

Minutes for Big Wood River Flood Mitigation Atlas Project Kickoff Meeting held at the Hailey Courthouse (02/28/2019)

Attendees

Stakeholder Group Members:

Kristine Hilt (KH)- Blaine County Certified Floodplain Manager
Jeff Loomis (JL)- Blaine County Engineer
Jon Ambrose (JA)- Lead Consultant (Cardno)
Zach Hill (ZH)- Sub-consultant (Ecosystem Sciences)
Zack Herzfeld- Sub-consultant (Ecosystem Sciences)
Heather Dawson- City of Hailey Administrator
Dick Fosbury (DF)- Blaine County Commissioner
Mike Choat (M)- Bellevue City Council
Scott Boettger (SB) - Wood River Land Trust
Brittany Skelton (BS)- City of Ketchum Senior Planner
Bryan Dilworth (BD)- Flood Control District #9 Commissioner
Frank Edelman (FE)- Idaho Fish and Game

Public:

Larry Schoen (LS)/Alan Reynolds (AR)- Former Blaine County Commissioners
Kate Crane (KC)- Twin Falls BLM Office
Keri York (KY)- Trout Unlimited
Stephanie Eisentbarth (S)- Local Consultant
Josh Johnson- Idaho Conservation League
Jim Phillips (JP)- Hiawatha Canal Company
Chris Corwin- Blaine County GIS/Disaster Services
Nick Miller (NM) – Trout Unlimited and Wood River Land Trust
Ryan Santo - Wood River Land Trust

Introductions and Purpose of Meeting

KH- Meeting introductions and project scope overview as per agenda. Meeting purpose is to solicit feedback from all stakeholders about how they would like to use the atlas.

JA- Discussion of Study Objectives

- The impetus of this work is the 2017 flood.
- Develop a quantitative analysis of the river behavior and flooding risks.
- Explore risks with respect to habitat value, and flood risk reduction
- Develop strategies to address flood management
- Develop resources for managers to address the issues related to erosion, flooding and habitat
- Develop concepts specific to each reach for addressing river and flood management
- We are starting with good, high quality data—LiDAR, aerial photos, etc.
- Would like to canvas the meeting participants and ask what are stakeholder's biggest needs and priority areas?

Questions:

KY- What is the study area?

JA- SNRA boundary to Stanton Crossing

KH- Looking to provide BMPs that are specific to individual reaches.

JA- Areas of lower density development may be opportunities to address flood mitigation. Will be dividing the study area into manageable reaches using geomorphological criteria.

LS- Will there be a web page that stakeholder can use to access project documents?

KH- Affirmative, in development.

AR- What projects have Cardno done that are similar to this one?

JA- The Big Wood River (BWR) has a high sediment load similar to many other rivers in the PNW at which Cardno has performed geomorphic and hydraulic assessments.

KY- How have past Cardno project documents been utilized by stakeholders?

JA- Referred to work on Methow River. Stakeholders there were able to refer to the final document for prioritizing future restoration projects.

DF- Clarification of KY's question as in the context of how regulators will be able to use the atlas. Specifically, will the atlas offer additional guidance for those in the county who are responsible for processing stream alteration permits (SAPs)?

KH- Blaine County SAP guidelines are currently vague. There is a need for more specificity/BMPs/quantitative guidelines that they can refer consultants to. There were 37 SAPs in 2017. What are the appropriate guidelines for processing SAPs—consultants are frustrated with lack of guidance from regulator. It would be helpful for the atlas to have a code revision discussion. Hope is to redefine SAPs to make it easier for landowners/consultants to anticipate what is needed in a SAP. Ultimately, the elected officials and general public will decide how to utilize the data/tools from this study. This may include updates to the County's SAP program through the adoption of regulatory framework.

JA- This atlas should help jurisdictions better evaluate SAP applications in the larger context of reach character, risks, and opportunities.

Discussion of Challenges Faced by River Resource Managers and Goals for the Assessment

LS- There are only three people in the State's stream protection office. There is a need to help stakeholders understand channel migration zones (CMZs) historical extent to restore the river to its natural function. It is not about specific landowner's wants or the regulators perspective. There is a need to provide an outcome that gives each stakeholder a wholistic view of the river and its natural functions.

ZH- Offers the Boise River work that Ecosystem Sciences has done as an example to the BWR atlas project. Mentions the complexity and diversity of stakeholder values within the Boise River. The atlas will be interpretable to a general audience. Need to understand appropriateness of BMPs for specific instances. Should develop a stakeholder group post Atlas to offer continuing guidance and direction for specific projects. These would include property

protection, flood risk reduction, habitat improvements (aquatic and terrestrial), water quality, recreation and access, etc.

BS- There is a need to find a better way of evaluating SAPs in broader contexts and scales (entire reaches). A need for quantitative methods, rather than qualitative methods to evaluate SAPs in the code. Permanent vs. emergency permitting.

AR- How far in time do you go back to analyze and define channel migration zones (CMZs)?

JA- Aerial photos go back to the 1930's or 40's. Atlas will explicitly show where CMZs are disconnected from the river due to infrastructure. Atlas will also provide flood hazard layers associated with elevations relative to base flood elevations. Atlas will identify how sediment was transported by the 2017 flood using LiDAR from pre and post flood.

