



United States Environmental Protection Agency  
Region 10  
1200 Sixth Avenue Seattle  
Washington 98101

2024 MS4 Annual Report  
Under Phase II MS4 General Permitting Program  
01/31/2023 - 01/30/2024

FORM Approved OMB No. 2040-0004 Expires On 07/31/2026

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MS4 Entity Information

MS4 Name: Naval Base Kitsap Ms4

MS4 Operator: Department Of The Navy

MS4 Class: Phase II: Small

Operator Type: Federal

MS4 Entity Type: Military Installation

City: Bremerton

County: Kitsap

MS4 State/Territory: Washington

Designation Date: 11/13/2000

Designation Type: Automatic Nationwide

Population:

Source:

MS4 Identifier: MS4-WA-SM-FE-2000-0003

NPDES ID: WAS026646

MGP Number: WAS4IP000

Joint Coverage:

Latitude: 47.720556°N

Longitude: 122.713056°W

Description of Location:

MS4 Contact Information

MS4 Program Coordinator Information

First Name: Timothy

Middle Initial:

Last Name: Allmann

Title: Environmental Engineer

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State: Washington

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Permittee Responsibilities and Equivalent Documents

Has the Permittee submitted to EPA for consideration any documents, plans, programs or program summaries that the Permittee believes to be equivalent to a required control measure or control measure? No

Do you, the Permittee, share Permit implementation responsibility with one or more Outside Entity for compliance with the Permit? No

Have you established and maintained relevant enforceable mechanisms to control pollutant discharges into and from the MS4 and to meet the requirements of this Permit? Yes

Are you maintaining system(s) to track SWMP data and information? Yes

MCM1: Public Education and Outreach

Have you listed and publicized means for the public and Permittee personnel to report spills and other illicit discharges? Yes

Have you informed target audiences of the environmental impacts associated with illegal discharges and improper disposal of waste and how to report them? Yes

Have you selected specific education and outreach topics to build general awareness and effect behavior change? Yes

Please list these topics:

Education and outreach on appropriate spill prevention practices started during the first year of the permit. For the second year of the permit, proper pet waste management was added as a second topic of emphasis.

Please summarize your activities and accomplishments as part of the Southern Resident Killer Whale Outreach and Education efforts.

As required by part 2.1.1.3, Naval Facilities Engineering Systems Command (NAVFAC) Northwest (NW) has been working with National Marine Fisheries Service (NMFS) to develop and deliver a training program for target audiences. During Year 1 of the permit, NOAA hosted a virtual training for MS4 program managers and other Navy personnel who could potentially impact stormwater management. During Year 3, NOAA provided a slide presentation to MS4 program managers on impacts from stormwater on Southern Resident killer whales (SRKW) on June 6, 2023.

Have you conducted public education and outreach activities specifically on bacterial pollution problems? Yes

Have you assessed, or participated in efforts to assess, the understanding and adoption of intended behaviors by the target audiences for at least one of the topics? Yes

➤ Please summarize your efforts to assess the education and outreach activities conducted during the reporting period, and how this information is being utilized to improve the public education and outreach program efforts. Please also include one or more example of successful education/outreach.

Education regarding proper spill reporting on base to prevent stormwater pollution has resulted in an increase in the number of reported spill notifications and cleanup responses relative to pre-permit baseline information (2019-2020). Therefore, a behavioral change has occurred. The volume of calls has attracted the attention of command leadership, who have established command and emphasis on spill prevention with the support of the Installation Environmental Office – another behavioral change.

Surveys of public and recreation areas for pet waste have identified neighborhoods without fencing as the most problematic areas. Behavioral change in these areas has been limited and continues to receive attention from Hunt Military Communities in terms of warnings and fines when individuals can be identified.

The Installation Environmental office engaged the public face to face at the following events:

- Monthly Environmental Awareness Training for industrial workers
- Annual recreational fishing derby at Trident Lakes, June 3, about 450 attendees
- Spoil Your Dog Day, August 2

MCM2: Public Involvement and Participation

Have you conducted one or more meetings to coordinate among appropriate staff, managers and others who play a role in Permit implementation? Yes

➤ Briefly describe meeting(s), participants, and topics:

Installation stakeholders include environmental compliance staff, base housing management, public works, and NAVFAC NW Design and Construction Division. Having established roles, responsibilities and procedures in the SWMP, communication has become in formal and ad hoc, focusing on particular issues and construction projects.

