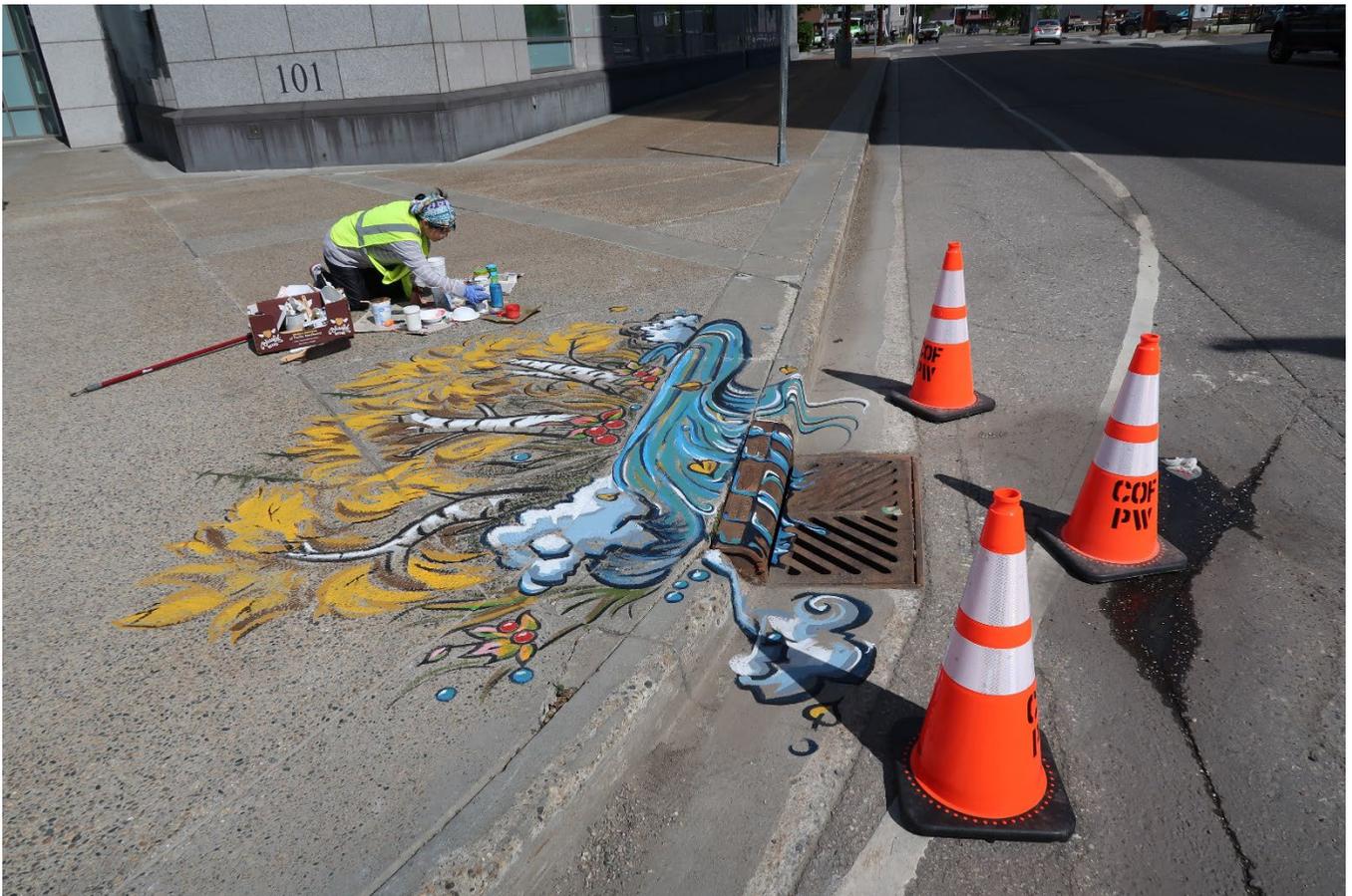


# 2021 ANNUAL REPORT

*Alaska Pollutant Discharge Elimination System Permit No. AKS-053414*



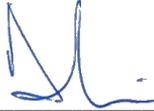
February 11, 2022

# 2021 ANNUAL REPORT

This Annual Report documents the activities undertaken January through December 2021 to comply with the requirements of Alaska Pollutant Discharge Elimination System Permit No. AKS-053414 issued by the Alaska Department of Environmental Conservation to the Fairbanks North Star Borough. By signature below, this report is hereby certified in accordance with 18 AAC 83.385.

*"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 information, the information submitted is, to the best of my knowledge and belief, 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."*

**FAIRBANKS NORTH STAR BOROUGH**



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David Bredlie, Director, Public Works

**02/11/2022**

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Date

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# STORM WATER PERMIT OVERVIEW

## Storm Water Permit Overview

### INTRODUCTION

This Annual Report documents the activities undertaken January through December 2021 to comply with the requirements of Alaska Pollutant Discharge Elimination System (APDES) Permit No. AKS-053414 issued by the Alaska Department of Environmental Conservation (ADEC) to the Fairbanks North Star Borough (FNSB). Annual Reports are required to be submitted to the ADEC in accordance with Section 4.3 of the permit. The last report documented activities undertaken January 2020 through December 2020. Annual reports are required to be submitted to the ADEC by February 15.

### PERMIT HISTORY

The FNSB was originally issued a Phase II National Pollutant Discharge Elimination System (NPDES) Permit from the U.S. Environmental Protection Agency (EPA) on June 1, 2005 for a term of five years. The ADEC later assumed authority over the permit in October 2009 under the APDES Program and provided an administrative extension for the existing permit's requirements to remain effective and enforceable until a new permit could be developed and issued. The new permit, with new requirements, was issued to the FNSB in June 2013 with an effective five-year term beginning August 1, 2013 and expiring July 31, 2018. FNSB and ADEC went through the permit renewal process in 2018 resulting in a slightly modified new five-year permit with an effective term starting July 1, 2018 and expiring June 30, 2023. A copy of the permit can be found at <https://www.fnsb.gov/DocumentCenter/View/796/APDES-Permit-Number-AKS-053414-PDF>. This annual report documents compliance with the current permit that covered the calendar year 2021.

### COVERAGE AREA

The permit covers all areas within the boundary of the Fairbanks Urbanized Area that are served by the municipal separate storm sewer system (MS4) owned and operated by the FNSB. Urbanized area boundaries are established by U.S. Census Bureau and defined as the core census block groups or blocks that have a population density of at least 1,000 people per square mile and surrounding census blocks that have an overall density of at least 500 people per square mile. The current boundary of the Fairbanks Urbanized Area was established using data from the 2010 Census. A map of this boundary can be found at <https://fnsb.maps.arcgis.com/apps/webappviewer/index.html?id=9e10ca346d88422888b81b048d562e9b>

### AUTHORIZED DISCHARGE

With some limitations, the permit authorizes the FNSB to discharge storm water to waters of the U.S. from all portions of the MS4 owned and operated by the FNSB located within the boundary of the Fairbanks Urbanized Area. The limitations are outlined in Section 1.4 of the permit and include non-storm water discharges, discharges threatening water quality, snow disposal to receiving waters, and discharges to water quality-impaired receiving waters.

