2006 ANNUAL REPORT

Municipal Separate Storm Sewer System (MS4)
NPDES Permit No. AKS-053406

CO-PERMITTEES:
CITY OF FAIRBANKS, CITY OF NORTH POLE,
THE UNIVERSITY OF ALASKA – FAIRBANKS,
AND THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES – NORTHERN REGION OFFICE

Prepared by:

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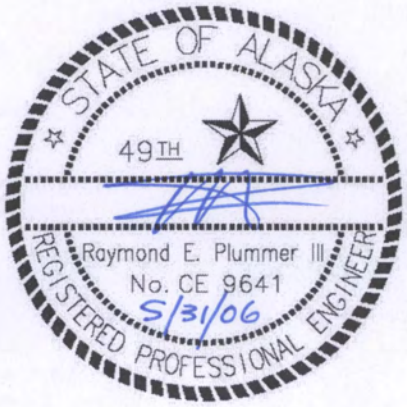
May 2006

CERTIFICATION

The technical material and data contained in this Annual Report was prepared under the supervision and direction of the undersigned whose seal as a professional engineer licensed to practice as such in the state of Alaska is affixed below.

"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."



Professional Engineer's Stamp
License No. CE-9641

Raymond E. Plummer III, P.E.

5/31/06

Date

APPROVAL SIGNATURES

Any person executing the approval signature of the Annual Report is making the following 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 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."

Name	Title	Signature	Date
Steve Thompson	Mayor, City of Fairbanks		
Jeff Jacobson	Mayor, City of North Pole		
Joseph Trubacz	Acting Vice Chancellor for Administrative Services, University of Alaska Fairbanks		
Howard Thies	Maintenance & Operations Director, Alaska Department of Transportation and Public Facilities – Northern Region Office		

TABLE OF CONTENTS

Page

APPENDICES

Appendix A.....Public Education and Outreach Materials
Appendix B.....Public Involvement / Participation Activities
Appendix C.....Storm Water Sample Locations
Appendix D.....Technology Transfer Class Documentation
Appendix E.....Street Sweeping Operations
Appendix F.....Evaluations of Municipal Operations That May Impact Storm Water Quality

ACRONYMS

ADOT&PF.....Alaska Department of Transportation and Public Facilities – Northern Region
ADEC.....Alaska Department of Environmental Conservation
BMP.....Best Management Practice
COF.....City of Fairbanks
CWA.....Clean Water Act
EPA.....U.S. Environmental Protection Agency
FNSB.....Fairbanks North Star Borough
FSWAC.....Fairbanks Stormwater Advisory Committee
MS4.....Municipal Separate Storm Sewer System
NP.....City of North Pole
NPDES.....National Pollutant Discharge Elimination System
PSA.....Public Service Announcement
SWMP.....Fairbanks Storm Water Management Program
TMDL.....Total Maximum Daily Load
UAF.....University of Alaska – Fairbanks
USKH, Inc.....USKH

I PERMITTEE INFORMATION & REPORTING PERIOD

Permit Number: AKS-053406

Co-Permittees:

City of Fairbanks
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Annexation:

Have any areas been added to the MS4 due to Annexation or other legal means?

YES ☐ NO ☑

Reporting Period:

June 1, 2005 to May 31, 2006

II INTRODUCTION

II.A Permit Overview

The U.S. Environmental Protection Agency (EPA) has issued Permit No. AKS-053406 for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), under the authorization of the National Pollutant Discharge Elimination System (NPDES), to the following permittees:

City of Fairbanks (COF),

City of North Pole (NP),

University of Alaska – Fairbanks (UAF), and

Alaska Department of Transportation and Public Facilities – Northern Region (ADOT&PF)

These four entities, known collectively as the co-permittees, are authorized to discharge from all MS4 outfalls existing as of the effective date of the permit (June 1, 2005), to receiving waters that include Beaver Springs, the Chena River, Chena Slough, Noyes Slough, and other associated waters of the United States within the Fairbanks Urbanized Area.

II.B Storm Water Management Program Overview

The MS4 permit requires that the co-permittees develop a Storm Water Management Program (SWMP), as described in permit section II.A.1:

> ***Co-permittees must develop, implement, and enforce a Storm Water Management Program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP must include BMPs, control techniques, system design, engineering methods, and other provisions the co-permittees or EPA determines appropriate for the control of pollutants in discharges from the MS4.***

The SWMP is the tool by which the co-permittees fulfill the requirements of the MS4 permit and provisions of the Clean Water Act (CWA). In the following discussion, a definition of the SWMP is provided, the purpose and goals of the SWMP are discussed, and the key performance characteristics that the SWMP must possess are presented.

II.B.1 Definition of the Storm Water Management Program

In the original MS4 Permit Application, the co-permittees submitted the *Stormwater Management Plan – Fairbanks Urbanized Area*, dated May 2003. The final MS4 Permit incorporated this document by reference into the permit requirements. The EPA expanded on

the co-permittees' submission and finalized the permit, which identifies six minimum control measures. These control measures include the following:

1. Public Education and Outreach;
2. Public Involvement / Participation;
3. Illicit Discharge Detection and Elimination;
4. Construction Site Storm Water Runoff Control;
5. Post-Construction Storm Water Management in New Development and Redevelopment; and
6. Pollution Prevention and Good Housekeeping for Municipal Operations.

The EPA also issued a fact sheet for the permit that explains and clarifies some of the permit language. In February 2006, the co-permittees submitted the *Monitoring Program Plan Including Quality Assurance Requirements*.

The following documents define the SWMP, as it currently exists:

- *Stormwater Management Plan – Fairbanks Urbanized Area*, dated May 2003;
- *Fact Sheet, Permit No: AKS-053406*, Environmental Protection Agency, dated October 18, 2004;
- *Permit No: AKS-053406*, Environmental Protection Agency, effective June 1, 2005; and
- *Monitoring Program Plan Including Quality Assurance Requirements*, dated February 2006.

Section IIA.4.b. of the permit states, *"Unless otherwise specified, program development and implementation schedules must provide for full implementation of a complete SWMP as soon as practicable, but no later than five years from the effective date of this permit."* In keeping with the compliance schedule, resources available to the co-permittees, and the logistics of the new permit, the co-permittees have not yet formalized the SWMP. It is expected that the co-permittees will meet the MS4 permit section IIA.4.b. requirements with completion of the SWMP in accordance with the timelines in the permit.

II.B.2 Purpose and Goals of the Storm Water Management Program

The purpose of the SWMP is to guide the co-permittees' collective efforts to satisfy permit requirements and the appropriate water quality requirements of the CWA. Through institution of Best Management Practices (BMPs), control techniques, system design, engineering methods, and other provisions, the co-permittees will ensure that the applicable Federal and State storm

water quality requirements are attained. Appropriate goals identified for the SWMP include, but are not limited to:

- Compliance with Permit No: AKS-053406;
- Adherence with CWA Section 303(d) impaired waterbody list and Total Maximum Daily Load (TMDL) waterbody recovery plan provisions;
- Meeting Alaska State Water Quality Standards (18 AAC 70 - Water Quality Standards); and
- Conformance with the Alaska State Anti-degradation Policy (18 AAC 70.015).

II.B.3 Storm Water Management Program Key Performance Characteristics

To successfully meet the purpose and stated goals of the SWMP, along with CWA objectives, the SWMP must possess key performance characteristics. These key performance characteristics are a function of the co-permittee arrangement, climactic conditions, local soils conditions, Fairbanks' cultural heritage, and pending TMDL waterbody recovery plans. The performance characteristics include intergovernmental coordination, the identification of BMPs suitable for subarctic conditions, removal of silt from storm water, water quality related to industrial activities, and TMDLs for impaired waterbodies.

