Climate Resilient Rivers Working Group
October 26, 2023
Meeting Minutes

Attendees:
Maya MacHamer and Kirin Riddell- Boulder Watershed Collective
Sarah Heerhartz and Sharla Benjamin- Boulder County POS
Cat McIntyre- City of Boulder OSMP
Jim Kirck- City of Longmont
Jenny McCarty- St. Vrain and Left Hand Water Conservancy District
Deb Hummel and Yana Sorokin- The Watershed Center

Action Items:

- Schedule "Gap Analysis Meeting" to present and discuss data layers to consider.
    - Others to engage as advisory members: TU, Lyons, Nederland, CPW, DRMS, GreenLatinos, BCPOS outreach and education staff.
    - Feel free to invite others in your circles that could be interested in this subject matter (Public works, GIS staff)

Purpose of this working group and why you are here

- Overview of Active Stream Corridor mapping efforts
    - Purpose of this meeting is to make you aware of a new effort the Watershed Center is doing to develop "Active Stream Corridor maps" in the St. Vrain and Left Hand Watersheds and the BWC is also doing a similar effort in Boulder Watershed. These maps identify areas in river corridors where we want to achieve geomorphic complexity as a desired condition.
    - These types of projects are aimed to increase geomorphic and ecological complexity in prioritized areas and projects may incorporate LTPBR, beaver mimicry structures, meadows restoration or other features.

- Purpose of this group and why you are here
    - We want this group to serve as both an advisory committee to the stream corridor mapping efforts and as a collaboration of practitioners interested in implementing/funding these projects across the Basin.

Background on funding and efforts

- Wildfire Ready Watersheds Program versus Active Stream Corridor Mapping
    - These efforts are funded by CWCB Wildfire Ready Watersheds Program. This program covers a broad scope of wildfire preparedness actions from development of Wildfire Ready Action Plan (WRAP), development of emergency

warning systems, to identifying priority river restoration projects, forest mitigation projects, infrastructure projects, and more.
    - The Active Stream Corridor Mapping efforts are a piece of this larger program and this group is focused on this part.
- The Watershed Center and Boulder Watershed Collective efforts
    - Our efforts are not exactly identical but they do overlap on Active Stream Corridor mapping. BWC has a broader scope to develop and address a WRAP, The Watershed Center is focused on the corridor mapping and resulting projects.
    - BCPOS will be doing an upgraded structure assessment of all structures across the County to also consider debris flows and other fish and wildlife goals. This will occur over the next 5 years.
    - Cat asked to clarify Active Stream Corridor mapping – any stream corridor with a broader floodplain either connected or not.
    - Jim is interested in BCPOS information on their structure mapping effort like the additional metrics or debris flow/ fish and wildlife goals to consider. Likes the debris flow risk lens to ID a project and then include multiple benefits for fish and wildlife.
    - Jim asked about overlap with Boulder County CWPP efforts.
        - Kirin is connecting with Meg on this effort and that will be their stakeholder group. Would like to align with CWPP. Deb followed up that we will also be leveraging similar existing data.

Overview of Active Stream Corridor mapping process

- What is gap analysis
    - First step in the analysis is assessment of what data exist, if we can use it, and what do we need
    - Boulder County has best available data in state of CO, comprehensiveness across County (Geographic area) and subject matter coverage (CFRI, floodplain mapping, hydrologic modeling after floods, debris flow mapping)
    - Values at risk (structure layer, diversion, water intakes, bridges, crossings—a lot of this is state data)
        - Maya/Jenny/Sharla: We should work to incorporate multi-cultural groups in this conversation of values.
        - Deb/Sarah: This also includes ecosystem values like existing beaver, meadows, etc.
- What is post-fire hazard analysis
    - Taking the tools already existing and tweak those for post fire scenario. Examples:

        - Quantify issues
        - Add Probability of debris flow after fire
        - Take existing hydro modeling and swap out land cover and put in different burn scenarios/severities (with CFRI fireshed data)- post fire flows
        - Fluvial hazard maps plus major tributaries
- What is susceptibility analysis
    - Overlaying hazards with values to start prioritization.
    - From here we move into project development and approaches.
        - Look at different watersheds to focus in on and areas to identify specific types of projects/ approaches. There will be several different project types/approaches such as bridges, river restoration, mine clean up, emergency systems, forest health. These efforts will be focused on the river restoration component.
- Sharla: asked if we are considering land ownership in the immediacy if projects for prioritization. Deb said yes and we are well situated to connect with private landowners.
- Sarah: asked if we are considering existing conservation easements or documenting high functioning areas in our data assessment. Could consider Boulder County beaver map. Deb replied that we are and these would be considered ecosystem values and other opportunities to protect is good.
    - We can share data layers to get the group's feedback and input.
- Sharla: asked if data are mainly fluvial geomorphology or are we considering other layers like mine tailing locations or existing wildfire mitigation efforts. Layers of past and current projects. Deb replied yes we would want to consider these other layers.
- Jenny/Sharla/Maya recommended we consider engaging other multi-cultural groups like Green Latinas or education and outreach staff at BCPOS.
- Maya- feel like there are so many layers of data and not sure what our gaps could be. The

Next Steps

- **Next meeting:** Let's plan to meet about the layers of data we are considering from fluvial geomorphology, to fire, to structural, to values (including multi-cultural), to beaver locations or fisheries. Seems like this will be a good opportunity for the group to provide more ideas on data layers to consider. Timeline will be multiple months from now as we get our data analysis teams contracted.
- **Others to engage in advisory group**:
    - CPW, TU, Town of Lyons, Town of Nederland, DRMS julie.annear@state.co.us, Green Latinos, BCPOS Outreach and Education Staff.

- Groups to inform: BoCo Fireshed, Town of Superior, City of Louisville/Lafayette
- Additional Engagement for layers input: BC Public Works and GIS (please feel free to share update meetings with other interested parties for feedback)