The NBK commanding officer and Public Works Department leadership are briefed annually on the installation stormwater program in coordination with the delivery of this annual MS4 report.

NBK continues to collaborate on education and public involvement initiatives with the West Sound Stormwater Outreach Group, a county-wide partnership of municipalities. Due to practical constraints, NBK develops separate parallel programs, such as for pet waste, but the forum is valuable for information, idea sharing and feedback.

Monthly stormwater meetings are held with key stormwater management personnel at Naval Station Everett, Naval Air Station Whidbey Island, and Naval Base Kitsap. Consistent monthly meetings were started in February 2020, and have continued since. These monthly meetings are used to discuss any topic related to stormwater, and to share best practices and lessons learned regarding stormwater management and implementation of the MS4 permit, MSGP, and CGP. The meetings provide a collaborative approach to stormwater management in the NW Region. Below is a summary of meetings held during the second year of the MS4 permit:

Year	Month	Meeting Topics
2023	February	SWMPs, annual reports, potential PFAS requirements in future permits, Downspout Evaluation updates, SIIP, EAP Sampling
	March	SWMP Review and Annual Reports
	April	Pet waste management, educational materials, IDDE supplies, website updates, funding
	May	Downspout evaluation update, grounds keeping contract discussion,
	June	SRKW Training
	July	Downspout evaluation update
	September	EAPs, NASWI sampling, NASWI education and outreach campaign
	October	MCM discussion on IDDE, funding
2024	January	SRKW and Climate Change presentation, discussion on SIIPs, downspout evaluation updates.

NAVFAC NW additionally hosted a regional water team conference June 6, bringing together multiple disciplines as stakeholders in stormwater, wastewater and drinking water.

The Installation Environmental Office has also engaged with Joint Base Lewis-McChord to share information and ideas for developing a robust MS4 program.

Please describe any engagement with affected entities in setting priorities for the storm water program.

NBK actively engages with the Native American tribes regarding environmental issues and to ensure that tribal treaty rights are maintained within the Puget Sound and Hood Canal. In order to protect water quality, NBK routinely monitors stormwater and conducts dry weather surveys to detect illicit discharges. Implementation of additional education, additional construction runoff controls, and additional maintenance requirements as part of the MS4 permit, should further protect and enhance local water quality. NBK is planning further work to repair and modernize portions of the sanitary sewer system as was also recently accomplished in 2022. These projects represent major investments on the Navy’s part to minimize overflow and leaks from the sanitary sewer system and improve local water quality.

NBK’s participation in the Stormwater Action Monitoring Program provides coordination with other entities and allows NBK resources to be applied to the highest priorities across the region.

Coordination with the base operational services contractor, tasked with maintenance of stormwater structures at NBK, has been ongoing at several levels. Biweekly meetings to coordinate and prioritize stormwater maintenance actions have resulted in focusing available resources to mitigate highest risks to the environment. Stormwater maintenance is also being addressed at mid- and upper-management meetings with the contractor.

Communication between the Integrated Solid Waste Program and the Installation Environmental Office has resulted in substantial progress toward eliminating illicit discharges.

Have you sponsored at least twice during the Permit term volunteer activities designed to actively engage residents and/or employees to better understand stormwater pollution? Yes

➤ Please describe these events and activities:

NBK stormwater program managers have engaged with NBK Public Affairs, volunteer coordinators and Morale Welfare and Recreation event planners to develop ongoing volunteer activities to educate residents and improve water quality. Although active in previous years, no group volunteer activities were held this year due to a lack of time and manpower available to plan and coordinate them.

MCM3: Illicit Discharge Detection and Elimination (IDDE)



Have you developed updated maps of the MS4 within the Permit Area that include all of the features listed in Part 2.3.1 of the Permit? N/A

Do you effectively prohibit non-stormwater discharges into the MS4 (except those authorized in Part 1.3.4 of this Permit) through effectively robust policies and procedures? Yes

For any discharges of potable water, have you dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted, and volumetrically and velocity controlled to prevent resuspension of sediments in the MS4?

Yes

Have discharges from lawn watering and other irrigation runoff been minimized through public education and water conservation efforts? Yes

For any discharges of swimming pool, spa and hot tub waters, have you dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, pH-adjusted and re-oxygenized if necessary, volumetrically and velocity controlled to prevent resuspension of sediments in the MS4, thermally controlled to prevent an increase in temperature of the receiving waters, and prohibited the discharge of pool cleaning wastewater and filter backwash?

