2020 Education and Outreach Goal Review

General outcomes results:



- Utilize at least 75% of the budget for Landscape Level 1 and rainbarrel cost-share funding.
 - o Complete
- Complete at least one Landscape Level 2 cost-share grant.
 - o N/A
- Observe a minimum of 10% annual growth in adopt-a-drain volunteers, exceed 20 reported hours, 500 lbs debris
 - o 65% growth in Adopt-a-Drain subscribers in 2020 45 new adoptions in 2020.
 - Grow email subscriptions and social media following by 15% annually.
- Reach 200 students annually through school visits.
 - 156 students reached through virtual education resources: Watershed/school-specific maps, continuing past year
 - AFSA Academy: 40
 - Frassati Academy: 80
 - Vadnais Heights Elementary: 30
 - Central Middle School: 6
- 50% increase in end-of-year public survey results in knowledge, awareness, attitude, skills and behavior concerning water resources. Measured by annual public review survey questions.
 - Knowledge: 50%Awareness: 50%
 - o Attitude: 50%
 - o Skills: 75%
 - o Behavior: 75%
- Monthly phenology posts made at each picture post, at least one new participant engaging in program.
 - Monthly posts completed at Charley and Deep Lake picture posts. Birch, Sucker, and Tamarack Nature Center active every 3-4 months.
- Complete at least one Community Blue grant annually.
 - o 3 completed in 2020. 102 participants across all programs.
- At least 15 workshop and/or cost-share participants participate in two or more VLAWMO events/workshops.
 - o Effort discontinued due to COVID-19 pandemic
- At least 5 public raingardens are adopted and annually maintained by volunteers.
 - 4 public raingardens adopted and annually maintained by volunteers: Vadnais Heights Elementary, Vadnais Heights City Hall, Fox Meadow in White Bear Township, Heritage Hall in Gem Lake.
- Observe at least 20 public and VLAWMO visitors at TEC/BOD meetings and Water Matters sessions annually.

- Effort discontinued due to COVID-19 pandemic
- Achieve over 500 reported volunteer hours through volunteer opportunities such as leading a shortterm service projects, citizen science, specific or custom volunteer roles, advising VLAWMO through the Citizen Advisory Committee (CAC), or utilizing a VLAWMO education display at an existing community event.
 - o Reported 372 hours

Education and Outreach goals summary: 1. VLAWMO Supports its partner Cities in making progress in their MS4's

A. Objective: One instance for each City annually where the City utilized

VLAWMO tools and programs to support Minimum Control Measure #1 (MCM #1)

Measure: Goal of 2 of 6 MS4's, 4 achieved.

- Vadnais Heights:
 - o 2 social media postings: yard care and watering outreach
 - Website update assistance: yard care and watering
 - 1 City Council meeting presentation
 - o Attendance at MS4 City Summit event to prepare for new MS4 permit: March, 2020.
- White Bear Township: Pet Waste outreach in Lambert Creek subwatershed
 - o 3 social media postings: Advertising workshops, MN Water Stewards program
- White Bear Lake:
 - Attendance at MS4 City Summit event to prepare for new MS4 permit: March, 2020.
- Lino Lakes:
 - Attendance at MS4 City Summit event to prepare for new MS4 permit: March, 2020.
- B. Objective: One instance for each City annually where the City utilized

VLAWMO tools and programs to support Minimum Control Measure #2 (MCM #2)

Measure: 3 of 6 MS4's

- White Bear Lake
 - Adopt-a-Drain membership and promotion with Goose Lake subwatershed focus: 21 adoptions in White Bear Lake
- Raingarden and BMP maintenance development with Vadnais Heights
 - Maintained VH City Hall raingarden with support from VH public works and city hall staff
- White Bear Township:
 - o Fox Meadow Raingarden maintenance. Volunteer and public works staff partnership.
- C. At least two city staff will articulate something they have adjusted in their operations as a result of Smart Salting or Turf Maintenance Best Practices Training.

Measure: 0 staff adjustment reports

2. Key personnel have continued to advance their knowledge of water and related natural resources

A. Objective: 75% attendance annually at "Water Matters" events and supplemental education activities.

Effort discontinued due to COVID-19 pandemic

3. Establish place-based watershed education that applies to multiple age demographics

A. Objective: A minimum of 3 survey responses from parents of school-age children

Effort discontinued due to COVID-19 pandemic

B. Objective: Reach 10% of school-age population in watershed per year through school programs

Measure: Estimated 2% of school-age population reached through custom watershed and schoolyard maps, Jr Watershed Explorer activity booklet

C. At least 3 classrooms will utilize a school raingarden to support their planned curriculum activities, such as Race to Reduce.