# STORM WATER PERMIT OVERVIEW

## PERMIT REQUIREMENTS

The permit requires the FNSB to develop and implement a Storm Water Management Program and meet the individual requirements of the following minimum control measures:

1. Public Education & Outreach
2. Public Involvement & Participation
3. Illicit Discharge Detection & Elimination
4. Construction Site Storm Water Runoff Control
5. Post-construction Storm Water Management
6. Pollution Prevention & Good Housekeeping

The Program is documented in the Storm Water Management Plan, which was written by the FNSB in April 2014 and updated in January 2022. The plan without appendices is attached in Appendix G of this report and the entire plan can be found at <https://www.fnsb.gov/DocumentCenter/View/798/Fairbanks-North-Star-Borough-FNSB-Storm-Water-Management-Plan-PDF>. The plan identifies best management practices (BMPs) and other strategies to meet the requirements of the minimum control measures and reduce the discharge of pollutants from the MS4 to the maximum extent practicable to protect the water quality of receiving waters. Documentation of the activities undertaken in accordance with the plan is included in the following sections of this report and Appendices A through F.

## ANNUAL REPORTS

In accordance with Section 4.3 of the permit, Annual Reports must include:

- An updated Storm Water Management Plan document.
- Description of the effectiveness of each Plan component or activity.
- Planned activities and changes for the next reporting period for each plan component or activity.
- An evaluation of compliance with the requirements of this permit, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals of each minimum control measure.
- Results of any information collected and analyzed during the previous reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable.
- A summary of the activities the FNSB plans to undertake during the next reporting cycle (including an implementation schedule) for each minimum control measure.
- Proposed changes and completed changes to the Storm Water Management Plan, including changes to any BMPs or any identified measurable goals for any minimum control measure.
- Description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards.
- Notice if the FNSB is relying on another entity to satisfy some of the permit obligations, if applicable.

# MINIMUM CONTROL MEASURES

## Minimum Control Measures

The following subsections list the individual requirements for each minimum control measure, a description of the activities undertaken by the FNSB to comply with those requirements, and measurable goals for the next reporting period.

### 3.1 PUBLIC EDUCATION & OUTREACH

#### Permit Requirements

To date, the FNSB has met all the requirements under Minimum Control Measure 1 – Public Education & Outreach with adjustments made due to the COVID-19 pandemic. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2021.

Permit Requirements	Compliance Date	Status
<i>FNSB must maintain a public education program to educate the community about the impacts of storm water discharges on water bodies and the steps that citizens and businesses can take to reduce pollutants in storm water runoff.</i> [Section 3.1.1]	Annually	Complete, ongoing
<i>At least annually, the FNSB must distribute storm water educational materials to target audiences that encourage the public to improve water quality.</i> [Section 3.1.2]	Annually	Complete, ongoing
<i>At least annually, the FNSB must prepare and distribute appropriate information that encourages the public to improve water quality to local media outlets.</i> [Section 3.1.3]	Annually	Complete, ongoing

#### Compliance Activities

The City of Fairbanks, City of North Pole, University of Alaska, Fairbanks and the Alaska Department of Transportation & Public Facilities – Northern Region (Fairbanks Permittees) have a separate but similar APDES permit (Fairbanks Permit) to the FNSB. The FNSB and Fairbanks Permittees have worked together since 2005 to implement a unified public education program on local storm water issues. The program’s education and outreach activities are focused in the month of April of each year when snowmelt runoff is prevalent, parking lots and streets are flooded, and storm water concerns are easily identifiable to residents of the community. The program is focused on creating awareness and educating the public about the impacts of storm water discharges to the MS4 and local water bodies and provides information on how citizens and businesses can take steps to reduce pollutants in storm water runoff. Program activities completed during the 2021 reporting year included the following:

- Updating and maintaining an informative storm water management program website
- Providing educational presentations on storm water at local schools
- Providing guest presentations on storm water to interested groups
- Distributing educational material by mail, in person, and via local media

# MINIMUM CONTROL MEASURES

- Other Public Education and Outreach Activities

## **Fairbanks Storm Water Management Program Webpage**

The website can be viewed at [fnsb.gov/383/Fairbanks-Storm-Water-Management-Program](https://fnsb.gov/383/Fairbanks-Storm-Water-Management-Program). It provides an overview of storm water and pollutants of concern in the Fairbanks area, program information for each of the six Minimum Control Measures, a list of ways the public can get involved (i.e. attending storm water committee meetings, participating in stream cleanup events, etc.), links to the City of Fairbanks, City of North Pole, and FNSB storm water ordinances and corresponding site development plan review requirements, a link to access and view the comprehensive storm drain system map of the entire FNSB, links to local publications such as the Best Management Practice (BMP) Effectiveness Report for Fairbanks, directions on how to report illicit discharges, and contact information for the storm water coordinators for each of the FNSB and Fairbanks Permittees. The website also provides links to the ADEC Storm Water Program webpage, ADEC Construction General Permit, ADEC Alaska Storm Water Guide, Cities of Fairbanks and North Pole Storm Water Management Program Guide, FNSB BMP Design Guide, Site Development Plan Review Requirements that includes a map and storm water plan submittal flowchart for the Fairbanks Urbanized Area, the current APDES MS4 Permits, the most recent MS4 Annual Reports, brochures such as the Snow Storage & Disposal for Local Contractors and 10 Ways You Can Prevent Storm Water Runoff Pollution and links to associated groups such as the Tanana Valley Watershed Association and the Fairbanks Soil and Water Conservation District.

## **Educational Presentations on Storm Water at Local Schools**

The Fairbanks Permittees were able to offer a limited number of storm water educational presentations in Fairbanks in 2021. Presentations were given to FNSB elementary classrooms (grades 1-6) via videoconference software. The presentation was projected within the classroom and children were able to ask questions and have a dialogue with the presenter. A list of the educational presentations and the estimated number of students in attendance is included in Appendix A. (A1)

## **Guest Presentations on Storm Water**

The Fairbanks Permittees were able to provide two guest presentations to UAF Watershed Planning students. The presentations included information on the Fairbanks Storm Water Management Program, green infrastructure, and water quality in 2021.

## **Educational Material Distribution**

2021 Fairbanks IABA Home Show – The 2021 IABA Home Show was held outdoors at the Tanana Valley State Fairground on May 14-16. The FSWAC staffed a booth all three days. The Home Show is an annual event held in Fairbanks each spring to kick off the construction season and includes a wide variety of local vendors showcasing building materials, equipment, and services. This year the FSWAC shared a booth with Fairbanks Soil & Water Conservation District. Committee members distributed brochures about the stormwater program and green infrastructure in addition to holding a raffle for a rain barrel.

