

6.0 INFORMATION & EDUCATION PLAN

Spring Creek is one of the higher quality streams in northeast Illinois. Water quality and biological data suggest there is only minor overall impairment due to current land use practices. However, future land use changes, development pressure, nutrients (fertilizers), sediment, de-icing salt, invasive species, and poor land management practices are among the primary threats to watershed health now and in the future. The primary purpose of this plan is to spark interest and give stakeholders a better understanding of the watershed to promote and initiate plan recommendations with the overall intent focusing on protecting high quality conditions and restoration of identified impairments in the watershed.

The cumulative actions of individuals and communities watershed-wide can accomplish the goals. In a region dependent upon groundwater for their water needs, watershed health is of primary importance. When people begin to understand the issues related to water quality and natural resource protection/enhancement they begin to change their behaviors and activities thereby improving the overall health of the watershed.

A successful Information & Education (I&E) plan first raises awareness amongst stakeholders of watershed issues and problems. This is followed by education and actions that stakeholders can take to address the issues and problems. I&E plans include the following components (UEPA 2008):

- Define I&E goals and objectives.
- Identify and analyze the target audiences.
- Create the messages for each audience.
- Package the message to various audiences.
- Distribute the message.
- Evaluate the I&E program.

Recommended Information & Education Programs

Development of an effective I&E plan begins by defining I&E goals and objectives. The Spring Creek Watershed partnership (SCW) specifically addressed watershed information and education issues by developing an education goal with *primary* objectives. Many other *secondary* objectives that are not included under the education goal are also addressed in this Section.

Goal F: Foster appreciation and stewardship of the watershed through education.

Primary Objectives:

- 1) Educate the public on water supply, infiltration, potential contamination, groundwater recharge and nonpoint source pollution issues and the link between how property owners manage the land.
- 2) Provide watershed stakeholders with an education plan that promotes the knowledge, skills, and motivation needed to take action on implementing the watershed plan.
- 3) Educate the public on the benefits of native plants, a balanced ecosystem, and natural area restoration.
- 4) Identify open space parcels adjacent to public facilities such as schools that would be appropriate for outdoor education.
- 5) Install environmental interpretation/education signage at access points throughout public open space.
- 6) Develop recommendations for education and alternatives to phosphorus use.
- 7) Develop recommendations for education and alternatives to road & other pavement salt use.
- 8) Educate homeowners how to best maintain septic systems.

The recommended target audience for each education action is based on the need to reach each goal or objective. The target audience is a group of people who are intended to be reached by a particular message. The target audience can include people of all demographics, locations, occupations, watershed roles, and ages. The general target audiences selected to meet watershed goals and objectives include riparian and other landowners, residents, local government (i.e. municipalities and townships), homeowners associations, developers, businesses, lake property owners, schools, and equestrian and farmland owners. Each audience has specific needs and requirements and can impact the watershed on different levels.

Creating and distributing a message for each audience is done through development of actions to address the I&E program needs related to the watershed goals and objectives. The I&E needs for Spring Creek watershed were revealed through stakeholder meetings, with residents, and municipal leaders. An I&E Plan Matrix (Table 40) was developed to help implement an I&E Plan for the watershed. Not only does the matrix include education actions, it also includes:

- Primary goals addressed by each action
- Target audience(s)
- Best package (vehicle) for delivery of the action message to the target audience
- Lead and supporting organizations
- Potential outcomes (measurable behavior change)
- Estimated cost to implement each education action
- Time Fram

As with any plan, the I&E plan should be regularly evaluated to provide feedback regarding the effectiveness of the outreach efforts. Evaluation conducted early on in the effort will help determine which programs are working and which are not. Based on this information, money and time can be saved by focusing on the programs that work and doing away with and/or refining those that do not. Section 8.0 of this report contains a “Report Card” with milestones related to watershed education that can be used to assess the I&E efforts.

Table 40. Information and Education Plan Matrix.

