to the Town River, residents from both communities joined the official Steering Committee; their responsibility was to plan the specifics details of this local survey project. The first meeting was held in the West Bridgewater Highway Department's conference room with volunteers Don Berry, Skip Copeland, Kevin Curry, Veronica Ellis, Chris Iannitelli, Capt. Bob Paccia, Carole Smudin, Paul Von Protz, Ben Walsh, Marlene Howell and Jim Howell present.

The agenda included basic orientation regarding the federal Wild & Scenic Taunton River Feasibility Study, the National Park Service's roll in river stewardship, and information about the technical assistance available from the Massachusetts Riverways Programs. Volunteers shared a little of their personal background, and reasons for their interest in this particular stream. They were then introduced to the Town River itself as a major tributary to the Taunton and as a major water resource in both communities. With snacks and beverages on the table, the group reviewed various existing land-use management plans, maps, and photos.

Rachel Calabro from the Riverways Program spoke at the second meeting, this one held in the Bridgewater Highway Department conference room. More information was distributed concerning the upcoming Stream-Team training session and the survey itself. The Steering Committee set specific items to include in the survey, including gathering data on the condition of culverts. They set Monday evening, 30th June 2003 to meet at Bridgewater State College for Rachel to conduct the training for the hands-on volunteers, and decided that the actual river work would be started within a couple of weeks thereafter.

The Steering Committee divided the approximately 12-mile long Town River into eight accessible segments, to be surveyed via canoe or kayak. The project also involved dividing the number of volunteers into 10 teams, with each team assigned to investigate a specific section of the tributary and to record its existing health. There were 42 participants in all including teens from the East Bridgewater YMCA *Leaders in Training Camp*. Maps, cameras, and data sheets were the primary tools used to record the cultural and historical elements as well as natural resource conditions.

Some of the participants were seasoned canoeists and knew this stream well; others had never even canoed before but had always wanted to do something exciting like this ... paddle through the Hockomock Swamp and all the way downstream to the 'Great River'.

The weather was nice all month. Some meeting for the first time, team members from both communities introduced themselves to each other, and away they went like sun turtles sliding off a log into the water. At times their adventure was serene and tranquil as they glided along with the current. At other times their escapades became quite comical, footage for Reality TV to hear them tell it, as they ‘battled multi-headed snakes, and spiders as big as a man’s hand jumping out of the jungle-like vegetation’ while they were trying to portage around gigantic downed trees, to then have their clothes ripped off by the raging riffles!

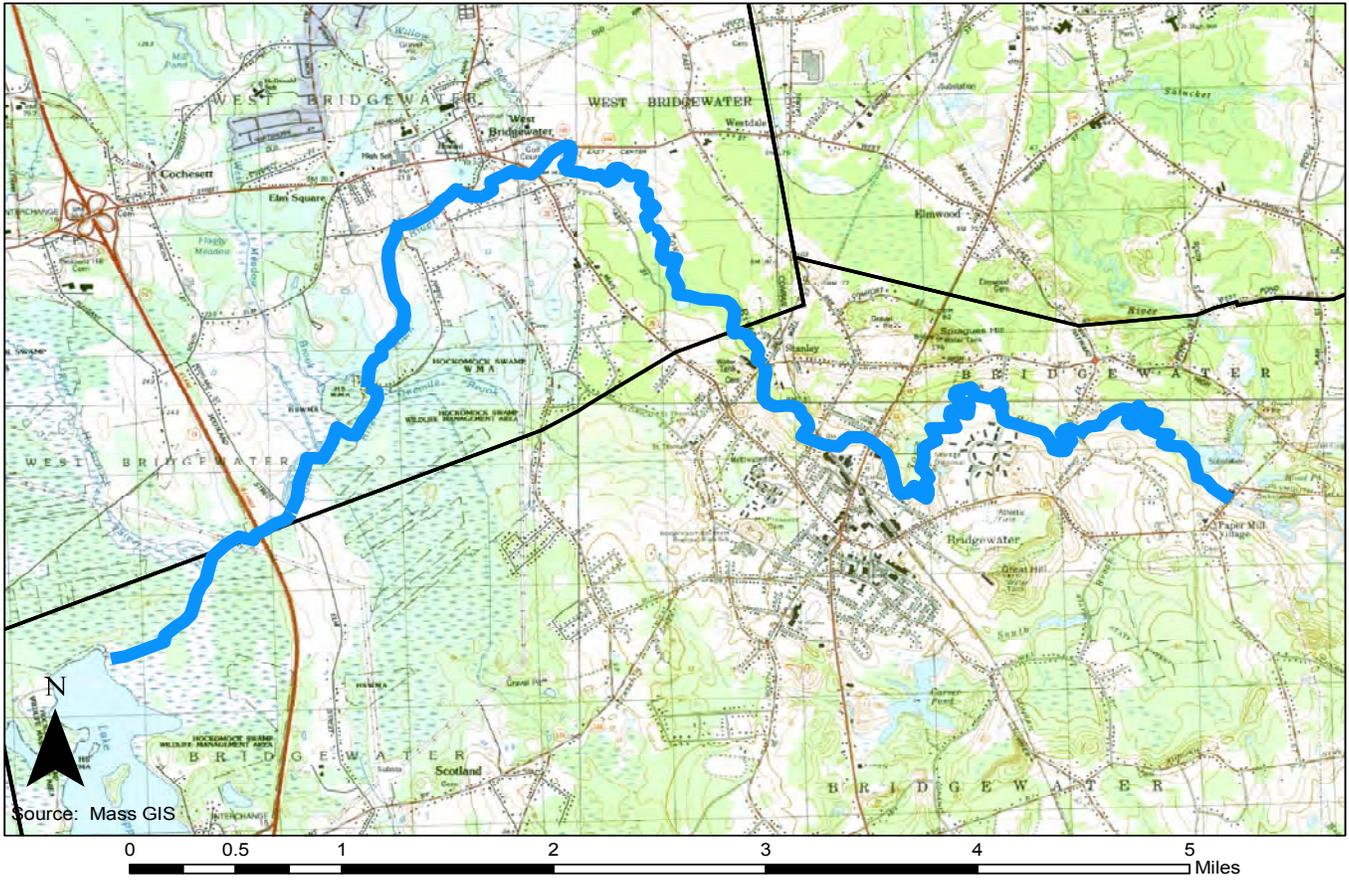
Hmmm ... this is the Nunckatessett, our peaceful, meandering Town River?

The Stream–team participants were Cindy Allen, Jack Ames, Vicki Benea, Andrew Cook, Kevin Curry, Mike Enos, Mary Farrell, Pete Fuller, Sarah Fuller, Ralph Galante, Jim Howell, Marlene Howell, Carlton Hunt, Fran Jeffries, Daphne Knudson, Kent Kreutler, Kei Kreutler, Robyn Mahoney, Marguerite Morse, Jim Revil, Beth Smith, Barbara Thomas, Stephanie Thomas, Paul Von Protz, Ben Walsh, Glenn Watson, Wayne Whidden, and Campers from the East BridgewaterYMCA Leadership in Training Program.

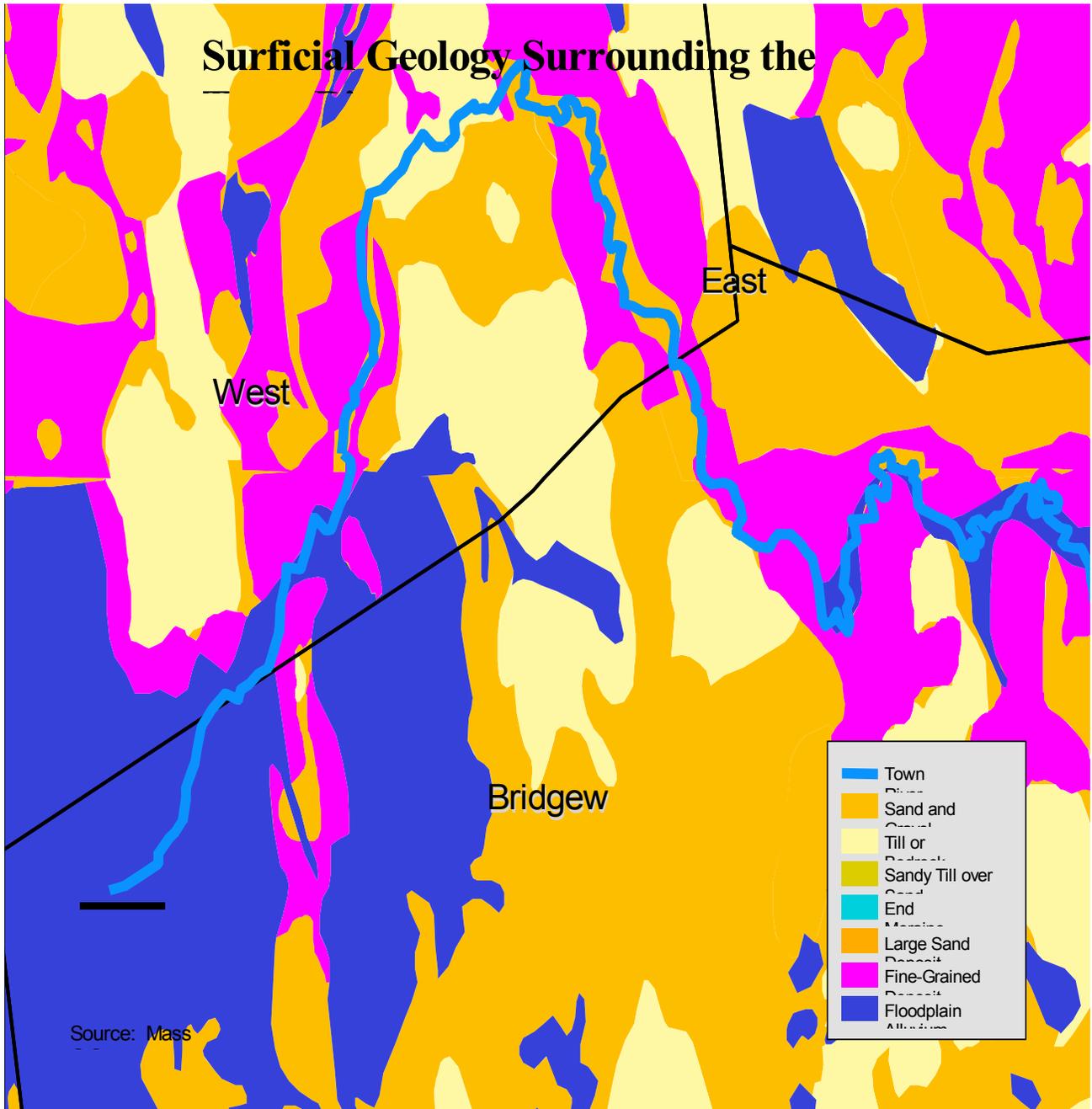
This is their story. But first, we need a little background regarding the Town River Corridor itself.

II. Maps of Town River

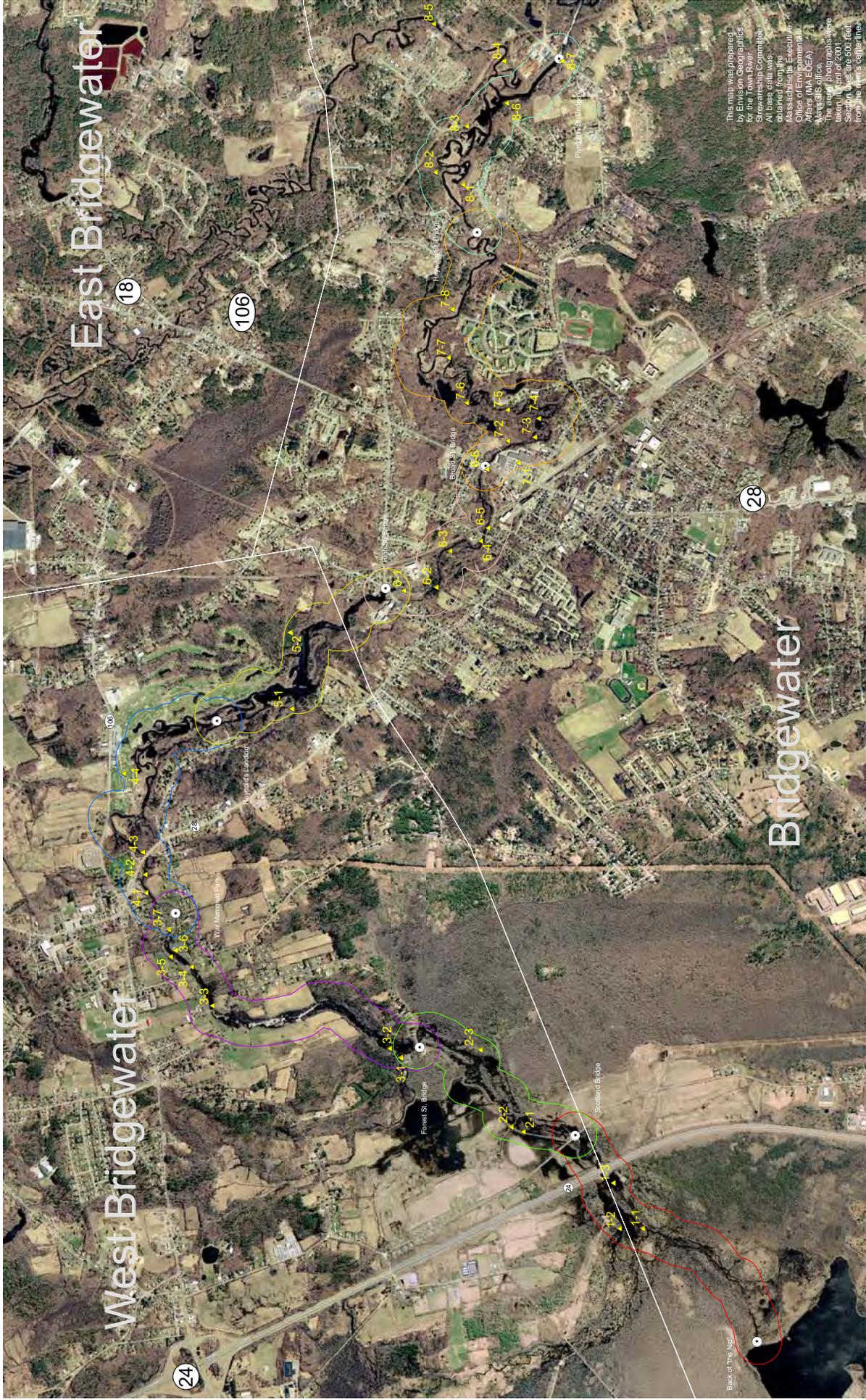
The Town River



Surficial Geology – Town River Corridor



Town River Survey



This map was prepared by Envision Geographics for the Town River Stewardship Committee. All base data were provided by the Massachusetts Office of Environmental Affairs (MA EOA) WERSIS office. The aerial photographs were scanned at a resolution of 2000 feet from the town's cadastral files.



1:24,000



III. The Nunckatessett: Natural, Cultural, and Historical Attributes

Overview: Town River Geology and Soils

Surficial geology is the underlying basis for both natural systems and human use and provides important information about an area's environmental potentials and vulnerabilities. The glaciers that covered New England more than 20,000 years ago left their mark on the Old Bridgewater area. As the two-mile thick layer of ice moved south it scraped the solid rock beneath it and carried along rocks and soil. A mix of material ranging from clay to boulders (glacial till) was deposited at the base of the glacier as it passed over the area. About 19,000 years ago, the temperature began to rise and the ice slowly retreated. As the ice melted, the melting water deposited sand and gravel referred to as outwash. The Old Bridgewater region was under a large glacial lake (Glacial Lake Taunton) that existed at the end of the glacial era but has since drained, leaving extensive areas of lakebed silts and clays. (Information source: Bill Giezentanner, Resource Management).

