



LARIMER COUNTY | ENGINEERING DEPARTMENT

P.O. Box 1190, Fort Collins, Colorado 80522-1190, 970.498.5700, Larimer.org

FLOOD REVIEW BOARD

Date: March 28, 2024

Time: 8:30 AM, MDT

Location: Lake Estes Conference Room, 3rd Floor, 200 W Oak St., Fort Collins and via Zoom meeting

Contact: Tina Kurtz, Larimer County Engineering Department

MEETING MINUTES

Staff Present: Tina Kurtz, Caryn Nezat, John Barnett

Staff Online: None

Board Members Present: Dr. Chris Thornton, Chad Morris, Travis Rounsaville, Dr. Elisabeth Ervin-Blankenheim, Jamis Darrow

Board Members Online:

Call to Order: Dr. Thornton opened the meeting at 8:32 a.m., MDT

Introductions

Item 1: Approval of February 22, 2024, Board meeting minutes

Motion:

Mr. Rounsaville motioned to approve the February 22, 2024, Board meeting minutes.

Dr. Ervin-Blankenheim seconded the motion.

Further Discussion:

None

Vote:

Mr. Hunt – Absent

Dr. Thornton – Yes

Mr. Morris – Yes

Dr. Ervin-Blankenheim – Yes

Mr. Darrow – Abstain

Mr. Rounsaville – Yes

Motion passed [4-0], with 1 abstention.



Item 2: A petition filed by the Coalition for the Poudre River Watershed for a Floodplain Project Review under Section 12.1.6.H of the Larimer County Land Use Code to improve water quality and riverscape resiliency following impacts from the 2020 Cameron Peak Fire in the Sheep Creek FEMA Zone A Floodplain Overlay District at the following location to wit: Section 1, Township 8 North, Range 75 West, Larimer County, CO, otherwise known as parcel 5801000003.

Applicants Present: Chelsey Heiden and Elaina Passero, Ayres Associates; Taryn Contento, Coalition for the Poudre River Watershed

Ms. Kurtz introduced the project to the Flood Review Board and stated that this is a Floodplain Project Review for a stream mitigation project to improve water quality and ecological functioning in the Sheep Creek FEMA Zone A floodplain. This watershed was impacted by the 2020 Cameron Peak fire. The project consists of installing woody materials that would become disembedded and buoyant during a 100-year flood event. This would result in not having an impact on the 100-yr floodplain. She also presented information from FEMA and the Colorado Water Conservation Board (CWCB) regarding their thoughts on permitting the project. These comments are in the PowerPoint attached.

Ms. Contento started the presentation with the background of the Coalition for the Poudre River Watershed (CPRW) goals and stakeholders. She described the impacts to the watershed from the historical fires. Low impact projects are the most efficient use of the natural function of the stream to allow the watershed to heal itself. Ms. Heiden continued with information on Sheep Creek. She said that a Section 7 permit was applied for as well for this project. The alluvial fan of Sheep Creek is impacted by 86% of the burn scar from the Cameron Peak fire. The area has an active beaver habitat but will likely see recovery to historical levels. The project will be installed by hand crews and will cause minimal disturbance. Water quality in the area will also improve as sediment is trapped behind the structures that will be installed.

There are no insurable structures within the area around the subject property. Hand installation for this project does not require a Colorado Department of Public Health and Environment permit. The structures are expected to wash out during the 100-year flood event. Hydrology was provided by CWCB and the pre-fire 100-year flow is the most conservative flood to mimic the hydraulics. The analysis showed the cross sections and scour are expected to show the post-fire hydrology which is the stabilizing mechanism for the structure. The posts of the structures that will be installed are similar to piers and will capture debris. The resulting scour has 2.5 times factor of safety. The logs are sourced from onsite, so they do not introduce additional debris to the area.

Ms. Heiden discussed the risk of the mobilized logs and potential impacts to infrastructure downstream. The likelihood that there is any damage to infrastructure is minimal.

Dr. Thornton asked about the backwater effects and normal depths. Differences in the impacts during a 100-year storm are either the structure is dislodged, or the area is inundated with the floodwaters from the Poudre River and there is no impact to the water surface elevations. Ms. Contento discussed the post-installation monitoring plans. The vegetation options were discussed. Mr. Darrow asked for



clarification between this and the project on the South Fork of the Poudre River. The difference is this project will be completely hand installed and is low impact. Mr. Morris asked about clarification with the FEMA guidance. The analysis of existing and proposed conditions does meet the recommendations from FEMA and CWCB.

Motion:

Dr. Ervin-Blankenheim moved to recommend approval of the Coalition for the Poudre River Watershed Floodplain Project Review for stream mitigation activities to improve water quality and riverscape resiliency following impacts from the 2020 Cameron Peak Fire in the Sheep Creek FEMA Zone A Floodplain Overlay District to the County Engineer.

Mr. Darrow seconded the motion.

Further Discussion:

None

Vote:

Mr. Hunt – Absent

Dr. Thornton – Yes

Mr. Morris – Yes

Dr. Ervin-Blankenheim – Yes

Mr. Darrow – Yes

Mr. Rounsaville – Yes

Motion passed [5-0], with 0 abstentions

Item 3: Flood Review Board Bylaws

Ms. Kurtz stated that the Flood Review Board bylaws have not been updated since 2008. Many changes have been made in regulations and policy since then. A draft of the bylaws has been prepared by the County Attorney's Office to be in concert with the new regulations and policies. This draft has also been through the Assistant County Manager's Office for review.

There was a discussion on changes to the bylaws and expectations for the Board. One item that was of concern to the Board was the qualification requirement for the members to "be technically qualified in civil engineering with an emphasis in river hydraulics and hydrology." It was suggested that the language be changed to read "be technically qualified professionals with an emphasis in river hydraulics and hydrology". This was discussed because there is a current member who is a Professional Geologist (PG) and a highly valued member with a geomorphology background relative to floodplain hydrology and hydraulics. The Board believed the change would still limit the professionals to hydraulically qualified professionals but would not limit the County to Professional Engineers in civil engineering only.

Motion:



Mr. Rounsaville moved to recommend the draft Flood Review Board bylaws be advanced to the Board of County Commissioners for their approval with the following conditions, that the qualifications for the Board in Article IV, Section 1.D.a be changed to read “technically qualified professionals with an emphasis in river hydraulics and hydrology” instead of “be technically qualified in civil engineering with an emphasis in river hydraulics and hydrology.”

Ms. Ervin-Blankenheim seconded the motion.

Further Discussion:

None

Vote:

Mr. Hunt – Absent

Dr. Thornton – Yes

Mr. Morris – Yes

Dr. Ervin-Blankenheim – Yes

Mr. Darrow – Yes

Mr. Rounsaville – Yes

Motion passed [5-0], with 0 abstentions

Other items:

- Discussed upcoming agendas.

Meeting adjourned at 9:45 a.m., MDT.