U.S. Environmental Protection Agency

Final Determination

Designation of Naval Air Station Whidbey Island
As a Small Municipal Separate Storm Sewer System (MS4)

I. Action

On September 30, 2019, the U.S. Environmental Protection Agency Region 10 (EPA) published a notice of the Agency's preliminary designation of Naval Air Station Whidbey Island as a small municipal separate storm sewer system (MS4) for the purpose of issuing an National Pollutant Discharge Elimination System (NPDES) permit to cover municipal stormwater discharges from the MS4. EPA requested comments on that preliminary designation. On November 14, 2019 the public comment period closed. EPA received no comments on the preliminary designation.

Today, EPA is issuing the Final Determination designating Naval Air Station Whidbey Island as a small MS4.

II. Background

Under Clean Water Act (CWA) Section 402(p), 33 U.S.C. § 1342(p), Congress required EPA to establish permitting requirements for certain storm water discharges. EPA established stormwater regulations in two phases: Phase I, 55 Fed. Reg. 47,990 (Nov. 16, 1990); and Phase II, 64 Fed. Reg. 68,781 (Dec. 8, 1999). These regulations describe a program that requires many MS4s to obtain NPDES permit coverage. In addition, CWA Section 402(p)(2)(E), 33 U.S.C. § 1342(p)(2)(E), provides that the permitting authority may, on a case-by-case basis, determine that a stormwater discharge requires a NPDES permit if the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the U.S. *See* also 40 CFR § 123.35(a)(1). The authority to require NPDES permits for otherwise unregulated stormwater sources is commonly referred to as the "Residual Designation" authority.

In accordance with Section 402(a)(2)(E), (5) and (6) of the Clean Water Act, 33 U.S.C. §§1342(p)(2)(E), (5) and (6), and the implementing regulations at 40 CFR §§122.26(a)(1)(v) and 122.26(a)(9)(i)(D), EPA Regional Administrator may, as a matter of discretion, designate additional stormwater discharges for NPDES permitting where she/he determines that "the discharge, or category of discharges within a geographic area, contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. In doing so, EPA's long-standing interpretation and practice is that the Agency m ay consider factors that it deems relevant to such a discretionary action, such as whether the discharges in question are adequately addressed by other environmental programs. See 64 Fed. Reg. 68780 (Dec. 8, 1999) (preamble to EPA's final Phase 2 Stormwater Regulation).

EPA's authority to designate such unregulated stormwater discharges for NPDES permitting is discretionary. EPA recognizes the primary authority of states to prevent, reduce and eliminate pollution and, while optimizing resources. CWA section 101(b) and (f), 33 U.S.C. § 1251(b) and (f). EPA has identified factors that it recommends NPDES-authorized states consider when deciding whether to exercise residual designation authority. Specifically, "EPA recommends a balanced consideration of the following designation criteria on a watershed or other local basis: discharges to sensitive waters, high growth or growth potential, high population density, contiguity to an urbanized area, significant contributor of pollutants to waters of the United States, and ineffective protection of water quality by other programs." 40 CFR §123.35(b)(a)(ii). Where EPA is the permitting authority these criteria are also relevant in evaluating whether MS4s not

designated by existing regulation should be required to obtain NPDES permits. In deciding to exercise its discretionary authority to designate the unregulated MS4 at Naval Air Station Whidbey Island for NPDES permitting, the Region considered the 40 CFR §123.35(b)(a)(ii) factors.

