Annual Report
Naval Air Station Whidbey Island
Municipal Separate Storm Sewer System (MS4)
Permit WAS026611

Reporting Period

- ☐ Year 1 Reporting Period: effective date of the permit – January 31, 2022
- ☒ Year 2 Reporting Period: February 1, 2022 – January 31, 2023
- ☐ Year 3 Reporting Period: February 1, 2023 – January 31, 2024
- ☐ Year 4 Reporting Period: February 1, 2024 – January 31, 2025
- ☐ Year 5 Reporting Period: February 1, 2025 – January 31, 2026
- ☐ Other _____

General Information

Contact Person Name and Title: Leanne McConnell, Water Program Manager

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Stormwater Website URL: https://cnrnw.cnic.navy.mil/Operations-and-Management/Environmental-Stewardship-and-Compliance/Water-Quality-Information/

Signature and Certification

Certification: *"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 properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Signature: _____ Date: 30 MAR 23

Printed Name: ERIC HANKS

Signatory Title: Captain, US Navy, Commanding Officer

Section I. Permittee Responsibility (Part 1):
If you answer "NO" to any of these questions, please explain in the Comments section.

Year 1 Annual Report		
1.	YES ☐ NO ☒	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? *If the answer is "YES", use the Comments section to briefly list the one or more documents, plans or programs you have requested be considered as an Equivalent Document, Plan or Program. Cite the relevant Permit provision for each.* (Part 1.5)
All Reporting Years		
2.	YES ☒ NO ☐	Have PFAS-containing AFFFs been used for any reason at Naval Air Station Whidbey Island during this reporting year? *If yes, please explain in the Comments section.* (Part 1.3.4)
3.	YES ☐ NO ☒	Do you, the Permittee, share Permit implementation responsibility with one or more Outside Entity for compliance with the Permit? *If yes, please explain in the Comments section*. (Part 1.4.1))
4.	YES ☐ NO ☒	If the answer to question 4 is "yes," is the agreement with Outside Entity(s) formalized in a written and binding agreement between parties? (Part 1.4.1)
5.	YES ☐ NO ☒	If the answer to question 5 is "yes," is the agreement with Outside Entity(s) described/cited in the Stormwater Management Program (SWMP) Document? (Part 1.4.1)
6.	YES ☒ 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? (Part 1.4.2)
7.	YES ☒ NO ☐	Are you maintaining system(s) to track SWMP data and information? (Part 1.4.4)

Permittee Responsibility and Equivalent Documents, Plans or Programs Comments:

2. On July 11, 2022, a small tool fire in the maintenance bay of Hanger 15 (Bldg. 2990) at Ault Field tripped the Aqueous Film Forming Foam (AFFF) fire suppression system releasing 250 gallons of concentrated Arctic™ Foam 3 percent MIL-SPEC-AFFF. Personnel responded to the release of AFFF immediately and shut down the fire suppression system. However, the building's AFFF containment system diverter valve failed to activate, resulting in the discharge of approximately 7,500 gallons of diluted AFFF to the wastewater system. There were no impacts to the stormwater system.

4. No formal agreement is necessary based on the answer to question 3.

5. No formal agreement is necessary based on the answer to question 3.

Section II. Stormwater Management Program (SWMP) Control Measures (Part 2)
Please answer all questions and provide all requested descriptions of SWPPP activities.

Education and Outreach on Stormwater Impacts (Part 2.1)
If you answer "NO" to any of these questions, please explain in the Comments section.

8.	YES ☒ NO ☐	Have you listed and publicized means for the public and Permittee personnel to report spills and other illicit discharges? (Part 2.1.1.1)
9.	YES ☒ NO ☐	Have you informed target audiences of the environmental impacts associated with illegal discharges and improper disposal of waste and how to report them? (Part 2.1.1.1)
10.	YES ☒ NO ☐	Have you selected specific education and outreach topics to build general awareness and effect behavior change? *Please list these topics in the Comments section.* (Part 2.1.1.3)
11.	Narrative	*In the Comments section, please summarize your activities and accomplishments as part of the Southern Resident Killer Whale Outreach and Education efforts.* (Part 2.1.2)
12.	YES ☒ NO ☐	Have you conducted public education and outreach activities specifically on bacterial pollution problems? (Part 2.1.3)
13.	YES ☒ NO ☐	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? *In the Comments section, 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.* (Part 2.1.4) *Please also include one or more example of successful education/outreach.* (Part 2.1.4)

Education and Outreach Comments:

10. The specific topic chosen to build general awareness and effect behavioral change is appropriate spill prevention practices and spill response. Additional topics include proper management of street, parking lot, sidewalk, and building wash water, proper recycling, and pet waste management.

11. 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 may impact stormwater management. During Year 2, Naval Air Station Whidbey Island (NASWI) participated in Orca Recovery Day volunteer event on October 15, 2022 (NOAA Marine Debris Survey beach cleanup) with Sound Water Stewards, WSU Ext Waste Wise, and WA State Parks. (2.2.4 Volunteer activities).

13. Multiple successful education/outreach examples and efforts to assess behavioral changes were identified in during Year 2 of the permit term.

