

CARNELIAN-MARINE-ST. CROIX WATERSHED MANAGEMENT PLAN

APPENDIX E

Communications and Outreach Plan

Carnelian Marine St. Croix 10-year Management Plan: Education Goals, Objectives, and Activities

PUBLIC EDUCATION AND ENGAGEMENT

Audience: General public: CMSCWD residents, visitors and water-users

Program Goals:

1. Provide CMSCWD residents and visitors with information about water quality and water quality trends in district lakes and streams.
2. Educate the public about nonpoint source water pollution, groundwater conservation, watershed ecology and management, and changes in precipitation due to climate change.
3. Build partnerships with state and local government, non-profit organizations, and community groups.
4. Engage community members and other stakeholders to help meet water quality goals identified in the CMSCWD watershed management plan, as well as TMDL and WRAP plans.

Educational Objectives:

People will learn:

1. That nonpoint source water pollution comes from a variety of land uses - residential, commercial, and agricultural.
2. That common pollutants impacting surface and groundwater resources in CMSCWD include phosphorus, sediment, nitrates, *E. coli*, chloride, and mercury.
3. That a watershed includes all of the land draining to a lake, stream or river, and that CMSCWD is a special-purpose local unit of government charged with managing the local resources to prevent flooding and protect water quality.
4. That surface and groundwater resources interact.
5. That annual rainfall and frequency of mega-rainstorms in Minnesota are increasing due to climate change.
6. That area residents can help to prevent nonpoint source water pollution through a variety of behaviors, including raking leaves and grass clippings out of the street, using less fertilizers and chemicals on lawns and gardens, covering bare soil during landscaping and construction, picking up pet poop, replacing failing septic systems, using less salt for winter maintenance and water softening, disposing of household waste properly, and using less electricity.
7. That communities and residents can build resiliency against climate change.
8. Community members will participate in public meetings, provide input for plans, and take action to support the goals outlined in the CMSCWD watershed management plan, as well as TMDL and WRAP plans.

Education Activities:

1. Activity: Provide CMSCWD residents and visitors with information about water quality and water quality trends in district lakes and streams and engage them to help meet water quality goals identified in the CMSCWD watershed management plan, as well as TMDL and WRAP plan.
2. Activity: Educate the public about nonpoint source water pollution, groundwater conservation, watershed ecology and management, and **changes in precipitation due to climate change**.
3. Activity: Build partnerships with state and local government, non-profit organizations, and community groups.

LANDOWNER OUTREACH

Audience: Urban, rural, riparian, and bluff landowners

Program Goals:

1. Ensure that landowners understand and comply with CMSCWD rules and apply for permits when necessary.
2. Motivate, train, and assist CMSCWD landowners to complete habitat and water quality improvement projects on their land that reduce runoff pollution, conserve groundwater, and increase infiltration.
 - a. Educate riparian landowners about lake/stream ecology and the ecological importance of shoreline and streambank buffers. Train and assist riparian landowners in projects to protect and enhance existing buffers areas and restore altered shorelines and streambanks.
 - b. Educate bluffland landowners about St. Croix Riverway rules and the importance of protecting bluffland areas. Train and assist bluffland landowners in projects to protect and enhance their riverway properties.
 - c. Educate septic owners about the potential impacts of septic systems on surface and groundwater quality, as well as proper care and maintenance of septic systems.
3. Promote CMSCWD's BMP cost-share incentive program and connect landowners with state and federal grants for water quality improvement projects.

Educational Objectives:

1. Landowners will understand why CMSCWD rules exist, how to comply with rules, and when to apply for permits.
2. Landowners will understand how they can help to protect district lakes, streams, wetlands, groundwater, and the St. Croix River by completing habitat and water quality improvement projects on their land, including: upland habitat restoration, invasive species management, raingardens, lakeshore and streambank plantings, bluffland restoration, and erosion control; and they will acquire the knowledge and skills to complete these projects.
3. Landowners will be aware of and utilize the CMSCWM BMP cost-share program to complete projects.

