

2.1 Desired Results, Measurable Outcomes

How is the Education and Outreach Plan Measured?

The following goals and objectives function as the fulfillment of the VLAWMO Water Plan Priority Issue #3: Need for education and outreach. The desired results portray VLAWMO's vision of what that education and outreach will ideally look like as long-term results. Some objectives are especially relevant to this or other priority issues, these are included in parenthesis after the objectives, phrased as "(PI #-#-#)".

Desired Results: *"Through the EOP, VLAWMO desires to..."*

Listed according to priority.

1. To complete annual Capital Improvement Campaigns; specific education efforts related to VLAWMO projects including outreach, communication, and stakeholder engagement.
2. To confirm that MS4 partners are using VLAWMO MS4 resources and are striving to improve their MS4 permits and SWPPP reports according to the full scope of the current MS4 permit.
3. To maintain active, relevant outreach that fosters participation with VLAWMO's cost-share and volunteer programs, in addition to member community partnerships.
4. Witness a citizenry that grapples with the complexity of water resources, culture, and climate change, and advocates for solutions that promote long-term stewardship of resources.
5. To observe resident volunteers educating and being educated by their peers, utilizing knowledge and skills related to stormwater, watersheds, and water quality.
6. To observe citizens demonstrating watershed protection behaviors.

2.1 High Priority Strategies

Capital Improvement Project Campaigns: 2021

Goose Lake Adaptive Lake Management

Goal: Compliment the Goose Lake Adaptive Management project with accurate documentation, stakeholder engagement, and relevant supplementary education.

- Facilitate staff planning for presentations: Set agendas, schedule meetings and consultations, ensure meeting outcomes are delivered, follow-up as needed.
- Design and launch a stakeholder survey that integrates with Adaptive Lake Management efforts and relates to all stakeholder representations.
- Coordinate a minimum of two introductory stakeholder meetings: PowerPoints, agendas, communications, follow-up for outcomes.
- Design and implement integrative education and outreach content with COVID-era adaptations.

Desired result: #1 **Priority issue:** #1, 5, 6

Target audience: Public: At large, workshops, events, businesses, homeowners/lake association

Lambert Lake Pond and Meander / Ditch Education

Goal: Compliment the Lambert Lake Pond and Meander project with documentation and relevant education on ditch history, wetlands, and stream and floodplain function.

- Provide monthly updates with photos and links on project web page:
vlawmo.org/lambertlakepondandmeander
- Maintain ditch management communications informed by local policies, studies, and ditch and drainage education.
- Complete a complimentary outreach series utilizing construction footage, drone footage, and background information on ponds, ditches in context of ecosystem health, and creek meanders. Utilize newspaper, website, and social media (using #LambertCreekVH).
- Distribute hardcopy mailings (letters, postcards) containing construction and upcoming webinar updates to residents. Mailing list of 267 properties, mailing occurrence dependent on project status and progress.
- Facilitate questions and address concerns between staff, the public, and City officials. Coordinate communications informed by feedback, maintain a Frequently Asked Questions section on the Lambert Pond and Meander project webpage.

Desired outcome: #1

Priority issue in focus: #1, 5

Target audience: Public: At large, homeowners assc.

