Appendix C: Past Accomplishments

Water Resources Accomplishments

- Provided financial support for volunteer water quality data collection through the NHDES <u>Volunteer River Assessment Program</u>, enabling uninterrupted data 1990 to present.
- Commissioned research to quantify and identify the source of bacterial contamination at recreational areas along the river. At two sites where significant contamination was found, funded additional research to help isolate the source(s).
 - o guidance for minimizing recreational bacterial contact
 - o bacterial tracking report 2024
 - o bacterial tracking report 2023
 - o bacterial tracking report 2022
 - o bacterial tracking report 2021
- Worked with NHDES to fund and ensure that the mainstem Lamprey River and the five designated tributaries have stream flow gauges, 2022. Real time conditions can be found through the NHDES website: NH Instream Flow Map
- Funded graduate work to determine the <u>effects of Japanese knotweed on riverside</u> <u>erosion, 2021-2022.</u>
- Funded equipment upgrades at Wiswall Falls in Durham for use by UNH researchers,
 2021
- Funded graduate student work to create a <u>nutrient budget</u> along segments of the Lamprey River, 2020.
- Funded the <u>Raymond wetland inventory</u> and recommendations for zoning changes to maximize protection of drinking water sources in Raymond, 2020.
- Funded several trend analyses to determine whether water quality is improving or worsening over time.
 - o <u>long-term heavy metals and phosphorus</u>, 2019
 - o long-term dissolved oxygen, pH, and nitrate, 2016
 - o long-term specific conductance, E.coli, and turbidity, 2018
 - o Lamprey River Water Quality report 1993-2016
- Participated in planning for the Spruce Hole Aquifer recharge project in Durham, which
 went into service in 2016. The project, the first of its kind in New Hampshire, involves
 moving raw water from the Lamprey River during periods of plentiful flow to the Spruce
 Hole Aquifer for later use by the Durham-UNH Water System during periods of low flow
 which often coincide with peak water demands during the fall semester at UNH.
- Funded supervised undergraduate work to determine the source of turbidity in Woodman Brook, 2015.
- Co-sponsored a road salt reduction workshop and commissioned *The Road Less Salted* DVD for public and private snow plow drivers, 2010.

- Sponsored septic system outreach, including a pilot on-site program for riverside landowners to understand and improve their septic systems.
- Created brochures to promote clean water and protect wildlife habitat along riverfront lands.
- Co-sponsored a series of workshops on maintaining vegetated buffers to protect the river.
- Held workshops to inform citizens about the connections between economics and ecological integrity.
- Co-sponsored "Your Water, Your Wallet, Your Watershed" workshop to encourage towns to work across municipal boundaries in addressing water issues.
- Reviewed proposed development projects within one quarter mile of the Lamprey River and its state-designated tributaries to assure that water will not be degraded during and after construction.

Wildlife and Ecology Accomplishments

- Offered annual "Herring Aid" events at the Macallen Dam fish ladder with NHFGD personnel to inform the public about river herring, sea lampreys, and American eels.
- Funded *Interweave* public art participation project in Newmarket as a way of connecting participants with the river's wildlife and natural history through art. (2024).
- Commissioned a videographer to create <u>two videos featuring David Carroll</u> (turtle researcher, artist, and author) (2019).
- Provided funding to NHFGD to support the creation of nesting habitat for Blanding's turtles in Durham/Newmarket (2018).
- Provided seed money for the establishment of the Lamprey River Elementary School Eco-trail in Raymond (2016).
- Worked with high school students to study vernal pools and produced <u>Spring into Vernal</u> <u>Pools</u> DVD to educate the public about these special ecological habitats.
- Funded a Small Grant that led to the creation of a lending library of tools to eradicate invasive plants in the Great Bay Estuary drainage area (2010). The original tool inventory has been expanded and has been used on hundreds of restoration projects. The library is currently housed at the Southeast Land Trust headquarters in Epping.
- Worked with partners to test methods for managing invasive Japanese knotweed.
- Worked with NHFGD and the US Fish and Wildlife Service to advocate for fish passage at the Wiswall Dam in Durham. In 2011, a fish ladder was installed. That year, more than 30,000 river herring were able to travel past the dam and access breeding areas that had been unavailable to them for 200 or more years. The fish ladder continues to see high numbers of successful passage.
- Commissioned the following wildlife or ecological research:
 - Genetic characterization and local ecological prevalence of a novel pathogen affecting American toads (2024, 2025)
 - o Erosion Modeling: Japanese Knotweed Areas Versus Natural (2021)
 - Wetland Mapping and Prioritization Project in Raymond (2020)

