Request for Approval under the "Generic Clearance for Citizen Science and Crowdsourcing Projects" (OMB Control Number: 2080-0083)

TITLE OF INFORMATION COLLECTION:

CyanoScope: Mapping Cyanobacteria One Slide at a Time

PURPOSE:

The main scientific goal of this ongoing project is to develop a national library of identified cyanobacteria photographs that can be used for spatial distribution and occurrence modeling.

NEED AND AUTHORITY FOR COLLECTION:

Safe Drinking Water Act § 1442, 42 U.S.C. § 300j-1, authorizes the Administrator to conduct research, studies, and demonstrations relating to the causes, diagnosis, treatment, control, and prevention of risks to human health related to drinking water supply, and to share information and make recommendations based on this research and investigation.

USES OF RESULTING DATA:

The data will be used for spatial distribution and occurrence modeling.

DATA COLLECTION METHODS:

After training and obtaining a digital microscope kit, citizen scientists collect water samples from local lakes or ponds and then take microscope photos of the cyanobacteria present in the samples. These photos are then shared on the cyanoScope project of iNaturalist (www.inaturalist.org/projects/cyanoscope). The iNaturalist site allows participants to interact with the cyanoScope community and have experts assist with genus and species level identification.

PARTICIPANT UNIVERSE:

Category of Respondent	No. of Respondents	Number of responses per respondent	Participation Time per response	Burden Hours
Participant	1000	10	1 hour	10,000

AGENCY COST: EPA labor costs are calculated using an hourly rate for a GS-14 (step 1) based in Washington, DC[1] including an additional 60% for overhead and benefits. This project is estimated to occupy approximately 50 hours of an FTE annually at a cost of $3,952.

STATISTICAL ANALYSIS:

The data collected will be analyzed with spatial distribution and occurrence modeling. No contractor will be used for the survey.

[1] https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/18Tables/html/DCB_h.aspx

DATA QUALITY ASSESSMENT PROCEDURES:

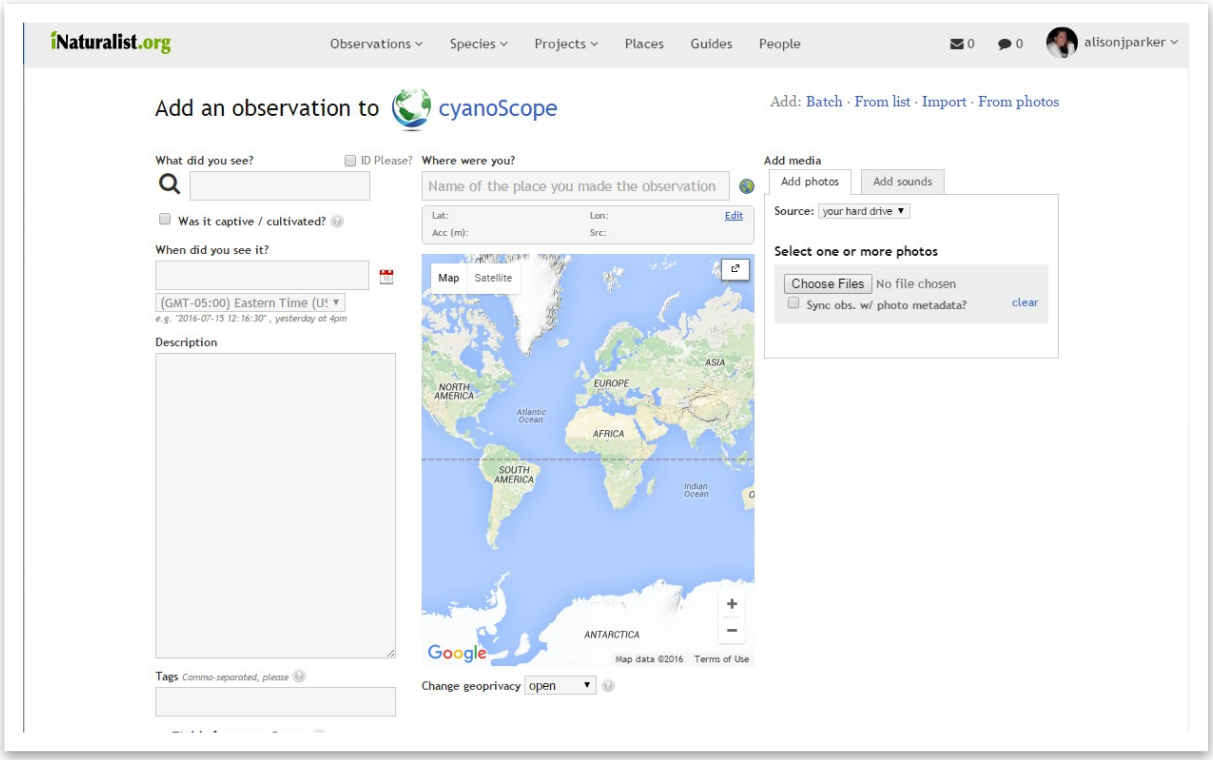
This project falls under an EPA approved QAPP that has been operable since the inception of the project. Details regarding data collection, taxonomic verification and reconciliation, and enumeration are all covered within the approved QAPP and within the crowdsourcing database of iNaturalist.

