

CREEK SIGNS



Guide to Developing
a Local Watershed and
Creek Signage Program

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**Produced by
Southern Sonoma County
Resource Conservation District**

1301 Redwood Way, Suite 170
Petaluma, CA 94954
(707) 794-1242 x5

www.sscr.cd.org



Produced by
Southern Sonoma County Resource Conservation District

Principal Writer & Editor: Vicki Hill, Vicki Hill & Associates

Principal Researcher: Chris Taylor, SSCRCD staff

Artwork by: Lisa Krieshok

Graphic Design and Layout: Tom Hansen

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This guide is available on our website at: www.sscr.cd.org



CREEK SIGNS

This Guide is dedicated to past SSCRCD Board Director, Maxine Durney and her granddaughter Elizabeth Durney, who brought forth the idea locally, volunteered countless hours to select sign locations and foster support of the program. We salute them for their perseverance and commitment to watershed education and awareness in our treasured Sonoma County.

**Our thanks to the California Coastal Conservancy
for funding for this guide and sign program
and for their partnership on many
other local projects.**

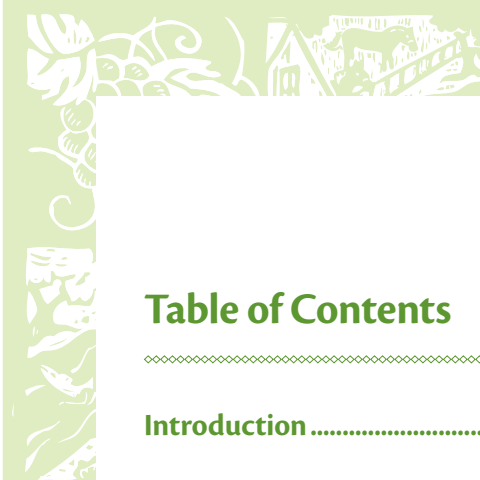


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Guide to Developing a Local Watershed and Creek Signage Program


Introduction

The purpose of this guide is to assist agencies and organizations in developing and implementing watershed and creek sign programs within their jurisdiction. This guide is intended to share the knowledge gained by agencies and community groups that have successfully implemented sign programs.

The guide covers all aspects of developing this program, which may be used as a template by other agencies within the state. Specifically, this guide identifies key components of a successful creek sign program, funding options, management responsibilities and regulatory considerations. It provides a step-by-step outline, which can be utilized by other Resource Conservation Districts (RCDs), city and county government, water agencies and watershed groups. Information contained in this guide answers questions such as:

- How are sign locations chosen?
- Who is responsible for designing, constructing, permitting, installing and maintaining signs?
- How is a sign program funded?
- What permits are required for signs?

This guide is based on the creek and watershed sign program developed and implemented through a shared partnership between the Southern Sonoma County Resource Conservation District, Sonoma County Regional Parks, and the West County Watershed Network, with funding from the California Coastal Conservancy. Research and consultation with other jurisdictions that have implemented successful sign programs was conducted extensively to develop this guide.



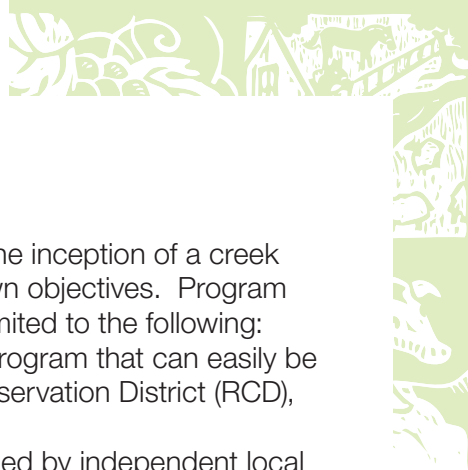
Please note that there are numerous ways to develop and implement a sign program, so agencies are encouraged to explore partnerships that best fit their local situation. A creek or watershed sign program can be a stand-alone program or a component of a larger watershed education or stewardship program. Opportunities for a sign program should be investigated through consultation with local organizations and agencies involved in watershed and water resource management. Programs can be established at the regional, county, or city level or even within a particular watershed.

Key Elements of a Sign Program

A watershed and creek sign program's goals and objectives should be clearly stated at the beginning of the process.

