Tips for using the Needs checklist

- How much time do you have to do a service project? Look back at your timeline.
  - Your group may want to split into teams to answer questions
  - If your group gets stuck on complicated questions, skip these and come back to them later if there is time
- What will the weather be like when you do your service project?
- How much time do you and other adults have to supervise and help with the project?
- Is there a project you can join ?

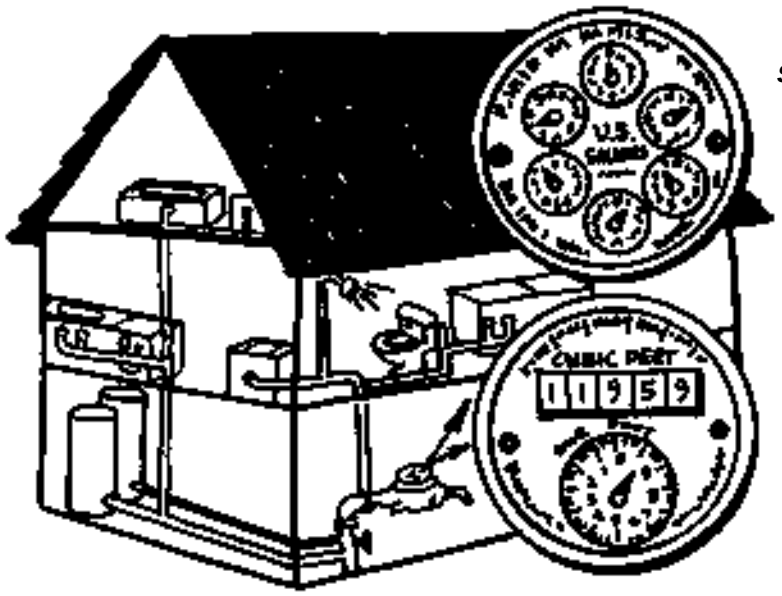
Setting Priorities

Once your group has completed the checklist, they will need to set priorities on the problems to help identify a service project. The top priority issue or problem may be obvious, or it may seem that everything is important. One way to narrow the choices to one or two is to have group members vote for their top three priorities.

Reading a water meter

Some questions on the Checklists require the students to read a water meter. There are two basic kinds of meters. The single-dial meter is read like the mileage meter of a car, except that the last digit “0” is printed on the water meter. The needle on the dial shows you how many more gallons you should add to the number of gallons in the window.

The six-dial meter is a little more difficult to read. Begin by reading the dial labeled with the largest number, usually 100,000. Then read the dials clockwise. The labeled numbers of each dial will be smaller. Record the numbers indicated by the needles on each dial. If a needle points between two numbers, record the smaller number (except when the needle is between 0 and 9, record 9). Some meters measure water in cubic feet instead of gallons, but you can read them the same way. A cubic foot of water equals about 7.48 gallons.



six-dial meter

single-dial meter

Activity 3: Map your watershed

Preparation and time

Preparation

Read through this activity carefully in advance; if you are not comfortable using a topographic map, see Using Maps in the following section.

See Materials Needed on page 41 in the Action Guide.

A builder's blueprint of the site buildings may be helpful.

To complete the Watershed Map, the group will need to identify the location(s) where water comes from, where wastewater goes, whether surface runoff goes into storm drains, and where the drains empty. You may wish to find this information in advance or have one of the group members do so. Contact the local water utility, or see American Water Works Association in Project Partners, page 29.

Time

90 minutes.

Goals

- Your group draws a map of the watershed where the project site is located.
- Group members understand what a watershed is and can describe the watershed, including water sources and drainage patterns
- Young people understand how they are connected to the environment and their watershed.

Key Points

Water issues are best understood in relation to watersheds; i.e., things dumped on the ground may eventually end up in a stream, lake or well.

Basic information about your watershed helps in understanding water issues. Group should be able to answer questions like:

- Where does the site's water come from?
- Where does wastewater go?
- Where does surface runoff flow from the site?
- Why/How does your priority problem (from Needs Checklist) affect water quality or quantity in our community?
- What happens in your watershed that creates the problem you have identified?

