

River and Stream Continuity Implementation Plan

Last Revision 5-24-22

Objective: Support municipal and non-municipal owners in upgrading barriers to improve habitat continuity, increase flood resiliency and restore floodplains.

Advisory Committee

- Neil Shea, Chair
- Kaitlyn Shaw, NOAA
- Ben Gahagan, Mass DMF
- Rob Dalton, Native Fish Coalition, Andover
- Scott Jackson NAACC, UMass
- Brian Kelder, DER
- Carl Soderland, TU Nor'East

Lead Partners:

Coordinator: To be determined, with assistance from IRWA

Watershed Associations: Parker River Clean Water Association, Chebacco Lake Watershed Association

Supporting Partners:

PIE Continuity Group: Division of Ecological Restoration, Division of Marine Fisheries, NOAA, USFWS, Audubon, Department of Fish and Game, MA Stream Continuity Partnership, Trout Unlimited (project specific), Sea Run Brook Trout Coalition (project specific).

Municipal Department of Public Works and conservation Commission Staff

This implementation plan will support the following actions identified in the [PIE-Rivers Action Plan](#):

Action 44: Remove Migration and Flow Barriers

Improve aquatic habitat connectivity and restore natural flow regime through various methods including dam removal, culvert replacement/upgrade, and fishways as necessary with focus on barriers identified as high priority for both habitat and flooding impacts. Changes in flow capacity for structures such as culverts and bridges should take into account position in the watershed and potential effects on upstream and downstream structures.

Action 12: Prioritize Aquatic Barriers

Identify and prioritize barriers including physical (dams, culverts, etc.) and “soft” barriers (temperature, DO, chemical, behavioral) that may be limiting critical aquatic organism migration. For physical barriers, include analysis of risk of infrastructure failure and impacts on flood risk (upstream and downstream) and community resiliency in prioritization where feasible and applicable.

*Action 12, Prioritize Aquatic Barriers has, for the most part, been completed through the [Great Marsh Barriers Assessment](#) Work, these strategies will build off of the extensive prioritization work from this study. “Soft” barriers were not identified as part of this work.

Progress metrics: # proposals submitted, # proposals received, # barriers upgraded, # municipalities & other owners participating

2021-22 PIE-Rivers Partnership River and Stream Continuity

Timeline and related activities:

Project Timeline	Lead Partner	2021 Sep-Dec	2022 Jan-March	2022 April-June	2022 Jul-Sep
Activity 1: Partner engagement, team & material development					
Task 1: Enlist <i>PIE Watershed Representatives</i> (to be tasked with watershed-level municipal engagement and priority list development using continuity tools).	Coordinator				
Task 2: Enlist <i>PIE Continuity Group</i> partners, to be comprised of state, non-profit and Federal partners capable of providing technical and/ or financial assistance for barrier projects.	Coordinator				
Task 3: Develop an implementable, repeatable and modifiable one-page Barrier survey for DPW and Conservation Commissions to fill out for 5 town priorities (When possible, Coordinators administer in-person or over the phone).	<i>PIE Continuity Group</i>				
Task 4: Help towns incorporate priorities identified through this process into their MVP plans	Coordinator				
Task 5: Conduct Town consultant inventory. Develop pre-approved vendor list of consultants with expertise, develop framework for consultant training & engagement.	Coordinator				
Activity 2: Municipal engagement, prioritization, site visits and dissemination					
Task 1: <i>PIE Watershed representatives</i> engage municipal staff (Conservation commission/ DPW staff) to provide feedback (preferably in person).	Watershed Associations, Municipal staff				
Task 2: Utilize <i>Town Rep</i> program to promote continuity work with Town staff.	<i>Town Reps</i>				
Task 3: Train <i>PIE Watershed representatives</i> in use of continuity tools for priority list development and ensure familiarity with the Great Marsh Barriers Assessment results.	Coordinator				
Task 4: <i>PIE Watershed Representatives</i> compile municipal feedback and utilize tools to develop Town priority lists for their respective watershed.	Watershed Associations				
Task 5: <i>PIE Watershed Representatives</i> send priority lists to coordinator to combine for delivery to <i>PIE Continuity Group</i> .	Watershed Associations				
Task 6: Coordinator visits proposed high priority sites if needed.	Coordinator				
Task 7: Coordinator combines <i>PIE-rivers</i> watershed list and distributes to <i>PIE Continuity Group</i> for review.	Coordinator				

Task 8: <i>PIE Continuity Group</i> reviews list and provides available technical assistance & proposed funding ideas for priority sites based on rapid assessment forms and continuity tools.	<i>PIE Continuity Group</i>				
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2020 PIE-Rivers Partnership River and Stream Continuity

Timeline and related activities continued:

Project Timeline	Lead Partner	2020	2021 Jan-April	2021 May-August	2021 Sept- Dec
Activity 3: Assist municipalities with funding proposals and available technical assistance					
Task 1: Coordinator maintains funding availability page on PIE-Rivers website and provides updates to <i>PIE Watershed Representatives</i> and <i>Town Reps.</i>	Coordinator				
Task 2: <i>PIE Watershed Representatives</i> disseminate information on available funding sources to municipal staff.	Watershed Associations				
Task 3: <i>PIE Continuity Group</i> provides technical assistance, where applicable.	<i>PIE Continuity Group</i>				
Task 4: <i>PIE Watershed Representatives</i> aid Municipal staff in applying for funding and aid with technical matters throughout process.	Municipal staff, Watershed Associations				
Task 5. Provide public outreach with crafted messages through flyers, e-news, website, social media and/or presentations as appropriate.	Watershed Associations				
Activity 4: Implementation progress, metrics and updates.					
Task 1: <i>PIE Watershed Representatives</i> consult with municipalities to assess new priorities yearly. Updates on funding requests and suggestions.	Watershed Associations, Municipal Staff				
Task 2: Conference call with <i>PIE Continuity Group</i> to summarize lessons learned from implementation plan, suggestions for next steps.	Coordinator, <i>PIE Continuity Group</i>				
Task 3: Summarize accomplishment metrics, # proposals submitted, # proposals received, # barriers upgraded, # municipalities participating	Watershed Associations				
Task 4: Update form based on municipal staff feedback	Coordinator				