August, 2020



Youth and Community Engagement Tool Kit

A Publication of the National Association of Resource Conservation and Development Councils



Youth and Community Engagement Tool Kit

Our hope is that, through these case studies and success stories, interested youth and community members will better understand how USDA-NRCS practices may be utilized to benefit diverse communities while fostering the development of the leaders and conservation makers of tomorrow.

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Introduction

This Youth and Community Engagement Toolkit

consolidates the lessons-learned of the interns and host Resource Conservation and Development (RC&D) councils who participated in the National Association of Resource Conservation and Development Council's (NARC&DC) *Empowerment and Training of Youth Leaders* project in 2020. The goal of the project, which was funded by a grant from the United States Department of Agriculture's Natural Resource Conservation Service, was to engage interns with research-based conservation best practices and best available technologies, and identify opportunities for maintaining existing working lands and incorporating current conservation practices through the involvement of traditional and nontraditional community partners.

During the course of this project, interns were hosted and mentored by RC&D councils representing communities in California, Oregon, Montana, Pennsylvania, and Connecticut. Through hands-on projects and a variety of community engagement opportunities, interns were exposed to a diverse set of conservation issues and practices.

Through their local projects, the participating interns and host RC&D Councils reached several important Key Findings related to engaging youth with conservation practices and fostering the development of future agriculture and conservation professionals.

We encourage RC&D Councils, allied organizations, and youth to utilize these Key Findings to strengthen capacity to engage with local communities on critical conservation issues.



Key Findings

By taking action on these Key Findings, RC&D Councils around the nation will empower their organizations to more effectively engage youth and the community in their local regions:

1. SOCIAL MEDIA FOOTPRINT

An organization's social media footprint (and their ability to engage with their community online) can be increased through concerted effort, including strategic outreach to youth and underserved communities and higher quantities of social media posts.

2. CAREER READINESS TRAINING

Career readiness training is one of the most effective ways to engage tomorrow's leaders with conservation disciplines, especially during one-on-one sessions where youth have the chance to review their resumes and cover letters with mentors and to discuss career goals.

3. UTILIZING PROFESSIONAL PERSPECTIVES

Exposure to a variety of professional perspectives and forms of career training via engagement with adults working in several different roles within the agriculture and conservation field is especially beneficial.

4. MULTILINGUAL EDUCATIONAL MATERIALS

Organizations seeking to engage with youth on agriculture and conservation issues should create multilingual educational materials, such as workshops and videos. Multilingual educational materials are vital to maintaining connections with diverse communities.



Key Findings

By taking action on these Key Findings, RC&D Councils around the nation will empower their organizations to more effectively engage youth and the community in their local regions:

5. DIRECT COMMUNITY OUTREACH

Hands-on projects that involve direct community outreach, such as vermiculture bin training and the distribution of garden starter kits, serve as effective opportunities for youth to engage other youth in agriculture while providing important educational services to under-served communities.

6. IDENTIFY CAREER PATHWAYS

Youth improve their chances of obtaining employment opportunities in the natural resources fields if they follow established career pathways. Youth should prepare via career research, completing the proper course work, and finding practical experience opportunities such as volunteering or part-time employment. Planning a strategy with counselors at both the high school and college level will help set aspiring youth on the right trajectory for successful careers in agriculture and conservation.

7. ADAPTING TO ONLINE FORMATS

An organization's ability to adapt programs to online formats is a crucial advantage when a community is faced with unexpected external factors such as the COVID-19 pandemic. Online formats also increase opportunities to reach youth.

Cultivating Connections-High Tunnel Best Practices

BITTER ROOT RC&D Hamilton, Montana

Grant funds received from the National Association of RC&D Councils = \$16,000

Matching funds and contributions provided by host council and local partners = \$24,643



Youth interns and volunteers used NRCS best practices to maximize high-tunnel production, providing families in the Bitterroot Valley with instant garden starts.

Major project objectives included involving teens in conservation utilizing NRCS Best Practices related to irrigation, erosion, mulching, and high tunnel vegetable production.