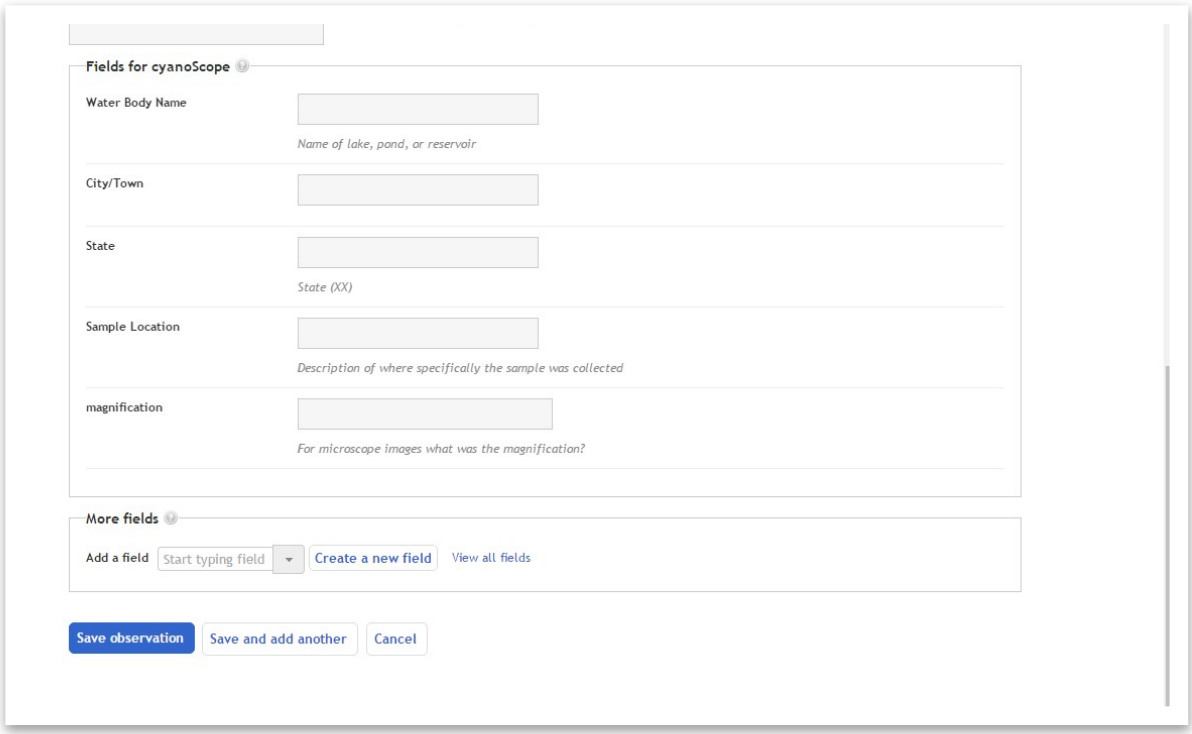
ADMINISTRATION OF THE INSTRUMENT: (Check all that apply)

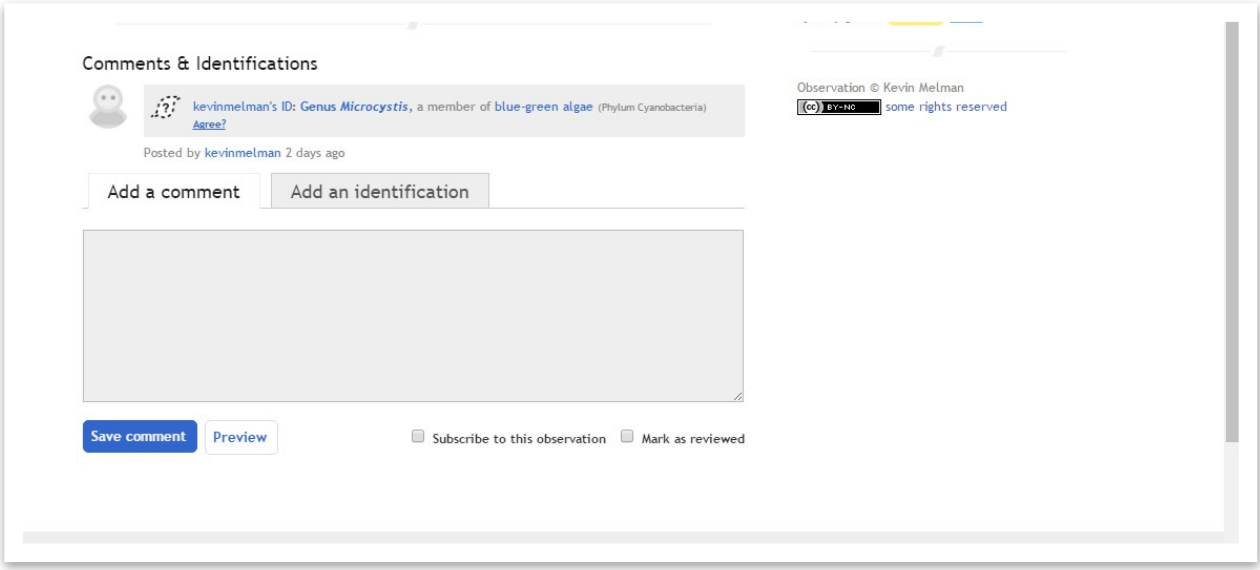
[x] Web-based or Social Media
[ ] Telephone
[ ] In-person
[ ] Mail
[ ] Other, Explain

INSTRUMENT: See screen shots documenting survey below.

CONTACT NAME: Alison Parker **EMAIL:** Parker.Alison@epa.gov




Fields for cyanoScope
Water Body Name
Name of lake, pond, or reservoir
City/Town
State
State (XX)
Sample Location
Description of where specifically the sample was collected
magnification
For microscope images what was the magnification?
More fields
Add a field
Start typing field
Create a new field
View all fields
Save observation
Save and add another
Cancel


Comments & Identifications
kevinmelman's ID: Genus Microcystis, a member of blue-green algae (Phylum Cyanobacteria)
Agree?
Posted by kevinmelman 2 days ago
Add a comment
Add an identification
Save comment
Preview
Subscribe to this observation
Mark as reviewed
Observation © Kevin Melman
some rights reserved