Goals

The main goal of a signage program is to enhance the public's awareness of the watershed in which they live and to encourage good stewardship of our valuable streams, wetlands, water supply and overall watershed. By identifying local creeks and watershed boundaries, the local public may become more aware connected to the watersheds they live in or pass through. Signs create a sense of ownership and responsibility of local streams and the surrounding environment. All too often we pass over creeks and through watersheds without realizing their importance. Awareness is the first step toward becoming interested in the watershed, which leads to the public becoming more involved in decision-making and hands-on watershed and water quality protection and restoration efforts.



Objectives

The numerous parties involved with the inception of a creek sign program may each have their own objectives. Program objectives may include, but are not limited to the following:

- Create an educational awareness program that can easily be implemented by any Resource Conservation District (RCD), local agency or citizen group.
- Develop a program that will be funded by independent local entities. These entities can sponsor watershed signs and/or creek signs, while providing a form of publicity for the local entity as well as providing local involvement in improving the environment.
- Cause the public to take better care of its resources and help solve problems like:
 - Dumping of household garbage, old appliances and yard waste into streams
 - Improper use and disposal of chemicals
 - Littering.

Many jurisdictions have adopted sign programs to successfully achieve these objectives. Examples are found extensively in California and throughout the United States.

Key Elements of a Sign Program

The key elements of a successful sign program are listed below and described in more detail in subsequent sections:

- Clear designation of program manager, agency responsibilities and framework for implementation, including agency partnership agreements;
- Clear statement of goals and objectives;
- Consensus building stakeholder process for selecting signs;
- Support from local jurisdictions and political representatives;
- Identification of funding sources for planning, designing, and installing signs
- Identification of sign parameters;
- Implementation plan (to construct and install signs); and
- Sign maintenance plan.



Getting Started - Program Collaboration

A successful watershed and creek signage program should start with a collaboration of local landowners, stakeholder groups and agencies. This is important to create an effective and efficient on-going program. This first organizational or administrative phase involves: designating an agency to be responsible for overall program management, establishing a stakeholder group (or utilizing an existing group), identifying an entity to make and install the signs, and securing funds for sign construction and installation.

Program Management

A local RCD, agency or watershed group can handle the management of the program, which may include the following responsibilities:

- interacting with the public and establishing a stakeholder group;
- soliciting and accepting applications from entities interested in adopting signs;
- selecting and prioritizing appropriate sign locations (generally and in the field)
- approving requests for placement of signs from local organizations or stakeholders;
- developing the wording and associated graphics for the signs, including researching correct creek or watershed names and determining what map to use as the naming authority for creek names and spelling (e.g. USGS maps or local maps);
- obtaining permits for the signs from the local jurisdiction and/or other permitting agency (e.g. California Department of Transportation [Caltrans]);
- soliciting bids (if necessary) for sign manufacturing and installation and communicating with the sign maker on sign ordering;
- installing signs or hiring a contractor to install the signs;



- carrying insurance for the program and maintaining the signs or contracting with a separate maintenance agency; and
- serving as a fiscal agent for any funding.

For purposes of this guide, this lead agency is referred to as the “managing agency.” The above responsibilities may be shared between different groups based on expertise, funding and/or staffing. While a variety of agency partnerships may be effective, it is most important to clearly outline agency roles and responsibilities at the beginning of the program.

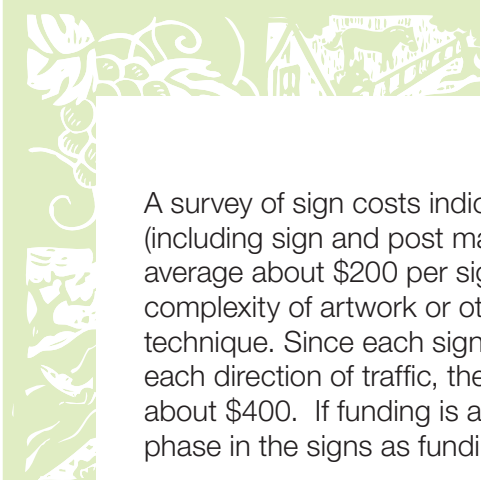
Agency Responsibilities

The managing agency may contract with another agency or entity to manufacture and/or install the signs. For example, the local RCD could serve as the managing agency and could contract with a county or city Public Works Department to manufacture and install the signs because Public Works departments often have sign making shops and construction staff. The Public Works Department may also undertake responsibility for maintaining and insuring the signs.

