

The WELL Project
& the McKenzie
Watershed
Council



THE ADVANCED WATER TEAM PROGRAM

AN IN-DEPTH WATERSHED MONITORING AND RESEARCH PROGRAM FOR SECONDARY STUDENTS

Goals and Objectives

Goal 1

Maintain a field-based service learning program for secondary students focusing on long-term watershed (catchment) monitoring and research projects.

- Objective 1: Establish and maintain specialized student teams at Middle (7-8) and High Schools (9-12) in Springfield School District
- Objective 2: Maximize student participation and promote long-term understanding of watersheds
- Objective 3: Promote student understanding of field based scientific methods in monitoring watersheds



Goal 2

Provide partnering agencies, organizations and the general public with comprehensive set of high quality data on streams and rivers in the watershed (catchment).

- Objective 1: Ensure understanding of established methods and protocols
- Objective 2: Promote program and watersheds conservation
- Objective 3: Complete long-term monitoring for partners
- Objective 4: Produce and update program database and produce annual, or otherwise, reports.

The Advanced Water Team Program is science education at its best- it's real, it's rigorous and it's rewarding

Program Details

- Most students stay involved with the program for a minimum of 3 years with some students working for 6 consecutive years (over 400 hours of field work)
- Each team operates monthly, and students engage in field work for an entire school day
- Some teams operate 12 months a year with students earning a stipend for summer work
- Currently students earn community service hours for their time with the program but we are developing a credit-based option for students
- Student safety and accurate data collection are our top priorities

Program Benefits

- With limited resources and personnel reductions by agencies involved with watershed monitoring, the program has proven to be a cost effective alternative to producing accurate and consistent data for our partners
- Long-term participation by our students improves the accuracy of our data and builds a sense of community among all the students involved with the program
- Program demonstrates to our students real-world applications of science content standards they learn in the classroom setting
- The program has served as an effective community outreach tool in opening up monitoring sites with private landowners and encouraging them to become involved in catchment protection and restoration efforts

Students

- Returning students are given first priority on each team and new middle and high school students are selected by an application process
- Middle school students (grades 7-8), who have participated on a Restoration Team, are given first priority on the high school teams
- Applications are reviewed by classroom teachers and the WELL Project coordinator, and each application is scored based on the student's potential for successfully conducting field research, school attendance records, and grades.
- After high school graduation, during summer breaks from university studies, some students return to continue engagement with the program through participation in summer data collection

Protocols, Equipment & Data Management

- Field protocols are reviewed and approved by partners and in many instances modified to increase the accuracy of data collection efforts
- Water quality teams use equipment that meets state or federally accepted procedures
- Use of iPads with custom data entry forms allowing direct upload of data to the project database increasing data accuracy
- Databases are designed for seamless sharing of data with partners
- University of Oregon staff have begun training our students on ArcView GIS software to prepare maps for reports and presentations

Partnerships

- Our primary partner, the McKenzie Watershed Council, is a non-governmental agency that works on a voluntary and collaborative basis with all stakeholders in the watershed (catchment)
- Federal and state partners include the U.S. Forest Service, Bureau of Land Management, Oregon Department of Fish and Wildlife and Oregon Watershed Enhancement Board
- Other partners include public utilities, municipalities, private corporations and private landowners

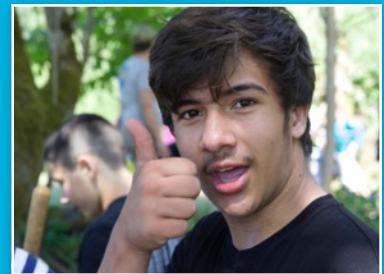
Funding

- Annual funding (\$115,000, US) for the WELL Project (Springfield Public Schools) and the Advanced Water Team Program for the past 16 years has been provided by Springfield Utility Board
- Additional funding includes grants secured by McKenzie Watershed Council
- Other sources of funding include federal and state agencies, other utility boards and private corporations

Contact Information

- Stuart Perlmeter & Stephanie Lawless, WELL Project Coordinator
Springfield Public Schools
425 10th Street
Springfield, OR 97477 USA
stuartperlmeter@icloud.com or stuartperlmeter@springfield.k12.or.us
- Jared Weybright & Jennifer Weber
McKenzie Watershed Council
442 A. Street
Springfield, OR 97477 USA
education@mckenziawc.org
- Watch a documentary film produced by Norman Bonney on the Advanced Water Quality Team Program: <http://vimeo.com/84062680>

The Advanced Water Teams in Action



Currently we operate 5 different types of teams between the high school (grades 9-12) & middle schools (grades 7-8):

- () = number of teams
- Water Quality (2)
- In-Stream Habitat (2)
- Restoration Survey
- Well Water Testing
- Riparian Restoration (5)