In 2005, the U.S. Fish and Wildlife Service submitted comments to the Washington Department of Ecology (Ecology) on Ecology's proposed MS4 Permits that documented municipal stormwater impacts to aquatic resource degradation in areas outside of the Census-defined Urbanized Areas, and recommended expanding coverage to smaller, less-developed jurisdictions before their impacts were irreversible. In 2006, EPA similarly encouraged Ecology to expand coverage areas of the State's Phase II MS4 permit to include all Puget Sound watersheds that contain Urban Growth Areas. Island County was one of the counties specifically identified as experiencing growth. That same year, Ecology identified criteria for designating smaller areas; those criteria included: discharge to sensitive waters, high population density; high growth or growth potential; contiguity to an urbanized area; significant contribution of pollutants to waters of the U.S.; and ineffective protection of water quality by other programs. Following notable public process, Ecology designated a number of smaller communities in Puget Sound as small MS4s, including the City of Oak Harbor on Whidbey Island. Ecology finalized the Western Washington Phase II MS4 permit in 2007, and Oak Harbor obtained coverage under the permit. Understanding that EPA intended to designate the Naval Air Station Whidbey Island MS4 as a regulated small MS4, in 2016, Naval Air Station Whidbey Island submitted a permit application requesting permit coverage for discharges of municipal stormwater.

This record of decision describes EPA's designation of the Naval Air Station Whidbey Island MS4 as a regulated small MS4 that requires an NPDES permit. *See* 40 CFR § 122.26(a)(9). As discussed in detail below, EPA has determined that Naval Air Station Whidbey Island's MS4 discharges are a significant contributor of pollutants to waters of the U.S. Therefore, EPA is designating the discharges from Naval Air Station Whidbey Island's MS4 for regulation under the NPDES program.

III. Basis for Final Designation

In accordance with 40 CFR § 122.26(a)(9)(i)(D), EPA has discretion to designate stormwater discharges from small MS4s based upon a determination that they contribute to exceedances of water quality standards, including impairment of designated uses, or are significant contributors of pollutants to waters of the U.S., including consideration of habitat and biological impacts., and whether there are sufficient controls to manage such discharges. *See also* 33 U.S.C. § 1342(p)(2)(E). As discussed in detail below, available information indicates that MS4 discharges from Naval Air Station Whidbey Island are significant contributors of pollutants to waters of the United States. Therefore, pursuant to 40 CFR § 122.26(a)(9)(i)(D), the EPA has determined that it is appropriate to designate the MS4s owned/operated by Naval Air Station Whidbey Island as regulated MS4s.

In 2002, as the permitting authority for several areas within the Region, EPA Region 10 developed criteria (*see* Table 2) to guide whether specific small MS4s should be designated as "regulated small MS4s."[1] These criteria are based on recommendations made by EPA in the Phase II rule proposal (63 FR 1562, January 1998), and are intended to evaluate whether the MS4 discharges are a significant contributor of pollutants (*i.e.,* whether the discharges cause significant water quality impacts). Notably, these criteria are similar to the ones considered by Ecology when the Ecology designates additional MS4s outside of urbanized areas, including the City of Oak Harbor, which is adjacent to the Naval facilities on Whidbey Island.

Table 2. Relevant Factors for Residual Designation of MS4 Discharges

Factor 1:	Does the municipal separate storm sewer discharge to sensitive waters?

[1] U.S. EPA, *EPA Region 10's Designation Criteria for Small Municipal Separate Storm Sewer Systems*. June 2002.

Factor 2:	Do discharges from the Municipal Separate Storm Sewers a contribute pollutants of concern to waters of the United States?
Factor 3:	Does the municipal separate storm sewer serve a densely populated area?
Factor 4:	Does the municipal storm sewer serve an area that has experienced high population growth over the last 10 years?
Factor 5:	Is the municipal separate storm sewer contiguously located to an Urbanized Area or to an already regulated municipal storm sewer?
Factor 6:	Is the municipal separate storm sewer physically interconnected to another, already regulated municipal storm sewer?
Factor 7:	Are the water quality impacts of the municipal separate storm sewer already being addressed under other regulations or programs?

EPA's September 30, 2019 preliminary designation of the Naval Air Station Whidbey Island as a small MS4 includes a detailed characterization of the stormwater discharges via the MS4.

