



Pollution Identification & Correction Program

2023 Annual Report

Skagit County's Pollution Identification and Correction (PIC) Program is a partnership between state and local agencies, tribes, local non-governmental organizations, shellfish growers, and private citizens. Skagit County is the lead agency for the program. We are dedicated to protecting the public from waterborne illness by reducing the levels of fecal bacteria in the rivers and creeks of Skagit County. The PIC Program has been operating since 2010 and has successfully reduced bacterial pollution in several watersheds in Skagit County.

Water quality monitoring and outreach to landowners are the core of our PIC Program. We identify water quality sampling sites near the confluence of streams and monitor them on a regular basis. When we find high levels of fecal bacteria, we perform source identification sampling (sometimes referred to as "bracket sampling") upstream to identify where the pollution is coming from. Staff then follow up by visiting nearby property owners to identify the source of pollution and work with them to correct any problems that are found. Common sources include pets, failing septic systems, farm animals, and wildlife.

Through partnerships with the Skagit Conservation District, Skagit County Public Health Department, Craft3 Clean Water Loans, and Skagit Fisheries Enhancement Group, we connect property owners to resources to find solutions to problems they may have. Resources include low-interest loans and grants for septic system repairs or replacements, free and confidential farm assessments with a trained farm planner, assistance with farm management, and financial assistance for fencing, invasive plant removal, native plantings, and other projects.

A graphic representation of all aspects of the PIC Program is presented in Figure 2. Skagit County's PIC Program



Figure 1. A PIC staff member counts colonies of *E. coli* bacteria in a water quality sample taken from the Samish watershed.