Education Action	Primary Goal	Target Audience	Package (vehicle)	Lead and Supporting Organizations	Outcomes/Behavior Change	Estimated Cost	Time Frame
Primary Objectives & Actions							
Educate the public on why water quality is important and how water supply, infiltration, potential contamination, groundwater recharge, and nonpoint source pollution issues are linked to public lifestyle and how property owners manage the land.	Goal A	General Public	SCW/FCWP and BACOG hold an annual groundwater recharge and quality "event" day that includes educational workshops and field trips around the watershed to educate the general public about groundwater and ways to change everyday activities to promote recharge and water quality.	SCW, FCWP, BACOG	"Event" day attendees understand the importance of groundwater recharge and quality and begin to change everyday activities. By doing this neighbors and others become aware and also change.	\$3,000	Annually
Educate the public on the benefits of native plants, a balanced ecosystem, and natural area restoration.	Goal D	General Public	CFC offer workshops that help homeowners identify and choose the appropriate native plants and trees that can be used in landscaping and where to purchase them. Certify properties under Conservation@Home or the National Wildlife Federation-Backyard Wildlife Habitat Certification Programs.	CFC, SCW Consultants, IDNR; FPDCC; FPDKC; NRCS	Homeowners become more aware of the beauty of native plants and their environmental benefits. When visiting a nursery, homeowners are able to identify native plants or go to nurseries or plant sales that specialize in native plants.	\$1,000	Annually
Provide schools with resource information applicable to creating outdoor curriculum on adjacent or nearby natural areas or other open space.	All Goals	Students	Educate students about watershed planning and the importance of implementing Management Measures to improve overall watershed conditions. Integrate watershed planning and education into existing elementary, middle and high school science curriculum.	SCW, CFC, IDNR; FPDCC; FPDKC; NRCS	All students that live in the Spring Creek or other surrounding watersheds will understand the environment in which they live and realize the importance of maintaining a healthy place for people and nature to live in harmony. What is learned will be passed on to parents and future generations.	\$3,000	Every 3 Years
Install environmental interpretation/ education signage at access points throughout public open space.	All Goals	General Public	Create signage at key points in restoration sites throughout the forest preserve district to highlight projects, encourage additional work, and continue to recruit local champions. Watershed education signage to highlight key points in the watershed.	FPDCC; FPDKC; IDNR; Friends of Spring Creek; CFC	Visitors and riders in the Forest Preserves will learn about the work completed and the importance of watershed protection. Residents in the watershed will understand the watershed boundaries and that there is a plan to guide future practices.	\$5,000	1-5 Years
Develop recommendations for education and alternatives to phosphorus use.	Goal A	Landowners & Municipalities	SCW, BACOG, and CFC distribute "Riparian Area Management Guide for Citizens" (developed by LCSMC) to key large lot owners near waterbodies and other sensitive areas. Also use media to communicate to a wider variety of landowners the negative impacts of using fertilizer and recommend environmentally friendly alternatives.	SCW, CFC, BACOG, IEPA, LCSMC, Municipalities	The majority of landowners and local governments begin to use environmentally friendly fertilizers thereby reducing phosphorus loading into stormsewers and downstream waterbodies.	\$1,000	1-5 Years
Develop recommendations for education and alternatives to road & other pavement salt use.	Goal A	Municipalities Townships, Businesses, DOTs	SCW obtain available information related to road salts and the alternatives and meet with local governments to discuss the alternatives.	SCW, CFC, BACOG	Local governments cut down on the amount of salt used and begin trying alternatives that are more environmentally friendly.	\$1,000	1-5 Years
Educate homeowners how to best maintain septic systems.	Goal A	Homeowners	SCW and local municipalities offer workshops and/or mail educational letters to homeowners known to have septic systems.	SCW, Municipalities, County, Consultant	Homeowners begin to understand the threats that septic systems have on water quality. Owners act quickly to mitigate and repair all identified problems.	\$2,000	1-5 Years
Educate equestrian community about strategies to minimize pollutants.	Goal A	Equestrian Community	Offer workshops that educate the equestrian community about minimizing pollutants.	RCBH, Fox River Valley Pony Club, SCW; Friends of Spring Creek	Equestrians will understand the impacts of horses on the watershed and educate visitors and residents on practices that will have low impact on water quality and habitat to preserve the resources for the next generation of riders in this unique community.	\$1,500	Every 5 Years
Educate owners of large open or partially open lots about the value of restoring natural communities to their land to improve the function of existing open space in the watershed.	All Goals	Private Owners; Businesses; Local governments	SCW co-host a workshop to educate large landowners about the potential positive impacts of restoring large areas of land and protecting it with conservation easements or other means. SCW and CFC initiate a pilot funding program for restoration and protection for large land owners.	SCW, FCWP, CFC, FPDCC, FPDKC, NRCS	Large lot landowners become aware of restoration strategies and the importance in creating beneficial wildlife habitat and large greenway corridors. This causes them to take action by restoring the land and using conservation easements or other means to protect it.	\$1,000	Every 3 Years