2.1 High Priority Strategies

Professional Support: MS4 permit support

Goals

1. VLAWMO will support partner Cities and Townships in making progress in their MS4's.
 - A. VLAWMO will conduct a 2021 needs assessment with each MS4 community based on 2020 MS4 permit and SWPPP evaluation: <https://www.pca.state.mn.us/sites/default/files/wq-strm4-49a.pdf>
 - Emphasis on Minimum Control Measures 1, 2, 3, and 6.
 - Minimum Control Measures 4 and 5 assessed separately and collaborated on according to need and VLAWMO resource availability.
 - B. Each MS4 in VLAWMO will utilize VLAWMO for assistance under **Minimum Control Measure #1 (Education and Outreach)**:
 - Partner Cities and Townships retain compliance based on part 16 in the 2020 MS4 General Permit: <https://www.pca.state.mn.us/sites/default/files/wq-strm4-94a.pdf>
 - VLAWMO creates and pulls from existing resources to provide theme-specific and municipality-specific content to support MCM #1.
 - C. Each MS4 in VLAWMO will utilize VLAWMO for assistance under **Minimum Control Measure #2 (Public Participation/Involvement)**:
 - Partner Cities and Townships retain compliance based on part 17 in the 2020 MS4 General Permit: <https://www.pca.state.mn.us/sites/default/files/wq-strm4-94a.pdf>
 - Becoming a member of Adopt-a-Drain and working with VLAWMO in program promotion and implementation.
 - Promote or host storm drain clean-up events and/or trash pick-up events.
 - Collaborate with VLAWMO in hosting and promoting an annual raingarden, native plant, groundcover, shoreline restoration, or BlueThumb-sponsored workshop.
 - D. Each MS4 in VLAWMO will utilize VLAWMO for assistance under **Minimum Control Measure #3 Illicit Discharge Detection and Elimination (IDDE)**:
 - Partner Cities and Townships retain compliance based on part 18 in the 2020 MS4 General Permit: <https://www.pca.state.mn.us/sites/default/files/wq-strm4-94a.pdf>
 - E. Each MS4 in VLAWMO will utilize VLAWMO for assistance under **Minimum Control Measure #6 Good Housekeeping**
 - Partner Cities and Townships retain compliance based on part 21 in the 2020 MS4 General Permit: <https://www.pca.state.mn.us/sites/default/files/wq-strm4-94a.pdf>
 - F. VLAWMO will produce an MS4 report containing the year's programming and outreach summary to City and Township councils in December, 2021.

Desired Result #4

Primary priority issue in focus: #3

Target audience(s): MS4 partners

2.2 Intermediate Priority Strategies

Informal Education and Interpretation

Goals

2. Community members utilize watershed knowledge to act on watershed issues, with help from VLAWMO's tools and resources.
 - A. VLAWMO will offer and collaborate on at least three native plant, raingarden, and/or yard-care workshops annually.
 - B. VLAWMO will create and distribute cost-share promotional material to all VLAWMO municipalities and host a cost-share open-house annually.
 - C. VLAWMO will develop and maintain communications on ditch history, ditch maintenance, and residential options for supporting drainage and wetland health (part D).
 - D. VLAWMO will continually promote and evaluate the use of watershed stewardship activities through social media, website content, email blasts, and surveys (PI 3-3-1). To guide and organize VLAWMO's messaging, watershed stewardship messages include:
 - Water-friendly yard care strategies (keeping lawn at 3" height, keeping grass clippings on the lawn, etc.) A full list of strategies is found at vlawmo.org/residents/water-stewardship/
 - Adopting a stormdrain (Adopt-a-Drain.org)
 - Adopting a raingarden (vlawmo.org/get-involved)
 - Properly disposing yard waste and hazardous waste
 - Planting a raingarden, bioswale, native plant buffer, or installing other stormwater retention features
 - Redirecting downspouts away from pavement
 - Practicing salt and de-icer best practices

Desired outcome: #1, 2, 5 **Priority issue in focus:** #1, 2, 3 **Target audience:** Public: at large, workshops

2.2 Intermediate Priority Strategies

Informal Education and Interpretation

3. Community members are educated on VLAWMO issues and projects.

- A. VLAWMO will attend and present relevant water information and project updates at annual community events as opportunities arise. Examples include MarketFest in White Bear Lake and “Hot Dog with a Deputy” in Vadnais Heights (PI 3-2-2).
- B. VLAWMO will utilize community partnerships to promote VLAWMO events and capital improvement projects (PI 3-2-1). VLAWMO will also produce specific, separate communications plans corresponding with specific partnerships, capital improvement projects, and MPCA 319 projects being conducted within the defined year of this edition of the Education and Outreach Plan. **See Capital Improvement Project Campaigns.**
- C. VLAWMO will utilize the VLAWMO.org blog, VLAWMO YouTube channel, E-newsletter, and social media a minimum of once each week to promote awareness and build community rapport. Topics will include lake and stream monitoring, fieldwork updates, VLAWMO publications, local ecology, tips on water-friendly behaviors such as yard care practices, and current news relating to water resources and lake SLMP’s (PI 3-2-2).