Effort discontinued due to COVID-19 pandemic

4. Schools have established and maintained stormwater BMP's, embracing their educational value

A. Objective: One school each year will schedule and complete raingarden maintenance in conjunction with a VLAWMO on-site visit

Effort discontinued due to COVID-19 pandemic

B. One school each year will schedule and complete raingarden maintenance independently:

Measure: 1 independent school complete: Vadnais Heights Elementary

5. Community members are educated on VLAWMO issues and priorities

- A. Objective: 50 new registrations to email newsletter will result from public booth events. **Measure:** 40 new email registrations
- B. VLAWMO will utilize community partnerships to promote VLAWMO events and projects. (PI 3-2-1). Measure: Refer to general outcomes
- C. VLAWMO will utilize the VLAWMO.org blog, VLAWMO YouTube channel, E-newsletter, and social media a minimum of twice each week to promote awareness and build community report.
 Measure: 11,000 website views reported from analytics web host

6. Community members utilize watershed knowledge to act on watershed issues, with help from VLAWMO's tools and resources

A. VLAWMO will offer native plant, raingarden, and/or yard-care workshops annually.

Objective: Installation of four raingardens, native plantings, permeable paver systems as a result of VLAWMO workshops.

Measure: 1 installation - .011 lbs annual Total Phosphorus (TP) reduction, 6.2 annual .lbs total suspended solids (TSS) reduction.

6 cost-share site visits from 2020 workshop attendance

3 cost-share site visits from 2019 workshop attendance

Effort reduced due to COVID-19.

B. In the past year, 4 workshop attendees will have engaged VLAWMO in ways other than the costshare

program Objective: 4 workshop attendees engaged in VLAWMO activities in ways other than the cost-share program.

Measure: 5 workshop attendees engaged in VLAWMO in ways other than cost-share:

Watershed Action Volunteers (WAV), DIY neighborhood raingarden tour

C. VLAWMO will continually promote and evaluate the use of watershed stewardship activities through social media, newspaper submissions, and surveys (PI 3-3-1). 10% increase in stewardship activities documented from public survey

Measure: 65% reported increase in stewardship activities from end of year public survey

D. VLAWMO will produce and publish neighborhood spotlight articles that highlight cost-share and yard-care success stories. A minimum of 3 articles will be developed annually.

Measure: Refer to general outcomes

7. An appreciation of local natural resources is established in the community, fostering ecological awareness and community reflection.

Measure: See general outcomes for measures related to objectives A-D

A. Continued use of remote cameras to photograph local wildlife and use photos for educational messaging, schools, newspapers, blogs, and presentations.

- B. VLAWMO staff will host at least 1 Frog and Toad call education event annually.
- C. VLAWMO will produce and publish an article series titled 'Faces of Wetlands', featuring ecological knowledge on wetland wildlife while relating it to a local sense of place.
- D. VLAWMO will organize and interpret citizen science/service initiatives for community members to participate in.

8. A volunteer base that learns and leads

A. 5 volunteers will act as educators to their local citizen peers annually.

Measure: 3 volunteers acted as educators/leaders

B. Some efforts discontinued due to COVID-19 Pandemic. Completed volunteer leadership efforts from 2020 goal include:

Measure: 5 volunteer leadership roles accomplished.

Neighborhood BMP tour, Leaf Pack macroinvertebrate monitoring, public raingarden maintenance, rainbarrel webinar, and Jr Watershed Explorer Workbook (bonus).

C. VLAWMO provides a variety of short-term opportunities for volunteers to act as educators to their local citizens (PI 3-3-1).

Measure: Refer to general outcomes

D. Trained volunteers will help monitor the status of Aquatic Invasive Species (AIS) in the watershed.

Measure: 6 of 12 VLAWMO Lakes monitored for Aquatic Invasive Species (AIS)

9. A watershed focused congruency between community groups exists in VLAWMO

A. Notes and minutes from VLAWMO each meeting will be posted on the website forstakeholders and the public.

Measure: Refer to general outcomes

B. Workshops, outreach, programs, social media, and events will all promote the CommunityBlue program. One event resulting from unique, creative partnerships.

Measure: 3 projects complete, one complete from unique partnerships. See Community Blue Grants in 2020 Raw Numbers.

C. VLAWMO will produce and submit at least 10 newspaper articles annually.

Measure: Complete, 13 publications. Refer to general outcomes for results.