Skagit County Pollution Identification & Correction Program

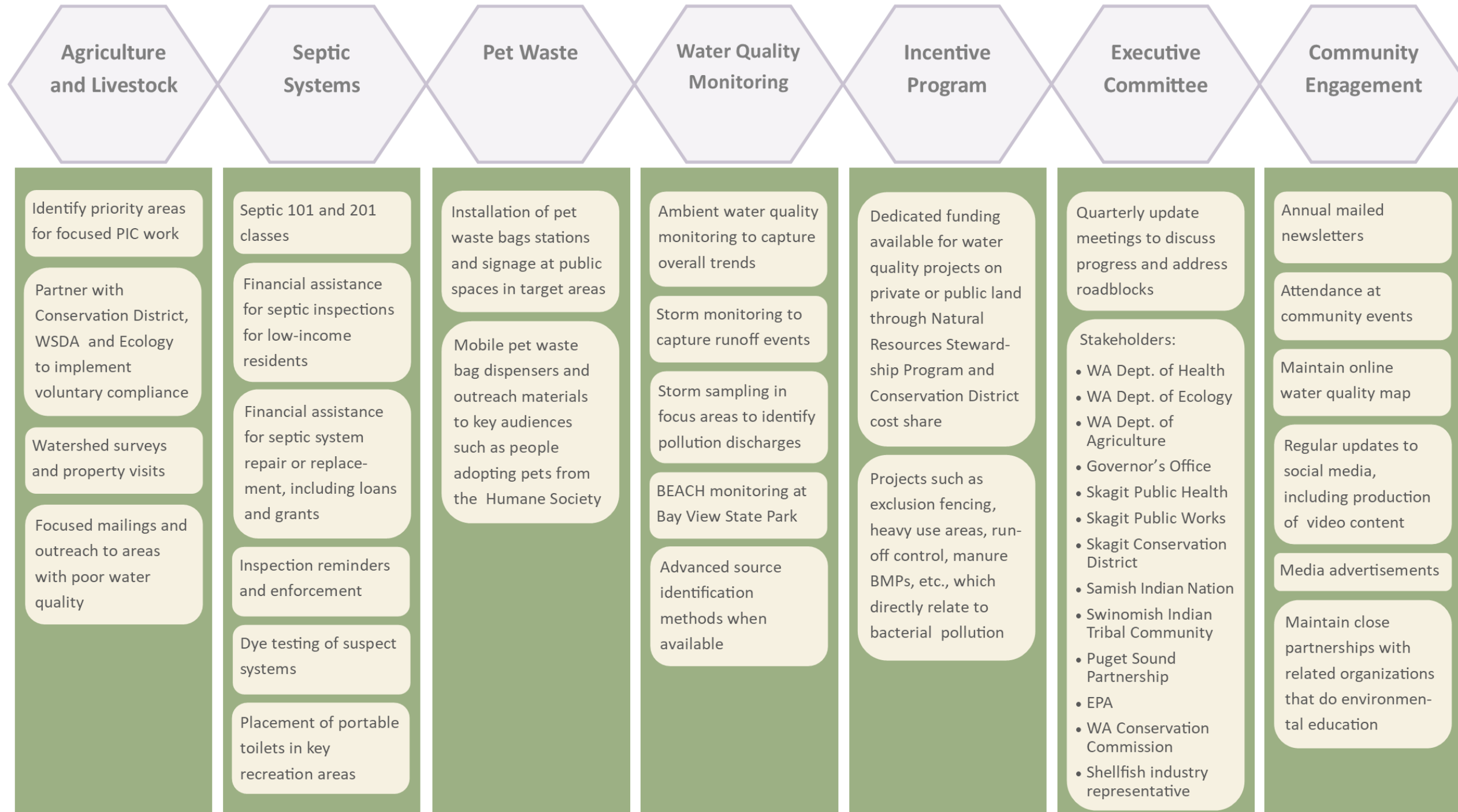


Figure 2. Skagit County's PIC Program

Areas of Focus

The Samish Bay watershed has been the major focus of the PIC Program since its inception (Figure 3. The Samish Bay watershed to the north, and the Padilla Bay watershed in darker blue to the south.). Samish Bay contains more than 4,000 acres of commercial shellfish beds. Shellfish are filter feeders and can accumulate fecal bacteria and other pollutants. High levels of these pollutants can make people who eat the shellfish sick.



In the fall of 2009, the Washington State Department of Ecology (Ecology) completed a study on fecal coliform bacteria pollution in Samish Bay, along with a plan for reducing the level of bacteria. The PIC Program has been working to implement that plan since 2010. The Samish River and its tributaries continue to be a major focus of the program.

In 2015, the program expanded to include the Padilla Bay watershed. This watershed includes 151 acres of commercial shellfish beds, along with a popular beach at Bay View State Park that was regularly closing every summer due to water polluted by fecal bacteria.

The PIC Program also responds to reports of pollution problems throughout Skagit County as time and resources allow.

Figure 3. The Samish Bay watershed to the north, and the Padilla Bay watershed in darker blue to the south.

Progress in 2023

Our PIC Program received \$686,798 in EPA National Estuary Program grant funds in July 2023. These funds will support source identification, storm sampling, best management practice installation, and outreach for the next four years.

Skagit County has partnered with the Washington Department of Health (DOH) and Taylor Shellfish Farms to sample the waters of Samish Bay when the growing area is closed for harvest due to high levels of fecal bacteria during storms. The goal of the sampling is to assess what portions of the shellfish growing areas are most impacted by fecal bacteria during storms. Following a plan created by DOH, we succeeded in sampling the bay during two of the six closures in 2023. DOH will use the data to continue to evaluate whether any changes need to be made to the size of the growing area or the closure criteria used to manage it.

Every summer for the last three years, our team of field staff from the various partner agencies create a plan for that year's rainy season. We select areas to focus on where we believe we can have the most

impact, and set goals for source identification work and outreach. In the Samish watershed, we focused the majority of our source identification work on the lower Samish watershed – the Edison Slough, Thomas Creek, Swede Creek, and Lower Samish River drainages. These areas continue to have water quality concerns, including a greater density of livestock properties that appeared to be missing best management practices (BMPs) according to a 2021 livestock survey. The survey assessed for BMPs that help reduce manure related runoff like pasture rotation and the use of heavy use areas in winter. In the Padilla watershed, our efforts were focused on No Name Creek.

Our multi-agency planning group identified improving outreach to farmers as a key goal in the 2023 rainy season plan. In January, we sent a New Years resolution letter to 444 farms on our farm inventory detailing best management practices for winter and sharing funding and technical assistance opportunities. In the spring, we sent another 142 letters to farms identified as high risk for pollution because of missing best management practices. The letters shared the farm practices that are crucial to protecting water quality, pastures, and soil, and again shared resources to help them improve the management of their property. We also worked with the Skagit Conservation District (SCD) to organize four events to meet new and existing property owners in the Samish and Padilla watersheds and share farm resources available. Invitations were mailed to farm owners advertising the events.

