

## CMaP PROJECT

**Project Title:** Renew, Reuse, Recycle—getting the ball rolling in West Haven City

**Created by:** SueZan Wight

**Class:** UEN CMaP 2010

<p>Project Description</p>	<p><i>"Let every individual and institution now think and act as a responsible trustee of Earth, seeking choices in ecology, economics and ethics that will provide a sustainable future..."</i>  — <b>John McConnell</b>, founder of International Earth Day</p> <p><i>"You must be the change you wish to see in the world."</i>  — <b>Mahatma Gandhi</b></p> <p>Recyclable materials pass through our hands every day. Plastics, Papers, Metals, Glass. However, in West Haven City where I live, we only have two large paper recycling dumpsters at the two elementary schools in our city limits. That's it. I'd really love for the kids to see how much we're throwing away. I plan to show students how each household recycling or not recycling effects our environment.</p> <p>Students will work in groups to canvas a local neighborhood surveying awareness of recycling. Students will create base maps to overlap one another. The base maps will be:</p> <ul style="list-style-type: none"> <li>- Which homes recycle one or more of the above recyclable materials on a regular basis (at least once a week) (i.e.—take plastics bags to recycle at the grocery store collection bins)</li> <li>-Which homes recycle nothing</li> <li>-Which homes would be willing to pay a maximum of \$10 a month for curbside recycling.</li> <li>-Which homes would be interested in a larger variety of recycling dumpsters at the elementary schools.</li> </ul> <p>Data will be compiled and presented at the West Haven City Office Building during Committee Meeting.</p>
<p>Community Issue or Problem Selected  -How project evolved?</p>	<p>According to the Environmental Protection Agency, the average American produces about 4.4 pounds of garbage a day, or a total of 29 pounds per week and 1,600 pounds a year. This only takes into consideration the average household member and does not count industrial waste or</p>

	<p>commercial trash.</p> <p>While living in Ogden, I had curbside recycling. When we moved, I learned that this was not an option in West Haven. Since moving, I have continued to separate my recyclables and take them into Ogden to put in my parents' curbside recycling dumpster. While taking CMAP, this issue has evolved into a community based project that I can initiate.</p>
<p>Community Partner(s)</p>	<p>Waste Management (801) 731-5052 2433 South 2050 West Ogden, UT 84401</p> <p>West Haven City Offices (801) 731-4519 4150 South 3900 West West Haven, UT 84401</p> <p>Weber County School District (801) 476-7800 5320 Adams Ave. Pkwy. Ogden, UT 84405</p>
<p>Project Objectives</p>	<p>In groups, students will learn GIS/GPS skills while surveying local residents about recycling. Groups will then present their findings through a multimedia presentation to the West Haven City Planning Committee.</p>
<p>Utah Core Standards/Objectives</p>	<p>Standard 4: objective 3b Determine the role of government in <u>contemporary</u> and historical world issues.</p> <p>Standard 5: objective1 Explore how humans change the environment and how the environment changes humans</p> <p>Standard 5: objective 2 Assess the importance and use of human and natural resources.</p> <p>Objective 2-1 Students will know the steps of the design process.</p> <p>Objective 4-1 Students will understand, identify, and use electronically communicate information.</p> <p>Objective 4-3 Students will be able to send, receive, and confirm electronic communication.</p>

<p>Essential Question(s) -Spatial Issue</p>	<p>How can humans use resources without destroying the environment?</p> <p>As a small group of people, do we have the ability to make changes we seek in the community we live it?</p> <p>How do GIS overlay maps help us understand problems in our area? How do they help us to make decisions? How has the technology of today allowed us to understand and communicate with the world today?</p>
<p>Assessments (rubrics, scoring guides)</p>	<ol style="list-style-type: none"> <li>1. Efficient completion of surveys by the given deadline will act as an assessment.</li> <li>2. Etch-a-sketch on the field and then downloaded to ArcMap completed will act as an assessment.</li> <li>3. Test of the basic uses of a GPS unit given at the end of each lab showing what they learned in that lab.</li> <li>4. Completion and noticeable participation in the project will also serve as an assessment.</li> </ol>
<p>Project Products</p>	<p>Maps, Charts, Graphs, and writing journal</p>
<p>Project Timeline (include a step by step Procedures)</p>	<ol style="list-style-type: none"> <li>1-Obtain GPS units from Davis County School District on a shared program.</li> <li>2-Install GIS software on computers at school</li> <li>3-Introduce students to the project idea, show recycling powerpoint: <a href="http://www.authorstream.com/Presentation/Teresa-38903-reduceusecycle-Applying-Three-Rs-Mount-Holyoke-Campus-REDUCE-REUSE-RECYCLE-Paper-Waste-Print-Doubl-Entertainment-ppt-powerpoint/">http://www.authorstream.com/Presentation/Teresa-38903-reduceusecycle-Applying-Three-Rs-Mount-Holyoke-Campus-REDUCE-REUSE-RECYCLE-Paper-Waste-Print-Doubl-Entertainment-ppt-powerpoint/</a></li> <li>4-Have two labs to instruct them on how to use their GPS unit: Etch-a-sketch on the field: i.e. tracking your initials or tracking a shape. Map trees in the schoolyard.</li> <li>5. Assign students into groups and areas they need to cover by a specific deadline to canvas a specific number of homes.</li> <li>6. Download survey coordinates into ArcMap using</li> </ol>

	<p>DNRGarmin. Have them create a field data chart from their survey results.</p> <p>7. Create maps and charts for an assignment. Prepare to present to West Haven City Planning Committee.</p> <p>8. Have students create a formal letter to the mayor asking for better vigilance in the area of recycling. Possibly involve them in writing letters to the editor of the Standard Examiner.</p> <p>9. Practice presentation in class.</p> <p>10. Present findings to West Haven Planning Committee.</p> <p>11. Have students write about their experiences in a writing journal (see project evaluation.)</p>
Resources Needed	<p>ArcGIS 9.2 software</p> <p>Weber County GIS data (maps)</p> <p>15-20 GPS Units</p>
Skills Required	<p>Prerequisite: some basic computer skills</p> <p>During pre-project labs, students will learn to use a GPS system, mark waypoints, tracks, and how download them into the ArcMap system.</p>
Project Team Member Roles	<p><b>Teacher(s):</b> SueZan Wight</p> <p><b>Students:</b> 9<sup>th</sup> grade students at Rocky Mountain Jr. High</p> <p><b>Partner(s):</b>          Brian Melaney, Mayor 801-731-5804          and West Haven City Planning Committee</p>
Celebration/Presentation	<p>Present findings at upcoming meeting City Hall meeting.</p>
Project Evaluation	<p>Have students complete a writing journal at the end explaining how they think the project went and what they thought could have been done better. Also writing about what they thought was accomplished and what still needs to be accomplished to complete the above objectives.</p>
Project Bibliography	<p>Author's Stream  <a href="http://www.authorstream.com/Presentation/Teresa-38903-">http://www.authorstream.com/Presentation/Teresa-38903-</a></p>

	<a href="#"><u>Doubl-Entertainment-ppt-powerpoint/</u></a>
Plans for Future CMAP Activities	<p>--Another way of recycling: Compost</p> <p>--Allowing students to brainstorm new CMAP activities that would be of interest to them.</p> <p>Some I'd like to do off the subject of recycling:</p> <p>--"Waypoints in Ogden Cemetery" Mapping out historical founders of the area and putting information about them on a field data graph.</p> <p>--"Waypoints to Points of Interest" Mapping out fun activities, their cost, or if they're free, and a star rating for each location.</p>