The headwaters for the Town River are an extensive complex of very poorly drained, organic soils (Swansea and Freetown muck soils). For most times of the year these soils have water ponded on their surface or ground water at the surface. As the river flows eastward it passes through a low-lying area of silts and clays. These sediments were deposited within the glacial lake. Soils within this area formed within these silts and clays (Scio, Raynham, and Birdsall soils) and in many areas have a mantle of sandy material overlying the finer sediments (Enosburg, Eldridge, and Scarboro soils). In areas where the Town River has meandered back and forth over time, it has created a floodplain by eroding from one area and depositing material in another. Soils formed within these nearly level low-lying areas (Winooski, Limerick, and Saco soils) are fine textured and are susceptible to seasonal flooding. Within the lower reaches of the Town River there are areas that abut the floodplain that have steep abrupt slopes which are evidence of past and continuing erosion by the river. (Information source: Peter Fletcher, Certified Soil Scientist).

Town River and Hockomock Swamp ACEC

The Town River begins in Bridgewater, within the 17,000-acre Hockomock Swamp, a designated Area of Critical Environmental Concern (ACEC) comprising the largest vegetated freshwater wetland system in Massachusetts, perhaps in New England. Located in six abutting communities, these sponge-like wetlands act as a huge reservoir, storing water during the wet season to release during the drier summer months. They are connected hydrologically with an extensive underlying system of medium and high yield aquifers used for public water supply.

With 1,268 acres protected by Massachusetts Division of Fisheries & Wildlife, the Hockomock Swamp is a vast natural and scenic area with unique and irreplaceable habitat. It is the location of at least 13 rare and endangered species, and also the location of several archaeological sites of enormous significance. Productive agricultural lands border the wetland and river systems. The

Hockomock Swamp and the section of the Town River located within the ACEC are among the premier resource jewels of southeastern Massachusetts.

Two streams within the ACEC meet and combine to form the Town River as we know it - the southerly-flowing Hockomock River in West Bridgewater and a northerly-flowing tributary stream out of Lake Nippenicket in Bridgewater; some people also refer to this tributary as the Town River. The aerial photograph on the cover shows this headwater area.

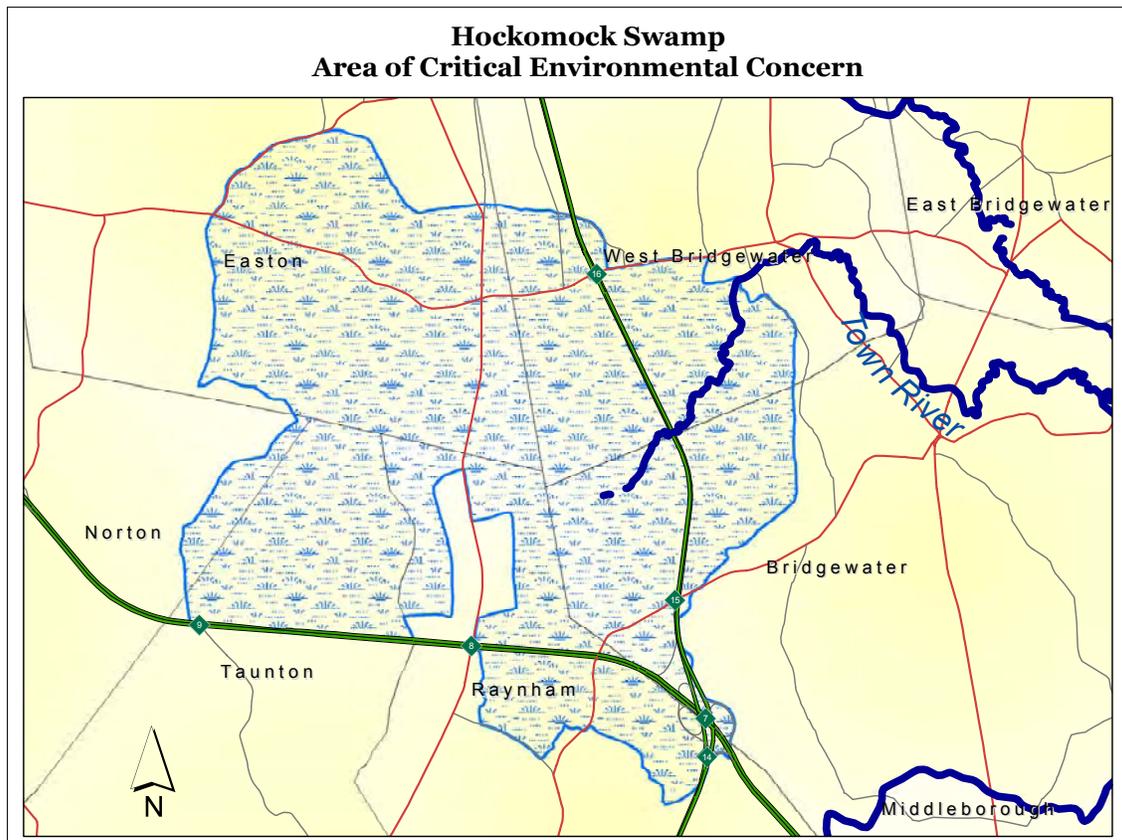
The Town River then flows northwesterly into West Bridgewater from the confluence of these streams within the vast freshwater wetlands of 'The Hock.' The Town River emerges from these wetlands into rich and slightly rolling agricultural fields to the historic stone bridge over Forest Street. Forest Street forms part of the northeast boundary of the ACEC. But the significance, charm and resource value of the Town River does not stop at the boundary of the ACEC - the entire stretch of the Town River is a gem that needs wise stewardship all the way to where it meets and joins with the Matfield River to become the Taunton River.

(Information source: Leslie Luchonok, former Director of the ACEC Program)



Town River Agricultural land along Forest Street, West Bridgewater, the northeast boundary of the Hockomock Swamp ACEC. In the Wampanoag language, 'Hockomock' translates to 'Place where Spirits Dwell.'

Photo credit: Jack Manchester



Historical background

In the 1600s when the first European settlers came to the area, they found an unblemished territory with abundant wildlife, virgin forests and miles of inland waterways that wound their way to the sea. Native Peoples had lived along the banks of these rivers for centuries, hunting and fishing in harmony with the ecosystem that supported them. The vast waterways that formed their habitat comprised a unique river complex, which today we call the Taunton River Basin. Tributary rivers with ageless aboriginal names such as our Nunckatessett, the Nemasket, Winnetuxet, and Satucket eventually joined the Kuttetequat to provide passage to the tidal estuaries of Narragansett Bay.

Old Bridgewater, which included present-day Brockton, parts of Abington and Middleboro, East Bridgewater, West Bridgewater, and Bridgewater, was purchased from the Chief of the Wampanoags, Massasoit - also known as Ousamequin - by Miles Standish and others in 1649. Over the next decades villages developed in all of the outlying sections of this territory, and eventually the above mentioned towns broke away from Old Bridgewater and incorporated as independent communities.

The Nunckatessett, or the Town River Corridor, is one of the earliest areas of colonial settlement, with the first church organized in 1651 and with the very first inland saw mill and gristmill founded in 1654 – on the Town River.

Not long after the colonists' arrival, these rivers began to suffer. While water routes were still the primary means of transportation, they also supported an European-like culture, supplying the economy with power for mills, and water for domestic use. As in many watersheds settled during these years, the rivers served as the waste disposal systems for individual households, towns and beginning industry. Vast land clearing for agriculture, construction along riverbanks, increased population and industrial growth all disrupted the environmental balance. The great forests, the marshes and wetland, the dense riverbank vegetation and the pristine streams gave way to development and sewerage. The natural shelter for wildlife and waterfowl and the natural purification system for our groundwater and aquifers began to disappear.

Dams & Fisheries

Dams and industry built during the 1700s were a major cause in the decline of the fisheries that had been a mainstay food source for early colonial survival. These dams obstructed the upstream migration of anadromous herring, while effluent from mills and factories killed the breeding fish population and polluted their nursery areas in the river.

With citizens becoming more aware of natural environmental components like flood plains, aquifers, water cycles, ground water tables, stream flow and wetlands, with better understanding of the consequences of human disruption to these components, with tougher environmental laws, and with the closing of riverside industry, the river has begun to clean itself - residents have even seen otters playing in the Nunckatessett. But, people living along the Town River now still remember the brightly colored river, the mounds of frothy foam, the foul odors, and discharge water from sewer pipes, the shoe industry, paper mills, and foundries of the 1900's- it wasn't that long ago.

There are two dams remaining on the Town River today, each supporting a working 'fish ladder' that allows herring to access their breeding grounds in the 'Nip' and in lesser tributaries. State law requires that these ladders - a series of shallow pools each 18 inches higher than the preceding one - must be in place to facilitate the seasonal migration of herring, a key bate fish within our food chain – allowing them to get over the elevation of the dam to spawn each spring, and for fry (baby herring) to return to the sea in late summer.

Founded in 1994, the Town River Fishery Committee is a joint effort between the municipal administrations in both West Bridgewater and Bridgewater to restore, manage, and preserve the native herring resource, allowing a controlled



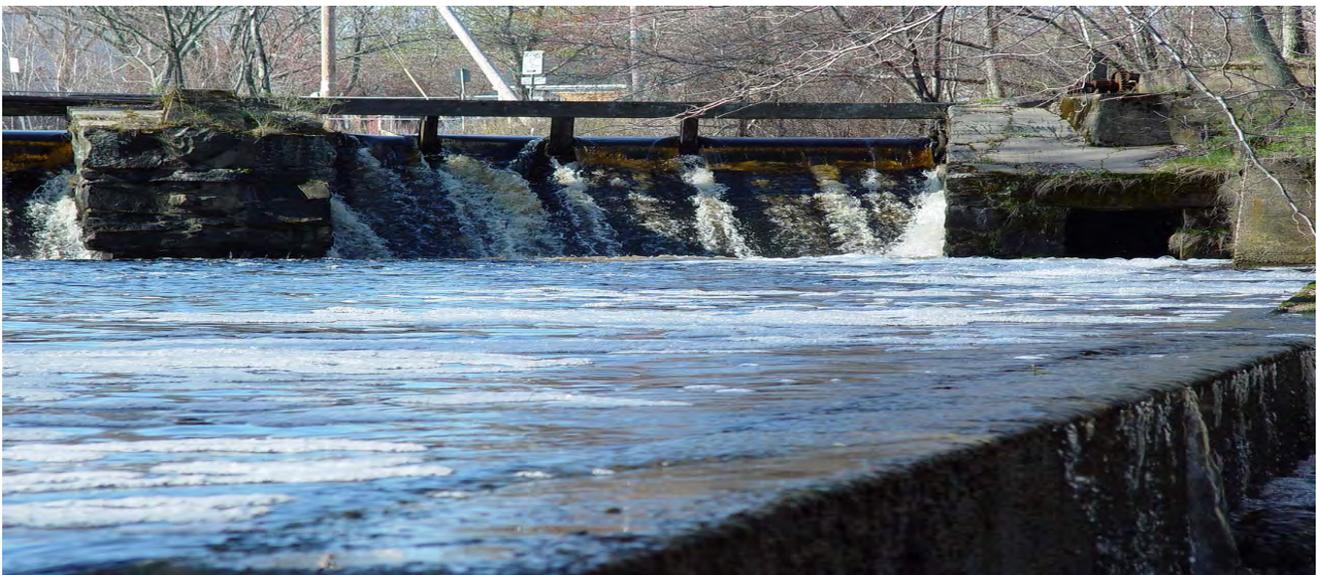


annual harvest of these fish. The TRFC is challenged to balance the needs of farmers wanting early spring access to riparian agricultural land, while maintaining adequate water levels to ensure safe passage within the fish ladders. Committee goals include improving safety at public viewing and catching areas, and creating educational materials to improve environmental awareness regarding the life cycle, habitat needs, and the importance of herring today.

The Town of West Bridgewater owns the earthen dam located at Arch Street near the Canoe Club and recently obtained state grant money to repair it. Here canoeists must portage across the street and through War Memorial Park before re-entering the river.

The second dam and fish ladder are located downstream in Bridgewater at High Street, adjacent to the Iron Works Park. They are privately owned, and the dam is in very poor condition. As the mills and foundry originally built on this site are no longer in existence, there is no economic incentive for the dam owner to spend personal money to obtain engineering plans and to rebuild the dam to today's construction codes. This situation is a perplexing challenge common to dozens of other colonial mill sites that still retain an upstream hydrological impoundment- in this case, an area of over 400 acres.

As long as the private dam owner keeps the fish ladder operable (for fish passage only – the ladder does not need to be open to the public) he is within the law.



Dam in need of repair at the Iron Works Parkland.

Photos by Jim Lynch

A review of the Inventory of Archaeological Assets of the Commonwealth shows that this river is of great historic and cultural value as well as the awesome natural resource discussed above, a cradle of human activity recording constant changes to native, colonial, and industrial era landscapes. These historic and cultural values are entwined into today's shifting demographics and economy as forests, fields and farm land on the Town River give way to riverside golf courses, shopping malls, residential subdivisions and condominium complexes.

Traveling downstream, in addition to the Hockomock Swamp ACEC and the many acres of protected Open Space owned either by the Mass Division of Fish & Wildlife or the Town of West Bridgewater Conservation Commission, other special places on the Historic and Cultural Landscape of the Town River include:

Skim Milk Bridge, Comfort Bridge, and Solitude Stone



“Solitude Stone”

The boulder was once part of a bridge or stone culvert and was becoming obliterated as Forest Street was widened. In 1970, the West Bridgewater Conservation Commission, Board of Selectmen and the Highway and Forestry Departments initiated a preservation project. The boulder was moved several feet off Forest Street, enclosed by a cedar-rail fence and beautified by shrubbery to make it a mini-park. Via a Ford Grant, a routed sign was installed noting the historic impact of “Solitude Stone”. (Information source: Old Bridgewater Historical Society)

From Notes of Edgar P. Howard ... ca. 1900

‘In ancient days the trail or path between Old Bridgewater and Taunton was what is now Forest Street in West Bridgewater, crossing the Nunckatessett or Town River at the old bridge just above where is now the Canoe Club House and again at a ford where is now ‘Comfort’ or ‘Pine Hill Bridge’, crossing again at ‘Skim Milk Bridge’ and so on to Nippenicket and the Village of Taunton.

‘This old road had been abandoned for many years as a public highway and is now only a cart path, used by the campers on the upper river and for getting out wood and hay from the meadows, and it is of the ancient bridge called ‘Comfort Bridge’ though no one in the present

day seems to know why, that is the occasion for this article. It was this path and bridge that was the scene of the first elopement of the Old Colony.

'In the year 1689 young Ephraim Howard on his gallant steed swung Mary Keith up upon a pillion behind him, and with her arms around his waist like young Lockavar galloped madly through the woods, hotly pursued by her irate parent, the Rev. James Keith, the first minister in the Old Town of Bridgewater; who, however, did not catch up with them until they had reached Providence, where they were married.'

'The old bridge is composed of three immense flat stones, the larger one of which is in the center and forms the roadway, while the other two at each side are somewhat smaller. The stream which used to flow under the bridge had been diverted perhaps 100 feet to the westward and now flows under a rude plank bridge (the one under which the body of Miss Evelyn Packard was found) the old bridge now serving to carry off the surplus water in case of a freshet.'

