# Testimony of Elizabeth Ainsley Campbell, Executive Director

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Testimony on HR 412: "Nashua River Wild and Scenic River Study Act"

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Mr. Chairman and Members of the Committee, on behalf of the Nashua River Watershed Association, I thank you for the opportunity to offer testimony on HR 412, which would amend the Wild and Scenic Rivers Act to designate segments of the Nashua, Squannacook, and Nissitissit Rivers in the Commonwealth of Massachusetts for study for potential addition to the National Wild and Scenic Rivers System. This legislation would initiate a three year study to establish whether these river reaches meet the criteria for being designated as Partnership Wild & Scenic Rivers. We appreciate this opportunity to speak in favor of HR 412 and to affirm the outstanding resource values of these special rivers. This legislation, which has strong local and state support, will help advance the protection of the entire river system as the Squannacook and Nissitissit are two of the main stem Nashua River's most important and cleanest tributaries.

The Nashua River Watershed Association is an environmental non-profit that serves as an educator, advocate, and steward for the 32 watershed communities covering over 530 square miles in north central Massachusetts and southern New Hampshire. Our professional staff works from our River Resource Center headquarters in Groton, Massachusetts. Founded in 1969, our mission is to work for a healthy ecosystem with clean water and open spaces for human and wildlife communities, where people work together to sustain mutual economic and environmental well-being in the Nashua River watershed. Our main goals include restoring and protecting water quality and quantity for people, fish, and wildlife. For over forty years we have worked with our many partners from the grassroots level to local, state and federal agencies on river

conservation projects. In providing testimony today I'm going to touch on 1) the remarkable history of the restoration of the Nashua River; 2) the current status of water quality; 3) the special fish and wildlife habitat of the river reaches and river corridor; 4) the recreational and educational opportunities; 5) the rich tapestry of culturally significant sites along the rivers; and 6) partnerships as an essential approach to a comprehensive River Management Plan.

### 1) History – a Legacy of Cultural and Historical Importance

In the 1960s the Nashua River was one of the nation's ten most polluted rivers, with raw sewage and industrial discharge going directly into the waterway, and was classified as "U" – unfit to carry more raw sewage. The Nashua River's recovery seemed an impossible task as the river was all but dead and one could smell the stench of the river from more than a mile away. The heavy concentration of paper mills and the use of dyes resulted in pollution that notoriously turned the river various colors downstream from the factories. Despite the deplorable state of the river, local citizens came together to see what could be done. They dared to envision the unthinkable: sparkling blue water with a ribbon of green along its banks. They formed the Nashua River Cleanup Committee in 1965 and advocated for a revitalized river corridor safe for people and wildlife alike. Led by Marion Stoddart, they galvanized the attention of towns, government agencies, businesses, and other residents. Together they worked to encourage the passage of the state and federal Clean Water Acts. As you know, these Acts made it illegal to pollute rivers and provided funding to build waste water treatment facilities to improve water quality. Recognizing that to clean up the rivers and protect the land along their banks would be a longterm effort, the Nashua River Clean-up Committee formed the Nashua River Watershed Association in 1969. Today, a sparkling blue Nashua River runs from central Massachusetts to southern New Hampshire, hosting some of the Commonwealth's best fishing tournaments. Flora and fauna thrive in it, canoeists revel in it, and swimmers splash in it.

This inspiring story of restoration has been retold in "A River Ran Wild: An Environmental History" by Lynne Cherry, a children's non-fiction book published in 1992 that is still frequently used in school curriculums throughout the country. In 1993 National Geographic Magazine spotlighted the Nashua's recovery in an article "The Promise of Restoration: New Ideas, New

Understanding, New Hope " in its Special Edition: "The Power, Promise, and Turmoil of North America's Fresh Water" in which were published the dramatic 'before' and 'after' images of the Nashua River. The story of the Nashua River continues to be inspirational and informative. In 2010 National Geographic published a collection of essays, "Written in Water: Messages of Hope for Earth's Most Precious Resource," which included an essay by Marion Stoddart on "Cleaning Up the Nashua."

Most recently, the story of Marion Stoddart and the Nashua River was made into an independent, critically acclaimed, documentary film by ExtraMile Design -- "Marion Stoddart: The Work of 1000." The film speaks to a model for effective leadership and coalition building to achieve one's vision and achieve positive change.