II.C Annual Report Overview

At least once annually, the co-permittees are required to submit an Annual Report to the EPA and the ADEC. This Annual Report must include, at a minimum:

a. An evaluation of compliance with the requirements of the permit, the appropriateness of identified BMPs, and progress towards achieving identified measurable goals of the SWMP for each minimum control measure;

b. Results of any information collected and analyzed during the previous 12-month reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the maximum extent practicable;

c. A summary of the activities the co-permittees plan to undertake during the next reporting cycle (including an implementation schedule) for each minimum control measure;

d. Proposed changes and completed changes to the SWMP, including any changes to any BMPs or any identified measurable goals for any minimum control measures;

e. A description and schedule for implementation of additional BMPs that may be necessary, based on monitoring results, to ensure compliance with applicable water quality standards; and

f. Notice if the co-permittees are relying on another entity to satisfy some of the permit obligations, if applicable.

The requirements for evaluation of the SWMP in the first Annual Report submission are presented within the MS4 permit section I.D.4.b.

> ***Not later than one year from the effective date of this permit, the co-permittees' Storm Water Management Program must include a section describing how the selected Best Management Practices (BMPs) identified by the co-permittees will control the discharge of pollutants of concern, and will ensure that the MS4 discharges will not cause an in-stream violation of the water quality standards. This discussion must specifically identify how the BMPs will collectively control the discharge of the pollutant(s) of concern. The co-permittees must submit this section of the Storm Water Management Program to EPA and ADEC as part of the first Annual Report required in Part IV.C.***

This document fulfills the submission requirements for Annual Reporting for the first 12 months since the effective date of the permit, per the permit sections II.B.1. through II.B.6., IV.C., and Appendix A. The following seven report chapters provide required information on the co-permittees' efforts with respect to the six minimum control measures mentioned above, and an evaluation of the SWMP as it pertains to the permit compliance activities completed to date. Because the permit has only been effect for 12 months, most of the efforts expended to date have focused on the public education and outreach, and public involvement and participation control measures.

III PUBLIC EDUCATION AND OUTREACH

The requirements of the first minimum control measure, Public Education and Outreach, are presented within the MS4 permit section II.B.1. The following discussion of the co-permittees' efforts to meet the requirements of this minimum control measure is based on the Annual Report requirements presented in Section II.B.1.d. of the permit, and applicable sections of Appendix A of the permit.

1. Public education programs and outreach programs accomplished during the previous calendar year, including at least one copy of each educational material distributed

The co-permittees joined together with the Fairbanks North Star Borough (FNSB) to meet public education and outreach requirements. Together, the co-permittees and FNSB have instituted a public education program that educates the public about the impacts of storm water discharges on waterbodies. The public education and outreach program has provided steps that citizens can take to reduce pollutants in storm water runoff. While current efforts have targeted local youth and the general public, the program will also provide steps businesses can take to reduce pollutants in storm water runoff.

The Fairbanks Stormwater Advisory Committee (FSWAC) developed the public education program, with direct oversight provided by the Sub-committee on Public Education and Outreach. Sub-committee meeting minutes from the past year are included in Appendix A, along with a narrative describing the formation of the FSWAC. The goal of the public education and outreach program is to create a viable and sustainable means of educating the greater Fairbanks community about storm water and pollution. To meet this goal, the FSWAC will accomplish the following objectives:

- Provide Fairbanks residents with visual and audio messages seasonally on how to eliminate water pollution,
- Solicit local participation in cleanup opportunities,
- Provide education, particularly through work in schools, about storm water and runoff pollution, and
- Encourage behavior changes through participation and observation.

The following sections summarize education and outreach programs accomplished during the previous year. Some of the FSWAC's accomplishments, such as the 2005 Noyes Slough Cleanup, can be categorized under both minimum control measures 1 (Public Education and Outreach) and 2 (Public Involvement / Participation). A discussion of the 2005 Noyes Slough Cleanup is provided in the minimum control measure 2 discussion in Chapter IV.

Fairbanks Storm Water Management Program Web Page

The FNSB web page, available on-line at: http://www.co.fairbanks.ak.us, contains a direct link to the public education and outreach web page available on-line at: http://www.co.fairbanks.ak.us/PWorks/StormWaterManagementProgram/. The COF also has a link (storm water management) on its home page (http://www.ci.fairbanks.ak.us) to the SWMP public education and outreach web page. The web page is updated regularly to reflect upcoming events. In addition to providing a general description of the SWMP and links to the permits, helpful storm water sites, and a Fairbanks Urbanized Area map, the web page also contains links to existing and upcoming public education or outreach events and provides contact information for the FNSB, COF, NP, and ADOT&PF. Documentation of the web page is located in Appendix A of this report.

Public Service Announcements

Starting in April 2006, Public Service Announcements (PSAs) were distributed for broadcasting by local radio stations. In this manner, the FSWAC distributed information to general target audiences throughout the greater Fairbanks and North Pole areas. Each week, radio stations were asked to announce a new message regarding storm water runoff pollution. As a result, Dan Bross of KUAC Public Radio conducted an interview with Clark Milne of the FSWAC, regarding storm water education efforts in April 2006. The FSWAC also forwarded PSAs to the local newspaper. Appendix A contains documentation of the language used in the April 2006 PSAs.

Word Search Placemats

The Public Education and Outreach Sub-committee negotiated with a local restaurant located near Noyes Slough to distribute word search placemats based on EPA's Stormwater Challenge. The sub-committee was able to place additional messages about their purpose and the storm water logo contest on each placemat. Copies of the placemat and associated storm water challenge are located in Appendix A.

Stormwater is Cool Educational Presentation

The FSWAC developed a storm water educational presentation for delivery to elementary school students during the observation of National Earth Week in some of the FNSB schools. The presentation, entitled *Stormwater is Cool*, was designed for a 20- to 30-minute time block, including questions and answers. In total, there were eight presentations delivered to elementary and middle school age children at three different schools. It is estimated that approximately 250 students attended the presentations. *Stormwater is Cool* wristbands were distributed to the students during the presentations (Appendix A). Five members of the FSWAC and one representative from the FNSB delivered the presentations.

In general, the presentations were judged very successful in delivering the message of how storm water can carry pollutants into surface waters, and how those pollutants adversely affect the flora and fauna in our local waterbodies. The enthusiastic reaction of the children and the generation of insightful questions evidenced the success of this educational effort during the presentations.

Logo Contest

The FSWAC sponsored a logo contest for local middle, junior, and senior high school students. The contest concluded May 8, 2006. The FSWAC members devised a ranking system and planned to award prize money to the top three submissions after selection at the May 9, 2006 FSWAC meeting. Unfortunately, the FSWAC received no submissions for the contest. There are plans to repeat the contest in the coming months by including additional target audiences. Correspondence regarding the logo contest is located in Appendix A.

Fairbanks Outdoors Days

On May 9 and 10, 2006, two FSWAC members, with the assistance of an additional person, presented educational materials to local sixth graders as a part of Fairbanks Outdoors Days. Fairbanks Outdoors Days is an annual, 2-day event attended by sixth graders throughout the greater Fairbanks area and is held at the UAF trail system. Representatives from local, state, and federal agencies are invited each year to present materials to students at the event. FSWAC members presented 30-minute presentations to student groups, totaling approximately 200 students over the two days.