Reaching property owners who had recently acquired property was another goal identified in the rainy season plan. Recognizing that SCD is a trusted source of information, we partnered with them to mail 715 postcards introducing SCD as a resource to all properties that had sold in the past year.

Figure 4 shows our source identification progress in 2023. Source identification sampling and windshield surveys identified 12 properties with confirmed pollution problems or conditions that lead to a high risk for pollution during rain events. Problems included animals in saturated pastures, overgrazed and muddy pastures, or uncovered manure storage practices. We

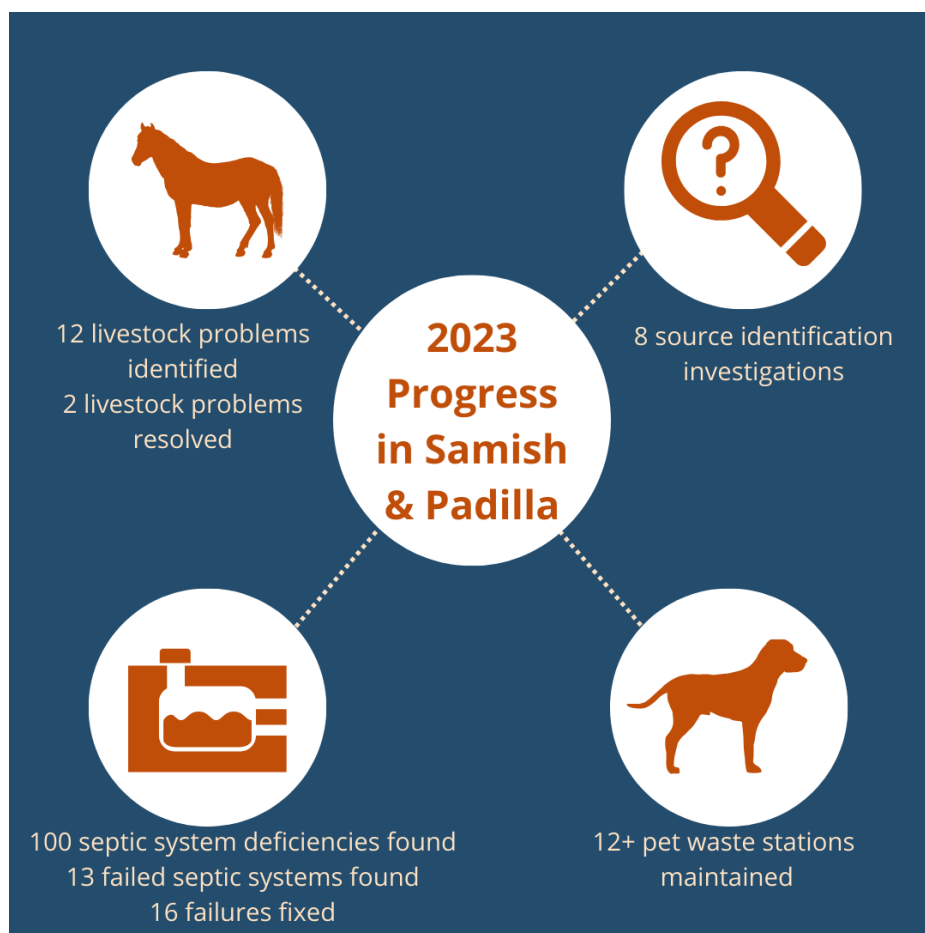


Figure 4. Overall progress by the PIC Program in the Samish and Padilla watershed focus areas.

helped solve two pollution problems in the Samish watershed and referred two additional problems to the Skagit Conservation District for assistance.

The Onsite Septic Program continued county-wide notifications of septic maintenance reminders in 2023. The Program sent reminder letters along with information about our septic inspection rebate program to all septic system owners who were overdue for inspections. Grant-funded rebates of up to \$200 per household for inspection, pumping, or installation of risers were available to homeowners during the last half of 2023. The Onsite Septic Program gave out a total of 213 rebates county-wide. A financial assistance program was also available for property owners on limited, fixed incomes. The Program also gave out a total of 62 vouchers for a free inspection to low-income property owners.