"In a time when families are facing unprecedented challenges to keep their families fed, assisting and empowering the 180 families to raise some of their own food was a critically important accomplishment." -Pam Gouse, Bitter Root RC&D





721 hours of research and farm labor



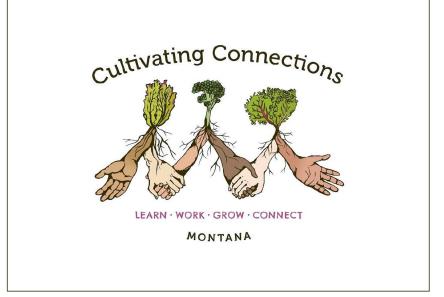
9,540 seedlings & 19,000 seeds donated



180 families received gardens

With the assistance of the Bitterroot Conservation District, Homestead Organics Farm, NRCS, Hamilton Field Office, and Cultivating Connections.

BITTER ROOT RC&D COUNCIL-LESSONS LEARNED



The above logo was designed by a Bitter Root RC&D project intern, Lilly, and will be used by Cultivating Connections for online marketing.

In Hamilton, Montana, interns worked with Cultivating Connections, a non-profit educational organization that provides agricultural job skills. Interns worked in "hands-on farm classrooms " to learn about best practices for producing organic vegetable crops in high tunnels. As they took part in seeding, transplanting, watering, irrigation, weeding, mulching and the eventual harvest, interns experienced the advantages of using high tunnels to extend the growing season, a useful practice given the harsh winters in Montana.

A critical part of this project involved rehabilitating an irrigation ditch that feeds the farm, which had recently flooded several of the farm's high tunnels. With help from the Bitterroot Conservation District, interns worked with contractors to repair the ditch and plant trees along it to hold the banks, to protect the water from sedimentation, and to protect the farmland against future flooding. The experience provided the interns with a practical lesson on the utilization of buffers to control erosion and improve water quality.

BEST METHODS FOR ENGAGING YOUTH WITH CONSERVATION BMPS:

"I think social media is the best way to reach youth. Most teens have social media such as Instagram, Facebook, YouTube, Twitter, etc. Since we spend so much time on social media, we come across lots of different topics and ideas and people making it easy and fun to connect with other people around the world. If you want to get something across to teens and young people, social media is the way to go."

-Lucy, Bitter Root RC&D Intern



Interns learned about several methods of irrigation in use at Cultivating Connections.

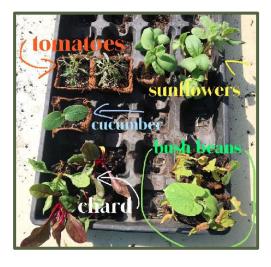
BITTER ROOT RC&D COUNCIL-LESSONS LEARNED



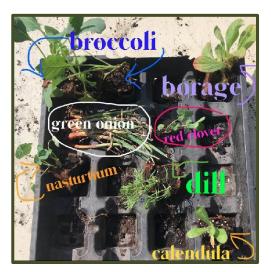
Interns took part in a project which directly engaged the youth of their community by encouraging them to raise their own small-scale gardens

Bitter Root RC&D interns engaged with their local community, via the May Day Gardens Project, by helping to provide free seedlings paired with online video garden tutorials to empower 180 families to grow their own gardens in small spaces. Their effort was received with gratitude and excitement by the community, including youth of ages ranging from toddlers to teenagers, some of whom were facing economic insecurity due to the COVID-19 pandemic. This opportunity provides a tangible example of how youth can engage other youth in agriculture to meet an immediate community need while providing hands-on and social media-adaptable educational opportunities.

"It was astonishing that we could get so many people on board with this, considering we live in such a rural area. It helped me see that we can bring people together and that conservation is beneficial to everyone." -Lucy, Bitter Root RC&D Intern







Interns helped compile and distribute 180 May Day Garden plant starts.

NORTH COAST YOUTH ENGAGEMENT PROJECT

CONSERVATION WORKS (NORTH COAST RC&D)

Santa Rosa, California



Grant funds received from the National Association of RC&D Councils = \$15,217

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Matching funds and contributions provided by host council and local partners = \$15,871



"I have thoroughly enjoyed the opportunity...to experience this internship in an area where people and organizations are exercising a variety of USDA-NRCS best management practices..."—Makayla, Conservation Works Intern Conservationist

Youth from one of Conservation Works vermiculture project schools "dig in" to explore the rich compost produced by worms in these school bins, which were constructed and provided by Conservation Works for this project.

This project facilitated outreach to youth and other community members by researching outreach activities, assessing the breadth of the existing outreach to identify gaps, and identifying barriers for engaging youth in sustainable agricultural practices.



