

Spotty Rain Advisory Board Meeting

11th December 2019



Agenda

1. Welcome
2. Introduction **New** Members
 - a. Grant Team
 - b. Advisory Board
3. Project update
 - a. What have we done achieved thus far?
 - b. What do we want to achieve next?
 - c. What we hope to do together?
4. Discussion

NSF Program: Advancements in Informal STEM Learning, DRL-1811506

Title: Enhancing the Capacity for Rural Libraries to Engage the Public in Drought Science, Monitoring, and Adaptation

Length: 5 years, June 2018-June 2023

Where: 90 Rural libraries in Oklahoma, Colorado, and Nebraska (and Great Plains)

What: Professional development webinars, Materials (poster, drought infographic booklet), and Library programs



Project Objectives



- To enhance the capacity for rural libraries to engage their communities in citizen science opportunities.
- To explore the social contexts for STEM learning and community participation in volunteer drought monitoring.
- To design and pilot educational materials that translate scientific knowledge about drought in useful and usable ways.

Research Questions

RQ1: What **professional development opportunities and resource materials** help rural libraries to engage their communities in citizen science opportunities?

RQ2: How do librarians **tap into the web of relationships** and dense social networks in rural spaces (across generations, cultures, community sectors, etc.)?

RQ3: In **what ways do rural communities engage with citizen science** programs at the library (e.g. entry points for STEM, economy, motivations/attitudes/behaviors)?

RQ4: Does the Spotty Rain **improve the communication of science-based knowledge about drought** risks, impacts, and adaptive technologies?

Grant Team

Co-PIs:

Dr. Nicole Colston, Environmental Science

Dr. Tataleni I. Asino, Educational Technology

Graduate Research Assistants:

Ayodeji Ibukun, Educational Technology

Clement Abai, Educational Technology



Advisory Board

Drought Science

Deke Arndt, NOAA

Tyson Ochsner, Oklahoma State University

Rural and Small Libraries

Keliann LaConte, NASA/STARNet

Michael Hull, SE Public Library System of Oklahoma
(represented today by [Mary Michelle Turner](#))

ISE Research & Evaluation

Sue Allen, Maine Math and Science Alliance

Rodney Hopson (external evaluator), University of Illinois

[Andrea Kunze, University of Illinois](#)

Educational Technology

[Lucy Santos Green, School Library & Information Science](#)

Annual Project Report (Year 1)

Year One milestones include Phase 1 participant recruitment, exploratory needs assessment, and educational media design.

Design research protocols

Initiate participant recruitment

Conduct exploratory research

Design professional development workshop

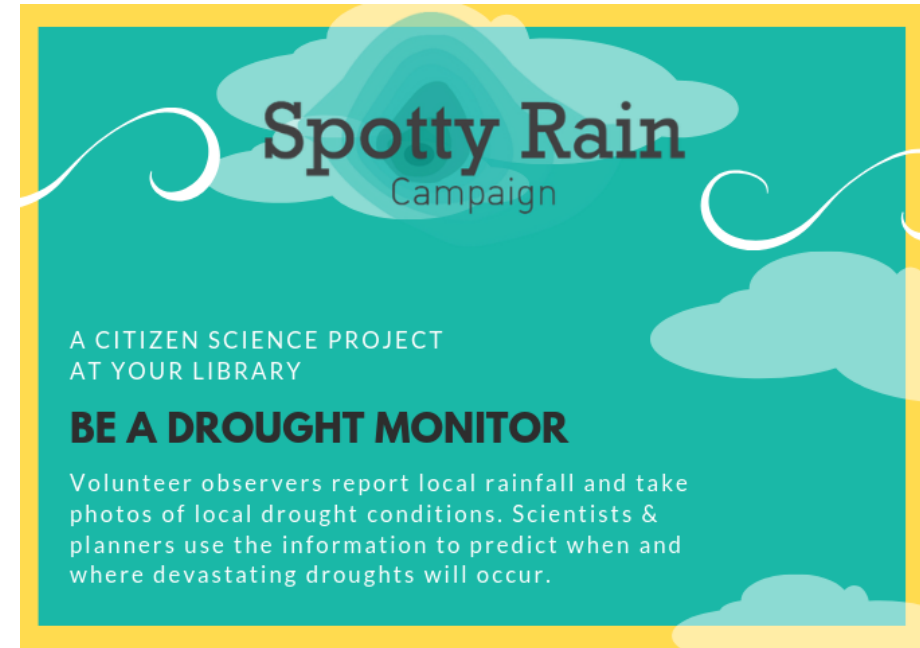
What we have achieved?