Education Activities:

1. Activity: Ensure that landowners understand and comply with CMSCWD rules and apply for permits when necessary.
2. Activity: Motivate, train and assist CMSCWD landowners to complete habitat and water quality improvement projects on their land that reduce runoff pollution, conserve groundwater, and increase infiltration.
3. Activity: Targeted promotion of CMSCWD's BMP cost-share incentive program and connect landowners in high priority areas with technical assistance from incredibly talented and experienced staff who can guide cost effective approaches to restoration and know how to leverage local, state and federal grants for water quality improvement projects.

Professional Trainings for Business and Local Government

Audience: Water resource professionals, county and municipal staff, consultants and contractors, local elected and appointed officials, business owners, lawn care providers, winter maintenance providers

Program Goals:

1. Provide local decision makers (city councils, planning commissions, county commissioners, etc.) with information and training needed to implement policies, programs, and practices that protect and restore water resources. This includes, but is not limited to, Minimal Impact Development Standards (MIDS) and Shoreland/Buffer rules.
2. Offer professional trainings for area business owners, lawn care providers, and winter maintenance contractors to share information about local water issues and encourage business practices that protect surface and groundwater resources.

Educational Objectives:

1. Local decision makers will understand that stormwater runoff, erosion, and illicit discharge contaminate surface and groundwater resources and, also, that there are best management practices to reduce these causes of water pollution.
2. Local decision makers will understand that land use impacts water quality and that there are a variety of policies, programs and practices cities, counties, and watershed management organizations can implement to protect their water resources, including MIDS and shoreland/buffer rules.
3. Area business owners, lawn care providers, and winter maintenance contractors will learn how to conserve groundwater resources and reduce surface and groundwater pollution through a variety of practices, including:
 - a. Completing water efficiency audits.
 - b. Following lawn care practices recommended by the University of MN and MPCA
 - c. Reducing road salt application by using new technology, calibrating equipment, and adjusting anti-icing and deicing methods based on weather forecasts; and storing salt properly to reduce leaching.
 - d. Using and storing pesticides and fertilizers safely.

Education activities:

1. Activity: Provide local decision makers (city councils, planning commissions, county commissioners, etc.) with information and training needed to implement policies, programs, and practices that protect and restore water resources. This includes, but is not limited to, Minimal Impact Development Standards (MIDS) and Shoreland/Buffer rules.
2. Activity: Offer professional trainings for area business owners, lawn care providers, and winter maintenance contractors to share information about local water issues and encourage business practices that protect surface and groundwater resources.

Carnelian Marine St. Croix 10-year Management Plan: Education

Tasks to Accomplish Goals, Objectives and Specifics on Activities

PUBLIC EDUCATION AND ENGAGEMENT

- Update webpages for each lake and stream with water quality data, reports and shoreline evaluations
 - 10hrs per year
- Send four newsletters per year to all residents in the District
 - 120hrs per year
- Share water quality info and trends with Washington County Parks to post on their park pages for Big Marine and Square Lakes (once per year)
 - 2hrs per year
- Create interpretive signage for popular water resources with public access. Include web link or QR code to access current water quality data. (create once, maintain as needed)
 - 50 hours to create + fabrication costs
 - 5hrs once every three years to maintain
- Share water quality info via email and district newsletter (once per year)
 - 10hrs per year
- Share water quality info via press release / article in local newspapers (once per year)
 - 4hrs per year
- Share water quality info via social media platforms (3x per year)
 - 6hrs per year
- Deliver special mailing to riparian landowners with information about water quality, trends, and upcoming projects on their lake or stream (1x per year)
 - 5hrs each x number of water bodies
- Attend city/township and lake association meetings to share water quality info (once per year)
 - 50hrs per year
- Create posters or displays for community events (create once; update annually)
 - 20hrs
- Table at 3 community events (attend an event in each community at least once every three years)
 - 24hrs per event
- Support 3 volunteer monitoring programs, including with students
 - 16hrs
- Host ice creams socials (once per year)
- 15hrs per event Continue to partner with EMWREP (ongoing)
- Share info via email and district newsletter (6x per year)
 - 24hrs per year
- Share info via social media platforms (50x per year)
 - 50hrs per year
- Table at community events (attend an event in each community at least once every three years)
- Partner with community groups, nonprofits, and other partners (ongoing)
- Continue recruiting and training water stewards

