


The Back River Watershed Association

The Back River Watershed Association, founded in 2000, by the late Mary F. Toomey, Weymouth native welcomes you to learn more about one of the South Shore's greatest natural treasures at Weymouth Back River and its highly productive and valuable Estuary. Join us outdoors to explore nature's renewing gifts as people of all ages are discovering the beauty of the Weymouth Back River trails, it's sweeping panoramic views of Hingham Bay, Quincy Bay, and Boston Harbor and it's larger local watershed within the towns of Weymouth, Hingham, Braintree, Rockland, and Abington. The Back River, its bountiful Estuary, and surrounding nine parks offer surprising tranquility and passive recreation such as canoeing, kayaking, hiking, fishing, jogging, bicycling, picnicking, and wildlife observation in a bustling suburban setting. These open space public parks include; Webb State Park, Abigail Adams State Park, Stodder's Neck Park are part of the Back River Reservation and managed by Mass. Dept. of Conservation and Recreation. Great Esker Park, More-Brewer Reservation, Herring Run Park, Bare Cove Park, Back River Wildlife Sanctuary, and Bouve Conservation Land are owned and managed by the towns of Weymouth and Hingham.

A truly historic and treasured destination in the South Shore community and beyond, the Back River is distinguished as being one "Massachusetts' Special Places", Local Scenic River, and Wildlife Refuge" and is also designated as an "Area of Critical Environmental Concern (ACEC)." The Back River Watershed is part of the Boston Harbor Basin consisting of approximately 950 acres located largely between the extraordinary coastal communities of Weymouth and Hingham serving a population of nearly 80,000 residents. Two of the largest parks, Weymouth's 237 acre Great Esker Park and Hingham's 484 acre Bare Cove Park, that border Back River located north near busy Route 3A include approximately 200 acres of valuable salt water marshes and tidal mudflats within a serene nature reservation.

Ms. Toomey noted, "The Back River is a coastal, tidal river running a mile in a half through the wide saltwater marshes and receiving water from upland ponds, swamps, rivers, lakes, tributaries, and smelt, eel, and herring runs that create a confluence. The Back River Estuary is a mix of part freshwater and saltwater and its water distribution system flows into Back River from water sources from Weymouth's Mill River, Great Pond, Old Swamp River, enter Whitman's Pond and in Hingham's Fresh River, with the Tucker's Swamp/ Hockley Run Complex that enter Back River thus creating a highly productive

The Back River Watershed Association is a 501(c) (3) tax exempt organization organized to preserve, protect, and promote the Back River and its watershed in Weymouth, Hingham, and parts of Abington, Rockland & Braintree.




Estuary which empties into Hingham Bay". "It is of crucial importance to protect and nurture this inseparable combination of fragile fresh and salt water resources which, working in unison, provide that first link in the marine food chain that sustains the marine fisheries of the greater waters of Quincy and Hingham".

The late Dr. Sears, U.S. Naval Reserves Commander, Scientist Emeritus of the Wood's Hole Oceanographic Institution stated, "The estuaries controlled the nursery for the offshore fisheries, Back River Estuary being one of the most important ecological food resources in the region and that its resources were limitless providing an important food source." Ms. Toomey said, "The Back River Estuary serves as a fertile breeding ground for over thirty species of native fin fish, including flounder, mackerel, striped bass, tom cod, bluefish, herring, sweet clams and other shellfish, smelt and eel. It also a quiet haven and forested habitat for many forms of wildlife, mammals, ducks, and reptile including painted and snapping turtles, wildflowers, unique plants and over 150 different species of birds listed with The Massachusetts Audubon Society including rare species of green and blue egrets, great blue herons, black-crowned night heron, red tailed hawks".

The Back River Estuary also supports the Weymouth Herring Run which is one of Massachusetts largest and most productive herring runs. River Herring are two species alewife and blueback they play a vital role sustaining and restoring our collapsing local and off shore commercial and recreational New England Fisheries impacted by overfishing, bycatch, illegal fishing, and climate change which is effecting ecosystems world wide. Historically River Herring was a staple protein for prehistoric people, Native Americans and early settlers, today their importance cannot be overstated both environmentally and economically. River Herring are protected by law and are recognized as the keystone species supporting the marine food web that feed many of our favorite fish like haddock, cod, blue fin tuna and other wildlife. It is truly a great spectacle and natural wonder when 'the herring are in at Weymouth', making their amazing annual pilgrimage from the Atlantic Ocean each Spring swimming upstream through Jackson Square to spawn at Whitman's Pond their ancestral home. These small gray fish number in thousands and their passage is made safer with the work and care of our dedicated herring wardens. The BRWA works as partners with the Town of Weymouth, The Division of Marine Fisheries and our local and state officials to improve conditions at Weymouth Herring Run Flood Control area where these fish are often trapped or die.

Ms. Toomey description of Great Esker Park its history and formation.

The history and formation of the Back River and surrounding lands takes us back 12,000 years ago to the period of the last glacier- when glacial melting resulted in sea level rise and the flooding of coastal




lands. The Back River and Estuary is unique as a priceless archeological resource as one of the greatest remaining in the Boston Harbor Basin. It has been studied by Members of the Eastern Massachusetts Archeological Research Group. This study shows evidence to date that the Back River Eskers some rising 90' feet are the highest in the country. Sand Plains were the home of at least eight pre-historic cultures of different Stone Age sites the earliest dating back to the late Paleo stage, about 9,000 years old. The entire area has been studied by experts in the fields of botany, biology, marine biology, geology, forestry, and others.

