

Bigfork Stormwater Project

Susan Hanson, Chairwoman
Bigfork Stormwater Advisory Committee

The community of Bigfork is located at the northeast corner of Flathead Lake. Originally a logging community, the village surrounds Bigfork Bay. The Swan River empties into Flathead Lake at Bigfork Bay, now primarily a resort community. The many art galleries and the Bigfork Theatre for the Performing Arts draw tourists from around the state, country and world.

Recent development, with increased impervious surfaces such as roofs, paving and sidewalks, have created flooding problems to residences and businesses around Bigfork Bay, including increased pollution entering the Bay and subsequently Flathead Lake. Stormwater has occasionally infiltrated the Bigfork Water and Sewer System sanitary sewer lines to an extent that the wastewater treatment capacity of the system was compromised. In 2007, the Flathead County Commissioners, with the assistance of a community advisory committee, formed a stormwater project to upgrade the antiquated stormwater conveyance system and mitigate untreated stormwater.

With the help of grant funds and matching funds from the Department of Environ-

mental Quality, Flathead Basin Commission, Department of Natural Resources and Conservation (DNRC), and Treasure State Endowment Program the project is well on its way to implementation.

Accomplishments to date include a Preliminary Engineering Report (PER) defining the stormwater issues pertaining to the defined area as a whole. The PER identified priority areas and recommended a phased approach to upgrade and mitigation. One of the largest contributors to stormwater on Grand Drive, the main entrance to Bigfork Village, was the roofs and parking areas of Bigfork Schools. In 2008, Bigfork Schools installed an underground Stormtech detention and filtration system on the Elementary playground to capture some of the runoff. In 2009, Flathead

County, in partnership with the Bigfork School District, utilized grant funding and matching funds to install an additional underground Stormtech detention and filtration system on school property. The school also installed five new drywells in parking areas of the school. The two systems have reduced stormwater entering the conveyance system to Bigfork Bay by as much as 85%.



Source: Bigfork Stormwater Advisory Committee, 2007

Stormtech detention/filtration system during construction at Bigfork School District

The Stormwater Advisory Committee has also implemented a Sampling Analysis Program to sample stormwater at the outfalls prior to and after upgrades to the system. Other projects include a stenciling program to mark stormwater drains and draw public attention to pollution entering Bigfork Bay. The Committee sponsored a workshop in 2008 with the Flathead Lakers, Flathead Conservation District and the DNRC in an effort to raise awareness and promote Best Management Practices. In the fall of 2009, two groundwater monitoring wells were installed adjacent to the outfall area on Grand Drive.

Present and future grant funding includes final engineering of the entire project in the Bigfork Bay area and implementation of all phases of the upgrade. The project will likely include a Rural Special Improvement District to match grant funding and provide funding for maintenance of the upgraded system. The Bigfork community is committed to completing the Stormwater Project and takes pride in providing a pilot project for other communities. For more information, see the website: bigforksteering.org/ and click on the Stormwater page.



Source: Bigfork Stormwater Advisory Committee, 2007

Flathead County GIS taking reading at the public dock