N/A

Have discharges from street and sidewalk wash water, water used to control dust, and routine external building wash down that does not use detergents been minimized through public education and water conservation efforts?

Yes

For any discharges of accumulated stormwater from utility vaults, have you conducted sampling to verify that no pollutants cause or contribute to water quality impairments, AND visually verified prior to any discharge, that there are no visible sheens or solids in the discharge?

N/A

For any discharges of accumulated stormwater from secondary containment structures, have you conducted sampling to verify that no pollutants cause or contribute to water quality impairments, AND visually verified prior to any discharge, that there are no visible sheens or solids in the discharge?

N/A

Are you implementing a targeted IDDE program at Naval Base Kitsap-Keyport and Naval Base Kitsap-Bangor for fecal coliform source identification in sub-basins draining to Liberty Bay and Clear Creek, respectively?

Yes

Does the program described in the SWMP document include procedures for locating priority areas likely to have illicit discharges, including areas where complaints have been recorded and areas with storage of large quantities of materials that could result in spills and areas where storage, usage, releases or contamination of any pollutant in Table 2.4.4 is or has occurred?

Yes

Do you conduct a dry weather analytical and field screening monitoring program to identify non-stormwater flows from stormwater outfalls? Yes

For Annual Reporting Year 5 only, have you completed field screening of at least 75% of all MS4 outfalls located within the Permit Area? N/A

Are your screening methods/protocols consistent with Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments, Center for Watershed Protection, October 2004, or another methodology of comparable effectiveness?

Yes

Do you have and implement procedures for characterizing the nature of, and potential public or environmental threat posed by, any illicit discharges which are found by or reported to the Permittee? Yes

Do these procedures include the evaluation of whether the discharge must be immediately contained and the steps to be taken for containment of the discharge per the stipulations in Part 2.3.3.3? Yes

In the Comments section, please summarize all illicit discharge responses, including responses to spills and recurring discharges. Also summarize any investigations and referrals as detailed in Part 2.3.3.3.2.

On 18 April 2023, the contractor working a project on Delta pier overflowed its post-treatment industrial wastewater tanks on Runner Road. System was discharging at approximately 10 gpm during the overflow. An estimated 600 gallons overflowed, of which less than 100 gallons entered the storm drain. The remainder flowed into vegetation along the road. Pumps were halted upon discovery of the overflow.

On 1 September 2023, the lift station pumps for ship oily discharge on Delta Pier experienced mechanical failure, allowing 10,000 gallons of water with sheen to be released to the dry dock floor and 1500 gallons to Puget Sound. Absorbent clay was placed around drains, an emergency work order was issued for repair, and booms placed in the water to contain the spill.

On 29 January 2024, a leaking domestic wastewater line on the causeway trestle from Olympic Pier was discovered. Wastewater ran down the utility trench with some leaking through expansion joints into Hood Canal below, and the remainder drained into the stormwater system wet well on the pier, and from there into Hood Canal. All pumps were secured until appropriate repair actions could be accomplished. The spill volume was estimated to be less than 2000 gallons. There were no observable solids in the released wastewater.

For incidental spills that tenants can cleanup with on-hand spill response supplies that do not enter surface waters or risk entry into the MS4, the spills are responded to, cleaned up, and notification is made to the Installation Environmental Office. For spills that tenants cannot cleanup themselves due to size/supplies/personnel/risk/etc the NBK Federal Fire Department (FFD) is notified to respond, once the FFD completes their initial assessment and ensures the scene is safe, notification is made to NBK's OHS Response cleanup crews for additional response and cleanup. Please see Appendix 10 for additional information. The processes for characterizing the nature of, and potential public or environmental threat posed by illicit discharges is included in the SWMM Plan.

Do you have and implement procedures for notification of affected parties, including immediate notification of the spills and illicit discharges and ongoing updates about abatement measures and possible impacts? [Yes](#)

Please summarize all notifications to downstream operators of MS4s, shellfish beds/fisheries, agricultural/livestock operations, drinking water systems (public or private) or other affected entity of spills or other non-stormwater discharges that may impact those systems. Please include in the description all outreach, discussions and/or information exchanges regarding the impacts of discharges and the status of illicit discharge elimination activities.

