



FINAL REPORT

NEIW PCC Job Code: 0364-004-001
Project Code: LS-2023-026
Contractor: Lamoille County Conservation District
Prepared By: Emily Porter-Goff, PhD, Education and Outreach Coordinator
Project Period: 5/25/2023 to 12/07/2023
Date Submitted: 12/5/2023
Date Approved: 12/11/2023

Stream Wise in the Lamoille Watershed

CONTACT INFORMATION

Lamoille County Conservation District
109 Professional Dr, Suite 2, Morrisville VT 05661
802-888-9281 and emilylccdedu@gmail.com

This is a U.S. Environmental Protection Agency funded project.

This project was funded by an agreement awarded by the U.S. Environmental Protection Agency to NEIWPC in partnership with the Lake Champlain Basin Program

Although the information in this document may have been funded wholly or in part by the United States Environmental Protection Agency (under agreement LC00A00981-0), it has not undergone the Agency's publications review process and therefore, may not necessarily reflect the views of the Agency and no official endorsement should be inferred.

The viewpoints expressed here do not necessarily represent those of the Lake Champlain Basin Program, NEIWPC, or the U.S. Environmental Protection Agency, nor does mention of trade names, commercial products, or causes constitute endorsement or recommendation for use.

EXECUTIVE SUMMARY

The Lamoille County Conservation District (LCCD) offered Stream Wise Assessments to residents of Lamoille County. After completing the required training for the program, the LCCD initiated a social media campaign to increase awareness of this program to the community. The email blast generated 4 of the 5 requests for evaluations, although it is unknown if other marketing, such as handing out flyers at table events or social media posts impacted the likelihood of responding to the email blast. Exactly five evaluations were requested, and all five evaluations were completed.

Two of the five properties qualified for the Stream Wise Award. All landowners visited had an existing strong drive for responsible land stewardship and virtually undisturbed stream buffers which typically extended far beyond the required buffer width. The other three properties were ineligible for the award due to factors outside of their control, none of which could the landowners improve themselves (ie: acres of Japanese knotweed, a discrepancy between the farming required agricultural practices and the criteria of this program, and severe erosion due to an undersized culvert upstream of their land).

Collectively, administering Stream Wise in Lamoille County was successful. We look forward to participating in the coming years and looking forward to seeing how the program grows and changes with experience.

CONTENTS

Executive Summary 3

1. Project Synopsis 5

2. Tasks Completed 5

3. Methodology 6

4. Quality Assurance Tasks Completed 6

5. Deliverables Completed 6

6. Conclusions 7

7. Appendices 7

1. PROJECT SYNOPSIS

LCBP funded the development of a Stream Wise Award Program in the Lake Champlain Basin, modeled after the Lake Wise Award Program in Vermont, to educate and incentivize communities to engage in riparian stewardship activities with a consistent marketing message and brand. The award program was developed in 2020-2021 with federal, state, and provincial input (governmental and non-governmental, non-profit organizations); incorporated practices from existing programs; and was specifically tailored to respond to the needs and capacities of local watershed organizations to the greatest extent possible. Stream Wise engages streamside property owners in the Lake Champlain basin to enhance and protect vegetated stream buffers, increasing flood resiliency and benefiting water quality and natural habitat, all of which supports the Opportunities for Action of the Lake Champlain Basin Program. The Lamoille County Conservation District will participate in the 2023 Stream Wise pilot year in partnership with the Stream Wise Project Team and other Stream Wise pilot year partners using Stream Wise program material in accordance with the Stream Wise Assessment Protocol. An estimated 5 Stream Wise Assessments will be conducted.

Throughout its history, the LCCD has successfully offered programs through the Lake Champlain Basin Program. Both director Peter Danforth and Education Outreach Coordinator/Water Quality Associate Emily Porter-Goff have taken the lead on many successful grants over the last 5 years. Emily holds a PhD in stream ecology and extensive experience in outreach, which makes her an ideal fit for facilitating this program in Lamoille County.

The LCCD is excited to offer this service to the communities of Lamoille County. This pilot season will require more extensive marketing in order to establish our initial relationships. Subsequent years are predicted to require less effort to attract program participants. This pilot year will also be necessary in establishing workload and real time needed for this program. We look forward to offering up to \$150 in rebates for program participants towards the purchase of materials for Stream Wise projects, such as native plantings; erosion matting; materials for practices, such as infiltration steps; etc.

Over the course of this project, all required trainings were attended in person or made up. A press release was distributed to announce the program. All necessary equipment was purchased (field clipboard, measuring tape, etc). An ad was generated and distributed via our mailing list, website and Facebook. Five emails of interest were received for the program.

The LCCD was able to complete the target number of 5 Stream Wise evaluations. This precisely met the number of requests with our initial outreach efforts. In other words, supply equaled demand in this case. Of the 5 properties visited, 2 qualified for the Stream Wise award. The remaining 3 properties did not and never could qualify for the award due to the current requirements of the program, despite excellent land management on all 5 properties. The 3 properties which did not qualify are excluded from the program due to: current farm required agricultural practices, owning over 2 acres of knotweed which is all but impossible for them to do anything about, and massive erosion on their land caused by a culvert under the private road they are on, but they do not own and cannot change.

2. TASKS COMPLETED

Task 1. Attend Stream Wise Outreach Materials/Content sign-up meeting. Staff attended one Stream Wise Outreach Materials/Content sign-up meeting in March 2023. During the meeting, partners participated in group discussion about outreach material needs and updates for 2023 and submitted a supplies ordering list to LCBP.

