

| Action Items   | Phase(s)   | Year(s)   | Responsible Party(ies)   | Potential Funding Source(s)   | Estimated Cost Per Year | Estimated Total Cost |
|--|------------|-----------|--|---|-------------------------|----------------------|
| <b>1. Continue Monitoring and Tracking for Pollution Sources</b>   |            |           |  |   |                         |                      |
| 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. Continue compiling data on the watershed's septic systems (i.e. collecting missing data through landowner surveys, inspection reports during property transfers, etc.)            | I, II, III | 2020-2029 | Towns of Windham and Falmouth                                  | Towns of Windham and Falmouth (in-kind)   | \$200                   | \$2,000              |
| ii. Contact homeowners with presumed high-risk systems to encourage advanced inspections   | I          | 2021-2022 | Towns of Windham and Falmouth                                  | Towns of Windham and Falmouth (in-kind)   | \$200                   | \$400                |
| iii. Conduct advanced septic system inspections with interested homeowners with potential high-risk systems  | 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. Develop yearly water quality monitoring plans   | I, II, III | 2020-2029 | HLA, Lake Stewards of Maine, University of Southern Maine, DEP | In-kind services of responsible parties   | \$200                   | \$2,000              |
| ii. Conduct yearly water quality monitoring of basic lake health indicators  | 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             |
| <b>2. Reduce Known Pollutant Loading to the Lake</b>   |            |           |  |   |                         |                      |
| A. Address "Low-Hanging" High Impact Sites (Primarily Road Sites)  |            |           |  |   |                         |                      |
| 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          | 2020-2023 | CCSWCD, HLA, DEP   | US EPA / DEP 319 funding, Town of Windham and Falmouth, HLA Board Members (in-kind)         | \$1,600                 | \$6,400              |

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| ii. Provide technical assistance to property owners with high impact polluted runoff sites to install conservation practices | 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              |
| iii. Install conservation practices to address "low-hanging" high impact polluted runoff sites                               | 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>B. Address "Low-Hanging" Medium and Low Impact Sites (Primarily Residential Sites)</b>                                    |          |           |   |   |                         |                      |
| i. Determine methods/incentives to address multiple low impact residential sites   | I        | 2020      | HLLT Watershed Management Committee             | Towns of Windham and Falmouth, HLA (in-kind)  | \$2,800                 | \$2,800              |
| ii. Implement determined methods/incentives to address multiple low impact residential sites                                 | 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              |
| iii. Provide technical assistance to property owners with polluted runoff sites to install conservation practices            | 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              |

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| iv. <i>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             |
| 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              |
| <b>C. Address "High-Hanging" High and Medium Impact Sites</b>  |            |           |  |   |                         |                      |
| 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             |
| <b>D. Address Ongoing Water Quality Impacts of Existing Private Roads</b>  |            |           |  |   |                         |                      |
| 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            |
| <b>3. Limit/Prevent New Phosphorus Inputs into the Lake</b>  |            |           |  |   |                         |                      |
| 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             |
| 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              |

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| 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              |

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|---|----------|-----------|---|--|-------------------------|----------------------|
| 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  |

i. Phone, letter, email reminders to road associations and contractors

ii. Providing maintenance contractors contacts and services

iii. Setting up volunteer or low-cost maintenance assistance (possibly youth conservation corps or lake volunteer corps)

|   |   |           |                                     |  |         |         |
|---|---|-----------|-------------------------------------|--|---------|---------|
| 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 |
|---|---|------|---------------------------------------|---|---------|---------|

i. Establish landowner incentives for lake protection (i.e. LakeSmart or similar program, native plant discounts, etc.)

ii. Offer landowner workshops (i.e. YardScaping or conservation landscaping, vegetative buffers, septic system care, etc.)

iii. Create and distribute outreach material (i.e. public service announcement, handouts, etc.)

iv. Encourage residents and private road associations to reach out for assistance if their property or private road has an erosion

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| <b>6. Manage Alewife Migration</b>  |            |           |  |  |                         |                      |
| 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              |
| <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>   |            |           |  |  |                         |                      |
| <b>7. Continue Leadership Efforts and Evaluate Effectiveness of the Plan</b>  |            |           |  |  |                         |                      |
| 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             |
| <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             |
| <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             |
| <b>9. Develop Funding Mechanisms to Support Action Items</b>  |            |           |  |  |                         |                      |
| 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              |
| 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              |

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| ii. Apply for 319 grant to target low-hanging, medium and low impact sites  | I          | 2023             | HLLT Watershed Management Committee    | Towns of Windham and Falmouth, HLA (in-kind) | \$5,200                 | \$5,200              |
| iii. Apply for 319 grant to target high-hanging, high and medium impact sites   | 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            |