

## **CHAPTER 7: ELEMENT E. - PUBLIC INFO & EDUCATION**

The Deer Creek watershed offers countless opportunities for education. The overall public info and education strategy for the Deer Creek Watershed includes social marketing, media outreach, outreach through schools, and leveraging partnerships. The project will work with a variety of entities to co-sponsor and/or lead implementation of project components.

Social marketing activities to date have included the formation of a Deer Creek Watershed Friends citizen's arm of the Deer Creek Watershed Alliance. Everyone who receives the DCWA email newsletter is a Friend of the Alliance. In addition, a citizen-based Deer Creek Watershed Steering Committee helps to guide the activities of the Alliance. In addition, guest speakers at various speaker series have kept citizens informed on a range of related topics. Citizen engagement projects have included a creek clean up with 571 citizens participating, a creek naming project resulting in eleven newly named Deer Creek Tributaries. Interactive activities focusing on the water quality benefits of trees, booths at public festivals, hands-on invasive species removal, tree planting projects, and more. In addition, there will be focused attempts to continue to build the email newsletter list, and informative email newsletters are mailed out 4 times per year.

Media outreach has included press releases when warranted, and regular social media postings on Facebook. Leveraged partnerships will be utilized wherever possible to increase the effectiveness of outreach campaigns.

Outreach through schools is an additional public info and education strategy.

### **7.1 EDUCATION OUTREACH GOALS AND OBJECTIVES:**

1. Identify and obtain contact information for key citizen landowners in each municipality who are interested in clean and healthy rivers. Grow the contact list to at least 1-2% of the watershed in five years (1,000- 2,000 names) by tabling at festivals, encouraging peer-to-peer networking, making PowerPoint presentations, conducting media outreach campaigns, and/or sending out letters as publicity for the Rainscaping Cost Share Program.
2. Educate, grow the interest of, and motivate to action this core group, resulting in the publication of quarterly email newsletters, website updates, and educational public meetings.
3. Plan and develop citizen-led public engagement projects as prioritized by citizens in the watershed.
4. Support municipalities in conducting outreach to their citizens to take positive voluntary action in their own yards, resulting in at least 20 landowners with demonstration projects over a five-year period.
5. Facilitate communication between municipalities regarding model ordinances, incentives, pilot projects, and barrier removal mechanisms.
6. Identify key schools to implement demonstration projects that can be a source of ongoing education for students, parents, and the local community, resulting in at least 8 schools in the watershed with implemented demonstration projects over a five-year period.

7. Conduct workshops for area professionals as identified in the plan to improve project implementation success rates, resulting in at least one professional training workshop per year for a five-year period.

## 7.2 TARGETING THE AUDIENCE:

### **Individual landowners**

Seventy one percent of the land use in the watershed is single-family private residences, making this target audience the top priority to reach.

### **Municipal representatives**

With 20 different municipalities operating within the watershed, each with their own ordinances and governmental structure, communication with and between municipal representatives in the watershed is vital. In addition, municipal parks in the watershed can be developed to protect the riparian corridor and educate the public about stream dynamics. This is the second most important audience to reach.

### **Professionals and consultants working in the watershed in related fields**

Upgrading the knowledge base of engineers, horticulturalists, landscape architects, biologists, arborists, hydrologists, and other related professionals is a key ingredient to a successful watershed implementation strategy.

### **School representatives**

Identifying and working with interested schools in the watershed can provide key focal organizing points. In addition, when teachers involve students, this informs not only the next generation of community members, but also often reaches parents and grandparents. The Litzinger Road Ecology Center is located in the center of the watershed where it introduces students to natural stream systems influenced by urban development. In addition, there are many schools in the watershed and several of them border sections of the creek or its tributaries. Teacher education and strategies for using the creek to teach biology and the natural sciences can increase public awareness of the importance of streams in an urban environment as natural means of carrying stormwater and as important systems to support a diversity of plant and animal life. Topics of study can range anywhere from basic stream ecology and understanding of watershed principals to raising awareness about water quality and human impacts on our water resources.

### **Commercial/Industrial landowners**

Although not as primary an audience as the other sectors identified, commercial/industrial landowners are none-the-less an important audience to reach.

## 7.3 CREATING A MESSAGE

Key messages:

### **Clean and Safe Water**

When we have clean water, everyone wins, resulting in not only improved habitat and species diversity, but also improvements in recreational opportunities and in human and pet health, as well as economic benefits such as improved property values, reduced damage to infrastructure, homes and businesses, and reduced property loss from creek widening.