It is especially gratifying and exciting that sections of the Nashua River, with its dramatic history of restoration, whose story is heard so widely & whose watershed approach has become a model, has become such a strong candidate for inclusion in Wild and Scenic Rivers System along with its tributaries the Squannacook and Nissitissit Rivers.

### 2) Current Water Quality – the Basis for Healthy Aquatic Life

The Nashua River Watershed Association's water monitoring program, currently in its 21<sup>st</sup> consecutive year, has data showing that the Squannacook and Nissitissit Rivers have excellent to good water quality meeting state bacteria standards for swimming and boating almost all of the time. The Nashua River segment proposed for Wild and Scenic designation meets boating standards most of the time and swimming standards many times.

Therese Beaudoin, MassDEP Watershed Coordinator, states "The Massachusetts Department of Environmental Protection has studied water quality in the Nashua Watershed since the late 1960s. The Squannacook River has provided an ideal location for establishing least impacted conditions for both water quality and flow, and has served as a reference river for decades. A long term monitoring station was established here in 1998, with sampling conducted every two months; available data show that water quality and aesthetics in the Squannacook River have been consistently among the cleanest in Central Massachusetts."

In contrast, although vastly improved since the 1960s, the Nashua River currently is on the 303(d) "impaired waters" list and has had Total Daily Maximum Loads (TMDLs) developed for bacteria and phosphorus. The phosphorus TMDL noted that the primary cause of the impairment from phosphorous was attributed to discharges from the wastewater treatment facilities. Treatment facilities along the Nashua River are correspondingly improving their infrastructure to improve water quality. Bacteria impairment is being addressed upstream of the designated reaches in the City of Fitchburg, whose City Council voted in 2012 to expend over \$70 million to separate sewers and upgrade its treatment facility. In addition, the Nashua River Watershed Association's education and outreach efforts to citizens regarding what they can do to keep water clean will also result in long term water quality improvements. We believe that if HR 412 were to be enacted, the resultant study and possible designation would play an important role in continuing to move toward healthier waters in the Nashua.

#### 3) Fish & Wildlife Habitat – Special Characteristics to Protect

The 1975 Squannacook-Nissitissit Sanctuary Act (M.G.L. 132A:17) prohibited new discharges of pollutants to the waterways and recognized the high value of these riverine ecosystems. The Nissitissit and Squannacook Rivers are state-designated Outstanding Resource Waters and are cold water fish resources. They are well-managed streams that support native trout, including brown, brook, and rainbow trout reproduction. Brook trout spawn in the tributaries and travel to the Nashua River for part of each year. These rivers in their entirety within Massachusetts were designated "Living Water Core Areas" by the MA Natural Heritage and Endangered Species Program (NHESP). The NHESP has also delineated the entire length of the Nashua, Nissitissit, and Squannacook Rivers within Massachusetts as "BioMap2 Core Habitat". The Living Waters area (with a focus on freshwater aquatic) and the BioMap2 area (with a focus on terrestrial) are roughly equivalent designations intended to guide strategic biodiversity conservation in the state over the next decade by focusing land protection and stewardship on the areas that are most critical for ensuring the long-term persistence of rare and other native species and their habitats, exemplary natural communities, and a diversity of ecosystems. The areas are also designed to include the habitats and species of conservation concern identified in the State's Wildlife Action Plan.

As we understand it, a goal the US Fish and Wildlife Service is pursuing for the Nashua River is to reintroduce Alewife and American Shad to the Nashua River in the next ten years. The US Fish and Wildlife Service has stocked Alewife and American Shad in an impounded pond on the Nashua River in New Hampshire. American Eel exist in the Nashua and Squannacook Rivers, and upstream eel passage has been installed at Ice House Dam on the Nashua River.

The Pepperell Dam creates an impoundment on the Nashua River from the dam to approximately four miles upstream of the dam. This river reach has been excluded from this proposed Wild and Scenic Study Act. Pepperell Hydro Company (PHC) LLC is the owner of the Pepperell Dam and hydro facilities, which currently provides 8 Gwh per year of electrical power. PHC purchased the facility in 2004 and has been operating as a grandfathered facility since that time, as the dam and hydro facilities were constructed prior to the Federal Energy Regulatory Commission's existence. PHC is in the process of applying for a FERC license; exclusion of this river reach would allow FERC licensing to proceed. Up and downstream fish and eel passage will likely be required by US Fish and Wildlife Service as a prerequisite to the FERC license.

