



2020 Stormwater Management Program (SWMP) for National Pollutant Discharge Elimination System (NPDES) Permit Implementation in Kitsap County, Washington

Permit # WAR045546



Updated March 17, 2020

Kitsap County Public Works Department Kitsap County, WA

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KITSAP COUNTY STORMWATER MANAGEMENT PROGRAM

1. INTRODUCTION

1.1 Overview and Background

The *National Pollutant Discharge Elimination System and State Waste Discharge General Permit for Discharges from Small Municipal Separate Storm Sewers in Western Washington*, hereafter referred to as the Phase II Permit or Permit, outlines stormwater program activities and implementation milestones that permittees must follow to comply with the federal Clean Water Act. All Phase II communities are expected to develop a Stormwater Management Program (SWMP) that includes all the required activities, implement those activities within the required timeframes of the Permit term, and submit annual reports to the Washington State Department of Ecology each year to document progress toward completing program implementation.

The 2007 Phase II National Pollution Discharge Elimination System (NPDES) Permit (modified in 2009) was in effect for the initial reporting period until February 15, 2012. By Engrossed Substitute House Bill 1478 (2011), the legislature directed Ecology to reissue the 2007 Permit without changes, to be effective for one year until a new Permit could be established. A revised Permit was issued by Ecology on August 1, 2012, became effective on September 1, 2012, and expired on July 31, 2013. On August 1, 2013, the new updated Phase II NPDES Permit became effective. The 2013-2018 NPDES Phase II Permit implements actions required by Pollution Control Hearings Board, including low impact development (LID) implementation. In 2019, Ecology issued the [most recent iteration of the permit](#) with an expiration date of July 31, 2024.

The current Phase II NPDES Permit applies to cities and counties in Western Washington operating a municipal separate storm sewer system (MS4) that is located within, or partially within, an urbanized area and that discharges to a surface water of Washington State. Urbanized areas are defined as population centers with at least 50,000 people and densities of at least 1,000 people per square mile based on the most recent federal census data. Kitsap County has been designated by Ecology as a Phase II permittee. The Permit pertains to the MS4 contained within the census urbanized areas and the urban growth areas, including those adjacent to the cities of Poulsbo, Bremerton, and Port Orchard.

Kitsap County was founded in 1857. Kitsap County population estimate (as of 2019) was approximately 270,100 making Kitsap County one of the most densely populated counties in the state. Kitsap County occupies a unique position in the central Puget Sound region of the State of Washington, located directly between the urban areas of Seattle and Tacoma and the largely undeveloped Olympic Peninsula. It is bounded by the Hood Canal on the west, Puget Sound on the east, and Mason and Pierce Counties to the south. Kitsap County has a total landmass of 396 square miles, ranking 36th in size among all counties in Washington State. The County seat is located in the City of Port Orchard, Washington.

In the first half of the twentieth century, dairy farming dominated land use. During the past 50 years, many farms were subdivided into one- and five-acres parcels. The density of animals and

people grew resulting in increasing pollution flowing into its bays, streams, lakes and marine waters (nonpoint source pollution). Dyes Inlet, Sinclair Inlet and Liberty Bay are among the more densely developed and populated areas in the County.

With no large rivers or mountains containing snow pack, Kitsap County is similar to an island and relies on groundwater for its drinking water. The County's streams are relatively short in length and carry surface pollutants from stormwater runoff rapidly to its surface waters.

Kitsap County residents are represented by three elected County Commissioners and are served by a variety of agencies and government departments. The Board of County Commissioners (BOCC) is responsible for establishing public policy and local public laws within unincorporated Kitsap County. They also have the fiscal responsibility for the county including: budget authority, power to set fees and charges, levying of taxes, and issuance of debt consistent with provisions of state laws.

The BOCC also adopted by Resolution 109-2009 – amended and revised in 2016 as Resolution [134-2016](#)) the Water as a Resource Policy which recognizes that storm and surface water runoff is the leading transport of pollution into Puget Sound and its associated wetlands, creeks and rivers. Some of the guiding principles of this policy include reducing pollutant loading of ground and surface waters, maintaining natural low energy flow regime; managing assets and refining management tools to reflect latest technology and innovations.

The Kitsap County Department of Public Works (KCPW) is responsible for building, operating and maintaining public facilities and utilities within unincorporated Kitsap County, including streets, recycling, solid waste, sewers, and stormwater drainage systems.

The Department of Public Works includes the Utilities Division (Solid Waste, Wastewater, Stormwater); the Administrative Services Division (Public Information, Equipment and Support) and the Roads Division (Engineering, Transportation and Operations).

The Stormwater Division is responsible for the operation and maintenance (O&M) of all county closed conveyances within the right of way, water quality devices, and other drainage facilities outside the right of way. The Stormwater Enterprise fund receives its revenues mostly from user fees billed under the authority of [Chapters 12.36](#) and [12.40](#) of the Kitsap County Code (KCC) and [Chapter 36.89](#) of the Revised Code of Washington (RCW).



1.2 Department Implementation Responsibilities

Within the County organization, many staff contribute toward meeting Permit requirements. Managing the NPDES Permit and developing the SWMP is primarily the responsibility of the Public Works Department Stormwater Division. Support is provided by the County Auditor for accounting, the County Treasurer for utility billing, the Department of Administrative Services for budgeting, Information Services and Facilities maintenance department. The Parks Department provides support for maintenance and operation of the county fairgrounds and park system. The KCPW Roads Division for road maintenance, and the Department of Community Development (DCD) for development review and code enforcement.

1.2.1 Kitsap County Stormwater Management Program

To address the challenge of managing stormwater runoff and protecting water quality, the Surface and Stormwater Management program (SSWM) was formed in the early 1990s. Kitsap County and other local jurisdictions began working together to design a coordinated partnership to meet multiple needs:

- The Department of Public Works needed to develop a stormwater management program in response to US EPA's development of the National Pollution Discharge Elimination System Permit Program for communities with populations of more than 100,000.
- The Kitsap Conservation District, in 1989, needed to seek legislative approval for a fee to fund programs for landowner assistance.
- The Kitsap Public Health District needed stable funding to address public health issues related to shellfish bed closures, failing septic systems and other water quality complaints.
- Kitsap County Department of Community Development needed funding for state mandated watershed planning efforts.

The Kitsap County Board of Commissioners adopted Ordinance 156-1993 establishing the Surface and Stormwater Management (SSWM) program and the stormwater utility pursuant to [Chapter 36.89 RCW](#), as codified in [Chapter 12.36 KCC](#) in 1993. Key features of the ordinance were the link between surface and stormwater and the formation of the partnership between Public Works and other agencies with the common vision for stormwater management and the protection/restoration of water quality.

In 2014 SSWM was rebranded to Clean Water Kitsap (CWK).



The [CWK program](#) is a collaborative partnership between KCPW Stormwater Division, Kitsap Conservation District (KCD), Kitsap Public Health District (KPHD), Washington State University Kitsap Extension (WSU) and Kitsap Public Utilities District (KPUD). The scopes of work and inter-local agreements are updated annually with each budget cycle.

The utility rate structure was adopted in 1994 and amended in 1995, 2004, 2006, 2012 and 2017. The rate structure is contained in [Chapter 12.40 KCC](#). The initial adoption and subsequent amendments included several public meetings and input from watershed community groups,

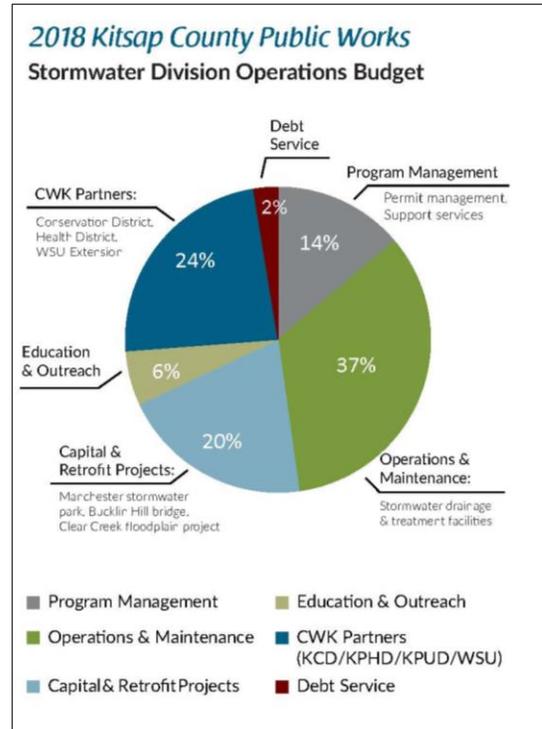
advisory committees, and the public.

1.2.2 Stormwater Utility Rate Structure

In 2017, the rate structure for the new permit cycle was revised through Ordinance 549-2017 to be adopted by resolution and approved by the Board of County Commissioners.

The rate structure was then adopted by Resolution 226-2017 to step up incrementally over the span of six years and fund a multitude of different programmatic areas.

2018	\$96
2019	\$105
2020	\$110
2021	\$115
2022	\$125
2023	\$130



Many of the existing elements within the CWK Program satisfy the requirements of the Western Washington Phase II NPDES Permit. The CWK partner agency programs are summarized below.