The jurisdiction in which the sign will be located (city or county) will often require approvals of the overall concept or program and permits for the signs. Also, if the sign is located within a state highway right of way, Caltrans (in the State of California) will require a permit and conformance with its sign requirements (see permit discussion below).

Costs and Funding

Program costs include administrative and program management labor expenses as well as sign construction and installation costs. Program management costs can have a wide range, depending on the scope of the program and the level of effort needed to obtain permits and coordinate with agencies and stakeholders.



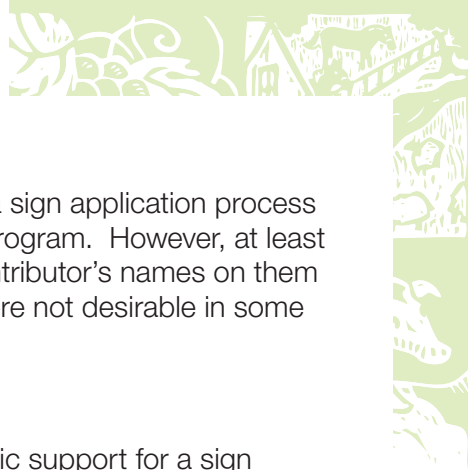
A survey of sign costs indicated that, in 2007 dollars, costs (including sign and post materials, construction and installation) average about \$200 per sign, depending on the size of the sign, complexity of artwork or other special features and installation technique. Since each sign location needs two signs, one for each direction of traffic, the total cost per location would be about \$400. If funding is a constraint, the managing agency can phase in the signs as funding allows.

Generally, implementation of sign programs should be achieved by funds accrued by public and private entities sponsoring signs (see Adopt-A-Sign) or other watershed education funding sources. Grants may be available from agencies such as water agencies, transportation agencies or the California Coastal Conservancy. The source of funds from the Coastal Conservancy is an appropriation from Proposition 40, “The California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Act of 2002.” These funds are available for grants to public agencies and nonprofit organizations for restoration and associated planning, permitting and administrative costs, for the protection of coastal watersheds and streams.

Other possible funding sources include stormwater pollution (non-point source Proposition 50) funds from the State Water Resources Control Board, watershed education programs, and the California Coastal Commission (education funding for coastal watersheds).

Adopt-A-Sign Program Option

Similar to California’s “Adopt-A-Highway” program, sponsoring entities may pay for the signs’ construction, installation, and maintenance costs. The contributor’s name can be placed on the sign as recognition of their intention to raise awareness of the County’s important environmental resources. This is one method used to fund the direct costs associated with installing



the signs. For this type of program, a sign application process is an efficient way to administer the program. However, at least one agency noted that signs with contributor's names on them were viewed as "commercial" and were not desirable in some locations.

Stakeholder and Public Support

Garnering stakeholder input and public support for a sign program is an important component of the process, as funding can be made available through interested parties who want to sponsor a sign. Stakeholders include property owners, watershed stewardship groups, environmental organizations, water agencies, local jurisdictions in which the signs will be located, County public works and transportation departments and local RCDs. Stakeholder input can occur in a variety of ways. Forming a group of interested parties for the specific purpose of implementing a sign program is one option. Another option is to utilize an existing work group or committee (e.g. a watershed advisory committee) to review sign locations and design.

Activities should include meetings with politicians to gain their support, public and/or stakeholder workshops, information distribution (via email and flyers) and press releases. Press releases can serve to advertise the program and solicit applications for sign sponsors.

Stakeholder involvement is important at the initiation of the program to gather input on sign locations and sign design. Once the sign locations and one or more options for sign design have been identified, stakeholders should be provided an opportunity to review these proposals to ensure "buy-in."



Step-By-Step Guide for Implementation

Once the stakeholder group and agency management/partnership is established, the program can be implemented. The following steps are described below:

- Select sign locations
- Design signs
- Obtain permits for signs
- Construct and install signs
- Develop maintenance program
- Monitor/review.