'While sitting upon the bridge, resting after a day of arduous searching for the girl, the writer's attention was arrested by an inscription chiseled upon the flat stone forming the south side of the bridge. The stone is of an oblong shape and perhaps five or six feet across. Curiosity was aroused and an attempt was made to decipher the ancient inscription, which comprised of six lines extending across the face of the stone, and which had been almost been obliterated by time and the elements, and it was only by clearing away the tangled vines and filling the letters with black chalk that the words could be deciphered.'

'The verse reads as follows:

All ye, who in future days,
Walk by Nunckatessett stream
Love not him who hummed his lay
Cheerful to the parting beam,
But the Beauty that he wooed
In this quiet solitude.

'After some inquiry among the elder residents of West Bridgewater, some of whom attributed the work to William Cullen Bryant who once lived in the vicinity, authentic information was obtained as to the identity of the practical stone cutter....'

'Rev. Timothy Otis Paine, L.L.D. was the Preacher – Poet – Sculptor – Scholar who inscribed the poem on the boulder. A native of Winslow, Maine, he had studied to become a sculptor; was a student of Oriental languages and was credited (at the time) as being the most learned Egyptologist in America. He had a volume of poems published in 1897, over 40 years after he chiseled the above poem'. (Paragraph insert from the writings of Marjorie MacDonald, courtesy OBHS)

'...The beauty of the scene may well have inspired the lines. To the south stretches Eagles Nest Meadows toward the Hockomock, with the winding Nunckatessett and the woods beyond. At the bridge the stream makes a sharp turn to the right before it reaches the Pine Hill ridge, crowned by whispering pines, flowing under the old bridge, with its riot of vines and elders almost hiding it from view.

The old bridge has been ignorantly called by some Suicide Bridge and there is a tradition of a suicide from this place. This is wrong, however. In the year 1880 John Crane, a young man crossed in love, committed suicide by shooting in the woods some distance from the bridge. The proper and ancient name is Comfort Bridge, though why 'Comfort' is not known, anymore than why the next bridge above has always been called 'Skim Milk Bridge'. (Document courtesy of Old Bridgewater Historical Society)

Anderson Farm - recommended for listing in the National Register of Historic Places.

Agriculture has always been a significant part of West Bridgewater's history. In 1865 there were 145 working farms, with extensive strawberry cultivation, dairy, and poultry farming as the mainstays. In 2002, the Anderson Farm on River and Howard Streets was the only remaining dairy farm. The Massachusetts Historical Commission recommends it for listing in the National Register of Historic Places.

Established in 1952 as the Nuncketeset Dairy, this farm was created by joining two adjacent, centuries-old farmsteads with other dwellings, a collection of outbuildings, plus additional agricultural land. The farm has a long history that extends back to the oldest surviving house in town – ca. 1662 – built for the first minister in Old Bridgewater, the Reverend James Keith. The National Register of Historic Places 2002 Criteria Statement reads as follows:

'The Anderson Farm is the only remaining dairy farm in West Bridgewater and the only farm that retains evidence of a long and continuous farming tradition in its dwellings, agricultural fields, and remnants of the farm buildings, all situated overlooking the Town River. The farm retains integrity of location and setting. The sense of rural design responsive to the farming use is retained. While some materials and evidence of workmanship have been changed in some resources there is an overall sense of original materials and workmanship. The farm retains integrity of feeling and association as well'.

(Information source: DEM – 2002 Heritage landscape Inventory)

-Rev. James Keith House This ca. 1662 saltbox with a large central brick chimney and three fireplaces was built for the Scottish immigrant preacher, the Reverend James Keith. For 56 years, housing, plus acreage for subsistence farming was part of the annual contract between the parish and the parson. Rev. Keith raised a large family in the parsonage, and today his descendants are numerous, living throughout the country.

At the end of King Phillip's War in 1676, Rev. Keith intervened on the behalf of the slain Wampanoag Chief's widow and young son when these two were to be executed. He managed to persuade the authorities to send them out of the country – presumed into slavery in Bermuda.

The church and its incumbent parsons constituted a great force for government, education, religion, and social development – church and state in the Puritan system worked hand in hand in all these matters.

The late 19th century owner of the Keith House and property was George Pratt, his associated farmland then extending to the south side of River Street. The ca. 1850 stone arch bridge crossing the Town River at Forest Street is known as Pratt's Bridge. The Pratt Farm including this historic Keith home was part of one of the farms combined to create the Anderson Farm. In 1961 the Howard Anderson Family donated the Rev. James Keith House and the land on which it sits to the Old Bridgewater Historical Society. It was restored in the 1970's and now opens to the public through the OBHS. (Information source: Form B – Building Massachusetts Historical Commission)

Today, photographers and artists often capture the idyllic farm scene as viewed from Pratt Bridge at the corner of Forest and River Streets. The aerial photographs on pages 12 & 37 shows this location.

Canoe Club - research pending

War Memorial Park

In 1933 West Bridgewater town officials created this memorial park to commemorate the history of the site as the earliest industrial mill park in the Old Bridgewater settlement. These industries included a grist mill, fulling and carding mill, oil mill, iron foundry, tannery, sawmill, shingle mill, dye house, saddler's shop, shovel making shop, and even a shop making weather vanes. Early maps refer to this area as the Town Mills or the Mill Pasture. The town bought the property from the Ames family, and Works Progress Administration funds supplied workers and volunteers, with Evaline Johnson as Landscape architect. A dozen small industries with waterways to turn wheels, dams to control water, bridges for transport were built, thus creating a true industrial park replica. (Information source: Form A – Area Survey, Massachusetts Historical Commission 1980)

Pulpit Rock – Traditional records indicate that in 1663 the Rev. James Keith, a Scottish immigrant and the first permanent minister of the First Church of Bridgewater, preached his first sermon on this rock in what was to become centuries later the West Bridgewater 'Town Park'. This monument with its brass plaque is prominently featured in the West Bridgewater Town Seal. (Information source: Form C – Monuments; Massachusetts Historical Commission)

Edson Monument - In memory of Samuel Edson, a deacon in the Puritan church and a prominent leader in community affairs, the plaque on this granite boulder describes him as an original proprietor of Old Bridgewater. With courage and foresight, Deacon Edison built the first gristmill in the new colony on this site. The mill made a huge impact on the quality of life for all the settlers, enabling them to grind their grain -so vital to their diet. It was also significant as the first industry to be introduced into this first inland settlement from Plymouth, creating what became an industrial park. (Information source: Form C Monuments; Massachusetts Historical Commission)

Triphammer Stone - The land of this park was allotted to John Ames, an original shareholder and settler. Before the Revolutionary War the 4th inheritor, Captain John Ames, began to manufacture shovels with a triphammer set on this large granite stone. By including this triphammer stone in the park, the community recognized the first inland industrial park in North America. The flourishing firm moved to Easton, MA in 1803, and supplied most of the basic tools for the nation's expansion in mining, canal-building, railroad extension and dozens of other operations.



Arch Bridge / Canal Bridge - Made of native stone, this triple-arch bridge built over the Town River during the colonial period has served the community for over 200 years, originally providing easier access to the mills, and saving at least a mile of travel between the center of the community and outlying areas. Measuring 24 ft. wide and 33 ft. long, the bridge was built by a skilled stonemason from Bridgwater, England, an exact replica of that city's ancient 3- arch stone bridge dating back to 1201; unique for its architecture and traprock dry masonry, the bridge structure is now deemed unsafe for vehicle traffic and permanently closed. (Information source: Form F. – Structure; Massachusetts Historical Commission 1980)

Ancient millstones / replica of a colonial water wheel - 17th Century, hand-hewn granite; these mill stones were of high importance to the people of Old Bridgewater and nearby communities. Without this service, farmers would have been obliged to carry their grain (sometimes on their backs or on pack horses) 13 miles over wretched trails to the nearest mill in Taunton. Also, Indians readily accepted corn meal in the fur trade, which figured highly in early commerce. Debts were paid in this commodity, even half the Parson's salary, per contact, was paid in corn. With an established mill, the community flourished and grew.



The newly constructed water wheel is a copy of the wheel placed in the park at the time of its opening in 1936. Vandals destroyed that wheel, a replica of the type of wheel used in the original industrial park. This wheel is an example of the several wheels used in the park – one for each different shop or mill. In its active life as a hive of industry, the original industrial complex used waterpower. (Information Source- Form F – Structure Massachusetts Historical Commission)

In the early 1980s the 6-acre War Memorial Park was in ruin. Town Park, as it is affectionately called, was home to drug dealers and vandals. In 1992 the Town Forestry & Parks Department

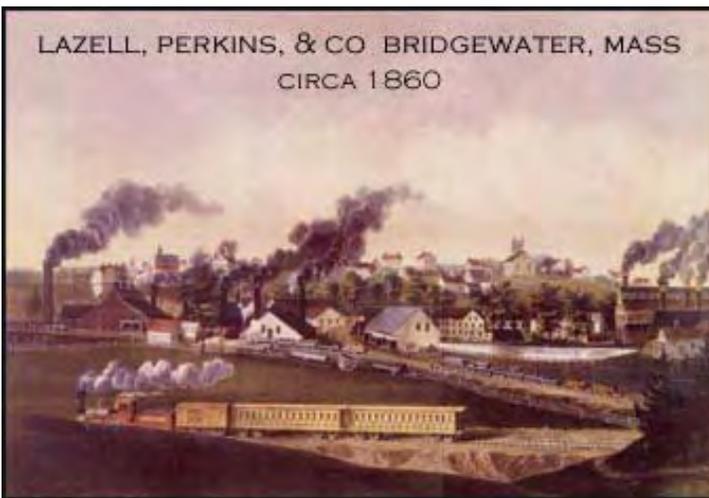
facilitated renovation efforts. Today the park is a favorite resource of the townspeople, with High School graduation, the prom march, weddings and special events held here annually. With thousands of people attending, each September the town gathers at the park for “Park Day”, a day to clean up and celebrate.

Hayward Farm / River Bend Country Club - research pending

Reynold’s Landing – Located on Ash Street, this one-acre piece of conservation land provides one of three West Bridgewater access points to the Town River for canoeing. It is the smallest of West Bridgewater’s conservation properties, but the most heavily used.

Just a few yards downstream from Reynold’s Landing, the Old Bridgewater Historical Society has documented from 1725 highway records the existence of a brick kiln. Renovation of a nearby 1703 house with similar bricks suggests use of kiln near that period; there is also some indication that pottery was made here. This is one of two areas in West Bridgewater known to have clay pits. An old ramp to the Town River suggests river transport of bricks. (Information Source: MHS Historical Resources Survey, Historical Archeological Sites 1986)

Iron Works Parkland - on the National Register of Historic Places



Established in 1691, the Bridgewater Iron Works on the Town River was the first to produce iron in the American colonies, initially to supply much needed nails and shovels. The reservoir above this dam site included more than 400 acres of water storage – what is now the Town River along Ash Street to War Memorial Park. This waterpower was harnessed to turn water wheels, which operated the bellows to provide air for the blast furnace. Other water wheels lifted the hammer to forge or pound the iron into usable shapes and consistency. There

were also water wheels which turned the rolls to reduce the thickness of the iron bars into plates and to then slit the plates into strips to form hinges, nails, and other small iron items.

This primitive blast furnace would evolve over the next 150 years to become by 1860 the second largest iron mill in the United States. During the Civil War, it manufactured ammunition and

iron siding for the colonist's ships. The Iron Works industrial site was abandoned in 1988 and the land donated to the Town of Bridgewater.

Iron Works Park History

1691 – First dam on the Town River, built by Robert Perkins

1707 – Iron manufacturing started

1785- Second slitting Mill in America established

1812 - Cannon made for the War of 1812

1850 - Produced nails, wagon wheel hoops, boilerplate, steam engine housings, furnaces, anchors, hydraulic presses, etc.

1860 - Produced artillery shells, cannon balls, boilerplate for the locomotive shops and shipbuilding industry, armor plating for the Union ship U.S.S. Monitor and other naval vessels. At this time, Bridgewater earned the reputation as the "Bethlehem of the East."

1876 - Exhibited at the 1876 Centennial Exposition in Philadelphia as a manufacturer of high quality rolled steel tube, rod and plate products

1898 - Plant purchased by Stanley Tool Company of New Britain, Connecticut for its ability to roll steel plate and provide large castings of up to 45 tons

1926 - Stanley Tool closed the plant and consolidated its operations in Connecticut

1945 - Bridgewater Foundry opened on site to produce iron castings. Work performed by area residents and employees of Whitman Foundry

1988 - Bridgewater Foundry closed, ending nearly 300 years of iron and steel production on the site
(Information source – Iron Works Parkland web page)

Today the Iron Works Industrial site is on the National Register of Historic Places, and part of Bridgewater's passive Recreational Parkland System. The town has approved through the Conservation Commission an Iron Works Management Plan, which establishes basic guidelines for volunteer Stewards to follow as they restore and develop this site into a user-friendly park modeled after War Memorial Park upstream. It is a rest stop on the Town River for canoeists and kayakers; the Stewards goals include improving the current difficult portaging over High Street and through the Iron Works. As this site is also a key **Greenway Connection** with the **Bay Circuit Trail** through the three Bridgewaters, the Stewards wish to foster more awareness and public participation to make this parkland user-friendly.

Although the dam and fish ladder are on private property, the annual Spring Herring Run is an attraction; it is a goal of the Town River Fishery Committee to create a safe public viewing and catching area here.

Iron Works Parkland Ruins



Photos courtesy Jim Lynch

Stiles & Hart Conservation Area

Recommended for listing in the National Register of Historic Places.

Historically, the section of Bridgewater on High Street that descends from Sprague's Hill (elevation 175 ft.) to the Town River (elevation 24 ft.) across from Campus Plaza Shopping Center was agricultural land. These 75-acres now known as the Stiles & Hart Conservation Area were the site of the Plymouth County Agricultural Society Fairground in the mid-1800s. An exhibition hall, grandstands, livestock sheds, fields, a waterfront park, and a quarter mile-racing track were all once located here.



NRTB Parkland Management Plan

In 1895, Mr. William Basset, Sr., purchased the land and founded the Bridgewater Brick Company, mining clay and producing bricks on site. In 1913, Stiles & Hart Brick Company purchased the operation. A 1925 Bridgewater Town Map documents a railroad spur connecting the brickyard with New York, New Haven, and Hartford Railroad. A wooden trestle allowed railroad flatcars to pass between the buildings at 86 and 98 Spring Street to ship bricks off site. Due to damage to industrial buildings in the hurricane of 1938, brick production ceased, but clay mining continued until after World War II. (Information source: DEM – 2002 Heritage landscape Inventory)

During the mid-1900s several ponds that had been formed through the brick manufacturing process and affectionately known as ‘The Clay Pits’ served as local swimming holes and are still great fishing ponds. In 1999 the town was able to purchase this property, with its meandering river border of over 7,000 feet, through the Executive Office of Environmental Affairs Self-Help Program; and, with a site-specific Management Plan gifted to the town by the Natural Resources Trust of Bridgewater, the Conservation Commission accepted this property as part of the growing municipal Parkland System.

The Stiles & Hart Conservation Area is currently one of several developing parks governed by the Bridgewater Conservation Commission and managed by the Parkland Stewardship Council, a sub-committee working with Stewards, volunteers, and town departments to ensure the appropriate development and operation of each parkland.

One of the Stewards’ first goals is to improve poor public access to Stiles & Hart Conservation Area. Sharing its Town River boundaries with Campus Plaza and other businesses along Spring Street, and in close proximity to the Bridgewater State College Campus and the MBTA, it has great potential as a feature Open Space and passive recreation attraction in the heart of the Central Business District.

Both the Stiles & Hart Management Plan and the Town of Bridgewater's Master Plan endorse the possibility of creating a public canoe launching area, and also a pedestrian bridge to span the river from the former municipal highway barn complex on Spring Street – now called the Town River Landing – to the parkland at the vicinity of the old railroad bed.