**Rain Gardens**

Improve public understanding of what a rain garden is, what purpose it serves, how it functions, and how to design one.

**Trees**

Increase public awareness of the impact of trees on water quality.

**Empowerment**

Motivated individuals can make a difference through voluntary efforts in their own yards and neighborhoods.

**Aesthetics, Effectiveness, Survivability**

Successful rainscaping projects have visual appeal, as well as meeting water quality goals over long term.

**Good neighbors**

Good neighbors pick up after their pets, manage stormwater on site, make sure their downspouts are not inappropriately connected to sanitary sewers and don't put trash or organic debris in the creek.

**Ongoing professional enhancement**

Quality professionals regularly educate themselves regarding new information in a rapidly changing field.

**We all live downstream**

Responsible municipalities take into consideration the impact of their procedures on other municipalities downstream.

**7.4 PACKAGING AND DISTRIBUTING THE MESSAGE FOR VARIOUS AUDIENCES:**

**Mass Media**

Develop and distribute press releases to the media as appropriate. The mass media will be targeted with outreach ideas as they arise and/or as opportunities become available. The Deer Creek Watershed Alliance will coordinate with others to contribute to the greater population in regards to PSE's, press releases and radio discussions.

**Online Materials**

Develop a web-based presence with interactive website, publish quarterly email newsletter, and engage citizens on social networking sites such as Facebook, Linked In, Twitter.

**Events**

Organize educational meetings; implement annual public engagement projects; deliver PowerPoint presentations to community and other groups; table at festivals, farmers markets, and other events; provide professional enhancement workshops for professionals; share results at conferences to a national audience.

**Leverage resources**

Partner with other groups who would like to develop and disseminate print materials, such as the Ladue Garden Club development of a tree planting guide for elementary students. Partner with municipalities to

conduct outreach to local citizens through municipal newsletters, public meetings, and other tools for communicating with local citizenry.

There are a lot of educational and outreach opportunities that can be found throughout the St. Louis region. Some of these educational efforts can be coordinated. That is the benefit of a large city. EPA and MSD and other entities have lots of information and brochures posted to their websites that can be used with permission. This information can be made available at various venues, (e.g. workshops, festivals, public forums, etc.). In many cases it may not be necessary to develop materials, but only print or disseminate information as needed/pertains to a particular area. Some examples of resources are:

EPA NPS outreach toolbox -> <http://water.epa.gov/learn/resources/adulttrn/npsout/index.cfm>

The university extension has a program that would benefit the watershed  
<http://healthyyards.missouri.edu/>

Similar programs: <http://extension.missouri.edu/cole/Programs/ag/Healthyyardsbro.pdf>

[http://www.gocolumbiamo.com/PublicWorks/StormWater/show\\_me\\_yards.php](http://www.gocolumbiamo.com/PublicWorks/StormWater/show_me_yards.php)

<http://www.jamesriverbasin.com/pages/programs>

HEC-TV Interview and video: <http://new.hectv.org/programs/ser/liquidlight/ep65.php>

Video only: <http://hectv.org/programs/spec/program.php?specialid=17>

Corresponding curriculum: <http://hectv.org/education/cur/science/swr.php>

## 7.5 EVALUATING EDUCATION & OUTREACH PROGRAM:

Watershed outreach implementation should include both formative and summative evaluation components. Formative tools will provide a feedback mechanism for ongoing improvement of the outreach efforts. Summative evaluation will provide indicators of education and outreach success.

### **Formative Tools**

Email newsletter surveys will be used to improve outreach and education efforts. Surveys will include measurements of gaps in citizen knowledge base, information on efforts landowners have undertaken and problems they have encountered, and preferences/priority interests of the target audiences. These formative surveys will be used as tools for improving the outreach and education program.

### **Summative tools**

These tools include documentation and measurement of effective products produced, and if the project was successful in reaching its outreach effort goals. These metrics may include: 1,000 people on email newsletter list and social networking sites achieved; increasing website “hits” per week over time; 6 festivals/farmers markets/events tabled per year; 6 PowerPoint programs delivered per year; at least 50% open rates on email newsletters; at least 100 participants in annual citizen engagement projects; at least 30 participants in annual professional enhancement workshops, etc. In addition, summative surveys that measure knowledge gained

among target audiences as contrasted with formative survey baselines will provide conclusive metrics on success of education efforts.

An evaluation can also include the number of people who participate in activities and /or implement management measures as a result of the Educational/outreach efforts.