

Action Items	Phase(s)	Year(s)	Responsible Party(ies)	Potential Funding Source(s)	Estimated Cost Per Year	Estimated Total Cost
1. Continue Monitoring and Tracking for Pollution Sources						
A. Review and assess potential phosphorus inputs into the lake (i.e. waterfowl, fertilizer use, pet waste, erosion sites, etc.)	I, II, III	2020-2029	HLA	HLA (in-kind)	\$400	\$4,000
B. Regularly update and maintain Highland Lake's 'Site Tracker' with information on new and addressed polluted runoff sites	I, II, III	2020-2029	HLA	HLA (in-kind)	\$100	\$1,000
C. Monitor private road conditions	I, II, III	2020-2029	Private Road Residents, HLA	HLA (in-kind) and Private Road Residents (in-kind)	\$400	\$4,000
D. Continue to explore potential impact of septic systems on the lake's water quality						
<i>i. Continue compiling data on the watershed's septic systems (i.e. collecting missing data through landowner surveys, inspection reports during property transfers, etc.)</i>	I, II, III	2020-2029	Towns of Windham and Falmouth	Towns of Windham and Falmouth (in-kind)	\$200	\$2,000
<i>ii. Contact homeowners with presumed high-risk systems to encourage advanced inspections</i>	I	2021-2022	Towns of Windham and Falmouth	Towns of Windham and Falmouth (in-kind)	\$200	\$400
<i>iii. Conduct advanced septic system inspections with interested homeowners with potential high-risk systems</i>	I	2022	Towns of Windham and Falmouth, DEP, Maine State Soil Scientist	Towns of Windham and Falmouth, DEP, Maine State Soil Scientist	\$8,000	\$8,000
E. Continue water quality monitoring for basic lake health indicators (i.e. clarity, phosphorus levels, dissolved oxygen, etc.)						
<i>i. Develop yearly water quality monitoring plans</i>	I, II, III	2020-2029	HLA, Lake Stewards of Maine, University of Southern Maine, DEP	In-kind services of responsible parties	\$200	\$2,000
<i>ii. Conduct yearly water quality monitoring of basic lake health indicators</i>	I, II, III	2020-2029	HLA, Lake Stewards of Maine, University of Southern Maine, DEP	In-kind services of responsible parties, Town of Windham and Falmouth, HLA member donations	\$10,000	\$100,000
F. Continue to track picocyanobacteria blooms and their potential causes	I, II, III	2020-2029	HLA, Lake Stewards of Maine, University of Southern Maine, DEP	In-kind services of responsible parties, Town of Windham and Falmouth, HLA member donations	\$5,000	\$50,000

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2. Reduce Known Pollutant Loading to the Lake						
A. Address "Low-Hanging" High Impact Sites (Primarily Road Sites)						
<i>i. Provide technical assistance to private roads and associations to review their road's impact to water quality, develop road maintenance plans, and install conservation practices</i>	I	2020-2023	CCSWCD, HLA, DEP	US EPA / DEP 319 funding, Town of Windham and Falmouth, HLA Board Members (in-kind)	\$1,600	\$6,400
<i>ii. Provide technical assistance to property owners with high impact polluted runoff sites to install conservation practices</i>	I	2020-2023	CCSWCD, HLA, DEP	US EPA / DEP 319 funding, Town of Windham and Falmouth, HLA Board Members (in-kind)	\$1,200	\$4,800
<i>iii. Install conservation practices to address "low-hanging" high impact polluted runoff sites</i>	I	2020-2023	Private Road Residents	US EPA / DEP 319 funding, HLA, Town of Windham Watershed Grants, Road Associations, Residents	\$30,000	\$120,000
B. Address "Low-Hanging" Medium and Low Impact Sites (Primarily Residential Sites)						
<i>i. Determine methods/incentives to address multiple low impact residential sites</i>	I	2020	HLLT Watershed Management Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$2,800	\$2,800
<i>ii. Implement determined methods/incentives to address multiple low impact residential sites</i>	II	2024-2026	CCSWCD, HLA, Towns of Windham and Falmouth, DEP	US EPA / DEP 319 funding, HLA, Residents, Towns of Windham and Falmouth (in-kind)	\$3,000	\$9,000
<i>iii. Provide technical assistance to property owners with polluted runoff sites to install conservation practices</i>	II	2024-2026	CCSWCD, HLA, DEP	US EPA / DEP 319 funding, Town of Windham and Falmouth, HLA Board Members (in-kind)	\$1,200	\$3,600
<i>iv. Install conservation practices to address medium and low impact polluted runoff sites</i>	II	2024-2026	Residents	US EPA / DEP 319 funding, HLA, Town of Windham Watershed Grants, Residents	\$30,000	\$90,000

