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## Module 4      Survey of Local Water Uses/Resources

### **Introduction**

There are many ways to look at a stream, lake, river, or pond. When we consider changing something about a water resource, all the things that affect it must be considered. For example we need to know what flows into a river, what wildlife uses a pond, or how many people live around a lake during the summer. We must expand our vision of a stream, lake, river, or pond beyond our own preferred use and consider who else uses these waters and why. As a community we need to perceive each water resource as children, elderly, sociologists, economists, artists, politicians, farmers, foresters, etc. Whether we recognize it or not, each of us has a preferred use for water, regardless of position of perception.

Capturing a big picture of local water resources is key to understanding how best to assess, monitor, and protect it. By knowing the different roles water plays in our community, decision making processes about how the water resource is ultimately to be used can be made.

In this module participants will examine: *Local water resources, use, and issues.*



### *Discussion Points*

- ❖ What percentage of your community understands the complexity of your water resources? How might you reach the greatest number of people about a key water quality concern that could make a difference?
- ❖ Determine and list all the existing “water” partnerships in your community? Who is involved? Why is it important to know this before any assessment, monitoring, or protection effort takes place?
- ❖ After considering what has been presented, list 5 additional water concerns for your community in the year 2020. What does this tell us about our present water resource?
- ❖ Most communities have schools and educators that can be part of a water quality education effort. List five or more key educators who could help address issues and concerns identified in this portion of the short-course.



### *Journal and Evaluation*

List the key accomplishments in your community that are related to water in the last century. For example, did they put in a community water system, sewage treatment facility, stock watering system, storm drainage system, build a water storage reservoir, or flood prevention dike? In a few lines write down how this was accomplished and why.



### ▶ *Additional Activities*

Some workshop participants may be interested in a more complete history of water issues and protection. Several PNW extension publications listed for water quality can be ordered for free or low cost and used in presenting topics.

#### ❖ **Idaho**

- University of Idaho, Agricultural Publications. For publication and video orders phone: 208-885-7982 or Fax: 208-885-4648 or mail it to: Agricultural Publications, University of Idaho, Moscow, ID 83844-2240, e-mail: [cking@uidaho.edu](mailto:cking@uidaho.edu)  
Web site: <http://info.ag.uidaho.edu/>

#### ❖ **Oregon**

- Oregon State University Extension and Experiment Station Communications. Phone: 541-737-2513 or Fax: 541-737-0817 or mail it to: Publication Orders, Extension & Station Communications, Oregon State University, 422 Kerr Administration Bldg., Corvallis, OR 97331-2119, e-mail: [puborders@orst.edu](mailto:puborders@orst.edu)  
Web site: <http://eesc.orst.edu/>

#### ❖ **Washington State**

- WSU Cooperative Extension Educational Materials. Voice: 1-800-723-1763 or Fax: 509-335-3006 or mail it to: Bulletins Office Washington State University, Cooper Publications Building, Dept. WB., P.O. Box 645912, Pullman, WA 99164-5912, e-mail: [bulletin@coopext.cahe.wsu.edu](mailto:bulletin@coopext.cahe.wsu.edu)  
Web site: <http://pubs.wsu.edu/>

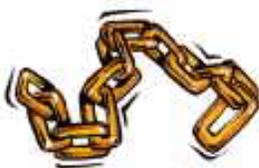
- ❖ The USGS Water Resource Outreach program has six great water education posters. They cover wetlands, water use, wastewater, navigation, groundwater, and water quality. The posters are drawn in a cartoon format by the same cartoonist. Posters are available in color or black and white. The reverse sides of the color posters contain many educational activities. Water ideas and activities are appropriate for adult and youth audiences. Call 1-888-ASK-USGS or check out their web site (<http://water.usgs.gov/outreach/OutReach.html>).



► *Ideas for Water Quality and Monitoring Action*

- ❖ In many cases water quality issues do not know there is a county, tribal, or state line. Building coalitions across these lines, governmental jurisdictions, or states may be necessary before action ideas can be implemented. Be sure to consider this as part of your Learn, Plan, and Act process.
- ❖ Local museums and libraries can be great partners in finding out the history of water in your community. They often hold historical documents and pictures of past water quality conditions that can be invaluable in assessment and monitoring efforts. Comparing today's photo points with yesterday's historical pictures can help tell the story of many watersheds. Conduct water education meetings at these sites and be sure to include the staff as part of your program. Group "water search" sections can produce an abundance of references.