- Pilot Project for Detecting Invasive Eurasian Milfoil in Pawtuckaway Lake (2020)
- Land Conservation Co-occurrence Mapping in Barrington (2019)
- Acoustic Bat Survey (2018)
- <u>Lamprey Watershed Stream Crossing Assessment</u> (2017)
- Mussel Survey, targeted sites on Lamprey River (2015)
- o Rothwell Reserve Bioinventory and Management Plan (2014)
- <u>Dams of the Lower Lamprey</u>: Highlighting Opportunities to Improve Fish Passage (2013)
- Floodplain Mapping and Bioinventory of Lamprey River Wetlands in the towns of Epping, Lee, Durham, and Newmarket (2011)
- <u>Dragonfly and Damselfly Inventory</u> (2011)
- o <u>Tributary Fish Survey</u> (2010-2011)
- Mussel Survey, main stem Lamprey River (2010)

Recreation and Public Enjoyment Accomplishments

- Created the popular Explore the Lamprey River map and guide for passive, river-based recreational opportunities in the Wild and Scenic towns of Epping, Lee, Durham, and Newmarket 1996. Updated and reprinted 2020 and 2024.
- Purchased land near Wadleigh Falls in Lee, donated it to the Town of Lee, and installed a
 public canoe access and signage. With permission from the Town of Lee, secured
 construction permits and hired a contractor to address safety and erosion issues by
 adding a new granite step and water bars to direct stormwater to a vegetated area and
 improve ease of access (2024).
- Published Public Paddling Access along the Lamprey River (2020).
- Provided seed money for the establishment of <u>the Lamprey River Elementary School Eco-trail in Raymond</u> (2016).
- Provided the Town of Newmarket with funding to purchase and install kayak racks at three Lamprey River public access sites: Schanda Park, Piscassic/Sliding Rock Park, and Schoppmeyer Park. These racks hold town-owned kayaks that are available for use by the public through town recreational programs and individual rentals.
- Provided funding for improvements and/or kiosk signage at several town-owned parks along the main stem Lamprey River and tributaries:
 - Wiggin Farm in Newmarket (2025)
 - Old Lee Trail in Newmarket (2024)
 - Sliding Rock Conservation Area/Piscassic Park in Newmarket (2023)
 - Heron Point Park in Newmarket (2022)
 - o <u>Little River Park</u> in Lee (2022)
 - Thompson Forest in Durham (2020)
 - Tilton Conservation Area in Epping (2020)

- Lamprey River Elementary School Eco-trail in Raymond (2016), <u>main kiosk panel</u> plus 12 station panels
- John Hatch Park at Wiswall Falls in Durham <u>NRCS Fish Ladder Panel</u> (2012), <u>John Hatch memorial panel</u> (2014)
- o Mary Blair Park in Epping (2009, 2012)
- Schanda Park in Newmarket, 2011
- Partnered with the Lamprey River Watershed Association and Trout Unlimited to
 document canoe passage obstacles and hazards between Wadleigh Falls in Lee and the
 Route 87 crossing in Epping (2015-2016). Funded a pilot program to improve safe
 passage by removing and relocating several in-stream fallen tree hazards (2018).
 Canoe Passage Enhancement summary report 2018.pdf (lampreyriver.org)
- Funded the manufacture and installation of public canoe access signage on Route 152 Lee (2014) and on Route 87 in Epping (2018).
- Partnered with the Town of Newmarket to offer kayak race training (2018).
- Made a large contribution of funding and expertise for the creation of Schoppmeyer Memorial Park in Newmarket, 2016.
- Recruited partners to offer guided eco-paddles on the river (2017- 2019).
- Partnered with the Town of Newmarket to establish the Splash and Dash paddling event that includes a race out to Great Bay (2016-2018).
- Investigated and mapped a potential walking path along the Wild and Scenic section of the river (2015) Final Report and Full Footpath Map.
- Awarded a Small Grant toward the publication of Big Trees of New Hampshire, 2013, which includes a separate section for the <u>Lamprey River Big Tree Tour</u>. Two guided tours were offered to the public.
- Provided a Small Grant to the Town of Deerfield to develop the <u>Deerfield Community</u> <u>Trail Plan</u> (2011).

