

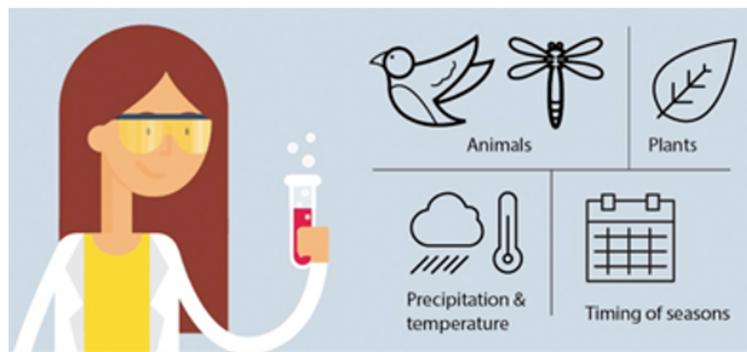
## Blog 2020-2: Citizen Science and the RotaryH2O Challenge

By Geoffrey S. Elliott, MSc. Earth Science, Rotary E-Club for WASH

February 22, 2020

It was an honor to participate in Rotary District 5450's Water, Sanitation, and Hygiene (WASH) Symposium last October along with our intern Rebecca Hofmeister and friends Dr. Greg Newman and his wife Sarah Newman from Colorado State University (CSU). Greg manages the [www.citsci.org](http://www.citsci.org) citizen science platform hosted at the CSU Natural Resource Ecology Lab, including over 850 projects with more than 1,000,000 observations; Sarah also works at CSU studying social media aspects of citizen science and serves as Research Team Coordinator for Earth Challenge 2020 (see [www.earthchallenge2020.earthday.org](http://www.earthchallenge2020.earthday.org) ).

# Citizen Science?



*Citizen Science is scientific research conducted, in whole or in part, by amateur scientists – Wikipedia*

The Symposium theme was “NextGen WASH – Investing in our Next Generation of Water, Sanitation, and Hygiene Professionals.” Greg, Sarah, Rebecca, and I led a breakout session promoting citizen science in Rotary WASH projects as a way to enhance local student participation, strengthen community assessments (and make them more fun), and to broaden our watershed perspective. Sarah shared her perspective of citizen science and traced the natural overlap with Rotary goals worldwide. My presentation covered our recent citizen-science-based work in the Kawuneeche Valley headwaters of the Colorado River in Rocky Mountain National Park and opportunities for Rotary Clubs to incorporate the Project WET (water education for teachers) curriculum into community outreach. Greg surveyed participants looking for citizen science experiences (many of us have more than we think) and how we might move ahead.

We wrapped our breakout session with a Citizen Science Challenge Sarah entitled “WASH into Watersheds” to see how many Rotary Clubs might tap into the global citizen-science

phenomenon to enhance in-country water assessments and grow local student teams. We also unveiled a new citizen science project app called “RotaryH2O” now live on [www.citsci.org](http://www.citsci.org) . This Level 1 Assessment (*Show us your Water!*) aims to familiarize teams with in-country conditions:

- Brief description of water site, who is monitoring and why, and brief notes on watershed setting
- Three photos including 1) citizen scientist holding water in clear container, 2) where the water was collected, and 3) surrounding watershed. Can do a fourth photo as you wish.



Example: Kawuneeche Group in RMNP  
RotaryH2O: *Show us your Water!* Photo 1) Water in clear container  
[www.kawuneechegroup.com](http://www.kawuneechegroup.com) in Colorado River Headwaters,  
Rocky Mtn National Park, Colorado

Our hope is for Rotarians to mentor NextGen WASH students connecting internationally and learning more about water quantity/quality and source-water watershed assessments. Observations and photos can be documented on [www.citsci.org](http://www.citsci.org) and, after proper vetting, be available to Rotarians and WASH professionals worldwide to support Rotary goals of sustainability and cost-effectiveness.

RotaryH2O is open to all Rotary clubs and their project partners wishing to participate at any time and, we hope, any place on Earth. Even better, go big and join our “watershed blitz” in support of Earth Challenge 2020 by collecting water observations and photos over a one-month sample period:

- Start March 22, 2020 (United Nations World Water Day, now one month away!)
- End April 22, 2020 (Earth Day 50<sup>th</sup> Anniversary)

Feel free to share content and links below and do drop me a line at:

[geoff@grandenvironmental.com](mailto:geoff@grandenvironmental.com)

## RESOURCES:

### Downloads below:

- Blog File 2020-2A = this blog here)
- Blog File 2020-2B = RotaryH2O Level 1 Assessment User's Guide
- Blog File 2020-2C = my Rotary District 5450 Symposium Presentation
- Blog File 2020-2D = my citizen-science presentation dated 9Sept19 to Rotary District 5450 WASH Committee, more emphasis on what citizen science is

### See also:

- [www.citsci.org](http://www.citsci.org)
- Earth Challenge 2020 [www.earthchallenge2020.org](http://www.earthchallenge2020.org)
- Project WET (Water Education for Teachers) [www.projectwet.org](http://www.projectwet.org)
- Rotary E-Club for WASH <https://www.rotarywasheclub.org/wash>
- Rotary District 5450 (Denver Area and west into Rocky Mtns) [www.rotary5450.org](http://www.rotary5450.org)  
search for District 5450 Wash Symposium
- Rotary WASH one of 6 Areas of Focus [www.rotary.org/en/our-causes/providing-clean-water](http://www.rotary.org/en/our-causes/providing-clean-water)
- Kawuneeche Group [www.kawuneechegroup.com](http://www.kawuneechegroup.com)
- Grand Environmental Services [www.grandenvironmental.com](http://www.grandenvironmental.com)