Reportable spill notifications and any updates are made through the installation Oil and Hazardous Substance (OHS) spill program and OHS Program Manager. The spill notifications and updates are made depending upon the location and substance released as specified in the Navy Region Northwest Oil and Hazardous Substances Integrated Contingency Plan. Depending upon the type and nature of the release, notifications are made to appropriate agencies, which may include the National Response Center, Washington State Department of Ecology, Kitsap County Department of Emergency Management, Washington State Health Department, Kitsap County Department of Health, Puget Sound Clean Air Agency, Region 10 EPA office, Center for Disease Control, Department of Health and Human Services, US Coast Guard National Command Center and District 13, Northwest treaty tribes, and Washington State Emergency Management. See Attachment 3 for the list of reportable spills that required notification.

Do you have and implement procedures for tracing sources of illicit discharges, including visual inspections, opening manholes, using mobile cameras, collecting and analyzing water samples, and other procedures, as appropriate?

[Yes](#)

Do you have and implement procedures for eliminating illicit discharges, including scheduling and implementing remedial measures and other safeguards to ensure the discharge does not recur? [Yes](#)

Do these procedures include initiation of an investigation within 21 days of a report or discovery of an illicit connection to determine the source, nature and volume, and responsible party? [Yes](#)

Do these procedures include initiation of action to eliminate the illicit connection within 45 days of confirming the connection? [Yes](#)

Have all staff responsible for investigating, identifying and eliminating illicit discharges, spills, and illicit connections into the MS4 received program-specific training? [Yes](#)

Please describe any training provided during this reporting period, including new employee training and follow-up training.

None provided during this reporting period.

Please include a general summary of the results of dry weather screening program activities conducted over the preceding reporting period, including number and type of illicit connections identified, dry weather screening efforts, and location and efforts to correct identified illicit discharges.

See attached Dry Weather Survey Summary 2022 (Attachment 4).

MCM4: Construction Site Stormwater Runoff Control



Does the SWMP document describe, and are you implementing, a program to reduce pollutants in stormwater runoff to the MS4 from all construction in the Permit Area, including roads? [Yes](#)

During this reporting year have you provided adequate oversight to "regulated construction activities" and "regulated industrial activities" to ensure that all regulated activities obtained coverage under the appropriate stormwater permits?

[Yes](#)

Have you implemented an enforceable mechanism to address runoff from construction site projects to include the minimum requirements, thresholds and definitions? [Yes](#)

Does the enforceable mechanism include all of the criteria listed in Part 2.4.2.2 of the Permit? [Yes](#)

Have you had any equivalent criteria approved by EPA for use in stormwater controls from construction site runoff? [No](#)

Have you implemented policies and procedures, including contract mechanisms, to ensure review of all stormwater site plans for proposed development activities? [Yes](#)

Do you inspect, prior to clearing and construction, all development sites that have a high potential for sediment transport as determined through plan reviews based on definitions and requirements of Appendix C of the Permit?

[Yes](#)

Do you inspect all development sites during construction to verify proper installation and maintenance of required erosion and sediment controls? [Yes](#)

During this reporting year, did you take the necessary enforcement actions, as relevant, based on the results of these inspections? [Yes](#)



Please describe:

All concerns identified during construction inspections are referred to the government project manager to address corrective actions with the contractor.

Were at least 80% of scheduled inspections completed during this reporting year? Yes

Have you established and implemented an internal tracking system to respond to issues of non-compliance? Yes

Please describe any training provided during this reporting period, including new employee training and follow-up training.

Because initial training was provided to facility project planners, designers, construction managers and lead engineering technicians during the first two permit years, on-the-job training was the focus of the third permit year. The above personnel and contractors were engaged during actual project design and construction with an emphasis on education as opportunities arose. Contractors are required to complete environmental training through the ECATTS web-based training system. Contractors are also required to submit erosion and sediment control certification when required by regulation.

Please include a general summary any corrective actions taken at construction sites, number of site plans reviewed, site inspections, and one or more example of follow-up actions.

During the third year of the MS4 permit, stormwater managers reviewed 15 site plans and conducted 12 formal site inspections. Project construction sites were also reviewed during required quarterly MSGP site inspections. See attached Inspection Tracker (Attachment 5).

Corrective actions identified during construction inspections were all minor. A filter vault full of water and not draining was identified, but the vault had not yet been placed in service. The vault was in service by the following survey. A catch basin installed next to a wash rack was investigated to determine it was not connected to the wash rack drain and sanitary sewer. Construction management confirmed that storm water vaults previously found with sediment inside had been cleaned before government acceptance. A trench drain pipe incorrectly installed was modified to direct flow appropriately to containment or to storm sewer, as appropriate.