NASWI and base housing (Hunt Properties) conducted a pet waste awareness campaign in Year 2 of the permit term. Two pet waste problem areas were identified near Seaplane Base.

- October 11, 2022, educational signs were placed in these areas and flagged each pet waste left behind. 240 flags were placed between the 2 areas (190 at location 1, 50 at location 2).
- October 22, 2022, there was a large display at the Hunt Properties Fall Festival about the pet waste campaign. 1/3 of the display had general stormwater awareness information. 2/3 of the educational display focused on human health and environmental impacts from pet waste. There was a “Scoop the poop” pledge for residents to sign to receive a pet waste bag dispenser and bags. 40 residents signed the pledge and 600 residents attended the festival (adults and children).
- October 26, 2022, pet waste and flags were removed.
- November 2, 2022, the Environmental Outreach Coordinator wrote an article to be sent electronically to all Hunt Properties residents. The article focused on the pet waste campaign and the environmental and human health impacts of pet waste.
- November 17, 2022, the areas were re-flagged. 51 flags were placed on this reflagging day (32 at location 1, 19 at location 2).

Through continuous education and outreach efforts, personnel have become more actively involved with the Naval Air Station Whidbey Island (NASWI) Public Works Department (PWD) Environmental Division.
- Spill response continued to be a focus in 2022. A regional worst case discharge tabletop exercise was held in December 2022. The drill set up an initial command post according to ICS-201, and tested the early hour reactive phase response to a spill in the water, notification systems, and contingency plans. Real time weather and tides were used. Spill response efforts are further exemplified through the Facility Response Teams (FRT) monthly response training drills.
- All NASWI personnel are trained in spill awareness, including emergency and non-emergency spill protocols and procedures. The training tools distributed are now presented in a spill response flowchart, as opposed to list form.

Public Involvement/Participation (Part 2.2)
If you answer "NO" to any of these questions, please explain in the Comments section.

14.	YES ☐ NO ☐ NA ☒	Have you complied with applicable federal notice requirements, as relevant? (Part 2.2.1)
15.	YES ☒ NO ☐	Have you conducted one or more meetings to coordinate among appropriate staff, managers and others who play a role in Permit implementation? *Briefly describe meeting(s), participants and topics in the Comments section.* (Part 2.2.2)
16.	Narrative	*In the Comments section, please describe any engagement with affected entities in setting priorities for the stormwater program*. (Part 2.2.2)
17.	YES ☒ NO ☐	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? *Please describe these events and activities in the Comments section.* (Part 2.2.4)

Public Involvement/Participation Comments:

15. Monthly regional stormwater meetings are held with key stormwater 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 including the MS4 permit, MSGP, and CGP. The meetings provide a collaborative approach to stormwater management at the NW installations. The table on the next page, Summary of Monthly Stormwater Meetings, is a summary of meetings held since February 2022. NASWI PWD Environmental Division has internal meetings for ongoing environmental discussions across different media areas.

NAVFAC Design and Construction (D&C), NASWI Facilities Engineering and Acquisition Division (FEAD), and PWD Environmental Division continuously engage in project meetings to stay abreast of developments and environmental requirements applicable to construction projects. Engagement between PWD Environmental Division and Utilities began before the MS4 permit was issued and maintenance efforts are addressed using a team approach.

16. During Year 2 of the MS4 permit, meetings were held with design, facilities, utilities, construction, and environmental staff to discuss permit requirements and effects on existing installation practices, projects, and operations. Priorities are focused on ensuring proper planning up front on future projects and how to adjust current projects to include permit requirements.

17. Please see Appendix 2 for a full list of volunteer activities completed at NASWI in 2022.

Summary of Monthly Regional Stormwater Meetings

Year	Month	Short Summary of Meeting Topics
2022	February	SWMPs, annual reports, EAP, SRKW training
	March	Education, IDDE, pet waste materials, EAP sampling
	April	IDDE, educational materials, SWMPs, annual reports
	May	BMPs, SRKW, construction training, education and outreach materials, future funding discussions
	June	Funding discussions, BMPs
	July	6PPD, contract language, sampling, mapping, IDDE, outreach, training
	August	No meeting held due to scheduling conflicts
	September	Meeting not held, combined with October meeting instead
	October	Outreach events, SWMPs, stormwater inventory, contracting specifications
	November	SWMP reviews, annual reports, sampling, mapping, BMP evaluation
	December	New technology, funding update, annual reports, maintenance, MSGP annual report
2023	January	BMPs, sampling, budget, education and outreach materials

Illicit Discharge Detection and Elimination (Part 2.3)

If you answer "NO" to any of these questions, please explain in the Comments section.