Desired outcome: #2, 6

Priority issue in focus: #1, 3

Target audience: Public: at large, associations, citizen groups, stakeholders

4. Coordinate an active volunteer base that learns and leads.

- A. VLAWMO will creatively recruit volunteers through relationship building, and nurture its existing volunteer base. Volunteer programs include participation in the Minnesota Water Stewards program and facilitating VLAWMO-designed volunteer positions (PI 3-3-1).
- B. VLAWMO plans out annual projects for the Watershed Action Volunteers (WAV) and Citizen Advisory Committee (CAC) with volunteer input (PI 3-3-1). Possible activities for 2021 include:
Neighborhood BMP tour, Leaf Pack Macroinvertebrate monitoring at four sites on Lambert Creek, Frog and Toad Monitoring, Shoreline restoration open house, native plant swap, raingarden maintenance, “adopt-a-raingarden” maintenance on public raingardens and bio-swales, community stormdrain clean-ups, adopt-a-drain promotion (door hangers, etc.)
- C. Trained volunteers will help monitor the status of Aquatic Invasive Species (AIS) in the watershed. VLAWMO will partner with the Ramsey County Soil and Water Conservation Division to host volunteer trainings.
- D. VLAWMO will maintain a relationship with the University of Minnesota service learning, and will host students for outdoor fieldwork such as buckthorn removal and camera trap setting.

Desired outcome: #3

Priority issue in focus: #1, 3

Target audience: Volunteers

2.2 Intermediate Priority Strategies

Informal Education and Interpretation

5. Watershed communications are accountable and active in the community.

- A. Notes and minutes from VLAWMO meetings will be posted on the website for stakeholders and the public. (PI 3-2-1, 3-2-3).
- B. Each municipality will be reached annually through newsletters, email blasts, or website updates with relevant MS4, watershed stewardship, cost-share, or Capital Improvement Campaign content.
- C. Due to its remote location, small area, and being in Anoka County, the Lino Lakes portion of the VLAWMO watershed will receive one hardcopy mailing annually.
- D. VLAWMO will produce and submit at least 10 newspaper articles annually.
- E. VLAWMO will participate in local groups such as VHDEC Partners for Good to maintain connections with local businesses and nonprofits.
- F. VLAWMO continues memberships with Metro Watershed Partners and Blue Thumb to provide education content and peer-to-peer consultation with other watershed organizations in order to enhance programs and services to the VLAWMO public.

Desired outcome: #1

Priority issue: #1, 5, 6

Target audience: Public: At large

2.3 Low Priority Strategies

Formal Education: Schools

6. Schools have established and maintained stormwater BMP's integrated with watershed education efforts.

- A. VLAWMO will provide at least one BMP maintenance event annually within the WMO, either during school hours or during after hours care. (PI 3-2-2)
- B. Visit or provide supportive water resource content to each school at least once/year for water-focused lesson and activity. Repeatable and accessible education activities are listed at vlawmo.org/students (PI 3-3-2).

Desired Result: #2, 5

Priority issue in focus: #3

Target audience: Schools, Public: families

2.3 Low Priority Strategies

Informal Education and Interpretation

7. An appreciation of natural resources is established in the community, fostering ecological awareness, participation, and a sense of place.
 - A. Continued use of remote cameras to photograph local wildlife and use photos for educational messaging, capital improvement project support, schools, newspapers, blogs, and presentations.
 - B. VLAWMO staff will develop story maps focused on wetland wildlife, frog and toad populations, and VLAWMO projects.
 - C. VLAWMO will produce Neighborhood Spotlight articles (successful cost-share raingardens, stewardship practices, and other best management practices) and Faces of Wetlands articles (featuring ecological knowledge on wetland wildlife while relating it to human activities).
 - D. VLAWMO will organize citizen science initiatives for community members to participate in. These include but aren't limited to LeafPack macroinvertebrate monitoring, pollinator monitoring, or picture posts (phenology). Resulting data will be interpreted in terms of watershed health (PI 3-3-1).

Desired outcome: #1. 2. 3 Priority issue in focus: #1, 5, 6 Target audience: Public: at large, events

Professional Support: BOD, TEC, WAV

8. Key personnel (BOD, TEC, CAC) have continued to advance their knowledge of water and related natural resources.
 - A. VLAWMO will provide one enrichment opportunity annually in the form of a supplementary presentation titled "Water Matters". Presentations will invite guest speakers on watershed related topics from the greater Twin Cities metro. Each presentation will be recorded and posted on the VLAWMO website, and the public invited.
 - B. VLAWMO staff will forward relevant news, events, and research to TEC and BOD members for supplementary learning when available.