County-wide, the Septic Program found 46 failed septic systems with surfacing sewage in 2023. An additional 429 septic systems had deficiencies that could lead to failure if not corrected. When a failure is found, the county requires that the septic system be fixed. When a deficiency is found, the county notifies the property owners about it but does not require that they to fix the problem. A breakdown of the location and number of deficiencies, failures, and fixed systems is provided in Table 1 below.

Table 1. Onsite septic system failures and deficiencies found and fixed in 2023

Area of interest	Failures Found	Failures Fixed	Deficiencies Found
Samish Bay	5	5	33
Padilla Bay	8	11	67
South Skagit Bay	4	12	39
Greater Skagit County	29	35	290

Education & Outreach

Education and outreach are a major part of our PIC Program. Skagit County Clean Water staff create a monthly e-newsletter, send mailings, attend events, and manage Facebook, Instagram, YouTube, and NextDoor social media accounts. Our goal is to update the public about our activities and inspire behavior change to benefit clean water. We also work with other organizations such as Skagit Fisheries Enhancement Group, Skagit Conservation District, Skagit Conservation Education Alliance, and Washington State University Extension to ensure that our messages are being shared by a variety of trusted information sources. Through a partnership with the Washington Department of Agriculture and Whatcom Conservation District, state and local agencies can share their fecal coliform and *E. coli* water quality results on a single online map. Skagit County has been sharing water quality data on the map since 2017. The map helps us visualize the data and is an excellent public outreach tool. It can be found at <https://arcgis.com/bzGi>.

Figures 5 and 6 show highlights of the traditional and social media outreach efforts for Skagit County's Clean Water Program in 2023.

Communications Review

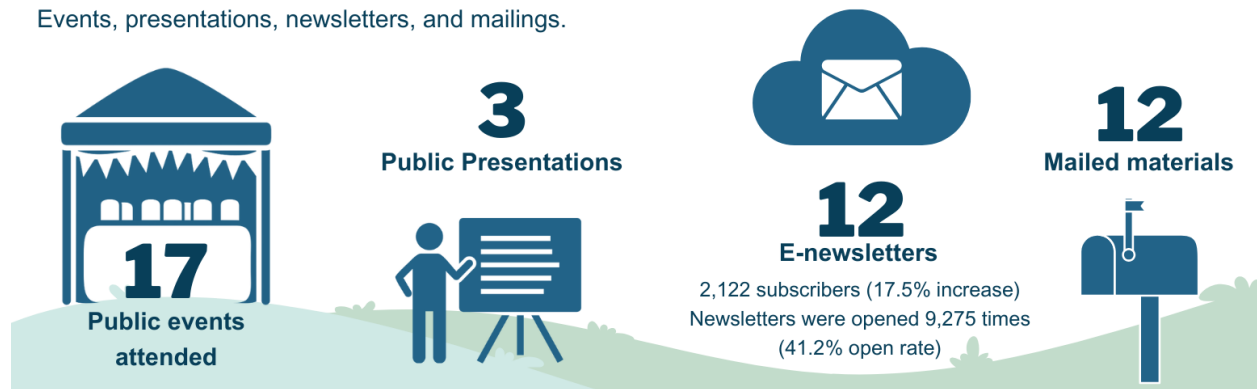
2023 Skagit County Clean Water

OVERVIEW

2023 was a very eventful year for us— Literally! With more staff available and additional resources for outreach, we were able to attend events in every season. From fairs and breweries to science nights and dog days, we had meaningful conversations with Skagit County residents about every angle of our mission. We also continued our successful use of postcards, newsletters, and social media to connect with a broad and varied audience.

TRADITIONAL PUBLIC OUTREACH ACTIVITIES

Events, presentations, newsletters, and mailings.



EARNED MEDIA COVERAGE

Media news stories resulting from our work covered topics including the Farmland Legacy Program, the Fidalgo Bay Day, and restoration projects at Barrel Springs, Ovenell Slough, and Bowman Bay.