18.	YES ☐ NO ☐ NA ☒	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? *For Annual Reporting Years 1 through 4, you may check NA if these maps have not yet been completed.* (Part 2.3.1)
19.	YES ☐ NO ☐ NA ☒	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? *For Annual Reporting Years 1 and 2, you may check NA if you have not yet implemented effective policies and procedures.* (Part 2.3.2)
20.	YES ☒ NO ☐ NA ☐	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? (Part 2.3.2.2.1)
21.	YES ☒ NO ☐ NA ☐	Have discharges from lawn watering and other irrigation runoff been minimized through public education and water conservation efforts? Part 2.3.2.2.2)
22.	YES ☐ NO ☐ NA ☒	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? (Part 2.3.2.2.3)
23.	YES ☒ NO ☐ NA ☐	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? (Part 2.3.2.2.4)
24.	YES ☐ NO ☒ NA ☐	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? (Part 2.3.2.2.5)
25.	YES ☐ NO ☒	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? (Part 2.3.2.2.6)
26.	YES ☒ NO ☐	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? (Part 2.3.3.1)
27.	YES ☒ NO ☐ NA ☐	Do you conduct a dry weather analytical and field screening monitoring program to identify non-stormwater flows from stormwater outfalls? *For Annual Reporting Years 1 and 2, you may check NA if you have not yet begun dry weather field screenings. (Part 2.3.3.2.1)*

28.	YES ☐ NO ☐ NA ☒	For Annual Reporting Year 5 only, have you completed field screening of at least 75% of all MS4 outfalls located within the Permit Area? *For Annual Reporting Years 1 through, you may check NA unless you have completed screening of 75% of the MS4 outfalls in the Permit Area.* (Part 2.3.3.2.2)
29.	YES ☒ NO ☐	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? (Part 2.3.3.2.3)
30.	YES ☒ NO ☐	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? (Part 2.3.3.3)
31.	YES ☒ NO ☐	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? (Part 2.3.3.3)
32.	Narrative	*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.* (Parts 2.3.3.3.1, 2.3.3.3.2 and 2.3.3.3.3)
33.	YES ☒ NO ☐	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? (Part 2.3.3.4)
34.	Narrative	*In the Comments section, 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.* (Part 2.3.3.4.1) *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.* (Part 2.3.3.4.2)
35.	YES ☒ NO ☐	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? (Part 2.3.3.5)
36.	YES ☒ NO ☐	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? (Part 2.3.3.6)
37.	YES ☒ NO ☐	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? (Part 2.3.3.6.1)
38.	YES ☒ NO ☐	Do these procedures include initiation of action to eliminate the illicit connection within 45 days of confirming the connection? (Part 2.3.3.6.1)
39.	YES ☒ NO ☐	Have all staff responsible for investigating, identifying and eliminating illicit discharges, spills, and illicit connections into the MS4 received program-specific training? (Part 2.3.4)

40.	Narrative	*In the Comments section, please describe any training provided during this reporting period, including new employee training and follow-up training*. (Part 2.3.4)
41.	Narrative	*In the Comments section, 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.* (Part 2.3.5)

Illicit Discharge Detection and Elimination Comments:

24. MS4 Permit Section 2.3.2.2.5 states, “Following a one-time sampling of accumulated stormwater for any pollutant that might reasonably be expected to occur based on current or legacy activities, and verification that no pollutants occur at concentrations that would cause or contribute to water quality impairments, accumulated stormwater in utility vaults may be discharged to the MS4 following a visual inspection that verifies that no sheens or accumulated solids are present in the discharge. If at any time a spill in or into the vault occurs, this provision is suspended until additional sampling confirms that pollutants will not cause or contribute to water quality impairments.” In accordance with this section a Vault Inspection Form is being implemented to document visual inspections prior to any discharge of stormwater accumulated in utility vaults. Currently, vaults that do require water to be pumped from them are visually inspected for oil. If there is an indication of oil, the water is pumped and sent to an Oil Water Separator. Additionally, ongoing trainings have highlighted this requirement and a plan to conduct sampling is being developed. Not all aspects of this requirement have been established, however efforts are being made to meet this permit requirement during 2023.

25. The MS4 Permit Section 2.3.2.2.6 states, “"Following sampling of accumulated stormwater for any pollutant that might reasonably be expected to occur based on current or legacy activities, and verification that no pollutants occur at concentrations that would cause or contribute to water quality impairments, accumulated stormwater in secondary containment structures may be discharged to the MS4 following a visual inspection that verifies that no sheens or accumulated solids are present in the discharge. Stormwater sampling must be repeated after any incident in which pollutants have collected in the secondary containment structure and the same assessment procedures followed." In accordance with this section, each time a secondary containment is drained a visual inspection is completed. Secondary containment valves are to remain secured at all times. After a rain event the tenant will conduct a visual inspection of the secondary containment, if no sheen or POL is present in the secondary containment the tenant will then drain the containment and re-secure the valve. If a sheen or POL are present in the secondary containment the tenant will determine if they can remove the sheen/POL with absorbent pads and dispose of them properly before draining the containment. If the tenant cannot remove the sheen/POL they will contact the Base Operating Support Contract (BOSC) contractor and the BOSC contractor will dispatch a vacuum truck and crew to clean out the containment. Not all aspects of this requirement have been established, however efforts are being made to meet this permit requirement during 2023.

32. For incidental spills that tenants can cleanup with spill response supplies, the spills are responded to, cleaned up, and notification is made to PWD Environmental Division. For spills that tenants cannot cleanup due to size/supplies/personnel/etc. the BOSC contractor will be contacted to respond. Emergency spills are when the NASWI Federal Fire Department (FFD) is notified to respond, once the FFD competes their initial assessment notification is made to the BOSC contractor to complete cleanup operations. The processes for characterizing the nature of, and potential public or environmental threat posed by illicit discharges is included in the SWMP Plan.