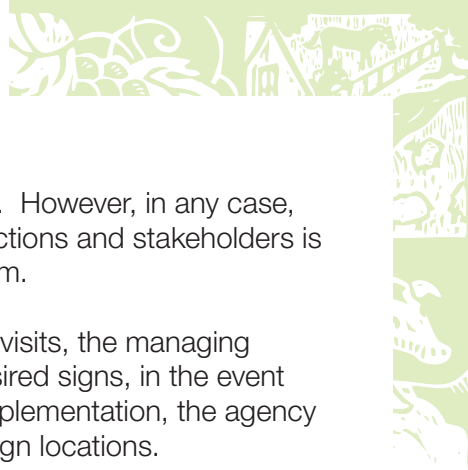
Sign Locations

Common locations for signs along roadways include river/stream crossings, watershed boundaries, water supply areas (e.g. lakes or reservoirs), creek or watershed restoration areas, and flood hazard areas. Signs can also be placed along pedestrian, equestrian and bicycle trails that parallel or cross creeks. In determining sign locations, the agency should consider:

- which water courses will be recognized
- what watershed crossings should receive signage
- what creek crossings should receive signage
- what areas are most receptive to signage
- what locations are best suited for signage to increase public awareness
- whether or not to pursue signage on state and/or federal roadways.

Location Selection Process

From the above broad list, the agency and stakeholders should develop a list of potential sign locations. Local landowners, stakeholder groups or agencies can identify a need for a sign, then submit a written request to the managing agency (using a standardized form). Although this type of process is desirable, it is not mandatory. In some cases, a less formal process



for sign selection may be appropriate. However, in any case, consultation with local groups, jurisdictions and stakeholders is a “must” for a truly successful program.

Based on stakeholder input and field visits, the managing agency should prioritize the list of desired signs, in the event that funding is limited. To facilitate implementation, the agency should prepare a map with specific sign locations.

Site visits by managing agency staff should be made to determine precise locations, based on visibility and aesthetics, roadway setback requirements, and other relevant factors. Sign placement should ensure that the sign is visible from the public roadway, is readable, and is not intrusive in the surrounding landscape.

Two signs should be installed at each chosen location, to be visible for traffic going each direction. To facilitate appropriate siting, agency staff should conduct a site visit, take photographs of proposed locations, mark locations, and use similar sized temporary structures to “simulate” sign visibility at various locations. Signs cannot be installed on top of buried utility lines or cables, so consultation with appropriate utilities or underground utility locators (e.g. Underground Service Alert, see Call Before You Dig) is necessary. Consultation with permitting agencies should be conducted in advance to ensure that the sign locations conform to permit requirements.

The managing agency should provide its final list of sign locations to interested stakeholders. After finalizing the locations, the managing agency must submit them for approval to the local/state permitting agency (e.g. County Public Works Department, County Roads Department, or State Highway Department for state roads). In some situations a specific location might not be approvable due to safety (obstruction of roadway visibility), right-of-way issues, and/or environmental or aesthetic impacts. The permitting agency will review and authorize the exact location.



Local vs. State/Federal Roadway Signage

The managing agency may want to focus on signage along local and County roadways, to avoid the Caltrans permit process. In general, local permit requirements are less burdensome than Caltrans requirements. State and federal transportation agencies have much more complicated and restrictive protocols and more funding will be needed to design a program to meet the additional transportation agency requirements. One option is to divide the program into two stages: the first stage would focus on roads under County jurisdiction. With the success of the program and additional funding, the managing agency could expand the program to include state and/or federal roadways.

Sign Size and Design Requirements

There are many considerations in designing the actual signs, such as: permitting agency requirements, visibility, aesthetics and compatibility with surrounding landscape features, sign wording and size, color and materials, durability, and installation techniques. The type of sign also depends on whether the location is urban or rural. Logos, graphics and other design elements can provide differentiation and style standardization throughout jurisdictions and regions. Although the possibilities are endless, cost and agency approval dictate the ultimate sign design.

The sign dimensions must comply with the appropriate permitting agency requirements. Therefore, these requirements must be determined in advance of designing the signs. Most permitting agencies have specific design guidelines that address signage. With this information, the managing agency should solicit input from stakeholders on sign design and provide an opportunity for stakeholders to review draft designs. A stakeholder decision may be made to determine overall sign specifications and possible



artwork on the signs, factoring in costs to produce and maintain the signs. Signs should be designed so that they can easily be replaced if damage occurs. The sign maker or designer (if different from maker) should have graphics capabilities if artwork of any type is planned on the sign. The type of support structure for the sign must be determined as part of the design and permitting process.