The presentations taught students about sediment loading, wetlands, BMPs, and erosion. Students also learned that May is wetlands month, and the FSWAC members distributed "Clean Lake" magnets listing BMPs (Appendix A). The presentations used Project Wet curriculum and taught students and teachers about World Water Monitoring Days, which is a program from September 18 to October 18, 2006 for "spot check" water quality monitoring of temperature, pH, turbidity, and dissolved oxygen. Additional information about Project Wet and World Water Monitoring Days can be found on-line at: http://www.projectwet.org/ and http://www.worldwatermonitoringday.org/.

2. Methods and frequency of distributing information

The FSWAC distributed public education and outreach program information to the public using multiple formats, including: PSAs read by local radio stations; information posted to the SWMP web page; presentations to local schools; placemats distributed to a local restaurant located near Noyes Slough; public notices; and, notices to the local newspaper.

PSAs were available weekly. The SWMP web page is available continuously. The FSWAC anticipates that this program of delivering the *Stormwater is Cool* presentation to schoolchildren will become an annual event during the Earth Week observation at FNSB schools. The presentation can easily be re-packaged for delivery to other audiences as well as other events in the Fairbanks Urbanized Area where appropriate. The Cookie Jar Restaurant, which is in the direct vicinity of Noyes Slough, an impaired waterbody, distributed 250 word search placemats. The word searches were also made available electronically on the storm water web page and to each committee member for general and targeted distribution. Examples of public education and outreach materials are included in Appendix A.

3. Target audiences and pollutants / sources that are addressed by the program, and how they were selected

Target audiences for the public education and outreach program include:

a. Home and property owners,

b. Students,

c. Other federal, state, and local agencies, and

d. Business owners, specifically:

   i. Car lot owners,

   ii. Parking lot owners,

   iii. Auto repair facilities, and

   iv. Car wash facilities.

Outreach efforts have been tailored to reach target audiences according to type of message and method of distribution. The FSWAC selected April 2006 as a focus month for storm water messages to the public because impacts from melting snow and rain are visible during spring breakup. Similarly, the school presentation *Stormwater is Cool* was presented to elementary school students, and the Fairbanks Outdoors Days presentation was given to a target audience of sixth grade students.

The FSWAC selected pollutants of concern based on permit requirements designed to enhance the quality of local waters on the ADEC's impaired waterbodies list, namely the Chena River, Chena Slough, and Noyes Slough. The pollutants of concern include petroleum products and sediments for the Chena River and Chena Slough; and sediment, petroleum products, and debris for Noyes Slough. Springtime public education and outreach efforts were focused on storm water runoff from spring breakup, and spring and summer activities such as car washes and grass cuttings disposal.

4. Estimate of the number of people reached by the program over the previous 12-month period

The public education and outreach program has reached approximately 6,000 people during the previous 12-month period. This number includes 20-30 people reached by the logo contest, 260 people reached by the word search placemats, 250 students that attended the *Stormwater is Cool* presentation, 200 students that attended the Fairbanks Outdoors Days presentations, and roughly 5,000 residents that may have heard the PSAs.

Additionally, public education and outreach efforts related to the 2005 Noyes Slough Cleanup (see discussion in Chapter IV) may have potentially reached as many as 16,000 people due to a major article on the cleanup presented in the September 18, 2005 edition of the Fairbanks News-Miner, a potential audience of 5,000 people that may have heard PSAs broadcast regarding the cleanup, and more than 100 mail-outs on the cleanup efforts that were sent to residents living along the slough.

5. Measurable goals for the public education and outreach program over the next calendar year, and dates by which the measurable goals will be achieved

The following sections summarize the measurable goals of the public education and outreach program to be accomplished over the next calendar year, and outline dates when these goals will be achieved.

Golden Days

The Public Education and Outreach Sub-committee plans to participate in the Golden Days celebration in July 2006 by promoting storm water education and sustainable practices. Golden Days consists of a collection of local festivities honoring the history of gold discovery in Fairbanks. Sub-committee efforts for education and outreach tentatively include the distribution of handouts and other educational materials. The measurable goal of sub-committee participation in Golden Days events will be the occurrence of direct communication between the sub-committee members and the public regarding storm water pollution prevention. Implementation of this goal will occur during the Golden Days events scheduled from July19-23, 2006.

Tanana Valley State Fair

The Public Education and Outreach Sub-committee will distribute materials from the ADOT&PF and ADEC booths at the Tanana Valley State Fair in August 2006 in order to promote public engagement in storm water management and pollution prevention. Members of the sub-committee will assist in manning the booths at the fair in order to present informational handouts and perform direct outreach to the public. The measurable goal of sub-committee presence at the fair will be the distribution of educational resources from sub-committee members to the public. Implementation of this goal will occur during the Tanana Valley State Fair held from August 4-12, 2006.

Seasonal PSAs

In August 2006, the Public Education and Outreach Sub-committee will continue to create and develop seasonal PSAs for distribution in fall 2006 and winter 2006-2007. The announcements will address storm water concerns and BMPs pertinent to each season. The sub-committee plans to dispense the PSAs in a similar manner as the April 2006 PSAs, distributing new announcements to local media such as newspapers and radio stations. The measurable goal of the distribution of PSAs will be the broadcasting of storm water PSAs to the public in various media formats. Implementation of the future PSAs will begin with their development in August and October 2006, and will conclude with their circulation in fall 2006 and winter 2006-2007, respectively.

Car Wash Water Retention

In an effort to promote proper water capture and retention at car washes, the sub-committee has contacted the FNSB and local churches with large grassy locations that may be willing to host local car wash fundraisers. Future efforts will include confirming and then promoting the use of these locations, along with the potential distribution of coupons to encourage the use of sustainable car wash sites. The measurable goal of the car wash activities will be to facilitate local groups in hosting car washes at sites selected by the Sub-committee. Implementation of the car wash activities is proposed to begin in 2006.

6. Persons responsible for implementing and coordinating the education activities

While all members of the FSWAC and its Sub-committee on Public Education and Outreach have shared responsibility for implementing and coordinating education activities, Clark Milne, Maintenance Engineer for ADOT&PF, Northern Region, is the primary education activity coordinator.

Summary of Activities

Within the first year of the effective date of this permit, the co-permittees have instituted and implemented a public education program that educates the community about the impacts of storm water discharges on waterbodies, and the efforts that citizens and businesses can take to reduce pollutants in storm water runoff. Furthermore, the co-permittees have distributed storm water educational materials to target audiences regarding the SWMP, and they have prepared and distributed appropriate information relevant to the program to local media outlets.

Future Planned Activities

Public education and outreach efforts proposed to begin in summer and fall 2006 also include coordinating cleanup messages with dog parks regarding waste disposal, posting signs on borough buses and water quality messages on message signs owned by businesses such as banks. Additionally, the Public Education and Outreach Sub-committee will pursue educational opportunities through the Alaska Public Lands Information Center in Fairbanks, and promotional opportunities through newspaper articles. These future measures are anticipated to engage the full spectrum of the targeted audience, including businesses, residents, and local agencies.

Compliance With Permit Requirements

The co-permittees are currently within the requirements of section II.B.1. as the result of the presented public education and outreach activities completed by the FSWAC over the past year.

IV PUBLIC INVOLVEMENT / PARTICIPATION

The requirements of the second minimum control measure, Public Involvement / Participation, are presented within the MS4 permit Section II.B.2. The following discussion of the co-permittees' efforts to meet the requirements of this minimum control measure is based on the Annual Report requirements presented in Section II.B.2.h. of the permit, and applicable sections of Appendix A of the permit.

