

SJHFHP - Science Committee - 11/2/2018

Attending: Matt Tuten, Steve Hartvigsen, Herb Grover, Keith Bruno, Anthony Culpepper, Matt Cook

Action Items

- Summarize relevant scientific literature and periodically send out to the group
- Keith & Herb to confirm research question and gauge interest of Audubon group to engage in citizen science effort
- Refine treatment area prioritization template and present it at next Headwaters meeting
- Continue to identify data gaps and work towards compiling relevant data

1. What are our goals, objectives & deliverables

- a. Providing science to the group– examining research literature, develop monitoring plans
- b. Provide good readable summaries of scientific literature
 - i. Poll the group for interested topics
 - ii. Send out periodic summaries of relevant ecology topics
- c. Stay relevant with scientific community
 - i. Get relevant professional speakers to come by, facilitating conversations
 1. Greenhouse partnership always looking for topics
 - ii. Goal of the committee could be to communicate the complexity of ecological topics

2. How do we identify monitoring areas and goals?

- a. We need to come up with objectives
- b. Headwaters doesn't have a universal monitoring plan
 - i. Funding wall, lots of questions, but can we tie it into the funding of a treatment project
 - ii. There is a budget line for monitoring in the Cohesive budget

3. Citizen Science Efforts

- a. Audubon - There is a question if Rx fire and mastication negatively affects bird
 - i. Use established methodologies – point monitoring station
 1. Teams go to pre specified point for 6 min and observe, then move to next point.
 - a. What is frequency? Need to identify locations that are accessible, Have sampling dates that make sense.
 2. Set up points in Tx areas and control areas
 3. Determine if Tx have impacts on bird populations
 4. Possible small grants to apply to
 5. Possible areas: Jackson Mountain, Fourmile, Turkey Springs
 6. What is end game: Dataset to put in report form?
 7. For 2019: pick 1, 2 or 3 sites and pilot the program. Determine buy-in with Audubon group.

8. Keith B. works with local High School with other monitoring and can be a resource.
9. Matt T. to come up with a list of potential sites and maps
10. Connect this with Ft Lewis? Students working on thesis
 - a. Other opportunities: CSU or RMRS
11. Let's not collect data that doesn't get used!
 - a. Citizen Science efforts lose steam if data collected doesn't get at answering question
12. Keith and Herb: to flesh out study design/question, gauge group interest
 - a. Need to be vetted by bird expert
13. This gets at the gap in Headwaters monitoring – wildlife

ii. MSI Citizen Science Plots

1. Piloting on Columbine – bring to Dolores & Pagosa Districts
2. Plot design: fixed radius plots – examining beetle activity, post fire effects and post fuel reduction tx effects
 - a. Four plots installed: 2 around Silverton (Kendall Mtn & Molas Pass) and 2 closer to Durango (Falls Creek)
3. Working with local High Schools and Middle Schools - students involved in monitoring and collecting data
4. Hoping to establish large dataset that schools can tap into in subsequent years
5. Also tying in MSI's benthic macroinvertebrate and water quality monitoring into this Cit Sci program

4. Map Exercise from last week - Priority Treatment Area Rankings

- a. Examined ranking template provided by Steve H.
 - i. Very agency specific: NEPA considerations, past Tx
 1. How do we make this more standardized for non-agency folks
 - ii. Shouldn't go through this process if it's something we might not do
 1. If we already agreed to do something then NEPA isn't an issue
 - iii. People have different interpretation of ecological value
 - iv. Headwaters gives input – but ultimately the District makes decision
 1. Is there utility for the group to go through this process
 2. This process gives us justification – this is a follow-up
 - v. Need to think about veg growth and determine how many acres per year works for a sustainable industry and implementation – want to avoid boom & bust
- b. Data gaps
 - i. Data historically collected in Tx areas
 1. What about data outside of Tx areas
 - ii. Look into LANDFIRE datasets
 - iii. How much of the landscape is truly operable
 1. Roads, terrain, veg type
 - iv. Watershed assessment effort by Thurman

1. Continue this effort? Or start fresh?