Community Engagement and Education Accomplishments

- Developed (1990) and updated (2012) <u>The Lamprey River Curriculum</u> for elementary, middle and high school students.
- Commissioned *The Story of Peter Little Bear, A Lamprey River Adventure*, a story that describes life along the Lamprey in the late 1600s through the eyes of a native boy (2004). (This book is no longer available due to historical omissions and inaccuracies.)
- Contracted a specialist to assist with education and outreach efforts.
- Produced several professional-quality videos and made them available to local libraries and town cable channels, the LRAC website, and You Tube:
 - o River Story: The Lamprey River Through History
 - o Mary Blair Park
 - Spring into Vernal Pools
 - o Wiswall's Mills
 - o <u>Streamwalk</u>

- o Connecting Lives on the Lamprey River
- o Interview with David Carroll
- Created, updated, and continue to maintain the LRAC website, <u>www.lampreyriver.org</u>.
 Website was most recently updated in 2021.
- Partnered with regional planning commissions, land trusts, and other organizations to provide documents and workshops promoting stewardship, land protection, sport fishing, and public enjoyment.
- Developed portable displays, brought them to local events and libraries, and used them as a platform for informing participants about LRAC and the resources of the rivers.
- Created a Community Grants Program that provides seed money for education and outreach projects that help implement management plan objectives.

2009	development of database and soil conservation outreach to Lamprey River	
	landowners in Strafford County	
	Wiswall's Mill: A Short History DVD	
	The Lamprey River Tour: Mary Blair Park and Streamwalk DVDs	
	documentation and mapping of historic mills along the Lamprey River	
2010	nitrogen pollution outreach in Durham and making rain barrels	
	creation of lending library of invasive weed removal tools housed at Great Bay	
	Discovery Center	
	development of the Deerfield Community Trail network and map	
2011	pilot project for on-site septic system review and outreach for homeowners	
	revision and update of <i>The Lamprey River Curriculum</i>	
	• fly-over filming and production of <i>Connecting Lives on the Lamprey River DVD</i>	
2012	enhanced database of dams along the lower Lamprey River with focus on	
	improving fish passage	
	creation of natural playground plan for Mary Blair Park	
	creation of historic and nature trail system at Mary Blair Park	
2013	creation of "The Lamprey River Big Tree Tour" booklet and guided tour	
	outreach about local and global water issues and creation of a public	
	participatory "Stream of Conscience "art installation	
	• creation of "Reflections of a River" video to celebrate 30 years of volunteer	
	service to protect the Lamprey	
2014	bioinventory and stewardship plan for the Rothwell Reserve in Lee	
2015	eradication of invasive weeds at Rothwell Reserve in Lee	
	documentation of process and findings for limited large woody material	
	relocation	
	watershed-wide stream clean-up event	
	identifying stormwater improvement demonstration sites and potential barriers	S
	to implementation	
2016	stormwater demonstration project in Newmarket	
	first annual Lamprey River Splash & Dash kayak race in Newmarket	
2017	Blanding's turtle nesting area enhancements pilot project in Durham	
2018	trail and signage improvements at the Route 87 access in Epping	
	Hammock to 3K kayak race preparation and river education series	

