



LITTLE FALLS WATERSHED ALLIANCE

EDUCATION - ACTION - STEWARDSHIP

## Strategic Plan 2021-2025

**Vision:** A beautiful, healthy, and restored Little Falls Watershed—beloved and cared for by a committed community that strives to protect this fragile natural ecosystem for generations to come.

**Mission:** Our mission is to restore and protect the vulnerable natural ecosystem nestled in this populous area of Montgomery County and Washington, D.C. We strive to restore and sustain the water quality, natural habitat, health, and integrity of the watershed. We develop and apply diverse, innovative, and successful programs to accomplish these goals; build awareness about the importance of these natural spaces to our environmentally sustainable future; and ensure that our creeks and their surrounding natural environment survive and thrive for their own sake, and the enjoyment and utilization of current and future generations.

### **Who we are:**

The Little Falls Watershed Alliance is a community-based organization founded in 2008 by a group of concerned citizens to restore and protect the water quality in the Little Falls Watershed located in southern Montgomery County and Northwest DC. LFWA remains dedicated to improving and sustaining the Little Falls watershed, which includes the Little Falls, Willett, and Minnehaha Branches; and ensuring that the natural spaces and ecosystems in our area persist for generations to come. Our community includes a multi-talented board and executive director, dedicated members, an extensive and enthusiastic volunteer network, and diverse partnerships and coalitions that drive our success.

### **What we do:**

LFWA effectively employs and integrates outreach & education, community-based partnerships, policy advocacy, and science to achieve our vision and mission.

### **Outreach & Education:**

As a community-based organization, engaging, involving, and exchanging information with our neighbors and other stakeholders is paramount to our success and a critical component of everything we do. Since its founding, LFWA has implemented a broad array of effective outreach and education activities including stream clean-ups, weed pulls/invasive species removals, creek critter identification, community events and workshops. In recent years, our outreach and education efforts have also been integrated with our expanding community-based partnership, policy advocacy and science programs (see below). Since early 2020, COVID-19 and related restrictions have limited

some of these traditional outreach and education activities, but we have managed to find creative solutions to continue this vital component of our work. Examples of such creativity include remotely providing materials and fostering individual trash clean-ups, holding zoom calls to share information, participating in virtual public meetings, and offering a first weekend hike which included remote sign-up, downloadable maps from our website, and onsite signs with QR coded maps.

### **Looking to the future:**

We expect that the COVID-19 situation will continue to improve, and related activity restrictions will be relaxed, allowing us to return to many of our traditional outreach and education efforts. In addition, we expect to continue or expand the use of the innovative tools we have relied on more recently such as virtual meetings and the use of QR coding to share information as appropriate. Regardless of the mix of these tools, LFWA will work to fully engage, involve, and inform the community regarding conservation of Little Falls Watershed. We also expect to further integrate our outreach and education efforts with our community-based partnerships, policy advocacy and scientific work as discussed below.

### **Community-based Partnerships:**

Promoting and facilitating hands-on conservation and restoration through community-based partnerships (e.g., projects in Sumner Village, Overbrook, Westbrook, etc.) is another vital element of our mission to restore and protect the Little Falls Watershed. Since its inception, LFWA has sought and engaged with a variety of local groups to successfully complete such conservation projects including native plantings, meadow restoration, rain gardens, storm drain stenciling, stormwater management and other projects that reduce runoff that hurts our creeks. Our community-based partnership and outreach and education efforts are inextricably linked and integrated.

### **Looking forward:**

LFWA will continue to pursue additional community partners, opportunities, and funding to substantially expand our work in this area. LFWA's community-based projects were relatively small initially, but in recent years, they have grown considerably in size and complexity. We expect to see this trend continue in the future. This growth has been facilitated in part through our success in securing larger grants, including several from Montgomery County's Watershed Restoration and Outreach Grant Program administered through the Chesapeake Bay Trust. In 2017, we received such a grant to do a stormwater study for the Overlook Homeowners Association in Bethesda and to install demonstration rain gardens and conservation landscaping. LFWA received a follow-up grant that builds and expands on the successful Overlook collaboration and includes installation of permeable pavement to further reduce stormwater runoff. LFWA received a similar grant in 2019 to tackle the stormwater run-off problem at Sumner Village, a condominium community in Bethesda. That project was successfully completed in 2020, despite several challenges posed by the COVID-19 pandemic.

### **Policy Advocacy:**

The third vital pillar of LFWA's work involves developing, evaluating, advocating for, and securing policies to conserve, restore and protect the Little Falls Watershed. Since its inception, LFWA's advocacy work has greatly increased in scope. An important inflection point for our advocacy

efforts occurred in 2014 when Montgomery County initiated efforts to revise the Westbard Sector Plan, which focuses on future development right in the heart of the Little Falls Watershed, encompassing a large section of the degraded Willett Branch, and bordering on and draining into the Little Falls Branch itself. Starting with a charette in 2014 and continuing through myriad public, private and government meetings until the Westbard Sector Plan was finalized in 2017, LFWA identified those components of the plan most likely to impact the watershed and its creeks and advocated for their restoration and protection. LFWA's successful advocacy campaign focused on and secured language to improve stormwater management, restore and naturalize the Willett Branch, and create a future Willett Branch Stream Valley Park. The campaign integrated support from our outreach and education efforts, community-based partnership, and scientific work to achieve success.