34. No reportable spills during permit term, no notifications were required.

40. Please see training a list of training courses and summaries in Appendix 1.

41. During Year 2, initial dry weather visual field assessments of all known MS4 outfalls were completed. Inspection forms were completed for each location and any follow-up field assessments are anticipated to be completed later in the permit term.

New Development, Redevelopment, and Construction Site Runoff Control (Part 2.4)
If you answer "NO" to any of these questions, please explain in the Comments section.

42.	YES ☒ NO ☐	Does the SWMP document describe, and are you implementing, a program to reduce pollutants in stormwater runoff to the MS4 from all construction, new development and redevelopment project site activities in the Permit Area, including roads? (Part 2.4)
43.	YES ☒ NO ☐ NA ☐	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? *Only choose NA if there were none of these activities in the Permit Area during this reporting year.* (Part 2.4.1)
44.	YES ☒ NO ☐	Have you implemented an enforceable mechanism to address runoff from new development, redevelopment and construction site projects to include the minimum requirements, thresholds and definitions? (Part 2.4.2.1)
45.	YES ☒ NO ☐	Does the enforceable mechanism include all of the criteria listed in Part 2.4.2.2 of the Permit? (Part 2.4.2.2)
46.	YES ☐ NO ☒	Have you had any equivalent criteria approved by EPA for use in stormwater controls from new development, redevelopment, and construction site runoff? *If so, in the Comments section please describe how these have been utilized during this reporting year.* (Part 2.4.2.4)
47.	YES ☒ NO ☐	Have you implemented policies and procedures, including contract mechanisms, to ensure review of all stormwater site plans for proposed development activities? (Part 2.4.3.1)
48.	YES ☒ NO ☐ NA ☐	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? *Only choose NA if there were none of these activities in the Permit Area during this reporting year.* (Part 2.4.3.2)
49.	YES ☒ NO ☐ NA ☐	Do you inspect all development sites during construction to verify proper installation and maintenance of required erosion and sediment controls? *Only choose NA if there were none of these activities in the Permit Area during this reporting year.* (Part 2.4.3.3)
50.	YES ☒ NO ☐ NA ☐	During this reporting year, did you take the necessary enforcement actions, as relevant, based on the results of these inspections? *If yes, please describe in the Comments section. Only choose NA if there were no construction activities in the Permit Area or you did not identify any failures to properly install or maintain the required controls.* (Part 2.4.3.3)
51.	Narrative	*In the Comments section 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.* (Part 2.4.3.4)
52.	YES ☒ NO ☐ NA ☐	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? *Only choose NA if there were none of these activities in the Permit Area during this reporting year.* (Part 2.4.3.5)

53.	YES ☒ NO ☐	Are all maintenance requirements assigned/entered into the electronic tracking system for stormwater treatment and flow control BMPs/facilities? (Part 2.4.3.5)
54.	YES ☒ NO ☐	Do you keep adequate records to document that all the requirements of Part 2.4.3 of the Permit have been fully implemented? (Part 2.4.3.6)
55.	YES ☒ NO ☐	Were at least 80% of scheduled inspections completed during this reporting year? (Part 2.4.3.6)
56.	YES ☒ NO ☐	Have you established and implemented an internal tracking system to respond to issues of non-compliance? (Part 2.4.3.7)
57.	Narrative	*Annual Reporting Year 1: In the Comments section, 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.* (Part 2.4.4)
58.	Narrative	*Annual Reporting Year 2-5: In the Comments section, 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.* (Part 2.4.4)
59.	YES ☐ NO ☐ NA ☒	*Annual Reporting Year 4:* Have you submitted a written Stormwater Infrastructure Investment Plan to EPA that documents future investments and upgrades in Naval Air Station Whidbey Island's stormwater infrastructure designed to improve MS4 discharge quality, AND that meets all of the requirements of Part 2.4.4? (Part 2.4.4)
60.	Narrative	*In the Comments section, please describe any training provided during this reporting period, including new employee training and follow-up training*. (Part 2.4.5)
61.	Narrative	*In the Comments section, 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.* (Part 2.4.6)

New Development, Redevelopment, and Construction Site Runoff Control Comments:

46. No equivalent criteria has been submitted to EPA for approval.

49. As SWMP requirements continue to be implemented, completion and tracking of inspection efforts are enhanced. Contractors are responsible for completing inspection for construction projects that require permit coverage under the Construction General Permit. Please see Appendix D of the SWMP for a list of construction inspections and tracking efforts. Requirement procedures are identified in the SWMP Plan.

50. There were seven enforcement actions completed for the 2022 reporting year. These actions included enforcement of perimeter controls, covering and slope protection, and control of solid waste.

51. 100%. There were two new development construction projects active in 2022.

57. Not applicable. Currently in Year 2.

58. Please see Appendix 4 for Summary of EAPs and statuses.

60. For the 2022 reporting year, approximately 22 construction contractors completed stormwater training through the ECATTS web-based training system.

61. Refer to Appendix 3 for number of site plans reviewed and site inspections. Refer to comment for Question 50 above for corrective actions and follow-up actions.

Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance (Part 2.5)

If you answer "NO" to any of these questions, please explain in the Comments section.

62.	YES ☒ NO ☐	Have you established maintenance standards that are protective of facility function for all permanent stormwater facilities used for onsite management, flow control and treatment? (Part 2.5.1.1)
63.	YES ☒ NO ☐	Were all required maintenance activities, as relevant, undertaken per the schedules in Part 2.5.1.2? (Part 2.5.1.2)
64.	YES ☒ NO ☐	Does your operation and maintenance program include an enforceable mechanism that clearly identifies the party/parties responsible for maintenance? (Part 2.5.1.3)
65.	YES ☒ NO ☐	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? (Part 2.5.2)
66.	Narrative	*In the Comments section, 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.* (Part 2.5.2)
67.	YES ☒ NO ☐	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? (Part 2.5.3)
68.	Narrative	*In the Comments section, 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.* (Part 2.5.4)
69.	Narrative	*In the Comments section, please specify the number of catch basins cleaned during this reporting year.* (Part 2.5.4)
70.	YES ☐ NO ☒	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? (Part 2.5.6) *Please briefly describe in the Comments section.*
71.	Narrative	*In the Comments section, please briefly describe the animal waste management activities, during this reporting year.* (Part 2.5.7)
72.	Narrative	*In the Comments section, please summarize all measures implemented to minimize or eliminate discharges of PFAS via the MS4.* (Part 2.5.8.1)
73.	YES ☒ NO ☐	Have you established specific protocols for minimizing the resuspension, conveyance and discharge of PFAS in the MS4, both during normal operations and during all maintenance and remediation activities? (Part 2.5.8.2)
74.	Narrative	*In the Comments section, please describe any training provided during this reporting period, including new employee training and follow-up training*. (Part 2.5.9)
75.	YES ☐ NO ☐ NA ☒	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? *Only choose NA if there were none of these facilities in the Permit Area OR if this is the Annual Report for Year 1.* (Part 2.5.10)

76.	YES ☒ NO ☐	During this reporting year, have you kept records of all inspections, findings of inspections, follow-up actions to correct problems, and all maintenance? (Part 2.5.11)

Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance Comments:

66. During the permit term, 16 inspections (100% of facilities) were completed.

67. A major storm event is considered to be rainfall greater than the 24 hour, 10 year recurrence interval. Based on rainfalls maps with the SWMMWWW (2019) a major storm event is 1.75 to 2 inches of rain. No qualifying rain event was identified during Year 2 of the permit term.

68 & 69. Please see Appendix 5 for a summary of catch basin inspections and cleanings.

70. During Year 2 of the MS4 permit, many of the activities listed in Section 2.5.6 completed in a manner that minimized discharges of pollutants, in accordance with the MS4 permit language. Multiple policies and procedures to reduce stormwater impacts from key areas and activities identified in Section 2.5.6 of the permit were evaluated and will continue to be improved. The BOSC completes many of the required activities in accordance with the current contract, including cleaning of culverts that convey stormwater, runway/airfield cleaning and ditch maintenance. A full assessment of practices is underway to ensure maintenance procedures are in accordance with this permit requirement.

71. Morale, Welfare, and Recreation (MWR) and Hunt Properties manage the pet waste stations at Ault Field and Seaplane Base. At NASWI, there are approximately 51 pet waste stations installed which are managed and inspected by the respective owner. MWR owns approximately 13 and Hunt Properties owns the majority.

72. Measures taken to minimize or eliminate discharges of PFAS include requiring large construction projects to have a plan for potential dewatering activities in areas likely or known to be impacted by PFAS, policies and procedures established within the SWMP Plan including a risk matrix to aid in decision making; additionally, a field test and demonstration of a Mobile PFAS Removal System to treat AFFF-impacted water was conducted and we are awaiting findings of the demonstration. Furthermore, AFFF is no longer used for training exercises and can only be used during a firefighting emergency.

74. Please see Appendix 1 for a list of stormwater trainings.

Section III. Monitoring, Recordkeeping and Reporting Requirements (Part 3)
If you answer "NO" to any of these questions, please explain in the Comments section.