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v. <i>Provide outreach, incentives, and assistance to property owners to install native plants for water quality improvement targeting properties with inadequate shoreline vegetative buffers</i>	II	2024-2026	CCSWCD, HLA, Towns of Windham and Falmouth	US EPA / DEP 319 funding, HLA, Towns of Windham and Falmouth, Local Nurseries	\$2,500	\$7,500
C. Address "High-Hanging" High and Medium Impact Sites						
i. <i>Develop specific strategies for addressing each identified "high-hanging" high and medium impact site (6 Total)</i>	I, II	2021-2026	HLLT Watershed Management Committee	HLA, DEP, Towns of Windham and Falmouth	\$3,200	\$19,200
ii. <i>Implement specific strategies for addressing each identified "high-hanging" high and medium impact site (6 Total)</i>	III	2027-2029	HLLT Watershed Management Committee	US EPA / DEP 319 funding, HLA, Town of Windham Watershed Grants, Towns of Windham and Falmouth (in-kind)	\$5,000	\$30,000
D. Address Ongoing Water Quality Impacts of Existing Private Roads						
i. <i>Hold a series of workshops (2 minimum) to explore methods to effectively reduce impacts of existing private roads on Highland Lake's water quality</i>	I	2021-2022	HLLT Watershed Management Committee	US EPA / DEP 319 funding, HLA, Towns of Windham and Falmouth (in-kind), Residents, Outside Speakers (in-kind)	\$4,800	\$9,600
ii. <i>Create a plan to implement methods determined to effectively reducing impacts of existing private roads on Highland Lake's water quality</i>	II	2024	HLLT Watershed Management Committee with workshop attendee input	US EPA / DEP 319 funding, HLA, Towns of Windham and Falmouth, Residents, Outside Speakers (in-kind)	\$8,000	\$8,000
iii. <i>Implement determined methods to effectively reduce impacts of existing private roads on Highland Lake's water quality and install conservation practices</i>	III	2027-2029	HLLT Watershed Management Committee	US EPA / DEP 319 funding, HLA, Towns of Windham and Falmouth	\$40,000	\$120,000
3. Limit/Prevent New Phosphorus Inputs into the Lake						
A. Review ordinances and provide suggested updates to Towns for limiting and preventing new phosphorus inputs into the lake	I	2020-2021	HLLT Ordinance Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$5,000	\$10,000

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B. Ensure enforcement of ordinances by towns and State Erosion and Sediment Control Law by Maine DEP for new development in the watershed	I, II, III	2020-2029	HLLT Ordinance Committee, HLA	HLA (in-kind), Towns of Windham and Falmouth	\$800	\$8,000
C. Develop a strategy to limit/prevent phosphorus input into the lake from future agriculture practices	I	2022	HLLT Watershed Management Committee, Department of Agriculture, Conservation, and Forestry, Agriculture property owners	Towns of Windham and Falmouth, HLA (in-kind),	\$3,200	\$3,200
D. Implement strategy to limit/prevent phosphorus input into the lake from future agriculture practices	II	2023-2025	HLLT Watershed Management Committee, Department of Agriculture, Conservation, and Forestry, Agriculture property owners	Towns of Windham and Falmouth, HLA (in-kind)	\$5,000	\$15,000

4. Maintain Installed Conservation Practices

A. Coordinate collaborative purchasing for conservation practice maintenance services (i.e. catch basin cleaning, road sweeping) and material (i.e. erosion control mulch)	I	2021-2023	HLLT Watershed Management Committee	US EPA / DEP 319 funding, HLA (in-kind), Towns of Windham and Falmouth	\$2,500	\$7,500
B. Inspect conservation practices to prompt ongoing maintenance	I, II, III	2020-2029	HLA, CCSWCD, Private Road Residents	US EPA / DEP 319 funding, HLA (in-kind), Private Road Residents (in-kind)	\$1,600	\$16,000
C. Determine methods to enhance/encourage ongoing private road maintenance, such as:	I	2020	HLLT Watershed Management Committee	Towns of Windham and Falmouth, HLA	\$3,000	\$3,000

