

Lower Fourmile Creek Restoration Design Community Meeting

Wednesday, October 26, 2016, 6:00–8:00 PM

Fourmile Canyon Firehouse, 1740 Fourmile Canyon Drive

This summary includes an overview of the purpose and format of the meeting, and questions from the full group discussion. Individual comments shared at the meeting and after the meeting will be evaluated and considered for implementation by both Boulder County and the design team.

Fourmile Creek Recovery and Restoration:

More information on the stream restoration, including the meeting presentation and a link to the designs, is available at:

<http://www.bouldercounty.org/flood/creekrestoration/pages/fourmilecreek.aspx>

Contact Information:

Boulder County – Contact with feedback or questions, to submit a form or to be added to the community list serve.

- **Stream Recovery and Restoration:** Clarissa Hageman: 303-441-1610, chageman@bouldercounty.org
- **Road Reconstruction:** Andrew Barth: 303-441-1032 - abarth@bouldercounty.org

Fourmile Creek Watershed Coalition: Maya MacHamer and Cat Price, 303-449-3333, fourmilewatershed@gmail.com, <http://fourmilewatershed.org>

Purpose and Format

The purposes of the community meeting were to share and obtain feedback on the draft 30% Lower Fourmile creek restoration design and discuss next steps before restoration work can begin. Community members were asked to respond to questions including:

- Are you comfortable with the proposed improvements on your property (e.g., where the creek will be located and how it flows/ meanders, in-stream features, bank stabilization, and revegetation)? If not, why? Do you have any stream restoration customization requests?
- Do you have a well or septic system that is on the creek side of your property? Is it within 50 feet of the current creek alignment? If so, can you send us a photo by March 21, 2016?

The meeting began with a brief presentation, which is available on the project website. It included an overview of damage done to the creek, an overview of the assessment and key goals and components of the proposed stream design, an implementation schedule update, and information on required next steps, including obtaining Stream Restoration Project Participant Agreements from all property owners (due October 28). After a full group discussion (see questions below), people went to reach-specific tables to review the design maps for their area. This was an opportunity for individuals to talk directly with technical team members to ask questions and share input. Feedback was recorded on maps and comment cards, all of which will be reviewed closely by the Project Team and incorporated into the Plan as appropriate.

Large Group Discussion Questions

The discussion included the following questions and responses.

What is the budget and what are the funding sources? Federal funding has been received through the USDA Natural Resources Conservation Service (NRCS) Emergency Watershed Protection (EWP) program. A 12.5% local match is required for this funding. Boulder County is providing this match for the lower section of Lower Fourmile (address range 819-1767) and the Watershed Coalition is providing the match for the upper portion through other grants (address range 3644-4726). NRCS EWP funding needs to be spent by the end of 2017. A total of \$8-9M is being spent in the entire Fourmile Watershed for stream restoration.

When will stream restoration start? Stream restoration in Lower Fourmile will likely start in Summer 2017 after run-off. There will be about 3-4 months of active construction. Other sections of the watershed are on different timelines. For example, Wall Street is expected to start in Spring 2016.

How will timing be coordinated with the road construction? The intention is to work on stream restoration at the same time as road construction. However, road construction on Lower Fourmile may take a little longer due to the time needed to finalize right-of-way agreements. Stream restoration therefore may start earlier in this section of the watershed.

What will construction be like? After the design progresses a little further, the technical team will identify 3-5 points to access the creek. There will be smaller equipment in the creek (e.g., excavator and skid steer). The construction team will work upstream to downstream. The site will not look pretty during and after construction, and it will take at least a year to begin growing back.

Will there be walls to reinforce the creek? If so, what will they look like? We are not including retaining walls to reinforce the stream design. Instead, we will stabilize the channel bank with stacked boulders. If it's not a steep slope than will be dry stacked. If it is a steep slope, we will grout with cement and try to hide the grout, to ensure they are safe. The Urban Drainage and Flood Control District website has example photos at <http://udfcd.org/>. Note that there will be some retaining walls in the watershed due to road construction needs.

Will there be additional infrastructure for debris and flooding? We are designing the stream to pass debris through naturally so additional infrastructure will not be needed. There will be no infrastructure to control flooding; the channel will not spill over onto the road in a 10-year flood.

Will concrete fill be removed? Concrete, rubble and chunks on the bank will be pulled out in areas where bank stabilization is being done with this project.

What are the tree removal plans for the stream? We don't have a formal tree removal plan for stream restoration because it takes a long time to develop. We are making notes when we talk to people and we can continue to obtain input from property owners during construction. For the road construction project, the 60% design plan set shows all the trees that are expected to be removed. The maps show all trees in the area and this does not mean that all trees that are being taken out. Instead, there is a matrix that identifies which trees that will, may or won't be removed. Boulder County and the road design team will continue to meet with homeowners about what they prefer with their trees. In places where trees are removed outside of Boulder County's right-of-way, trees will be replaced. Within Boulder County's right-of-way, there won't be as many trees replaced. People should also let Boulder County know if there are any iconic trees in the watershed by contacting Andrew Barth.

What are the revegetation plans? We create a seed mix based on what natural plants are out there now and are careful to prevent invasive plants. There are different seed mixes based on the elevation of the creek in different areas. Zones A is right by water, zone B is 1 foot above the water, and zone C is 2 feet above the water.

Are there any examples of finished flood recovery projects nearby? All stream projects are unique, and there are not a lot of examples for flood recovery in the area. One potential example, however, is North St. Vrain along Longmont Dam Road.

Will the final outcome look like Lefthand? Lefthand and Fourmile are very different roads with different functions. The stakeholders in the Left Hand Watershed were much more focused on ensuring the road stays after the floods so it was moved away from creek. Lower Fourmile stakeholders did not want a significant change to the aesthetics of the area, including no blasting.

How can private property owners do complimentary work (e.g., bridge, landscape, flood walls)? This should be discussed on a case-by-case basis with the design team. In some cases, work may be able to be incorporated into the design or it may be better to wait until after the stream restoration is completed.

Will long-term monitoring be done to ensure the creek is healthy? The Michael Baker Team's scope includes determining long-term monitoring, but it hasn't been refined yet. The NRCS EWP grant requires 3-years of monitoring.

How do we stay informed about designs moving forward? The Boulder County Fourmile Creek website (link above) will continue to be updated, and people can always contact Andrew Barth (abarth@bouldercounty.org) and Clarissa Hageman (chageman@bouldercounty.org) with additional questions or concerns.