

FAQ's and Replies to Citizen Comments

Who were the scientists and professionals involved with creating the Roots Against Erosion plan?

- Bitter Root Water Forum (BRWF): engaged in restoration in the Bitterroot for over 10 years
- BRWF Projects Committee: guided the development of this project, and includes a fisheries biologist, hydrologist, and two research scientists
- Geum Environmental Consulting: hired by BRWF to create the design, have ecologists and biologists with more than 30 years combined experience in Montana and Idaho ecosystems including grasslands, forests, riparian and wetland systems.
- Geum subcontracted with a nationally-renowned geomorphologist to commission a channel migration analysis of the site to help inform the proposal.
- Montana DEQ supports the project as proposed (letter of support provided to the City and is available upon request).

How do you project the amount of river and bankline movement?

- Hydrologists, biologists, cartographers, and geomorphologists used science, historical data, and modeling to predict future trajectory.
- Geum subcontracted with a renowned geomorphologist to make erosion and bankline predictions based on a channel migration analysis.

How might changing grassland habitat affect birds and wildlife?

- [Riparian habitats are vital, and habitat diversity is good for wildlife](#) (USDA/NRCS)
- The entire project footprint is 1.5 acres; only 2% of the 70-acre park will be modified.
- A limited number of cottonwood trees will be planted. Cottonwood trees offer more diversity of habitat for various wildlife species. If the river does move into the project area in the future, cottonwood trees offer shading for the river as well as potential important woody debris if they fall into the river.
- Bitterroot Audubon supports this proposal; they have submitted a letter of support to the City Council.

What was the process for developing this plan and sharing it with the community?

- The proposal was developed over two years of studying the area, weighing different alternatives, and creating an appropriate design.
- BRWF collaborated with the City Public Works Director from the beginning.
- BRWF waited to address this project with the public until after the transfer from BRLT to the City so as not to confuse or distract from that separate and distinct process.
 - BRWF worked with the Ravalli Republic to publish an article about the proposal before the City would be asked to vote on the issue.
- BRWF is providing a Zoom meeting for the public to learn more about the project, in addition to the multiple public presentations at the Council of the Whole.

Will there be a view of the river while walking the ADA trail?

- Plant types and planting density have been adjusted to help preserve the viewscape from the ADA trail. The plantings will be 97% willows, as their combination of low height at maturity and complex root systems accomplish multiple project objectives including maintaining the viewshed and providing erosion control.

Will local taxpayers pay for the implementation of the plan?

- No money is being requested from or contributed by the City.
- The project is being funded through:
 - a grant from the Montana Department of Environmental Quality 319 program, which is funded by the EPA via congressional appropriation;
 - Bitterroot Audubon;
 - BRWF donors;
 - and in-kind contributions.

Were alternatives to this proposal considered?

- Hard rock revetment, also known as “rip-rap”, was considered and was not recommended. We estimate this approach would cost over \$350,000. Rip-rap is far less “natural” than a constructed swale that simulates river processes. It is also less river and wildlife friendly and requires long term maintenance funding.
- The option to do nothing was considered, and is not recommended. To do nothing would mean watching erosion continue while losing time to develop root systems.

Will we still be able to access the river from the park?

- People will still be able to access the river from the park, and the footpath near the bank will still exist.
- The Public Works Director proposed a modification in the trail design to help reduce rapid erosion near the banks while maintaining river access.

Has a project like this, using willows to slow erosion, ever been attempted before on a river like the Bitterroot?

- An erosion reduction project using willows that was implemented in Stevensville on the mainstem of the Bitterroot River in 2012 is still functioning
- For ecologically sound vegetative projects, the first flood event is the most challenging. That is why this project is placed back away from the active channel, allowing years for the vegetation to take root.
- There are no guarantees in restoration, but this is the most cost effective and ecologically responsible approach to slowing erosion and preserving the park.

Does the plan keep the park “undeveloped” and “natural”?

- All plants are native to the area.
- The proposed swale (a swale is a low elevation area that is more moist than surrounding ground) is necessary for the growth of willows and other riparian vegetation. Swales are common along the Bitterroot River floodplain where flooding and minor channel changes occur. The constructed swale will simulate what occurs naturally along the river.
- The fencing is temporary until plants establish and can withstand browse pressure from deer/moose.

When would the project be implemented?

- The proposal is still going through the public process and being vetted by the City
- BRWF recommends the project be completed as soon as possible because establishing the root system is key to the project's success.
- Ideal timeline would have construction beginning in the Spring of 2021