Background

How to Obtain a Topographic Map

1) Look under "maps" in the Yellow Pages of the phone book to see if there is a place to purchase maps in your area, or ask your local Soil and Water Conservation District office for the nearest source.
2) Or call Give Water A Hand at 1-800-WATER20 (1-800-928-3720) to find out which maps you need for your area and how you can order them.
3) You can also get an index for maps in your state directly from The United States Geological Survey (USGS) by calling 1-800-USA-MAPS. The index will take about four weeks to arrive and you'll still need to order your maps. Standard maps cost $2.50 each from USGS and are generally more at map stores.

Helpful Activities to Explain Maps

Start by drawing a map of a very small area such as a table. Measure the table and draw its outline on a piece of paper. Then look down

at it and “map” each item on the table so it appears to be relatively the right size and distance from the others. Now draw a map of the room, showing all the furniture as if you could see it from the ceiling. Next draw the building and grounds as though you could see them from a plane. This is similar to what the group did when it made a site map.

Explain that USGS maps are made from aerial photographs. Imagine what it would be like to fly in a plane over your site. What would you see?

One way to explain different elevations shown on a topographic map is to pretend to walk along a road on a map (or a trail if there is one). Look at your topographic map and determine where on the road the slope be steepest. Figure out how high a particular hill is. Relate that height to something familiar such as a tall building which is ten feet per floor. Are there any cliffs on along the road? Which part of the road would you find the most interesting scenery? Which part of the walk would be the hardest?

If your group needs help reading contour lines, see “Using Topographic Maps” below.

Using Topographic Maps

Topographic maps depict an aerial view of land. They use contour lines to show the elevation of land areas. These lines are sometimes called level lines because they show points that are at the same level or altitude. The ***top*** drawing [at right] is a contour map showing the same hills which are illustrated in profile in the ***bottom*** drawing. On this particular map, the vertical distance between each contour line is 10 feet.

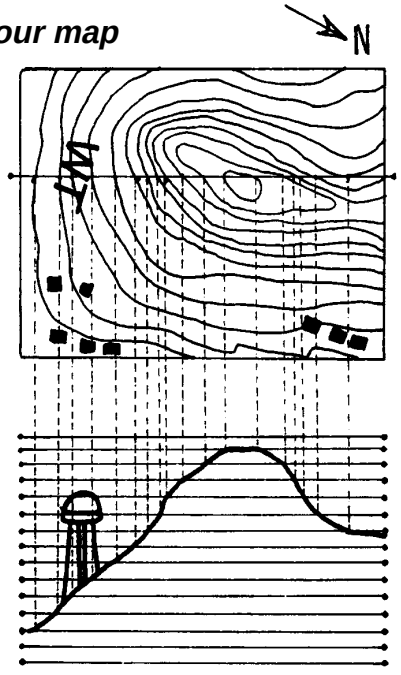
Lines that are close together show steeper slopes. Lines that are far apart show flatter terrain. Streams on topographic maps often intersect the points of a series of Vs or Us in the contour lines where the Vs point up hill. Hilltops are where contour lines connect to form circles or ovals. They are illustrated as the smallest center circle.

USGS maps use brown ink for topographic lines. Every fifth line is an index line which is bolder and gives a number indicating its altitude above sea level. Waterbodies are in blue. Buildings and other human-made structures are in black. Green shading indicates wooded areas. Important roads and survey system marks are in red. Purple features were added from aerial photographs during map revision and have not yet been field checked.

Each map has a scale, which is the relationship between distance on a map and the corresponding distance on the ground. The scale is expressed as a ratio, such as 1:24,000. The smaller the second number, the more detail the map has. You need to make sure you have a topographic map with a small enough scale so that you will be able to find specific streams, buildings and hills on your site. A good choice for local watershed mapping using USGS map scales is 1:24,000 (also known as 7.5 minute quadrangle maps). Your site may be on the edge of a map, or your watershed may cross two map sheets, in which case you may need two or more maps.

Check the date on your topographic map to see how recently it was made. A current, detailed street map can help you fill in new construction and other changes as you map your watershed. You will also need a street map to fill in details that are off the edge of your map. USGS also sells aerial photographs of most areas, and they may be helpful in locating landmarks (such as your school, a patch of woods, or a road).

contour map



Preparation and time

Preparation

Use the Get Partner Support section on the back cover of the Action Guide to review the benefits of working with partners. You may wish to invite a local expert other than existing partners in order to expand your network, to provide a different perspective, or to obtain information on a specific topic. You may wish to invite more than one expert to present alternative views. In any case, be sure that your group hears differing perspectives. See Handling Controversy below for tips. Make sure the guest is invited well in advance, be clear in communicating the goals of the meeting, and confirm his or her attendance a few days before the meeting.