1. ***State or local requirements for public involvement, including how the public was involved in the development of the Storm Water Management Plan submitted with the permit application***

The regulatory requirements for public involvement and participation for small MS4s stipulate mandatory compliance with state and local public notice requirements. In order to comply with state and local requirements, the FSWAC has developed a system of posting notices of individual events, committee meetings, and sub-committee meetings on bulletin boards in city offices and on the SWMP web page. FSWAC meeting minutes from the past year are included in Appendix B.

During the preparation of the Storm Water Management Plan (SWMP) submitted with the permit application, three management practices were selected to foster public involvement, namely hosting a stream cleanup day, conducting a volunteer monitoring program, and coordinating an adopt-a-stream program. Additional activities chosen for public involvement / participation include the institution of a storm drain stenciling program and the completion of a public attitude survey.

Over the past year, the FSWAC has begun to plan and implement these practices in concert with the public education and outreach activities discussed in the previous section. The public involvement / participation efforts have increased public awareness and a feeling of ownership with regard to local storm water pollution and water quality issues.

2. ***Activities and target audiences for public involvement that the program accomplished for the preceding 12-month period, including any monitoring and / or survey results, number of storm drains stenciled, etc.***

Target audiences for the public involvement / participation efforts are the same as those for the education and outreach program outlined in the previous section. The following subsections summarize public involvement / participation efforts accomplished this year.

<u>Noyes Slough Cleanup</u>

The FSWAC hosted a stream cleanup day for Noyes Slough on Saturday, September 17, 2005. Noyes Slough traverses approximately seven miles along a horseshoe-shaped channel through neighborhoods and businesses on the north side of the Chena River. The water of Noyes Slough has become partially stagnant over the years as the result of down-cutting of the bed of the Chena River, and the construction of several beaver dams within the slough. The slough has become an

impaired waterbody from the dumping of trash, animal waste, untreated runoff, and yard clippings into the water over the years.

Over 30 volunteers participated in the Noyes Slough cleanup. The cleanup of the slough yielded the collection of over fifty-one 30-gallon trash bags along with an assortment of large trash items that included automotive bumpers, shopping carts, Styrofoam boxes, and animal carcasses. Completion of the stream cleanup day marked the accomplishment of one of the measurable goals for public involvement / participation activities specified in the SWMP.

The slough cleanup also presented an educational opportunity to reach residents who live and work along Noyes Slough. Information pamphlets that detailed the cleanup activities were mailed to residents who live along the slough, and reminded them not to dump yard clippings and waste into the slough. PSAs were broadcast that addressed the cleanup efforts. Additionally, the cleanup efforts were documented in a September 18, 2005 article in the Fairbanks News-Miner. Information and pictures on the Noyes Slough cleanup are included in Appendix B.

Storm Drain Stenciling

The FSWAC purchased and distributed storm drain inlet stencils to the FNSB and all co-permittee members. The purpose of the stencils is to identify drop inlets for the public, educate the public where the stormwater ends up, and discourage illicit discharges. Pictures of the stencils are included in Appendix B. Two types of stencils are shown, one designed for the case in which outfall flows to the Chena River, and one designed for the case in which outfall flows to a slough of the river. ADOT&PF plans to stencil about 25% of their storm drain inlets this summer, beginning after the rainy season in July 2006.

3. Procedures for receiving and reviewing public comments

The FSWAC plans to establish a formal public comment reception and review process prior to June 2007. Public comments have been received at the various outreach and involvement events, including the public involvement / participation stream cleanup event. Furthermore, there are two Public Interest members on the FSWAC that are not members of the co-permittee organizations.

4. Measurable goals for the public involvement / participation program over the next 12-month period, and dates by which the co-permittees will accomplish each of the upcoming measurable goals

The following sections summarize and outline dates of the measurable goals for public involvement / participation to be accomplished over the next calendar year:

Chena Slough Cleanup

In August or September 2006, the FSWAC will assist in the preparation, execution, and public notification of a stream cleanup day. The FSWAC will target the Chena Slough for cleanup efforts in 2006. The committee will solicit public participation in the stream cleanup day and will develop the educational opportunity to reach residents who live and work along the Chena Slough. In addition to public involvement / participation, potential methods of public education and

outreach include the distribution of information pamphlets to nearby residents, detailing the stream cleanup activities, and promoting sustainable outdoor maintenance practices. The measurable goal of the cleanup day will be to host the event. The number of participants and amount of trash collected will be recorded. Implementation of the cleanup day will occur by the end of September 2006.

Attitude Survey

The FSWAC will develop, distribute, and collect a public attitude survey in order to evaluate the public's knowledge and outlook regarding storm water management in the greater Fairbanks Urbanized Area. Survey development is scheduled to begin in summer 2006, with targeted distribution for March 2007. The results shall be submitted to the EPA no later than six months prior to the expiration date of this permit, as required. The measurable goal of the attitude survey will be the development, distribution, and analysis of the survey. Implementation of the survey will begin in March 2007, and will conclude no less than six months before the expiration date of this permit.

Adopt-A-Stream

The FSWAC plans to develop and institute an annual adopt-a-stream program for implementation in 2007. The program will incorporate service groups and individuals in the water quality improvement process, which will increase public awareness of water quality issues. The measurable goal of the adopt-a-stream program will be to increase the length of adopted streams in the Fairbanks area. Implementation of the adopt-a-stream program will occur prior to December 31, 2007.

5. Persons responsible for implementing and coordinating the public involvement / participation activities

While all members of the FSWAC have shared responsibility for implementing and coordinating public involvement / participation activities, Clark Milne, Maintenance Engineer for ADOT&PF, Northern Region, is the primary public involvement / participation coordinator.

Summary of Activities

Within the first year of the effective date of this permit, the co-permittees have created a storm water advisory committee, the FSWAC, which works to inform and involve the public in storm water pollution prevention. To date, the co-permittees have hosted a stream cleanup day and have started a storm drain stenciling program. Over the next year, the development of an adopt-a-stream program and a public attitude survey will continue. The co-permittees will also begin to plan and implement a volunteer monitoring program for additional public involvement / participation. Regular FSWAC meetings will continue to occur, with meeting dates and times posted on the public education and outreach web page. Annual Reports compiled for this MS4 permit will be available to the public and located in the document repository at the City of Fairbanks Engineering Department, along with the Storm Water Management Plan, Quality Assurance Project Plan, and Monitoring Program Plan.

Compliance With Permit Requirements

The co-permittees are currently within the requirements of section II.B.2. as the result of the presented public involvement / participation activities completed by the FSWAC over the past year.

V ILLICIT DISCHARGE DETECTION AND ELIMINATION

The requirements of the third minimum control measure, Illicit Discharge Detection and Elimination, are presented within the MS4 permit Section II.B.3. The following discussion of the co-permittees' efforts to meet the requirements of this minimum control measure is based on the Annual Report requirements presented in Section II.B.3.h. of the permit, and applicable sections of Appendix A of the permit.

1. Criteria used to prioritize investigations in areas suspected of having illicit discharges

At this time, specific criteria has not yet been developed to prioritize investigations in areas suspected of having illicit discharges. It is anticipated that the COF will be the first of the co-permittees to take the initiative on investigating areas suspected of having illicit discharges. Furthermore, it is anticipated that the other co-permittees will develop similar criteria for the prioritization of investigations. However, it should be noted that if a sheen related to suspected hydrocarbon discharge is witnessed on any of the water bodies of concern, investigations in that area would become a priority.

The co-permittees will undertake measures in the coming years in order to develop criteria to prioritize investigations in areas suspected of having illicit discharges. These criteria will be included in the Annual Report for permit year 2008.