While the adoption of the Westbard Sector Plan created an opportunity to secure improved stormwater management, restore and naturalize the Willett Branch, and create a Willett Branch Stream Valley Park, it was only the first step in a long, multi-stepped process. Since 2017, our advocacy efforts have focused on the Montgomery County Parks and Planning Commission and its component parts, their consideration and approval of various private development proposals within the Westbard Sector, planning for the proposed Willett Branch Stream Valley Park and securing funding to make the park viable. LFWA's continued advocacy work bore some fruit in 2019-2020, securing increased requirements on and commitments by developers to improve stormwater treatment and provide lands and money for the stream valley park and securing appropriations for the park.

### **Looking ahead:**

The Westbard implementation work will remain a central focus of our advocacy work for the foreseeable future. In addition, we are exploring and researching other opportunities for expanding our policy advocacy work including policies related to individual site stormwater permitting and waivers; county stormwater management; restoring, naturalizing, and de-concreting other sections of the watershed; removing physical barriers to fish passage and migration; and restoring native fish and other aquatic communities

### **Science & Monitoring:**

The fourth and final vital programmatic component of LFWA's work focuses on developing, securing, compiling, evaluating, and sharing the scientific information necessary to better understand the health of the watershed and how human activities are impacting it, assess policies intended to address this human impact, and develop options to improve restoration and protection. Our scientific and monitoring program is intended to support and be integrated with our other programmatic work. Since its inception, LFWA has developed and implemented a growing array of scientific and monitoring projects in partnership with other groups that have yielded some significant results and successes but remain limited in scope. Much of our science and monitoring work has focused on water quality and related stormwater issues that LFWA recognizes as a principal threat to our watershed.

Some examples of our water quality and stormwater related science and monitoring work to date include quarterly macroinvertebrate community (a widely recognized indicator of stream health) censusing done in partnership with the Audubon Naturalist Society; road salt testing done in

collaboration with the Izaak Walton League's Winter Salt Watch; and some preliminary bacterial monitoring work initiated in 2020 in collaboration with Anacostia Riverkeeper and other groups doing this on a regional basis. Another successful and noteworthy example of LFWA scientific work is a project we partnered with Design Green, an engineering firm that specializes in stormwater management, to study the Westbard site and make recommendations regarding best management practices and how their implementation would benefit the Willett Branch. This study was used to support our policy advocacy work on Westbard and ultimately resulted in adoption of a much-improved stormwater management plan for the site.

### **Looking Ahead:**

Building on our existing programs and successes, LFWA sees Science and Monitoring as a potential growth area for the organization. Our macroinvertebrate monitoring program suggests that the health of the Little Falls Branch is fair to poor, at least at the one site we monitor regularly, but does not provide causal information nor information about other locations. LFWA believes the primary threat to the watershed's health and the one most likely responsible for its fair to poor rating is stormwater runoff. This runoff results in an unnatural water flow regime characterized by aberrant cycles of both high and low water that flushes the creek on a regular basis and causes rapid fluctuations in water temperature, including high and potentially lethal temperatures during the summer months. LFWA's salt monitoring program is providing good information on one potential water quality threat, but we currently do not have any regular monitoring of other potential chemical or biological contaminants including bacteria as discussed below, however, we are beginning to monitor bacteria periodically. The state, county and park also do some water quality and other monitoring of the creek, but it is limited in scope and not their highest priority due to the watershed's apparent impairment and relatively small size. No one currently measures water flow, water temperature, or bacterial levels on a frequent basis.

LFWA initiated a major expansion of its water quality monitoring program in 2021 and expects accelerated growth as opportunities and resources permit. Noteworthy accomplishments to date include (1) implementing a highly-successful biweekly bacterial monitoring program this summer; (2) comprehensively analyzing and presenting our previous monitoring results in a report and on our website; (3) initiating relatively low-cost regular monitoring of water temperatures, water flow, pH, and several other parameters; and (4) securing a major grant from the Chesapeake Bay Trust, funded by Montgomery County, that will enable us to further expand our monitoring efforts. For this grant, entitled *Using Autonomous Robots to Monitor Water Quality and Engage Community*, LFWA is partnering with KickRobotics, a local firm, and utilizing their innovative and unique autonomous environmental robots to accomplish three goals (1) expand and improve existing water quality monitoring for the Little Falls Watershed; (2) engage, publicize and inform the community about water quality issues and their importance; and (3) provide STEM-based educational opportunities that involve and motivate students. This project will enable us to greatly expand the number of parameters we monitor and provide a platform for reporting our monitoring data on a regular, continuous basis.

Some additional areas we plan to focus future research efforts on include mapping and analyzing blockages to fish passage in our creeks, assessing the extent to which our creeks are currently concreted and channelized, exploring the feasibility of future restoration of these stretches, and improving the characterization of the creeks' fish fauna.