Desired Result #4 Primary priority issue: #3 Target audience(s): Key personnel

EDUCATION & OUTREACH GOALS

2.1

2.4 Desired Results, Measurable Outcomes

Measurable Outcomes: *Measured program participation that indicates incremental accomplishment of goals. Objectives attributed to each goal are evaluated through this pool of outcomes.*

1. Adopt-a-Drain: Observe a minimum of 50 new drain adoptions, exceed 20 reported volunteer hours, maintain 20 active annual volunteers and achieve 50 lbs of debris collected and reported by adopt-a-drain volunteers.
2. Grow email subscriptions and social media following by 75 people annually.
3. Achieve 300 social media engagements annually.
4. Achieve 10,000 website visits annually.
5. 50 new social media followers annually.
6. 500 VLAWMO received and opened email newsletters annually.
7. 20 end-of-year annual survey results or Facebook engagements reporting independent watershed stewardship (goal 2c).
8. Successfully published articles in various newspapers, newsletters, and custom mailings. A minimum of four times annually.
9. Reach 4 classrooms (90-100 students) annually through school programs or use of VLAWMO web resources.
10. A reported increase in Tblisi education categories: Knowledge, awareness, attitude, skills, and behavior. Increases in each category as a result of VLAWMO workshop or tour survey, or annual end-of-year survey.
11. Monthly phenology posts made at each picture post, at least one new participant engaging in program annually.
12. A minimum of 50 watershed residents attending VLAWMO workshops, open houses, tours, and Blue Thumb workshops annually.
13. A minimum of 5 VLAWMO event participants from the past two years will participate in a VLAWMO cost-share or soil health grant.
14. A minimum of 5 VLAWMO cost-share participants from the past two years will also participate in education and outreach through a spotlight article or volunteering with VLAWMO.
15. A minimum of 2 Lawns to Legumes applications in the VLAWMO watershed annually.
16. At least 5 public raingardens are adopted and annually maintained by volunteers under Adopt-a-Raingarden.
17. Achieve over 500 reported volunteer hours through volunteer opportunities such as leading a short-term service projects, citizen science, specific or custom volunteer roles, or utilizing a VLAWMO education display.
18. A minimum of five volunteers will act as educators to their local citizen peers annually.
19. A minimum of three volunteer efforts completed annually, at least 25 participants across all activities.
20. One or more trained AIS volunteers will report and monitor at least once on each lake in VLAWMO annually.
21. At least two schools each year will schedule and complete raingarden maintenance with or without VLAWMO assistance.
22. A minimum of one engagement annually with a resident in Lino Lakes portion of watershed.
23. TEC and BOD quorum met at each meeting.
24. If cost-share best management practices are successfully installed as a result of education and outreach efforts (workshops, events, etc.), VLAWMO will report these as supplementary measurable outcomes.

Barriers: What challenges will be faced when pursuing the goals?

1. Many watershed features in VLAWMO (lakes, wetlands) are difficult to access and are also generally out of sight to the public. This creates difficulty in building personal interaction and appreciation with local natural resources. Finding ways to foster local, place-based appreciation of water resources (lakes, wetlands, etc.) is an important strategy for inspiring behavior change and watershed stewardship (water friendly yard care, etc.).
2. Maintaining a variety of activities that appeal to a wide range of communities on a limited budget. With a wide range of age groups, political affiliations, and professions in the watershed, VLAWMO is unable to focus on one particular group.
3. Competing for attention and focus from the public. To get educational messages across in newspapers, social media, or email, they must compete with many more news stories, email distributions, advertisements, and social functions. This inundation of information has the potential to turn community members off to watershed education and messages.
4. A trend of disassociation to place and water resources. Having many causes, priorities, and interests active in the watershed allows for many different focuses. A particular niche may or may not require attention to the local environment or water resources to function. This creates space for an assumption that water resources are irrelevant to some, and the responsibility of others. As a watershed organization, VLAWMO focuses on the interconnectivity of water resources, recognizing that everyone who lives or works in the watershed impacts water resources. A challenge VLAWMO faces is to assist in making this interconnectivity visible, relevant, and accessible to all interests and priorities.
5. Perceived complexity, intimidation, or conflict concerning water management. The notion of not being an expert may inhibit some from pursuing actions or policies that strive to improve water quality. Education focused on new behaviors regarding land use and watershed connectivity may also reveal differences in attitudes, norms, and priorities. Gridlock, conflict, or disengagement may occur when these differences require cultural, political, or social reflection within the discussion. Such reflection demands a degree of voluntary personal interest and a receptiveness to difference, which can vary. Potential reflective topics include land use and water use, climate change, private property ethics, or yard care routines.