The Natural Resources Trust of Bridgewater (NRTB) and the College and Community Relations Council (CCRC) hosted by Bridgewater State College have partnered with the Taunton River Wild & Scenic Study Committee to explore the feasibility of this exciting idea.

The Massachusetts Historical Commission has recommended this site as a National Register District.

Tuckerwood Conservation Area

Tucked away amongst quiet, suburban neighborhoods, this 32-acre wooded wetland with 2000 feet of Town River frontage has many vernal pools and is an island of nature surrounded by residences.

Once used for agriculture, the Chambers family had owned the site since 1951; the area has been virtually undisturbed since then. It was sold to the Town of Bridgewater in 1998 with part of the cost being financed through an EOE A Self-Help grant. This wooded wetland is located in the Bridgewater Zone II Aquifer Protection District (off High Street) and provides the valuable benefit of filtering water before it enters the aquifer.

Again, with a site-specific Stewardship / Management Plan gifted to the Town of Bridgewater by the Natural Resources Trust of Bridgewater, the local Conservation Commission has added Tuckerwood to its Municipal Parkland System. Volunteers Stewards use this Management Plan as a guidance document as trails and benches are incorporated onto the site. Two Eagle Scout candidates have earned their Eagle Rank by developing the trail network as designed in the plans.

The current goals for this parkland are to certify the many vernal pools, and to clearly establish marked parkland boundary lines.



IV. The Survey Project

Narrative:

This 'trip' took place during the month of July 2003, by several groups, on different days during the month. This is a composite account of their adventure. For a detailed list of the participants, please check the Table of Contents.



Mouth of the Town River

Photo by Kent Kreutler

Section 1.

It was a beautiful, warm summer day. We entered the Town River after paddling across Lake Nippenicket from the public access ramp on Route 104 in Bridgewater. The water was higher than normal for this time of year, about 3 feet deep, with a moderate current; there were no rocks, and the mucky bottom of the stream was not visible. The water temperature was 72 degrees Fahrenheit.

We heard a choir of frogs as we paddled along through the marshy growth, and saw large numbers of dragonflies throughout this section of the trip. A few yards further downstream small hardwoods – swamp maple and oak - appeared along with cattails and white water lilies.



Photos by Kent Kreutler

Soon highbush blueberries came into view alongside multiflora roses. Then heavier undergrowth began on both sides of the narrow stream, and it was a slower paddle for the next half-mile.

We passed by where a conservation group had previously placed a wood duck box, and then found a second box attached to a lone dead tree.

Dying maples were on the left bank, their bleached skeletons bejeweled by multiflora roses and yellow water lilies. We now came upon the first sign of purple loosestrife on the right bank, and of maple tree leaves changing color on the left bank about 75 yards away from the stream itself.





A wetland appeared on the right, balanced by cattails pointing skyward on the left bank. Here we noted on an old board clumps of small sized-scat, approximately 1 centimeter long; maybe muskrat?

We saw a female mallard, and many grackles and red-winged blackbirds. Potamogeton – a wildlife food source also called pondweed, was noted in the stream and a female wood duck was sighted flying from the swamp grasses into a tree on the left bank.

We also found algae adhered on the marsh plants about a foot higher than the stream, a clue to the high water mark.



A little further along on the right bank we found hoof prints and crushed grasses marking a deer trail as we approached the Town River confluence with the Hockomock River, flowing in from Route 106 in West Bridgewater. Here the river widened with increased inflow and a faster current, with more marshland and less brush along the banks. The water temperature dropped down 4 degrees to 68 degrees Fahrenheit and we began seeing more wildlife including killdeer and turtles along the murky and muddy floodplain.

A large flock of mallards flew overhead, 20 or more, with no adult males noted. Tall hardwoods began to appear set back from the river banks, and a growth of white oak on the right bank marked the first significant shaded area on the trip.

We saw a red tail hawk as we glided along under the power line; we noted Canada geese scat, but interestingly, never sighted a Canada goose in this whole section.



Suddenly, several Great Egrets and also Great Blue Herons were sighted in the air at the same time! It was awesome! We saw many of these beautiful birds through out the day.

Bird chatter rose above the loud traffic noise as we approached Route 24, and we noted the first grape vine tangles on the banks. There was a 6-foot clearance under the Route 24 Bridge, which seemed in good repair with no signs of improper runoff. Pigeons live under the bridge.

We saw more ducks, and giant bulrushes – invasive and non-native in the marshy swamp on the right bank. Shady hardwoods grew on the high left bank. There was a large hardwood tree down across the Town River in this section.

At this point, brush continued to flourish all along both banks together with very large hardwood trees. There was significant shading, but no obstruction to our canoe passage.





We glided under the Scotland Street Bridge (with several feet of clearance) where farm fields and cleared areas were seen on both sides of the Town River in concert with a notable stand of purple loosestrife.

On this day, no runoff area was evident as we passed under the bridge, but there was a rotted support post on the right side. We pulled out of the river at this point.

Neither riffles nor foam were seen in this first section of the river. The streambed was camouflaged under the tea-colored water, always between 3-4 feet in depth. There was no adverse odor, no culverts, nor runoff pipes; it was a truly glorious day on the Town River.

Photos by Kent Kreutler





Skim Milk Bridge is found on the maps prior to 1831, and was the original crossing of the Town River before the extension of Scotland Street, West Bridgewater, was connected to Elm Street, Bridgewater. Hiking trails intersect near here.

Section 2.

The freely flowing river channel through this second segment was clear of growth and had limited overhanging trees. One tree was close to falling into river and blocking it. No side tributaries were evident. Above Skim Milk Bridge there was a berm area with a hill and a drainage ditch on the left bank. The banks were wet, with more soft-stemmed plants than shrubs extending out from the stream. We did not find any areas of erosion as we did our shoreline survey.



Photos by Carlton Hunt

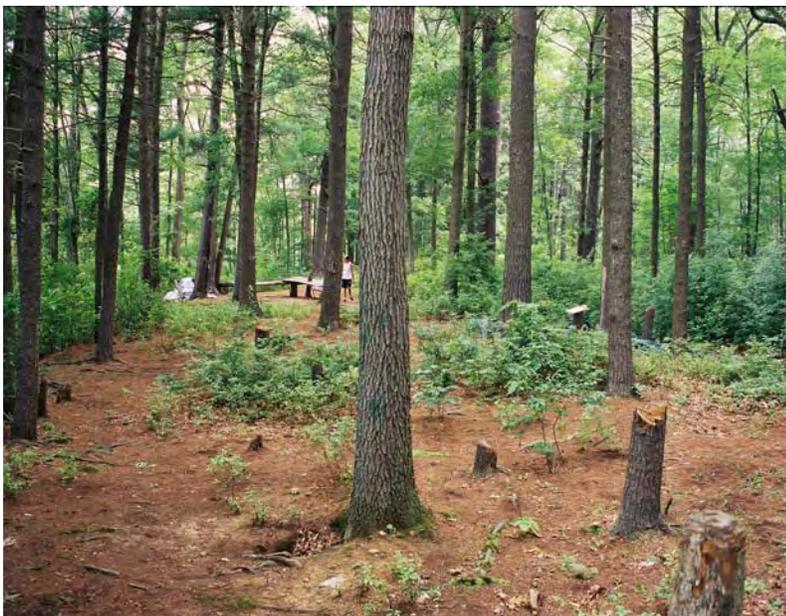


Downstream from Skim Milk Bridge the riverbanks had more shrubs. It was a drier riparian area than up- stream with the floodplain varying from being contained right next to the stream to being spread out more laterally. Wetlands were often transitioned between the river and riparian zones as the floodplain continued out a distance from the bank. Wild life included birds, turtles, frogs, and muskrat. We saw deer tracks, with the river current moving right along in this entire segment. The channel ranged from 6' to 20' wide; the depth was consistently over 3' with the bottom sandy and well scoured.

We found trash - TVs, air conditioners, tires, paint cans, buckets of mystery substances, mattresses, couches, home construction debris and paper. Nearby field roads offer good dumping areas. We wished that people who use this fragile land would become more responsible or some even volunteer as river advocates....



Parallel to the river on the left, there was a mile- long dike built to drain and irrigate the floodplain (18-20 acres minimum, shoreline alone) for Cumberland Farms agriculture. Along the entire length of the dike there was trapped, stagnant water; the sides of the sluiceway box were rotted – no longer controlling water level. We wondered if opening the dike would recreate wetland or clog the river with years of accumulated fill, pesticides, and fertilizers. Need expert help on this.



Along the right bank there was Conservation property owned by the Town of West Bridgewater, actively used for camping and parties. A number of trees have been cut at random here, and from the wood that is stacked onsite, it looks like someone has made a concerted effort to have a supply of kindling on hand.

Hiking trails criss-cross though this undeveloped area. One path follows the dike and connects Clinton Road to Scotland Street and the Hockomock Wildlife

Management Area; this remote area that people are camping in might need marked access for emergency vehicles.

There were no user-friendly vehicle parking spots available between the Nip and War Memorial Park; we suggest that 4-6 parking spaces be created on the northeast side of Scotland Street Bridge – which is the best launching side. We also suggest having a few spaces somewhere near Clinton Road Bridge for access to the foot trail that leads back to the dike and to the rest of the trails.

Photo by Jack Manchester

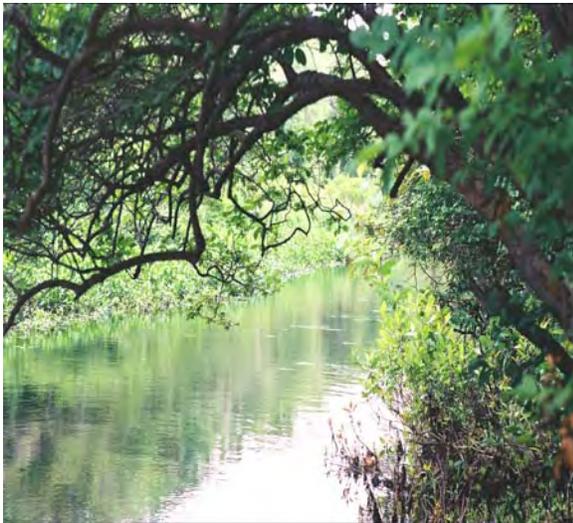


“One of the 'hidden agendas' of this Shoreline Survey is to build an aware river constituency and coalition of interested river people. We want to remove the political bounds, and think of the Town River as one entity from ‘The Nip’ to its confluence with the Matfield River.

“I think the fact that folks from both West Bridgewater and Bridgewater, avid canoeists who are interested in the well-being of this river, participated together on this survey formed a great connection, a good foundation for that constituency. Nature doesn't know political boundaries and jurisdictions.”
Carlton Hunt

Section 3 .

As shown in the photo on p.33, this section of the Town River was mostly undisturbed. It is an excellent stream for canoeing, flowing at 10 feet per 17 seconds at the center. The bank heights range from water level to a four-foot high elevation on both sides. The stream was clear, tea-colored and clean. No trash was observed until near the Forest Street Culvert. Frogs were heard; Canada geese and turtles were seen. Evidence of deer crossings was seen at several places. The foliage included trees, shrubs and brambles, with many lupids, water lilies, and wild grapes evident. The river flowed through wooded, pasture, and residential areas. Forest Street is considered to mark the northeast ACEC boundary.



Photos by Carlton Hunt

Beginning at the bridge at Clinton Road on the west end of Forest Street, the river was 8-10 yards wide, with the riparian corridor being 250 yards wide. The right bank was less than one foot high, while the left bank was 2-3 feet high. The river was about three feet deep and had a rocky bottom. The left bank was residential property and the right, open meadow. There was approximately 20% canopy. Lupid and wild grapes were the predominant foliage. The river flow rate was 10 feet per 17seconds at the center; it was clear and clean water, tea-colored with 6-inch visibility. The tea-color is normal, being caused by the organic matter decomposing in its Hockomock Swamp source.

West Meadow Brook, a spring fed tributary originating in Brockton, flows in through Flaggy Meadow on the left. It supports considerable vegetation including wild grapes and pompoms. Its corridor is 100 yards wide, and the brook itself about six feet wide.

The Town River continues to meander. There are a few 'hang-ups' where pollen and natural debris, but no trash, have accumulated. The flow rate is slower in this section. There are some coves (approximately 7 feet deep) that are clear and home to some water lilies and duckweed.

On the left bank there is a campsite on private land. Forget-me-nots and mussel shells line the bank. On the right side there are both living and dead trees, showing a high-water scum line at about three feet. On the left bank, the corridor is built up, while on the right, the tree roots are exposed. The riparian corridor narrows at this point to approximately 40 yards.

In a short distance the riparian corridor widens to approximately 100 yards and the river becomes channelized, no longer meandering. At this point the stream is six feet deep and has a sandy bottom. The right bank is dedicated conservation land and the left is pasture with a fence to keep livestock away from the riverbank. Some fieldstones appear along the left bank and elderberry, cattails, and reeds grow along the right bank.



Photo credits Carlton Hunt

A little farther down the river, there is a weeping willow on the right bank, and evidence of erosion from cattle coming to the river from a pasture that is not fenced off.



Approaching the Forest Street Bridge (big culverts now because of previous repair design), Measurement Rock on the right bank showed a four-inch drop in the river depth during the past 24-hours. From this point in the river one can see a well-known historical site in West Bridgewater, the oldest parsonage in the United States (~1662). The culvert under the bridge shows some corrosion, but is in reasonably good condition.

On the downstream side of this culvert horses were grazing to the water edge; topsoil was worn away. On the left bank a path of lush vegetation pointed upward toward a milking barn. There was a home with a new septic system with some of the grass mowed to the water's edge while other areas were left untouched, thus creating a vegetated buffer that slowed the runoff water.



On the right bank large fieldstones have been moved to the river edge, creating riprap that diffuses the runoff water energy and lessens erosion. Here the first evidence of trash (plastic bottle and some paper) was seen caught in a fallen tree.



Photo by Andrew Cook

Just beyond the Forest Street culvert there were Canada geese on the left bank. Each goose leaves 4-5 pounds of waste per day, virtually all of which settles into the river.



Also now classified as a culvert, the South Street Bridge just a short distance downstream was badly deteriorated, showing 'buckling' and exposed metal from the effects of corrosion, as well as deteriorating stone and mortar work. The west side of the culvert pipe at this bridge was buckled up on the bottom lip, creating a dangerous 'dam' effect; the river ponds up at this

point, putting a lot of water pressure onto the culvert pipe itself. It is tricky to paddle in over the metal lip with the water pressure, through the culvert to the downstream side of South Street. The canoes scrape the barrier lip if the water is too low.

Safely under the South Street Bridge- Culvert, the river widens to 80 feet at the Canoe Club. On the left bank is an 8' steel pipe from which discharge from the high school on Route 106 flows.

The flow is clear and roughly equal to that from a ½" hose. The bottom quarter of the inside of the pipe is gray-green, surrounded on either side by a band of white, with the remaining top half being rust-colored.

At the center of the river in front of the Canoe Club is a small man-made island in the shape of a canoe that was once an exotic flower garden. At the end of this river segment there is the recently repaired dam and fish ladder in War Memorial Park,

Photo courtesy Jack Manchester



Looking upstream past the Canoe Club, one can see the historic Anderson Farm on the right and the South Street and Forest Street Bridges crossing the Town River.

Dear Kitty,

I went out on the Town River on my Birthday - Monday July 21- for four hours with my sister, Meg, who was visiting. We put in above the War Memorial Park dam. We canoed upstream for two hours, and went under the Route 24 Bridge.