5,600 people engaged via social media



Focused Outreach Plan developed



100 hours of partnership engagement



Interacted with more than 40 youth

### CONSERVATION WORKS (NORTH COAST RC&D COUNCIL)-LESSONS LEARNED



The Intern Conservationist helped lead a fun and engaging environmental education module which teaches youth lifelong sustainability and healthy soil regenerative practices.

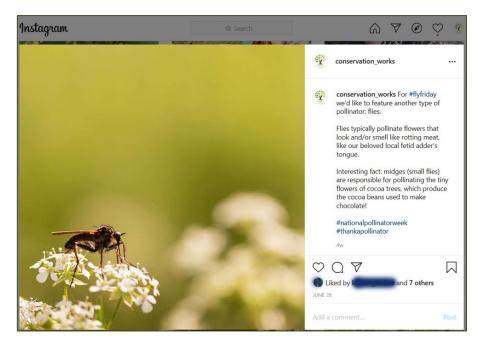
In Santa Rosa, California, the intern, Makayla, led a project focused on studying effective outreach techniques, including interviews with local representatives of sustainable agriculture and resource conservation organizations, both governmental and private. The intern researched existing outreach programs related to the mission of Conservation Works, assessed the breadth of the existing outreach to identify any gaps, and identified barriers to engaging youth and other community members (especially underserved communities) in these issues. The intern detected gaps in the existing outreach in Mendocino, Lake, Marin, and Sonoma Counties related to sustainable agriculture and forestry best available technologies and with youth engagement with these technologies. As a first step in addressing this issue, the intern presented and discussed these gaps at public meetings and to the Conservation Works Board of Directors.

#### ENGAGING INTERNS WITH CONSERVATION BMPS:

"We exposed our intern to many different NRCS best management practices, one of which was increasing soil health through the use of vermicomposting systems. In the early spring, before COVID-19 workplace disruptions, our intern was able to attend several vermicomposting workshops at local schools. These workshops provided educational opportunities for the intern to learn about vermicomposting systems as a way to improve plant health and productivity and reduce emissions of greenhouse gases while also engaging local youth leaders in sustainable agriculture projects. Our intern's engagement with this BMP was successful in achieving increased youth and underserved communities' participation in sustainable agriculture."

> - Oona Heacock, Conservation Works

### CONSERVATION WORKS (NORTH COAST RC&D COUNCIL)-LESSONS LEARNED



The intern increased Conservation Works' Instagram audience by more than the targeted 50% during the course of the project.

Another of the intern's goals for this project was to bolster the social media presence of Conservation Works. The intern increased social media posts on multiple platforms, and grew Conservation Works' Instagram audience by more than 50%, reaching 192 followers after 63 posts. This effort also expanded the Twitter audience, although not by as much as hoped, as difficulties in breaking into the Twitter feeds of their target audience proved more challenging than expected. This project also increased Facebook posts regarding sustainable agriculture and forestry best available technologies, and continued to increase the amount of Conservation Works Facebook followers. This experience demonstrates that a conservationfocused organization's social media footprint (and their ability to engage with their community online) can be increased through concerted effort, including strategic outreach to youth and underserved communities and higher quantities of social media posts.

#### OUTREACH APPROACHES DURING COVID-19:

"Social media and digital content can be helpful for situations in which in-person contact and outreach to communities is limited due to geographic challenges, or health and safety orders, etc. Outreach should include offering events pertaining to sustainable agriculture, such as online workshops, preferably around one-hour in length, and short informational videos that can be posted on social media, video viewing platforms, such as YouTube, and web pages. Planning should also include creating multilingual educational materials, such as workshops and videos. Whether organizations have staff on hand with fluency in different languages or must hire translators, bilingual educational materials are vital to maintaining connections with diverse communities."

-Excerpt from Conservation Works Outreach Plan created by Makayla, North Coast RC&D project intern

### PATHWAYS TO AGENCY EMPLOYMENT INTERN ENGAGEMENT PROJECT

### Ore-Cal RC&D Yreka, California

 " My youth interns found this so timely and relevant as they make plans on education and careers at NRCS or other agencies, thank you so much".
 -Charnna Gilmore, Scott River Watershed Council



Grant funds received from the National Association of RC&D Councils = \$12,499

Matching funds and contributions provided by host council and local partners = \$17,600

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Project Goal: Identify and map Pathways to Employment for youth considering careers in natural resource conservation agencies and NGOs while exposing youth to NRCS employment opportunities and programs. Results were shared with youth and youth leaders who will "Train the Trainers" to impact large numbers of future youth leaders.