77.	Narrative	*In the Comments section, please provide an evaluation of your compliance with the Permit conditions and progress towards achieving the control measures, during this reporting year.* (Part 3.1)
78.	☐ Option 1 ☒ Option 2	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)? *For all reporting years: If you selected Option 1, please answer questions 79, 80, 81 and 82. If you selected Option 2, please answer question 83.*
79.	Narrative	*In the Comments section, please summarize the results of all monitoring and evaluation undertaken during this reporting year. Discuss results of all types of assessments per the monitoring plan approved by EPA pursuant to Parts 3.3.1 through 3.3.10 of the Permit. Provide your interpretation of these data and how you are using them to inform your stormwater management program.* (Part 3.3)
80.	YES ☐ NO ☐	During this reporting year, was all sample collection, preservation and analysis conducted according to test procedures approved under 40 CFR Part 136, or another method approved by EPA (with the exception of PFAS – see next question)? (Part 3.3.4)
81.	Narrative	*In the Comments section, please indicate that analytical method(s) used during the reporting year for PFAS.* (Part 3.3.4.4)
82.	YES ☐ NO ☐	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? (Part 3.3.9)
83.	Narrative	*In the Comments section, please summarize your activities as a participant with the Stormwater Action Monitoring Program.*
84.	YES ☒ NO ☐	Are you complying with the record-keeping requirements of Part 3.6 of the Permit? (Part 3.6)
85.	YES ☒ NO ☐	During this reporting year have you ensured that an updated SWMP and all SWMP records are available to the public? (Part 3.7.2.2.2) *In the Comments section please discuss what records are available on your website, any requests you have received for records and your responses.*
86.	YES ☐ NO ☒	During this reporting year, have any boundary changes to your facilities resulted in either an increase or a decrease in the Permit Area? *If yes, please describe in the Comments section.* (Part 3.7.2.2.4)
87.	Narrative	*In the Comments section please provide an annotated list of any attachments to this Annual Report.* (Part 3.7.2.2.1)
88.	YES ☒ NO ☐	Are all monitoring data collected during this reporting year, as applicable, attached to this Annual Report? (Part 3.7.3)

Monitoring, Recordkeeping and Reporting Comments:

77. Compliance with the MS4 began before the official MS4 permit became effective in February 1, 2021. Efforts included incorporation of draft construction requirements, updating maps with stormwater structures, preparation for IDDE dry weather surveys, and development of maintenance standards. After the effective permit date, the efforts to meet compliance continue to improve.

MCM #1- NASWI is fully compliant with this MCM. Training and outreach efforts were established to meet permit compliance in 2021 and have continued. In addition to outreach and trainings identified in Appendix 1, outreach materials were purchased including spill response magnets, pet waste supplies, storm catch basin medallions, posters, and no vehicle maintenance magnets. Existing AEC/AEM training was updated to include MS4 permit requirements and multiple trainings were developed.

MCM#2 - NASWI is fully compliant with this MCM. See Appendix 1 for volunteer and outreach activities. Efforts will continue to increase engagement in stormwater pollution prevention activities.

MCM #3 - NASWI is implementing the final stages to meet compliance with this MCM. Procedures, in accordance with the MS4 permit, were developed and incorporated within the SWMP Plan. Additional activities taken include:
- A contract to update stormwater maps across the installation.
- Training target audiences on BMPs to prevent illicit discharges.
- A continuing water conservation program to minimize discharges from lawn watering and irrigation.
- Development of procedures for allowable discharges from utility vaults and secondary containment.

MCM #4/5 - NASWI is implementing the final stages to meet compliance with this MCM. Procedures and responsibilities were developed in accordance with the MS4 permit and incorporated within the SWMP Plan. Multiple trainings were held in during Year 2 of the permit to communicate permit requirements. Implementation efforts and accomplishments include:
- Training for project designers and construction management personnel
- Implementation and completion of all required site plan reviews and construction inspections
- Implementation and completion of corrective actions addressing inspection findings
- Updating project contract language to include MS4 and CGP requirements

MCM #6- NASWI is implementing the final stages to meet compliance with this MCM. In 2020 a Stormwater Utilities Engineer was hired to manage stormwater maintenance. Improvements with stormwater maintenance have been made since the effective date of the MS4 permit and will continue implementation efforts and accomplishments during the first permit year include:
- Inspection of catch basins in compliance with requirements
- Implementation of an audit to identify all stormwater structures requiring inspections
- Development of maintenance standards for stormwater structures
- Training for stormwater personnel on maintenance standards
- Ongoing development of stormwater maintenance tracking and reporting
- Pet waste assessments in housing and recreation areas

83. Through negotiations with the Stormwater Action Monitoring (SAM) Network, the

Navy is considered an 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 in the future is available. The Navy's participation in SAM is outlined in the Cover Letter provided in the Year 1 MS4 Annual Report.

85. The NASWI SWMP and MS4 Annual Reports are listed on the stormwater website (URL on the cover page of this report). There were no records requests in Year 2.

87. Annotated List of Attachments
Appendix 1 Education and Outreach Tables
Appendix 2, Public Involvement - Volunteer Activity Table
Appendix 3, Construction - Construction Inspection Tracker
Appendix 4, Construction - Summary of EAPs
Appendix 5, O&M - Catch Basin Inspections Table

Section IV. Required Response to Exceedances of Water Quality Standards (Part 4)

89.	YES ☐ NO ☒	During this reporting year were any exceedances of water quality standards identified, per the terms of Part 4 of the Permit? (Part 4)
90.	Narrative	*If yes, please describe in the Comments section all measures that were taken to mitigate the water quality standards exceedance, including notifications, adaptive management measures undertaken, schedules for implementation, and a status of current conditions. Include details per the provisions in Part 4 of the Permit.*

Required Reponses to Violations of Water Quality Standards Comments:

Appendix 1 - Education & Outreach Tables
NASWI MS4 WAS026611 Annual Report - Permit Year 2
February 1, 2022 to January 31, 2023