Education Actions	Primary Goal	Target Audience	Package (vehicle)	Lead and Supporting Organizations	Outcomes/Behavior Change	Estimated Cost	Time Frame
<i>Secondary Objectives & Actions</i>							
Provide educational information on flood proofing to owners with structural flood problems.	Goal C	Property owners with flooding	Workshops for landowners, municipal engineers and municipal leaders to mitigate flood problems in flood prone areas. Peer-to-peer training seminars.	FEMA, Municipalities, Township	Planners will understand the impact of future developments on current flood prone areas, and work to mitigate current problems with solutions that are appropriate. Homeowners will understand and keep an eye on future planning to ensure problems are addressed appropriately.	\$2,000	Every 5 Years
Conduct garden and restoration walks in areas currently planted with native species for stakeholders interested in using natives.	Goal D	General Public	Garden tours will focus on native plant communities within the watershed and conduct tours of restored areas for the general public and for stakeholders.	Owner; CFC; SCW, FCWP, garden clubs	The practice of implementing and improving natural areas will be encouraged and become a more viable solution to addressing landscaping on large lots, and in private formal gardens.	\$3,500	Annually
Educate riparian property owners on ways to improve riparian and streambank conditions for water quality and wildlife habitat.	Goals A&D	Riparian Landowners	SCW, IDNR, and NRCS conduct workshops for riparian landowners that recommend bioengineering options, funding sources, and qualified contractors for stabilizing eroded streambanks.	SCW, IDNR NRCS, Consultant	Riparian landowners recognize benefits of bioengineering to reduce bank erosion and habitat improvement for wildlife and use these techniques in place of hardscaping or traditional landscaping and seek funding opportunities to complete projects.	\$1,500	Every 3 Years
Educate land owners on agricultural practices to improve water quality.	Goal A	Farmland managers and owners	SCW helps to identify tools and opportunities to provide education to large farm owners on Management Measures with livestock and crops.	SCW, CFC, NRCS, RCBH, For River Valley Pony Club	Less run-off occurs from agricultural practices in the watershed.	\$500	Every 3 Years
Educate stakeholders on the identification & maintenance of drain tiles.	Goals A&C	Large land owners	SCW helps to provide information and programs on the modification, maintenance and identification of drain tile issues.	SCW, NRCS	Less flooding and contamination or increased runoff from failed drain tiles.	\$500	Every 5 Years
Educate residents and businesses about the benefits of constructing rain gardens to capture and filter stormwater in higher density population areas and in flood prone areas.	Goals A&C	Businesses, Homeowners, Municipalities	SCW co-host a workshop with FCWP to discuss construction and planting of rain gardens.	SCW, FCWP, CFC, Consultant	Residents and businesses learn of the water quality, flood reduction, and aesthetic benefits that rain gardens have and begin installing them. Municipalities begin requiring rain gardens and decentralized stormwater management in new subdivisions.	\$1,500	Every 3 Years
Educate owners/developers of old and new developments on ways to reduce volumes and rates of stormwater runoff by protecting natural areas/open space and implementing BMPs that improve water quality.	All Goals	Owners, Developers, Municipalities	Municipal Engineers, USACE, and developer meet on case-by-case basis to develop strategies and incentives for limiting impervious surfaces and using existing natural areas and open space. Homeowners Associations and developers allocate funding toward natural area protection/open space preservation and maintenance.	SCW, Engineering departments, HOA, USACE	Owners and developers learn to utilize the natural drainage features of the land, preserve open space, and construct Management Measures that reduce runoff. Municipalities provide incentives to developers that reduce impervious surfaces and use other measures (exceeding minimum requirements) in new developments.	\$2,000	Ongoing
Educate municipalities, businesses, and homeowner associations on how to maintain naturalized detention basins.	Goals A&D	Municipalities, Businesses, Homeowners Associations	SCW distribute flyer and offer workshop to owners of all detention basins identified in the watershed that stresses maintenance of existing natural basins and retrofits to improve poorly functioning or poorly designed basins.	SCW; CFC, Consultant	Municipalities, businesses, and homeowner associations realize potential benefits of naturalized detention basins to reduce flooding and improve water quality and implement ongoing maintenance activities and retrofits of poorly designed/functioning basins.	\$3,000	1-5 Years
Educate school-aged children, adults, corporate, and political entities how to appreciate and provide stewardship in the watershed.	Goal F	Children, Adults, Corporate Entities, Political Entities	SCW, IDNR, CFC, conduct volunteer days related to stewardship activities that can be performed to improve the watershed. Activities could include stream or lakeshore clean-ups, development and installation of interpretive signage, and volunteer natural area maintenance.	SCW, IDNR, CFC	All people in the watershed become aware of how their daily activities affect the environment and make individual changes that cumulatively improve the environment.	\$5,000	Annually
Establish a watershed information sharing website.	All Goals	All Watershed Stakeholders	SCW create and maintain a website to keep people informed about watershed issues and opportunities.	SCW	Website users have information related to the watershed including potential and ongoing projects, watershed problems, funding opportunities, and a calendar of upcoming events.	\$3,000	Ongoing