Attendance & exhibiting at library conferences

- Association for Rural & Small Libraries (early Sept)
- CALCON in Colorado (mid Sept)
- Nebraska/ Iowa Joint Conference (early Oct)

Webinar Pilot with CoCoRaHS & NDMC

- **Oct 11- It's easy!** Training volunteers to report rain and environmental conditions with educators from the CoCoRaHS Network
- **Oct 25- It's important!** Learn about drought reports and forecasts with scientists from the National Drought Mitigation Center
- **Nov 8- It's local!** Tips for making your own precipitation maps and visualizations
- **Nov 22- It's in the Library!** Learn more about resources for programming, community planning, and water education



What we have achieved?

Educational Technology

- Make it Rain AR App
- Presentations at the Association for Educational Communications and Technology (AECT)
 - Digital Divide



What we have achieved?

Evaluation Team

- Logic Model
- Focus Group Interviews
- Webinar Exit Surveys

Resources/Inputs	Outputs		Outcomes -- Impact		
	Activities	Participation	Short (Material & Network Creation)	Medium (sustained engagement)	Long
Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS) <ul style="list-style-type: none"> - Regional Coordinators (data access) - State Coordinators 'Drought' Scientists (Dirty Dozen Council for Data access) <ul style="list-style-type: none"> - Invasive Species - Water Resource Current Oklahoma Librarian Network (In progress) National Drought Mitigation Center (NMDC) Bridge between online degree programs and capstone required activities for students Oklahoma State University <ul style="list-style-type: none"> - Center for Research on STEM Teaching & Learning (CRSTL) - Emerging Technologies and Creativity Research Lab Advisory Board/Experts	Professional development for rural librarians: <ul style="list-style-type: none"> - Webinar series Mini-grants for library sponsored programs Educational media in library (booklet, posters, displays) <ul style="list-style-type: none"> - State Library Conference presentations (librarians ONLY) [3rd year] Development of "Make it Rain (gauge)" Application	Rural and Small Librarians Community Partners Library patrons CoCoRaHS Volunteers	Development of Webinar series about drought monitoring and resourced cataloged materials Stakeholder analysis (Understand relational capacity and context for libraries around science) Library network materials and sustained engagement Library Programs Web page <ul style="list-style-type: none"> - Plug & play programs that librarians and pick up and implement 	Offer Mini-grants for library sponsored programs Develop multiple pathways for engaging public	Enhance the capacity for rural libraries to engage their communities to citizen science opportunities Develop a regional network of rural librarians supporting citizen science Broadly distributed educational materials that translate scientific knowledge about drought in useful and usable ways

What we have achieved?

Networking

- Library Science degree programs
- School District Libraries in NE
- Nevada/Illinois State Librarians
- OK Invasive Species
- Governor's Water Conference
- Rural Renewal Institute
- SciStarter/STARNet
- Program content analysis

ALA adding sustainability as a core value of librarianship

For Immediate Release
Tue, 05/14/2019

Contact:

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CHICAGO – Libraries play an important and unique role in promoting community awareness about resilience, climate change and a sustainable future. They are also leading by example by taking steps to reduce their environmental footprint.

Now the American Library Association (ALA) is supporting the library community by showing its commitment to assisting in the development of sustainable libraries with the addition of sustainability as a core value of librarianship.

At the 2019 Midwinter Meeting in Seattle, the ALA Council, in adopting the strategic direction of sustainability, made a commitment to the "triple bottom line" framework for sustainability recommended by the ALA Special Task Force on Sustainability. This tripod consists of practices that are environmentally sound, economically feasible and socially equitable. The council also responded to a 2018 membership survey indicating that two-thirds of ALA members felt the association needed to provide leadership in the area of sustainability.

In working to ensure that library professionals have access to resources needed to adopt sustainability practices within their institutions, ALA intends to explore collaborations with such institutions as the New York Library Association to nationally offer a Sustainable Library Certification Program. Library professionals will now have access to professional development opportunities including books, grants and library school curriculum.



Announcements

- Nicole Colston transfers to the OSU Natural Resources and Ecology Management (NREM) and joined the Water Resource Center
- Paul “Wynn” Jennings our NSF AISL program officer retires.

Spring Goals

Citizen Science Fair (and presentation at OLA)

Library Program Pilots

- 68 registrants

Advisory Meeting in March

- What dates work or don't work?
- \$1000 annual stipend (March to March)
- Includes flights to Stillwater (SWO), rooms, food, and transportation



What are the goals of the advisory meeting?

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Provide Feedback and Formal Advice for Evaluation

Identify opportunities for Collaborative Work



Format Options under consideration

Unconference

Focus discussions (Climate Visuals, Rural STEM, Sustainability (ALA), etc)



Thank you!

Looking forward to working together