12 youth and crew leaders

Workshops highlighting various career pathways were conducted with local youth.



14 Pathways to Employment mapped



Face to face & Zoom presentations on career opportunities

3 new nonprofit partnerships activated

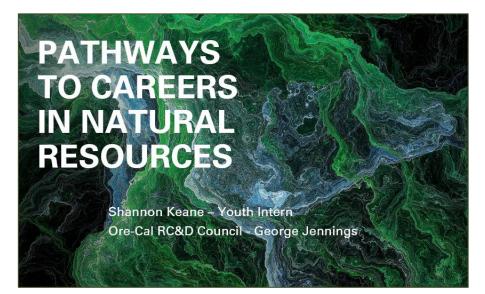
Fort Bidwell PAIUTE Reservation w/ Lomakatsi Restoration, Scott River Watershed Council







ORE-CAL RC&D - LESSONS LEARNED



In August 2020, the Ore-Cal RC&D intern delivered her Pathways to Careers in Natural Resources presentation during a webinar attended by RC&D councils from around the country.

In Yreka, California, the Ore-Cal RC&D intern's goal was to analyze and illustrate potential pathways for high school students to access an entry level position within one of the natural resources agencies and organizations operating in Northern California and Southern Oregon, including: US Forest Service (USFS), Natural Resources Conservation Service (NRCS), US Fish and Wildlife Service (USFWS), and The Nature Conservancy. The intern developed a white paper and visual aids outlining the pathways and presented the findings to local youth via virtual and in-person presentations. The NRCS Pathway visual can be found on the following page . While the intern's research was specific to the region of Northern California and Southern Oregon, many of these opportunities are offered nationwide and similar pathways exist throughout the rural western U.S. and beyond.

THE IMPORTANCE OF CONSERVATION BEST MANAGEMENT PRACTICES:

"The removal of western *juniper for forest health is* an incredibly important practice, because in the last century, western juniper have encroached on mixed conifer forests and thrived in the fire-suppressed lands while native tree populations, such as ponderosa pine, are struggling. Junipers are also known as water hoas which not only leave little water for other vegetation in the forest, but also deplete water in the soil which increases the chances and severity of fire."

-Shannon, Ore-Cal RC&D Intern

ORE-CAL RC&D - LESSONS LEARNED

Pathways to Employment: USDA -NRCS

	2				
cation	Natural Resources Conservation Service Soil Conservationist Agriculture Engineer Range Management Wildlife Biologists Conservation Planner				
condary Edu	Internship: Actively producing a related degr 640hrs, at least 2 summers Competitive (USA jobs) Paid Upon graduation, intern is eligible		degree & within two years of graduation ◆ 1-year program ◆ Competitive (USA jobs)		
Post-Se	Classes/ Experience Soil Sciences (15 credits) ArcGIS Plant/crop ecology (15 credits) Handheld GPS/ mapping Animal ecology (9 credits) Knowledge of local farming and ranching operations				
ISecondary EducationI IPost-Secondary Education	 Earth Team Volunteer Program Students 14 years and older Volunteers work with conservation p improve air quality and enhance wild Northern CA contact: Carrie Nicolls Carrie Southern OR contact: Kathy Ferge kathy 	llife habitat ie Nicolls@c:	a usda gov	rove soil quality, conserve water,	
	 Ag Mechanics Ag Welding Ag Fabrication and Construction 	Focused Dua Agri Science 1 Intermedi Adv Ag E Agri Business Intermedi Adv Ag N Natural Reso Intro Sust	ate Ag Business susiness Pathway ate Ag Mechanics fechanics urces Pathway ainable Ag ate Sustainable	Yreka High School <u>Focused Dual Enrollment</u> Animal Science Pathway Animal Science Pathway Animal Husbandry Agri Mechanics Pathway Intro Ag Mechanics Adv Agriculture Mechanics Adv Agriculture Mechanics Ag welding Ag metal fabrication Natural Resources Pathway Intermed Forestry & Natural Resources Adv Forestry & Natural Resources Floral Design	

The Ore-Cal intern created this graphic to provide a visual representation of existing career pathways to USDA-NRCS employment in Northern California and Southern Oregon.

