

Water Quality Testing at Lewisville Park

Field Trip Date: Friday, September 30, 2005

Time: 10:30 AM – 1:40 PM

Location: Lewisville Park, section “D”

Student Group: CAM 7 Science (2 classes of 30 students each)

Teacher: Michael Clapp - CAM 7/8 Science

Transportation: School Bus

Background:

The students in CAM 7 study environmental and life science. Water quality testing at a nearby stream gives students an opportunity to apply the concepts and skills learned in class to a real-world situation. The data generated will be entered into a statewide database used to monitor stream health. There is also an opportunity for representatives of the class to attend a Watershed Monitoring Congress in the spring at the Water Resources Education Center in Vancouver. Teachers, students, and representatives gather to share with others the data and conclusions they have developed regarding water quality in the SW Washington region. The overall goal of the watershed program is to actively involve citizens from the area in monitoring water quality and wildlife habitat.

Ideally, students are able to make repeated trips to the same stream. This provides the students with an opportunity to observe differences in the water quality and aquatic habitat as a result of seasonal variations. It also provides an ongoing set of data that students can examine and compare for change.

We are fortunate to have access to the services of the Environmental Information Cooperative and its representatives, Pete Ritson and Hannah Dondy. They will attend the field trip with several other trained volunteer mentors. The EIC will provide training and testing equipment to help facilitate the monitoring process.

Purpose of the Field Trip:

The field trip provides an opportunity for students to conduct a study of water quality, aquatic macroinvertebrate populations, and an examination of riparian habitat. Dr. Ritson and/or Hannah Dondy and other volunteer mentors will meet us at the site and assist with the water quality assessment. Water quality monitoring provides an opportunity to measure biotic and abiotic factors in assessing stream health. It also provides a chance to examine the relationships between different organisms and the interaction between organisms and their environment.

Outcomes:

As a result of this experience students will be able to:

1. develop the ability to take qualitative and quantitative measurements of an aquatic environment based on standardized water quality tests/parameters;
2. determine the relative health of the East Fork of the Lewis River at Lewisville Park based on quantitative data and qualitative observations;
3. identify and discuss how streamside property use along the East Fork of the Lewis River can have an impact on the stream and the wildlife that lives there;
4. describe the significance of a healthy aquatic habitat on the plants and animals that depend on the stream as a habitat, including but not limited to, salmon and steelhead.