KH- CARDNO data ask- where are levees currently? Maintenance records? Need to identify levees that need better maintenance to prevent emergency permitting—pre-emptive measures. Distinction—SAPs are not maintained.

LS- The potential role, risks, and benefits of using large woody debris (LWD) should be included in the atlas. There is a difference in opinion among stakeholders with respect to the value of LWD and extent to which excavation with the channel should be done. Also, should address directly in the Atlas restoration versus prevention approaches, and the need for project maintenance. Address the challenges head on; there exists disparate views on river management.

AR- Wants to see fish sizes and abundances that can be seen in past photos.

FE- IDFG typically recommends the limitation of bank armoring and keeping LWD in streams. Also recommends the use of LWD rather than rock or other hardened material for restoration/SAP projects. Increase fluvial diversity and complexity. Armoring of banks is bad for fish and bad for neighbors. IDFG policy is no net loss of LWD, encourage overall river health, a dynamic and complex river system in equilibrium. IDFG would like to see LWD BMPs.

JP- The irrigators interests lie in protecting water diversion structures. These structures currently exist in various states of function but will continue to be part of the river landscape and must be considered in any approaches. These irrigation structures need protection, and need to be retrofitted, maintained and installed in a thoughtful manner that works with the overall river management objectives and goals. These features should be part of a river reach functional assessment.

KH- FEMA designated floodway maps have been produced for the BWR. Federal flood insurance is contingent on certain guidelines. There is a need to design structures that are more permanent and less susceptible to erosion, emergency stabilization, and failure during high water events.

SB- Eighty percent of BWR is developed and 52% of the floodplain is disconnected. Where is the infrastructure that is not needed?

JA- High flow events create mixed feelings among stakeholders in that they allow CMZs to be accessed, and move gravel through a system, but can also threaten property within the riparian zone.

BD- Is there an ideal mix between the use of hardened materials (rock) and LWD/vegetation plantings for restoration/SAP projects?

JA- There is no “ideal” but a combination of hard and soft engineering, including use of LWD can be added to the equation.

LS- Need to consider the issue of levees failing inspection due to vegetation growth.

JL- There are no BWR levees that weren’t built during non-emergency situations.

BD- Has observed that levee inspections seemed to be arbitrary—same conditions result in both pass and fail. How can we mitigate levees, and transform them to something else, like habitat? The levees are troublesome to maintain, and we would like to get away from the need for levees. Seven levees in the area and several have failed inspection. All the levees were put in place in response to a flood – they were not designed levees for permanent or integrated flood risk reduction / management.

NM- Don’t treat all infrastructure as permanent—some examples are expendable. Should take a long-term view and explore all opportunities to mitigate flood risk; including land acquisition and removal of old levees.

JA- Atlas will identify low-hanging fruit—levees that, if removed, will allow the river to access adjacent floodplain.

KC- Would like to see the elimination of the use of hard structures. The challenge is how to adequately address landowner’s interests. The key is in educating landowners to help them understand the importance of mitigation measures. Enumerate the benefits of riparian zones relative to private property.

Bellevue area of the river is very active, particularly below the canal head gate.

DF- There is a lack of understanding with regards to the benefits of the riparian zone.

KC- LWD and Wood River Sculpin are valuable resources that are worth consideration.

M- Issues of encroachment in the riparian zone are not as great in Bellevue due to the channel being less confined in his jurisdiction.

Discussion of Data Sharing:

JA- Appeal for geospatial data sharing (maps of flood control districts, habitat data, etc.)

FE- Encouraged Cardno to visit Jerome office to acquire electrofishing data that has been collected by IDFG.

KC- IDEG/USGS also have fish population data.

KH- Any data sharing communication should be conducted via email to JA, cc'ing KH.

JA- Where are chronic problems—repeat SAPs. Appeal for any anecdotal information about issues regarding BWR flooding from locals.

SB- Do we need to be considering the impact of development, etc. in the areas that are directly north of Ketchum and just outside of our current study area?

LS- There may be existing available data that is useful from the Blaine County GIS department. There are opportunities for jurisdictions to work together in places to replace riprap with less hard materials. The Atlas should be a regional or watershed wide view of river management with jurisdictions that work together / cooperatively to realize the goals of the plan. Flood mitigation means avoiding hardened infrastructure and avoid disruptive, drastic changes.

Closing:

KH- The atlas should address mitigating future threats from flooding.

ZH – the project/atlas should develop a vision, goals and objectives to guide the planning and development. A vision statement could be 'a complex and dynamic river system that is healthy and vibrant and enhances the values of the communities that live with the river'. Goals could include: habitat protection and enhancement, flood mitigation, flood conveyance and protection, etc. Objectives and BMPs would follow from the goals.

JA- Thanks in closing. Reiterating that we are in the data collection phase. There will be approximately 3 more meetings: one soliciting input on data analysis and data visualization outputs; and another soliciting feedback on a draft of the atlas. These will be during the spring and summer. The final draft will be produced in the fall.

KH- Shows Silver Creek document produced by Ecosystem Sciences as an example of an atlas. Ecosystem Sciences will provide some additional examples of other atlases.