Kitsap Conservation District (KCD)

The [Kitsap Conservation District](#) provides several programs that work to protect and restore surface water quality. These include:

- [Agricultural Assistance program](#)
- [Backyard Habitat program](#)
- [Rain Gardens and More program](#)

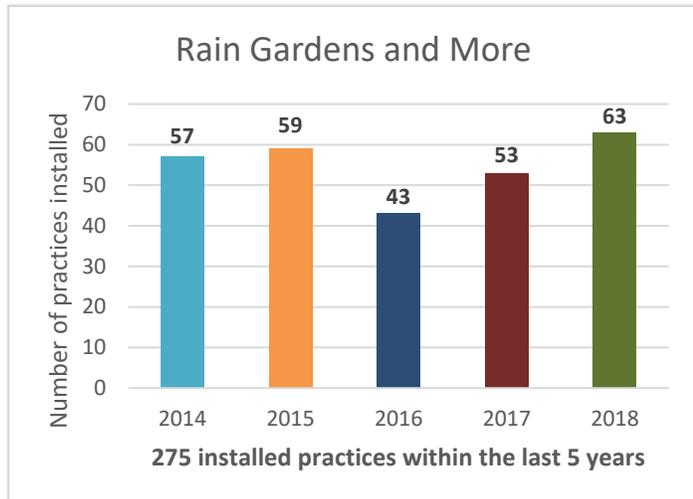
The Agricultural Assistance program works with farmers and livestock owners to manage their land and animals to prevent pollution and protect surface water quality. KCD assists farmers with well-designed conservation practices that include pasture, crop, manure and mud management. They provide technical assistance for the implementation of best management practices as well

as providing funds for cost sharing to support these best management practices. KCD also conducts workshops and farm tours.

The Backyard Habitat program helps with planning, design and funding on the ground projects to restore backyard stream habitat on private property. Projects are selected based on a scoring criterion. Staff assist with permitting, engineering, design, and construction. These projects remove barriers to improve fish passage, habitat, and water quality, as well as remove noxious weeds.

The Kitsap Conservation District's "Rain Gardens and More" program provides technical assistance and cost incentives for installing rain gardens and other green stormwater solutions on private and commercial properties.

The cost share incentive provides up to \$1,000 per project. The program continues to grow. The benefits of rain gardens include reducing flooding and erosion in streams, filtering pollutants such as oil and grease from roads, and increasing the amount of water that soaks into the ground to recharge local groundwater.



Kitsap Public Health District (KPHD)

[Kitsap Public Health District's Pollution Identification and Correction](#) program staff:

- Collect water samples from streams and shoreline areas to identify potential sources of bacterial pollution
- Investigate these sources and work with property owners to correct them
- Conduct septic system inspection and educational visits, investigate citizen complaints, and support regional efforts to provide financial solutions for property owners faced with septic system replacement
- Respond to spills and issue public health stream/swimming beach advisories



Washington State University (WSU Extension Kitsap)

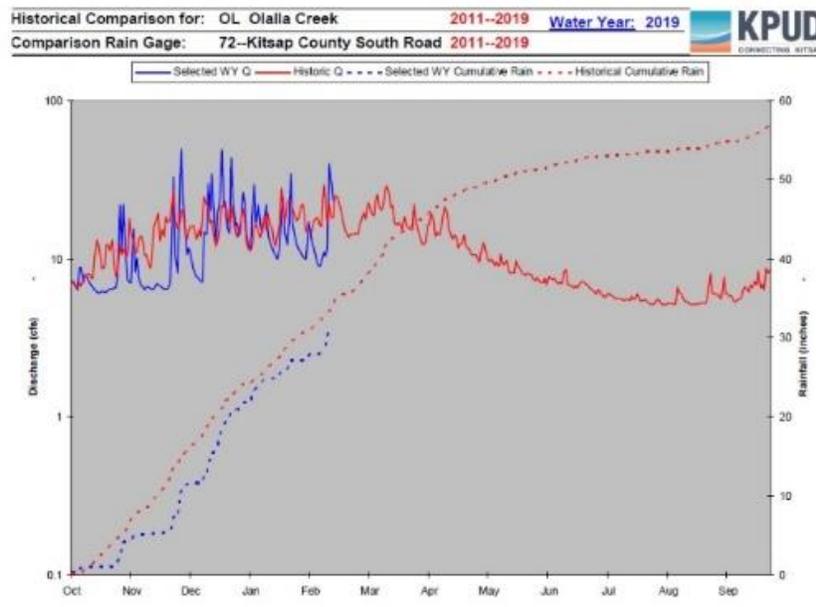
[WSU-Extension Kitsap](#) provides quality education and volunteer opportunities for stewardship projects that raise awareness about Kitsap streams to support the protection and restoration of water quality.



- The Stream Stewards program provides outreach events and continuing education classes
- The Green Stormwater Solutions program conducts Professional Rain Garden workshops

Kitsap Public Utilities District (KPUD)

[Kitsap Public Utilities District](#) provides the Stormwater Division with streamflow gaging, stream temperature logging, rainfall gaging, maintenance of the gaging network, and hydrologic analysis for streams throughout the County.



1.3 Document Organization

This report comprises the written documentation of the Kitsap County SWMP that is required to be submitted with the Annual NPDES Permit Report. In accordance with the Phase II NPDES Permit terms, the SWMP has been designed to reduce the discharge of pollutants to the maximum extent practicable (MEP) per federal regulations and meet the State of Washington criteria of using all known, available and reasonable methods of prevention, control and treatment (AKART) requirements to protect water quality. The following sections describe the actions that Kitsap County has taken to comply with the requirements of the Phase II NPDES Permit. In addition, the SWMP outlines the future steps Kitsap County plans to take to further improve water quality and stormwater management.

To aid in tracking permit requirements, this document has been organized into sections that correspond to the Special Conditions in the Phase II NPDES Permit and are outlined as follows:

- Section 1.0 – Introduction (see above)
- Section 2.0 – Stormwater Planning, Special Condition S5.C.1
- Section 3.0 – Public Education and Outreach, Special Condition S5.C.2
- Section 4.0 - Public Involvement and Participation, Special Condition S5.C.3
- Section 5.0 – Illicit Discharge Detection and Elimination (IDDE), Special Condition S5.C.5
- Section 6.0 – Controlling Runoff from New Development, Redevelopment, and Construction Sites, Special Condition S5.C.6
- Section 7.0 – Pollution Prevention and Operation and Maintenance (O&M) for Municipal Operations, Special Condition S5.C.7
- Section 8.0 – Source Control Program for Existing Development, Special Condition S5.C.8
- Section 9.0 – Compliance with Total Maximum Daily Load (TMDL) Requirements, Special Condition S7– Reporting Requirements, Special Condition S7
- Section 10.0 - Monitoring, Special Condition S8
- Section 11.0 – Reporting Requirements, Special Condition S9

Although compliance activities associated with Special Conditions S7, S8 and S9 are not required in the SWMP, they are documented here for thoroughness. Compliance activities with Special Conditions S7 and S8 must be and are still included as part of the Annual Report, provided separately. Additional Permit conditions, such as Special Conditions S1 through S4 and General Conditions G1 through G20, still apply to permit holders, though they do not result in specific program activities, nor is the SWMP required to document compliance with these activities. These additional conditions cover topics such as the entities covered by the Phase II Permit and the discharges authorized under the Permit, as well as legal guidelines for transferring, revoking, and appealing the Permit. Penalties for non-compliance are also included in these conditions.

2. STORMWATER PLANNING

2.1 Permit Requirements

Section S5.C.1 requires Kitsap County to implement a Stormwater Planning program to inform and assist in the development of policies and strategies as water quality management tools to protect receiving waters.

The program includes

- Coordination with long-range planning updates
- Low impact development code-related requirements
- Stormwater Management Action Planning (SMAP)

2.2 Current Activities

The stormwater planning program is a new requirement for the 2019-2024 Permit cycle.

Kitsap County's Stormwater Division is responsible for operation of the County's storm drainage system under the regulatory framework of the Phase II Permit. The County carried out this responsibility in part by having a comprehensive Stormwater Management Program (SWMP) that establishes policy, service level standards, and a Capital Improvement Plan (CIP) designed to meet the goals and objectives of the County's Stormwater Division.

The County worked with a consultant in 2019 to begin the process of Stormwater Management Action Planning, and to create a Stormwater Comprehensive Plan (SWCP). This SWCP will provide goals, policies, guidance, and planned program activities that will help Kitsap County meet regulatory requirements, as well as to create funding mechanisms to support SWMP program requirements, a CIP, and maintenance requirements for the Division for the years 2020 to 2026.

In summary, the SWCP:

- Reviews previous studies, plans and other information associated with current and proposed stormwater systems. Useful information will be compiled and incorporated into the stormwater comprehensive plan.
- Provides the County with a prioritized list of projects from the current capital facilities plan (CFP).
- Evaluates County resources relating to current and future needs for NPDES compliance, including staffing, equipment, and funding.
- Develops actions for anticipated sea level rise, increased storm intensities and other issues related to climate change.