Time

Goals

- Group members meet with a local water expert or partner to learn more about local water issues and gain input on group research and priorities.

Key Points

- Local water experts and partners can provide helpful information, ideas and resources for projects.
- Experts can share community priorities and connect youth to ongoing projects.
- It is important to respect other people's input and time.
- A thoroughly prepared agenda and questions will facilitate meeting with an expert.
- A discussion with the expert will be more useful if it focuses on the group's specific site.

Background

The role of an expert or Give Water A Hand partner is varied, and there are many places throughout your project where they can help. They can help your group review what you have found through researching needs and mapping the watershed; this can be a good opportunity to analyze the priorities. Experts can share their experiences working on local problems and possibly link you to on-going projects. They might know how to find funding for your project. Many of the national partners have materials and resources to help you.

Check with your potential partner to learn their goals for involvement. Partners and experts may wish to be involved with your group from the beginning.

Even if you are already part of a national or local network of organizations, review the national partners list (on pages 29–33) to decide who might best be able to help your group. Some of these groups operate primarily at a national level, but others have local offices. See Get Partner Support on the back cover of the Action Guide for ideas on contacting local water experts.

Use the following checklist to help keep your partnerships with experts and others on track.

(All questions refer to both ends of any partnership.)

- ☐ Is there general agreement on long-term goals?
- ☐ Are goals and objectives within reach?
- ☐ Do all partners have a share in deciding goals and objectives and the rules by which they will be achieved?
- ☐ Do partners have a sense of belonging, a feeling that they are needed to achieve long-term goals?
- ☐ Is there a feeling that what partners contribute has real purpose and contributes to the broadest of goals?
- ☐ Can partners see progress being made?
- ☐ Is there confidence in the people in leadership roles, based on their credibility, fairness and consistency?
- ☐ Are partners kept well-informed?
- ☐ Are all partners flexible and responsive to change?
- ☐ Is there a climate of mutual trust among partners?
- ☐ Do partners respect one another's organizational rules and procedures?
- ☐ Is there positive recognition of contributions?
- ☐ Is the partnership fun and satisfying? Does everyone feel a part of things? Are things getting accomplished to benefit the whole?

(Adapted from *Keep America Beautiful*)

When experts disagree: handling controversy

Try to make sure your group sees and hears a balance of people, information, and materials. Eliminate bias by inviting organizations with a different positions to tell their side of the story. Responsible environmental education does not promote a particular viewpoint, but presents a range of evidence and views and helps youth learn to judge evidence for themselves. Participants in Give Water A Hand will work with real people and explore real issues from many viewpoints.

Are you hearing the whole story? Ask participants to divide into two groups, each side arguing a different point of view. Then, as one group, discuss what you learned about the other side's case. Point out that several people can each be honestly telling the truth as they see it and still disagree.

Preparation and time

Preparation

Complete Project Nuts and Bolts Worksheet that follows to help define limits (group members may be involved in completing this worksheet).

Review the "Will it Work" questions for youth in the Action Guide (page 49).

Contact your local and national partners to find out if they can suggest projects.

Time

90+ minutes if the group doesn't know what project it will do.

60 minutes if the group has chosen a project and just needs to identify group resources and define tasks.

Goals

- Group members choose a service project that meets a real need.
- Group evaluates chosen project to make sure it matches their skills and interests, and that it is appropriate for the site and amount of time and resources available.

Key Points

- Reviewing the Watershed Map, Checklist, and notes from the expert interview will insure the project meets a real need.
- Completing the Choose a Project chart will insure the project matches the skills and interests of group members.

