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PROJECT: West Sylvan Middle School
8111 SW West Slope Drive
Portland, OR 97225

CONTACT: Joe Blowers (503) 916-5690

BUDGET: Metro grant - \$3,000
Approximate Volunteer Hours - 81
Total Project - \$7,589

QUESTION: How can students learn to deal with multifaceted issues they will face as adults?

GOAL: To involve students in real-life scientific research on wetlands and land use decision making processes. To restore the wetland as a Willamette Valley wet meadow by removing non-native plants, planting natives, and monitoring the success of various management activities. To involve every student twice in the school year in active, on-site restoration. To help students value wetlands, understand the impacts of their own activities, and to connect with a wild place they have come to know well.

COMMUNITY:

"The more real-life connections you can provide for the kids the better, and these grants provide them." - Joe Blowers, project manager

The Fanno Creek Watershed in Washington County benefit from the efforts of sixth and seventh graders from West Sylvan Middle School and Catlin Gabel Middle School. Over 380 students from the two middle schools and 40 to 50 parents join efforts to monitor and enhance Greenway Park in the rapidly expanding county.

DESCRIPTION:

The school and students established an on-going restoration, monitoring, and maintenance program with the Greenway Park area near Hall Boulevard in Beaverton. Students determined plant species composition in established meter square wetland and "berm" plots. Students removed noxious "weed" species by hand using shovels to ensure all roots were removed. Students monitored success of spraying versus digging for removal of weeds. Students measured groundwater levels in 6 shallow wells made of capped PVC pipes using meter sticks to measure water levels from the top of the well. Students monitored height and basal diameter of selected trees and shrubs. Students recorded bird, mammal, amphibian, reptile, and invertebrate sightings. To collect invertebrates, a 50 meter sweep with an insect net was done and invertebrates were identified to the "family" level in the classroom. Binoculars allowed students to observe and identify birds and mammals. Inexpensive cameras with "trip-wires" were constructed and set-up as remote photo stations. Amphibians and reptiles were photographed and identified in the classroom. All data was transferred from the student notebooks to a computer database. Twelve students formed a team to research, design and install five

interpretive signs. The data collected during the bi-weekly monitoring was presented to other participants of the monitoring and enhancement project: David Evans & Associates (DEA) and the Tualatin Hills Park and Recreation District (THPRD) Park Board. The students were trained how to treat the natural environment with care, ensuring that all monitoring created minimal disturbance to the wetlands area.

ACTION:

1. Determination of plant species composition in established wetland and "berm" plots.
2. a) Removal of noxious "weed" species. (Biweekly)
b) Determination of plant species composition in additional plots to determine success of spraying versus digging for removal of weeds that threaten the wetland. (Quarterly)
3. Measure groundwater levels in 6 shallow wells made of capped PVC pipes. (Biweekly)
4. Measure height and basal diameter of selected individual trees/shrubs. (Quarterly)
5. Recorded bird, mammal, amphibian, reptile, and invertebrate sightings. (Biweekly).

PARTNERSHIPS:

David Evans & Associated (DEA)
Tualatin Hills Park & Recreation District (THPRD)
TIP (Teaching Improvement Program) Grant Fund
Catlin Gabel Middle School

RESULTS: The school and students established an on-going restoration, monitoring, and maintenance program. Hundreds of Purple loostrife were removed along with 2,154 willow seedlings. More than 620 Camus bulbs were planted, 221 of which were salvaged from a road widening project. Every student participated twice in thirteen field trips. Students kept journals and compiled data on the wetlands and were encouraged to reflect and creatively record their observations. Four wells were installed for monitoring purposes, and baseline data were compiled. Five interpretive signs were researched, designed and installed.

BARRIERS: Greenway Park is used by many school and community groups for environmental education and projects. These uncoordinated efforts can become counter-productive. For instance, a group planted non-native trees in the middle of West Sylvan's project. Water quality testing, slide shows and camas bulbs were unforeseen in the initial budget. Also needed were more shovels and field guides.

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