Typical sign specifications include the following:

- Creek crossing sign – 6 inches by 30 inches
- Watershed sign – 12 inches by 36 inches
- Reflective lettering – 4-inch letters; lettering for sponsoring entity and elevation (or other miscellaneous wording) could be approximately 2-3 inches.
- Anti-graffiti film coating (allowing easier removal of graffiti)
- Single side sign, constructed of aluminum, green background
- Support structure - 10-foot non-treated redwood signpost, sometimes set in concrete, with sign placed at a height of seven feet (or more) above ground. (Wood poles are recommended over metal poles, as wood is easier to replace and causes less damage if struck by a vehicle.)
- In urban areas, affix signs to existing structures (e.g. bridges, utility poles, etc.) if appropriate, to avoid installing a new structure.

Some entities may want to distinguish watershed and creek signs from common roadway signs. Signs may bear a simple message such as “Help Keep It Clean” or “Ours to Protect” or provide a water quality hotline phone number to contact to report polluters or obtain additional information on the resource. Examples of watershed and creek signs in place across the United States.

Sign Examples

The creek sign example is 8”x30” in size, high intensity, reflective green single sided aluminum sign with a white border. The signs identify the creek or waterway the road is crossing.

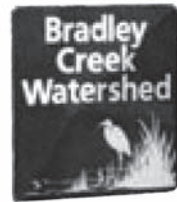
The watershed sign example is 12”x48” in size, high intensity,

Lichau Creek

Entering the Petaluma River Watershed

reflective green single sided aluminum sign. The signs identify the watershed name and entrance or exit of the watershed.

Miscellaneous signs illustrating the range of wording and design.





Permitting

Once the location planning and sign design are complete, the program is ready for implementation. However, before you start installation, you must obtain permits for the signs – this is an important step. It is important to consult with permitting agencies early in the process in order to clarify requirements that need to be incorporated into the sign location and design.

Caltrans Permits (California Department of Transportation)

The primary permitting agency is Caltrans, for signs located within California State road right of way. Caltrans has specific requirements for signs, as well as a sign “encroachment” permit process that must be followed. In order to obtain a permit, the managing agency will need to submit detailed drawings showing exact locations of signs and detailed sign drawings, in compliance with Caltrans specifications. Caltrans requirements specify sign material, color, letter size, post design, installation technique, and distance from road. Several key Caltrans regulations include using wood posts and not placing the posts in concrete.

Also, Caltrans requires watershed signs to be located outside the State right of way. Obtaining permits from Caltrans may require substantial time, so plan ahead. Caltrans sign specifications vary according to state roadway and proposed signage type. If outside California, contact your local office of the state highway or transportation agency.





Local Permits

For signage along county or city roads, the local transportation agency will likely require “encroachment” permits for the sign, as the signs will be located within the road right of way. Permit applications will need to be filed, along with sign dimension drawings and description of materials to be used in the signs. One person at the sign program managing agency should be assigned the duty of filing and tracking permit applications.

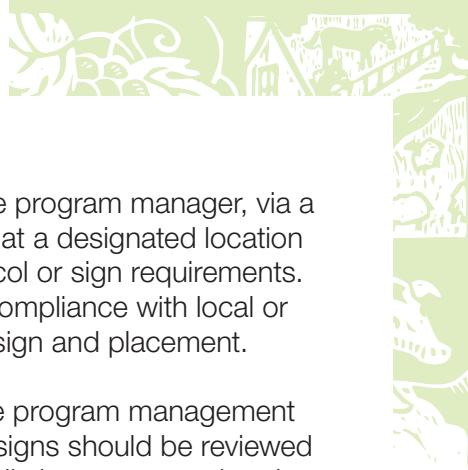
Regardless of the type of permit, the specific sign location will need to be determined in advance of issuing the permit.

“Call Before You Dig” Approval, USA

Prior to installing the signs, the managing agency must contact the Underground Service Alert (USA) to ensure that construction activities do not disturb buried utilities. USA has a specific approval process in place in which they contact the appropriate utilities to confirm that there is no conflict with the sign location. This process requires marking the sign location with paint and calling USA at least two days in advance of digging. USA requires information on sign location, nearest cross street, and construction foreman. USA issues a job number, construction start date and expiration date (date work must be completed). More details are provided at: <http://www.usanorth.org/about.php?user=excavators>

Sign Construction and Installation

The program manager will need to determine who will make the signs and who will install them. The sign maker may be responsible for installation, or a different entity may install the signs. If a County Road or Public Works Department is not available to manufacture the signs, the managing agency may have to solicit competitive bids for making and installing the signs. In all cases, the managing agency will need to provide detailed specifications (consistent with specifications approved by the local permitting agency) to the sign manufacturer and/or installer.