2.3 Planned Activities

As part of our on-going effort to remove barriers and encourage wider implementation of Green Stormwater Solutions (GSS), also known as Low Impact Development (LID), Kitsap County is updating its current Stormwater Code and Stormwater Design Manual (SDM) to continue to make LID the preferred approach to stormwater management for new development. This effort is being done in cooperation with the Kitsap Builders Association (KBA) and includes all elements of Kitsap County government. In addition, as part of our overall Water as a Resource Policy, Kitsap County continues to look for opportunities to expand GSS/LID as part of our retrofit activities that address existing development.

As part of our ongoing Water as a Resource Policy implementation, Kitsap County has begun an effort to better coordinate long-range planning between all departments related to stormwater management, water resource management, and other related activities such as road network planning, facilities development, and other Kitsap county land-use activities. The Stormwater Comprehensive Plan currently underway will specifically address this new NPDES Permit requirement beginning in 2020.

3. PUBLIC EDUCATION AND OUTREACH

This section describes the Permit requirements, current County activities, and planned actions to be implemented for public education and outreach.

3.1 Permit Requirements

Section S5.C.2 requires Kitsap County to develop and administer an Education and Outreach Program to reduce or eliminate behaviors and practices that cause or contribute to adverse stormwater impacts and encourage the public to participate in stewardship activities.

3.2 Current Activities

The program components include:

- educating target audiences about the stormwater problem and providing specific actions they can follow to reduce the problem
- creating stewardship opportunities and/or partnering with existing organizations
- measuring the understanding and adoption of the targeted behaviors

Kitsap County provides public education related to the Permit through a variety of activities, channels and programs within the Stormwater Division, as well as collaboratively through the CWK partnership with WSU, KPHD, KCD, KPUD and neighboring municipal permittees.

2019 Program highlights include:

Regional Partnerships

- The West Sound Stormwater Outreach Group (WSSOG) is a regional group of permittees (formed in 2008) that works collaboratively on water quality education and outreach. Kitsap County leads the WSSOG group to provide consistent education and outreach on a regional basis through this partnership.
- Kitsap County also connects to broader regional outreach efforts with a high level of participation in the Puget Sound Stormwater Outreach for Regional Municipalities (STORM) partnership. Kitsap County represents themselves and the WSSOG group on the STORM Steering Committee and "Puget Sound Starts Here" (PSSH) Committee, attends quarterly meetings and the annual Symposium, implements the PSSH campaign locally and participates in specialized workgroups and subcommittees.

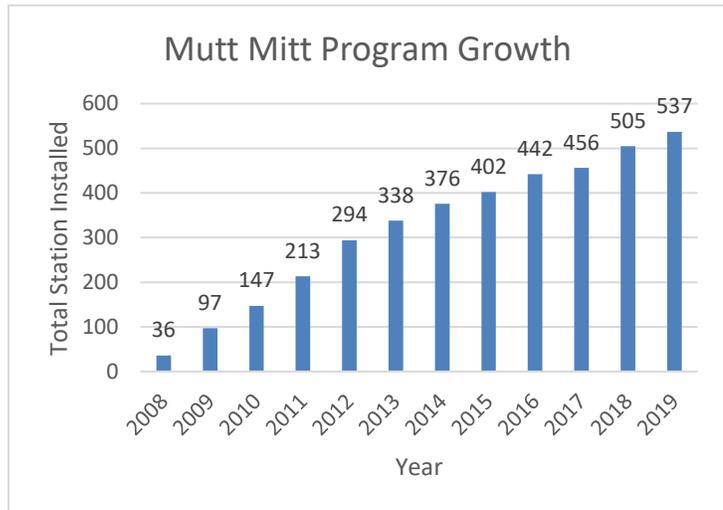


Pet Waste Education/Outreach

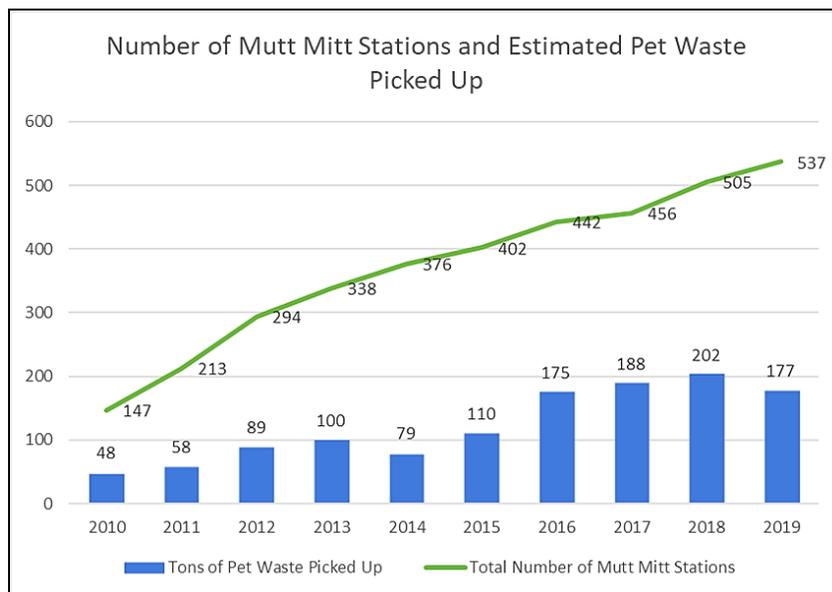
- The WSSOG identified pet waste pick-up and proper disposal as a key behavior for driving awareness and behavior changes. A behavior change campaign targeting pet waste in public

areas (Mutt Mitt program) was implemented in 2009. Efforts related to this key behavior have continued annually since that time and the program continues to be the primary behavior change campaign for the County and the WSSOG.

- To address pet waste in public places, the Kitsap Community Mutt Mitt Program was established in 2008. In 2014, the County surveyed and provided a report that focused on two target audiences: Mutt Mitt station sponsors and Mutt Mitt station users. The report also identified strategies to improve the Mutt Mitt program. Those strategies were implemented in 2016.
- The Mutt Mitt program continues to grow steadily, and currently comprises 537 stations installed throughout the county, including 32 new stations installed in 2019. On average there has been between 20-40 stations added each year since the program began.



- In 2019, following several years of campaign success, the program distributed 1,075,660 pet-waste disposal bags through the Mutt Mitt program. This effort represents **177 tons of dog waste diverted from the natural surface waters of Kitsap County.**



- In 2018, WSSOG implemented a Backyard Pet Waste social marketing pilot to encourage residents to pick up and properly dispose of pet waste in their backyards. The campaign included informational postcards and encouraged residents to place a sticker on their garbage

can to indicate they were placing pet waste in the garbage with the hope of creating a positive social norm. This effort represented an expansion of the existing pet waste campaign into a new audience. An evaluation of the effectiveness of the Backyard Pet waste campaign was completed in 2019 and the group chose not to move forward with this behavior and target audience.

Natural Lawn Care program

Per the requirements of the updated 2019 Permit, the County and the WSSOG looked at their current behavior change campaign and, based on trends and the Backyard Pet campaign evaluation, elected to develop a behavior change campaign focused on a new target audience and BMP. The group selected nutrient reduction as the goal, and improper/combination fertilizer use as the new BMP, targeting homeowners who do DIY-lawn care. The group hired a consultant and in 2019 developed a new social marketing campaign to target this BMP.

Septic Sense workshops

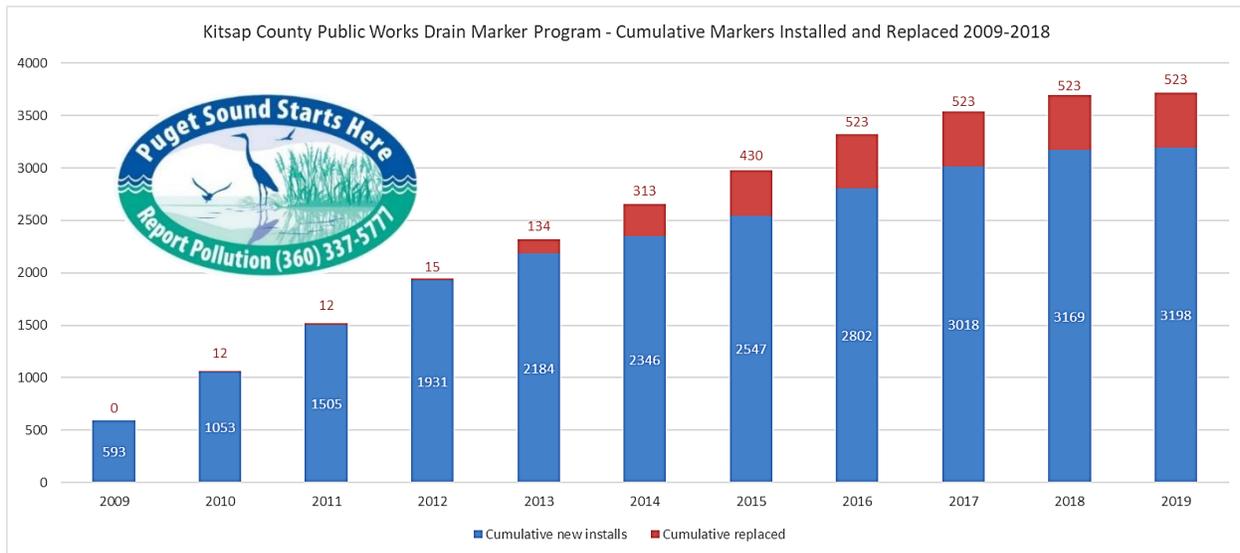
Two Septic Sense workshops were held in 2019 to raise awareness and help change behaviors related to septic maintenance and operation. These workshops were a collaborative effort between Kitsap County and the CWK partners. 137 homeowners attended the workshop, which addressed topics such as septic maintenance, how to identify a failing septic system, landscaping near their septic field, and in-depth information on how their systems operate.

