MONTANA SILVER JACKETS

Annual Meeting: *Notes*

Friday, March 4, 2022 8:00am-1:00pm Mountain (9:00am-2:00pm Central)

1. Introductions

- a. Traci Sears, MT DNRC NFIP Coordinator
- b. Nadene Wadsworth, MT DNRC Mapping Outreach Specialist
- c. Shaye Bodine, MT DNRC Floodplain Specialist
- d. Shylea Wingard, MT DNRC Floodplain Specialist
- e. Sam Johnson, MT DNRC
- f. Larry Schock, MT DNRC
- g. Sara Hartley, MT DES SHMO
- h. Cody Ferguson, MT DoCommerce
- i. Laurel Hamilton, USACE Omaha District, MT SJ Co-lead
- j. Jeff Greenwald, USACE Omaha District, MT SJ Co-lead
- k. Tony Krause, USACE Omaha District, Flood Risk Program Coordinator
- l. Peter Reinhardt, FEMA Region 8 Mitigation Specialist, FAF
- m. Tracie Harrison, FEMA Region 8 Mitigation Specialist, FAF
- n. Vince Archer, USFS, Regional Soil Scientist, BAER Coordinator
- o. Kathy Chase, USGS, Surface Water Specialist

2. Charter

- a. Presented by Traci Sears
- **b.** Shared 2012 Charter
- c. Looking to have signed renewed 2022 MT Silver Jackets Charter shortly
- 3. Silver Jackets Program History Laurel Hamilton & Jeff Greenwald
 - a. Tony Krause discussed history of Silver Jackets Team. In most countries, there is a National Department of Water. In the United States however, numerous agencies work with water. In emergencies and events, FEMA shows up in blue jackets, military shows up in green, etc. Silver Jackets emerged out of a desire to increase collaboration and efficiency across federal and state partners, to increase the 'bang for our buck'.
 - b. Another change, the Floodplain Management Services (FPMS) program funding was reorganized so a large portion of the money is now assigned for interagency FPMS projects. There are usually a few calls a year requesting for project ideas.

4. 10-year Anniversary of the MT Silver Jackets Team – MT DNRC NFIP CAP

- a. Traci Sears discussed learning about the national effort for the Silver Jackets program. The floodplain program and state hazard mitigation office were noticing duplication of efforts, where multiple state agencies were paying for the same efforts or data. They wanted to find a way to coordinate all partners, especially when it came to flood events. Started in 2010 by Traci Sears and Kent Atwood, the then MT SHMO. They visited the Idaho SJ team and began working with Colleen Horihan with the USACE Omaha Districts. Next, key partners started joining—NWS, DEQ, USGS, FWP and FEMA.
- b. It emerged as a state-driven program. Linda Saul with MT DEQ took the initiative to reach out to ASFPM in 2011 to request a complete assessment on floodplain management in the state of Montana. At its origination, the MT SJ Team was focused on flooding—there may

be a current drive to expand it to an all-hazards approach. State-wide flooding in 2011 impacted the growth and development of the team.

- c. The first charter was drafted in 2012. It broke up the Silver Jackets team into four committees: DNRC Program, Mapping, Planning-Mitigation-Outreach, and Regulatory Permitting. Over time, the committees overlapped with other state committees and initiatives, such as the 310 committee. Currently, Silver Jackets meets as one group rather than split committees.
- d. In 2018, Montana won the Silver Jackets Team of the Year. The USACE Omaha District was critical in the high-profile projects that earned the team the award.
- e. Historical projects areas have included:
 - i. SWIFT (Doris Fisher was instrumental in building the initiative to support communities in improving their levees and levee management)
 - ii. High water signs
 - iii. Ice jams: identification and mapping (Kathy Chase has been integral to increasing creative education, outreach, and mapping of ice jams going back to 2013)
 - iv. Levees (A large number of communities throughout MT have levees, but in some cases the communities did not even know they had levees for decades. In many cases, maintenance and operation was lacking.)
 - 1. Levee breaches
 - 2. Levee outreach
 - 3. Levee mapping
 - v. Disaster recovery outreach
 - vi. Flood after fire (FEMA (Tracie Harrison and Peter Reinhardt), USFS (Vince Archer) and DNRC Fire (Julia Berekey) have been great partners in the ongoing initiative to improve post-fire flood outreach.
- f. Kathy Chase added that the partnerships formed by Silver Jackets have led to good work beyond the group. Even though the inundation projects were not official Silver Jackets projects, they happened because of Silver Jackets.
- g. Laurel Hamilton added that Montana Silver Jackets averages 1-2 projects a year.
- h. Traci ended with a challenge for members to consider whether we want to maintain the focus on flooding, or shift to an all-hazards approach.
 - i. Tony Krause mentioned that he's seen a push over the last 6 years for HMP to be more all-hazards focused. However, the FPMS pot of money is flood-focused, and will naturally influence projects that way. But there are a lot of different types of floods, so there still seems to be a broader perspective of risk management than it was 11 years ago.

