Watershed Management Interns

Summer 2008

Preparing Under-represented students for USDA Natural Resource Careers Foundation for California State University San Bernardino Water Resources Institute CSREES Award No. 2007-38422-18075 $275,000

Jason Thomas

Melissa Vasquez

Katherine Keeran

Shannon Johnson

Mathew Howard

Marlene Guiterrez

Angelique Santiago

Angelique works on the Water Conservation and Native Habitat Gardens project, a pilot study to determine the effectiveness of children as a means to sell native and drought-tolerant plants within the construct of a school fund-raiser. Part of her project includes speaking to elementary and high school students about water conservation and the role that native and drought-tolerant plants can play in it.

Nick Perry

Nick is cutting through material in the WRI Archives about the Lytle Creek watershed, repairing documents, as needed, and scanning reports, maps, photos, books, and papers of historical value to make them available by remote access. Nick also is preparing directions for using the WRI's Interactive Map Search Database.

Jennifer Kimmel

Jennifer is the Watershed Ambassador for the Lytle is Vital campaign, helping educate the public about the importance of keeping the watershed free of pollution in order to protect the drinking water supply for those downstream. She writes press releases, designs public relations materials, and attends community meetings to spread the message.

Lissa Jennings

Lissa works with the City Manager Offices of Ontario and San Bernardino to inspect the cities’ municipal and development codes, identifying barriers to implementing the Awahnee Water Principles. She is also creating a model ordinance to show improvement in watershed functions to strengthen the ecosystem, water quality, and water sources.

Karen Travis

Karen is examining the cultural and historical water use compared to current watershed management in the Lytle Creek Watershed.

Aaron Fregeolle

Aaron assists the Western Municipal Water District, using GIS technology to calculate the percentage of irrigated landscape in the water district’s service area. He is also exploring how to use the Water Demand Forecaster software.

Brian Spears

Brian photographs the flora and fauna of Lytle Creek and the neighboring areas, creating a visual catalogue of the special in the watershed. His work is used in public education messages created for the Lytle is Vital program and other watershed projects.

Kyle Quarles

Kyle’s is researching the history and development of the North Fork area of San Bernardino County. He will be creating a poster and two storyboards displaying the results of his research.

Karen Antonio

Karen is studying alluvial fans most likely to be developed by 2040. He will conduct environmental site assessments of three sites recommended by the Alluvial Fan Task Force. These sites will be outlined on GIS hazard maps to show their significance to the watershed and made available to stakeholders and the public. Sites that have had alluvial fan flooding will be used to show proper fan management.

Melissa is working with San Bernardino County Museum’s biological database and incorporating it into a GIS database that will make the information easier to understand and access. The information will be made available to other government conservation agencies such as the U.S. Forest Service and California Department of Fish and Game.

Katherine is surveying the habitat of the San Ana Speckled Dace, a small minnow that lives in local streams. She takes water samples of the areas in which the fish are present. Katherine is also collecting fish for genetic analysis to compare them to previously found populations. Her project incorporates both conservation biology and population genetics.

Shannon is collecting data such as storm channel water quality, storm drain location and known National Pollution Discharge Information System permitted locations to determine contamination and point sources. He is incorporating GIS mapping to help locate those areas that may need to be more closely monitored in the future. Best Management Practices will be identified and implemented at the point of contamination (POC) sources.

Mathew is collecting water samples at four stations in Lytle Creek from the bottom portion of the creek to the Applewhite Campground, testing for contaminants. He is also testing other parameters, such as total nitrogen, total phosphorus, and TOC’s (total organic carbons).

Marlene works alongside Matthew in Lytle Creek doing water quality monitoring. Together, they test water for total coliform, E-coli, and enterococcus. The water is sampled weekly.

Katherine is studying alluvial fans most likely to be developed by 2040. He will conduct environmental site assessments of three sites recommended by the Alluvial Fan Task Force. These sites will be outlined on GIS hazard maps to show their significance to the watershed and made available to stakeholders and the public. Sites that have had alluvial fan flooding will be used to show proper fan management.

Melissa is working with San Bernardino County Museum’s biological database and incorporating it into a GIS database that will make the information easier to understand and access. The information will be made available to other government conservation agencies such as the U.S. Forest Service and California Department of Fish and Game.

Katherine is surveying the habitat of the San Ana Speckled Dace, a small minnow that lives in local streams. She takes water samples of the areas in which the fish are present. Katherine is also collecting fish for genetic analysis to compare them to previously found populations. Her project incorporates both conservation biology and population genetics.

Shannon is collecting data such as storm channel water quality, storm drain location and known National Pollution Discharge Information System permitted locations to determine contamination and point sources. He is incorporating GIS mapping to help locate those areas that may need to be more closely monitored in the future. Best Management Practices will be identified and implemented at the point of contamination (POC) sources.

Mathew is collecting water samples at four stations in Lytle Creek from the bottom portion of the creek to the Applewhite Campground, testing for contaminants. He is also testing other parameters, such as total nitrogen, total phosphorus, and TOC’s (total organic carbons).

Marlene works alongside Matthew in Lytle Creek doing water quality monitoring. Together, they test water for total coliform, E-coli, and enterococcus. The water is sampled weekly.

Katherine is studying alluvial fans most likely to be developed by 2040. He will conduct environmental site assessments of three sites recommended by the Alluvial Fan Task Force. These sites will be outlined on GIS hazard maps to show their significance to the watershed and made available to stakeholders and the public. Sites that have had alluvial fan flooding will be used to show proper fan management.

Melissa is working with San Bernardino County Museum’s biological database and incorporating it into a GIS database that will make the information easier to understand and access. The information will be made available to other government conservation agencies such as the U.S. Forest Service and California Department of Fish and Game.

Katherine is surveying the habitat of the San Ana Speckled Dace, a small minnow that lives in local streams. She takes water samples of the areas in which the fish are present. Katherine is also collecting fish for genetic analysis to compare them to previously found populations. Her project incorporates both conservation biology and population genetics.

Shannon is collecting data such as storm channel water quality, storm drain location and known National Pollution Discharge Information System permitted locations to determine contamination and point sources. He is incorporating GIS mapping to help locate those areas that may need to be more closely monitored in the future. Best Management Practices will be identified and implemented at the point of contamination (POC) sources.

Mathew is collecting water samples at four stations in Lytle Creek from the bottom portion of the creek to the Applewhite Campground, testing for contaminants. He is also testing other parameters, such as total nitrogen, total phosphorus, and TOC’s (total organic carbons).

Marlene works alongside Matthew in Lytle Creek doing water quality monitoring. Together, they test water for total coliform, E-coli, and enterococcus. The water is sampled weekly.