IDDE Education

- The WSSOG continues to promote the “Spills Happen” hotline campaign locally with banners at local events and distribution of paint sticks to hardware stores and coffee sleeves.
- Kitsap County added new app and desktop-based reporting capabilities to enhance the existing spill hotline. The new app, *See/Click/Fix*, allows more targeted geolocation of spills, simplifies public reporting, and provides real time response to spills during business hours.
- Kitsap County conducts an annual internal Illicit Discharge Detection and Elimination (IDDE) training program focused on preparing County field crews to identify illicit discharges and take appropriate action. The program includes an interactive presentation with information about how and what to report for spills, as well as information related to spill containment and supplies.
- A Spills Response trailer was purchased in 2018 and stocked with a variety of supplies as a resource for staff responding to larger spills. During annual spills training staff were provided with an orientation of the trailer including a review of the inventory of materials. The trailer is centrally located in the County at the Central Road Shop and this central location has reduced response time for spills.
- The Storm Drain marker program also promotes the spills hotline (see following section).

Storm drain marker program

The WSSOG initiated a storm-drain marker program in 2009. The markers advertise the Water Pollution Hotline and the “Puget Sound Starts Here” campaign message. In 2019 there were 29 storm drains marked bringing the total number of marked storm drains in Kitsap County to 3,198.



Youth Education programs

- Kitsap County continues to implement a robust youth education program. In 2019, the program reached 4,335 students with in-class lessons or field trips, including Salmon in the Classroom, Kitsap Water Festival, and National Public Works Week.
- In support of the new state science standards, which focus on project-based learning and engineering, a storm drain monitoring project for 5th grade was implemented during the 2018-2019 school year at 4 elementary schools.
- In 2019, following some internal program analysis, the County partnered with a consultant to review the entire suite of youth based educational programming. This evaluation was designed to measure Kitsap’s programming against state science standards, the NPDES permit requirements, and current curriculum requirements. The results of this evaluation will guide program development in 2020.

Stewardship programs and workshops

In 2019, the following events and stewardship projects were offered, reaching nearly 8,000 residents:

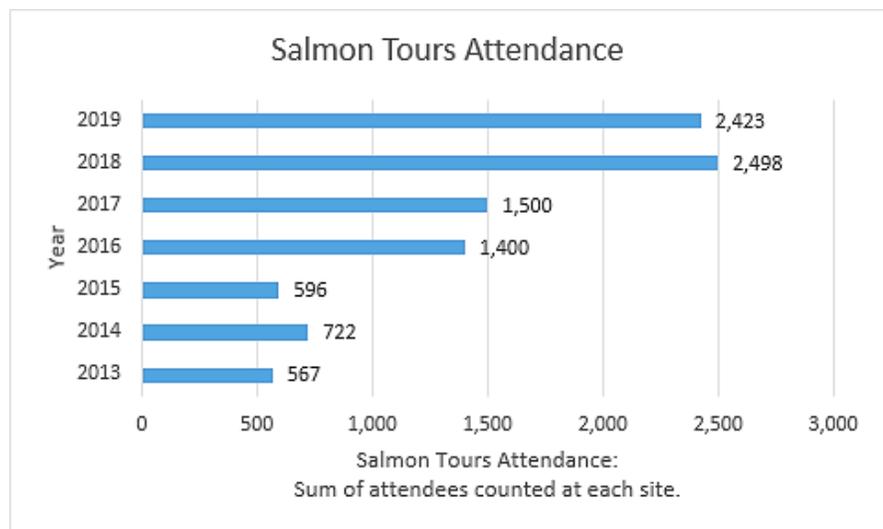
- Salmon in the Classroom
- Spring Home and Garden Show
- Clear Creek Story Walk
- STEM Elementary Family Night
- Kitsap Water Festival
- STEM Showcase at Kitsap Mall
- National Public Works Week
Elementary Tour Day
- West Sound Green STEM Summit
- Petswalk
- Kids Day
- PAWS WagFest
- West Sound Ecosystem Fair
- Discover Your Parks – Howe Farm
- Clear Creek Beaver Walk
- Fall Home and Recreation Show
- Kitsap Salmon Tours

Partner Programs

Kitsap County’s public involvement activities are supported by additional stewardship activities provided by the Departments of Public Works, Parks, and Community Development, as well as through our Clean Water Kitsap (CWK) partnerships.

Stewardship programs led by WSU Extension and the Kitsap Conservation District include Stream Stewards, Professional Rain Garden Workshop and the Rain Garden Cost-Share program. These programs provide in-depth trainings, volunteer opportunities with landowner projects that protect and restore stream and riparian corridors and provide public outreach opportunities.

Salmon Tours, led by WSU Extension, is an annual event involving staff, volunteers and the community. The number of touring sites remained constant at 7 sites, but attendance increased significantly (40%) in 2018. This public outreach event demonstrates building awareness and providing education about the stormwater problem and its impact on water quality.



Construction Project Outreach

Kitsap County education staff continue to develop innovative outreach materials and initiatives related to stormwater capital construction projects. Each project is viewed as a unique opportunity to tell the “stormwater story” to those affected by and who live near these projects.

3.3 Planned Activities for 2020

Kitsap County has implemented all required actions under this section of the Permit. Activities planned for 2020 will include maintaining and improving the programs outlined above and adapting them as necessary to meet permit and program objectives.

Kitsap County will continue to implement and improve the pet waste education programs and will hold a social marketing pilot campaign for the new Natural Lawn Care behavior in support of the new 2019 permit requirement. Business education programs and maintaining partnerships with Clean Water Kitsap education partners, WSSOG and STORM partners, and other local education programs will continue in 2020.

Kitsap County plans to conduct the following activities in 2020:

- Implement a social marketing strategy for a new permit requirement related to behavior change. The strategy will focus on Natural Lawn Care and include a pilot campaign in spring 2020.
- KCPW will participate in the PSSH campaign by purchasing and distributing PSSH branded materials that are used in regional advertisements.
- The “Spills Happens” campaign will continue, and the County will actively promote the new See/Click/Fix spills reporting option.
- KCPW, in partnership with WSU, KCD, KPHD and KPUD, will continue to inform and educate communities about Low Impact Development through publications, news articles and press releases.
- The CWK partners will continue to implement successful outreach programs in schools, community events and the popular Septic Sense Workshops. The partners will also present a Professional Rain Garden Workshop for contractors.
- The Backyard Habitat program, Stream Stewards, Salmon Docent, Rain Garden Cost-Share Incentive Rebate, Septic Workshop Series, Pollution Identification & Correction and Agricultural Assistance programs will continue to provide technical assistance and education and encourage participation to take action to reduce the impacts of existing development and pollution sources.



4. PUBLIC INVOLVEMENT AND PARTICIPATION

This Section describes the Permit requirements for current and planned compliance activities for public involvement and participation.

4.1 Permit Requirements

Section S5.C.3 of the Permit requires the County to:

- Provide ongoing opportunities for public involvement through participation on advisory councils, public hearings, watershed committees, participation in developing rate structures or other similar activities. The public must be able to participate in the decision-making processes involving the development, implementation and update of the SWMP and SMAP.
- Make the SWMP document and Annual Reports available to the public and post these documents on the County's website. Any other submittals required by Ecology also must be available on the website.

4.2 Current Activities

Kitsap County supports various public involvement and participation opportunities that exceed the minimum measures required by this element. Public involvement activities are included through the Departments of Public Works, Parks, and Community Development, as well as through our Clean Water Kitsap (CWK) partnerships with WSU Kitsap Extension, Kitsap Conservation District (KCD), Kitsap Public Health District and Kitsap Public Utility District (KPUd). Public involvement is based upon opportunities for in-depth and meaningful conversations about stormwater challenges and solutions, including the County's projects and planning.

The County currently makes the SWMP and NPDES Annual Reports available to the public on the County's website and provides contact information and an intake form for any public feedback. The public is also invited to provide input on spills, stormwater issues, and other areas of public concern via the See/Click/Fix app.

Kitsap County utilizes a community-based outreach and feedback program designed to provide a place-based and project-based approach to engaging with the public. When Kitsap County is performing operation and maintenance, construction, retrofits or education and outreach activities in the community, these actions provide an excellent engagement opportunity and the public contact is more meaningful. Members of the public who are not also members of these communities may contact staff and programs through information provided on the Kitsap County Stormwater Division and Clean Water Kitsap webpages.

Kitsap County sponsors several Citizen Advisory Councils (CACs) in the communities of Manchester, Keyport, Kingston, Hansville, Silverdale and Suquamish. These community connections provide opportunities for the public to provide input on specific stormwater projects located in their communities, as well as the various programs and services offered to communities through the Clean Water Kitsap (CWK) partnership.