Strategy Levels

4.0

Prioritizing the work load

Three strategy levels organize the goals and objectives into a balanced work load. Various strategy levels tend to utilize similar methods and tools,

Table 1: Strategy levels

High priority strategies

High priority strategies that receive primary focus in content creation, planning, and implementation.

Goals: Capital Improvement Campaigns, Goal 1

Methods & Tools: Internal planning, stakeholder engagement, content development such as mailings, VLAWMO website, media, and presentations.

Intermediate priority strategies

A segue between long and short term results, requiring intentional planning yet produces tangible results.

Goals: 2, 3, 4, 5

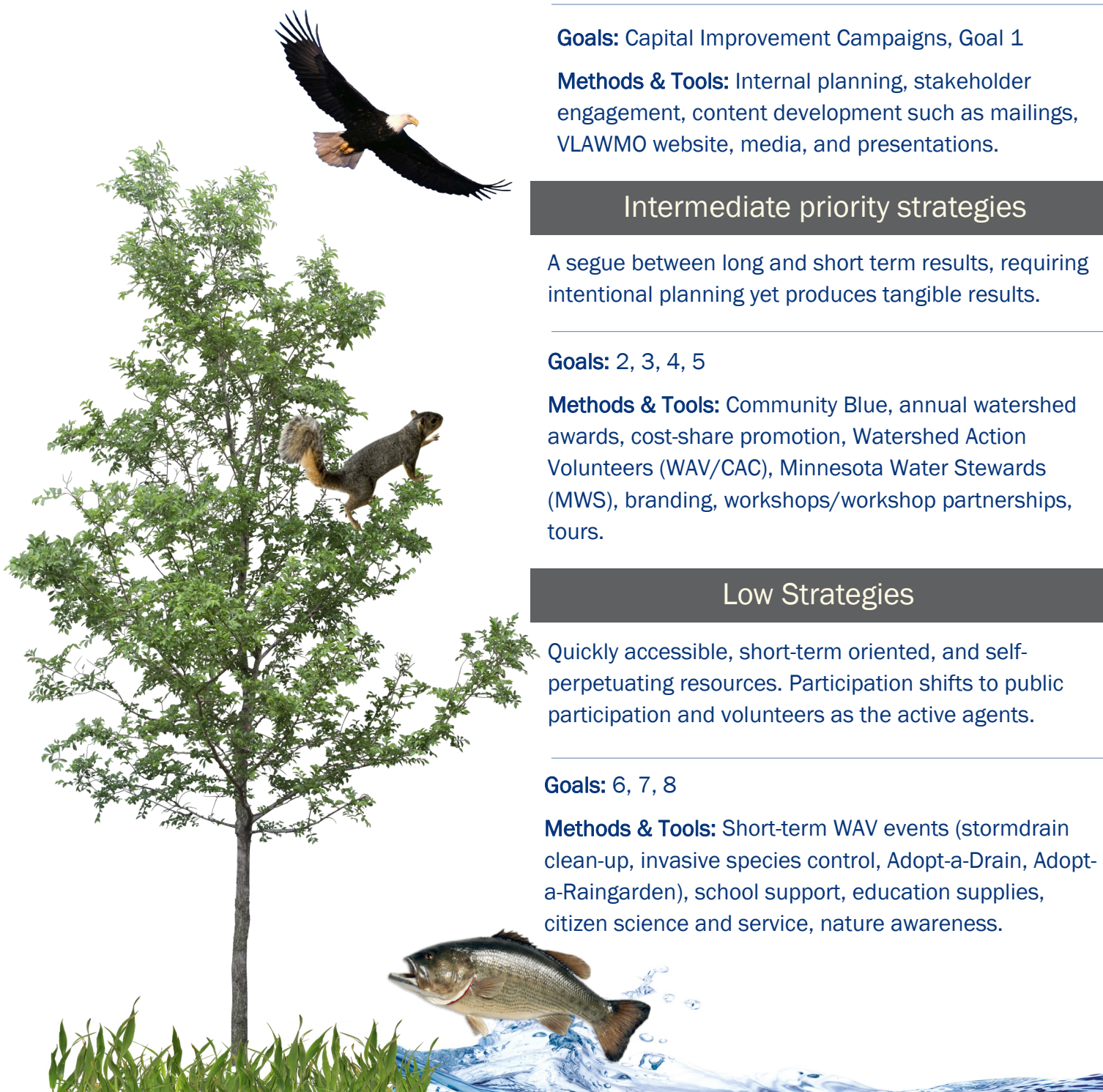
Methods & Tools: Community Blue, annual watershed awards, cost-share promotion, Watershed Action Volunteers (WAV/CAC), Minnesota Water Stewards (MWS), branding, workshops/workshop partnerships, tours.