ADVICE FOR YOUTH INTERESTED IN NATURAL RESOURCES JOBS:

"Youth employment opportunities with governmental agencies or NGOs working on natural resource focused issues abound if you prepare and follow the created pathways. Each of the agencies has a national hiring system and a local internship program. Preparing yourself by doing the research, getting the course work completed, and finding practical experience opportunities like volunteering or parttime employment will move you closer to a career in the agencies. It is important to plan a strategy with counselors at both high school and college to make sure you are on the correct trajectory."

-Shannon, Ore-Cal RC&D Intern

YOUTH LEADERSHIP FOR CONSERVATION & AGRICULTURE

CONNECTICUT RC&D COUNCIL Haddam, Connecticut

Grant funds received from the National Association of RC&D Councils = \$15,500

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Matching funds and contributions provided by host council and local partners = \$16,216



CT RC&D partnered with the NRCS CT State Agronomist, Jim Hyde, to conduct an on-site training demonstration during a Cover Crop / No -Till Pilot Project at SubEdge Farm. He also did a mock site evaluation and answered questions about career options in the field.

"Without this experience I am not sure if I would have found what I am passionate about, ecology, or would have gotten a critical jumpstart into my career/future. Also I have learned about current environmental issues that I had no clue about before the internship, issues that I want to help with and make change in. Being a part of the Groundbreakers was one of the

CTRCD.org/youth/groundbreakers

Groundbreakers was one of the best things I could have done for my education, my career, and my future."

-Ana, CT RC&D Intern

"Our team made vermicomposting bins to give to community organizations and delivered lettuce plants to local organizations for people in need. This gave me a defined sense of what volunteer work looks like and allowed me to get creative with helping others." -Kurt, CT RC&D Intern



30+ industry professionals engaged with interns

15 planter & vermicompost donations



400 hours of technical training



27 public educational materials created by interns

Partners: NW Conservation District, CowPots, Assawaga Farm, CTNOFA, CT Ag Experiment Station, Wallingford Community Garden, Earth Care Farms, UCONN Soil Research Team, CT Council on Soil and Water, SubEdge Farm, Wallingford/Middletown Public Schools FFA Programs

### CONNECTICUT RC&D-LESSONS LEARNED



Interns received a dry bulk density measurement demonstration from NRCS Connecticut's state agronomist. This demonstration and further explanation from Sub Edge Farm helped interns learn about cover cropping and crop rotation.

In Haddam, Connecticut, CTRC&D formed a team of four interns ("The Groundbreakers") ages 16-23 interested in Conservation and Soil Science. For six months they were immersed in the subject of soil health and engaged with industry professionals on agriculture productivity, carbon sequestration, environmental practice in land use, and direct career training in the field of conservation. The interns especially benefitted from exposure to a variety of professional perspectives and forms of career training via engagement with individuals working in diverse roles within the conservation field. During the project, each intern interviewed a professional working in the fields of conservation and agriculture, including a dairy farmer, a postdoctoral researcher at University of Connecticut, a nutrient management planner and soil conservationist, and the Northwest Conservation District Executive Director.

#### CHALLENGES OF ENGAGING YOUTH AND COMMUNITY WITH CONSERVATION BMPS:

"I believe the biggest challenge is breaking the stigma that is associated with something like soil science or agriculture. When someone hears the term "soil science", they probably would not know much or anything about it. Many people are unaware of what actually happens in the soil, or that it requires management practices at all. This makes the entire concept foreign, which wards people away from it. Another stigma that is associated with BMPs is the negative aspect of farming. Many people are not familiar with farming on any level, which makes it difficult to understand the process behind keeping the soil healthy."

-Kyle, Connecticut RC&D Intern

### **CONNECTICUT RC&D - LESSONS LEARNED**



Interns received a virtual tour of Freund's Farm Inc. to learn about anaerobic digestors, waste management, healthy land use practices, sustainable food sourcing and ethical milking practices for cattle.

Using an almost all-digital format, the interns had the opportunity to engage as a team and connect over weekly assignments that were curated by their CTRC&D mentor. These ranged from videos to readings and case studies. Group discussions were held after each assignment and augmented with a virtual visit to the field, or conversation with a professional, making the content easier to digest and providing an effective alternative to hands-on activities. CTRC&D found that career readiness training was one of the most effective ways to engage with their interns, especially during one-onone sessions where the interns had the chance to review their resumes and cover letters with their mentors.