4.3 Planned Activities for 2020

Kitsap County has implemented all required actions under this section of the Permit. Activities planned for 2020 will include maintaining and improving the programs and adapting them as necessary to meet permit and program objectives. Continued coordination of volunteer and public involvement opportunities will be performed through the CWK education partnership.

Kitsap County plans to conduct the following activities in 2020:

- Solicit input from the public regarding program feedback, concerns, requests for information etc., through the website and See/Click/Fix app, as well as other venues such as public meetings and Community Advisory Councils.
- Solicit input from the public regarding the Stormwater Comprehensive Plan, the revision of the Kitsap County Stormwater Management Manual, and the development of a Stormwater Management Action Plan to meet new NPDES permit requirements.

5. ILLICIT DISCHARGE DETECTION AND ELIMINATION

This section describes the Permit requirements, programs, and planned activities related to Illicit Discharge Detection and Elimination (IDDE).

5.1 Permit Requirements

Section S5.C.5 of the Permit requires the County to:

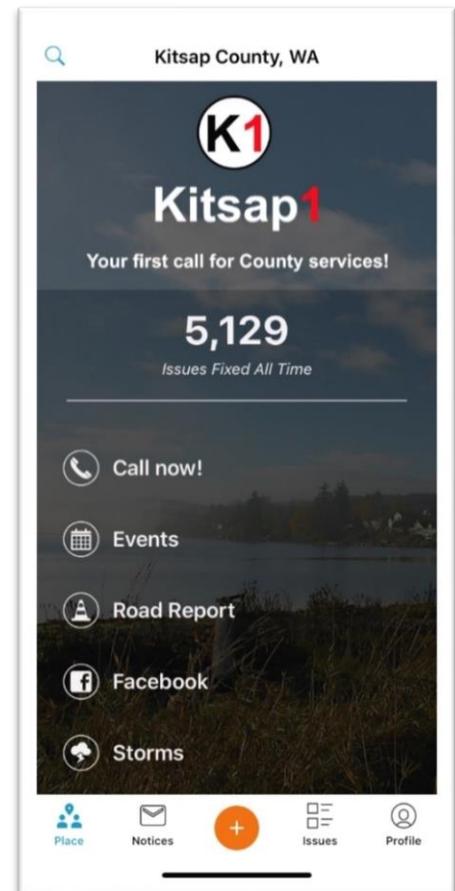
- Implement an ongoing program to prevent, detect, and remove illicit discharges, connections and improper disposal, including any spills, into the municipal separate storm sewers owned or operated by the County.
- Develop a storm sewer system map and implement ordinances to prohibit illicit discharges.
- Publicize a hotline or other local telephone number for reporting of spills or other illicit discharges. Track illicit discharge reports and actions taken in response to calls.
- Adopt and implement procedures for IDDE program evaluation and assessment.
- Provide appropriate training to staff on identification and reporting of illicit discharges.
- Summarize all illicit discharges and connections reported to the County and response actions taken in the Annual Report, including updates to the SWMP document.

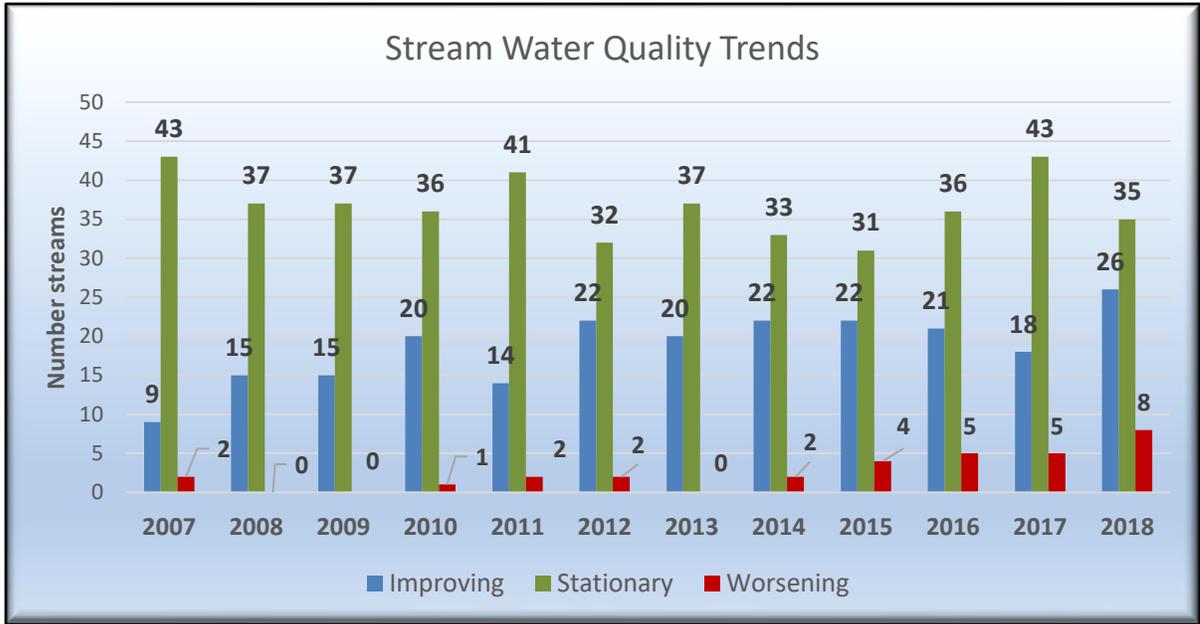
5.2 Current Activities

Kitsap County Public Works (KCPW) has conducted IDDE activities described by the Permit since 1995. All known municipal stormwater outfalls have been screened for potential pollution sources. Some of the IDDE efforts have been carried out via an inter-local agreement between KCPW and Kitsap Public Health District (KPHD). Specific program elements include the following:

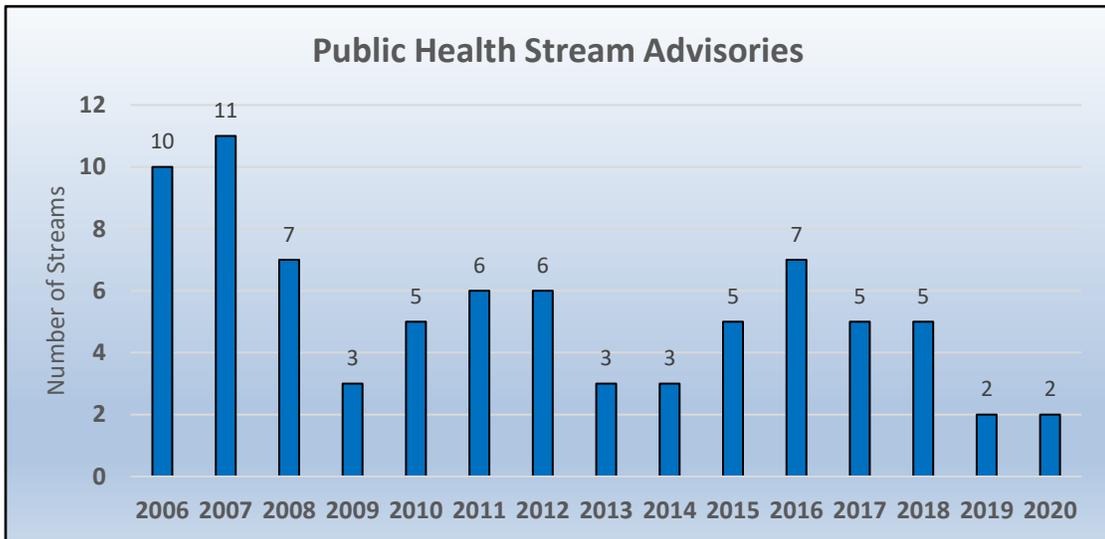
- Kitsap County's stormwater infrastructure inventory is managed through the Cartegraph[®] Software system. This database system links to the Kitsap County Geographical Information System (GIS) and stores information for each asset (size, type, as-built date, condition, inspection and maintenance history etc.). The system is updated to reflect public and private system changes, additions, and upgrades based on as-built documents received upon project completion. The system can be combined with other GIS information to create maps showing land use, topography or other features to aid in illicit discharge detection and elimination or spill control.
- Kitsap County Code [Title 12](#) has prohibited illicit discharges to the stormwater drainage system since at least 1996. The code was updated in September 2016 to reflect the specific requirements of the Permit regarding definitions and enforcement mechanisms.