The Nashua River runs within three Areas of Critical Environmental Concern (ACEC's) in Massachusetts. This is quite remarkable as there are only 30 state-designated ACECs in total in the state. The three that include the Nashua River are: the Central Nashua River Valley ACEC, the Squannassit ACEC; and the Petapawag ACEC. ACEC designation is a special recognition because of the quality, uniqueness, and significance of its natural and cultural resources; it is also a real achievement stemming from years of research, outreach and community meetings with an emphasis on extensive public input and discussion and largely driven by volunteers.

The Nashua River forms the 'heart and backbone' of these connecting ACEC's and is adjacent to an extensive network of publicly owned open space. The MA Natural Heritage and Endangered Species Program describes the Nashua River as a wildlife corridor and focal point for wildlife concentrations in central Massachusetts. An excerpt from the Executive Summary pertaining to the Central Nashua River Valley ACEC designation says, "The river valley provides significant linkages between important wildlife areas. The relatively

undeveloped nature of this area is critical to preserving thriving rare species populations."

There are at least 19 state-listed rare species in the Central Nashua River Valley ACEC, 16 in the Petapawag and 23 in the Squannassit ACEC. A few years ago the Stewardship Committee of the Petapawag and Squannassit ACECs encouraged the Nashua River Watershed Association to undertake a multi-year biological control program to reduce non-native invasive purple loosestrife. The project benefits several high priority species of wetland-dependent wildlife including, but not limited to, the American Black Duck, Mallard, Wood Duck, American Woodcock, Eastern Kingbird, and Blandings Turtle.

The Oxbow National Wildlife Refuge, which consists of some 1,600 acres of southern New England flood-plain forest and wetland communities, abuts nearly 8 miles of the Nashua River corridor. The wetlands of the Nashua River and tributaries have been identified as priority wetlands by both the North American Waterfowl Management Plan and the Emergency Wetlands Resources Act of 1986, due to their critical importance in supporting waterfowl of the Atlantic Flyway, and are also listed in the Environmental Protection Agency's Priority Wetlands of New England. A Visitor Contact Station is currently being completed on the Refuge along the banks of the Nashua River in Devens.

The Nashua River Watershed Association has worked in partnership with others for over four decades to establish a permanently protected greenway (naturally vegetated buffer area) along the Nashua River and its tributaries. While much more remains to be done to complete the vision, a very significant amount of the corridor has been protected. The width of the undisturbed river corridor is in some cases a few hundred feet, and in other cases a few miles wide. The result is a mostly intact wild river of great beauty, supporting a range of wildlife, contributing to better water quality, outstanding habitat and remarkable recreational opportunities.

# 4) Recreation & Education – A Robust Result of River Recovery

"Recovery" has sparked recreational use of the Nashua River and its tributaries at places like the Oxbow National Wildlife Refuge; the Bolton Flats, Squannacook River, and the Nissitissit River State Wildlife Management Areas; the J. Harry Rich and Townsend State Forests; and the Groton Town Forest, to name but some of the conserved lands abutting the rivers and protecting the shorelines of the river segments included in HR 412. Recreation often involves birding and hiking along the rivers. The very popular 11+ mile Nashua River Rail Trail runs alongside the river through four Massachusetts towns in the study area, and a 4 mile soft-surface rail trail is shortly anticipated to be created along the Squannacook River.

For decades these rivers have provided focal points for the local Squan-A-Tissit Chapter of Trout Unlimited projects such as: constructing a universal access facility on the Squannacook River, adopting the Nissitissit River under Massachusetts Adopt-A-Stream program, as well as assisting the MassWildlife staff when they conduct electro-shocking and fish sampling on these rivers. These rivers provide some of the best fly-fishing within reach of metro-Boston anglers. There are many formal canoe and boat access sites along the rivers, and there are several annual popular bass fishing tournaments hosted on the Nashua River by such groups as Yankee Bassmasters and Freedom Bass.

In addition to recreation focused on fishing, others use the river for a variety of sports. For example, the Jack London Trail Race group holds an annual canoe race on the Nashua River and the Groton School uses it for their crew team

Families are out on the rivers enabled in part by Nashoba Paddlers LLC, a successful local family-owned business based in West Groton, offering canoe rentals, tours, and a Summer River Camp. Free boating is provided at two annual events: the River Festivals in Groton and Lancaster, Massachusetts. Such events are typical of the collaborative efforts already in place; for example the Groton Greenway Committee which sponsors the Groton River Festival is "charged with protecting river and stream frontage in Groton, particularly along the Nashua and Squannacook Rivers and educating townspeople of the environmental and financial importance of protecting riverfront lands." We note the inclusion of "financial" importance, for when the river's rank odor could be smelled at a distance and its fumes peeled off paint, riparian real estate was worthless. Times have changed for the better on the rivers, and we believe that a "Wild & Scenic" designation would significantly increase the value of adjacent lands, boosting local tax rolls.