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<ul style="list-style-type: none"> <i>i. Phone, letter, email reminders to road associations and contractors</i> <i>ii. Providing maintenance contractors contacts and services</i> <i>iii. Setting up volunteer or low-cost maintenance assistance (possibly youth conservation corps or lake volunteer corps)</i> 						
D. Implement determined methods to enhance/encourage ongoing private road maintenance	I	2021-2023	HLLT Watershed Management Committee	US EPA / DEP 319 funding, HLA, Towns of Windham and Falmouth	\$2,500	\$7,500
5. Expand Education and Outreach to Modify Behavior for Lake Pollution Reduction						
A. Develop an education and outreach plan for the Highland Lake Watershed, such as:	I	2020	HLLT Education and Outreach Committee	Towns of Windham and Falmouth, HLA (in-kind), DEP	\$4,800	\$4,800
<ul style="list-style-type: none"> <i>i. Establish landowner incentives for lake protection (i.e. LakeSmart or similar program, native plant discounts, etc.)</i> <i>ii. Offer landowner workshops (i.e. YardScaping or conservation landscaping, vegetative buffers, septic system care, etc.)</i> <i>iii. Create and distribute outreach material (i.e. public service announcement, handouts, etc.)</i> <i>iv. Encourage residents and private road associations to reach out for assistance if their property or private road has an erosion</i> 						
6. Manage Alewife Migration						
A. Create a Highland Lake Dam Management Committee to include multiple stakeholders (HLLT members, City of Westbrook, University of Southern Maine, Maine Inland Fisheries and Wildlife, Maine Department of Marine Resources, Casco Bay Estuary Partnership, etc.)	I	2020	HLLT	In-kind services of HLLT and Dam Management Committee Members	\$500	\$500
B. Determine objectives and timeline for dam management tasks to improve alewife migration into and out of Highland Lake. Tasks to possibly include:	I	2020	Highland Lake Dam Management Committee	In-kind services of Dam Management Committee Members	\$4,800	\$4,800

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<ul style="list-style-type: none"> <i>i. Determine optimum water level for alewife egress</i> <i>ii. Create dam/water level management plan for improved alewife egress that involves all interests</i> <i>iii. Modify the outlet to ensure alewife migration can easily be facilitated</i> 						
7. Continue Leadership Efforts and Evaluate Effectiveness of the Plan						
A. Continue efforts of HLLT	I, II, III	2020-2029	Towns of Windham and Falmouth, HLA	Towns of Windham and Falmouth, HLA (in-kind)	\$5,000	\$50,000
<ul style="list-style-type: none"> <i>i. Hold a minimum of 4 meetings per year</i> <i>ii. Actively appoint new members</i> 						
B. Strengthen participation and involvement of HLA members	I, II, III	2020-2029	HLA with HLLT support	HLA, Towns of Windham and Falmouth	\$2,000	\$20,000
<ul style="list-style-type: none"> <i>i. Create yearly HLA goals</i> 						
C. Meet a minimum of 2 times per year to evaluate effectiveness of Plan and update the Plan as necessary	I, II, III	2020-2029	HLLT Watershed Management Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$4,800	\$48,000
9. Develop Funding Mechanisms to Support Action Items						
A. Create a Committee to Develop a Funding Plan	I	2020	HLLT	Towns of Windham and Falmouth, HLA (in-kind)	\$1,000	\$1,000
B. Develop a Funding Plan to Support Action Items (to include C-H)	I	2020-2021	HLLT Management Plan Funding Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$3,000	\$6,000
C. Pursue funding to address identified high-risk septic systems	I, II	2023-2024	HLLT Management Plan Funding Committee	US EPA/DEP 319 funding, Maine State Revolving Loans, Small Community Grants Program, Maine Municipal Bond Bank	\$1,600	\$3,200
D. Pursue funding to conduct yearly water quality sampling	I, II, III	2020-2029	HLA	HLA (in-kind)	\$500	\$5,000

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E. Pursue Section 319 grant funding to provide technical assistance and cost-sharing to address known pollutant sources and assist with education and outreach efforts						
<i>i. Apply for 319 grant to target low-hanging, high impact sites</i>	I	2020	HLLT Watershed Management Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$5,000	\$5,000
<i>ii. Apply for 319 grant to target low-hanging, medium and low impact sites</i>	I	2023	HLLT Watershed Management Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$5,200	\$5,200
<i>iii. Apply for 319 grant to target high-hanging, high and medium impact sites</i>	II	2026	HLLT Watershed Management Committee	Towns of Windham and Falmouth, HLA (in-kind)	\$5,400	\$5,400
F. Pursue Town of Windham watershed grant funding to provide technical assistance and cost-sharing to address known pollutant sources	I, II, III	2020, 2023, 2026	HLA	HLA (in-kind)	\$960	\$2,880
G Seek local sponsorships for supplies and/or grant funding to address small, low-hanging polluted runoff sites	II	2024-2025	HLA	HLA (in-kind)	\$320	\$640
H Develop long-term funding mechanisms to continue to support overseeing, evaluating, and updating the Management Plan	I	2020-2023	HLLT Management Plan Funding Committee	TBD	\$4,800	\$19,200
						\$854,120