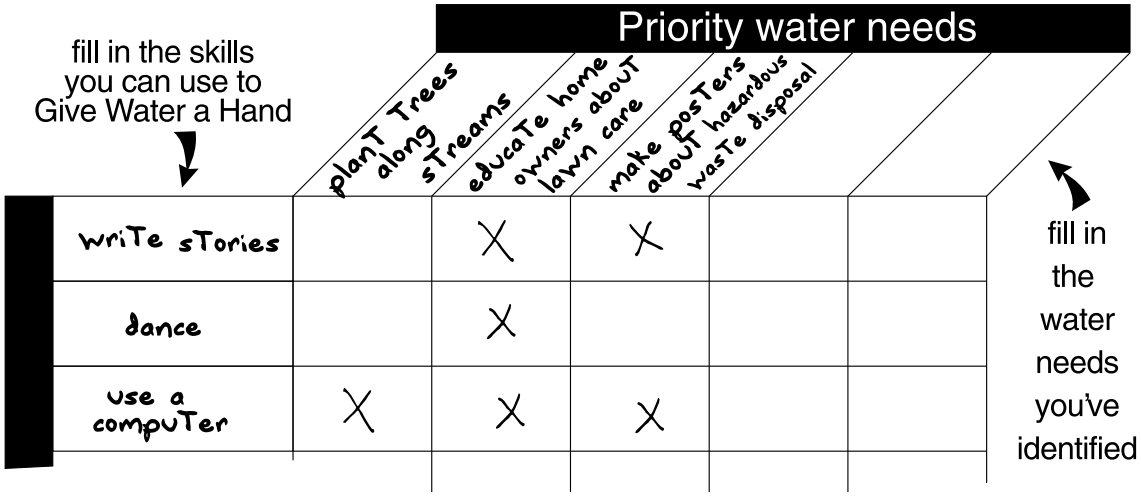
Background

In this step, group members will decide on a service project, or evaluate one they have chosen to make sure it meets their skills and interest. In choosing a project, it is important that the group review what it has learned from the Checklist, Watershed Map and interview with an expert.

The Project Nuts and Bolts Worksheet was created to help you and your group identify whether your chosen project is realistic to take on. Some questions need to be answered by you and others need to be answered with help from your partners. There may be an existing project your group could join.

If your group still has trouble deciding on a project after this exercise, review the lists of project ideas in the Action Guide. The ideas are broken down into four lists by site (school, community, farm/ranch, home).

...the Choose a Project chart...



Finding Time for Service Projects

The group will need a few hours outside regular meeting or class time in order to complete a service project. If this is impossible, make sure the group's project can be done in the time available. Parents or volunteers may be willing to help supervise service work. Partners can provide much-needed help also. If yours is a school-based program, you should link service-learning to the overall curriculum so that class time may be used to complete service projects. See Using Give Water A Hand within a K-12 School Curriculum, page 26.

Involving Families

Parents or guardians can provide welcome supervision and/or expertise. This is also important because children whose families are involved in community issues are far more likely to stay involved themselves. Possible adult roles include:

- Planning and organizing with the group
- Helping to identify projects
- Scouting out service sites, collecting materials or equipment
- Helping with Checklists, Watershed Mapping and other activities, especially if the group must split up to accomplish certain tasks
- Presenting background information or training
- Providing transportation
- Evaluating the project, personally and by interviewing community contacts
- Helping youth contact the media to get recognition for their project
- Helping youth organize a final celebration or recognition
- Help in finding funding

It's important to clearly explain roles and responsibilities to parents or guardians. Make sure they understand your own role — and its limitations — as project leader. Encourage them to offer feedback.

Whatever their role, parents or guardians must be kept informed about what their children are doing. A brief note can acknowledge the contributions of their children and avoid misunderstandings. Explain the important lessons youth will learn, and point out that they will be exposed to careers in science, public service, etc.

Transportation

Ideally, your project will be conducted within walking distance of your usual meeting site. Other transportation options include: city buses or other mass transit (you may be able to get tokens donated), bicycles (go over safe riding rules first!), school activity buses, organization or business vans (check with your partner).

Partners, parents or other volunteers may be able to drive the group in cars. Be sure all drivers have a current driver's license and insurance, and stress that all participants must wear a seat belt.

Funding

Funding needs for most Give Water A Hand projects will be minimal. If you do need funds, however, your best bet is to try local sources: individuals, civic groups, businesses, community organizations, government agencies, community foundations or local corporate or nonprofit foundations. Your partner is an essential contact. Your partner may also be able to provide in-kind donations such as tools, seedlings, paint, or use of vehicles or copiers. Help kids develop and submit funding proposals, including a budget. Funding cycles may be quite long — as much as a year for some organizations. Plan ahead.