2. Procedures used to locate and remove illicit discharges, including detection methods

At this time the co-permittees have not developed specific procedures for the location and removal of illicit discharges. However, informal conversations have been held with operations and maintenance personnel associated with the various co-permittees. The co-permittees will undertake measures in the coming years in order to develop specific procedures for the location and removal of illicit discharges. These procedures will be included in the Annual Report for permit year 2007.

As an aid in future illicit discharge detection efforts, production has begun on a Comprehensive MS4 Storm Drain Map (II.B.3.f. of the MS4 permit). The ADOT&PF has contracted with USKH, Inc. (USKH) and PDC, Inc. to perform their portion of the system delineation work. Efforts performed to date have included initial office efforts to prepare a preliminary storm sewer system map of the portion of the MS4 drainage system under ADOT&PF control. The COF has prepared their preliminary storm drain map. Further map refinements were achieved in 2005-2006 with the help of a summer intern. Additional MS4 mapping field activities are slated to occur before September 2006, and the efforts for completing the required comprehensive storm sewer system map of the MS4 are well ahead of the scheduled compliance date of June 2008.

The COF has instituted a permit system to control the discharge of building cooling water into its stormwater system. During dry flow periods, it will be important to know where permitted activities occur in order to make it easier to identify illicit discharges.

In conjunction with the storm drain mapping efforts, a hydrologic study (II.B.3.a. of the MS4 permit) is being performed with the intent of determining the path and ultimate outfall of storm water in the various branches of the MS4. The co-permittees have contracted with USKH to perform this work. Efforts performed to date on the hydrologic study have included initial field and office efforts in April and May 2006. Additional hydrologic study activities are slated for this year, and the efforts for completing the required hydrologic study of the MS4 are well ahead of the scheduled compliance date of June 2008.

3. Summary of all dry weather testing conducted to date, and of co-permittee activity to remove any identified illicit discharges

At this time, the co-permittees have not initiated dry weather screening efforts. Dry weather screening will be performed in the coming years and summaries of these activities will be included in the Annual Report for the permit year 2008.

4. Copy of the established ordinance or other regulatory mechanism used to prohibit illicit discharges into the MS4. If the permittee has yet to develop this local requirement, describe the plan and schedule for doing so, and progress towards implementation

The City of Fairbanks has contracted with a private consulting firm, USKH, to assist in the creation of ordinances that will prohibit illicit discharges into the MS4. It is likely that the other co-permittees will use this ordinance as a framework to create their own ordinance or regulation. These ordinances will be created and adopted within three years of the effective date of this permit. A copy of these ordinances will be included in the Annual Report for permit year 2008.

5. Enforcement policy and jurisdiction

At this time, the jurisdiction of each of the co-permittees within the Fairbanks Urbanized Area is not completely understood, nor has it yet been rigorously documented. Additionally, a specific program has not yet been developed that outlines procedures for coordination with adjacent municipalities and / or state or federal regulatory agencies to address situations where investigations indicate that illicit discharges are originating outside of the co-permittees' boundaries. In the coming years, co-permittee jurisdiction and coordination procedures will be developed, and will include procedures for notifying EPA and ADEC when enforcement assistance is necessary. A description of programs and procedures relating to these requirements of the MS4 permit will be included in the Annual Report for the permit year 2008.

6. Methods used over the previous 12-month period to inform the public and / or train public employees about illicit discharges and the improper disposal of waste

Efforts have been made in the past 12 months to inform the public about illicit discharges. These efforts are discussed in Sections III.1 and IV.2 of this Annual Report. These efforts included PSAs, community cleanup, and storm drain stenciling.

The FSWAC will be continuing public education efforts and will initiate employee educational efforts specific to illicit discharges in the coming years. Information concerning these efforts will be included in the Annual Report for permit year 2007.

7. Measurable goals for the illicit discharge detection and elimination program for the next 12-month period, and the dates by which each permittee will achieve each of the measurable goals

The co-permittees will perform storm water sampling at a number of sampling sites to determine whether or not illicit discharges can be inferred based on laboratory results. One round of samples will be performed in the summer months of calendar year 2006 during a significant runoff event (or events) and another round will be performed during the spring breakup of calendar year 2007. (Photographs and descriptions of the proposed sampling sites are included in Appendix C.) The exact dates of these samples will be dependant on weather conditions. Further, the co-permittees will continue their public education efforts throughout the coming year.

8. Persons responsible for coordination and implementation of the illicit discharge detection and elimination program

The following people are responsible for coordination and implementation of the illicit discharge detection and elimination program for their respective co-permittee organizations:

City of Fairbanks: Chris Haigh, Acting City Engineer
City of North Pole: James Remitz, Public Works Director
University of Alaska Fairbanks: Thaddeus Williamson, Environmental Health, Safety, and Risk Management Department Safety Officer
Alaska Department of Transportation and Public Facilities – Northern Region: Darren Mulkey, Environmental Program Specialist

Summary of Future Activities

The co-permittees intend to initiate efforts to meet the requirements of the MS4 permit (AKS-053406) within the coming years with the development of criteria to prioritize the investigation of illicit discharges, procedures to detect and remove illicit discharges, and inform the public of the hazards associated with illegal discharges. The co-permittees intend to fully meet the requirements of Section II.B.3 by June 1, 2008.

Compliance With Permit Requirements

The co-permittees are currently within the requirements of Section II.B.3 of the MS4 permit since the permitting schedule does not require full compliance until June 1, 2008.

VI CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

The requirements of the fourth minimum control measure, Construction Site Storm Water Runoff Control, are presented within the MS4 permit Section II.B.4. The following discussion of the co-permittees' efforts to meet the requirements of this minimum control measure is based on the Annual Report requirements presented in Section II.B.4.g. of the permit, and applicable sections of Appendix A of the permit.

1. ***Copy of the established ordinance or other regulatory mechanism used to require erosion, sediment, and waste control at construction sites. If the co-permittees have yet to develop the required regulatory mechanism, describe the plan and schedule of doing so***

At this time, ordinances have not yet been completely developed to require erosion, sediment, and waste control at construction sites. The City of Fairbanks has contracted with USKH to develop city ordinances. It is likely that the other co-permittees will use this ordinance as a framework to develop ordinances of their own. During the construction season of calendar year 2006, ADOT&PF intends to make observations and collect documentation at construction sites in order to correct existing erosion and sediment control problems, and aid in the formulation of the mechanisms to reduce pollutants from such sites in the future.

The co-permittees will continue their efforts to establish construction site erosion and sediment control ordinances and / or regulatory mechanisms in the coming years. Copies of all ordinances and / or mechanisms will be included in the Annual Report for permit year 2007.

2. ***Summary of the number of sanctions and enforcement actions taken by the co-permittees to ensure compliance with the construction site ordinance during the previous 12-month period***

Because construction site ordinances have not yet been developed, sanctions and enforcement actions by the co-permittees have not taken place during the previous 12-month period. Following the finalization of such ordinances, a record of actions will be kept and included in the Annual Reports from that point forward.

3. ***Copy of the written requirements for appropriate erosion, sediment, and waste control BMPs at construction sites***

The co-permittees have not yet published and distributed requirements for the implementation of appropriate erosion and sediment control BMPs to control waste generated on construction sites.

It is anticipated that the requirements will be completed during 2007. A copy of these written requirements will be included in the Annual Report for permit year 2007.