5. Current Project Update - Laurel Hamilton & Jeff Greenwald

- a. Laurel announced the new Silver Jackets national logo, released in January 2022. Each element of the logo is symbolic, for instance the waves in the background representing water, the bee is now silver. All previous logo images in active documents need to be replaced.
- b. High water mark story map
 - i. Project from about 5 years ago (FY2017). Project linked photos to their location. Websites are currently down because the USACE server they were stored on was down. A new storage location has been identified, so all photos will be transferred over and all urls will be linked—story map should be back online within the next year.
- c. Milk River flood risk evaluation
 - i. Glasgow model + levee breach (FY20)
 - ii. Havre model levee breach + lifesim (FY21)

- iii. Currently SQRA is in initial scoping and planning phase. All of the model and mapping results have been provided, but the Havre report is still forthcoming.
- d. Musselshell River CMZ mapping
 - i. Kickoff meeting in June 2021. Applied geomorphology as a guide for the remaining reaches of the Musselshell River. Digitization: 2019, 2011, 1996, 1977, and 1940 aerials were traced. The next steps was to look at migration rates and how fast the channel was changing. Vectors were drawn comparing the 1953 and 2019 channels. The vector lengths were averaged to get a representative sample. The river was split into $10 \sim 30$ mile reaches. An individual migration rate was found for each reach. Added a channel buffer of average migration rate x 100. Added an avulsion hazard area links areas of low terrain between bends where conditions for avulsion are favorable. The only piece of the pilot study that is missing is the restricted migration areas—essentially where the banks is armored. On track to present results to the Musselshell Coalition meeting on April 12th.
- e. Ice Jam App
 - i. Supplemental to the FY19 project. The goal is complete the linkage to the USACE Cold Regions Ice Jams database as well as to incorporate other features, such as uploading photos and funding outreach and training. Kathy Chase has been working diligently to acquire funding through USGS. The most recent USGS grant is announcing selection in March (next week), so the project has been delayed. If funding still isn't acquired, there will need to be a discussion about the path forward.
- f. Levee Risk Communication Toolbox
 - i. Was not selected in Just, so state pursued FEMA Community Engagement and Risk Communication funds to provide the toolbox for residents behind levees. Silver Jackets funded remaining projects in January, looking to rescope to support the Twin Bridges Levee Evaluation. Tentative plan is to update the hydraulic model and explore overtopping.

6. Montana Regional Mitigation Plans and Tribal Coordination – Sara Hartley

- **a.** One of DES biggest priorities through the strategic plan was to increase investment throughout the state—but too many jurisdictions had expired or expiring HMPs and they didn't have the capacity or funding to renew their plans every 5 years. This motivated a discussion with other states doing state-led hazard mitigation planning (Alaska, Wyoming, Kentucky) and realized it would be a good fit for Montana.
- **b.** Splitting the state into 3 regions: central, western, and eastern. Prioritization based on timing of expired or expiring plans. Plans will drill down to the jurisdictional-level, but communities will not incur a cost.
- **c.** Notices of intent sent to communities and counties throughout the state, the vast majority are electing to opt in, including tribes. All four reservations in the central region have decided to opt-in. Big push on the federal side to ensure that there are equitable solutions for underserved tribes.
- **d.** Traci suggested that it would be great for Silver Jackets to stay informed throughout the rollout.
- e. Sara stated that one of the biggest upcoming tasks is identifying stakeholders at the federal and state level. The communities will do a great job putting together local stakeholders—but we want to ensure non-duplicative but comprehensive efforts are identified across all stakeholders. MT DES would like to invite state and federal partners to the first (central region) kick-off meeting.
- **f.** Traci discussed that the meeting will likely end much earlier than the calendar invite. Suggested that the next meeting include a FAF presentation / discussion.

