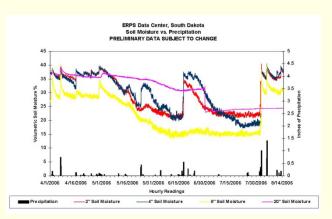
Thoughts on Soil Moisture Network Placement and Future Engagement

USDA Climate Change Program
National Soil Moisture Network Meeting

NOAA Boulder, CO May 24-26, 2016

Dr. Carolyn Olson USDA-OCE-CCPO





Climate Change and Environmental Justice Communities

- E.O. 12898: Environmental Justice
 - Each Federal Agency achieves as part of its mission
 - Minorities and Low Income
- Environmental Justice Communities Today
 - Minority Populations, Low-income and Socially Disadvantaged Populations
 - American Indians, Alaska Natives, and sovereign Tribal governments,
 - Highly persistent-poverty regions
 - Communities that are disproportionately and adversely burdened by environmental risks and hazards



Climate Change and Environmental Justice Communities

- Addresses **Environmental Effects** of federal programs, policies and activities on these Communities
- USDA EJ Strategy for 2016-2020: Guiding environmental justice in research, data collection, analysis, interagency coordination and development of model projects

Presidents Climate Action Plan

- Tribal Leaders Task Force on Climate Preparedness and Resilience
- The Office of Tribal Relations and staff from the Departments participated on the White House Council for Native American Affairs interagency working groups
 - Focus: Federal outreach and policy for climate change, economic development, energy, health and wellness, and sacred sites,
 - Interagency Arctic Executive Steering Committee working groups on coastal erosion, energy, and Tribal consultation.

USDA Has Leadership in Natural Resources and Climate Dissemination

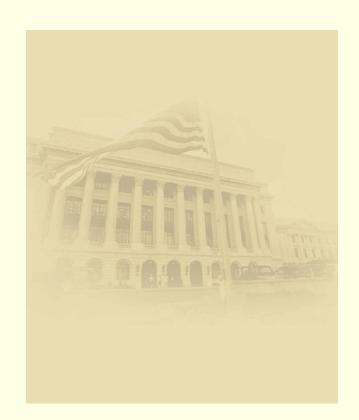
- Rural Areas USDA Stakeholders
 - Population Loss
 - Chronic poverty
 - Job loss and
- Vulnerabilities vary with Geographic Region:
 - USDA Regional Climate Hubs
 - Science Based
 - Region-specific information and technology
 - Underserved and vulnerable communities, Tribes and Individuals



USDA EJ Strategic Goals for Communities at Risk

- 1. Ensure USDA Programs Provide Targeted Opportunities for EJCs
- 2. Capacity-Building
- 3. Public Participation
- 4. Civil Rights
- 5. Employee Training
- 6. Updating Regulations





USDA EJ Goal 1: Program Opportunities

"Establish a National Soil Moisture Network with an emphasis on expanding monitoring into underserved regions and vulnerable populations, to help improve monitoring capabilities, plan for drought, and support drought and climate change risk-management strategies."



Johnson Farm.

Nebraska SCAN Site

Goal 2: Capacity Building

- Collaborate with environmental justice communities and other partners to train residents, enhance community capacity, and establish and attain environmental justice priorities, including climate change resilience and adaptation strategies
- Collaborate with environmental justice communities and other partners to develop career and leadership opportunities for community members.

EJ Goal 2: Capacity Building

• Collaborate with partners to address other <u>climate change risks</u>, including flooding, drought, heat stress, sea-level rise, and invasive species pressure

• Establish Tribal natural resource <u>climate</u> <u>change resilience projects</u> in collaboration with other Federal agencies and partners.



EJ Goal 3: Public Participation

- Expand participation in program operations, planning activities, and decision-making processes to benefit EJCs
- Engage the public to identify, avoid, minimize, and mitigate potential environmental justice concerns based upon input from various mechanisms, such as public meetings, comment periods, and Tribal consultation
- Through USDA's Office of Tribal Relations, continue the improvement of USDA's recognition of and support for its government-to-government relationship with Tribal governments, which will in turn provide improved support for Tribal communities and individuals.

EJ Goal 3: Public Partnerships

- Partnered with the Hispanic Communications Network (HCN) to deliver a national Spanish-language public natural resource conservation education and awareness radio campaigns that encourages Spanish speakers to "explore, recreate in and enjoy natural resources.
- The Forest Service partnered with HCN to produce four 60-second public service announcements (PSAs) that carry environmental education messages to Spanishlanguage listeners nationwide.
- Fact sheets in additional languages for rural residents: e.g. Mien, Hmong and Laotian

National Soil Moisture Network and EJ Climate Change: Recommendations

- Gap analysis overlay with rural and underrepresented population areas
- CoCoRaHS placement engage citizens
- Training Opportunities Next Generation of Network Operators, Scientists and Engineers
 - Internships
 - NSF Tribal College and Universities Program (TCUP)
 - Fellowships and other funded sources





Carolyn Olson, Ph.D.
USDA-OCE-CCPO
Washington, DC
colson@oce.usda.gov



The Hubs improve the information flow *from* stakeholders to provide feedback to research agencies