The ADOT&PF hosted a Technology Transfer Class titled "Effective Sediment and Erosion Control on Construction Sites." In attendance was an audience of approximately 80 people. The class was held in Fairbanks at the Wedgewood Resort on November 15, 2005. The co-permittees' inspectors and a number of local consultants, including Great North West, Power House Construction, Shannon & Wilson, Design Alaska, and Rockwell, attended this class. The class consisted of a daylong instructional period where the publication *Field Manual on Sediment and Erosion Control, Best Management Practices for Contractors and Inspectors*, authored by Jerald Fifield, was distributed and reviewed. A list of attendees to this class, as well as the cover of the training manual mentioned above, is included in Appendix D.

4. Summary of the number of site plan reviews conducted by each permittee

A summary of site plan reviews conducted by each permittee during the previous twelve months is not yet available, since the co-permittees do not yet have a standardized system for conducting such reviews. It is anticipated that the information provided to the co-permittees during the Technology Transfer Class will be applied to site plan reviews that are conducted in construction season 2006. A summary of the number of site plan reviews from the 2006 construction season will be included in the Annual Report for permit year 2007.

5. Description of the procedures for receipt and consideration of information submitted by the public

Specific procedures have not yet been developed for the receipt and consideration of information submitted by the public. However, the co-permittees will be planning in early winter of 2006 for the implementation of such procedures to be used in calendar year 2007 and 2008. The co-permittees intend to develop such procedures in the coming years and descriptions of such procedures will be included in the Annual Report of permit year 2008. Currently, the COF and the NP both accept public information via telephone.

6. Summary of the number of sites inspected during the previous 12-month period, including a description of the site inspection procedures, how sites will be prioritized for inspection, and when and how often a site will be inspected

At this time, a summary of site inspections conducted by each permittee during the previous twelve months is not available. Future efforts will focus on developing inspection procedures and prioritization methods. The development of such inspection procedures will likely follow guidance provided in the inspection requirements cited on page 131 of *Field Manual on Sediment and Erosion Control, Best Management Practices for Contractors and Inspectors* by Jerald

Fifield. Once these efforts have been completed, a summary of the number of site plan inspections will be made and included in Annual Reports from that point on.

7. Measurable goals for the construction site runoff control program

Within the coming years, written requirements for appropriate erosion, sediment and waste control BMPs at construction sites will be developed. Procedures for the receipt and consideration of information from the public will also be developed. Additionally, during the 2006 construction season, observations will be made and documented of runoff leaving construction sites. The results of the samples and information from the construction site observations will be used to assist in the development of measurable goals for the construction site runoff control program. Measurable goals are likely to include the requirement of no detectable impacts from construction sites at storm water outfalls. A list of measurable goals will be provided in the Annual Report for permit year 2009. These goals will be completed by end of calendar year 2008.

8. Persons responsible for coordination and implementation of the construction site runoff control program

The following people are responsible for coordination and implementation of the construction site runoff control program for their respective co-permittee organizations:

City of Fairbanks: Chris Haigh, Acting City Engineer
City of North Pole: James Remitz, Public Works Director
University of Alaska Fairbanks: Thaddeus Williamson, Environmental Health, Safety, and Risk Management Department Safety Officer
Alaska Department of Transportation and Public Facilities – Northern Region: Darren Mulkey, Environmental Program Specialist

Summary of Activities

The co-permittees intend to initiate efforts to meet the requirements of the MS4 permit (AKS-053406) within the next calendar year with the development of a construction site runoff control program, ordinance creation, and site plan review procedure development. The co-permittees intend to fully meet the requirements of Section II.B.4 by June 1, 2008.

Compliance With Permit Requirements

The co-permittees are currently within the requirements of Section II.B.4 of the MS4 permit since the permitting schedule does not require full compliance until June 1, 2008.

VII POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

The requirements of the fifth minimum control measure, Post-Construction Storm Water Management in New Development and Redevelopment, are presented within the MS4 permit Section II.B.5. The following discussion of the co-permittees' efforts to meet the requirements of this minimum control measure is based on the Annual Report requirements in Section II.B.5.f. of the permit, and applicable sections of Appendix A of the permit.

1. ***Copy of the BMP design manual containing structural and non-structural BMPs that will be used to manage post-construction runoff from new development and redevelopment projects within the MS4s; and specific priority areas for this program***

Presently the co-permittees do not have a cohesive BMP design manual containing structural and non-structural BMPs that will be used to manage post-construction runoff from new development and redevelopment projects within the MS4. The climate in the Fairbanks Urbanized Area precludes the direct application of BMP-manual materials and BMP designs that have been developed for warmer climates. Thus, development of such materials for the Fairbanks area will require additional analysis, testing, and scrutiny of known BMPs. The co-permittees will work jointly to develop the BMP design manual.

Work to identify suitable post-construction BMPs and to develop a design manual will be carried out in the coming years. This manual will be included in the Annual Report for permit year 2009.

2. ***Design and performance features of the chosen BMPs that are intended to minimize water quality impacts***

As stated previously, the co-permittees are in the early stages of identifying BMPs that will perform in the climate of the Fairbanks Urbanized Area. At this time, the BMPs that are being used in the Fairbanks Urbanized Area are street sweeping, public education, periodic sump pumping, and snow removal and storage. These BMPs are of a procedural nature and therefore do not have specific design and performance features, as do structural post-construction BMPs.

An explanation of the design performance features of the chosen post-construction BMPs will be provided once these BMPs have been identified. This explanation will be included in the Annual Report for permit year 2009.

3. ***Copy of the established ordinance or other regulatory mechanism used to address post-construction runoff control. If the permittee has yet to develop the required regulatory mechanism, describe the plan and schedule for doing so***

The City of Fairbanks has contracted a private consulting firm, USKH, to develop an ordinance to address post-construction runoff control. This ordinance is intended to be the foundation of the larger task of developing, implementing, and enforcing a program to address post-construction

discharges. Work on this ordinance is currently underway. Once finalized, a copy of the established ordinance will be included in the Annual Report for permit year 2009.

Presently, the other co-permittees (the City of North Pole, the University of Alaska – Fairbanks, and the Alaska Department of Transportation and Public Facilities) have not begun efforts to address the development of an ordinance or regulatory mechanism to address post-construction runoff control. Work to develop such a mechanism will be undertaken in the coming years and copies of the established mechanism will be included in the Annual Report for permit year 2009.

4. How long term operations and maintenance of the selected BMPs will be ensured, including the organizations responsible, and their expected operations and maintenance schedule

As stated previously, the co-permittees are in the early stages of identifying BMPs that will perform in the climate of the Fairbanks Urbanized Area. During the development of the BMP design manual, long term operation and maintenance will be addressed. Long term operation and maintenance of existing procedural BMPs, such as street sweeping, will be ensured by the continued ownership, use, and maintenance of the necessary equipment. The various co-permittees will be responsible for maintaining BMPs and equipment that are used within the properties and rights-of-way that belong to each.

A description of how long term operations and maintenance of the selected post-construction BMPs will be provided once these BMPs have been selected. This description will be included in the Annual Report for permit year 2009.

5. Plans to inform and educate developers and the public about appropriate project designs that minimize water quality impacts

Presently there are no plans in place to inform and educate developers and the public about appropriate project designs that minimize water quality impacts. However, in the early winter of 2006 and spring of 2007, the co-permittees anticipate that planning will be initiated for such educational efforts. This effort will likely be combined with the instructional course required in Section II.B.5.f. of the MS4 permit in which local developers, engineers, and the public will be trained on the requirements of the BMP design manual. The co-permittees will work jointly to develop this training course.

Educational efforts are currently projected to take place sometime in calendar year 2008. A description of these efforts will be included in the Annual Report for either permit year 2008 or 2009.