Other in person events - FSWAC members did not participate in other annual events such as the Fort Wainwright Earth Day Fair (now incorporated into Outdoor Days), which was cancelled, or Fairbanks Midnight Sun Festival due to the COVID-19 pandemic.

# MINIMUM CONTROL MEASURES

Fairbanks Daily News-Miner Public Notice – FNSB staff placed a storm water advertisement “Know the Law” in a special section of the local newspaper. The “Building, Home & Garden Tabloid” section was published on May 14, 2021. The notice targeted local developers, engineers, and contractors to make them aware of the local storm water plan review and permitting requirements for the City of Fairbanks, City of North Pole, and the FNSB. A copy of the advertisement is included in Appendix A. (A2)

Direct Mailings - In the first week in December, *the Snow Storage and Disposal Practices for Local Contractors* pamphlet was sent to 50+ known landscape and snow removal contractors. See Appendix A (A3) for pamphlet.

Public Service Announcements - In the Spring of 2021, The Fairbanks Permittees arrange for a “Don’t Pollute” Public Service Announcement (PSA) on local radio stations that reminds people of the function of the storm drain systems and the importance of keeping them clean. PSA text provided in Appendix A. (A4)

## **Other Public Education & Outreach Activities**

Additional public education and outreach activities completed during the 2021 reporting year included hosting a stream cleanup day event, supporting the local Adopt-A-Stream (AAS) Program, assessing the storm drain stenciling program, assisting and supporting a storm drain art contest, convening monthly storm water advisory committee meetings open to the public, and updating the Fairbanks Storm Water Management webpage; all of which are later discussed under Minimum Control Measure 2 – Public Involvement & Participation.

## **Staff Responsible for Compliance Activities**

The following individuals were responsible for implementing and coordinating the public education and outreach activities during the 2021 reporting period:

- FNSB – Janet Smith, Deputy Director, Public Works

# MINIMUM CONTROL MEASURES

## Measurable Goals

The following table details the measurable goals set forth in the FNSB's July 2014 Storm Water Management Plan and carried forward to the 2022 Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measurable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Maintain the Storm Water Management Program website for the duration of the permit term	Yes	No
Annually provide a minimum of 15 educational presentations on storm water at local schools	No*	No
Annually provide guest presentations on storm water to local interest groups, as requested	Yes	No
Annually distribute storm water educational brochures at a minimum of two local events	Yes**	No
Annually mail educational brochures to landscaping, snow removal, and building contractors	Yes	No
Annually issue at least one PSA to local media outlets for broadcast	Yes	No

\*Did not reach the goal of 15 presentation due to the COVID-19 pandemic.

\*\*Only attended one event in 2021 due to the COVID-19 pandemic.

# MINIMUM CONTROL MEASURES

## 3.2 PUBLIC INVOLVEMENT & PARTICIPATION

### Permit Requirements

To date, the FNSB has met all the requirements under Minimum Control Measure 2 – Public Involvement & Participation. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2021.

Permit Requirements	Compliance Date	Status
<i>FNSB must comply with applicable state and local public notice requirements when implementing a public involvement/participation program. [Section 3.2.1]</i>	Annually	Complete, ongoing
<i>FNSB must continue to make the Storm Water Management Plan and all Annual Reports available to the public through the municipal library system, an FNSB / Fairbanks co-permittee-maintained website, or other easily accessible location. Public outreach should include location information whenever appropriate. [Section 3.2.2]</i>	Annually	Complete, ongoing
<i>FNSB must continue the Storm Water Advisory Committee. The Storm Water Advisory Committee meeting schedule must be made known to the public and ADEC through direct mail or e-mail notification, if possible, and other locally appropriate means. [Section 3.2.3]</i>	Quarterly	Complete, ongoing
<i>FNSB must continue to implement a storm drain stenciling program. [Section 3.2.4]</i>	Annually	Complete, ongoing
<i>At least annually, FNSB must continue to host a community Stream Cleanup Day. [Section 3.2.5]</i>	Annually	Complete, ongoing
<i>FNSB must maintain the means of providing relevant storm water information to and accepting input from the public through providing the public with internet access via a website, a telephone hotline, and/or other appropriate means. The availability of this education and communication tool must be advertised to the public through the FNSB's ongoing public education efforts. [Section 3.2.6]</i>	Annually	Complete, ongoing

### Compliance Activities

#### Public Notices

The FNSB follows the public notice requirements of the State of Alaska's Administrative Procedures Act (AS 44.62), including but not limited to the Open Meetings Act (AS 44.62.310), as well as all internal policies.

#### Storm Water Management Plan & Annual Reports

Copies of both the FNSB's and Fairbanks Permittees' APDES permits, Storm Water Management Plans, and most recent Annual Reports submitted to ADEC are made available to the public through the Fairbanks Storm Water Management Program website at [fnsb.gov/383/Fairbanks-Storm-Water-Management-Program](http://fnsb.gov/383/Fairbanks-Storm-Water-Management-Program).

#### Fairbanks Storm Water Advisory Committee

In 2003, the FNSB and the Fairbanks Permittees formed the Fairbanks Storm Water Advisory Committee (FSWAC) to coordinate and carry out the development, implementation, and review of the Fairbanks Storm Water Management Program. The FSWAC is comprised of agency representatives from each of the Fairbanks

# MINIMUM CONTROL MEASURES

Permittees' agencies, the FNSB, ADEC, as well as one citizen member from each of Fairbanks and North Pole serving as representatives of their respective communities. The FSWAC meets via Zoom on the second Thursday of each month from 11:00a.m. to 12:30 p.m. All meetings are open and advertised to the public. The meeting schedule is posted on the Fairbanks Storm Water Management Program website, on the city of Fairbanks website, via social media, and via email to the FSWAC's email distribution list. Minutes are drafted and approved by the FSWAC for every meeting held. Copies of the minutes for the 2021 reporting period are included in Appendix B. (B1)

## **Storm Drain Stenciling Program**

FNSB annually inspects and stencils as necessary storm drain inlets to bring attention to inlets, educate the public on where storm water drains empty to, and discourage illicit discharges. There is a common misconception that storm drains flow to the City's sewer treatment plant and the stenciling program helps clear up this misconception. The FNSB storm drain stencil has an outline of a salmon on it with the words "Dump No Waste, Drains to River". During the 2021 reporting year, FNSB inspected all its known inlets. Photos of stenciling completed in the past and a spreadsheet of the current locations are included in Appendix B. (B2, B3)

