

# 3J EDUCATION PROGRAM

## 1. ISSUE

Education is recognized as a key component of implementing the Carver County Water plan. Education is necessary to help people make informed decisions and build sustainable lifestyles and habits that help protect water resources. Most potential contamination threats to surface water and groundwater are human-caused, thus a significant element in the prevention of contamination can occur through educational efforts. Thus education is a key component of implementation of good water quality and conservation practices. In developing the education program, it is necessary to identify the target audiences, priority issues, available programs and tools, and best delivery methods to be effective and efficient.

Education is also part of the requirements with a Municipal Separate Storm Sewer System (MS4) permit. Carver County and the cities of Carver, Chaska, Waconia, and Victoria all have MS4 permits. The permit requires the entity to create a Stormwater Pollution Prevention Program with six components, one of them being public education and outreach, another being public participation.

## 2. BACKGROUND

The implementation of this Plan relies on three overall categories of activities: 1) Regulation, 2) Incentives, and 3) Education. For most issues, all three activities must be part of an implementation program. Regulation and incentives alone are rarely enough to create an environment of low risk, thus there is a need for education.

Education increases the understanding of risks and helps prevent problems. In addition, education can be a more simple, less costly and a more community friendly way of achieving goals and policies. Education efforts can provide the framework for more of a “grass roots”, community plan implementation, while regulation and incentives traditionally follow a more “top-down” approach. It is recognized however, that education by itself will not always meet intended goals, has certain limitations, and is characteristically more of a long-term approach.

Nearly all the issues discussed in this Plan have a policy or implementation activity needing education. This section outlines the education work plan for Water Management Plan issues. Education efforts are conducted through the education coordinator position who seeks to reach the audiences through a variety of methods including workshops, press releases, websites, newsletters, presentations, etc.

### **3. GOAL**

Goal ED-1 To provide those living, working, and recreating in Carver County with the knowledge, skills, and motivation required to ensure protection and improvement of the county's surface water and groundwater resources.

### **4. POLICIES**

Policy ED-1 Carver County recognizes that education can play a key role in the protection of groundwater and surface water resources. The County supports and encourages education efforts which target a wide range of issues and audiences in the county.

Policy ED-2 Carver County will include a water education program as part of implementing this Plan. This will include development of, and annual review of a one-year workplan that outlines education efforts. High and medium priority objectives shall be identified in this workplan.

Policy ED-3 Education efforts shall be coordinated between all involved (local, regional, state and federal agencies). Duplicative or overlapping efforts should be reduced as much as possible in order to increase efficiencies and present unified messages in an education program.

Policy ED-4 The County strongly encourages LGU's and other agencies to participate in, and initiate education efforts.

### **5. IMPLEMENTATION**

Implementation of water education goals and policies will occur through the development of a one-year work plan developed by the education coordinator. Both components of the MS4 permit requirements are met through the implementation of the different education programs and tools listed below.

Implementation of the education plan is lead by the education coordinator. Responsibilities include, but are not limited to;

- Identify target audiences and educational needs.
- Create, develop, execute and evaluate educational programs to meet these needs (workshops, seminars, K-12 programs, presentations, etc.)
- Continue existing education programs.
- Create networks and collaboration with other agencies (national, statewide, and local).
- Create and maintain education tools including website, online newsletter, fairs & expos, library displays, etc.
- Create and maintain volunteer programs.

## Target Audiences

Within Carver County there are many different groups that are involved in the protection, preservation and management of the County's water resources. The work plan has divided these groups into four target audiences; Home/land owners, decision makers, staff, and K-12. It is important to identify each target audience and tailor education programs accordingly to the associated needs and priorities. Each target audience has a different role relating to water resources.

- Home/land owners: residents living within the CCWMO watershed boundary.
  - Needs
- Decision makers: elected and appointed officials including city councils and planning commissions.
- Staff: of planners, engineers, contractors, developer and public works staff.
- K-12: students.

## Priority Issues

The work plan is structured through identification and prioritization of strategies and objectives which closely follow the main issues discussed in this Plan. Annually, the one-year education plan is presented to the Water, Environment and Natural Resources (WENR) Committee and Land & Water Services (LWS) staff for recommendations and approval. The WENR committee and LWS give input on whether the education plan is targeting the appropriate issues and audiences, recommends additional programs and tools and helps guide the education focus.

## Programs & Tools

Carver County has developed many education tools and programs as well as collaborated with other agencies for ideas and programs. The following is a list of the education programs. As stated above, the County has identified four target audiences. Education programs & tools for Carver County include, but are not limited to, the following lists by target audience.

### Education Programs & Tools for Home/Landowners

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|-------------------|---|
| Imp Strategy ED-1 | Stream Health Evaluation Program (SHEP)<br>SHEP provides citizens with professional training on how to evaluate stream health by physical characteristics and bio-indicators (macro-invertebrates). Citizens get hands on opportunities to learn about the water resources around them, stream ecology, and importance and methods of monitoring. |
| Imp Strategy ED-2 | Carver County Land & Water Services Online Newsletter<br>Carver County's LWS online newsletter provides citizens and employees in the County with information on the Environmental Center, recycling, water quality and conservation, upcoming workshops, volunteer opportunities and more.   |

Imp Strategy ED-3 Shoreline Restoration and Raingardens Seminars/Workshops  
Carver County provides seminars/workshops for homeowners on shoreline restorations and raingardens. These seminars and workshops may include background information and/or more in-depth information on methods of design, plants selection, site preparation, etc.