- ❖ There are several management tools that governmental agencies in your community use to help maintain or improve water quality. A few communities have even begun developing their own ground or surface water protection programs using a variety of resources. These management tools include: zoning ordinances, subdivision ordinances, site plan review, design standards, operating standards, source publications, purchase of property or development rights, public education, ground water monitoring, household hazardous waste collection, and water conservation. Check to see if any of these are in place in communities in your watershed. Bring copies of the associated public policies, laws, or agreements to assessment or monitoring group sessions.
- ❖ For the Water and Watershed module complete an activity that supports the **Streams** content on pages 56 and 57 of the Guide. Have participants identify all the stream orders on the USGS map that contains the field site where you will collect data. Have participants identify all the features on the map that might affect water quality (e.g. barrow pits, sewage treatment facilities, and roads). Have them outline all the watersheds on the map and finally focus on the watershed they will be monitoring.



▶ *Links and References*

Adams, Edward B., (1992) Defining Water Quality. WSU Cooperative Extension. Clean Water for Washington Series. EB1721(<http://cru.cahe.wsu.edu/CEPublications/eb1721/eb1721.html>).

Bedell, T., (1991) Watershed Management Guide for the Interior Northwest, EM 8436, March 1991, Oregon State University Extension Service, Corvallis, OR.

Gallagher, J., (1990) Citizen's Guide To Groundwater Protection, EPA 440/6-90-004 US EPA. Office of Water, Washington, DC.

Jean Sta. Maria. Teacher's Guide To Streamwalk, US EPA, Region 10, Water Division. Seattle, WA.

Total Maximum Daily Load (TMDL) Program. U.S. Environmental Protection Agency, Office of Water. (<http://www.epa.gov/owow/tmdl/>).

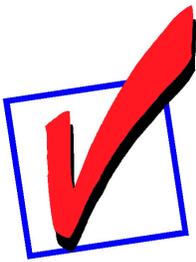
Washington State Department of Ecology. In addition to local news and events in the Northwest, this site includes a listing of publications distributed by Ecology; Washington Laws & Regulations; site lists; and some useful WWW Tools. (<http://www.ecy.wa.gov>).

WET Instruction Handbook. A Joint Project of the Austin AIM High Office and the Texas Water Commission. Texas Water Commission, PO Box 13087, Austin, Texas 78711. LP 90-08, September, 1990.



### ▶ *Short-course Presenters*

This module is designed so that at each location the short-course is presented, experts discuss local water issues after participants have identified a broader set of issues in the introductory activity. By adding factual information, expert testimony, science, and a historical perspective to the collected issues, the participant's awareness and knowledge can be expanded. The discussion points are presented to take the entire group, participants, short-course organizers, and invited experts to the "Big Picture" level of the water issues in their community. Rather than pointing fingers, the journaling activity is designed to recognize the contributions of past generations and point the way for this generation to make a difference for their own water resources.



### ▶ *Tips for Short-course Presenters*

- ❖ Take a moment to make sure everyone is comfortable with this terminology — often participants may have questions about each step and may ask for a brief definition. Answer their questions and reassure them that you plan to cover each area in greater depth in Part Two of the short-course.
- ❖ Do some research and get specific information about the number and type of public and private water systems in your community. Find out approximately how many get their water from ground water, surface water, or a combination of both. Present this information to short-course participants. See web sites or references for local information.
- ❖ Do some research about 303(d) listed streams and the causes of the listings.

- ❖ A local conservation district, state environmental protection agency representative, or public supplier are excellent resources to answer some of the discussion questions. Often they can give the group some perspective as to what has been done in the state and community to assess and protect their water resource.
- ❖ Most communities will have some type of contingency plan developed for use in case of emergency. Obtain a copy to show during the workshop. Ask the participants if they think the plan needs to be expanded in the water area (drought, flood, storm, etc.). Have them list any plusses and wishes for the plan and identify who needs to be contacted to add this information to the planning process.



#### *Optional Training Materials*

- ❖ Watershed Stewardship: A Learning Guide is a valuable resource for everyone interested in working in watersheds. Watershed councils, associations, or other groups; landowners or managers; volunteer interest groups; livestock and small woodland associations; policy and decision makers. This is an 18-chapter guide developed by Oregon State University as curriculum for those engaged in managing watersheds. For more information contact OSU Extension and Experiment Station Communications (<http://eesc.orst.edu/agcomwebfile/edmat/EESC4.pdf>).