## **Storm Drain Art Contest**

In coordination with the storm drain stenciling program, FNSB and the Fairbanks Permittees held the 8<sup>th</sup> annual Storm Drain Art Contest in downtown Fairbanks led by the Tanana Valley Watershed Association (TVWA). On June 5, 2021, 15-storm drains were painted on Lacy Street. The art was themed to bring awareness to the public that our storm drains empty into the river and not to the wastewater treatment plant. Posters were made of the submissions with final paintings and were hung in the School District Administration Building and Fairbanks City Hall. The flyer for the contest, photos of the event, sample posters, and TVWA Annual Report of Activities are included in Appendix B. (B4, B5, B6, B7)

## **2021 Annual Stream Cleanup Day Event**

FNSB and the Fairbanks Permittees held the 17th Annual Stream Cleanup Day event in Fairbanks on June 12, 2021. Volunteers were assigned to clean up the various sections of the 5.5-mile long Noyes slough and the 2.5-mile long section of the Chena River running through downtown Fairbanks. In total, 40 people volunteered for the event and removed close to 600 pounds of trash (including litter, bags, tires, vehicle parts, bicycles, and various other items) out of the waterways. Volunteers included residents who live or work along the waterways, Fort Wainwright soldiers and staff, and other citizens and community groups who responded to the advertisements. Participants are given a Stream Cleanup Day t-shirt and snacks. The Lion's Club provided a barbeque lunch for all participants. Copies of the 2021 Stream Cleanup Day flyer, participant's briefing sheet, and event photos are included in Appendix B. (B8, B9, B10)

## **Fairbanks Storm Water Management Program Website**

The FNSB maintains and hosts the Fairbanks Storm Water Management Program website. As described in previous sections the website can be viewed at: [fnsb.gov/383/Fairbanks-Storm-Water-Management-Program](https://fnsb.gov/383/Fairbanks-Storm-Water-Management-Program). It provides an overview of storm water and pollutants of concern in the Fairbanks area, program information for the six Minimum Control Measures, a list of ways the public can get involved (i.e. attending storm water committee meetings, participating in stream cleanup events, etc.), links to the FNSB, City of Fairbanks, and

# MINIMUM CONTROL MEASURES

City of North Pole storm water ordinances, corresponding site development plan review requirements, a link to access and view the comprehensive storm drain system map of the entire FNSB, links to local publications such as the Best Management Practice (BMP) Effectiveness Report for Fairbanks, directions on how to report illicit discharges, and contact information for the storm water coordinators for each of the Fairbanks Permittees and FNSB. The website also provides viewers links to the ADEC Storm Water Guide, and a Fairbanks Urbanized Area map and storm water submittal flowchart for the Area. The website address is printed on educational brochures distributed at local events and through the mail.

## Public Comments Log

In addition to all the activities listed above, the FNSB maintains a log of public comments related to storm water. Comments are accepted via telephone, electronic mail, postal mail, and in person and are directed to appropriate staff to be addressed. Public comments received during the 2021 reporting period, including documentation of their resolution (if needed), are included in Appendix B. (B11)

## Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the public involvement and participation activities during the 2021 reporting period:

- FNSB – Janet Smith, Deputy Director, Public Works

## Measurable Goals

The following table details the measurable goals set forth in the FNSB’s July 2014 Storm Water Management Plan and carried forward to the 2022 Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measurable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Continue holding monthly FSWAC meetings for the duration of the permit term	Yes	No
Annually stencil FNSB storm drain inlets	Yes*	No
Annually host a Stream Cleanup Day event	Yes	No
Maintain the Storm Water Management Program Website for the duration of the permit term	Yes	No

\*All inspected and were in satisfactory condition.

# MINIMUM CONTROL MEASURES

## 3.3 ILLICIT DISCHARGE DETECTION & ELIMINATION

### Permit Requirements

To date, the FNSB has met all of the requirements under Minimum Control Measure 3 – Illicit Discharge Detection & Elimination. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2021.

Permit Requirements	Compliance Date	Status
<i>FNSB shall review and revise as necessary, the program to detect and eliminate illicit discharges. FNSB must, as part of this activity, maintain an information management system to track illicit discharges. [Section 3.3.1]</i>	Annually	Complete, ongoing
<i>FNSB must review and revise an inventory and map of industrial facilities and activities that are covered by the Multi-Sector General Permits (MSGP), AKR060000 and that discharge directly to their MS4. At a minimum, the inventory must include the facility name and address, nature of the business or activity, Standard Industrial Classification code(s) or the newer North American Industry Classification System that best reflect the facility product or service, the receiving water body, and type of pollutants that may be discharged by the facility or activity. [Section 3.3.2]</i>	Annually	Complete
<i>FNSB must review the effectiveness and revise ordinances that effectively prohibit non-storm water discharges into their MS4s. FNSB must implement appropriate enforcement procedures and actions, including enforcement escalation procedures for recalcitrant or repeat offenders. [Section 3.3.3]</i>	Annually	Complete, ongoing
<i>FNSB must prohibit any of the non-storm water flows listed in Part 1.4.1.3 through ordinance if such flows are identified by DEC or the FNSB as a source of pollutants to the MS4. FNSB must document any existing local controls or conditions placed on such discharges. [Section 3.3.4]</i>	Annually	Complete, ongoing
<i>Annually, FNSB must inform users of the MS4 and the general public of hazards associated with illegal discharges and improper disposal of waste. [Section 3.3.5]</i>	Annually	Complete, ongoing
<i>FNSB must review and update the comprehensive MS4 map. At a minimum, the map must show jurisdictional boundaries, the location of all inlets and outfalls, names and locations of all waters that receive discharges from those outfalls, and locations of all municipally-owned and operated facilities, including public snow disposal sites. If available, locations of all privately operated snow disposal sites must also be indicated on the comprehensive map. A copy of the completed map must be submitted to DEC as part of the Annual Report. [Section 3.3.6]</i>	Annually	Complete, ongoing

# MINIMUM CONTROL MEASURES

<p><i>FNSB must continue dry weather field screening for non-storm water flows from all outfalls. By no later than the expiration date of this permit, all of the FNSB's outfalls within the permit area must be screened for dry weather flows. The screening should include field tests of selected chemical parameters as indicators of discharge sources where sufficient flow is found at an outfall to allow for monitoring. Screening level tests may utilize less expensive "field test kits" using test methods not approved by EPA under 40 CFR Part 136 (adopted by reference at 18 AAC 83.010), provided the manufacturer's published detection ranges are adequate for the illicit discharge detection purposes. FNSB must investigate any illicit discharge within 15 days of its detection and must take action to eliminate the source of the discharge within 45 days of its detection. Raw data and narrative review of screening and mapping shall be included in the following year's Annual Report from the year the data was collected. [Section 3.3.7]</i></p>	<p>July 1, 2023</p>	<p>Complete, ongoing</p>
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## Compliance Activities

### Illicit Discharge Investigations

Illicit discharge investigations are initiated when the FNSB has been notified a discharge occurred. Most notifications come from the general public. Commonly the discharge is observed at its source and the responsible party is readily apparent.