The sign maker will be directed by the program manager, via a work order to create and install signs at a designated location using the appropriate agency's protocol or sign requirements. The managing agency must ensure compliance with local or state requirements regarding sign design and placement.

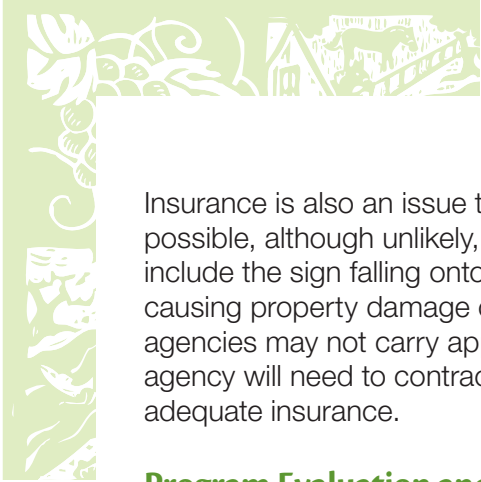
The sign-making entity will invoice the program management agency for the work. The completed signs should be reviewed by the managing agency prior to installation to ensure that the wording and spelling are correct, even in the simplest signs.

Prior to installation, the managing agency should ensure, through a site visit, that the sign locations are carefully marked. After installation, the program management agency should conduct site visits to confirm that the signs are installed at the correct locations.

Maintenance and Liability

After installation, the sign may become the public works or transportation agency responsibility to maintain and insure (e.g. State Highway Department, County Roads Department, or City street agency). Developing an agreement to use an existing local agency (County or City) sign maintenance program is ideal. In this way, the initial installation costs are funded by the managing agency and the maintenance costs are absorbed by an agency's existing sign maintenance program, rather than needing to create a new separate maintenance program.

A sign maintenance program ensures that funds and staffing are available for repairs, reconstruction, and replacement of signs, in the event that signs are damaged or stolen. The maintenance program should clarify who responds to maintenance calls, and what funds would be used for maintenance activities. The program should include a provision for periodic inspection of signs. Theft and vandalism of signage are real issues that should be considered early in the planning process and discussed as part of any long-term maintenance program or agreement.

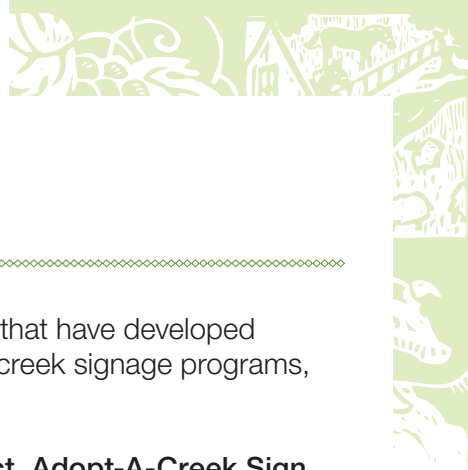


Insurance is also an issue that should be considered to address possible, although unlikely, accidents. Potential accidents include the sign falling onto a roadway or into a creek and causing property damage or personal injury. Since some agencies may not carry appropriate insurance, the managing agency will need to contract with a maintenance facility that has adequate insurance.

Program Evaluation and Monitoring

If possible, the overall program should include a provision for monitoring and evaluation. The sign program should be evaluated every two to five years to address possible restructuring and needed adjustments. This evaluation will allow stakeholder entities and interested agencies to express new ideas and take a look at the success of the program. In some cases, the location of signs may be adjusted or new sign locations identified.





Information Sources

The following agencies are just a few that have developed successful watershed and stream or creek signage programs, which can be viewed online:

- **Santa Clara Valley Water District, Adopt-A-Creek Sign**
http://www.valleywater.org/Water/Watersheds_-_streams_and_floods/Taking_care_of_streams/Adopt_A_Creek/Getting_started/Adopt-A-Creek_signs.shtml
- **City of Colorado Springs, Public Works Department, Creek Signs**
www.springsgov.com/Page.asp?NAVID=146
- **Pennsylvania Stream Signage Program**
www.pawatersheds.org/signage/
- **Chesapeake Bay Watershed Signs and other programs**
http://dipin.kent.edu/watershed_signs.htm
- **Grand Traverse Bay, Michigan, Educational Watershed Signs**
www.gtbay.org/watershedtc73567.asp