Low Strategies

Quickly accessible, short-term oriented, and self-perpetuating resources. Participation shifts to public participation and volunteers as the active agents.

Goals: 6, 7, 8

Methods & Tools: Short-term WAV events (stormdrain clean-up, invasive species control, Adopt-a-Drain, Adopt-a-Raingarden), school support, education supplies, citizen science and service, nature awareness.



STRATEGY LEVELS

4.0

Three strategy levels organize the goals and objectives into a balanced and self-perpetuating education program.

High strategies

Capital improvement campaigns: Communications, branding, meetings, documentation, and planning. Creating and updating the Comprehensive Water Plan, articles, annual reports, water monitoring reports, Water Policy, or Education and Outreach Plan.

Stakeholder engagement: Sharing resources and accruing knowledge through ongoing correspondence with stakeholders. Education, mailings, website maintenance, content/video creation, surveys, and webinars.

Intermediate strategies

Community Blue: A grant program focused on small-scale native plantings, community service initiatives, and citizen engagement. Emphasis on education, collaboration, innovation, and interactions between citizens and local water resources.

Watershed Action Volunteers (WAV): The recruitment and fostering of an active volunteer group. Formal volunteer positions are designed and filled annually, primarily driven by participation in the Minnesota Water Stewards program (MWS). Inclusion of Citizen Advisory Committee (CAC).

Cost-share promotion: The promotion of existing cost-share programs.

Tours: Live, on-site watershed demonstrations and interpretation throughout the watershed.

Annual Watershed Awards: Peer-nominated acknowledgement of watershed leadership.

Workshops: Formal instruction and training on watershed topics such as raingardens, shoreline restoration, wetlands, or citizen science.

MINNESOTA WATER STEWARDS
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Low strategies

Media: Physical or digital (social media, website) messaging and promotion of VLAWMO.

School planning and visits: Planning and supporting schools in watershed education through raingarden assistance, online watershed resources, class visits.

Events: Booth set-up, educational event (videos, ice cream social, etc.) or open house that occurs in the watershed or targeting watershed constituents.

Short-term volunteer: Adopt-a-Drain, Adopt-a-Raingarden programs and promotion. More at adopt-a-drain.org

Supplies: Education materials and displays for rent allow the general public to be empowered to participate in watershed improvement and leadership.

Nature awareness: The public at large being aware of watershed natural resources. Remote cameras, original staff wildlife and wetlands articles, and phenology picture posts. Non-volunteer public interact with and learn from the content generated from these efforts, each effort contains opportunities and invitations on how to be more involved in supporting the watershed.

Citizen science and service: Volunteers, community groups, or school groups gathering ecological data in the watershed or conducting service projects. Service projects include trash pick-up or raingarden/BMP maintenance. The citizen science program includes LeafPack macroinvertebrate monitoring, Aquatic Invasive Species (AIS) monitoring, and phenology picture posts. Descriptions of these projects are available at: leafpacknetwork.org picturepost.unh.edu.

