

Friends of the Winooski River

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Dear Friend,

Homes, businesses, and a few entire towns were upended by the historic flooding in the Winooski River watershed this summer. In just the few months since the floods we can see signs of recovery all around us, because of the commitment of our friends, neighbors, and communities to supporting each other.

Friends of the Winooski River's small staff have been engaged in flood response, recovery, and plans for resilience in myriad ways. In the days that followed the flood,

- 1. We assessed damage to streams and worked with partners and engineers to find solutions.
- 2. We visited folks who own dams that breached in the flood and helped them navigate the complex processes of temporary repair and long-term removal.
- 3. We helped our smaller towns navigate some of the challenges and opportunities they faced.
- 4. We organized three cleanups of flood debris in Plainfield, which received an astonishing amount of man-made material.
- 5. And, we continued our important work on a major culvert replacement in Fayston, three dam removal designs in Barre, Storm Smart and Stream Wise visits, and more.

Just as importantly, we need to do more over this next year to mitigate flood damage and build resiliency in our watershed.

Today you can directly support our work to create a clean, healthy, resilient Winooski watershed!

We've done this work before: one remarkable example that made a difference in this year's flooding is shown in the Dog River Park case study, enclosed. We need your support to be able to do more!

This is what we are planning to do in 2024:

- 1. At least **seven riparian planting** projects, which enhance resilience by slowing and filtering stormwater and reducing erosion;
- 2. Continued work on **four dam removal** projects, which enhance resilience by reducing flood elevations and restoring natural stream processes;
- 3. Design **two culvert replacements**, and continue to develop additional culvert replacement projects, which are important for wild fish to access cold water in hotter summers and which enhance resilience by preventing roads from blowing out in big storms;
- 4. Repair **two storm-damaged streams**;
- 5. Get out into the rivers and **clean up the flood debris** that we couldn't reach this year!

Have no doubt that we will advocate for the changes that are necessary to help our communities, natural and human, to adapt to the increasingly extreme weather in the future, and we will remain a reliable source of information for you and for our communities. We know that we can live with the tremendous natural resource that is our Winooski River, and we are on the ground finding ways to do just that.

As the year draws to a close, the staff and board of the Friends of the Winooski River want to express our heartfelt gratitude for your support and let you know that your continued generosity will allow us to make great strides in creating resilient places along our rivers in the face of increasingly severe weather events.

This year's goal is to raise \$30,000, a 50% increase to support increasing our capacity to complete more projects more quickly. We hope that you will join our year end campaign! Please consider increasing your gift to FWR so that we can increase our efforts to do the repair, restoration, and planning that communities along the Winooski River need now.

Sincerely,

Jared Carpenter President Michele Braun
Executive Director

P.S. This is what **3 tons of flood debris** looks like! **Thank you** for making us a strong enough team to handle this! We were proud to be able to provide this assistance when it was needed.



Employees of Dealer.com celebrating their work to remove this trash that was caught among the trees in floodplain forest along the Winooski River in Plainfield! September 26, 2023

The Dog River Park in Northfield

A Flood Resilient Community Asset That Works

The photo below shows the Water Street neighborhood in Northfield on July 10, 2023. The Dog River, one of the major tributaries to the Winooski, flows from top to bottom on the left side of the photo. The large area of open water outlined in yellow covers the Dog River Park, a beautiful spot for community recreation, river access, and environmental education. The Park is also a *functioning floodplain*, an area of open land where the river can spread out, slow down, and let debris settle out.

You might wonder whether the river spreading out in this area is safe for these homes, which are surrounded by flood waters. The fact is that the water in this neighborhood would have been six inches higher if the river was not able to fill this floodplain.

How does this work? Projects like this take a long time and a lot of money, so they need a dedicated organization to manage the whole process. We think it is worth it! This Friends of the Winooski River project



made a real, measurable difference in this year's flooding in Northfield, and your support built the foundation for this success. **Together, we reduced damage to these homes and disruption to these households.**

The Creation of Dog River Park

After Tropical Storm Irene in 2011, the Town of Northfield bought out 18 flooded homes, resulting in a major change to the Water Street neighborhood, and in Northfield becoming the owner of a 4-acre parcel of open land along the Dog River. The Town asked Friends of the Winooski River for help to use this public space to reduce future flooding in the neighborhood.

Working with SLR Consulting Engineers and GPI Landscape Architects, the Town of Northfield and Friends of the Winooski looked at alternatives and listened to input from the community and from experts in flood mitigation. Together, we developed a major floodplain restoration project that also serves as a busy public park and an environmental education resource for the local schools and Norwich University. We accomplished this with a lot of community support, and public and private funds that were generously contributed to support our work.

The Function of Dog River Park

The park is designed to flood and to recover from flooding without needing major repairs. It includes three distinct zones: a lawn along Water Street, a big wildflower meadow in the middle, and trees and shrubs that line the river. Since it was completed in 2017, the Dog River Park has experienced quite a few floods that filled the meadow and spread into the lawn, and it has performed just as designed.



This summer, the Water Street neighborhood was inundated by a nearly-50-year flood event. The Park area is not large enough to contain that much floodwater, but we know that it helped. Comparing the depth of this year's flood to what it would have been without the project, the depth of the water across the neighborhood was **six inches lower** than it would have been without our work. Homes experienced flooding in their basements, but not the first floor, which makes a big difference in the impact. The aerial photo of the flooding shows that another six inches of depth could have caused more serious damage to these homes and more costs to the community.

Let's Do More!

This Friends of the Winooski River project is now a model for floodplain management in Vermont. It has shown that we can make our communities safer and our waters cleaner by restoring nature wherever we can.

Knowing that this approach is successful at reducing flood impacts, FWR is looking for more opportunities to give our rivers and streams the room they need to spread out and slow down in a safe and amazing way.





And we hope to be able to use the same model to provide more public access to our rivers and beautiful natural recreation spaces for our communities.