



SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2021.** Please include this submission form with the electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

PROGRAM INFORMATION

County: Loudoun County
Program Title: Master Gardener Site Assessment Program
Program Category: Environmental

CONTACT INFORMATION

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SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

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Title: ASSISTANT COUNTY ADMINISTRATOR
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LOUDOUN COUNTY VACo Nomination – Environmental Category

Title: Master Gardener Site Assessment Program

OVERVIEW: Virginia Cooperative Extension Loudoun County Master Gardeners has developed a Pond/Stream/Site Erosion Site Assessment program that provides assistance to resident and community properties. Through this program, volunteers assess ponds, landscapes and stream sides that, through the years, have grown shady, stagnant and may threaten natural resource conservation during a weather event. The Master Gardeners document the issues through photos, samples of pond weed and water, and survey the surrounding landscape. They then provide property owners a detailed report, including options that can help them better maintain their own landscape and, as a result, a healthy ecosystem.

At minimal cost to the county, the Site Assessment program offers a new service to Loudoun County residents and property owners or managers, without any service fee. Expanding the county's community outreach education, the Master Gardeners assist in best management practices that contribute to natural resource conservation. And in the end, this program contributes to the Chesapeake Bay Watershed improvement plan.

Problem/Need for the Program:

Landowners with aged ponds were frequently contacting VCE Loudoun with questions on pond weeds and how to eradicate safely. The VCE Loudoun Agriculture and Natural Resources (ANR) Agent recognized the opportunity to train Master Gardener Water Stewards on assessing pond weeds and pond health. The opportunity grew to include landscapes and soil erosion as well as stream side assessments.

By training and utilizing volunteers, VCE Loudoun was able to increase the educational outreach and impact on the community regarding natural resource conservation, with no impact to county funding.

Description of the Program:

As the temperature warms up each spring, aquatic plants growing in a pond can quickly get out of hand. A pond mostly covered with overly exuberant vegetation is not only a nuisance to pond owners, but can also be detrimental to life in the pond and negatively affect the pond's entire ecosystem.

Many established landscapes that were once sunny and full of lush turf grass are now 90 to 100% shaded, due to mature tree growth. The shade may present an erosion problem in the landscape due to stormwater runoff where the grass no longer grows, and the landscape is sloped. In some cases, the water pools and is stagnant for days. A stream or creek can carry sediment and/or chemicals from surrounding landscapes with any level of rain if the embankment is bare.

During the site assessment, trained volunteer learn from the property owner about their objectives for the property being assessed, do a survey of the landscape in question, and write a detailed report that provides options on best management practices for the pond, yard, or stream.

Prior to any visit, the pond is looked up on the Loudoun County GIS mapping site to get dimensions and accessibility. The visits incorporate taking samples of the pond water if muddy, pond weeds for identification, and checking the temperature of the water. A walk around the pond enables the volunteers to see the surrounding landscape, vegetation on a dam and any other sources of input into the pond. Surrounding landscapes can be farms with animals or vegetation. A weather event can produce significant stormwater runoff, so understanding the use of surrounding landscape as well as what is done to those landscapes in terms of any fertilizers or chemicals will assist with management options.

The detailed report delivered to the client is broken out in sections. The first section explains the site history and observations of the entire landscape, as well as any measurements taken. Next section is specifics on the client's objectives and how to address them with best management practices. The final section lists general education resources on natural resource conservation practices (riparian buffers, etc.) as well as other programs like VCAP from Soil & Water District and General Services Department that might be of assistance for landscapes, stormwater management and trees.

The program is part of the Master Gardeners Stewards projects and any property owner or manager can request a site visit through a website form. The program runs from late March through mid-October depending on the weather.

Through this program, we have served a diverse group of clients throughout Loudoun County: private landowners, HOA common areas, community landowners (separate from an HOA), Loudoun County Department of General Services, small local farms, a nature sanctuary, and a nature conservancy.

The pond assessment program was established first in early 2017 with the County's Agriculture and Natural Resources Agent and a few Master Gardeners. Once the volunteers were confident with the pond visits in 2019, the program expanded to incorporate landscape and stream side evaluations.

Cost of the Program:

Minimal costs are associated with this program. Supplies for site visits totaled under \$200. No capital costs were incurred. Training volunteers increased the educational outreach available to the community on natural resource conservation with no impact to county funding.

Results/Success of the Program

Since its inception in 2017, the Site Assessment volunteers program has reached 40 clients, totaling over 36.5 acres (streams excluded), and provided 40 actionable reports to clients. The department had a 100% success rate in meeting the requests, even through 2020 and a distanced season.

In 2021, the program is so popular that there is a six-to-eight-week waiting list for assessments.

Success stories include:

- A successful pond assessment for an HOA identified numerous pond weeds and algae. Their objective was to keep the weeds down and not use harmful chemicals because the pond was used for fishing. By addressing when and how to manage these weeds, the HOA pond management team can take action to keep the pond free of weeds that may cover the entire pond and keep the water healthy for the fish and the recreational use of the community.
- A successful site assessment for a local resident identified soil erosion and one of the causes of it from a downspout. The report specified actions to take to stem that stormwater flow that sent his soil down to his neighbor's yard.
- A successful stream visit was made to a high school where the stream ran right in front of the school. A very steep slope, bare soil and no vegetation along the banks caused sediment to flow freely down the hill and into the stream. Recommending vegetation for the riparian buffer to slow water flow into the stream was key.

AWARD CRITERIA

- The Site Assessment program offers a new service to Loudoun County residents and property owners or managers, without any service fee.
- It expands the scope of community outreach education for the County, as the Master Gardeners assist in best management practices that contribute to natural resource conservation.
- This innovative program links trained volunteers with the needs of the community, and could serve as a model for other jurisdictions.
- In addition, it contributes to the Chesapeake Bay Watershed improvement plan: eroding land and stream banks is a major source of sediment. By assisting residents at no cost, this program can help prevent erosion and decrease sediment in the Bay.