

## K-12 Mission with 4-H Club in Grant County, Washington

Four GISCorps Volunteers Assist a 4-H Club in Grant County, Washington

By Beth Carpenter, Crystal Murphy, JJ Bach, Kelly Stancel, GISCorps Volunteers

Our GISCorps volunteer team assisted WSU Extension 4H Youth Development and Grant County Emergency Management in conducting several events during their 2009 GPS/GIS Day event held on June 6, 2009 at the Grant County Fairgrounds in Moses Lake, Washington (GIS = Geographic Information Systems, GPS = Global Positioning System). Students ranging in age from 6 to 17 participated in exercises using GPS and GIS tools. GISCorps volunteers Kelly Stancel, J.J. Bach, Crystal Murphy and Beth Carpenter assisted the two agencies in basic GPS training, geocaching activities, intro to GIS and fairgrounds facility mapping.

Students were introduced to handheld GPS receivers and educated in satellite locations and their relevance to coordinate accuracy. The students (and many parents) had fun utilizing their skills to locate geo-cached items for prizes on the fairgrounds site. As the GPS and intro to GIS activities took place, behind the scenes the fairgrounds facilities data set was developed in GIS. Utilizing simple heads-up digitizing from orthophotography volunteers created a representation of all facilities on the fairgrounds and field verified for further accuracy. The Grant County Emergency Management staff can further build upon this geodatabase to add other features or attributes supporting their emergency planning and response efforts.

Figure 1: Hands-on GPS/Geocaching Field Exercise - GISCorps Volunteer, Kelly Stancel, working with students on a variety of handheld recreational and vehicle navigation GPS receivers. "Community engagement is pivotal in informing and educating others about the GIS field."

Kelly Stancel, GIS Analyst, Seattle Public Schools

Figure 2: Fairgrounds Facility Mapping – Student digitizing building footprints from aerial imagery, GISCorps team member Crystal Murphy assists. "Opportunities like this to share my expert GIS advice, offer all party's involved a new perspective of the GIS technology. The usability that ESRI products provide for many areas of research and design are infinite."

Crystal Murphy, GIS Analyst; King County Wastewater Treatment Division

Figure 3: ArcGIS Exercise, Intro to GIS – Students learning GIS on laptops inside Grant County Emergency Mgmt. office. J.J. Bach/GISCorps (standing) and Jennifer Merrill/WSU Extension 4H Youth Development (near whiteboard). "I am glad that I decided to volunteer for this opportunity because it was a great experience to be able to work hands on in the field with the GIS/GPS technologies and at the same time teach others to use the technology."

J.J. Bach, GIS Analyst, Seattle Public Schools

Figure 4: Fairground Facilities Mapping – GISCorps team members Crystal Murphy (left) and Beth Carpenter (right) after field verification of building locations on fairgrounds. "I enjoyed donating my time and talent – especially for a project that will help the community and become a basis for county emergency management datasets. Having the current software and equipment made this project run smoothly. Our team was able to quickly apply our skills toward the project work immediately. The organizing staff on this project were so great to work with, very helpful and supportive of our ideas."

Beth Carpenter, GISP - GIS Coordinator/City of Sammamish, WA

Figure 5: A map of building locations within the Fairground ".....We had a great time with approx. 25 learners present. ....The volunteers were excellent, very knowledgeable and capable of really helping make a difference. Thanks again...."

Diane Russo

WSU Extension 4H Youth Development

You can read an article written about the event by Diane Russo from [HERE](#).