Criterion 1: Does the MS4 discharge stormwater to sensitive waters?

Conclusion: Yes. Ault Field discharges stormwater through the MS4 to "sensitive waters" of the State of Washington.

"Sensitive waters" include public drinking water intakes and their designated protection areas; designated public swimming beaches; State-designated Outstanding Resource Waters; waters within Federal, State and local parks; and waters containing threatened or endangered species and their habitat.

Dugualla Bay and the Strait of Juan de Fuca are both classified by the State of Washington as "extraordinary" for aquatic life uses and are also protected for shellfish harvesting and primary contact recreation. In addition, these waters are protected for listed threatened and endangered species (*see* the Biological Evaluation developed in partial fulfilment of the Endangered Species Act consultation requirements associated with this permit for additional information).

Criterion 2: Do discharges from the Municipal Separate Storm Sewer System contribute pollutants of concern to waters of the United States?

Conclusion: Yes, Naval Air Station Whidbey Island discharges stormwater through the MS4 to both: polluted waters requiring a water improvement project (Category 5) as well as to waters of concern (Category 2), as determined by the State of Washington. Since waterbodies to which the Naval Air Station Whidbey Island MS4 discharges exceed, are at, or are near capacity for pollutants present in the discharges, and adequate controls on these pollutants are not in place, EPA concludes that these discharges contribute pollutants of concern to waters of the U.S.

The Seaplane Base MS4s discharge to Crescent Harbor Creek, currently impaired for both dissolved oxygen and bacteria. Likely sources of pollutants include pet waste, sanitary sewer cross connections and wildlife. Seaplane Base has identified these as possible sources, and the draft permit includes a special condition for pet waste management, as well as standard provisions for identifying and eliminating illicit connections.

Table 3. Washington Department of Ecology Water Quality Assessment Data – Category 5

Water Body	Pollutant	Medium	Listing ID	Category

Crescent Harbor Creek	Bacteria	Water	45181	5
	Dissolved Oxygen	Water	47709	5
Unnamed Tributary to Crescent Harbor	Bacteria	Water	45443	5

Category 5: polluted waters that require a water improvement project.[2]

In addition, the Seaplane Base and Ault Field MS4s discharge to waters that the State of Washington classifies as Category 2. These waters show some evidence of a water quality problem, and Ecology advises ongoing monitoring.

Table 4. Washington Department of Ecology Water Quality Assessment Data – Category 2

Water Body	Pollutant	Medium	Listing ID	Category
Unnamed Tributary to Crescent Harbor	pH	Water	71373	2
	Bacteria	Water	46136	2
Strait of Juan de Fuca	Bacteria	Water	60355	2
Oak Harbor, Saratoga Passage	4-Methylphenol	Sediment	615980 618221	2
	Benzoic Acid	Sediment	615985	2
	Benzyl Alcohol	Sediment	515501	2

Category 2: Waters of concern: waters in this category have some evidence of a water quality problem, but not enough to show persistent impairment. These are waters recommended for continued testing.[3]

Criterion 3: Does the municipal storm sewer serve a densely populated area?

Conclusion: Based on the 2010 U.S. Census[4] the population density of the Oak Harbor urban cluster is 1102.1 people per square mile. Compared to other urban clusters in the U.S., this is a moderate population density. It has increased from 999.3 people per square mile since the 2000 U.S. Census[5].

Criterion 4: Does the municipal storm sewer serve an area that has experienced high population growth over the last 10 years?

Conclusion: No. Between 2000 and 2010 the population in the Oak Harbor urban cluster increased from 30,648 to 33,004, or approximately 8%. This is a moderate rate of population growth, but not a high rate of population growth based on the criteria established by EPA, as described below.