MCM5: Post-Construction Stormwater Management in New Development and Redevelopment



Does the SWMP document describe, and are you implementing, a program to reduce pollutants in stormwater runoff to the MS4 from new development and redevelopment project site activities in the Permit Area, including roads?  
Yes

Have you implemented an enforceable mechanism to address runoff from new development and redevelopment to include the minimum requirements, thresholds and definitions? Yes

Does the enforceable mechanism include all of the criteria listed in Part 2.4.2.2 of the Permit? Yes

Have you had any equivalent criteria approved by EPA for use in stormwater controls from new development and redevelopment runoff? No

Please document what percentage of all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new developments were inspected every six months prior to 90% of the common plan of development being constructed during this reporting year.

Due to the limited size of construction projects, it is practical and standard practice to review all permanent stormwater treatment and flow control BMPs/facilities and catch basins in new developments during recurring inspections.

Do you inspect all development sites upon completion of construction and prior to final approval or occupancy to ensure proper installation of permanent stormwater facilities? Yes

Are all maintenance requirements assigned/entered into the electronic tracking system for stormwater treatment and flow control BMPs/facilities? Yes

Do you keep adequate records to document that all the requirements of Part 2.4.3 of the Permit have been fully implemented? Yes

Were at least 80% of scheduled inspections completed during this reporting year? Yes

Have you established and implemented an internal tracking system to respond to issues of non-compliance? Yes

Annual Reporting Year 1: Please describe the Early Action Projects (EAPs) you plan to implement during this permit term. Please also provide a summary of all EAP planning and implementation actions taken to date.

Annual Reporting Year 2-5: Please provide any updates to your Early Action Projects (EAPs) plan. Please also provide a summary of all EAP planning and implementation actions taken in this reporting year.

Sampling continued in 2023 for constituents of concern where detected above established benchmarks. Please see attached MS4 Early Action Projects Sampling Results (Attachment 6).

Annual Reporting Year 4: Have you submitted a written Stormwater Infrastructure Investment Plan to EPA that documents future investments and upgrades in your facility's stormwater infrastructure designed to improve MS4 discharge quality, AND that meets all of the requirements of Part 2.4.4?

Please describe any training provided during this reporting period, including new employee training and follow-up training.

Because initial training was provided to facility project planners, designers, construction managers and lead engineering technicians during the first two permit years, on-the-job training was the focus of the third permit year. The above personnel and contractors were engaged during actual project design and construction with an emphasis on education as opportunities arose. Contractors are required to complete environmental training through the ECATTS web-based training system. Contractors are also required to submit erosion and sediment control certification when required by regulation.

Please include a general summary any corrective actions taken at construction sites, number of site plans reviewed, site inspections, and one or more example of follow-up actions.

During the third year of the MS4 permit, stormwater managers reviewed 15 site plans and conducted 12 formal site inspections. Project construction sites were also reviewed during required quarterly MSGP site inspections. See attached Inspection Tracker (Attachment 5).

Corrective actions identified during construction inspections were all minor. A filter vault full of water and not draining was identified, but the vault had not yet been placed in service. The vault was in service by the following survey. A catch basin installed next to a wash rack was investigated to determine it was not connected to the wash rack drain and sanitary sewer. Construction management confirmed that storm water vaults previously found with sediment inside had been cleaned before government acceptance. A trench drain pipe incorrectly installed was modified to direct flow appropriately to containment or to storm sewer, as appropriate.

MCM6: Pollution Prevention and Good Housekeeping in Municipal Operations



Have you established maintenance standards that are protective of facility function for all permanent stormwater facilities used for onsite management, flow control and treatment? Yes

Were all required maintenance activities, as relevant, undertaken per the schedules in Part 2.5.1.2? No

➤ Please explain:

Improvements in stormwater maintenance continue to be implemented. The project to identify and map all stormwater facilities at Navy facilities within the Northwest Region has been completed. As a result of completion of the project, inventory information continues to be updated in the real property database to ensure adequate funding for all maintenance activities. The procedures to accomplish this are being developed at the headquarters level, with a goal for completion in FY2026. Similarly, stormwater structures and required activities have been added to the maintenance database for tracking. NBK continues to work with its maintenance contractors to implement the maintenance standards developed and adopted under the first year of the MS4 permit to ensure complete and thorough maintenance. The contractors' maintenance programs have been assessed, and gaps within the programs have been identified and brought to contract management for resolution. Appropriate maintenance for biofiltration units has been defined for the next grounds maintenance contract to be awarded in FY2025. Stormwater maintenance execution by the base operating services contractor (BOSC) is being assessed and prioritized through biweekly meetings. BOSC performance continues to be assessed by public works.