	•	updating conservation action plan and co-occurrence map in Barrington
2019	•	wetlands mapping and prioritization for protection in Raymond
	•	Thompson Forest kiosk panel in Durham
2020	•	Little River Trail enhancements and signage in Lee
	•	equipment to track and control variable milfoil in Pawtuckaway Lake
	•	nutrient budgets along the Lamprey River
2021		
2022	•	Heron Point improvements and signage in Newmarket
2023	•	Sliding Rock/Piscassic Park improvements and signage in Newmarket
2024	•	Wadleigh Falls historic panels in Lee
	•	Willey House Central Park river-based art in Newmarket
	•	Old Lee Trail safety and signage improvements in Newmarket
	•	Wiggin Farm trail improvements

- Beginning in 2014, worked with NH Fish and Game Department biologists to host the annual Herring Aid program at Macallen Dam in Newmarket.
- Developed and offered salt marsh ecology programs for adults.
- Wrote quarterly newsletters to share on website and with municipalities.
- Offered numerous programs for children at local libraries.
- Helped fourth grade teachers at Mast Way School in Lee to prepare students for Lamprey River science field trips.
- Partnered to offer public education programs about septic systems.
- Created a guided eco-paddle program with local science experts to help citizens see local science issues in action.
- Wrote <u>Chick and Dee-Dee's Lamprey River Adventure</u> (2016) to help children and their adults learn about the history and ecology along the Lamprey River. Free copies were provided to all local libraries and schools.
- Began work on a citizen participation "Stream Team" to help document problems along the rivers (2023).

History Accomplishments

- Partnered with the Lee Historical Society and local Indigenous representatives to create Indigenous and mill history kiosk near Wadleigh Falls (2025).
- Funded *Interweave* © public art participation project in Newmarket as a way of connecting participants with the river's history through art. (2024).
- Produced Explore the Lamprey River map and guide (2008), including highlights of history in the lower four towns. Updated in 2020 and 2024.
- Commissioned the Phase I archaeological assessment of <u>Sullivan's Falls mill site</u> in Durham (2016).
- Published <u>Chick and Dee-Dee's Lamprey River Adventure</u> storybook highlighting historical sites along the river (2016).

- Offered participants opportunities to learn about local history and nature through outdoor recreational activities through "Hike it, Bike It, Like It" (2013-2014).
- Partnered to create <u>four historic panels</u> at the Wiswall Falls kiosk (2010-2012).
- Funded planning for the <u>historic trail at Mary Blair Park</u> featuring Folsom Mills in Epping, completed as part of a Small Grant (2012).
- Worked with the Newmarket Conservation Commission to create the <u>Schanda Park kiosk</u> panel (2011).
- Funded the re-use of salvaged foundation stone from the Wiswall Falls Bridge to provide historically compatible facings on the concrete abutments of the replacement bridge. (2010)
- Produced <u>The Lamprey River Curriculum</u> (1990), social studies and science for elementary school children, updated and expanded in 2011 to include middle and high school students.
- Funded a grant to produce <u>Wiswall's Mill: A Short History</u> DVD (2010), documenting the history at Wiswall Falls in Durham.
- Commissioned *The Lamprey River Tour: Mary Blair Park* DVD (2009), documenting both the history and present at Epping's Mary Blair Park.
- Funded a study of more than 100 dams and mill sites in the Lamprey River watershed area that were documented and <u>mapped</u> (2009).
- Created <u>River Story: The History of the Lamprey River Through History</u> (VHS 1997 and DVD 2009).
- Assisted with the history kiosk at Mary Blair Park in Epping (2008)
- Published The Story of Peter Little Bear (2005), based on local history in the late 1600s.
 This was an early attempt to be inclusive that was too reliant on local non-Indigenous sources. It helped us to reach out and work with present-day Indigenous historians and resources so as to include their presence in our narratives of Lamprey River history. The 2025 Wadleigh Falls history panels reflect that commitment.