We saw two cats sunning themselves on the riverbank at the cottages at Clinton Road, a small neighborhood formerly known as 'The Camps' during the 1940's when seasonal dwellings for migrant farm workers were located here. There is an informal campground just upstream near here, I believe on town property. When I was out on the river with Cindy, Pete and Sarah on July 6, there was one tent tarpaulin on the grounds. On July 21 there were three tarpaulins set up in this campground. When I went ashore for a rest stop on July 6, there was so much trash on the grounds that I was not able to pick it all up in a half hour. So it stayed there. The kids who use the campgrounds don't clean up after themselves. It might be a worthy project to clean up this area from the land. Cindy and I cleaned up litter in the river on July 6.

When we came to the Skim Milk Bridge, we got out of the canoe. I had never gone that far upstream before. There is less impact by man on that upstream part of the river than down towards River Street. We saw a snake slithering through the water to shore. He looked impressive with his tan body and gray markings. We saw a gray heron that held his ground.

Just downstream from the Route 24 Bridge on the left hand side was a 40-pound bag of garbage in a black plastic bag with the yellow tie plastic cord. Meg and I both tried to lift it into our canoe but to no avail. It was too awkward and too big.

Just keeping in touch.
Beth Smith



Photos by Ben Walsh

Canoeists must portage around the newly renovated War Memorial Park Dam, upstream from the Triple-Arch Bridge. The fish ladder is located on the left side, deep in the shadows.

Section 4.

We entered the Town River at War Memorial Park where the water is shallow; our canoe scraped against rocks, and the quick current carried us downstream. As we moved into deeper water, the current slowed and became steadier. There were no pools, only a couple of riffles over and around the rocks. The banks were tree-lined, some growing in the water with their gnarled roots in plain sight. There were ancient stonewalls, a small commercial complex and one or two residential areas visible as we paddled toward the Rt. 28 Bridge. There was a little erosion along some of the steeper banks, red-colored mud, and also areas of natural foam, some of which adhered to fallen tree branches and other debris in a cluster here. Downstream from the Route 28 Bridge we saw another informal canoe access area on the right.

The river smelled musky, pleasant as the vegetation now changed from wooded parkland to meandering floodplain, dense with lush reed grasses, willow shrubs, wetland flowers, and stumpy trees.



Covered with lily pads, here the river widened, the slow current twisting and turning several times in oxbows and mini-ponds, forming muddy little islands of riparian habitat; historically this floodplain section parallel to Ash Street is known as the Town River Pond. Children were swimming here as we paddled through.

Photos by Ben Walsh





Photo by Ben Walsh

Then we encountered the openness of River's Bend Country Club on the stream's left side, with managed putting greens and very little vegetated riparian buffer. This is the site of the former Hayward Dairy Farm. Watercolor remained a nut color, slightly reddish-brown; numerous swallows flew overhead, diving as they went after insects. We noted evidence of good bass, pickerel, and pan fish habitat.

We also saw Canada geese, mallard ducks, a heron, some red-winged blackbirds, turtles, and heard frogs throughout the day. We saw no endangered species, hardly any pollution in and along the river all the way to Reynold's Landing where we pulled out our canoes and left this peaceful section of river.

Section 5.

Continuing downstream from Reynolds landing, our next section of the Nunckatessett is a short paddle to the High Street Dam at the Iron Works Park. Summer vegetation is at its peak, with grasses and bulrushes towering over our heads as we sat in the canoe. Pink rose-like flowers bloom profusely along the riverbanks. There were multi-colored dragonflies everywhere.



We took time to paddle around some of the oxbows, discovering very dense growth of pond lilies, pickerel weed and other water plants. Knowing that we were downstream from the new golf course, we wondered if the lush riparian plant life, the coves choked solid with vegetation had anything to do with possible nutrient runoff from the putting greens; because much of the riparian buffer was cleared for the view – for the golfers to see the beautiful river - this should be checked into.



We discovered other areas of curiosity with checking out the coves.

In one place along the riverbank, we found a section of iridescent shiny water along the mudflats. While investigating this, we beached the canoe and explored a little path, to find a rubbish-strewn camping area.

We understand why folks might like to camp out along the river on a peaceful summer night, but we do not understand why they spoil the area for the next visitors.

Our paddle ended at High Street, where we pulled our canoe out along side the Lincoln Club. This is not an easy egress from the river as most of the property is private here. Through paddlers need to portage across the street and through the Iron Works Park at this point, and carry their gear a distance of about a quarter mile, as fences and stonewalls limit a clean re-entry of the stream within the parkland.

Photos by Jack Ames





Photo courtesy Jack Manchester

View from the Lincoln Club (red roof) on High Street, looking upstream with the River Bend Country Club on the upper right and Trucchi's Supermarket on Route 106 at the top of the picture. With Ash Street on the left, this is the hydrological impoundment above the High Street Dam

Photo by Jack Ames



Top of the privately - owned dam at High Street, part of the original area of the historical Iron Works site. The herring ladder is on the right side of the picture, behind foliage.

Section 6.

Photo by Jim Lynch



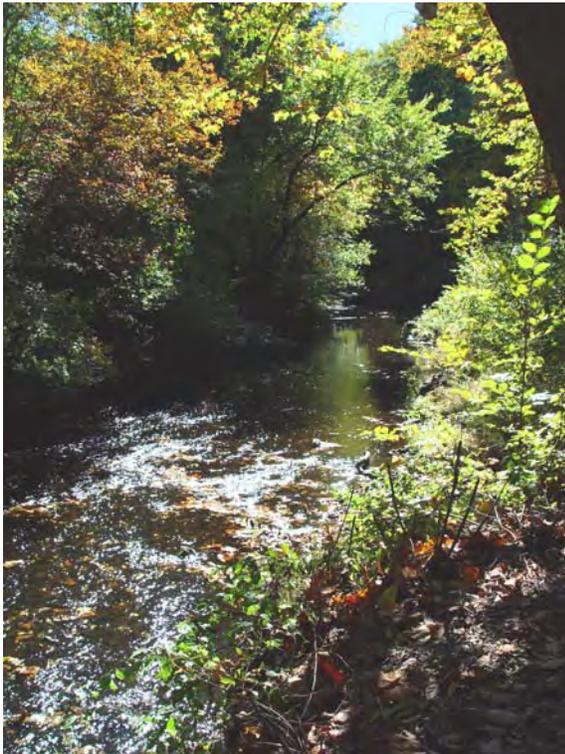
The Iron Works Park entrance is through the Highway Department gate and over this pedestrian bridge. Parking is in the Highway Department lot.

We put in below the falls at the point where the two channelized river segments joined; it was a 100 yards portage from the parking lot. The current moved right along past a floating tire, and many historical foundations on both banks.

There was a concrete bridge abutment dated 1918, remnants of an old railroad with nothing now spanning on top, and an old concrete passage on the left with water trickling out.



We next passed a concrete chute to the river now filed with plants and trees and were just able to kayak around our 1st downed tree snag. There was evidence of a wetland along the active MBTA RR tracks – its natural runoffs were full of fern and skunk cabbage; a very densely foliated area. The river widened and the vista opened up revealing benches and bird nesting boxes as we paddled past an antique farmhouse before the Oak Street Bridge.



Photos by Barbara Thomas and Jim Lynch

There was a slight riffle at this bridge with a large tree snag on the right and wetlands on our left. We met large riffles and dense vegetation under the currently used MBTA RR Bridge, with quick water and large boulders making it difficult

to navigate. The river opened up again behind the homes along Crapo Street, where we viewed well-maintained lawns with nice water access for the families. Then we paddled into a large boulder-strewn riffle at Rt. 18 Bridge.



The Town River meanders through the downtown Central Business District between Spring Street, Campus Plaza Shopping Center and the Stiles & Hart Conservation Area. Waterford Village and the municipal wastewater treatment plant are on the left, with the parkland on the right.

Section 7.

Paddling swiftly downstream through this shallow and rough section, we encountered the smell of sewerage as we passed discharge pipes under the Route 18 Bridge. Noting areas of foam emerging through the turbulence under the bridge, we then navigated our kayaks around a downed tree. Catalpa, purple loose strife and deadly nightshade covered the right bank east of Campus Plaza, while the Stiles & Hart Conservation Parkland on our left bank hosted more natural species – dragonflies and water bugs.

We noticed that there was a good canoe / kayak launch site potential at Stiles & Hart Parkland under the ancient Beech Tree, and here we also saw ruins of the old brick factory once on this site. There was minimal litter in this murky stream section, with the river about 30-40 feet across.

Behind Roche Brothers Supermarket we discovered a broken discharge pipe approximately 1 ft in diameter, emitting approximately 5-10 gallons of 'something' per hour; it smelled like fuel. There was much debris, trash, and an old discarded stairway here in what looked like a former canoe landing area. Milkweeds, locus trees, catalpa and Phragmites were growing on the bank,

The summer 2003 research students working with Dr. Tammi De Ramos in the Bridgewater State Collage Chemistry Department have found elevated levels of copper and lead in the sediments below the stormwater discharge at Rte 18. This drains the Roche Brothers Campus Plaza parking lot and the impervious surface area in downtown Bridgewater. She may have preliminary data the Taunton River Wild & Scenic Study Group can cite for the Town River on metals.

Dr. Kevin Curry, BSC

Again about 1' in diameter, we discovered our second pipe surrounded by riprap; and a silt fence on the left bank at the Stiles & Hart Conservation Parkland was in disrepair. On the right bank behind Julio's and the former Bridgewater Highway Barn (now named the Town River Landing) we found trash amongst the rocks in the marshy wetlands.

Here there were several riffles with a little white water; the remains of an old railroad spur crossing the stream to the former brickyard was visible, with submerged shopping carts lurking in the water. It is at this site that the Bridgewater Master Plan suggests the development of a canoe launch, with a pedestrian bridge linking Spring Street to the Stiles & Hart Conservation Parkland via the Town River Landing.

The left bank then became boggy, criss-crossed by several animal trails and what looked like oil was noted among deer tracks. We passed downed tree limbs in the water as the river narrowed to 10-15-ft across. As we approached the east end of Spring Street, we discovered a small island covered with cardinal flowers in the middle of the river where the stream bends to and fro with mini-oxbows and overgrown floodplain vegetation. Here we also discovered amid discarded wooden crates our 3rd pipe of approximately the same 1' to 1½' diameter – this one not connected to anything. Mushrooms grew on the left bank,

Pipe #4 near the Route 104 end of Spring Street is an old, musty smelling culvert; today it has a trickle of water discharging into the duckweed-covered river, with a decomposing wastewater smell. We saw a bullfrog, and overgrown banks dotted with small animal holes.

The river widened at the end of Morris Avenue where it passed the municipal Wastewater Treatment Plant on the right bank. Here we heard a chorus of singing birds and the banks were overgrown with vegetation.



The water runoff from the plant was clear, it's 1' to 1 ½' pipe discharging into riprap to dissipate velocity. There was little foam and no odor; fish were jumping.

A sister pipe was next to this one; both were covered with a brown, mossy algae as were the rocks and fallen logs for a 20' stretch.

For the next 50' to 100' on the left bank (Stiles & Hart Conservation Area) was covered with old bricks. Just a little further downstream there was another pipe sticking half way into the river. This pipe was dry, connected to nothing, but there were 3 outlets attached to it. There are still bricks visible on the left bank.

At this point we entered a little section of quicker water, shallow, with small falls and riffles. There were tree limbs in the stream, but we were able to pass safely by staying to the left bank. Fish were jumping; there was duckweed in the water, the shady banks appeared to be clay, dotted with small animal holes. We noticed an increased amount of purple loosestrife, and some trash.

Suddenly the river - meandering floodplain out in the middle of nowhere - became totally impassable with many downed trees and limbs across the water. There was no way to paddle through and we hated the idea of abandoning our task, abort our assigned section of the shoreline survey and go back, so ... since the left bank was covered in brambles and briars, we portaged our kayaks up through the brush and poison ivy on the right bank, under and over the blowdowns and then by walking out onto the trunk of a blowdown, were able to climb back into those tilty little boats.

It meant getting chest deep into the water at one point, with hissing and chomping snapping turtles and hungry spiders and big snakes and a huge, very angry red-tailed hawk just overhead! Someone lost a shoe amid the shrieking and laughter; it's still out there. Remember, this survey team consisted of 3 serious gals and one brave guy meeting for the first time....

Soaked, covered with scratches and mucky slime, we paddled on through the now changing vegetation into a more grassland like stretch. Both banks were muddy clay, dotted with little animal trails and burrows and nests and overgrown with Concord grape vines, purple loosestrife and Phragmites. We saw damselflies, and riparian grassland birds. There is a riprap

area embedded into the right bank for erosion control behind Waterford Village, and across the stream on private land, we saw a sawmill and barn complex with an upstairs apartment; several canoes and kayaks were tied there. Swallows greeted us as we passed under the Hayward Street Bridge, where we left the river that day.

Section 8.

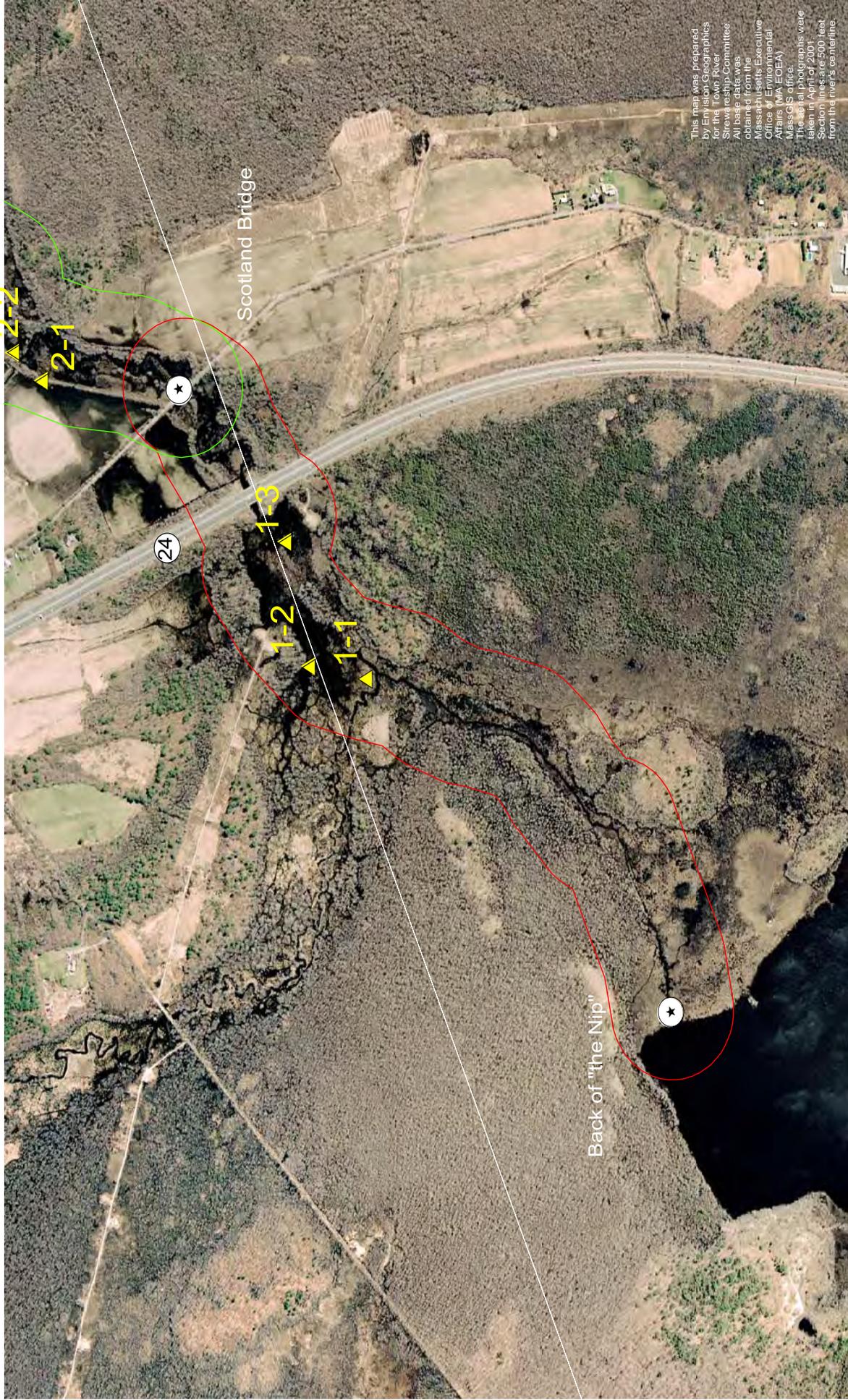
The river flowed slowly through this area, and was shallow at the put in on the downstream side of the Hayward Street Bridge; without recent rain, we thought that we might have to portage. The vegetation on the banks was plentiful with an overabundance of purple loosestrife. We heard and saw many varieties of birds, and there were many dragonflies. There was only one downed tree. We saw a little development, with only a few houses in the distance and only one very small mowed area for fishing on the riverbank,

The only issue of concern is the nutrient load where the Town River and the Matfield meet. We noticed that the Town River watercolor changed and became murkier as the two rivers merged, and the air smelled different also. We ended our river survey by paddling a little past the confluence of these two rivers onto the Taunton mainstem, and pulling out at the Plymouth Street Bridge (Route 104). Truly, this was an exciting 12-mile river reconnaissance.