Does your operation and maintenance program include an enforceable mechanism that clearly identifies the party/parties responsible for maintenance? Yes

During this reporting year have you conducted inspections of all stormwater treatment and flow control BMPS/facilities that discharge to the MS4 at least annually or per an alternative schedule as established in the SWMP based on maintenance records or other documented information?

No

➤ Please explain:

Improvements in stormwater maintenance continue to be implemented. The project to identify and map all stormwater facilities at Navy facilities within the Northwest Region has been completed. As a result of completion of the project, inventory information continues to be updated in the real property database to ensure adequate funding for all maintenance activities. The procedures to accomplish this are being developed at the headquarters level, with a goal for completion in FY2026. Similarly, stormwater structures and required activities have been added to the maintenance database for tracking. NBK continues to work with its maintenance contractors to implement the maintenance standards developed and adopted under the first year of the MS4 permit to ensure complete and thorough maintenance. The contractors' maintenance programs have been assessed, and gaps within the programs have been identified and brought to contract management for resolution. Appropriate maintenance for biofiltration units has been defined for the next grounds maintenance contract to be awarded in FY2025. Stormwater maintenance execution by the base operating services contractor (BOSC) is being assessed and prioritized through biweekly meetings. BOSC performance continues to be assessed by public works.

Please specify the number of inspections of permanent stormwater facilities conducted pursuant to Parts 2.5.2. Please also indicate what percentage of the overall number of permanent stormwater facilities these numbers represent.

NBK established a risk-based approach to stormwater inspection and maintenance, focusing its maintenance contractor efforts on oil/water separators in 2023; 11 of 12 were pumped and fully cleaned. Several biofiltration units were also cleaned out. Specifications for maintaining all biofiltration treatment across the installation were developed for the new grounds maintenance contract that will begin 1 Oct 2024. NBK continues to develop a list of flow control devices through review of plans/drawings, site review, and the new stormwater maps delivered by contract in 2023 (see #17 above). These units are being assessed as part of inventory development and will be incorporated into facility maintenance tracking systems following development of a comprehensive inventory.

During this reporting year, have you conducted spot checks of all permanent stormwater facilities, per the requirements of Part 2.5.3 after all major storm events? Yes

Please specify the number of catch basins and inlets that were inspected during this reporting year. Please also indicate what percentage of the overall number of catch basins and inlets, this represents.

NBK has an estimated 3252 stormwater catch basins located at properties covered under the permit, of which 747 (23%) were inspected in the second half of CY2021. Beginning in CY2022, stormwater catch basin maintenance was tracked by the responsible contractor in groups. The number of catch basins in each group was not identified, so the number of catch basins inspected and cleaned could not be determined. Discussions were held with the contractor about reporting requirements to ensure numerical data could be captured and it will be included in future reports.

Please specify the number of catch basins cleaned during this reporting year.

Beginning in CY2022, stormwater catch basin maintenance was tracked by the responsible contractor in groups. The number of catch basins in each group was not identified, so the number of catch basins inspected and cleaned could not be determined. Discussions were held with the contractor about reporting requirements to ensure numerical data could be captured and it will be included in future reports.

During this reporting year, did you undertake and complete all the necessary maintenance, as required by Part 2.5.6 of the Permit, and as described in the SWMP document? No

➤ Please explain:

Maintenance required by part 2.5.6 was conducted by contractor. QC of the maintenance reported by the contractor continues to identify discrepancies with performance standards and established requirements for execution. Contractor performance is being reviewed at upper levels of public works management.

Please briefly describe the animal waste management activities at the facility during this reporting year.

Periodic surveys of pet waste management at recreation areas and housing common areas were performed. NBK housing areas have pet waste stations for use by residents located at properties covered under the permit. Six additional stations were installed in recreation areas in 2023 to supplement those already in place. During the third permit year, 17 rolls of 200 bags were replaced in four stations maintained by the Installation Environmental Office. Usage statistics for pet waste stations in housing were not available.

Please describe any training provided during this reporting period, including new employee training and follow-up training.

NBK established a new environmental awareness training program in 2023 for workers, addressing best management practices for industrial operations and maintenance for pollution prevention, to include stormwater. Monthly training sessions have been well attended, with the goal of rotating through all industrial shops for presentation.