- 15hrs per steward
- Highlight local water stories – people, places, habitats, ecology 4x per year
 - 32hrs per year
- Support volunteer monitoring programs, including with students (20 residents per year)
- 80hrs Encourage and support development of lake and stream associations or friends' groups
 - 40hrs
- Foster connections to water management through social groups
 - 24hrs
- Establish a collaborative agricultural/rural support group
 - 80hrs
- Increase engagement of Citizen Advisory Committee to provide input, assist with education programming, and as watershed ambassadors (3 meetings and 2 events/yr)
 - 180hrs
- Develop and annually update professional fact sheets for programs and projects
 - 80hrs
- Publish and distribute annual "District at a Glance"
 - 24hrs

LANDOWNER OUTREACH

- Ensure that permit information is posted on website and is updated and continually improved to be understandable.
 - 24hrs per year
- Share info about permit program via email and district newsletter and community newsletter articles (once per year)
 - 16hrs per year
- Share info about permit program via press release / article in local newspapers (once per year)
 - 4hrs per year
- Share info about permit program via social media platforms (2x per year)
 - 2hrs per year
- Produce and deliver special mailing to riparian landowners with info about permit program (1x per year)
 - 32hrs per year
- Conduct workshop for realtors selling shoreline property in CMSCWD (once every 2 yrs)
 - 30hrs each (for all staff involved)
- Conduct shoreline workshop for landowners (every year)
 - 30hrs each (for all staff involved)
- Send reminder / check-in email to city, county and township zoning staff (once per year)
 - 2hrs per year
- Develop watershed welcome packet for new residents (create once; update annually; delivery = 4x per year)
 - 30hrs to create
 - 5hrs per year to update

- 30hrs per year to deliver
- Educate riparian landowners about lake/stream ecology and the ecological importance of shoreline and streambank buffers. Train and assist riparian landowners in projects to protect and enhance existing buffers areas, and restore altered shorelines and streambanks.
 - Deliver special mailing to riparian landowners (1x per year)
 - 5hrs per year
 - Highlight exemplary riparian areas through tours, neighborhood parties, and other special events (1x per year)
 - 30hrs per event
 - Recognize and celebrate watershed champions
 - 24hrs
 - Continue to partner with EMWREP to conduct workshops
 - 30hrs each
 - Create high quality “coffee table” magazine highlighting high quality lakes and streams via Midwest Glacial Lakes Shoreline Living Magazine
 - 160 hours to create, print, distribute
- Educate bluffland landowners about St. Croix Riverway rules and the importance of protecting bluffland areas. Train and assist bluffland landowners in projects to protect and enhance their riverway properties.
 - Partner with SCRA / NPS to deliver special mailing to bluffland landowners (1x per year)
 - 5hrs per mailing
 - Partner with SCRA to develop watershed welcome packet for new bluffland landowners (create once; update annually; delivery = 4x per year)
 - 40hrs to develop
 - 16hrs annual for identification and deliver
 - Conduct workshop for realtors selling bluffland property in CMSCWD (once every 2 yrs.)
 - 30hrs (all staff involved)
- Educate septic owners about the potential impacts of septic systems on surface and groundwater quality, as well as proper care and maintenance of septic systems.
 - Include article in district newsletter (1x per year)
 - 1) 8hrs
 - ☐ Continue to partner with EMWREP to share info via press release / article in local newspapers (once per year)
 - 1) 8hrs
 - ☐ Share info via social media platforms (10x per year)
 - 1) 16hrs
 - ☐ Include info in watershed welcome packet (create once; update annually; delivery = 4x per year)
 - 1) 8hrs

