TEMPLATE FOR CMaP PROJECT

Project Title: Watersheds of the Salt Lake Valley
Created by: Monica French
Class: Salt Lake 2007

Project Description	Watersheds of the Salt Lake Valley The students participating in this project will become familiar with the watersheds of the Salt Lake Valley in terms of location, water quality and general qualitative descriptors. The students will first participate in a model program mapping Parley's Creek and taking water quality data at 5 sites. The students will collect data using GPS units and water testing kits. The students will then compile and project their data through the use of GIS program.
Community Issue or Problem Selected -How project evolved?	Is there a difference in the water quality of protected watersheds compared to unprotected watersheds? Water testing is a critical component of the AP Enviro Core
Community Partner(s)	USU Extension
Project Objectives	The students will acquire skills in: 1. Water testing 2. GPS 3. mapping through the use of GIS software

Utah Core Standards/Objectives	
Essential Question(s) -Spatial Issue	How to identify a complete watershed. How are watersheds affected by human use.
Assessments (rubrics, scoring guides)	Grading will be contingent upon the successful completion of the mapping component and the students scientific paper.
Project Products	Map of watershed including water quality data and GPS points. Each student will produce a paper discussing their watershed in relation to the overall water quality, water quality of each data point and the possible correlation that may exist between two tested variables. The class will do a comparative study of the water quality of the protected watersheds and the unprotected watersheds.
Project Timeline (include a step by step Procedures)	3 weeks. Week one: group data collection of Parley's stream and mapping the attributes using GIS software. Week 2: Individual testing of selected watershed and mapping data using GIS. Week 3: Correlation study and scientific paper
Resources Needed	Water testing kit, GPS units, GIS software
Skills Required	How to use testing kits, GPS units, GIS software, how to write a scientific paper, how to compute an "r" value for correlation analysis.
Project Team Member Roles	**Teacher(s): Monica French (instruction)** **Students: AP Environmental Class (good learners)** **Partner(s): USU Extension (facilitate testing)**

Celebration/Presentation	Students will share their maps and results of correlation study (powerpoint, photostory…)
Project Evaluation	Personal reflection based on concept acquisition and time used
Project Bibliography	ESRI Data GPS waypoint and tracks
Plans for Future CMaP Activities	Invasion species mapping, Soil testing and student projects.

Optional:
-Lesson Plans
-Student Artifacts
-Publicity