Outreach Summary					
Date	**Outreach Item**	**Topics Covered**	**Audience(s)**	**Distribution Method and # of personnel**	**Additional Information**
Oct-22	Stormwater Social Media Post	Orca Recovery Day NOAA Marine Debris Survey beach cleanup	All personnel	Distributed on NASWI Facebook page.	
Oct-22	Residential Pet Waste Awareness Campaign	Environmental and human health impacts of pet waste	Residents	Pet waste left in 2 areas were flagged and educational educational signs were placed about human health and environmental impacts of pet waste. The flags were left for 2 weeks, and then the area was cleaned up, and signs were removed. After 2 more weeks, the areas were re-flagged and the signs replaced. There were less flags placed during the reflagging event. The 2 flagging spots were within eyeshot of 40 residences, and one was within eyeshot of a park/kids play area.	
Oct-22	Residential Newsletter	Pet waste awareness campaign	Residents	Distributed electronically to 1449 households	
Ongoing	Stormwater Video and social media post (Region)	General stormwater awareness of MS4 permit, the impacts of stormwater runoff and tips for stormwater pollution prevention.	All personnel	Distributed through social media.	

Training Summary					
Date	**Training**	**Topics Covered**	**Audience(s)**	**Training Method and # of personnel**	**Additional Information**
Ongoing	Area Environmental Coordinator (AEC) Training	Stormwater awareness, regulatory and permit background, potential ecological impacts of stormwater runoff, proper BMPs usage and maintenance, allowable and prohibited discharges, key elements of the industrial stormwater program, common sources of stormwater pollution, and spill response.	Civilian and Military workers	In person trainings, 230 AECs	
Ongoing	Area Environmental Manager (AEM) Training	Stormwater awareness, regulatory and permit background, potential ecological impacts of stormwater runoff, proper BMPs usage and maintenance, allowable and prohibited discharges, key elements of the industrial stormwater program, common sources of stormwater pollution, and spill response.	Civilian and Military workers	In person training by AEC, estimated 150 AEMs	
Ongoing	New Sailor Monthly Indoctorination	General stormwater awareness, use of BMPs, spill response, base-wide stormwater policies such as no personal vehicle maintenance and no dumping in storm drains.	Military workers	In person brief conducted monthly. Approximately 480 personnel trained in reporting period.	
Ongoing	Sediment and Stormwater Construction Training	Introduction to laws and regulations, environmental impacts of soil erosion, principals of erosion and sedimentation, vegetative stabilization, principals of stormwater runoff, construction site pollution prevention, sediment and stormwater plans.	Civilian and Military workers associated with construction, and construction contractors	Virtual training through ECATTS, 4 completed training in 2022. Since, 2009, 116 personnel have completed the training.	
Ongoing	Stormwater--Comprehensive Overview: Washington	General stormwater awareness, sources of pollution, laws and regulations, MS4 permits, environmental impacts of stormwater, controlling sediments and erosion control on construction sites, point and non-point source pollution sources, BMPs, LID, managing stormwater in industrial areas, and cross connections.	Civilian and Military workers	Virtual training through ECATTS, 35 completed training in 2022.	
Ongoing	Stormwater--Basic Information: Washington	General stormwater awareness, sources of pollution, laws and regulations, environmental impacts of stormwater, controlling sediments, point and non-point source pollution sources, BMPs, managing stormwater in industrial areas, and cross connections.	Civilian and Military workers	Virtual training through ECATTS, 354 completed training in 2022. Since 2017, 3867 personnel (mainly military) have completed the training.	
Feb-22	Hazardous Substance Incident Response Management (HSIRM) Training	Training covers spill and incident response with respect to the Incident Command System (ICS), National Incident Management System (NIMS), tabletop exercises, spill response equipment delopyments.	Personnel responsible for spill response efforts	Completed by 27 attendees at NASWI.	

Appendix 2 - Public Involvement - Volunteer Activity Table
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Public Involvement - Volunteer Activity Details