Imp Strategy ED-4 Blue Thumb: Planting for Clean Water.  
Carver County is a partner of the metro wide Blue Thumb organization which is an outreach program to educate homeowners on the importance and methods of construction of raingardens, shoreline stabilization projects and native gardens.

Imp Strategy ED-5 Open Houses  
Open houses are used for Total Maximum Daily Loads (TMDLs), Comprehensive Plan 2030 and other topics to provide education to citizens. During open houses information is often presented in poster form and staff are present to answer questions.

Imp Strategy ED-6 Brochures, Flyers & pamphlets  
Brochures, flyers and pamphlets are available at the Carver County Land & Water Services office, expos, fairs and online containing information on a number of different topics including; Direct Discharge Elimination Program, Stream Health Evaluation Program, Raingardens, TMDLs, cost share, photo conests and more.

Imp Strategy ED-7 Library displays  
Posters containing LWS information are often displayed in the libraries around the County. Past displays have included information on noxious weeds, volunteer opportunities and photo contests.



**Carver County Fair LWS Stand**



**2008 WENR Tour on Lake Waconia**

Imp Strategy ED-8    Fairs & Expos  
LWS has participated in a number of fairs and expos including Carver County Fair, Volksfest, Waterosity, Chanhassen Business Expo and Norwood Young America Business Expo. These fairs are used to distribute information on all LWS areas.

### **Education Programs & Tools for Decision Makers**

Imp Strategy ED-9    Carver County's Stormwater Workshop  
This workshop is designed to education developers, local officials, planners, engineers and decision makers about stormwater management Best Management Practices (BMPs) and new methods and developments in stormwater research.

Imp Strategy ED-10    Non-point Source Education for Municipal Officials (NEMO)  
NEMO is a nationally recognized program for decision makers that educated about the relationship between land use and water quality. The program uses tools including the Watershed Game, View from the Lake tour, presentations, workshops and more.

Imp Strategy ED-11    Water, Environment & Natural Resources (WENR) Tour  
Each year Carver County Lane & Water Services takes the WENR Committee on a tour. The tour is designed to inform the committee on current, completed, and upcoming projects and provide education necessary to making informed decisions.

### **Education Programs & Tools for Staff**

Imp Strategy ED-12    STORMWATER U  
This University of Minnesota Extension Program has created a series of workshops designed to education and give hands on experience to public works staff, engineers, designers, planners, public officials, etc. on stormwater management methods. Workshops include topics of prevention, inventory, inspection, maintenance and management.

Imp Strategy ED-13    Carver County's Stormwater Workshop  
This workshop is designed to education developers, local officials, planners, engineers and decision makers about stormwater management Best Management Practices (BMPs) and new methods and developments in stormwater research.

## Education Programs & Tools for K-12 students

Imp Strategy ED-14 Wetlands Education Program (WEP)  
WEP is an annual program put on by Carver County Land & Water Services targeting 6th and 7th graders. The program takes place at the MN Landscape Arboretum and educates students on the importance, benefits, and function of wetlands.

Imp Strategy ED-15 Metro Area Children's Water Festival (CWF)  
CWF is an annual program targeting 5<sup>th</sup> grade students and taking place at the MN State Fair Grounds. The program is a collaboration of the 7 metro counties and many state agencies and local watershed districts. CWF reaches 1200 students a year.

Imp Strategy ED-16 Envirothon  
The Envirothon is an annual two day event at the MN Landscape Arboretum, one day for Junior High students and one day for Senior High students. The Envirothon is a collaboration of MACDE Area IV staff. The program is an environmental knowledge bowl that leads the winning team in High School on to the State Competition.

Imp Strategy ED-17 Volunteer Stream Monitoring Partnership (VSMP)  
VSMP gathers students together to do stream health monitoring looking at both the physical characteristics of the stream and bio-monitoring using macro-invertebrates. Students may then attend the annual River Summit at the Science Museum to present their results.

Imp Strategy ED-18 Presentations  
Other presentations include Earth Day, Funky Minds, Carver Historical Society Family Camp Weekend and more. Topics include; water quality monitoring and bio-indicators, methods to management stormwater, common water pollutants. These presentations range in audience and number and are done upon request of an audience.



**2007 Children's Water Festival with Water Drop mascot.**

Imp Strategy ED-19 Stormdrain Stenciling

As part of the education component on stormwater management, Carver County has begun the Stormwater Stenciling program and is currently working with organizations around the county to have the message “Don’t Dump: Drains to Stream (or river, lake, wetland) put on or near the stormdrains. Before each session, participants are given a lesson in stormwater, the stormdrain system, pollutants, and the message they are delivering by participating in the activity.

Imp Strategy ED-20 World Water Monitoring Day (WWMD)

Teachers receive a WWMD kit that can be used at any age to test water quality. Participants then enter data from samples into a large online database.

**All Around tools**

Imp Strategy ED-21 Land & Water Services Website

Imp Strategy ED-22 Land & Water Services Online newsletter

Released every 1-2 months the online newsletter shares information on Environmental Center hours, volunteer opportunity, tips for recycling, water conservation, etc., articles on projects, programs or other opportunities.

**Best delivery methods**

There are many ways to distribute information. The programs and tools available through Carver County Water Management Organization (CCWMO) have been chosen because they have been evaluated and shown to be useful at distributing information. Surveys are often the best way of evaluating a program, asking questions on both the content of the program/tool as well as the logistics. CCWMO is continuing to increase their use of information distribution through technology, recently with the switch from a paper newsletter to an online newsletter. CCWMO will continue to improve and increase distribution of information.