- Kitsap County Public Works and KPHD cooperate to conduct a comprehensive county-wide IDDE Program. Specific geographic areas are targeted based on existing water quality concerns and monitoring trends. Personnel follow up on screenings through field investigations and interaction with residents and business owners. Successful efforts to date have been made through the Clean Water Kitsap sponsored KPHD Pollution Identification and Correction (PIC) Program that targets anthropogenic pathogens found in aquatic systems. The program is highlighted in the Puget Sound Partnership Action Agenda as a model for other regions.
- A regional hotline (360-337-5777) for general help and reporting spills within Kitsap County was implemented in 2009 and continues to be marketed. The County also provides an online form at <https://www.kitsapgov.com/dis/Pages/callkitsap1.aspx> .
- Kitsap County launched the “See Click Fix” (SCF) app in 2018 which provides a convenient way for the public to report spills (via their phones) as well as other County related issues/concerns. The jurisdictions of Bremerton, Bainbridge Island, Poulsbo and Port Orchard are also using SCF, and the County began to promote the use of the app in 2019.
- Reinforcement of the use of the regional hotline by Kitsap County employees continued to be promoted via a variety of means, including internal newsletters, hotline-branded products, and “Spills Happen” branding on vehicle graphics and other visible locations.
- Field employees attend illicit discharge training sessions on identifying, responding, and reporting to Kitsap 1.
- Kitsap County revised the spill calls system producing updated call flows based upon feedback from the Kitsap One call center staff and PW staff.
- Kitsap County PW staff continued to provide education with business owners about leaking dumpsters and other source control issues on a complaint basis.
- Water Quality (WQ) bacteria trends in Kitsap County have generally been improving over time. This is mainly due to the joint efforts of Kitsap County in partnership with KPHD’s Pollution Identification and Correction (PIC) Program. The number of streams with improving or stationary trends in 2019 showed a steady increase.

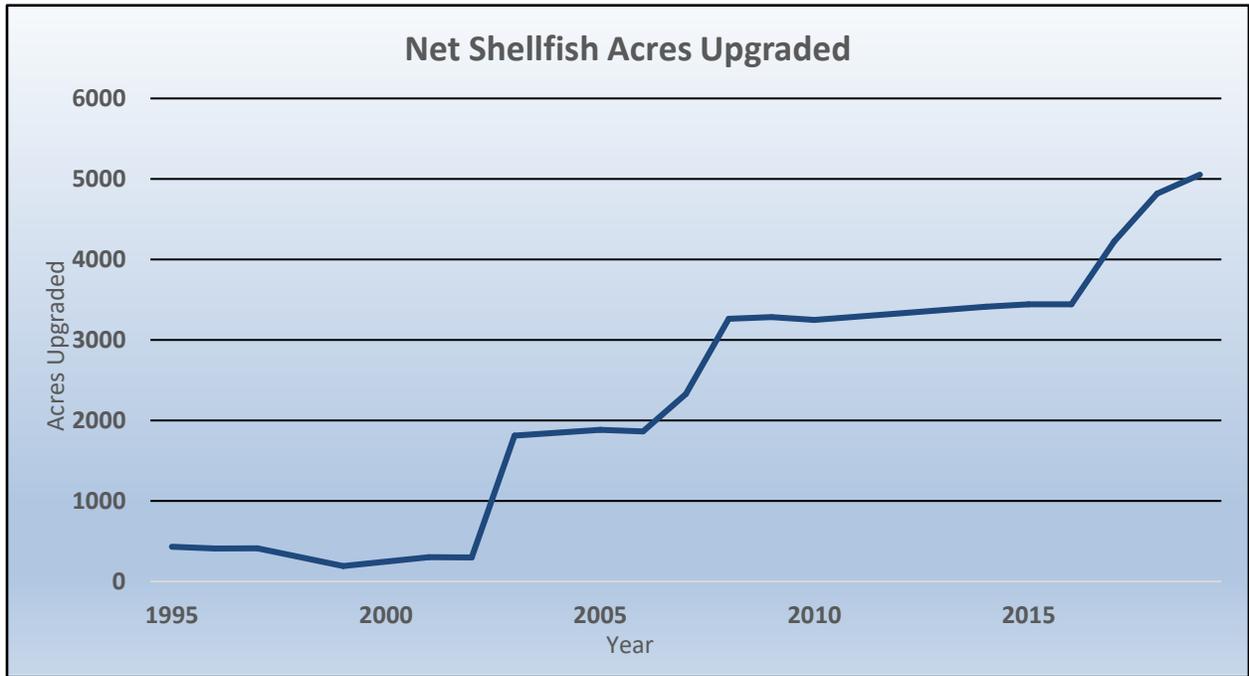




- KPHD issues public health advisories for streams with chronic high bacteria levels during the summer (3 year geometric mean value > 270 FC/100 ml). There is an overall downward trend in the number of advisories.



- Since 1995, 5,053 acres in Kitsap County have been upgraded and made available for shellfish harvest. In 2017 the Washington State Department of Health upgraded 760 acres in Liberty Bay (from prohibited to conditionally approved).



5.3 Planned Activities for 2020

Kitsap County has implemented all required actions under this section of the Permit, including publication of the Kitsap County IDDE Program Manual and full implementation of all IDDE program elements. 2020 actions will consist of maintaining and improving the programs and adapting them as necessary to meet permit and program objectives.

Kitsap County plans to conduct the following activities in 2020:

- Continue to conduct IDDE training for Kitsap County field crews.
- Continue to refine the spill call system with greater field staff involvement in how calls are managed, documented and resolved.
- Revise spills training and update IDDE educational materials as needed.
- Begin development of a comprehensive Source Control program according to the new permit requirements.
- Build two new spill response trailers to assist with larger spills that occur in Kitsap County.

6. CONTROLLING RUNOFF FROM NEW DEVELOPMENT, REDEVELOPMENT AND CONSTRUCTION SITES

This section describes the Permit requirements, programs, and planned activities related to Controlling Runoff from New Development, Redevelopment, and Construction Sites.

6.1 Permit Requirements

Section S5.C.6 of the Permit requires the County to:

- Develop, implement, and enforce a program to reduce pollutants in stormwater runoff that enter the municipal separate storm sewer system from new development, redevelopment and construction site activities. The program must apply to both private and public projects.
- Adopt and implement a regulatory process with the necessary legal authority for plan review, inspection, and escalating enforcement procedures necessary to implement the program in accordance with Permit conditions, including the minimum technical requirements in the 2019 Ecology Stormwater Management Manual for Western Washington (Appendix I).
- Provide options to allow non-structural preventive actions and source reduction approaches such as Low Impact Development techniques (LID) and measures to minimize the creation of impervious surfaces and the disturbance of native soils and vegetation.
- Adopt regulations that include provisions to verify adequate long-term operations and maintenance (O&M) of new post-construction permanent stormwater facilities and best management practices (BMP) in accordance with Permit conditions, including an annual inspection frequency and/or approved alternative inspection frequency and maintenance standards for private drainage systems that are as protective as those in the 2019 Ecology Stormwater Management Manual for Western Washington.
- Train staff on the new codes, standards, processes and procedures.
- Develop a process to record and track all inspections, maintenance and enforcement actions by staff for inclusion in the Annual Report.
- Make available appropriate information to permit applicants regarding NDPES Construction and Industrial permits and their notices of intent (NOI).
- Summarize annual activities for the Annual Report and identify any necessary update to SWMP document.

6.2 Current Activities

Kitsap County's Department Community Development (DCD) has a comprehensive land-use and development permit program. This program includes a permit review and inspection process that addresses the areas required by the Permit as follows:

- Continued to implement all existing stormwater codes and programs in compliance with Section S5.C.6 of the Permit.

- Continued to inspect all new development for permit compliance.
- Continued to provide stormwater training for Kitsap County staff and external partners in the development community.
- KCPW worked with DCD to update workflows including tracking total and allowable impervious surface sites
- Updated the bond release workflow for stormwater facilities
- Added an acceptance sign off for systems becoming public infrastructure

6.3 Planned Activities for 2020

Kitsap County has implemented all required actions under this section of the Permit.

Kitsap County plans to conduct the following activities in 2020:

- Maintain, improve and adapt programs as necessary to meet permit and program objectives.
- Continue annual inspection of all privately-owned stormwater facilities.
- Implement and review Kitsap County Code updated after December 31, 2016 to ensure consistency with LID requirements.
- Update the Stormwater Design Manual to reflect changes to the Ecology Manual.
- Continue to implement the enforcement process for KCPW staff to align with the updated stormwater code.

7. MUNICIPAL OPERATIONS AND MAINTENANCE

This section describes the Permit requirements, programs, and planned activities related to Pollution Prevention and Operation and Maintenance (O&M) for Municipal Operations (S5.C.7).

7.1 Permit Requirements

Section S5.C.7 of the Permit requires the County to:

- Develop and implement a stormwater system O&M program with the ultimate goal of preventing or reducing pollutant runoff from municipal operations.
- Establish maintenance standards for the municipal separate stormwater system that are at least as protective as those specified in the most current [Stormwater Management Manual for Western Washington](#).
- Inspect all municipally owned or operated permanent stormwater treatment and flow control facilities at frequencies required in the permit.
- Establish and implement procedures to reduce stormwater impacts associated with runoff from municipal operations and maintenance activities, including but not limited to buildings/structures, parks, streets, parking lots, roads, or highways owned or maintained by the County, and to reduce pollutants in discharges from all lands owned or maintained by the County.
- Develop and implement an ongoing training program for staff whose job functions may impact stormwater quality, and document the training program.
- Prepare Stormwater Pollution Prevention Plans (SWPPP) for all heavy equipment maintenance or storage yards and material storage facilities owned or operated by the County that are not covered by an Industrial Stormwater General Permit.
- Track and maintain records of inspections, maintenance and repair activities, and summarize them in the Annual Report.

