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Executive Summary

The internship that I was accepted into was the National Resource Conservation Service office in Hollister, California of the United States Department of Agriculture. During this internship I assisted the field staff, assisted the farmers with soil testing and planned educational activities for children and youth.

Project Objectives

My career goals for before this internship was to work for the Animal Plant Health Inspection Service, APHIS. During this internship my career goals have changed slightly to expanding my focus on the department of National Resource Conservation Service. I decided to lean in this direction because of the experiences that this internship provided me with. I enjoyed working for this office because of the partnerships they have with the farm owners. I felt you could really see the hard work that is done in the office pay off out in the field. The teamwork that they have is beneficial not only for the farm owners but for the preservation of the environment.

Specific project tasks that were set out were to assist field staff with site visits to farms and ranches. Prepare highly erodible land determinations, soil maps and other resource inventories. Utilize a vermin-composting display to prepare hands-on outreach activities to the general public. Prepare information sheets on plants commonly found on rangelands. Train farmers on the use of nitrate test strips and how to keep records for management practices. Assist in organizing the collection of soil samples from farmers to be tested.

Project Approach

To achieve these set tasks above I was given in a variety of resourceful information on the importance of soil health and more detailed information on how the NRCS provided resources for farmers to help not only improve their farm but to increase sustainability of the land. Athena Pratt, District Conservationist
and Drew Mathers, Soil Conservationist took me with them on field sites to learn and assist them in organizing contracts with the farmers. This included obtaining signatures, highlighting important aspects of their contract and making sure the farmer understood what they were being asked of. This particular NRCS office worked with mostly Chinese farmers where there were language barriers that provided some challenges when explaining contracts. Athena and Drew accomplished these tasks with patients and at times with the help of other farmers to help translate.

When it came too preparing highly erodible land determinations, soil maps and other resource inventories; Athena, Drew, and Stephanie took the time to show me the ropes of the software ArcGIS. I created and organized maps for farmer contracts and went through landowner HEL information and determined what classification they were for HEL upon the approval of Athena. I created a vermin-compost display with the assistance of Drew. I then created lesson plans to give to children of varies ages regarding soil health, pollinators, and the importance of composting. I went to the YMCA summer camp programs and discussed these topics with children ranging from K-8 graders allowing them to be hands on with the compost display and activities. I assisted Drew in training farmers on the use of nitrate test strips by showing the farmer the step by steps on how to test their soil. This helped farmers know how much nitrate is in their soil and gives them better control over how much nitrate they are putting in their soil, allowing for less nitration pollution in the soil. I was also fortunate to go out in the field and do transecting of randomized land to determine soil health. Determining the soil health by identifying the type of soil, species of plants, and the number of plants species.

**Project Outcomes**

This project has given me a well-rounded understanding of how the NRCS works as well as a great experience. I have been able to become familiar and gain experience in different aspects of this office. I have learned the value of having a patient and understanding relationship between the NRCS and the farmers out in the field. The connection between them and the work they do together to help further conserve the land is what is making a difference in this agency. I felt this was a very positive experience for me. I was able to gain knowledge in creating a lesson plan and giving presentations to children, working with ArcGIS software, being out on in the field learning about the different types of people and soils, understanding how the NRCS assists farmers in improving their land and keeping it sustainable, and what goes into a contract with the NRCS.

**Conclusion.**

This internship has furthered my career goals by giving me experience in not just for the NRCS agency but other potential careers as well. For example learning and practicing using the ArcGIS software is very valuable experience for me to have due to so many different careers now using this software. Another
example is being able to create and give hands on educational lessons to children of different ages. I felt this was a great experience for my future and I am very appreciative of all the help I have received from the NRCS office in Hollister.