The rivers also enable important environmental education programs. Every year thousands of students from throughout the region interact with the Nashua and Squannacook River segments through the NRWA's environmental education programs, notably during our on-water River Classroom® programs, on-shore ecological inventories, and our Summer Eco-Adventures programs. Students are thrilled to see a river otter or catch a glimpse of an American Bald Eagle soaring over the Nashua River.

### 5) Another View of Culture & History – A Rich Tapestry

The Freedom's Way National Heritage Area includes each of the communities affected by HR 412, and goes beyond them. The Freedom's Way National Heritage Area describes itself as including "communities in Massachusetts and New Hampshire that share unique historical, natural, and cultural resources. The region is home to a series of historic events that influenced democratic forms of governance and intellectual traditions that underpin concepts of American freedom, democracy, conservation, and social justice. These 45 cities and towns share common themes that have contributed toward this special landscape of American History." Freedom's Way National Heritage Area is a member of the Alliance of National Heritage Areas and is one of 49 Heritage Areas affiliated with the National Park Service.

By way of example, three significant cultural & historical sites in the study are are: 1) Fruitlands Museum, which abuts the Oxbow National Wildlife Refuge, is a Massachusetts and National Historic Landmark on the former site of a Transcendentalist utopian community; 2) a Shaker Village existed along the Nashua River in Shirley Massachusetts from the late 1700s to the early 1900s; and 3) two historic districts abut the Squannacook River in Townsend. Landmarks and historical sites abound along the rivers throughout the study area.

# 6) Partnerships – An Essential Approach to a River Management Plan

Since its founding in 1969, the Nashua River Watershed Association has always worked in partnership with local, state, and federal entities to achieve progress. For example, the Nissitissit and Squannacook Rivers sub-basins were the service area for a 2004-2009 "Protecting Today's Water for Tomorrow" partnership project funded by a U.S. Environmental Protection Agency Targeted

Watershed Initiative grant. The project helped protect valuable drinking water resources and surface water quality and promoted proactive land stewardship. The NRWA worked closely with a broad coalition of stakeholders, including property owners, to instill conservation approaches for privately held lands that help protect water resources. The NRWA was the lead partner on this multi-year project, and actively involved over three dozen local, state, and federal entities in providing matching services toward the goals of the project.

Although the Nashua, Squannacook and Nissitissit Rivers greatly contribute to the overall rural character of the towns through which they flow, at the same time, given their relative proximity to the metropolitan areas of Nashua, New Hampshire and Boston & Worcester, Massachusetts, these spectacular natural resources are also under the pressure of development associated with rapid growth and urban/suburban sprawl. Our area is characterized by the 2009 Mass Audubon report "Losing Ground II" as being on the "sprawl frontier". The NRWA encourages "smart growth" techniques to enable communities to meet their development goals and simultaneously protect their most important natural resources.

The NRWA took a lead role in bringing the possibility of a Study pertaining to potential Wild & Scenic designation to the attention of the affected communities. Letters of support from these communities have been included with Congresswoman Tsongas's testimony. We would welcome with great enthusiasm the opportunity to partner with the National Park Service, the U.S. Fish and Wildlife Service, the relevant Massachusetts agencies, the affected communities, and a myriad of involved stakeholders in a coordinated effort to undertake a Study and development of a comprehensive river management plan as part of determining if the river is suitable for designation.

In conclusion, all these factors - outstanding fisheries, rare wildlife, recreational value, a rich history - make the Nashua, Squannacook and Nissitissit Rivers in Massachusetts a strong candidate for inclusion in the Wild and Scenic Rivers System. I appreciate the opportunity to submit testimony on behalf of the Nashua River Watershed Association to the Subcommittee today. Thank you.

Nashua River in the 1960s



Nashua River valley in north central Massachusetts



Nashua River flowing through the Oxbow National Wildlife Refuge



**Squannacook River** 



**Nissitissit River** 



Paddling on the Nashua River (below), the Squannacook River (left) and the Nissitissit River (right)





# Nashua River Wild & Scenic River Study Act