High population growth may be measured by a rate of increase in population, or directly by the number of people added, or by the increase in impervious surfaces draining to the municipal separate storm sewer. EPA evaluates whether the area served by the municipal separate storm sewer has experienced high growth by one or more of the following measures:

[2] Washington Department of Ecology, *Water Quality Assessment Categories*. https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d/Assessment-categories

[3] Ibid

[4] 2010 Census Urban and Rural Classification and Urban Area Criteria. https://www.census.gov/geo/reference/ua/urban-rural-2010.html

[5] Census 2000 Urban and Rural Classification. https://www.census.gov/geo/reference/ua/urban-rural-2000.html

- Residential population has grown or is projected to grow by a rate of 10% or more within a 10-year period; this applies only to municipal separate storm sewers serving a minimum population of 1,000.
- The municipal separate storm sewer is projected to serve a population of 10,000 or more outside an Urbanized Area, or a population of 1,000 or more inside an Urbanized Area, when the next census takes place.
- The amount of total impervious area served by the municipal separate storm sewer has increased by a rate of 10% or more within a 10- year period; this applies only to municipal separate storm sewers serving a minimum population of 1,000.

Criterion 5: Are the municipal separate storm sewers contiguously located to an Urbanized Area or to an already regulated municipal storm sewer?

Conclusion: Yes. In 2007, Ecology designated the City of Oak Harbor as a small MS4 and the City obtained coverage for its discharges under the General MS4 Permit for Western Washington.

Criterion 6: Are the municipal separate storm sewers physically interconnected to another, already regulated municipal storm sewer?

Conclusion: Yes. The MS4 areas of Naval Air Station Whidbey Island and the City of Oak Harbor are adjacent and interspersed. Mapping of neither MS4 system has been completed, so the extent of interconnectivity of sewer systems is unknown. However, because land areas are interspersed and roadways run between MS4 areas, the MS4 system is physically interconnected.

Criterion 7: Are the water quality impacts of the municipal separate storm sewers already being effectively addressed under other regulations or programs?

Conclusion: No. Industrial activities at Naval Air Station Whidbey Island are covered under EPA's Multi-Sector General Permit (MSGP) for stormwater discharges from industrial activities. However, as summarized in Table 1, the vast majority of land area at the Naval Air Station is municipal rather than industrial. Numerous pollutants are associated with municipal activities rather than industrial activities, and are being discharged as part of that municipal stormwater without adequate controls to reduce their negative impact on receiving waters. Designation of these discharges and the ensuing controls put on them due to permitting will help to reduce their adverse impacts on receiving waters.

Ecology does not have authority to issue NPDES permits to federal facilities; EPA retains that authority. Ecology's designation of the City of Oak Harbor in the Oak Harbor urban cluster would have supported the State's designation of the naval facilities, had the State had the necessary permitting authority. EPA's designation of Naval Air Station Whidbey Island supports the State's framework for implementing its water quality standards, is consistent with Ecology's indicated expectations for water quality certification under CWA Section 401, and demonstrates how cooperative federalism works when a State cannot address a problem and must rely on the federal government to do so.

Conclusion

In considering whether to designate Naval Air Station Whidbey Island as a small MS4, the EPA gave a balanced consideration to all factors. EPA did not receive comments regarding the initial designation of Naval Air Station Whidbey Island during the public comment period. Therefore, EPA has determined that

Naval Air Station Whidbey Island is a significant contributor of pollutants to waters of the U.S. and that there are not at present adequate controls in place to manage the stormwater contributions.

IV. Final Designation

Based on the analysis set forth in this document, EPA has determined that stormwater discharges from the MS4 serving Naval Air Station Whidbey Island are a significant contributor of pollutants to waters of the United States. Therefore, under the authority of CWA §402(p)(2)(E) and 40 CFR §122.26(a)(9)(i)(D), EPA is issuing a final residual designation of Naval Air Station Whidbey Island as a regulated small MS4 that requires an NPDES permit.

Signed: s/s November 23, 2020
Daniel D. Opalski
Director
Water Division
U.S. Environmental Protection Agency
Region 10