

White River Algae Meeting

December 19, 2019

1:00 @ Sheriff's Training Room

Meeker, CO 81641

TAG Members:	Public:	
Alden Vanden Brink, RBWCD	Bailey Franklin, CPW	Cory Williams, USGS
Ben Rogers, WRCD	David Graf, CPW	Natalie Day, USGS
Brian Hodge, TU	Tucker Feyter, ACE	Callie Hendrickson, Districts
Kurt Nielsen, MSD	Ian Wilson, TU	Tristan Nielsen, Districts
Hunter Causey, CRWCD	Bob Regulski	
Tory Eyre, CPW	Brett Harvey	
Jocelyn Mullen, Rangely	Bob Dorsett	
R Clay Ramey, USFS	Marc Etchart	
Gary Moyer, RBC	Colton Brown	
Jessica Sanow, BLM	Denver & Janet Hayes	

Welcome and Introductions: Facilitator, Callie Hendrickson, welcomed everyone. She noted that the purpose of the meeting was to hear from USGS and CPW on their 2019 work.

USGS Presentation on 2019 Work

Natalie Day provided the presentation and information on USGS study.

See District website at <http://www.whiterivercd.com/white-river-algae-study.html> for Power Point presentation.

Additional Notes from the question and answer period:

- USGS hasn't looked at the nitrogen:phosphorous ratio yet but will be in the final analysis
- Nitrogen can be a limiting factor in algae growth
- Phosphorous is increasing in the region and around the world
- Not measuring nutrient loads in the flattops (snowmelt source of nutrients)
- No isotopic signatures were able to be tested below confluence

Note: USGS PowerPoint and information was reviewed for verification before being available for posting on the Districts' website. Below is information from Ken Leib regarding changes that were made. These changes are in regards to slide # 25, 26, & 27.

"Two things changed regarding the Isotope graph. First, we are using Kendall 1998 to show typical isotopic signatures for reference as opposed to Hundey 1987-2001. Kendall was recommended to us as the one to use. It is less specific to one area. Second, there was a calculation error on the x axis that caused the signatures to be shifted left. They have been plotted correctly and have shifted to the right. This represents more of a "soil" signature as the NO3 source although other sources are possible. As always, the data and interpretation is still preliminary and subject to change upon final publication."

CPW Presentation on 2019 Work

Tory Eyre presented information from CPW and Trout Unlimited work.

See <http://www.whiterivercd.com/white-river-algae-study.html> for Power Point presentation and more info.

- Notes:
 - CPW/TU Temperature and bug data will be published where the public and USGS can access it, perhaps the Districts' website
 - CPW data will be able to be used among groups to make sure it is not duplicated
 - Bug data has been collected before 2018
 - Fish Disease:
 - Gill Lice: Present but not increasing
 - Whirling Disease: Present, now stocking whirling disease resistant trout
 - BKD: present
 - Other algae and moss increasing (e.g. rock snot, dittimo)
 - Dittimo may fill in if cladophora is not present
 - No "wigs" present in lower white river
 - Town of Rangely did not have to clean intake screens as often

Public Comment:

- Post signage to help prevent the spread of "rock snot". Send registered letters to landowners/guides to inform them and their customers on how to clean gear to prevent the spread
- Send information to landowners who choose to stock fish notifying/educating them that they have the right to inspect the fish for gill lice or other diseases that are coming from hatcheries.
- Fisheries are not appearing to be affected by algae growth
- Turbidity was correlated with algae growth as less light through water prevents growth
- Isotope signatures were from the same source on both the north and south forks of the river
- USGS should look at the USFS air quality test site near burro mountain
- There is opportunity to do isotope testing in 2020 if there are sufficient funds, however it may not be as beneficial as we think

TAG Discussion Regarding Next Steps (2020 USGS Scope of Work):

- There is a lack of streamflow information, need more to get quality data
 - USGS can probably do this study for about \$5,000
 - USGS may be able to partner with a volunteer to help save on cost.
- Need more taxonomy info to see how much Cladophora is at each site.
 - Dr. Mario Sullivan-CNCC, may be able to help
 - USGS and CPW will check to see what all they can do for this test
- USGS supports drone imagery by County
- Volunteer photos and CPW time lapse is helpful to USGS
- Need to continue CPW/TU temperature monitoring at the 20 sites
- Make sure CPW data is published so USGS can cite their info
- Need to use Bob Regulski's real time video, consider adding security cameras in other locations to get real time footage
-

See <http://www.whiterivercd.com/white-river-algae-working-group.html> for Power Point Presentation and more info.

NEXT MEETING: After 1st of year, can communicate through emails.