Education Actions	Primary Goal	Target Audience	Package (vehicle)	Lead and Supporting Organizations	Outcomes/Behavior Change	Estimated Cost	Time Frame
Educate decision makers within local governments, corporations, and other non-government agencies on how to provide a vision for protecting, restoring, and enhancing ecological systems and natural communities within their jurisdiction.	All Goals	Decision makers with local governments, Corporations, and Non-Government agencies	SCW meet with Village and Township trustees and large corporation and non-government agency heads to promote the Watershed Plan and inform them of watershed issues in their jurisdiction. SCW send brochures to other smaller agencies not included on primary contact list.	SCW	All decision makers are familiar with the Spring Creek Watershed-Based Plan, general condition of the watershed, and issues to be addressed within their jurisdiction. Local governments adopt the Watershed Plan.	\$5,000	Ongoing
Include progress reports at local governments meetings as they relate to the Spring Creek Watershed-Based Plan goals and objectives.	All Goals	All Watershed Stakeholders	SCW representatives attend village and township meetings to report on progress of plan efforts toward reaching goals and objectives.	SCW; Villages; Townships	All interested stakeholders are kept up to speed regarding watershed planning and implementation efforts and how they are addressing Watershed-Based Plan goals and objectives.	\$5,000	Ongoing
Inform the general public, that a Watershed-Based Plan has been developed for Spring Creek Watershed to gain interest in implementing recommended actions.	All Goals	General Public	Use as many forms of media such as radio, television, newsletters, websites (SCW and Partners), and newspapers to inform the public about the Watershed-based Plan and ways that the public can obtain the plan and help implement projects.	SCW	The majority of the public in the watershed have excellent knowledge of the watershed conditions and who to contact to get involved and implement projects. The public also begins to alter every day activities that may lead to environmental degradation.	\$1,000	Ongoing

Abbreviation	Stakeholder
BACOG	Barrington Area Council of Governments
CFC	Citizens for Conservation
SCW	Spring Creek Watershed partnership
FCWP	Flint Creek Watershed Partnership
FPDCC	Forest Preserve District of Cook County
HOA	Homeowners Association
IDNR	Illinois Department of Natural Resources
FPDCC	Forest Preserve District of Cook County
FPDKC	Forest Preserve District of Kane County
IEPA	Illinois Environmental Protection Agency
LCSMC	Lake County Stormwater Management Commission
NRCS	Natural Resource Conservation Service
SWCD	Soil and Water Conservation District
USACE	US Army Corp of Engineers
DOTs	Departments of Transportation
RCBH	Riding Club of Barrington Hills