Every illicit discharge detected is entered into the FNSB's Public Comment Log, which records the date, location, and nature of the discharge, as well as a written description of the follow-up investigations and resolutions. A copy of the FNSB log for the 2021 reporting year is included in Appendix B. (B11)

### Industrial Facilities Map

In June 2016, the FNSB updated the MS4 map to include the locations of all industrial facilities and activities covered by the APDES MSGP in the Fairbanks area. In February 2017, the FNSB published an updated online MS4 map of industrial activity storm water permits at:

<https://fnsb.maps.arcgis.com/apps/webappviewer/index.html?id=66d32548f99440b1b864d6e47d80b78e>. A copy of the map is included in Appendix C. (C1)

### Illicit Discharge Ordinances

On June 12, 2008, FNSB adopted Ordinance 2008-22 establishing Title 21 of the FNSB Code of Ordinances. The FNSB re-codified Title 21 to Title 13 August 2016. At that time, the ordinance was reviewed in accordance with the requirement set forth in the permit. Chapter 13.12 prohibits illicit discharges to the MS4 through storm water, direct dumping, or snow clearance operations and requires immediate notification upon identifying a violation. The FNSB illicit discharge enforcement policy is regulated in Title 1 by the fine schedule. The schedule was revised as part of Ordinance 2008-22 to include fines on an escalation basis for illicit discharges and failure to notify authorities of illicit discharges. The ordinances can be accessed at: [fnsb.gov/401/Storm-Water-Ordinances](https://fnsb.gov/401/Storm-Water-Ordinances).

# MINIMUM CONTROL MEASURES

## Public Awareness Efforts

As discussed under the “Public Education & Outreach” and “Public Involvement & Participation” subsections, efforts are made annually to inform the public about illicit discharges and improper disposal of waste. Efforts include (1) maintaining the Fairbanks Storm Water Management Program website, which outlines procedures for reporting illicit discharges to the Fairbanks-Permittees and FNSB; (2) incorporating information about the types and causes of illicit discharges into the educational/guest presentations on storm water; (3) implementing the Storm Drain Stenciling Program, which creates public awareness about where storm water goes after it enters a storm drain inlet; and (4) mailing brochures to homeowners and local landscaping and snow removal contractors, which apprises them of the local illicit discharge ordinances.

## Comprehensive MS4 Map Update

In 2008, FNSB and the Fairbanks Permittees combined their individual MS4 maps into a single comprehensive map showing all storm water conveyance systems within the Fairbanks Urbanized Area. In 2019 and continuing through 2021, the City of Fairbanks began improving the attribute data of stormwater infrastructure layers in GIS. The updated 2021 Stormwater GIS map includes data provided by the UAF Facilities and AK DOT&PF. The map is now ~70% complete and a version available to the public is published at:

<https://fbx.maps.arcgis.com/apps/webappviewer/index.html?id=97965671d843408a85a006d3936473e6>

Jurisdictional boundaries, industrial storm water permit sites, and public and private snow disposal sites have yet to be added to this new map. The old map that contains that information can be accessed at:

<https://fnsb.maps.arcgis.com/apps/webappviewer/index.html?id=66d32548f99440b1b864d6e47d80b78e>.

## Dry-weather Outfall Screening

FNSB began conducting dry-weather screening outfalls in 2008 and has screened all known MS4 outfalls in, 2010-2012 and 2014-2019. FNSB has not detected flow at any of the outfalls; therefore, testing for pollutant types has not been conducted. In accordance with the requirements of the permit, FNSB will again screen every outfall owned and operated by the FNSB prior to the end of the permit term – June 30, 2023.

## Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the illicit discharge detection and elimination activities during the 2021 reporting period:

- FNSB – Janet Smith, Deputy Director, Public Works

# MINIMUM CONTROL MEASURES

## Measurable Goals

The following table details the measurable goals set forth in the FNSB's July 2014 Storm Water Management Plan and carried forward to the 2022 Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measurable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Maintain an inventory and map of MSGP-covered facilities and activities	Yes	No
Review and revise, as necessary, the Illicit Discharge Ordinances annually	Yes	No
Review and update the comprehensive MS4 map as necessary	Yes	No
Screen 100% of the outfalls owned and operated by FNSB by June 20, 2023	No	No

# MINIMUM CONTROL MEASURES

## 3.4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

### Permit Requirements

To date, FNSB has met all but one of the requirements under Minimum Control Measure 4 – Construction Site Storm Water Runoff Control. A provision for receipt and consideration of information submitted by the public will be developed and implemented by the end of the permit term. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2021.

Permit Requirements	Compliance Date	Status
<i>FNSB must annually review and implement its existing program that reduces pollutants in any storm water runoff to the MS4 from construction activities with this permit and the current version of the APDES General Permit for Storm Water Discharges from Large and Small Construction Activities in Alaska Permit #: AKR100000 (Construction General Permit or CGP). FNSB must discuss revisions, planned improvements, and schedule in the Annual Report. [Section 3.4.1]</i>	Annually	Complete, ongoing
<i>FNSB must maintain an ordinance or other regulatory mechanism to be consistent with this Permit and with the current version of the CGP. This ordinance or regulatory mechanism must include sanctions to ensure compliance. [Section 3.4.3]</i>	Annually	Complete, ongoing
<i>FNSB must continue to publish and distribute requirements for construction site operators to implement appropriate erosion and sediment control BMPs and to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality. [Section 3.4.4]</i>	Annually	Complete, ongoing
<i>Annually, FNSB must review, and implement procedures for reviewing all site plans as required in Part 3.4.1 for potential water quality impacts, including erosion and sediment control, control of other wastes, and any other impacts that must be examined according to the requirements of the law, ordinance, or other enforceable mechanism of Part 3.4.3. These procedures must include provisions for receipt and consideration of information submitted by the public. [Section 3.4.5]</i>	Annually	Complete, ongoing
<i>Annually, FNSB must review and implement procedures for site inspection and enforcement of control measures established as required in Parts 3.4.3 and 3.4.4, including enforcement escalation procedures for recalcitrant or repeat offenders. FNSB shall inspect all construction activities as required in Part 3.4.1 in its jurisdiction for appropriate erosion, sediment, and waste control at least once per year. [Section 3.4.6]</i>	Annually	Complete, ongoing
<i>FNSB must conduct a biennial training session for the local construction, design, and engineering audiences related to the construction ordinance and BMP requirements referenced in Parts 3.4.3 and 3.4.4. [Section 3.4.7]</i>	Biennially	Complete, ongoing

### Compliance Activities

FNSB's efforts to control construction site storm water runoff include codified ordinances, publication of a local BMP design guide, a municipal plan review and site inspection program, and biennial trainings for local

# MINIMUM CONTROL MEASURES

developers, engineers, and contractors. FNSB annually reviews and updates these program elements for their appropriateness and consistency with permit requirements and the CGP.

