STORMWATER REUSE AT CHANHASSEN HIGH SCHOOL

Each year, Chanhassen High School uses 3.8 million gallons of groundwater—a ka drinking water—to irrigate athletic fields and other green spaces. At the same time, there is an excess of stormwater that runs off the school grounds and nearby areas, causing pollution, erosion, and other issues in Bluff Creek.

In 2018, the RPBCWD, the City of Chanhassen, and Independent School District 112 teamed up to fund the construction of a system that captures stormwater and reuse it to irrigate the school’s athletic fields. Rather than flowing directly into Bluff Creek, much of the water that washes off of the school's land and nearby neighborhoods will instead be put to good use! This means that less drinking water will be wasted on irrigation, and less polluted stormwater will reach Bluff Creek.

HELP PREVENT EROSION ON BLUFF CREEK

When the banks and slopes of Bluff Creek wear away and fall into the creek, the sediment harms plants and animals who rely on it for habitat. Eroding slopes are also a danger to people and buildings. You can help us slow erosion down to healthy levels.

Plants are important for holding soil in place. If you live on or near a creek, promote healthy plant growth on the slopes leading to the creek: don’t dump leaves or debris - these can smother growing plants - and plant native species that have roots that grow deep.

Stormwater runoff from homes, parking lots, and roads increases erosion when it rushes into the creek after a rainfall. Even if you don’t live near the creek, you can help prevent erosion by slowing down stormwater. Build a raingarden to soak water from your roof into the ground, or install a rain barrel to catch, hold, and reuse it. If you live on a steep slope above a creek, don’t discharge water or heavily water your landscape: saturated soils are prone to erosion and can contribute to slope failure.

YOU CAN HELP

Rainwater runoff, the water that flows across yards, parking lots, and streets into stormdrains, is one of the main causes of pollution in urban areas. You can take simple actions to help protect Bluff Creek.

Keep the curb clean
Sweep up leaves, grass clippings, and fertilizer from driveways and streets.

Water with care
Grass requires 1-inch of water per week: about one hour of sprinkling per week if it has not rained.

Salt smart
The salt we use to melt ice can pollute our lakes and creeks. Use salt sparingly and always shovel first.

Reuse the rain
Collect and reuse rainwater with a rain barrel.

Build a raingarden
Raingardens soak up water and filter out pollution. Visit our website for help.

Bluff Creek

In the photo above, Bluff Creek winds its way south, past Chanhassen High School. Bluff is about seven miles long, and unlike Purgatory and Riley Creeks, does not connect any lakes on its way to the Minnesota River. It does however connect many wetlands and you can explore almost its entire length on trails.

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Length</th>
<th>6.8 miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevation change</td>
<td>232 ft</td>
</tr>
<tr>
<td>Watershed size</td>
<td>5.8 sq miles</td>
</tr>
<tr>
<td># of cities in watershed</td>
<td>2</td>
</tr>
<tr>
<td># of lakes connected</td>
<td>0</td>
</tr>
<tr>
<td># of monitoring sites</td>
<td>5</td>
</tr>
<tr>
<td># of parks</td>
<td>3</td>
</tr>
<tr>
<td>Impairment</td>
<td>Turbidity, Fish</td>
</tr>
<tr>
<td>Common fish</td>
<td>Brook Stickleback, Northern Fathead Minnow</td>
</tr>
<tr>
<td>Invasive species</td>
<td>Reed Canary Grass, Buckthorn</td>
</tr>
</tbody>
</table>

WATERSHED BOUNDARIES

Water that falls anywhere within the white border drains to Bluff Creek.

WATERSHED BOUNDARIES

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Land Use in the Bluff Creek Watershed</th>
</tr>
</thead>
<tbody>
<tr>
<td>12% Farmland</td>
</tr>
<tr>
<td>44% Open Space</td>
</tr>
<tr>
<td>28% Residential</td>
</tr>
<tr>
<td>12% Commercial</td>
</tr>
<tr>
<td>4% Roads</td>
</tr>
</tbody>
</table>

Land Use in the Bluff Creek Watershed

Celebrating our 50th Anniversary in 2019. Learn more at www.rpcbwd.org/50years

Contact us
and find out how you can get involved

District Office
18681 Lake Drive East
Chanhassen, MN 55317

Contact Info
952.607.6512
info@rpbcwd.org
rpbcwd.org

Find us on
Instagram
Facebook
Twitter
Keeping Bluff Creek healthy requires several tools and strategies. Implementing projects to stabilize the stream banks and restore creek reaches is one important strategy. Cleaning and slowing rainwater runoff before it reaches the creek is another. But before either of these can be done, we need to understand how the creek is doing and where it needs the most help.

The watershed district has been monitoring Bluff Creek since the 1970s. Recently, the district developed a new tool to assess the creek: the Creek Restoration Action Strategy (CRAS). The CRAS uses water quality data, as well as information on erosion and habitat to rank which creek sections are doing the best, and which are doing the poorly. Below, the three major types of data used in the assessment are described. On the next page, a creek map shows the results from 2018.

**Water quality**
District staff take samples at five sites during summer. They gather data on nutrient levels (phosphorus), algae, sediment, pH, and dissolved oxygen. These data let us know how clean the water is, and whether it is healthy for plants, animals, and people.

**Erosion**
Every year, staff walk along sections of the creek. They note sites with erosion, its severity, and whether any structures like houses or bridges are in danger. Erosion is also a problem because the sediment that erodes into the creek is a pollutant.

**Habitat**
Creeks are important habitat for insects, plants, fish, birds, and other animals. When staff check for erosion, they also assess the habitat. Reaches receive a score based on the quality of habitat they provide, and whether it needs to be restored.

**Dive deeper**
Interested in learning more? Explore the following reports on our website.

**Assessment**

**Implementation plan**

**Stormwater ponds**
RPBCWD. 2013. Stormwater Pond Project.