Have you developed and implemented SWPPPs for all heavy equipment maintenance and storage yards and all material storage facilities within the MS4 area that are not already regulated under the MSGP? N/A

During this reporting year, have you kept records of all inspections, findings of inspections, follow up actions to correct problems, and all maintenance? No

➤ Please explain:

Improvements in stormwater maintenance continue to be implemented. The project to identify and map all stormwater facilities at Navy facilities within the Northwest Region has been completed. As a result of completion of the project, inventory information continues to be updated in the real property database to ensure adequate funding for all maintenance activities. The procedures to accomplish this are being developed at the headquarters level, with a goal for completion in FY2026. Similarly, stormwater structures and required activities have been added to the maintenance database for tracking. NBK continues to work with its maintenance contractors to implement the maintenance standards developed and adopted under the first year of the MS4 permit to ensure complete and thorough maintenance. The contractors' maintenance programs have been assessed, and gaps within the programs have been identified and brought to contract management for resolution. Appropriate maintenance for biofiltration units has been defined for the next grounds maintenance contract to be awarded in FY2025. Stormwater maintenance execution by the base operating services contractor (BOSC) is being assessed and prioritized through biweekly meetings. BOSC performance continues to be assessed by public works.



Please provide a short statement summarizing your overall compliance with the Permit conditions and progress towards achieving the control measures, during this reporting year.



#### Minimum Control Measure (MCM) #1 – Education and Outreach

NBK is fully compliant with education and outreach requirements in the MS4 permit. Implementation efforts and accomplishments during the third permit year include:

- Pet waste management
  - o Distributed pamphlets on pet waste environmental impact to housing residents
  - o Posted educational signage on pet waste environmental impact at pet waste stations
  - o Installed additional pet waste stations and signage for recreational areas
  - o Conducted pet waste surveys of base housing to evaluate resident and housing management compliance with policy
  - o Hunt Military Communities engaged with base housing residents on pet waste management throughout the year
- Continued focused education on spill awareness and reporting
  - o Production and distribution of flyers, posters and magnets containing information for reporting spills and illicit discharges
  - o Initiated environmental awareness training, to include BMPs to prevent spills and illicit discharges, for all installation personnel
  - o Emphasized installation policy against vehicle maintenance being performed in parking lots via a graphical magnet distributed to all unaccompanied housing residents
- The Installation Environmental Office engaged the public face to face at the following events on (1) the environmental impacts associated with illegal discharges, spills, and improper disposal of waste and how to report them, and (2) pet waste management for bacterial control of pollutants at the following events in 2023:
  - o Initiated monthly face-to-face environmental awareness training for industrial workers.
  - o Housing BBQ 29 April
  - o Annual recreational fishing derby at Trident Lakes, June 3, about 450 attendees
  - o Spoil Your Dog Day, August 2

#### MCM #2 – Public Involvement and Participation

NBK is fully compliant with public involvement and participation requirements in the MS4 permit. Implementation efforts and accomplishments during the third permit year include:

- Informal communication with engineering design and construction staff for specific project issues
- Monthly stormwater meetings with stormwater management personnel at Navy installations across the region
- Engagement with Joint Base Lewis-McChord to share information and ideas
- Continued engagement with Native American tribes regarding environmental issues
- Participation in the Washington Dept. of Ecology's Stormwater Action Monitoring Program
- Coordination with the contractors tasked with maintenance of stormwater structures
- Coordination with Integrated Solid Waste Program to eliminate illicit discharges
- Coordination with the West Sound Stormwater Outreach Group for the development of education and public involvement initiatives.

#### MCM #3 – Illicit Discharge Detection and Elimination

NBK is fully compliant with illicit discharge detection and elimination requirements in the MS4 permit. Implementation efforts and accomplishments during the third permit year include:

- Continuing facility water conservation programs to minimize discharges from lawn watering and irrigation
- Continued dry weather screening program to identify illicit discharges, particularly targeting fecal coliform in discharges leading to Liberty Bay and Clear Creek.
- Staff training beyond permit requirements for awareness in identifying and reporting illicit discharges through face-to-face environmental awareness training

#### MCM #4 – New Development, Redevelopment, and Construction Site Runoff Control and

#### MCM #5 – Post-Construction Site Runoff Control

NBK is fully compliant with development, construction, and post-construction site runoff requirements in the MS4 permit. Implementation efforts and accomplishments during the third permit year include:

- Review of 15 site plans for inclusion of MS4 requirements
- 12 formal inspections of temporary and permanent stormwater treatment and flow control BMPs/facilities and catch basins
- o Numerous informal and drive-by inspections exceeded MS4 permit requirements
- Implementation and completion of corrective actions addressing inspection findings
- Developed list of potential projects for stormwater infrastructure investment
- Continued stormwater sampling and analysis to identify any contaminants of concern for priority action

#### MCM #6 – Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance

NBK continues to implement its operations and maintenance program for compliance with the requirements of the MS4 permit. The NBK Clean Water Act instruction established operational and maintenance responsibilities in accordance with the MS4 permit. Stakeholders have been engaged to ensure adoption of all requirements. The SWMP details practices and procedures, including operations and maintenance requirements. NBK continues to address stormwater infrastructure maintenance completion and tracking with the goal of establishing compliance with all requirements.

Implementation efforts and accomplishments during the third permit year include:

- Completion of stormwater mapping contract
- o Ongoing review to identify all stormwater structures across the installation and required inspections
- Continuing assessment of existing contract maintenance and reporting requirements and identification of potential gaps
- o Engagement with maintenance contractor toward MS4 and SWMP compliance
- o QC and feedback on contractor-performed maintenance

- Continued development of stormwater maintenance tracking and reporting
- Pet waste assessments in housing and recreation areas
- Installation of additional pet waste stations
- Education and outreach to residents on pet waste environmental impact

For Annual Reporting Year 1: Did you select monitoring Option 1 (Monitoring/Assessment Plan) or monitoring Option 2 (participation in the Stormwater Action Monitoring Program)?

Option 2

Please summarize your activities as a participant with the Stormwater Action Monitoring Program.

Through negotiations with the Washington Dept. of Ecology Stormwater Action Monitoring (SAM) Network, the Navy is considered a n active participant through annual payment. The regional MS4 manager participates in SAM Stormwater Work Group meetings, and while not currently voting on project proposals, the ability to do so in the future is available.

During this reporting year, have you complied with all elements of your Quality Assurance Program Plan (QAPP) developed pursuant to the requirements of part 3.3.9 of the Permit? Yes

Are you complying with the record-keeping requirements of Part 3.6 of the Permit? Yes

During this reporting year have you ensured that an updated SWMP and all SWMP records are available to the public? Yes

Please discuss what records are available on your website, any requests you have received for records and your responses.





The SWMP was published to the public web site in accordance with MS4 permit requirements.

During this reporting year, have any transfers of operational authority or responsibility or boundary changes to your facilities resulted in either an increase or a decrease in the Permit Area? No

Please provide an annotated list of any attachments to this Annual Report.

- Attachment 1: NBK Water Conservation Progress
- Attachment 2: Dry Weather Analytical Summary 2023
- Attachment 3: 2023 Spill Log
- Attachment 4: Dry Weather Survey Summary 2023
- Attachment 5: Construction Inspection Tracker
- Attachment 6: MS4 Early Actions Project Sampling Results

Use the space below as needed to attach files to your Annual Report:

Name	Uploaded Date	Size
 Atch 2A - Hood 2 Specials (Bangor) 8-2-23.pdf (attachment/177)	03/26/2024	1.38 MB
 Atch 2 - Dry weather analytical summary 2023.xlsx (attachment/178)	03/26/2024	587.71 KB
 Atch 1 - NBK Water Conservation Progress.pdf (attachment/179)	03/26/2024	184.21 KB
 Atch 6 - EAP Follow-up Sampling Summary.xlsx (attachment/171)	03/26/2024	23.93 KB
 Atch 5 - Construction Site Inspection Tracker.xlsx (attachment/172)	03/26/2024	22.40 KB
 Atch 4 - Dry weather survey summary 2023.docx (attachment/173)	03/26/2024	25.41 KB
 Atch 3 - MS4 Spills.xlsx (attachment/174)	03/26/2024	16.86 KB
 Atch 2B Hood 2_ Specials +100_12-7-23.pdf (attachment/176)	03/26/2024	1.47 MB

Are all monitoring data collected during this reporting year, as applicable, attached to this Annual Report? Yes

Required Response to Exceedances of Water Quality Standards

During this reporting year were any exceedances of water quality standards identified, per the terms of Part 4 of the Permit? No

Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction, or supervision, in accordance with a system designed to assure that qualified personnel gathered and evaluated the information submitted. Based upon my inquiry of the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment for willful violations.

Certified By: Rory S. Eisele

Certifier Title:

Certifier Email: rory.eisele@navy.mil

Certified On: 03/28/2024 7:28 PM ET