## **Construction Site Storm Water Runoff Control Ordinances**

On June 12, 2008 FNSB adopted Ordinance 2008-22 establishing Title 21 of the FNSB Code of Ordinances. FNSB re-codified Title 21 to Title 13 August 2016. Chapter 13.16 addresses construction site storm water runoff control by establishing a permit process for all regulated construction sites. Through this process, FNSB will review storm water management plans and conduct site inspections for each site. Regulated construction sites may not operate prior to issuance of a FNSB permit and must follow appropriate permit closure procedures prior to facility occupancy. The ordinances can be accessed at: [fnsb.gov/401/Storm-Water-Ordinances](https://fnsb.gov/401/Storm-Water-Ordinances). FNSB will review and revise these ordinances, as necessary, on an annual basis.

## **BMP Design Guide**

FNSB has prepared a BMP Design Guide. The guide provides an overview of both construction and post-construction storm water management design and construction requirements for new development and redevelopment projects within the Fairbanks Urbanized Area. The focus of the guide is to educate developers, engineers, contractors, and the general public on local storm water pollution control laws and provide resources for effective structural and non-structural BMPs for the Fairbanks area. Included in the manual is a brief overview of the local storm water management program, agency review requirements, general design considerations, and list of effective BMPs for the Fairbanks area, including discussion of the design and construction requirements for snow disposal sites, septic systems, and parking lots. A two-page handout was also created for local developers, engineers, and contractors which covers the different agencies' jurisdictions and plan submittal requirements for storm water within the Fairbanks Urbanized Area. Both the guide and handout are posted on the Fairbanks Storm Water Management Program website at [fnsb.gov/391/Storm-Water-Management-and-Permitting-Re](https://fnsb.gov/391/Storm-Water-Management-and-Permitting-Re). FNSB reviews and updates the guide at the beginning of every year and publishes the latest version on the website.

## **Plan Reviews & Site Inspections**

The site development plan review and inspection program is part of FNSB Planning and Construction Permitting, which directs all contractors/owners to submit storm water plans and applicable review fees in accordance with the requirements of the ordinances before a permit will be issued. The program also appraises contractors/owners that their construction site(s) will be inspected at least once per year for proper erosion and sediments controls. In the event that any person holding a permit pursuant to these ordinances violates the terms of the permit, the FNSB may issue a notice of violation, suspend, or revoke the permit. Site plan reviews are required for each regulated construction site and will be conducted upon receipt of a Site Development Permit Application as outlined in Chapter 13.16 of FNSB Code of Ordinances Title 13. The procedures currently do not have provisions for public review and comment. Such provisions will be developed before the end of the permit term, June 30, 2023.

FNSB did not receive any construction site plan permit applications during the 2021 reporting period.

No sanctions or enforcement actions were taken during the 2021 reporting period.

# MINIMUM CONTROL MEASURES

**Training for Local Developers/Engineers/Contractors**

Training for developers, engineers, and contractors is conducted biennially jointly by the Cities of Fairbanks and North Pole, FNSB, and ADEC . The 2-3 hour session is focused on educating developers, engineers, and contractors about the local construction site storm water runoff and post-construction storm water management requirements within the Fairbanks Urbanized Area. The training was conducted April 22, 2021 via Zoom. This training is scheduled to be offered again in April 2023 to meet the biennial training requirement of the permit. A copy of the advertising flyer is included in Appendix D. (D1)

Annually the ADOT&PF, ADEC, and Associated General Contractors of Alaska also host “Alaska Certified Erosion & Sediment Control Lead [AK-CESCL]” trainings in Fairbanks. The training is a two-day course that covers erosion and sedimentation processes, ACGP regulatory requirements, BMPs, site inspections, record-keeping, and cold climate challenges. In May, Janet Smith, Deputy Director, Public Works attended AK-CESCL re-certification training virtually. Certification has been extended to May 2024. A summary of all the AK-CESCL trainings held in Fairbanks during the 2020 reporting period is included in Appendix D. (D2)

**Staff Responsible for Compliance Activities**

The following individuals were responsible for implementing and coordinating the construction site storm water runoff control activities during the 2021 reporting period:

- FNSB – Janet Smith, Deputy Director, Public Works

**Measurable Goals**

The following table details the measurable goals set forth in the FNSB’s July 2014 Storm Water Management Plan and carried forward to the 2022 Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measurable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Review and revise, as necessary, the Construction Site Storm Water Runoff Control Ordinances by June 30, 2023	Yes	No
Review and revise, as necessary, the Fairbanks North Star Borough Storm Water BMP Design Guide by June 30, 2023	Yes	No
Conduct a training/workshop for local developers, engineers, and contractors in April 2019, 2021, and 2023	Yes	No

# MINIMUM CONTROL MEASURES

## 3.5 POST-CONSTRUCTION STORM WATER MANAGEMENT

### Permit Requirements

To date, FNSB has met all of the requirements under Minimum Control Measure 5 – Post-Construction Storm Water Management. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2021.

Permit Requirements	Compliance Date	Status
<i>FNSB must review and continue the implementation and enforcement of a program to address post-construction storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale that disturb one acre or more, that discharge into the MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts. [Section 3.5.1]</i>	Annually	Complete, ongoing
<i>FNSB must review the effectiveness and revise ordinances or other regulatory mechanisms to the extent allowable under state or local law to address post-construction runoff from new development and redevelopment projects. FNSB must implement appropriate enforcement procedures and actions, including enforcement escalation procedures for recalcitrant or repeat offenders. [Section 3.5.2]</i>	Annually	Complete
<i>FNSB must review and revise the publishing and distribution of a BMP design manual for post-construction storm water management, which includes a list of strategies reflecting a combination of structural and non-structural BMPs appropriate to the MS4s. [Section 3.5.3]</i>	Annually	Complete, ongoing
<i>FNSB must ensure proper long-term operation and maintenance of post-construction BMPs. [Section 3.5.4]</i>	Annually	Complete, ongoing
<i>FNSB must continue to conduct biennial training for local construction, design, and engineering audiences. [Section 3.5.5]</i>	2019, 2021, 2023	Complete, ongoing
<i>FNSB must incorporate Green Infrastructure Strategies into its education materials and BMP practices. [Section 3.5.6]</i>	Annually	Complete, ongoing
<i>FNSB must inventory locations of all FNSB owned snow disposal sites and map all FNSB, Fairbanks Co-Permittee, and privately owned snow disposal sites that discharge to the MS4 or to receiving waters. [Section 3.5.7]</i>	Annually	Complete, ongoing
<i>The permittee must evaluate whether to further protect water quality by explicitly regulating the operation of private snow disposal sites within the boundaries of the MS4 through ordinance or other regulatory mechanism. [Section 3.5.7.1]</i>	July 1, 2020	Complete

### Compliance Activities

FNSB's existing efforts to manage post-construction storm water include codified ordinances; a municipal plan review program for permanent storm water controls for sites disturbing greater than or equal to one acre; publication of a local BMP design guide; biennial training/workshops for local developers, engineers, and contractors. FNSB annually reviews and updates these program elements for their appropriateness and consistency with permit requirements.