Photo courtesy Jack Manchester



Going upstream from the Route 104 bridge at Plymouth Street, one can view the Taunton River passing by Bridgewater Farm Supply on the right, the junction of the Town and Matfield Rivers, the power line, and the beautiful meanders of the Town River flood plain pointing back in the direction we have just paddled through.



This map was prepared by Epsilon Geographics for the Town River Stewardship Committee. All base data was obtained from the Massachusetts Executive Office of Environmental Affairs (MA EOEA) MassGIS office. The aerial photographs were taken in April of 2001. Section lines are 500 feet from the river's centerline.

1:12,500



Shoreline Survey Field Data Sheet

Segment begins: *Back of the 'Nip*

Segment ends: *Scotland Street Bridge*

Date: 12 July 2003 **Today's Weather:** air temp 84F

Weather over the past 24 – 48 hours: absolutely glorious

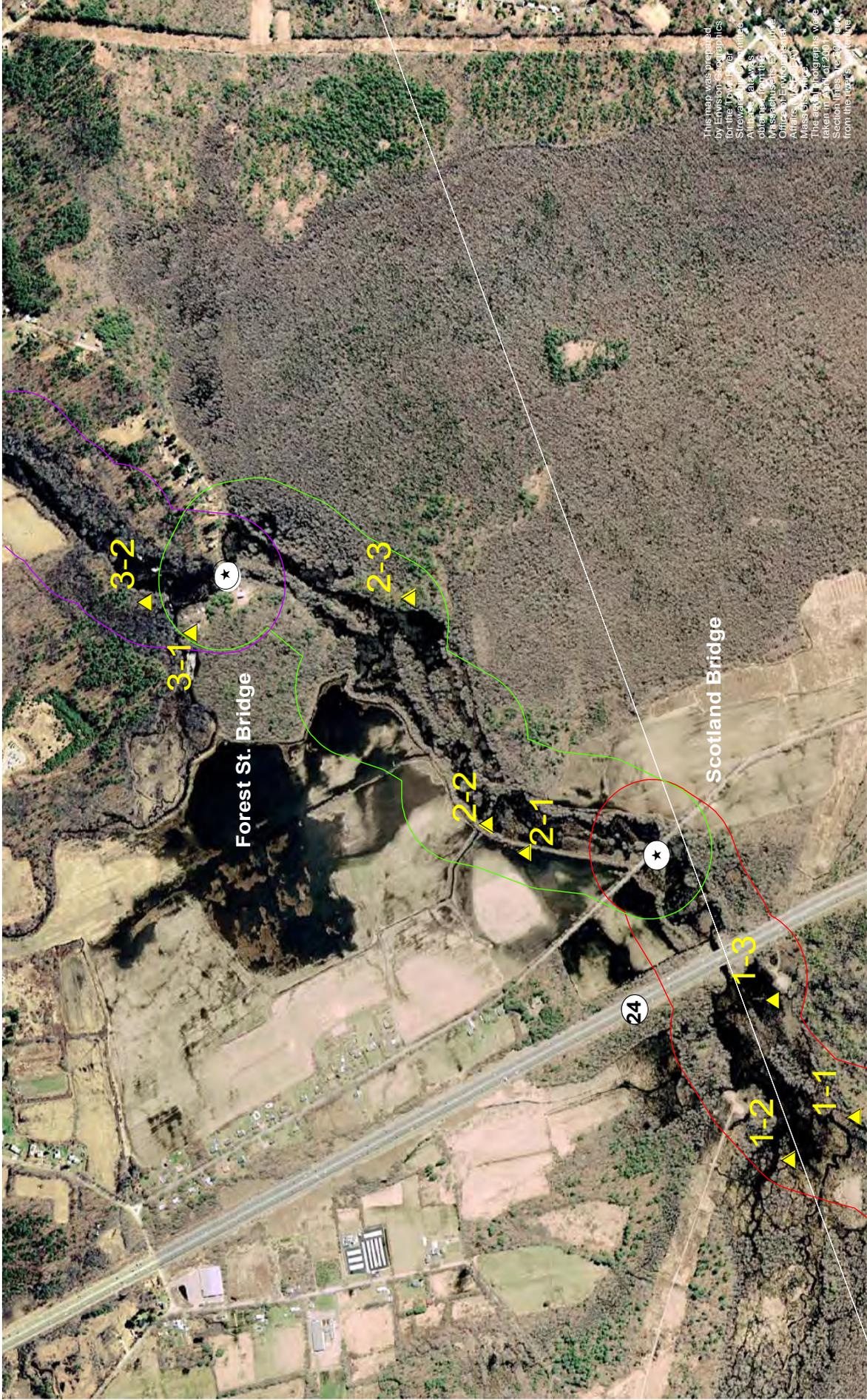
Section 1 - Surveyors: *Kent and Kei Kreutler, Kevin Curry, Jim and Marlene Howell*

Town River Shoreline Survey Results

Problems Found <small><i>See maps, survey forms and summary sheets for details</i></small>	Natural Resources and Assets Found	Priority Work to do
Section 1. Perhaps the absents of easy parking for vehicles	Abundant wildlife and vegetation, beautiful scenery, the solitude of wilderness paddling, clear, and clean water	Work on obtaining user friendly parking in the vicinity of Scotland Bridge

Section 2

July 2003



“I have not been on the Town River before and was impressed by its isolation from development, and its importance as for water management and for ground water recharge” *Carlton Hunt*

Section 2

General description: High water levels, water was clean, a large agricultural field was located near river, concern over primitive camping area that appears regularly used.

Shoreline Survey Field Data Sheet

Segment begins: *Scotland Street Bridge* **Segment ends:** *Clinton Road / Forest Street Bridge*
(Note: Scotland Street, West Bridgewater becomes Elm Street in Bridgewater a few yards southeast of bridge.)

Date: 16 July 2003 **Today’s Weather:** clear with morning haze; later cloudy and windy

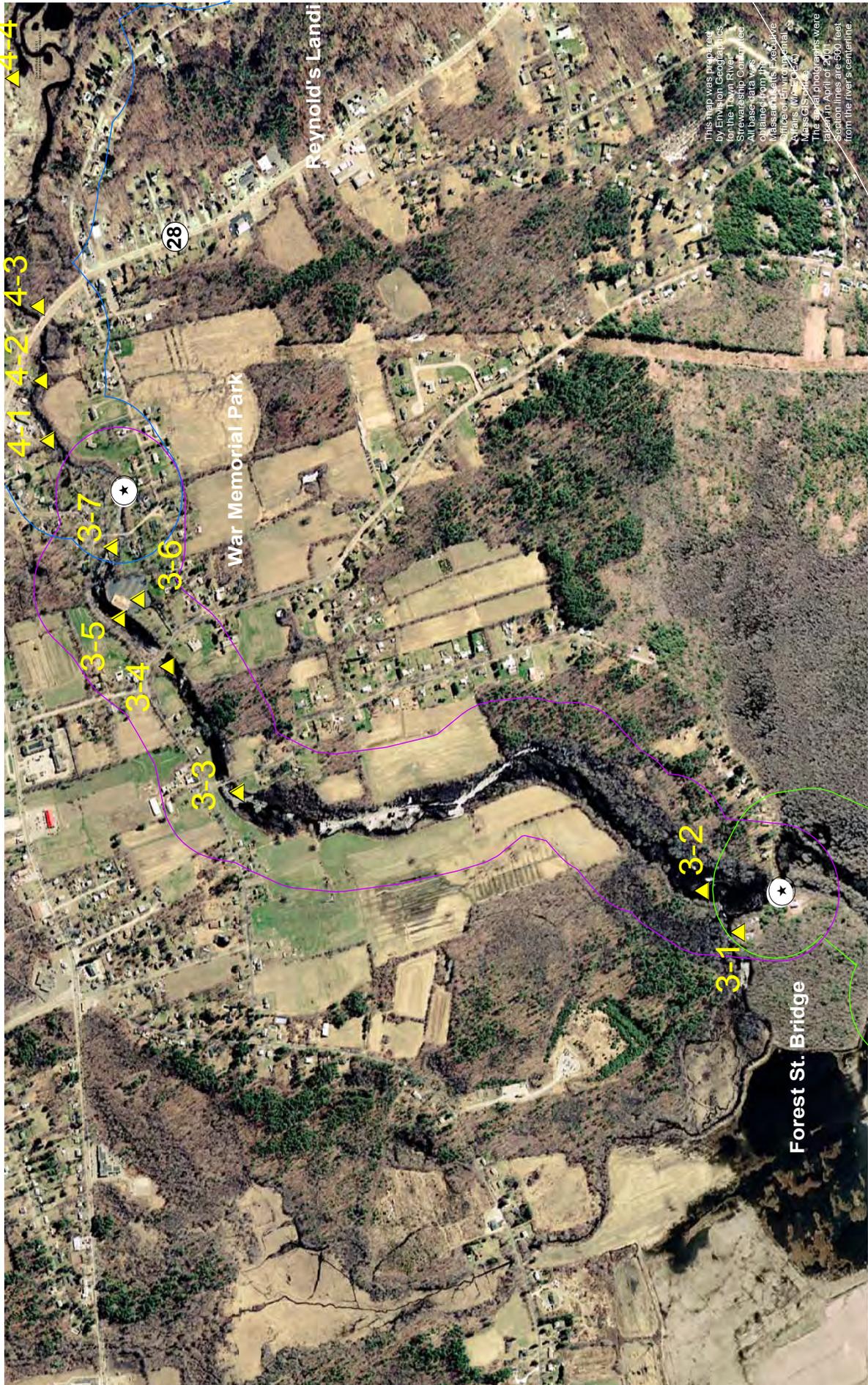
Weather over the past 24 – 48 hours: hot, no rain

Section 2 Surveyors: *Carlton Hunt, Ralph Galante, and Mike Enos*

Town River Shoreline Survey Results

Problems Found <small><i>See maps, survey forms and summary sheets for details</i></small>	Natural Resources and Assets Found	Priority Work to do
<p>Section 2.</p> <p>Unfriendly parking to off-load canoe, trash, rotted sluiceway on old dike, fear of contamination if breached, Stone bridge in need of repair due, random tree cutting on conservation land.</p>	<p>Beautiful river for canoeing or kayaking, interesting plants and wildlife, undeveloped open space, clean, tea-colored water</p>	<p>River clean up at Scotland Bridge, work to secure safe parking spots, identify owner of campsite with cut trees to perhaps investigate emergency vehicle access and ecologically sensitive management plan for public land.</p>

Section 3



This map was prepared by Environmental Resources for the Town River Survey. All base data was obtained from the Massachusetts Executive Office of Environmental Affairs (MassOECA) Maps of Massachusetts. The aerial photographs were taken in April of 2003. Elevation lines are 500 feet from the river's centerline.

1:12,500

0 0.25 0.5 1 Miles



General description: *Creosote oozing from old bridge timbers at Clinton Street, and the South Street Bridge (culvert) in extreme disrepair; large rock with petroglyphs, several farms with fields near river; one farmer allows horses to wade in river.*

Shoreline Survey Field Data Sheet

Segment begins: *Clinton Road / Forest Street Bridge* **Segment ends:** *War Memorial Park*

Date(s): 6 July & 30 July 2003 **Today's Weather:** Sunny, clear both days, mid 80's

Weather over the past 24 – 48 hours: Sunny

Section 3 Surveyors: *Pete and Sarah Fuller, Cindy Allen, Beth Smith, Fran Jeffries, Paul Von Protz, Marguerite Morse, and Vicki Benea in two groups*

Town River Shoreline Survey Results

Problems Found <small>See maps, survey forms and summary sheets for details</small>	Natural Resources and Assets Found	Priority Work to do
<p>Section 3.</p> <p>Possible concern over tar dripping through the bridges into the water, domestic livestock grazing to the river edge (2 places), South Street Bridge needing repair</p>	<p>Historical sites, beautiful vistas, wildlife, clean water, open farm land</p>	<p>Identify land owners with farm animals, approach them regarding BMPs, Research appropriateness of permanent conservation protection for the Anderson Farm</p>

Town River Survey

Section 4

July 2003



This map was prepared by Envision Geographic for the Town River Stewardship Committee. All base data was obtained from the Massachusetts Executive Office of Environmental Affairs (EOEA). The aerial photographs were taken in April of 2001. Section lines are 600 feet from the river's centerline.

1:12,500



General description: War Memorial Park and Canoe Club of Historic significance; Community involvement of YMCA leadership group in surveying section; riparian zone is well vegetated; numerous storm sewer pipes along banks especially Bettencourt's and near Rte. 28; some homes with yards coming up to rivers edge near Ash Street; lots of dragonflies!

