**NASA DEVELOP National Program**

NASA Langley Research Center

**Spring 2015**

**Virtual Poster Session Wave 1 Submission**

**DEVELOP Short Title:** North Carolina Water Resources

**Team Location:** Langley Research Center- Hampton, VA

**Project Lead & Email:** Chad Smith, chad.k.smith@nasa.gov

**VPS Title:** Blooming Bad

**Image:** File Name **(Please submit your image as a file)**

*This is the image that will be displayed on your team’s project page on Earthzine. It needs to be an image of processed data (processed by the team and not from any outside source) and include NASA Earth observations. No photographs.*

**{ image pending creation}**

**Caption:** Caption. **Max of 25 words.**

The delicate estuarine ecosystem of the Albemarle and Pamlico Sounds struggles under stress from Harmful Algal Bloom (HAB) activity.

**Squib:** (max 50 words)

*A squib is a short, catchy statement or question previewing what your project is about and enticing the reader to read on. It should be* ***no longer than 2-3 brief sentences****. You can include any combination of information about what your team accomplished, how it was done, who the partners are or will benefit, etc. This will be used in social media promotion and on website if a winning project.*

Microscopic organisms you can see from space? When harmful algae finds itself in the right environment, it can occur in such extreme abundance that the blooms are easily seen in satellite imagery. On the ground, both humans and wildlife suffer the algae’s toxic effects.

**Video Style:** This should be a **short paragraph** describing the style of the video. For instance, the setting (e.g. in the field, at your location) and the theme (e.g. news anchor, documentary). Describe the planned content of the video. Consider filling your first 60 seconds of the video with attention-grabbing material (community concern, problem, brief hint at/overview of the results) to catch and hold the viewer’s attention. Review the list below regarding what should be included and discuss the order these things would be included in the video.

Our video will be a documentary style video featuring “action” clips of various team members explaining concepts and describing things when appropriate. As each team member appears for the first time, a caption introducing their name to the audience will accompany the video. The order of information will follow the list below closely. The attention grabbing material in the beginning will consist of a brief overview of the detrimental effects of harmful cyanobacteria and algae. We will then lead into a partner/end-user introduction and we will describe their stake in the issue in the context of greater community concerns. To explain the project, we will start at the beginning and describe briefly the origins of our data (NASA observations and ancillary data) and major analysis and processing steps, making sure to give credit where credit is due and naming specific software involved. Finally, we will discuss our final products and their benefits to our end-users and the community as a whole. We plan to incorporate royalty-free images of algae, water bodies and our own video and photos. We plan to have some actual footage of the Albemarle Sound with at least some of the team members.

**Things to include in the video, other than the lead in and closing clips, the order of inclusion is entirely up to the team:**

Mandatory Lead in: DEVELOP Intro clip (available on the Exchange at: Start > Earthzine – Virtual Poster Sessions > Video Opening & Closing Clips)

Video Opening: description

Community Concerns:

* What are the environmental issues?
* Why is the project important?

Collaborators & End-Users:

* Who is this project partnered with?
* Who are the project end-users of the results and methodologies?

How will Participants be Introduced: description

Data Usage:

* What NASA Earth observations were utilized and how?
* Where did you get the data from?
* How did you process it?
* What other ancillary data was used and how?

Analysis:

* What type of analysis did the team conduct?
* What software was used?

Results:

* What were the final findings of the project?
* Any discussion relating to these results?

Benefits:

* How can the NASA Earth observations benefit the end-user/partners?
* How does it benefit society?

Mandatory Video Closing: DEVELOP closing clip (available on the Exchange at: Start > Earthzine – Virtual Poster Sessions > Video Opening & Closing Clips)