Task 2. Attend three Stream Wise training sessions. Staff watched the Stream Wise Introductory Webinar (0.5 hrs) attended one marketing campaign training session (virtual – 2 hrs), one desktop assessment training session (virtual – 2 hrs), and one field assessment training (in-person – 3 hrs) hosted by LCBP and the Stream Wise Project Team in the Spring/early Summer of 2023.

Task 3. Conduct Stream Wise Marketing Campaign. Following the guidance provided within the Stream Wise Program Materials and in collaboration with all Stream Wise partners, staff created and distributed 4 social media posts, 2 blog post, 1 email blast, 2 printed messaging to *spread the word* and provide *outreach* to engage with stream and river property owners to participate in Stream Wise within the Lamoille watershed and *celebrate* pilot year successes to engage more property owners between July - September 2023. LCCD also hosted a table at Rocktoberfest, a community event, to distribute Stream Wise information and answer questions.

Task 4. Conduct Stream Wise Desktop and Field Visit Assessments. Following Steps 1-5 in the Phase 1 Stream Wise Assessment Protocol, staff conducted 5 Stream Wise Desktop and Field Visit Assessments in the Lamoille watershed between June - November 2023. This protocol included procedures for the prevention of the spread of invasive species, such as sanitizing of boots and equipment between sites.

Task 5. Participate in end-of-season meeting and survey to record and discuss program feedback. Staff recorded program successes and areas for improvement throughout Spring – October 2023 and shared feedback via an end-of-season meeting and survey in November 2023.

Task 6. Reporting. Quarterly reports were submitted throughout the grant contract period to be filed with the LCBP project officer (Lauren Jenness) within 10 days of the last day of each calendar year quarter or December 31, March 31, June 30, and September 30. A draft final report was submitted that compiled a project summary and all grant deliverables including plans, maps, data, articles, photographs, project metrics, etc. by December 10, 2023.

3. METHODOLOGY

N/A See above.

4. QUALITY ASSURANCE TASKS COMPLETED

Our Stream Wise Assessment work complied with the Stream Wise Award Program Generic QAPP prepared by LCBP and approved by NEIWPC and the U.S. Environmental Protection Agency. The signed cover page of the QAPP as well as the Training Documentation Form (Appendix B of the QAPP) are included in this final report as appendices. A summary of results from the Stream Wise assessments is included in the Executive Summary and Project Synopsis sections and the Stream Wise Assessment App records have been downloaded and attached to this final report as appendices.

5. DELIVERABLES COMPLETED

Attended signup meeting: Training attendances and supplies ordered

The training attendance documentation was submitted. Supplies ordered included: metal compartment clipboard (\$22.55), 100' Measuring tape (\$12.99), and Grade rod (\$41.11).

Attend 3 trainings: Attendance record and approved QAPP

Both documents have been submitted.

Conduct social media marketing campaign: 4 Social media posts, 2 blogs, 1 email blasts, 2 printed

Across the life of the grant, 2 Facebook posts and 2 Instagram posts were generated about the program. A full page on our website was generated for the Stream Wise program and a latest news article was added. An email blast was sent to 358 recipients on October 3rd, 2023. Printed flyers were handed out at Morrisville's Rocktober Fest, a home school meet up, the pavilion ribbon cutting party at the Lamoille County Nature Center, and Johnson's Field days.

Conduct 5 Stream Wise evaluations. 5 Landowners participating in Stream Wise and 5 Entries of Stream Wise assessments within Fulcrum App

Five Stream Wise evaluations were conducted throughout October and November. All data has been added to Fulcrum and completed final reports as well as the metrics have been submitted. Two properties received the award. The other 3 properties were ineligible for the award due to various factors outside of their control which fell within the narrow confines of the program.

End of season meeting: participation record

I was unable to attend the end of the season meeting due to my son being hospitalized. However, I responded via email to the desired areas of feedback included in the presentation.

Reporting: Quarterly Reports, Approved Final report, Data and photos submitted, Project metrics report

All quarterly reports were submitted and approved. Data and project metrics have been submitted, and relevant photos are uploaded into fulcrum at the locations of each site and included as submitted deliverables.

6. CONCLUSIONS

Our pilot year of Stream Wise at the Lamoille County Conservation District was successful. The program was well received and generated the interest needed to obtain 5 landowners for the evaluations. All 5 landowners were individuals who already possess a strong interest and therefore knowledge of stewarding their land through conservation practices. This made the evaluations straightforward; however, they did not feel as educational for the landowner as they could be had I been able to gain the interest of landowners without a passion for conservation. Additionally, the confines of the criteria were frustrating as they made the award unobtainable for more than half of the evaluations.

7. APPENDICES

The following documents have been submitted and saved to the project file as appendices:

The approved QAPP and Appendix. B Training Documentation form (Task 2)

The four social media posts, flyer, webpage, and email blast (Task 3)

Five Stream Wise Assessment Reports with associated photos (Task 4)

Photos:



Large patch of invasive Japanese knotweed - Moulton Ln property in Stowe, VT.



Steep bank conditions on VT Route 15 property in Johnson, VT.



Stream buffer on Mud City Loop property in Morristown, VT.



Stream of Mud City Loop property in Morristown, VT.



Organic dairy barn on Mud City Loop property in Morristown, VT.