# MINIMUM CONTROL MEASURES

## **Post-construction Storm Water Management Ordinances**

On July 16, 2009 FNSB adopted Ordinance 2009-27 adding a new chapter to FNSB Code of Ordinances Title 21. The FNSB re-codified Title 21 to Title 13 August 2016. Chapter 13.20 addresses post-construction storm water management by establishing a submittal process for Permanent Storm Water Control Plans (PSWCP) for regulated sites. The FNSB post-construction storm water management policy is regulated in Title 1 by the fine schedule. The ordinances can be accessed at: [fnsb.gov/401/Storm-Water-Ordinances](http://fnsb.gov/401/Storm-Water-Ordinances). FNSB will review and revise these ordinances, as necessary, on an annual basis.

Long-term Operation & Maintenance of BMPs – Long term operation and maintenance of permanent storm water controls must be identified in the PSWCP and are ensured through maintenance agreements. These agreements must be executed by the owner of a regulated site, be recorded with the State of Alaska, and be binding upon all subsequent owners of the property. Each maintenance agreement must specify the items listed below.

- The persons responsible for the maintenance of permanent storm water controls.
- That the persons responsible shall maintain permanent storm water controls in accordance with the PSWCP and will correct any deficiencies in the system including repair or replacement of the controls if needed.
- That the FNSB is authorized to enter the property at reasonable times to conduct on-site inspections of the controls.

## *BMP Design Guide*

FNSB updates the Storm Water BMP Design Guide at the beginning of every year. The guide provides an overview of both construction and post-construction storm water management design and construction requirements for new development and redevelopment projects within the Fairbanks Urbanized Area. The focus of the guide is to educate developers, engineers, contractors, and the general public on local storm water pollution control laws and provide resources for effective structural and non-structural BMPs for the Fairbanks area. Included in the manual is a brief overview of the local storm water management program, agency review requirements, general design considerations, and list of effective BMPs for the Fairbanks area, including discussion of the design and construction requirements for snow disposal sites, septic systems, and parking lots. The guide is posted on the Fairbanks Storm Water Management Program website at [fnsb.gov/391/Storm-Water-Management-and-Permitting-Re](http://fnsb.gov/391/Storm-Water-Management-and-Permitting-Re). FNSB will review the guide on an annual basis and revise as necessary.

Design Criteria & Performance Goals – The design criteria and performance goals for post-construction (permanent) BMPs are outlined in Section 4.3 of the guide. For runoff volume, post-construction peak runoff is required to be limited to 5% over pre-construction peak runoff using the 10-year, 1-hour duration storm event. For runoff quality, the initial 1/2-inch of runoff must be treated, and after this first flush, treatment must be provided at a minimum rate of 0.005 inches per minute. These design criteria and performance goals were developed by City of Fairbanks and FNSB engineers in close coordination with ADEC and in consideration of Fairbanks's rainfall intensity data and design standards used by the Municipality of Anchorage.

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## Training for Local Developers/Engineers/Contractors

Training for developers, engineers, and contractors is conducted biennially jointly by the Cities of Fairbanks and North Pole, FNSB, and ADEC . The 2-3 hour session is focused on educating developers, engineers, and contractors about the local construction site storm water runoff and post-construction storm water management requirements within the Fairbanks Urbanized Area. The training was conducted April 22, 2021 via Zoom. This training is scheduled to be offered again in April 2023 to meet the biennial training requirement of the permit. A copy of the advertising flyer is included in Appendix D. (D1)

Annually the ADOT&PF, ADEC, and Associated General Contractors of Alaska also host “Alaska Certified Erosion & Sediment Control Lead [AK-CESCL]” trainings in Fairbanks The training is a two-day course that covers erosion and sedimentation processes, ACGP regulatory requirements, BMPs, site inspections, record-keeping, and cold climate challenges. In May, Janet Smith, Deputy Director, Public Works attended AK-CESCL re-certification training virtually. Certification has been extended to May 2024. A summary of all the AK-CESCL trainings held in Fairbanks during the 2020 reporting period is included in Appendix D. (D2)

## Green Infrastructure Strategies

The FNSB supports in the Fairbanks Area Green Infrastructure group that developed the Green Infrastructure Resource Guide for Fairbanks, AK. This guide is available on the Fairbanks Storm Water Management Program website which is hosted by FNSB. Selected Green Infrastructure will be evaluated and incorporated into the updated *BMP Guide*. FNSB has been implementing Green Strategies for several years in its projects. Many Borough facilities utilize dry wells to dispose of roof runoff. The Borough Solid Waste Facility employs infiltration planters, bioswales, dry wells, and detention basins to manage storm water. FNSB projects will continue to be evaluated for implementing these types of BMP’s.

## Snow Disposal Sites

In 2018, FNSB began development of an inventory and GIS map of public and known commercial snow disposal locations within the Fairbanks Urbanized Area. The Fairbanks Permittees developed an application that includes a database schema designed to collect attributes about each site. The dataset is designed to easily collect updated information about sites in the future. FNSB will review and update annually, as appropriate. In 2020, FNSB evaluated if snow disposal sites should be subject to ordinance or other regulatory mechanisms in order to protect water quality. FNSB concluded that no additional or special regulation was required at this time. The details were submitted with the 2020 Annual Report.

## Staff Responsible for Compliance Activities

The following individuals were responsible for implementing and coordinating the post-construction storm water management activities during the 2021 reporting period:

- FNSB – Janet Smith, Deputy Director, Public Works

# MINIMUM CONTROL MEASURES

## Measurable Goals

The following table details the measurable goals set forth in the FNSB's July 2014 Storm Water Management Plan and carried forward to the 2022 Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measurable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Review and revise, as necessary, the Post-construction Storm Water Management Ordinances annually	Yes	No
Review and revise, as necessary, the Storm Water BMP Design Guide by annually	Yes	No
Conduct a training/workshop for local developers, engineers, and contractors to include Green Infrastructure strategies in April 2019, 2021, and 2023	Yes	No
Distribute Green Strategies and Low Impact Development Strategies information annually	Yes	No
Create evaluation report to determine if additional regulation of snow disposal sites is wanted by July 1, 2020.	Completed in previous reporting period	No
Inventory and mapping of snow disposal sites	Yes	No

# MINIMUM CONTROL MEASURES

## 3.6 POLLUTION PREVENTION & GOOD HOUSEKEEPING

### Permit Requirements

To date, FNSB has met all the requirements under Minimum Control Measure 6 – Pollution Prevention & Good Housekeeping. The following table provides a summary of the individual requirements, compliance dates, and status as of December 2021.