7. Proposed Project for 2022 Annual Grant Cycle – Laurel Hamilton & Jeff Greenwald

- a. Currently looking at 4-5 proposals. Hearing the whisperings going on, due to the infrastructure funding, we're hopeful that more SJ projects will get funded than on a typical year.
- b. Tribal outreach
 - i. Supporting state hazard mitigation, USACE will focus on flood risk management support at workshops and individual meetings. Instead of the Corps being the lead, they will support MT DES's process. The way it's being written, Jeff, Laurel, a lead engineer, and the Omaha district tribal liaison, will attend the kick-off meeting and a workshop for each HMP district. If some additional modeling or GIS is needed, there may be an opportunity for additional technical assistance funding.
 - ii. Sara added that MT DES is using the EPA Resiliency Toolkit Framework to run hazard workshops within each of the regions.
 - iii. Jeff stated that Omaha has reached out to the Seattle District to coordinate. They are considering replacing the liaison/Laurel for western district meetings, but Jeff would be consistent in all three districts to maintain continuity.
 - iv. USACE is hoping for letter of support. Has received an email from Joan Houstin hoping to get a letter of support from her by mid-March. A letter of support from a tribe or any additional agency would be great. Letters would increase the chance of being awarded funding.
- c. Composite ice computations in HEC-RAS
 - i. Working with them to develop capabilities within RAS framework to perform the probabilistic stage functions of varying ice conditions with linkage to RAS Mapper. For example, in Glendive, in order to determine what the 100-year stage is, the ice conditions need to be factored in.
 - USACE still needs a local partner for this proposal. Laurel's first thought is Glendive, good working relationship currently and there's known ice jam issues. Traci suggested Gallatin County and Madison County as potential options. Tiffany suggested it may make since to do communities with mapping projects forthcoming.
- d. Levee evaluation Belt and Chinook
 - i. Perform levee risk identification for two communities, obtain levee surveys, update H&H model, and overtopping/breach scenarios. Outcomes could support future SQRA or entry into PL-8499. Laurel is inclined to break the proposal into two.
- e. Sun River nonstructural
 - i. H&H modeling of the reach to evaluate the flood risk potential due to the recent modification and evaluate nonstructural options to mitigate the risk induced by the change.
 - ii. There is recent CMZ mapping on the Sun River that can be incorporated.

8. Ongoing planning studies - Jeff Greenwald

- a. Corps planning authorities allow USACE to partner directly with communities to address flood risk management issues. Authority is delegated down and does not require congressional action.
- b. Section 205 Glendive Flood Risk Management Feasibility Study
 - i. Feasibility cost-sharing agreement signed with Dawson County, Nov 2021 study kick-off. Working on initiating several study activities. Working with an interagency team to ensure that the results are acceptable to the state and federal regulatory agencies such as FEMA. Planning charette in Dec 2021 to get to a final array of alternative refinements.
- c. Section 205 Miles City Flood Risk Management

- i. The levee alternatives under consideration are only economically justified if the high cost of riprap bank protection can be reduced. The team is investigating a setback levee alternative that may allow for reduced riprap. Estimated costs well above the Sec 205 total project cost limit. Looking at either transitioning study to General Investigation (GI) or continuing study as a Sec 205. Continuing under Sec 205 would only allow for a nonstructural alternative. Targeting a decision by May 2022.
- d. Section 14 Glendive Bank Stabilization Project
 - i. Emergency bank stabilization authority, used to protect public infrastructure. Have not received funding, but Jeff is hopeful that it will get funded.
- e. Section 206 Bozeman Ecosystem Restoration Study
 - i. Jeff is planning on contacting the City of Bozeman to ensure they are still interested. USACE received a letter of interest from the City years ago, but it hasn't been funded.
 - ii. Tiff commented that the DNRC floodplain program wasn't involved at the initiation of this project, so does not have much awareness. The city contacts may or may not be the same set of folks involved in the recent mapping update. DNRC can help with some community contacts/connections.
 - iii. Traci suggested that Jeff attended/present at the next Montana Stream Restoration Committee meeting.

9. Other USACE projects/opportunities – Jeff Greenwald

- a. Yellowstone River Intake Diversion Dam Fish Passage
 - i. All weir and in-river work complete. Still working on bypass channel excavation. Ribbon cutting targeted for July 2022.
- b. Upper Missouri Flood Risk Management General Investigation Study
 - i. WRDA 2020 Sec 216b. Requires a report on upper Missouri River Basin, contingent on identifying a local partner to cost share the study. Majority of flooding downstream of the lowest dam on the Missouri River basin system. Purpose would be FRM. Currently unfunded. No interested sponsors have expressed interest.

10. Floods after fire - Shaye Bodine

- a. Looking to schedule a FAF working group meeting for this Spring.
- b. Increased connections with state partners, including MT DES (participation in upcoming Fire TTX) and MT DNRC Fire.
- c. Thanks to Tony Krause for the invite to sit in on USACE conversation with CO regarding post-fire flood risk mapping.
- d. Laurel mentioned a USACE-led interagency FAF meeting scheduled for next week, will forward to the DNRC floodplain team.

11. Look ahead – Traci Sears

- a. Looking at May for next Silver Jackets team.
- b. Sara stated that the FEMA MT FIT lead is doing a 120-day deployment shortly. However, recent discussions on improving sharing and resources outside of the post-disaster timeframe. FEMA regional administrator is visiting Montana this month.
- c. Traci reflected on a discussion at MACo a county commissioner told her that ice jams frequency and severity has decreased in the state. Kathy stated that's an interesting question, but USGS has not conducted that analysis. Overall, there is a need for more data.
- d. Kathy, Traci, Jeff and others discussed shared initiatives for tribal engagement and a hope to minimize overlap or confusing from the tribes' perspectives.
- e. Laurel reiterated the need for letters of support.