7.2 Current Activities

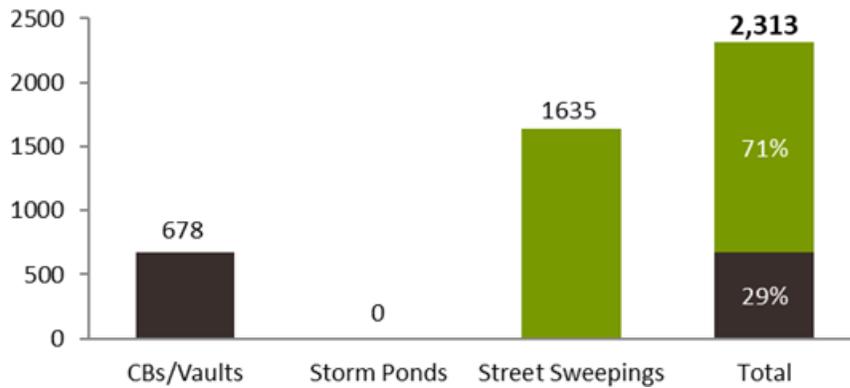
Kitsap County maintains County-owned facilities in a manner that is protective of water quality.

- Kitsap County is one of the agencies participating in the Western Washington Regional Road Maintenance Endangered Species Act (ESA) Program. Since December 12, 2001, Kitsap County has been officially committed to implement the Regional Road Maintenance ESA program. This program includes all the activities listed under S5.C.5.f and has a training element at: <http://www.wsdot.wa.gov/maintenance/roadside/esa.htm>
- Kitsap County Public Works facilities that meet the Permit thresholds have had multiple SWPPP's in place since 2003. All KCPW SWPPP's were revised and updated in 2019. Kitsap County maintains over 600 stormwater facilities to standards consistent with the Permit and cleans or inspects over 11,000 catch basins at least biannually. Soils and other materials removed from these systems are normally processed at the County-owned decant facility

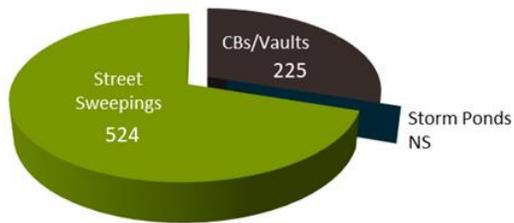
located adjacent to the Central Kitsap Wastewater Treatment Plant. The decant facility is operated under a solid waste transfer station permit issued by Kitsap Public Health District.

- Kitsap County operations and maintenance practices, policies and procedures were reviewed in 2017 and have been accredited by the APWA.
- Kitsap County Parks and Facilities Maintenance programs have created and implemented policies and procedures to address the applicable compliance areas related to property maintenance. These policies and procedures are based on the latest available best management practices to protect water quality and conduct routine maintenance activities on parks, buildings, and associated areas. The SWPPP for the Kitsap County Fairgrounds was implemented in 2010.
- Kitsap Public Works (Road Maintenance Division) operates a water-quality street-sweeping program utilizing three high-efficiency street sweepers (purchased in-part with Ecology Grant funds). This program results in the removal of a significant amount of street grit and debris and intercepts this waste prior to being washed into our stormwater system or receiving waters.
- Kitsap County Departments of Public Works, Parks, and Facility Maintenance have programs that use a common integrated pest management plan and fertilizer management plan. These plans employ the latest best management practices to avoid the use of pesticides where possible. All applicators are licensed through the Washington State Department of Agriculture.
- The Kitsap County Public Works waste disposal monitoring program closely tracks the amount and quality of solids removed from roads and the stormwater system. The solids come from several activities, including soil removal during ditch maintenance or pond maintenance, sediment removed from catch basins and vaults, and solids removed from streets by street sweepers. All these solids, if allowed to accumulate in the stormwater system, have the potential to carry the associated contaminants to natural surface waters during runoff events.
- Kitsap County plans and tracks all catch basin and stormwater facility inspection and maintenance activities in the Cartegraph[®] asset management system.
- In 2019, 2,313 tons of total solids were collected by vector trucks and sweepers. This included 502 pounds of copper/zinc/lead and 749 gallons of oil. All stormwater and street solids are tested and disposed of in accordance with local and state requirements.

**Tons of Total Solids
Removed from Kitsap County Storm System in 2019**

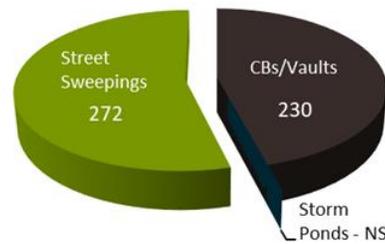


**Gallons of Oil
Removed from the Kitsap County Storm System in 2019**



Total Gallons of Removed = 749

**Pounds of Copper, Lead & Zinc
Removed from the Kitsap County Storm System in 2019**



Total Pounds Copper, Lead & Zinc Removed = 502

7.3 Planned Activities for 2020

Kitsap County has implemented all required actions under this section of the Permit. Kitsap County plans to conduct the following activities in 2020:

- Maintain, improve and adapt programs as necessary to meet Permit and program objectives.
- Continue to maintain stormwater management facilities to enhance water quality, reduce local flooding problems, and improve stormwater runoff flow-control.
- Expand asset management program to:
 - Maximize the number of stormwater projects by coordinating water quality retrofits with road and sewer projects.
 - Track inspection, maintenance, condition and life cycle of assets to ensure replacements occur before failures

- Ensure adequate funding for permit requirements
- Coordinate with jurisdictions per permit S5.C(4)(a) (vi) and S5A(5)(a) to comply with the mapping requirements of the 2019 Western Washington NPDES Phase II Municipal Stormwater Permit (Permit).

8. SOURCE CONTROL PROGRAM

This section describes the Permit requirements and planned activities related to the Source Control Program for Existing Development.

8.1 Permit Requirements

Section S5.C.8 of the Permit requires the County to develop a program to prevent and reduce pollutants in existing land use areas and pollutant generating activities which include the following:

- Develop a program to reduce the application of pesticides, herbicides, and fertilizers from pollutant generating sites.
- Adopt and implement an ordinance that requires the application of source control BMPs for pollution generating sources as outlined in Ecology's SWMMWW
- Establish an inventory that identifies pollutant generating businesses
- Implement a business inspection program, inspecting 20% of all pollution generating businesses in unincorporated Kitsap County, including follow-ups
- Inspect 100% of source control complaints
- Implement progressive enforcement policy that requires pollution generating sites to comply with stormwater requirements
- Train source control inspection staff

8.2 Current Activities

The source control inspection program is a new requirement for the 2019-2024 Permit cycle.

- The pollutant generating business inventory has been started using data collected from the Department of Revenue and Kitsap County GIS property classes.
- A draft ordinance has been created and is currently awaiting the legal process of code adoption.
- Kitsap County currently inspects 100% of source control complaints
- Kitsap County has capability to enforce on illicit discharge violations

8.3 Planned Activities for 2020

- Finalize pollutant generating business inventory and begin windshield surveys to verify business and pollutant generating status.
- Finalize the draft ordinance and adopt into code.
- Create a stormwater compliance policy that aids in enforcement of stormwater violations and includes an enforcement penalty rubric, which would consider environmental harm, responsiveness in correction, and repeat violations.

9. COMPLIANCE WITH TOTAL MAXIMUM DAILY LOAD REQUIREMENTS

This section describes the Permit requirements, programs, and planned activities related to Total Maximum Daily Load (TMDL) Requirements that are listed in Appendix 2 of the Phase II Permit. For all other applicable TMDL programs, compliance with the Phase II Permit is considered in compliance with the TMDL and no additional SWMP documentation is required.

9.1 Permit Requirements

Section S7 of the Permit requires the County to comply with the requirements of the applicable TMDL listed in Appendix 2 as follows:

- Comply with the specific requirements identified in Appendix 2 and maintain records of all required actions that are relevant to the applicable TMDL. TMDL implementation activities must be included as part of the Annual Report.
- Where monitoring is required, conduct the monitoring according to a Quality Assurance Project Plan (QAPP) approved by Ecology.

9.2 Current Activities

Currently, Kitsap County is affected by two fecal coliform TMDLs. The Sinclair-Dyes Inlet TMDL was approved by EPA in 2012 and is listed in Appendix 2 of the 2019-24 Permit. The Liberty Bay Watershed TMDL was approved by EPA in 2013 but is not listed in Appendix 2.

Kitsap County has been working with Ecology on the development of these TMDLs and has already implemented numerous early-action projects to meet the water-quality goals of the TMDLs.

- KCPW has implemented a robust Mutt Mitt Program to encourage pet waste pickup in public places and the Backyard Pet Waste Program to encourage pet waste pickup in backyards.
- KCPW, together with the CWK partners, has provided updated information regarding actions taken for the Liberty Bay TMDL to the Department of Ecology per their request. Ecology is considering next steps for delisting streams in Liberty based on improvements in water quality, source corrections and stormwater related improvements.

9.3 Planned Activities for 2020

Kitsap County has implemented all required actions under this section of the Permit. Future actions will consist of maintaining and improving the programs and adapting them as necessary to meet permit and program objectives.