BIG LAKE FERTILIZER CAMPAIGN

We partnered with Washington State University's Shore Stewards program to deliver a campaign to encourage residents around Big Lake to reduce fertilizer use. Outreach included tabling, postcards, social media posts, and offering soil samples. We saw significant results!

20% of Big Lake residents surveyed said they had stopped fertilizing in spring.

JOINT PET WASTE CAMPAIGN





We partnered with Whatcom County to deliver a campaign to encourage residents of both counties to scoop, bag, and throw away their dogs' poop on trails and in their yards.

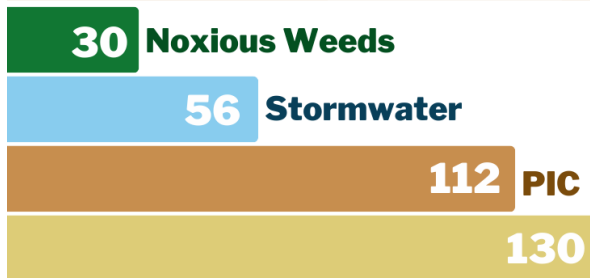
The project is currently in the planning phase, and future outreach will include tabling, social media posts, videos, partnerships with trusted sources such as veterinarians, and giveaways.

Figure 6. Traditional communications highlights in 2023.

Digital Media Review

2023 Skagit County Clean Water

 Facebook	1,723 Followers 6.75% Follower growth	145 Posts	21.6 K Page reach 52.4% Reach growth	1,728 Post engagements-likes, comments, clicks
 Instagram	152 Followers 182% Follower growth	106 Posts	4.8 K Page reach	591 Post engagements-likes, comments, clicks
 Nextdoor	31 K members, 22,249 households	56 Posts	149.5 K Impressions	497 Post engagements-likes, comments, clicks
 YouTube	84 Followers 6.33% Follower growth	21 Posts	3.1K Views	Most popular video Septic System Myths...BUSTED! 838 views in 2023



DIGITAL MEDIA CONTENT BREAKDOWN

We posted 328 times in 2024. Because of our diverse following across platforms, we cover a broad range of topics in our posts. While our main focuses were PIC, stormwater, and noxious weeds, we also created and shared content related to much, much more.

Figure 5. Website and social media communications highlights in 2023.

Our monthly e-newsletter audience continues to grow and has quickly become one of our most effective outlets for outreach. This year, our subscriber list grew 17% to 2,122 subscribers. The e-newsletter's open rate and link click rate regularly exceed government industry standards, indicating the content we share is valuable and relevant to subscribers.

We remain active on social media, posting on Facebook, Instagram, Nextdoor and YouTube. Nextdoor is our largest and most engaged audience, while Facebook remains a good place to reach those who are already interested in natural resources topics. In September and early October, we launched a series of short videos to educate people about their septic systems. The videos were shared on Facebook, Instagram, and YouTube and were well received across all platforms.

Throughout 2023, we continued to promote our grant-funded PoopSmart campaign, designed to use social marketing tools to encourage residents to change their behaviors to improve water quality. The campaign takes a lighthearted approach to attract attention to the subject. The PoopSmart website (poopsmart.org) is the centerpiece of the campaign and serves as a central location for links to information and resources from multiple agencies. The site is available in Spanish and English.

We attended 17 events this year, splitting our focus between large events with general audiences like the Skagit County Fair and smaller events with focused audiences like the Country Living Expo and tabling at local restaurants and breweries. We mailed newsletters to about 6,300 residents in the Samish and Padilla watersheds.

In the fall, we collaborated with Whatcom County to create a grant-funded campaign for pet waste on trails and in yards. The goal of the campaign is to use consistent messaging across both counties so that dog owners in northwest Washington get exposed to the same message in a variety of different ways. The campaign will launch in 2024 and will include partnerships with trusted messengers such as veterinarians to share poop scooping kits, pop up events at trails and pet stores, signage at trailheads, and a media campaign. In addition, we continue to stock pet waste bags at ten pet waste stations around the Samish watershed.

This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement PC01J18001-5 to the Washington Department of Health. The contents of this document do not necessarily reflect the views and policies of the Environmental Protection Agency, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.