Many local residents are surprised to learn that Native American Indian tribes and early European settlers once occupied the lands surrounding the Back River. The eskers served as lookouts and the river provided fish, game, and transportation. Kitchen middens can be seen on the river banks where prehistoric artifacts were discovered. Pilgrims wrote of traveling there on a partially preserved "gondola" barge found on the river bank. Weymouth and Hingham militias took part in the second skirmish of the Revolutionary War that occurred between Webb State Park and Grape Island. In 1912 the Navy acquired both sides of the river for military purposes, thus saving the area from development. During World Wars I and II ammunition was stored in bunkers on the Hingham side. Marines patrolled the entire area, and the federal government initiated shipbuilding at the old Hingham Shipyard. The Navy began to release parcels of land to Weymouth and Hingham in 1966 and also at this time Ms. Toomey founded the Great Esker Park Natural Science Center her students offered the town's youth an exciting hands on free summer nature program exploring earth sciences. Mary Toomey often remarked, " Great Esker Park is a piece of land valuable to every American citizen for its history, its beauty and its completely unspoiled nature". In 1967 The Town of Weymouth purchased and established Great Esker Park from the government.

The success of the Great Esker Park Natural Science Center and Mary's drive attracted the attention of Dr. Mary Sears, Commander in the US Naval Reserves, Scientist Emeritus and leading oceanographer of the famed Woods Hole Oceanographic Institution. In 1971, Dr. Sears came to Weymouth to meet Ms. Toomey and asked her to come down to Wood's Hole to learn about the value of the Back River Estuary. Ms. Toomey said "yes" and their amazing and successful collaboration began with three goals to preserve the Back River and surrounding lands; to obtain all available lots abutting the Back River, identify and clean up pollution, and restore the fisheries and Weymouth Herring Run.


The BRWA and people of the South Shore community and the Commonwealth of Massachusetts recognize with great appreciation the environmental activism and achievements of founder, the late



Mary F. Toomey, a woman of great vision and dedication who served her town as a beloved and innovative Weymouth School Teacher for over 40 years, Weymouth Town Meeting Member, author and became an ardent environmentalist under the direction of Dr. Sears. For decades Ms. Toomey committed her time, talents and strong leadership in guiding fellow volunteers to work together in the communities of Weymouth and Hingham with support of private and civic organizations, local, state, and federal officials and agencies to save The Back River and Estuary and to obtain all available lots abutting the Back River to create nine open space public parks, clean up pollution by identifying and preventing over 28 million gallons of raw sewerage from flowing into the Back River each year, and restoring the fisheries and herring run. She was instrumental in creating the Weymouth Back River ACEC in 1982. Her work help identify the hazardous waste site on Weymouth Neck where Bradley Fertilizer Works and AGRICO manufactured phosphorus fertilizer (1861-1967) that has been cleaned up in 2007. Ms. Toomey earned the title of a "modern day Abigail Adams" her mentor for whom she acknowledged her patriotism, heroism, and named the Abigail Adams State Park in her memory. Ms. Toomey and Dr. Sears are also honored at Webb State Park's "Mary's Point" a granite marker dedicated to these two women of vision. Throughout her amazing career as both educator and environmentalist Mary was the recipient of numerous honors and civic awards, including many Official Citations and Proclamations for serving the communities she loved. Ms. Toomey was also awarded the Conservation Teacher of the Year Award by Boston University's Academy of Distinguished Graduates and the prestigious Gulf of Maine Visionary Award presented by the Gulf of Maine Council and the Environmental Protection Agency's Merit Award in 2004.

Today the BRWA continues Ms. Toomey's vision and living legacy in her words; "To promote the close cooperation of government and private agencies in preserving this valuable Estuary, it's breeding ponds, and the many algae species which nourishes other life forms, and by promoting research that supports and protects the life of the Estuary; to preserve the waterways, surrounding lands, wildlife, trees and other vegetation, to support the healthy recreation of all citizens; to utilize this area for educational purposes by individuals and institutions to promote an understanding, appreciation and enjoyment of the many wonders of the natural world and the importance of it's protection and preservation as one of our greatest legacies to future generations".

The BRWA needs your support for future management of this vital natural resource, which is has been studied by the Coastal Systems Group School For Marine Sciences and Technology University of Massachusetts Dartmouth. The publication of "The Ecology of the Weymouth Back River" A Monograph has been completed. and is available to the public through Back River Watershed Association. This project was made possible with funding from The Town of Weymouth, The Back



River Watershed Association, and The University of Massachusetts Dartmouth. Your active citizen participation as good stewards through BRWA Membership is needed as we address many new challenges and expand our association. The Back River is surely a place of inspiration that will continue to attract and affect our lives for generations to come. If you listen carefully, you will hear the whispering winds of the ancient eskers, rhythmic tides and upstream waters that flow with a timeless quest seeking our response for protection and preservation from people of vision, like you.

For information and/or to become a member, please contact:

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About The Back River Watershed Association, Inc.

The Back River Watershed Association is a 501(C) (3) tax exempt non profit organization. It is organized to preserve protect, and promote the Back River and its watershed in Weymouth, Hingham, and parts of Abington, Rockland and Braintree. The (BRWA) is a member of the Watershed Action Alliance and the Mass Bays Program hosted by the Massachusetts Office of Coastal Zone Management.