2020 Education and Outreach: Raw Numbers

Community Blue Grants

- 3 grants completed in 2020, 1 postponed due to COVID-19.
 - Movie Night: Hometown Habitat Kate Windsor
 - Educational movie about native plants, green infrastructure, and water resources. Partnership with North Oaks Natural Resources Commission and the North Oaks Golf Club.
 - 40 participants
 - **\$200**
 - Rainbarrel Workshop:
 - Minnesota Water Steward capstone project Katherine Doll Kanne
 - 37 participants
 - \$1,700 awarded, \$1,272.45 used
 - Junior Watershed Explorer Ceci Shapland (MN Water Steward)
 - Activity workbook for kids and families, facilitating DIY games, puzzles, and site visits based on the local watershed. Long-term resource available for download and hardcopy print for families and schools.
 - Estimated 25 active users in 2020
 - \$700 awarded
 - Upstream: Postponed White Bear Center for the Arts
 - Curated tea and water education sessions with volunteer activities in public raingarden/bioswale maintenance
 - \$5,000 reserved for 2021 based on COVI-19

Workshops & Community events

- Cost-share open house: In person (pre-COVID-19)
 - February 4th
 - 12 participants
- Vadnais Lake trash pick-up DIY

- May 4th
- 5 participants
- Native Plants guest speaker: Natural Shores Technology, Tracy Lawler
 - o 50 participants
- Blue Thumb Resilient Yards workshop (online partnership)
 - o June 24th
 - o 12 participants (many other non-VLAWMO)
- Blue Thumb Healthy Soils workshop (online partnership)
 - o Sept 24th
 - o 2 participants (many other (non-VLAWMO)
- Lino Lakes Water Quality webinar (online partnership)
 - October 6th
 - 1 participant (many other non-VLAWMO)
- Lambert Pond and Meander webinar (online partnership)
 - o May 15th
 - 13 participants
- DIY Neighborhood raingarden and native plant tour: August 21st
 - o 23 participants
- Ramsey County AIS workshop (online partnership)
 - o April 19th
 - 3 participants
- East Goose Lake Neighborhood Conversation
 - December 1st
 - o 16 participants

WAV & Citizen Science

- Adopt-a-Raingarden training/service:
 - Vadnais Heights Elementary
 - May
 - 2 volunteers
 - Fox Meadow
 - October
 - 1 volunteer
 - Gem Lake Heritage Hall
 - June
 - 1 volunteer
 - Vadnais Heights City Hall
 - June
 - 4 volunteers
- Invasive Species/Fieldwork Service Days
 - 8 work days: Vadnais Heights City Hall/ Birch Lake 4th and Otter
 - o 27 volunteers
- LeafPack macroinvertebrate monitoring
 - 4 volunteers active
 - 6 Leaf Packs completed

- Adopt-a-Drain: ongoing (adopt-a-drain.org)
 - 40 stormdrains adopted in watershed
- Picture posts: photo phenology project on Pleasant, Birch, Sucker Lakes
 - 3 volunteers actively engaging in citizen science phenology

K-12 & Youth Programs

N/A - COVID-19 complications

Newspaper & City Newsletter Publications

13 publications

January 2020, North Oaks News:

Common carp and water-quality trends on Pleasant Lake

February 2020, North Oaks News:

Below the surface: What we do and don't know about Pleasant and East Vadnais Lakes

February 4, 2020, Bring me the news MN:

More than a dozen swans have died at Twin Cities lake

February 12, 2020, White Bear/Vadnais Heights Press:

Inspired by nature: Meandering Lambert Creek

February 14, 2020, StarTribune:

More evidence of lead killing swans on Vadnais-area waters

• February 26, 2020, Vadnais Heights Press:

Swans and loons will benefit from Get the Lead Out program

April 11, 2020, StarTribune:

2 lakes in 2 years: 16 swans dead

April 2020, White Bear/Vadnais Heights Press:

Preventing the use of lead in fish tackle

• May 10, 2020, StarTribune:

Natural curves of streams restored

• July 2020, North Oaks News:

On the lookout for invasive plants: Japanese knotweed

• August 2020, North Oaks News:

Beyond appearances: Invasive yellow iris

Faces of Wetlands Otters article (NV)

North Oaks News: December

Annual Watershed Award Announcements: December (NV)

WB/VH Press

Television coverage in 2020:

Year-round:

Local SCC station – circulating videos from VLAWMO Youtube channel

February 10, 2020, KARE 11:

Outdoors: Recent swan deaths brings lead fishing tackle concerns

MS4 Municipal Partnerships

- City MS4 Summit event
 - o March 12th
 - o 3 of 6 JPA member communities participating
- Adopt-a-Drain partnership with White Bear Lake
 - O Goose Lake subwatershed focus