Kitsap County plans to conduct the following activities in 2020:

- Enhancing the Mutt Mitt program with new information from station sponsor surveys and continuing to build and support the program in these areas.

- Continue to visit non-compliant dumpster sites and provide technical assistance.
- Continue funding KPHD Pollution Identification & Correction efforts in both TMDL watersheds.



10. MONITORING

This section describes the Permit requirements and planned activities related to water quality monitoring.

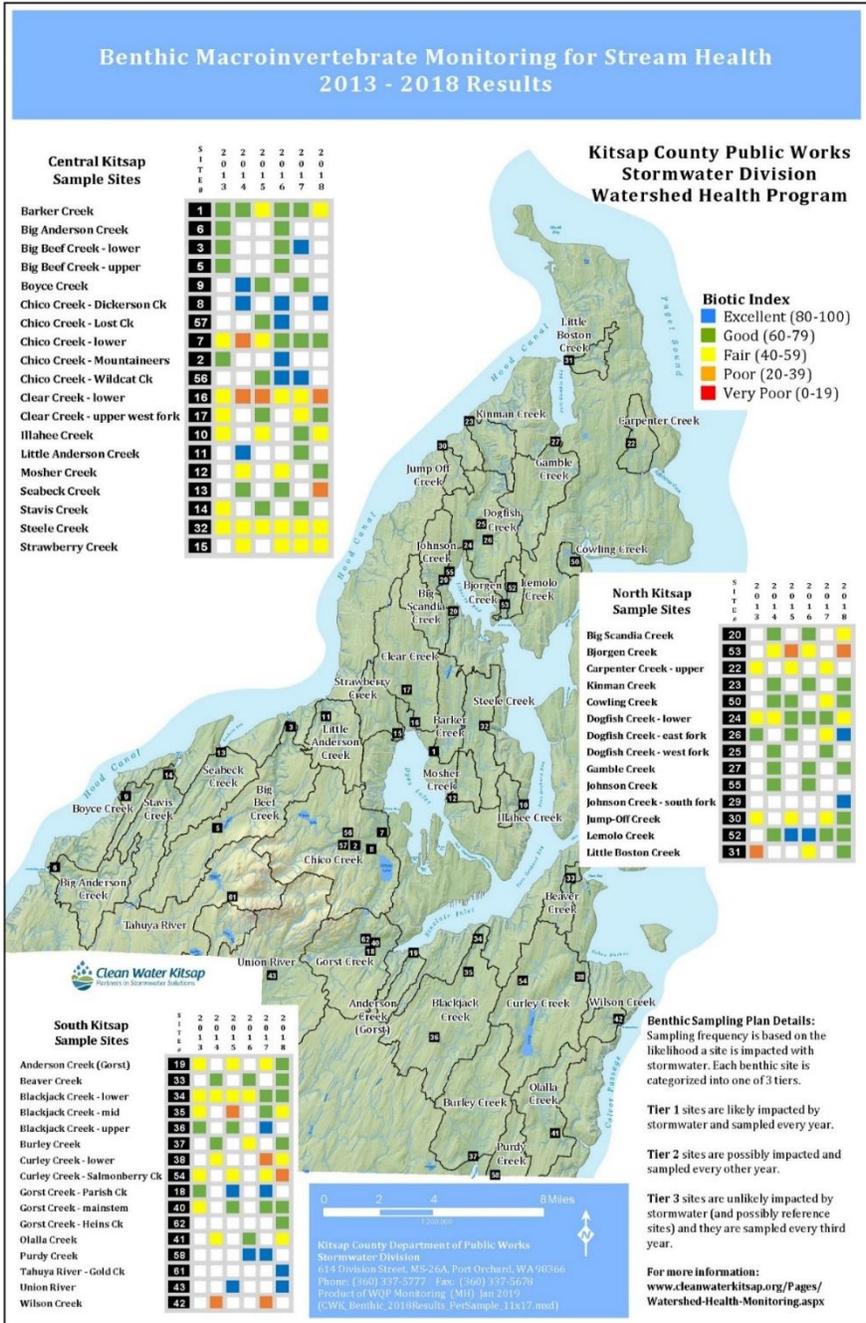
10.1 Permit Requirements

In the previous permit term (*Phase II Western Washington Municipal Stormwater Permit*, effective August 1, 2013-July 31, 2019), Section S8 of the Permit required the County choose one of two options for S8.B - Status and Trends Monitoring and S8.C - Effectiveness Studies: pay into a collective fund or perform specified monitoring. The County provided notification to Ecology by December 1, 2013 that we elected to pay into the collective fund for both options.

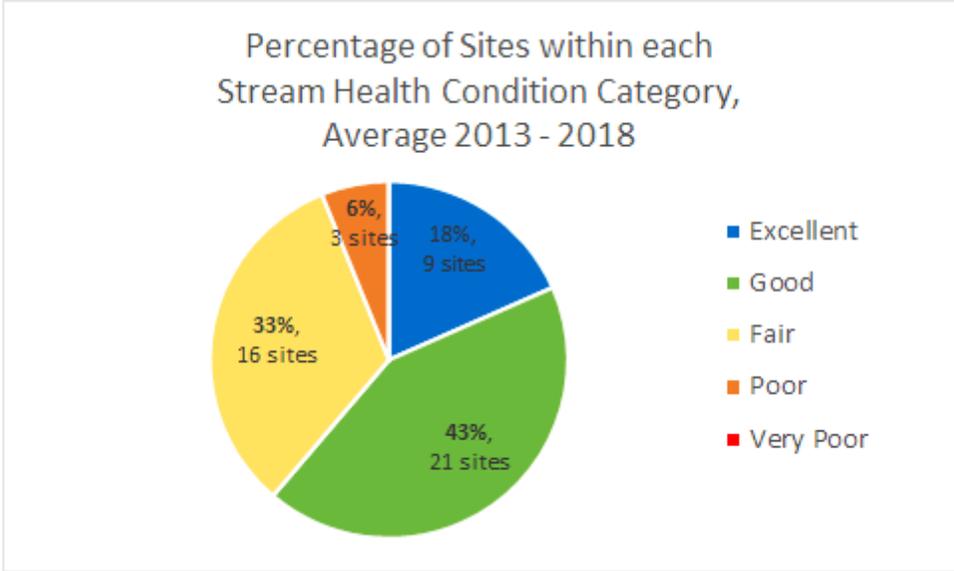
10.2 Current Activities

- Kitsap County provided a notification to Ecology by December 1, 2019 that the County would pay into the collective fund for monitoring for status and trends and effectiveness. Payments have been made annually.
- In addition to paying into the collective fund, KCPW also conducts a number of activities as part of the county-wide Watershed Health Monitoring Program.
- KCPW participates in the Stormwater Work Group and various subcommittees including the Freshwater work group and the IDDE/Source control workgroup.
- KCPW collects flow data from three stormwater drainage basins for potential use in studies to evaluate the effectiveness of stormwater management actions.
- Project and program effectiveness studies are underway for long term permeable pavement infiltration and removal of solids from the storm system (vacator, street sweeping and pond maintenance).
- KCPW monitors stream health by collecting samples of benthic macroinvertebrates (aquatic insects) from 48 sites. Sites are monitored on a rotational basis with most sites visited every other year. The Benthic Index of Biotic Integrity (B-IBI) is a standardized scoring system describing stream health. The greater the types (diversity) of insects and number of insects represented in the sample result in a higher score. Ten metrics are calculated, then added together to provide a score up to 100 points. Stream health categories range from "excellent" to "very poor." This standardized scoring system allows Kitsap stream health comparisons to the greater Puget Sound streams.





Kitsap has been conducting macroinvertebrate sampling since 2010. The average scores from the past five years show most sites in the good to fair category.



10.3 Planned Activities for 2020

Kitsap County plans to conduct the following activities in 2020:

- Continue to participate in the Stormwater Action Monitoring program.
- Continue to implement the watershed health monitoring program to demonstrate protection, improvement or decline in watershed health related to stormwater management actions.
- Conduct effectiveness monitoring at targeted restoration sites, capital project and retrofit sites.

11. REPORTING REQUIREMENTS

This section describes the Permit requirements and planned activities related to reporting activities required under the Permit.

11.1 Permit Requirements

Section S9 of the Permit requires the following of the County:

- Submit an annual report to Ecology by March 31 of the following year. The reporting period for annual reports will be the previous calendar year. The Annual Report shall include the SWMP, Annual Report form, and notification of jurisdictional boundary changes that affect the geographic area of Permit coverage, together with any implications for the SWMP.
- Retain all records related to the Permit and SWMP for at least five years and submit records to Ecology upon request.
- Make records related to the Permit and SWMP available to the public at reasonable times during business hours. The County must also provide a copy of the most recent annual report to any individual or entity upon request. The SWMP and Annual Reports will be posted to the website.

11.2 Current Activities

Kitsap County submitted an NPDES Annual Report and SWMP as required by the Permit.

11.3 Planned Activities for 2020

This SWMP has been prepared to demonstrate compliance with the requirements of the NPDES Phase II Permit and to describe future planned activities. This SWMP will be updated annually to reflect progress with implementing all elements of the stormwater management program required for compliance with the Phase II Permit and posted to the Kitsap County website.