Date	Activity	Notes
Apr-22	The interim Environmental Education and Outreach Coordinator organized an annual Earth Day tree planting ceremony. She coordinated with Public Works Planning Division and NEPA coordinator to prepare appropriate planting locations for five Garry oak saplings. She worked with volunteers to plant a tree with the base Commanding Officer, then planted the five Garry oaks donated by the Garry Oak Society.	Trees play a critical role in controlling stormwater runoff by helping to reduce the amount of runoff entering the MS4 and protecting surface water. Trees help to reduce sediment and nutrient loadings. Reference: https://www.epa.gov/sites/default/files/2015-11/documents/stormwater2streettrees.pdf
Apr-22	The interim Environmental Education and Outreach Coordinator worked with a local non-profit, Pacific Rim Institute for Environmental Stewardship, to organize two five-hour volunteer events held on Friday, April 22nd and Saturday April 23rd. She engaged in promotion and recruitment of Navy volunteers, providing them with registration and information. 34 Navy-affiliated volunteers attended between the two days, resulting in over 170 work hours for the non-profit.	The mission of the Pacific Rim Institute is "to equip people and communities to live sustainably and care for creation." For more information about the Pacific Rim Institute for Environmental Stewardship please visit: https://pacificriminstitute.org/who-we-are/
Oct-22	The Environmental Education and Outreach Coordinator worked with Sound Water Stewards, WSU Extension Waste Wise Program, and Washington State Parks on an Orca Recovery Day volunteer and education event. She engaged in promotion and recruitment of Navy volunteers to conduct a beach clean-up at an established NOAA Marine Debris Survey site at Fort Casey State Park. 10 Navy-affiliated volunteers attended, resulting in 30 work hours. Recovered trash from the beach cleanup included lumber with nails, cigerette butts, and plastic bottles. There were over 400 pieces of styrofoam recovered of various sizes.	The Marine Debris Monitoring and Assessment Project (MDMAP) is a NOAA citizen science initiative that engages NOAA partners and volunteers across the nation to survey and record the amount and types of marine debris on shorelines. The site at Fort Casey has been established by Sound Water Stewards. Sound Water Stewards provided additional education and hands-on activities about plastic degredation in oceans to volunteers and passerbys of the beach cleanup. https://soundwaterstewards.org/
Oct-22	The Environmental Education and Outreach Coordinator, water program manager, and air program manager worked with Base Housing representatives on a pet waste awareness campaign over 2 months. The campaign culminated at the Housing Fall festival where Navy-affiliated volunteers staffed an education booth about Residential stormwater requirements and the impact of pet waste. They engaged with Navy families and asked for their pledge to always pick up pet waste in base housing areas. 45 residents signed the pledge and recieved a pet waste bag dispenser and bags. 6 Navy-affiliated volunteers staffed the event under the direction of the Environmental Education and Outreach Coordinator, resulting in 18 work hours for this event.	

Appendix 3 - Construction - Construction Inspection Tracker
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Task Name	EPP Reviewd	Stormwater Site Plan Reviewed	Pre-Con Meeting	Pre-Inspection	Initial Inspection	6-month Inspection	12-month Inspection	Post Inspection
ACTIVE PROJECTS								
Replace PAPI Airfield Landing Aid, NASWI	10/13/2021	10/13/2021	2/7/2022	3/21/2022	4/13/2022	n/a		7/5/2022
Install AN/FRN-49/ICLS Preparation Upgrade, NASWI	9/14/2021	10/18/2021	9/1/2021	3/11/2021	3/25/2022 4/27/2022	n/a		8/3/2022
NASWI Car Wash Facility	4/11/2022	4/11/2022		6/2/2022	7/6/2022	11/30/2022	n/a	n/a
Steam Line Repairs B2547	11/17/2021	11/17/2021	11/1/2021 11/4/2021	5/17/2022	no inspection conducted			
FY22 OLF Coupeville Pavement Maintenance, NASWI	7/19/2022	7/19/2022		no inspection conducted				
FY22 Ault Field Pavement Maintenance	8/8/2022	8/8/2022		no inspection conducted				
Replace Roof, B381, NASWI	6/2/2022	6/2/2022	n/a	n/a	7/6/2022	n/a		
Replace 4 Fuel USTs with ASTs, B2622/2623/2625/2626, NASWI	1/17/2023	n/a		n/a				
P-8A Airfield Improvements	n/a			n/a				
EA-18G Fleet Replacement Squadron (FRS) Expansion Faclity	9/28/2021	9/28/2021	n/a	n/a				
Fuel Hydrant System	n/a			n/a				

Appendix 4 - Early Action Projects (EAPs) Plan
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Summary of EAPs		
Item	**Summary**	**Status**
Construction project process	Stormwater managers are included in the early design phase and continued efforts are underway to define the roles and responsibilities with various stakeholders.	Ongoing
Mapping Contract	The review of maps is currently underway.	Ongoing
Pet waste management	Continuing to maintain pet waste stations including pet waste bag replenishment. Housing purchased 16,000 bags in 2022.	Ongoing
PFAS	The Navy's Environmental Restoration Program is currently conducting base wide assessments for PFAS. In 2022/2023, the Navy conducted a remedial investigation at Area 31, Former Runway Fire School, at Ault Field. In 2023, the Navy will conduct a remedial investigation at the Current Fire Training School at Ault Field. These investigations will require multiple phases to fully delineate PFAS. In 2024, the Navy plans to start a remedial investigation at the Ault Field airfield, including hangars, taxiways, runways, and runway ditches. This investigation is a very large effort that will be phased over multiple years.	Ongoing
Catch basin inspections and cleaning	Catch basins are continuously evaluated.	Ongoing
Structural projects	Projects for stormwater improvements are still being proposed or in design.	Ongoing

Appendix 5 - Operation & Maintenance (O&M) Catch Basin Inspection Table
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Catch Basin Inspections			
Month	Number of Inspections Completed	Corrective Actions	
		Identified	Completed
Feb-22	181	Sediment/debris.	Cleaned with Vactor.
Mar-22	174	Sediment/debris.	Cleaned.
Apr-22	166	Sediment/debris.	Cleaned.
May-22	169	N/A	N/A
Jun-22	165	N/A	N/A
Jul-22	170	N/A	N/A
Aug-22	173	N/A	N/A
Sep-22	0	N/A	N/A
Oct-22	180	N/A	N/A
Nov-22	178	N/A	N/A
Dec-22	171	N/A	N/A
Jan-23	176	Cleaning around top of 6 locations is needed.	Cleaned.
% of catch basins inspections			95%