

## Water Quality Monitoring Plan Development Exercise

This exercise is an option for the Saturday portion of the Water Quality Monitoring WSEP module. The exercise was developed specifically to give participants the opportunity to apply the concepts learned in the evening session. The goal of the exercise is for participants to work in small groups to develop monitoring plans for watersheds in Oregon. The small groups mimic watershed council or SWCD committees. Groups use maps and some data to develop their plans. A worksheet guides them through the process. After developing plans, the small groups report back to the full group, and the exercise ends with debriefing / discussion.

Materials needed (from the disk):

- Umatilla Watershed
  - Relief map
  - Land cover map
  - Roads and streams map
  - Land ownership map
  - Information sheet with water quality limited streams and three data sets
- Nestucca Watershed
  - Relief map
  - Land cover map
  - Roads and streams map
  - Land ownership map
  - Information sheet with water quality limited streams and two data sets
- Yamhill Watershed
  - Relief map
  - Land cover map
  - Roads and streams map
  - Land ownership map
  - Information sheet with water quality limited streams and two data sets
- Handout from DEQ Volunteer Monitoring Coordinator Karen Williams: Asking Water Quality Monitoring Questions (specific\_ques.doc)
- Water Quality Monitoring Plan Development worksheet (worksheet0702.doc)

Also:

- Overheads of each watershed and overhead markers
- An overhead projector
- Pencils or pens for participants

Directions:

1) Split participants into groups of 4-5 people. This is a good number because it's enough people to have a variety of learning styles but not so many that the process is cumbersome. Count off around the room; this will ensure that participants work with people they don't sit with each time. Each group will work together for around an hour

to design water quality monitoring plans for one or more watersheds. It is best for everyone to start with the same watershed, so that results can be compared.

Also, it can be helpful to start with a watershed that is NOT similar to the county you're in. Groups tend to get caught up in political implications or pre-conceived ideas when dealing with watersheds or water quality problems that are in their region. It's good to think about those things, but for the purposes of this exercise, it's better to use a watershed that won't create a lot of controversy or make participants uncomfortable; they won't be able to focus on the process of developing the plan.

The group should designate one person to record their ideas and one person to make a short presentation to the full group.

2) Each group gets three watershed packets (one of each watershed) and three monitoring worksheets. A packet consists of the relief map, the land cover map, the roads and streams map, the land ownership map, and an information sheet with a map of water quality limited streams and some data. Each participant should get a DEQ "asking specific questions" handout.

3) Tell groups to read through the worksheet and the DEQ handout before doing anything else.

4) Participants should also look at the data for each watershed before starting to develop their plans.

5) Participants should work for around an hour on developing a plan for one, two or three watersheds.

6) After a break, participants should choose one watershed monitoring plan to present to the entire group. The monitoring sites can be drawn on overheads so that the full group can see.

7) The presentations should spark a lot of discussion about water quality monitoring in general and these plans specifically. The discussion can be guided in whatever direction you choose.

8) Feedback discussion. This is the most important part of the whole day. Take a few minutes to ask participants what they learned. Allowing all to share their impressions helps them to see the value of the exercise.

Debriefing questions: What did you learn? What did you find frustrating? What did you find worthwhile?

## Sample Agenda

9:00-9:15	Introductions and instructions
9:15-10:15	Work in small groups
10:15-10:30	BREAK
10:30 – 11:15	Presentations by small groups; discussion of monitoring plans
11:15 – 11:30	Discussion of what participants learned from exercise / feedback