6. Measurable goals for the post-construction runoff control program, including the dates by which the permittee will achieve each of the measurable goals

Runoff sampling at storm water outfalls will be performed in the coming months in accordance with the monitoring requirements of the MS4 permit. Measurable goals have not yet been developed but are likely to include the requirement of no detectable impacts from post-

construction sites at storm water outfalls. A list of measurable goals will be provided in the Annual Report for permit year 2009.

7. Persons responsible for coordination and implementation of the post-construction storm water management program

Each of the co-permittees is individually responsible for coordination and implementation of the post-construction storm water management program since many of the activities under this section are conducted within the properties and rights-of-way that belong to each. The names and titles of the persons responsible for each co-permittee are listed below:

City of Fairbanks: Chris Haigh, Acting City Engineer
City of North Pole: James Remitz, Public Works Director
University of Alaska Fairbanks: Thaddeus Williamson, Environmental Health, Safety, and Risk Management Department Safety Officer
Alaska Department of Transportation and Public Facilities – Northern Region: Darren Mulkey, Environmental Program Specialist

Summary of Activities

The co-permittees intend to initiate efforts to meet the requirements of the MS4 permit (AKS-053406) within the next calendar year with storm drain monitoring, and preliminary BMP identification. The co-permittees intend to fully meet the requirements of Section II.B.5. by June 1, 2009.

Compliance With Permit Requirements

The co-permittees are currently within the requirements of Section II.B.6. of the MS4 permit since the permitting schedule does not require full compliance until June 1, 2009.

VIII POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

The requirements of the sixth minimum control measure, Pollution Prevention and Good Housekeeping for Municipal Operations, are presented within the MS4 permit Section II.B.6. The following discussion of the co-permittees' efforts to meet the requirements of this minimum control measure is based on the Annual Report requirements in Section II.B.6.d. of the permit, and applicable sections of Appendix A of the permit.

1. Activities, maintenance schedules, and long term inspection procedures for controls to reduce discharge of floatables and other pollutants to the MS4

Presently, the only activities that are being undertaken by ADOT&PF that reduce discharge of floatables and other pollutants are procedural BMPs such as street sweeping and snow removal and storage.

The COF currently uses snow removal and storage as controls to reduce the discharge of pollutants to the MS4. The city maintains a street and storm drain cleaning crew when the weather allows. Normally this crew starts the last week of April or first week of May, and continues through September or October depending on the first snow. The streets are cleaned with sweepers and assisted by a water truck. The sweeper crew is a two-person crew working 5 days a week, assisted by the water truck driver also working 5 days a week. A jet truck crew of two people cleans the storm drain system. This crew also works 5 days a week. With this schedule, the whole storm drain system is cleaned every five years. A study of the effectiveness of the COF's street sweeping operations has been performed and is provided in Appendix E.

The UAF frequently sweeps the roads and parking facilities within the campus. A schedule of sweeping operations from July 1, 2005 to May 18, 2006 is provided in Appendix E.

In December 2003, all four co-permittees performed an inventory of operations that impact storm water quality. An operation evaluation form was circulated throughout the four organizations. Copies of the results are attached in Appendix F.

The additional efforts, as necessary, that each of the co-permittees will initiate in the coming year, and descriptions of such activities, maintenance schedules, and long term inspection procedures will be included in the Annual Report for permit year 2007.

2. Employee training program used to prevent and reduce storm water pollution including the targeted department personnel, frequency of such training, and a copy of training materials

Presently, such a program has not been developed by any of the co-permittees; however, informal training sessions have been held. A standardized program that includes the special considerations specific to the Fairbanks Urbanized Area is not known to exist. Thus, the development of such a program will require either developing additional instructional material in addition to existing course packages or the development of completely original courses that account for the local climate. The separate efforts of each of the co-permittees will be initiated in the coming year, and descriptions of the individual employee training programs will be included in the Annual Report for permit year 2007.

3. Controls for reducing or eliminating the discharge of pollutants from areas owned or operated by the co-permittees, including but not limited to streets, roads, and highways; maintenance and storage yards; waste transfer stations; fleet or maintenance shops with outdoor storage areas; salt / sand storage locations; and snow disposal sites operated by the co-permittees

In line with the EPA's hazardous waste regulations, each of the co-permittees has been involved in the control of discharges of various chemicals and other materials generated from such areas as streets, parking lots, maintenance yards, storage yards, waste transfer stations, maintenance shops, salt and sand storage locations, and snow disposal sites. These efforts have resulted in the minimization of hazardous discharges to storm water. Such controls include oil recycling, glycol recycling, sand and gravel recycling, vehicle wash down areas, sumps in vehicle storage buildings, wash racks that drain to the sanitary sewer, and controlled runoff at sand and snow disposal sites. Although these efforts have been made in accordance with other portions of the Clean Water Act, they provide a level of pollutant discharge control required under the MS4 permit.

As necessary, additional controls will be implemented in the coming year and a full summary of controls instituted by each of the co-permittees will be provided in the Annual Report for permit year 2007.

4. Procedures to ensure proper disposal of waste removed from the MS4 and MS4 operations including dredge spoils, accumulated sediments, floatables, and other debris

Few procedures are currently in place to ensure the proper disposal of waste removed from the MS4 and MS4 operations. The ADOT&PF currently disposes of sediments collected during maintenance operations at a local landfill. Each of the co-permittees will initiate efforts to ensure proper disposal of waste removed from the MS4 and the MS4 operations within the coming year.

A description of these procedures, for each of the co-permittees, will be provided in the Annual Report for permit 2007.

5. ***Procedures to assure 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***

Presently there are no procedures in place to assure that new flood management projects are assessed for impacts on water quality, or that existing projects are assessed for incorporation of additional water quality protection devices or practices. However, the FNSB presently has flood management ordinances in place that may effectively serve the needs of the co-permittees. Further investigation will be undertaken in order to establish whether or not the FNSB ordinances will cover the MS4 permit requirements of the co-permittees. If the FNSB ordinances are found to be insufficient to meet the requirements of the co-permittees, then further ordinance(s) will be developed by the co-permittees. A more detailed discussion of this issue will be included in the Annual Report for permit year 2007.

The co-permittees intend to conduct site visits to existing flood management projects in order to determine whether or not additional water quality protection devices or practices are necessary. A discussion of the findings and any actions associated with this investigation will be included in the Annual Report for permit year 2007.

6. ***Industrial facilities owned or operated by the co-permittees that discharge to the MS4, including facilities that are subject to EPA's Multi-Sector General Permit (MSGP) or individual NPDES permits for discharges of storm water associated with industrial activity. Include the EPA permit tracking number or a copy of the industrial Notice of Intent form for each facility, as appropriate***

The co-permittees do not own or operate any industrial facilities that are currently regulated under a Multi-Sector General Permit or that are on file as being regulated under individual NPDES permit.

7. ***Measurable goals for the pollution prevention and good housekeeping program, including dates by which the co-permittees will achieve each of the measurable goals***

The Sub-committee on Public Education and Outreach will launch an internal effort to observe the effectiveness of street sweeping beginning in July 2006. Efforts will include a literature review of existing reports, and the assessment and gathering of data. The measurable goal of the street sweeping investigation will be the assembly of results and reporting of the effectiveness of street sweeping as a pollution mitigation measure. Implementation of the street sweeping analysis will begin in July 2006 and will conclude prior to June 2007 so that the results can be included in the Annual Report for the permit year 2007.