#### DEVELOPMENT OF EDUCATIONAL OUTREACH CAMPAIGN FOR SOIL HEALTH:

"The final project is where the interns really started to take ownership and exercise the new knowledge they formed since starting the program. They became more confident with speaking and sharing their expertise. " "The interns really went above and beyond with their final project, creating a webpage as part of the CT RC&D's website with the goal to educate other youth about subjects and job opportunities in the soil science and conservation fields. On this webpage, they created infographics, blog posts and a documentary that summarized their experience They also led a social media takeover on the CTRC&D Instagram where they highlighted their topics of interest, as well as interviews that directed traffic to the website. "

-Jillian Shea, Youth Education Coordinator, Connecticut RC&D

### CONNECTICUT RC&D – INTERNSHIP MINI-DOCUMENTARY AND "GROUND BREAKERS" WEBSITE

The experience of the Connecticut RC&D interns was chronicled in a minidocumentary.

The interns also created a webpage as a resource for other youth to learn more about conservation and soil science.

### Watch the mini-documentary **HERE!**

www.youtube.com/watch?v=X2Y4Jqau8o4&feature=youtu.be



### Visit the interns' webpage HERE!

www.ctrcd.org/youth/groundbreakers

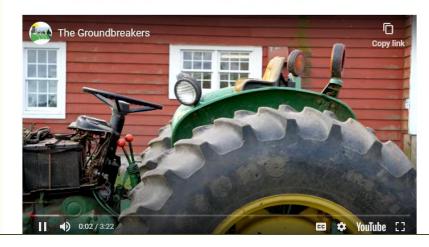
#### **THE GROUNDBREAKERS**

Our Groundbreakers Team has created this webpage as a resource for other youth to learn more about the world of Conservation and Soil Science. Read their blog and feel free to drop questions in the comments!

Youth Leadership for Conservation & Agriculture Program

In 2020, CT RC&D was awarded a National Association of Resource Conservation and Development Councils (NARC&DC)

#### CHECK OUT THIS MINI DOCUMENTARY ON THEIR GROUNDBREAKING WORK!



### News From the Groundbreakers

#### PERSONAL REFLECTIONS FROM OUR INTERNS

Building Personal Skills Personal Reflection: Ana Personal Reflection: Kurt Personal Reflection: Danielle Personal Reflection: Kyle

GROUNDBREAKERS

### COMMUNITY PARTNERSHIPS RC&D-LESSONS LEARNED



The Community Partnerships RC&D intern organized a field trip for an afterschool student program to visit the Riverside Greenhouse and learn about the Community Cookshop Program

In Lewistown, Pennsylvania, the Community Partnerships RC&D intern, Javiera, engaged with multiple programs operated by her host Council, including Community Cookshops, a program which offers educational resources for the community, including information on how families can start seeds and grow their own food, hands-on practice for potting seeds, and free seeds for families to take home. The intern successfully organized an in-person cookshop with 64 attendees, as well as a separate field trip for youth participating in an after-school program. Additionally, the intern helped to adapt Community Cookshops to a virtual set-up, which allowed the program to continue during the height of the COVID-19 lockdown.

Over the course of the project, the intern gained firsthand experience with several forms of community outreach, including youth-focused programs, and learned the importance of an organization's ability to adapt programming in the face of unexpected conditions in order to better serve a local community.

#### INTERN ASSISTANCE WITH HISPANIC OUTREACH AND VIRTUAL PROGRAMMING:

During this project, the Community Partnerships RC&D intern assisted her host Council with targeted outreach to the local community through the translation of Community Partnerships outreach materials from English to Spanish, and by working with the Outreach Coordinator to develop a plan for the Council's future outreach to the Hispanic community.

To enable Community Partnerships RC&D to continue offering their local community programs during the COVID-19 pandemic, the intern helped to adapt their programs for online delivery, including Community Cookshops, the Wild Geese: Flock Together program, and after-school and summer camp programming. A publication of the

#### National Association Of Resource Conservation And Development Councils

www.narcdc.org



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Natural Resources Conservation Service

Thank you to all of our host RC&D Councils for partnering with NARC&DC on this project:



Conservation Works www.ncrcanddc.org



Ore-Cal RC&D www.orecalrcdc.org



Community Partnerships RC&D www.cpartnerships.com



Bitter Root RC&D www.bitterrootrcd.org



Connecticut Resource Conservation & Development

Connecticut RC&D www.ctrcd.org

Project support provided by:



Western Maryland RC&D www.wmrcd.org



O'ahu RC&D www.oahurcd.org