Permit Requirements	Compliance Date	Status
<i>FNSB must continue to maintain and implement an operation and maintenance program intended to prevent or reduce pollutant runoff from municipal activities.</i> [Section 3.6.1]	Annually	Complete, ongoing
<i>Annually, FNSB must continue appropriate training for municipal personnel related to optimum maintenance practices for the protection of water quality.</i> [Section 3.6.2]	Annually	Complete, ongoing
<i>FNSBs must continue to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices.</i> [Section 3.6.3]	Annually	Complete, ongoing

### Compliance Activities

#### Operation & Maintenance Program

FNSB has 105 Road Service Areas. Each area was established through an election process by area specific residents to provide road powers to FNSB for area specific roads. The FNSB Rural Services Division supports and provides training to the Road Service Area Commissioners, who were granted road maintenance responsibilities through the aforementioned election process. Fifty-one of these service areas are located within the Fairbanks Urbanized Area. The storm water conveyance systems within these 51 service areas make up the FNSB MS4. The MS4 is maintained by various Road Service Area contractors. The FNSB Rural Services Division has developed a set of standard specifications for maintenance. The specifications include standards for replacing or repairing damaged culverts, furnishing and placing ditch lining material, cleaning and restoring the capacity of the ditches, cleaning culverts and catch basins, thawing frozen culverts and catch basins, and snow removal. Each Road Service Area is responsible for maintenance schedules and inspection of controls.

In addition, appropriate controls for reducing the discharge of pollutants are addressed on a per-department or division basis. A table that identifies specific controls being utilized is included in Appendix E. (E1)

Industrial Facilities – The FNSB does not own or operate any industrial facilities that discharge to the MS4.

#### Annual Employee Training

FNSB conducts annual employee trainings rotating two storm water training DVD kits from Excal Visual. One training is titled “Storm Water Pollution Prevention for MS4 Operations” and includes a 30-minute employee training DVD, training acknowledgement forms, pocket guides, and quizzes covering the topics of good

# MINIMUM CONTROL MEASURES

housekeeping and spill prevention/control/response, vehicle and equipment fueling/maintenance/washing, waste and materials management, facility maintenance, parking lot and street sweeping, storm drain cleaning, landscaping and grounds maintenance, and working over or near surface waters. A second training is titled “Illicit Discharge Detection & Elimination for MS4 Employees” and similarly includes a 15-minute employee training DVD and amenities covering the topics of spotting illicit discharges at their source and outfalls, as well as the employees’ role in illicit discharge detection and elimination. FNSB typically distributes the DVDs to the public works, maintenance, solid waste, and parks and rec departments annually, for viewing. Due to the COVID-19 pandemic and limited seasonal staff, public works and parks and rec were not included in the 2021 employee training. Training acknowledgement forms for the other departments are included in Appendix E. (E2)

## **Flood Management Projects**

Flood management projects generally result in dredge or fill in wetlands and other water bodies, which fall under the purview of the U.S. Army Corps of Engineers (USACE) and ADEC. The USACE requires a Department of the Army Permit for all dredge and fill activities regulated under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act. The ADEC also requires a Certificate of Reasonable Assurance be issued for the project(s) in accordance with Section 401 of the CWA before the Department of the Army Permit can be issued. The Certificate of Reasonable Assurance is the state’s proclamation the project(s) will meet Alaska Water Quality Standards and the requirements of the CWA; and retains conditioning authority therein, under the Federal Power Act, to require implementation of erosion and sediment control BMPs to ensure the project(s) will not violate Alaska Water Quality Standards or the CWA.

All flood management projects within the Fairbanks Urbanized Area, regardless of whether or not they result in dredge or fill in wetlands and other water bodies, additionally require a Title 15 Floodplain Permit from the FNSB. The Floodplain Permit is required for any new or substantially improved structure, alteration of a watercourse, or other development within the flood hazard area, Flood Zone A, inundated by the 100-year flood event. The goal of this permitting process is to ensure the cumulative effect of the proposed development would not create an obstruction in the floodplain, increase water surface elevation of the base flood more than one foot at any point within the Fairbanks area, or increase flood heights or velocities.

For smaller flood management projects within the Fairbanks area, such as bank stabilization projects, a multi-agency permitting process has been established to streamline the permit application process. The permit application is collectively reviewed by the USACE, ADEC, Alaska Department of Fish & Game, Alaska Department of Natural Resources, USFWS, U.S. Department of Agriculture Natural Resources Conservation Service, and FNSB; and subsequently approved by the Alaska Department of Fish & Game in accordance with prevention of stream bank erosion, protection of fish and wildlife habitats, and adherence to Alaska Water Quality Standards and the CWA.

## **Staff Responsible for Compliance Activities**

The following individuals were responsible for implementing and coordinating the pollution prevention and good housekeeping activities during the 2021 reporting period:

- FNSB – Janet Smith, Deputy Director, Public Works

# MINIMUM CONTROL MEASURES

## Measurable Goals

The following table details the measurable goals set forth in the FNSB's July 2014 Storm Water Management Plan and carried forward to the 2022 Plan, whether or not the goals were achieved during the current reporting period, and lists proposed changes, if any, for the next reporting period.

Measurable Goals	Achieved during current reporting period?	Proposed changes for next reporting period?
Continue current operation and maintenance efforts intended to prevent and reduce pollutant runoff from state and municipal activities for the duration of the permit term	Yes	No
Annually provide employee training on storm water pollution prevention for MS4 operations	Yes	No

## 4.1 OUTFALL MONITORING

### 4.1 Outfall Monitoring

The FNSB has not had the need to conduct water quality monitoring. If there becomes a need for FNSB to conduct water quality monitoring, the Fairbanks Permittees and the FNSB updated the Quality Assurance Project Plan (QAPP) in December 2019 to meet the requirements of the permit. A copy of the QAPP is included in Appendix F.

## 4.2 EVALUATION OF PROGRAM EFFECTIVENESS

### 4.2 Evaluation of Program Effectiveness

Each year the FNSB is required to evaluate the program's effectiveness and address any needed improvements/modifications. Overall, it is the opinion of the FNSB that the program has been very effective in reducing the discharge of pollutants from the MS4 through implementation of the compliance activities under each minimum control measure. This is evidenced by the water quality data collected by the Fairbanks Permittees and ADEC since the original permit was issued in 2005. Over time the data has shown improvement in water quality in both the Chena River and Chena Slough – the two primary water bodies in Fairbanks and North Pole to which the MS4 discharges. Both were previously listed as impaired by petroleum products and sediment from urban runoff and in 2010 the ADEC determined both water bodies met state water quality standards for petroleum products. In December 2013 the ADEC announced the Chena River was also meeting state water quality standards for sediment. As of 2019 the Chena River has been removed from the state's impaired waters list. Noyes Slough is still impaired for petroleum and debris (litter), and Total Maximum Daily Load (TMDLs) have been set for both of those pollutants at zero discharge.