Shoreline Survey Field Data Sheet

Segment begins: *War Memorial Park*

Segment ends: *Reynold's Landing*

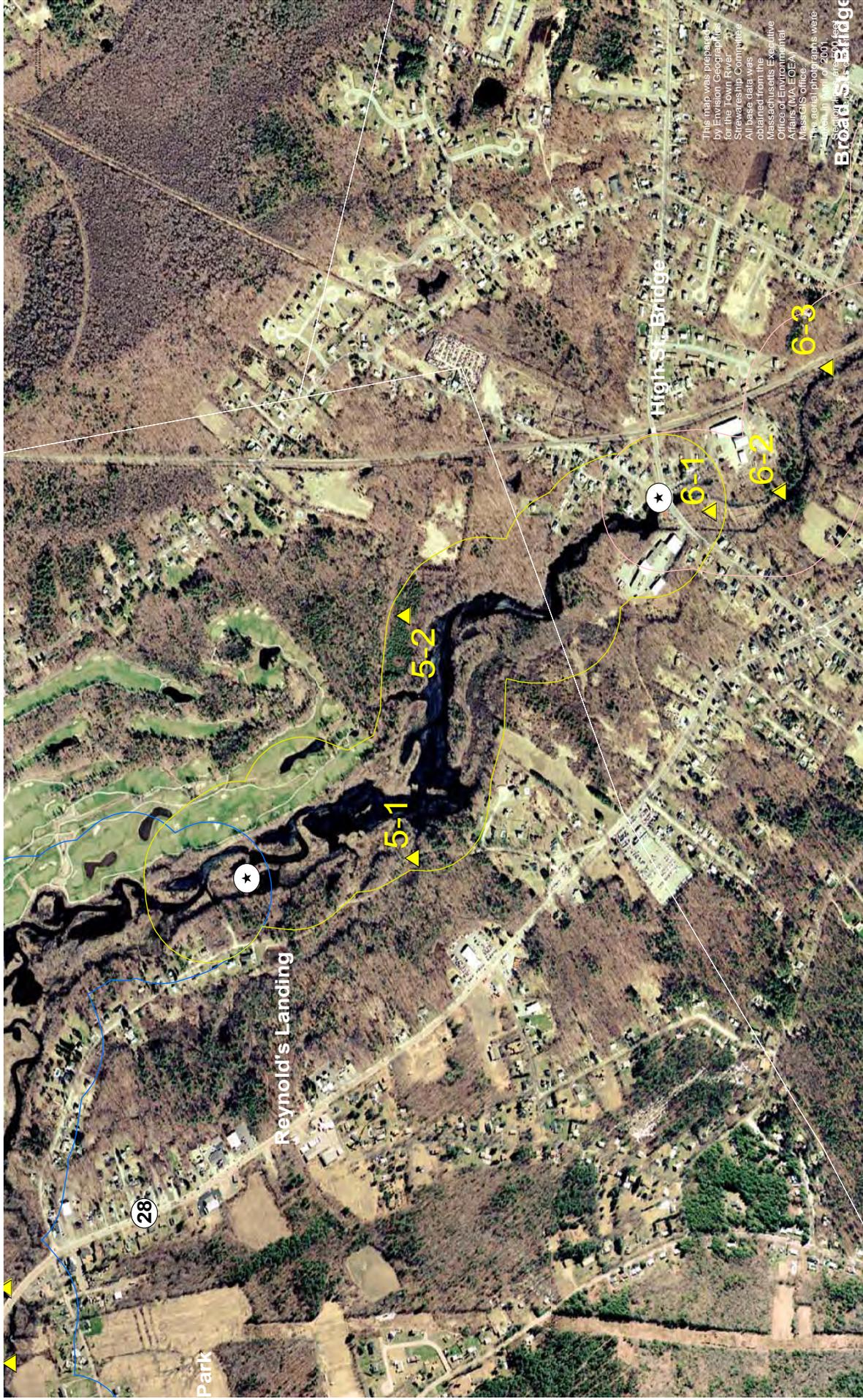
Date: *5 July, 9 July 2003* _____ **Today's Weather:** *hot, slightly overcast, rain coming in* _____

Weather over the past 24 – 48 hours: _____ *mostly sunny, hot* _____

Section 4 Surveyors: *in two groups; Ben Walsh, Robyn Mahoney, Andrew Cook, and East Bridgewater YMCA LIT.*

Town River Shoreline Survey Results

Problems Found	Natural Resources and Assets Found	Priority Work to do
<i>See maps, survey forms and summary sheets for details</i>		
<p>Section 4.</p> <p>Encountered very few problems, wondered about the nutrient loading from the River Bend Golf Course</p>	<p>Started at the War Memorial Park, beautiful paddle, plenty of birds and buzzing creatures, fish, and turtles. Children swimming.</p>	<p>Install signage regarding the river experience, remove trash at Route 28 Bridge, Perhaps prepare handout on BMPs for lawn care.</p>



Description: Vegetative changes noted in aquatic plants by those familiar with the river. Artifacts of Iron Works Park of Historical Significance; a lot of aquatic vegetation has grown in; fish ladder and herring run; high density of tessellated darters at end of Iron Works Park (BSC undergraduate summer research survey).

Shoreline Survey Field Data Sheet

Segment begins: *Reynold's Landing*

Segment ends: *High Street*

Date: 6 July 2003 **Today's Weather:** Sunny and hot; 85 degrees

Weather over the past 24 – 48 hours: Sunny, 80's – 90's

Section 5 Surveyors: *Glenn Watson and Jack Ames*

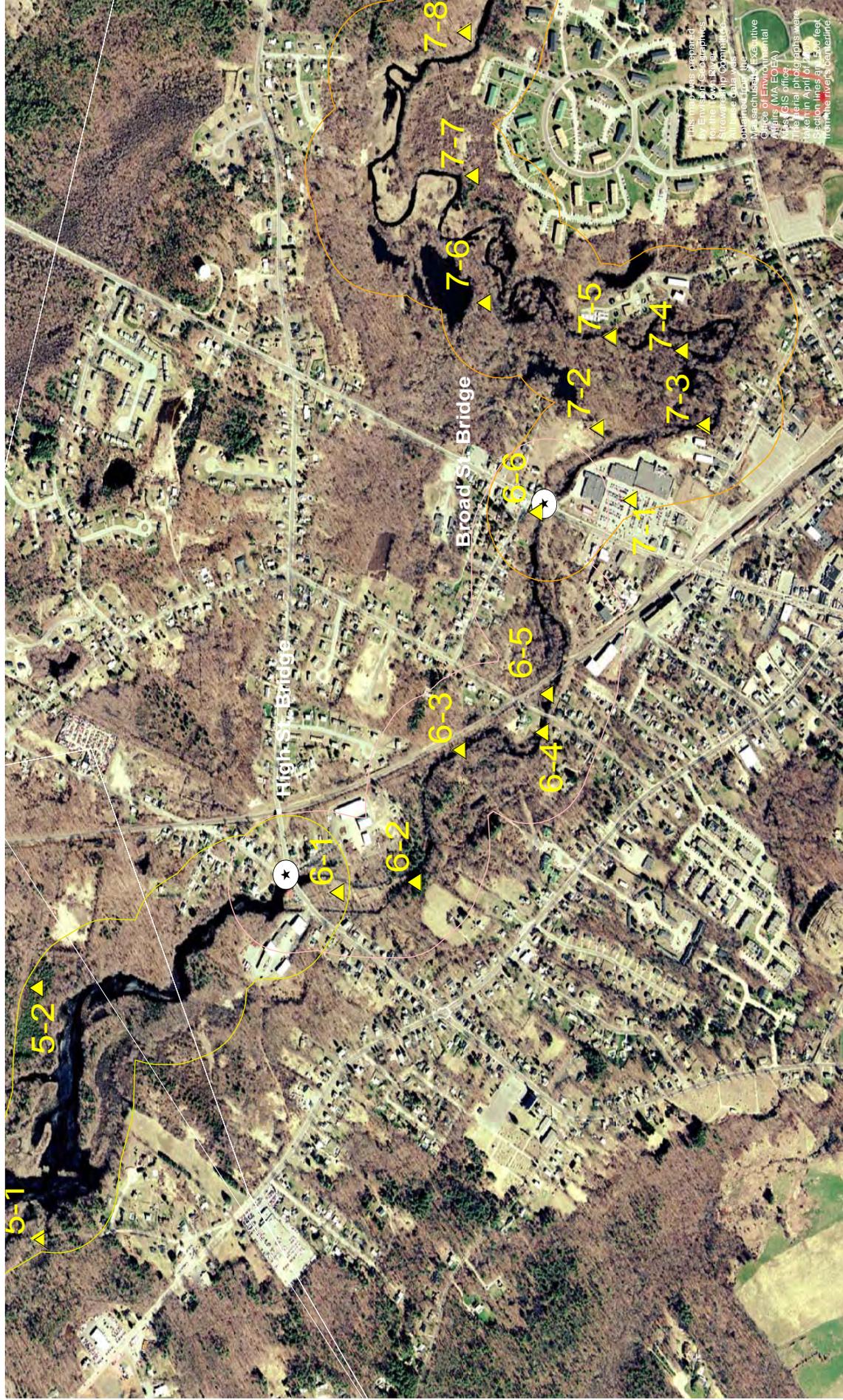
Town River Shoreline Survey Results

Problems Found <small>See maps, survey forms and summary sheets for details</small>	Natural Resources and Assets Found	Priority Work to do
<p>Section 5.</p> <p>Concern regarding trash on bank camping sites, need river signage, concern regarding changing growth mass of aquatic vegetation – perhaps nutrient loading? Concern regarding condition of High Street Dam.</p>	<p>Beautiful meanders in the river, beautiful scenery, fish dragonflies, birds, historical sites</p>	<p>Develop river management for trash removal, identify owners of camping areas to talk with them regarding trash, check into nutrient issue, research better egress at the High Street dam</p>

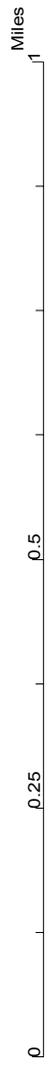
July 2003

Section 6

Town River Survey



1:12,500



Description: Old Mill sluice ways for water power of Historical significance; water very fast in several parts of this section; Oak St. is very beautiful natural area in riparian zone; pipes along bank more prevalent starting near Crapo St.

Shoreline Survey Field Data Sheet

Segment begins: *High Street at Iron Works Park* **Segment ends:** *Broad Street at Stiles & Hart Conservation Area*

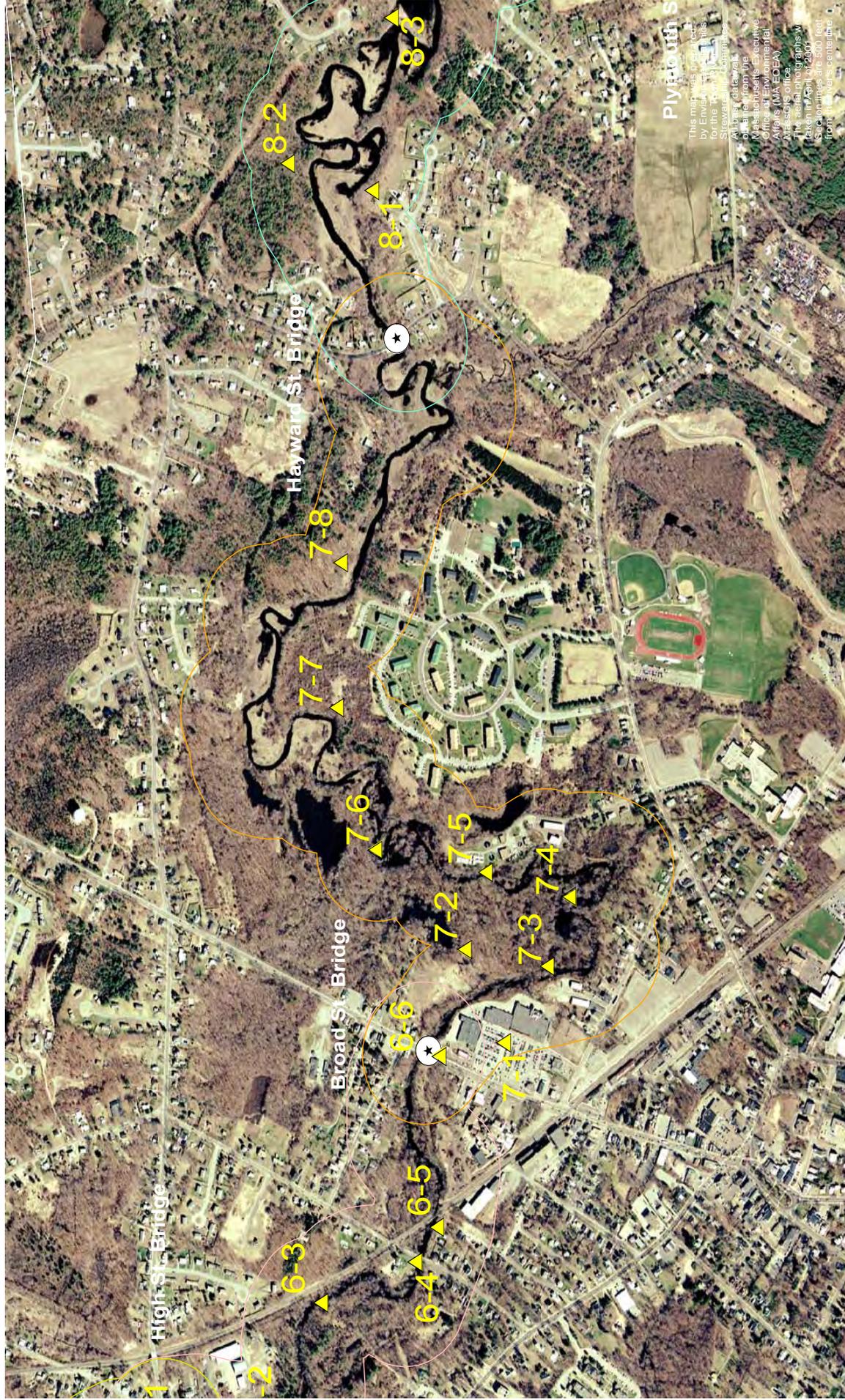
Date: 20 July 2003 **Today's Weather:** Sunny

Weather over the past 24 – 48 hours: rained 24 hours ago

Section 6 Surveyors: *Jim Revil, Barbara Thomas, Stephanie Thomas, and Daphne Knudson*

Town River Shoreline Survey Results

Problems Found <small><i>See maps, survey forms and summary sheets for details</i></small>	Natural Resources and Assets Found	Priority Work to do
<p>Section 6.</p> <p>Poor egress / access to the river, some blowdowns that need removing, some accumulated trash from residential homes, yukky smell under the Route 18 Bridge</p>	<p>Beautiful stretch of stream to paddle,</p>	<p>Develop safe access to portage across High Street, improve portage to the river, signage for historical areas, river clean ups at bridges</p>



General description: Pipes along bank more prevalent under the Rte 18 bridge and along the Campus Plaza Parking area; several with odors after rain; BSC summer undergraduate research students with several years of data on metals and chlorides at Rte 18 area; trash in river near Rte 18, Rail Road ties in or along river near Julio 's; Stiles & Hart Parkland area very accessible, AmeriCorps Conservation Team developed trail in Parkland area; many large trees down across river near Stiles & Hart Parkland area; logjams in river took over 1 hour to get through; Sewage Plant is well maintained and has large discharge pipe but no odor; snapping turtles and snakes before Hayward St.