- 2) Create targeted mailer to high risk septic owners (includes meetings and educational material development in coordination with public health) 60hrs each year to coordinate, develop, refine, and mail
 - ☑ Create and annually refine mailer to all septic and well owners about the potential impacts of chemicals and pharmaceuticals to groundwater and proper locations and times for safe disposal
 - 1) 60hrs
 - ☑ Continue to partner with Washington County on workshops for realtors (once every year (year 1 shoreland, year 2 bluffland, year 3 shoreland, year 4 bluffland, etc.)
- Ensure that BMP program info is posted on website and easy to find and understand (update annually)
 - 8hrs
- Share info about technical assistance in the District in targeted mailing (once per year)
 - 8hrs
- Share info about watershed district technical capacity via press release / article in local newspapers (once per year)
 - 8hrs
- Share info about BMPs and technical resources via social media platforms (2x per year)
 - 4hrs
- Deliver special mailing to riparian landowners with info about shoreland BMPs, technical assistance and BMP program (1x per year) YES!
 - 24hrs
- Include info in watershed welcome packet for new residents (create once; update annually; delivery = 4x per year) (already accounted for in other categories)
- Partner with specific targeted associations, community groups, and other partners (ongoing)- 3 Big Carnelian groups, MOSC Citizens, Big Marine Lake Association, Willow Brook group, Scandia Community Group, St. Croix River Association Group, 3 Agricultural or lake groups.
 - 16 hours group x 11 groups
 - 176 hours per year
- Continue to partner with EMWREP to conduct Blue Thumb workshops and conduct other BMP education (ongoing)
 - 16 hours per workshop

PROFESSIONAL TRAININGS FOR BUSSINESS AND LOCAL GOVERNMENT

- Continue to partner with EMWREP, et al. to conduct annual St. Croix River workshop on the water and educational webinars (once per year)
 - 16hrs
- Attend city/township meetings (12 meetings once per year)
 - 48hrs
- Pre-ordinance work- meet with city and township staff (12 meetings annually) Attend planning commission and council meetings (18 meetings annually)
 - 90hrs each year in 2022 and 2023
 - 240hrs each year in 2024 and 2025

- Deliver email updates to city, county and township staff and decision makers (once per year)
 - 8hrs
- Continue to partner with EMWREP to offer lawn care and SMART salting workshops (twice per year)
 - 15hrs per workshop
- Continue to partner with EMWREP to deliver SMART salting and lawn care information to municipalities and businesses via email and video (twice per year)
 - 10hrs per year
- Include “What to ask for from your lawn care provider” in watershed welcome packet for new residents (create once; update annually; delivery = 4x per year)
- Annual half day tour of watershed projects with municipal staff
 - 24 hours

**Carnelian Marine St. Croix 10-year Management Plan: Education
Target Outcomes and Priority Audiences**

Target Outcomes				Measurable Goals		Audiences				
Awareness	Understanding	Motivation	Behavior Change	Topic	Reference to Goals	Riparian owners	Non-riparian residents	Local officials and staff	Businesses	Other
X	X			Water Quality - actual data and trends aren't well known and understood	WQ1 WQ2 E&O1	XX	X	X		High priority landowners
X	X		X	Water Quality - bluff protection	WQ3			X		Bluffland property owners
X	X			Water Quality - understanding rules, permitting, etc.	O&M2 O&M3 O&M4	XX	X	XX	X	Realtors New Landowners
X	X	X	X	Water Quality - stormwater runoff from urban and ag	WQ6 WQ7	XX	XX	X	X	Ag landowners Riparian Landowners
X		X		Water Quality - BMP programs	WQ8	X	X	X	X	High priority landowners
X	X	X	X	Water Quality - riparian protections	WQ9 UP1	XX		X		High priority landowners
X	X			Water Quality - septics	GW3	X	X	X		
X	X			Water Quality - precipitation changes, need resiliency	FLOOD1 FLOOD3	X	X	XX		
X	X	X	X	Water Quality - local decision making and ordinances	O&M3 O&M4			XX		
X	X	X	X	Upland Resources - restoration, management, invasive species	UP1	XX	X	X		