For long-term projects, you may seek funds from larger regional or national foundations or from state or federal agencies. Some state and federal funds for youth service programs are available for school and community-based groups. Contact your state's department of education.

Nuts and bolts worksheet

How many hours can your group devote to its project? _____

How many young people are consistently active in the group? _____

How many young people would be interested in a water project? _____

What is the group's experience with projects? _____ novices _____ experienced _____ veterans

What skills are strong?

What skills are weak?

How can group members gain these skills? See Skills Bank, pages 62–64 of Action Guide.

Who besides yourself can help organize and supervise? Are there older or more experienced group members who could help? Volunteers from an older grade? Older scouts from another troup? Teachers-in-training from a local college?

What funds are available? $ _____

What resources might be donated in kind? (e.g, water tests, erosion control material, storm-drain stenciling kits)

List Partners

Resources committed

List other potential sources of funds:

What transportation is available?

Do you have liability insurance?

☐ Yes, covered by (school, club, city, etc.) ☐ No, need to purchase ☐ Don't know, need to find out

What rules or laws you must follow? Can you leave your site? Whose permission will you need? (e.g. principal, farmer, parents, etc.)

Is there an existing project you can join? What are the costs and benefits of joining this project? What input will your group have? Who is the contact person for the existing project?

Preparation and time

Preparation

Bring all maps, charts and notes.

Arrange in advance with partners and others to review the group's plans.

Time

60 minutes.

Goal

- Group members develop a realistic project plan, including a safety plan.

Key Points

- Start small and break down bigger jobs into achievable tasks.
- Everyone has a role in the project. You may want even want to rotate roles.
- Every task should have a deadline and a person responsible for it.
- It's O.K. to change the plan later, but it is important to make a plan so everyone knows their duties and deadlines and honors the deadlines.
- Setting realistic goals with measurable outcomes will help you succeed.
- It is important to have a safety plan.

Background*

Selecting Achievable Tasks

It is important to help young people set goals that are challenging yet achievable with available time and resources. Go over tasks on the group's Mind Map to make sure all necessary tasks are included and that they can be done with the people, funds and materials available.

Also check to see that tasks are specific enough. Unless your group has experience planning projects, this may be difficult for them. For example, "stop leaks" or "save water in the bathroom" are goals, not tasks, and are too general. Which leaks? How will water be saved in the bathroom? By taking shorter showers? Installing low-flow shower heads? Each task must be clearly thought out, understood and accepted by whoever is responsible for completing it.

Consider Safety

Professional responsibility as well as concerns about legal liability require leaders of youth service projects to consider safety issues. See the Safety Issues that follow. Make sure young people are adequately supervised by you or another responsible adult at all times. Your job as leader is to think ahead and take all reasonable precautions.

Speak with your organization's business manager, if there is one, or an insurance agent, to find out if you have liability coverage and if it is is adequate for the project you plan. If not, you may be able to make an inexpensive addition to your policy to cover your activities. The more clearly you lay out procedures, policies and responsibilities of all parties (ideally in writing), the better your protection against lawsuits.

Safety Issues - Risk Management

Identify risks your group might encounter in doing its project. Young people are more likely to behave safely if they have helped identify risks and set rules.

See the risk management worksheet on the following page.

**Some portions are adapted from Learning by Giving: K-8 Service-Learning Curriculum Guide, (Cairn, 1993).*

What are the general risks?

- weather
- busy streets
- crime
- water, even if it is shallow
- sunburn
- hypothermia, from getting wet

Are there any project-specific risks?

- trash with sharp edges, hazardous substances, tools

What are the human behavioral risks?

- running, fighting, playing with tools

What can be done to reduce risks?

- work with a buddy at all times
- read and follow instructions
- get training in use of equipment
- wear protective gloves or eye wear
- wear proper clothing (such as reflective safety vests), wear seat belts
- be careful near the water's edge
- ask group leader for help removing broken glass or unidentified items
- use crossing guards

Establish emergency procedures and make sure everyone knows them.

- post 911, hospital and other emergency phone numbers
- have a first aid kit and a car and driver available when working on projects
- have a trained first aid person on-site or nearby