Shoreline Survey Field Data Sheet

Segment begins: *Broad Street at Stiles & Hart Conservation Area*

Segment ends: *Hayward Street Bridge*

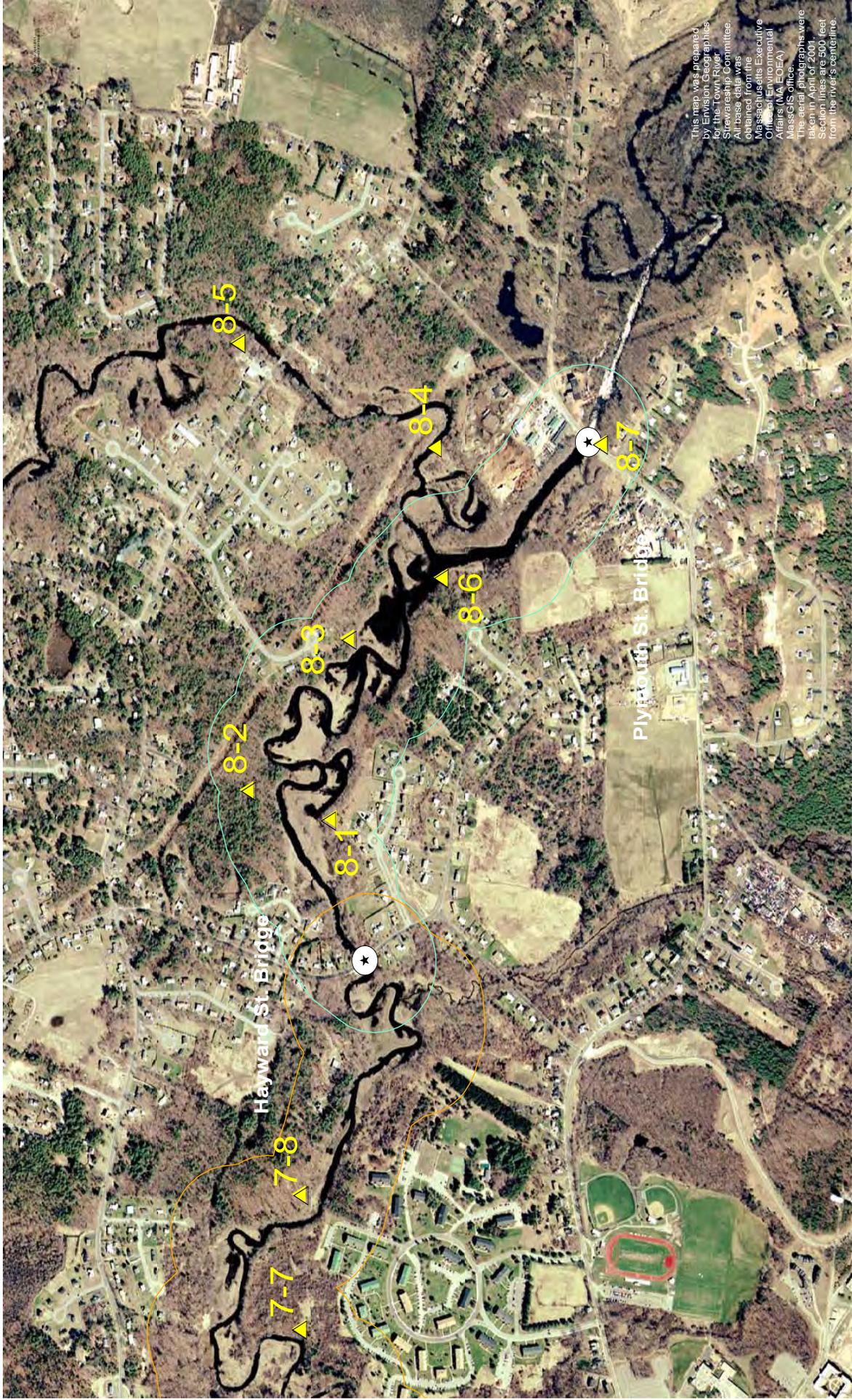
Date: 20 July 2003 **Today's Weather:** sunny and clear

Weather over the past 24 – 48 hours: rained two days ago

Section 7 Surveyors: *Jim Revil, Barbara and Stephanie Thomas, and Daphne Knudson (second section)*

Town River Shoreline Survey Results

Problems Found	Natural Resources and Assets Found	Priority Work to do
<p><i>See maps, survey forms and summary sheets for details</i></p> <p>Section 7. Needs river clean up, better egress / access to stream, blowdowns prevalent, several drainage pipes need further investigation</p>	<p>Municipal Conservation land on the east side, Town River Landing on right side, potential for pedestrian bridge and canoe launch site, beautiful marsh, grassland</p>	<p>River clean ups, canoe access to conservation area, check drainage pipes further</p>



This map was prepared by Epsilon Geographics for the Scavenger Club. All base data was obtained from the Massachusetts Executive Office of Environmental Affairs (MA EOEA) MassGIS office. The aerial photographs were taken in April of 2001. Section lines are 500 feet from the river's centerline.

1:12,500

0 0.25 0.5 1 Miles



Description: Some hawks seen on the river; not much trash; people observed fishing; lots of purple loosestrife in this section; Tuckerwood Parkland accessible from river; distinct odor from the confluence of the Matfield River; concern over no sediment controls on sand piles at Hayward St. from municipal street sweeper;

Shoreline Survey Field Data Sheet

Segment begins: *Hayward Street Bridge* **Segment ends:** *Route 104 Plymouth Street takeout*

Date: 28 July 2003 **Today's Weather:**

Weather over the past 24 – 48 hours: _____

Section 8 Surveyors: *Wayne Whidden and Mary Farrell*

Town River Shoreline Survey Results

Problems Found <small><i>See maps, survey forms and summary sheets for details</i></small>	Natural Resources and Assets Found	Priority Work to do
Section 8. Concern over change in water color and in odors at the confluence with the Matfield River	Beautiful meandering river	Better egress / access to the river

VI. TOWN RIVER RECOMMENDATIONS for ACTION

These are the 7 major issues that the Town River Stream -Teams have identified as challenged or problematic for the Town River in West Bridgewater and Bridgewater:

- A. Town River Awareness and Education.
- B. Access, Egress, and Safe Passage
- C. Water Quality & Riparian Land Use
- D. Heritage Landscape Preservation
- E. Habitat & Biodiversity Preservation
- F. Recreation Enhancement
- G. Dams & Bridges

***Short Term Action:** Suggestions for work that can be accomplished in a few months. Some of these proposals may be part of Long Term Action.*

Long Term Action: Suggestions for ongoing activities that will bind the two-community, one watershed Town River Advocacy Group together as they implement the Recommended Actions. These are ongoing tasks that will hopefully become part of the future Town River Landscape.

A. TOWN RIVER AWARENESS AND EDUCATION.

Short Term

1. Create material to educate the public about this river: its geological origins, historical and economical significance, and its ecological and recreational value.
2. Create educational kiosks at all of the public open space parklands and include educational material about the history and importance of each site as part of the Heritage Landscape.
3. Develop educational signage for hand-carried craft launching areas along this river.
4. Promote the ideals of Volunteer Stewardship for river management, connected to the appropriate local municipal departments.
5. Develop a series of brochures that promote the Town River as a recreational trail connecting municipal and state-owned conservation areas and parklands, connecting to the Bay Circuit Trail System, and the Wampanoag Commemorative Canoe Trail.

Long Term

6. Educate residents about the importance of the vegetated buffers and flood plains along the river corridor; develop materials for distribution to landowners.

7. Conduct public education concerning riparian land use and its effect on the river water quality; lawns & fertilizers, BMP for pastureland, erosion of farm fields, and their connection to weeds and sediment load in the river.

B. ACCESS to, EGRESS from, SAFE PASSAGE on river

Short Term

1. Encourage environmentally sensitive and appropriate use of existing public open space / conservation areas along the whole river.
2. With the approval of local conservation commissions, remove portions of blowdowns and river blockage to improve recreational passage, especially along the Stiles & Hart Conservation / Spring Street Area.
3. Encourage responsible use of launching areas with carry in / carry out signage for rubbish.
4. At reasonable intervals, develop additional user-friendly access with safe off-street parking spots at roadside areas along the whole Town River. (Scotland Street, Clinton Road / Forest Street, High Street, Broad Street, Hayward Street).

Long Term

5. Check ownership of informal campsite on east bank (going downstream) between Skim Milk Bridge and the Clinton Rd. area; for the public good, determine if area is accessible for emergency vehicle response (fire, police). Encourage landowners to post 'KEEP THIS AREA CLEAN' signage, and perhaps install a properly made firepit.
6. Improve canoe / kayak launching areas on the riverbanks at approved access / egress points to limit soil erosion and for the comfort of paddlers.
7. Improve portage at High Street / Iron Works Park Area in accordance with current Management Plan approved by Bridgewater Conservation Commission.
8. Improve access, egress at the Stiles & Hart Conservation Area in accordance with current Management Plan approved by Bridgewater Conservation Commission.
9. Develop additional environmentally sensitive and user-friendly picnic areas along the river passage; river access only.
10. Ensure that all improvements and development conforms with existing community Open Space & Recreation Plans and Community Master Plans.

C. WATER QUALITY & RIPARIAN LAND USE

Short Term

1. Conduct a river clean up around all bridge areas (especially Scotland Street) to remove and properly dispose of abandoned house hold appliances, junk and rubbish.
2. Conduct a clean up of the party debris left at the informal campsites between Skim Milk Bridge and Clinton Rd, and also above the High Street Dam.
3. Review (and if possible map) existing land use activities along the river and buffer zone.

4. Obtain list of riverfront homeowners for possible educational outreach concerning riparian land use and water quality.
5. Look at possible water quality runoff improvements at agricultural fields, pastureland, golf course, all bridges, parking lots, and canoe access / egress sites along the river.
6. Take appropriate action regarding task # 5.
7. Investigate source of discharges from various pipes along the river; Clinton Road area, River Street bank above the War Memorial Park, impoundment above the High Street Dam, discharge pipe by Campus Plaza, etc.
8. Take appropriate action regarding task # 7.
9. Contact property owners and Bridgewater Highway Department concerning inappropriate storage of street sweepings without erosion control barrier at the Hayward Street Bridge.

Long Term

10. Develop a relationship between the (now forming) Town River Stewards and the Bridgewater State College RiverNet Watershed Access Laboratory for long term water quality monitoring.

D. HERITAGE LANDSCAPE PRESERVATION

Short Term

1. Preserve and promote the pre-colonial and colonial history and historical significance of this whole river including the Hockomock Swamp, the farms, factories, foundries, mills, brickyards, fairgrounds, and fish ladders.
2. Create brochures to promote the preservation of the rich colonial history and protected public open spaces along this river.
3. Mark historical sites and places of interest along the river with appropriate signage.

E. HABITAT / BIODIVERSITY PRESERVATION

Short Term

1. With the approval of local conservation commissions, conduct a River Clean up to remove unnatural debris and household appliances; open up blowdown areas to maintain normal stream flow and safer recreational passage.
2. Explore ways to assist / work with the Town River Fishery Committee for the restoration / management / harvest of herring on this river, joint effort by both towns.
3. Promote protection of the important habitat in the Hockomock Swamp area, monitor rare species.
4. Promote the awareness and protection of unique habitat and species biodiversity in the public open spaces and conservation parklands along this river.
5. Promote awareness and protection of habitat and species biodiversity along the various meanders of this river, especially along Ash Street and behind Waterford Village to Hayward Street.
6. Monitor / improve water quality.

7. Promote the preservation of the scenic beauty and undeveloped character of this stream; develop habitat awareness information for riparian landowners.

Long Term

8. Develop this river's potential as a recreational fishery.
9. Investigate all aspects of the existing ACEC preservation regulations afforded the Hockomock Swamp / Town River Area to increase awareness and tighten protection in both the West Bridgewater and Bridgewater Communities.
10. To maintain the stream's character and integrity, consider zoning regulation review in Master Planning Documents to better protect this river.

F. RECREATIONAL VALUE

Short Term

1. Promote the Town River from the Hockomock ACEC to the Matfield confluence as a Recreational Canoe Trail, with handout brochures highlighting the Heritage and Natural Landscape, the amenities at existing state or municipally owned public open spaces, and with appropriate signage along the stream.
2. Promote the Town River connections to the Bay Circuit Trail System around Boston, and to the MBTA accessibility via the Bridgewater station.
3. Promote the Town River connection to the Wampanoag Commemorative Canoe Trail.
4. Encourage the appropriate development and use of existing public property according to specific management plans for these sites.

Long Term

5. Encourage the installation of strategically placed comfort stations, safe parking spots
6. Encourage the exploration of the Town River as a recreational fishery; improve, preserve habitat for other species restoration (beside herring).

G. DAM & BRIDGE REPAIR

Going downstream, the bridges over the Town River are: Route 24, Scotland Street, Skim Milk, Comfort Bridge at Clinton Road, Forest Street, South Street, Arch Street, South Main / Route 28, High Street, Oak Street, Broad Street / Route 18, and Hayward Street. The Scotland Street Bridge is currently marked for repair by the local and state DPW, while the Arch Street Bridge is unsafe for vehicle traffic and permanently closed. Oak Street has just been renovated.

There are two dams spanning the Town River, each created hundreds of years ago for waterpower at colonial industrial sites. The Town of West Bridgewater has recently repaired the dam at Arch Street, while the privately owned dam at High Street remains in guarded condition; maintenance is assumed to be the responsibility of the owner. Since the dam no longer generates economic return and the cost of rebuilding the dam under today's construction codes is so high, it is unlikely that this dam will be privately repaired any time soon.

Short Term

1. All bridges over this stream need public safety and stream pollution / erosion control assessment.
2. Evaluate all road runoff / drainage structures as part of the maintenance upgrades.
3. Scotland Street: As the bridge repair design is developed, incorporate 3-4 simple and safe off-street parking spots for canoeists to leave their cars while on the river.
4. Clean up / remove of all trash, discarded appliances, and road litter at the bridges and dams.
5. Check on the effect on water quality of the tar dripping down into the river at the Comfort Bridge on Clinton Road.
6. Check out the safety of the culverts under the South Street bridge; they seem to be totally eroded at the top, with just street tar covering them as a roadway surface.
7. Check into erosion / water quality remediation regarding the street sweepings at the Hayward Street Bridge.

Long Term

8. Incorporate railings over the bridges that would allow visibility of the scenic river wherever possible.
9. Colonial Skim Milk Bridge needs restoration; the huge stone slabs connecting the archways need to be reset after dislocation by farm machinery.
10. Research ways to repair the High Street Dam.



Photo by Carlton Hunt

VI. What's Next?

The Nunckatessett is a treasure trove of Native artifacts and natural resources; it is one of the earliest colonial cradle lands in New England, and today still is a beautiful recreational river for passive activities - fishing, canoeing and kayaking, swimming and tenting, to name a few. As this draft Shoreline Survey points out, the Town River deserves protection for many worthy reasons; it is a mirror of the sought-after Wild & Scenic values of the Taunton River itself.

While both West Bridgewater and Bridgewater have casually acknowledged the Town River in formal community planning documents, little attempt has been made to recognize the whole river from headwater to outfall as a single entity, putting protection of the common stream ecology, cultural history and recreational values together into one management plan.

In 1988, the Bridgewater **Open Space Plan** proposed establishment of a Green Belt along its portion of the Town River. A similar strategy was proposed in the 1988 West Bridgewater Bay Circuit Open Space Plan along the upstream segment of the river. This green belt concept was individually carried forward into subsequent Open Space Planning documents of both towns, serving to protect resource areas and potable water supplies within the region. It also served to enhance the effectiveness of preserving Open Space by concentrating it along a significant common feature within the two communities. It is time now for both towns to partner together more fully and harmonize the planning for this mutual resource. Some action is already underway.

1. In 1994 both towns agreed to form the **Town River Fishery Committee**, to have individuals representing both communities work together to manage this natural resource. Each town was to obtain 'Home Rule' over the fishery, and appoint local Herring Wardens to monitor harvest. More information can be obtained about the TRFC from the Town of Bridgewater Website; this committee can always use additional volunteers, especially from West Bridgewater.

2. In 1998 local citizens formed the **Natural Resources Trust of Bridgewater** as a nonprofit land trust in order to promote the conservation of land in Bridgewater and adjoining communities. A land trust is important to the future of the Bridgewaters because of changes in land use that are taking place as the region continues to experience robust economic growth. River corridor protection remains a prime focus with NRTB. The land trust is totally run by volunteers and may be reached through its website, www.nrtb.org.

3. As a direct result of individuals finding common cause during the process of this shoreline survey, a group of stream-teamers have banded together to begin hands-on implementation of the Action List within this document. **The Town River Stewards** have formed as a sub committee of the NRTB. Their web page is <http://www.nrtb.org/townriver/more>, and they have already conducted two river clean ups along bridge sites. They too need additional volunteers.

Finally, both West Bridgewater and Bridgewater need to update their municipal Open Space & Recreation Plans. It is hoped that the discussion in this document and in its sister tributary study of the Matfield River will serve as base data for a common unit in both individual plans.