8. Persons responsible for coordination and implementation of the pollution prevention and good housekeeping program

Each of the co-permittees is individually responsible for coordination and implementation of the pollution prevention and good housekeeping program since many of the activities under this section are conducted within the properties and rights-of-way that belong to each. The names and titles of the persons responsible for each co-permittee are as follows:

City of Fairbanks: Chris Haigh, Acting City Engineer
City of North Pole: James Remitz, Public Works Director
University of Alaska Fairbanks: Thaddeus Williamson, Environmental Health, Safety, and Risk Management Department Safety Officer
Alaska Department of Transportation and Public Facilities – Northern Region: Darren Mulkey, Environmental Program Specialist

Summary of Activities

The co-permittees intend to initiate efforts to meet permit requirements within the next calendar year with the implementation of an operation and maintenance schedule intended to reduce pollutant runoff from municipal operations, development of a program to assure that new flood management projects are assessed for impacts to water quality, and reviewing existing flood management projects for incorporation of additional water quality protection devices. The co-permittees intend to fully meet the requirements of Section II.B.6. by June 1, 2009.

Compliance With Permit Requirements

The co-permittees are currently within the requirements of Section II.B.5. of the MS4 permit since the permitting schedule does not require full compliance until June 1, 2009.

IX STORM WATER MANAGEMENT PLAN EVALUATION

The following sections provide an evaluation of the SWMP as it pertains to the permit compliance activities completed to date.

Evaluation of Efforts on Minimum Control Measure 1 - Public Education and Outreach, and Minimum Control Measure 2 - Public Involvement / Participation

There has been excellent exposure and response to the public education and outreach efforts performed over the previous 12-month period. Over 6,000 people have received a message about the SWMP through the World Wide Web, PSAs, *Stormwater is Cool* presentations at local schools, the Fairbanks Outdoors Days, as well as distribution of storm water educational placemats at a local restaurant. Additionally, public education and outreach efforts related to the 2005 Noyes Slough Cleanup may have potentially reached as many as 16,000 people due to a major article on the cleanup presented in the Fairbanks News-Miner. A potential audience of 5,000 people may have heard PSAs broadcast regarding the slough cleanup, and more than 100 mail-outs on the cleanup efforts were sent to residents living along the slough.

The co-permittees met the April 2006 compliance deadlines for distribution of storm water educational materials to target audiences and distribution of outreach materials to media outlets.

There have also been significant opportunities for public involvement and participation efforts over the previous 12-month period. Over 30 local citizens participated in the Noyes Slough cleanup held in September 2005, and ongoing efforts for storm drain stenciling are progressing well. The FSWAC has been meeting regularly since the permit effective date and the meetings are open to the public.

The co-permittees are ahead of the December 2006 compliance deadline for the Stream Cleanup Day event and on schedule for the June 2006 storm drain stenciling program.

Both minimum control measures 1 and 2 rely on procedural versus structural BMPs to control the discharge of sediment, petroleum products, and debris to waters of the U.S. from the MS4. Procedural BMPs are the planning, design, maintenance, and education measures that are applied in order to protect the environment from adverse effects. Procedural controls rely on processes rather than devices to provide environmental protection. It is the opinion of the preparer that the procedural BMPs for both the public education and outreach, and public involvement and participation efforts to date are helping to make significant progress toward the control of the discharge of sediment, petroleum products, and debris to waters of the U.S. from the MS4.

Evaluation of Efforts on Minimum Control Measure 3 - Illicit Discharge Detection and Elimination

Efforts thus far on the hydrologic study (II.B.3.a. of the MS4 permit) have included the initial field and office efforts necessary for USKH to perform a comprehensive hydrologic study of the portion of the MS4 drainage system under ADOT&PF control. Efforts performed under this task include

a literature search; review of storm water studies performed to date; review of the ongoing MS4 mapping efforts (II.B.3.f. of the MS4 permit); and a review of other pertinent mapping, aerial photography, and background materials discovered during the literature search. Data gaps have been identified based on the results of the background research. After the data gaps were identified, the field study efforts necessary to complete the hydrology study were started. A USKH surface water hydrologist made an initial field visit in May 2006 and is in the process of compiling the results from the field observations. Additional hydrologic study activities are slated for this year and the efforts for completing the required hydrologic study of the MS4 are well ahead of the scheduled compliance date of June 2008.

USKH is helping to facilitate the creation of an ordinance to prohibit non-storm water discharges for the COF, starting with model ordinances and ordinances in use in other locations and customizing them to reflect the political, social, and financial factors in the Fairbanks area. Efforts are underway to review model ordinances and catalog considerations unique to the subarctic environment and the Fairbanks community, and provide research for the types of enforcement means and sanctions that have been used successfully in other locations. These efforts are envisioned to provide a base of information and resources from which to begin drafting the ordinance for the co-permittees. The efforts for completing the required ordinance are well ahead of the scheduled compliance date of June 2008.

During the efforts on the Noyes Slough cleanup and the *Stormwater is Cool* presentations discussed above, the co-permittees also provided information about illicit discharges and improper disposal methods to the public.

Efforts thus far on the MS4 mapping (II.B.3.f. of the MS4 permit) have included the initial office efforts necessary for USKH to prepare a comprehensive storm sewer system map of the portion of the MS4 drainage system under ADOT&PF control. To meet the ultimate goal, USKH has performed research to review historical mapping and information that is readily available; determined what basis of coordinates, bearings, and elevations the existing historical mapping is in; resolved differences between the data; and has proposed an appropriate horizontal and vertical control network to use for the comprehensive mapping effort. USKH is currently in the process of determining limits and areas to be surveyed that are under ADOT&PF responsibility. Additional MS4 mapping field activities are slated to occur before September 2006, and the efforts for completing the required comprehensive storm sewer system map of the MS4 are well ahead of the scheduled compliance date of June 2008.

The efforts for minimum control measure 3 are well ahead of schedule. It is the opinion of the preparer that the initial illicit discharge detection and elimination efforts performed to date are helping to make reasonable progress toward the control of the discharge of sediment, petroleum products, and debris to waters of the U.S. from the MS4.

<u>Evaluation of Efforts on Minimum Control Measure 4 - Construction Site Storm Water Runoff Control</u>

USKH is helping to facilitate the creation of an ordinance to require erosion and sediment controls for construction site storm water discharges for the COF, starting with model ordinances and ordinances in use in other locations, and customizing them to reflect the political, social, and

financial factors in the Fairbanks area. Efforts are underway to review model ordinances and catalog considerations unique to the subarctic environment and the Fairbanks community, and provide research for the types of enforcement means and sanctions that have been used successfully in other locations. These efforts are envisioned to provide a base of information and resources from which to begin drafting the ordinance for the co-permittees. The efforts for completing the required ordinance are well ahead of the scheduled compliance date of June 2007.

Other permit compliance activities include the ADOT&PF hosting of a Technology Transfer Class entitled "Effective Sediment and Erosion Control on Construction Sites," on November 15, 2005. The co-permittees' inspectors and a number of local consultants attended this class. The class consisted of a daylong instructional period where the publication titled *Field Manual on Sediment and Erosion Control, Best Management Practices for Contractors and Inspectors*, authored by Jerald Fifield, was distributed and reviewed.

The efforts for minimum control measure 4 are well ahead of schedule. It is the opinion of the preparer that the initial construction site storm water runoff control efforts performed to date are helping to make reasonable progress toward the control of the discharge of sediment, petroleum products, and debris to waters of the U.S. from the MS4. The permit compliance schedule does not necessitate that these efforts be started yet. Successful development, implementation, and enforcement of the final construction site storm water runoff control program can be expected to yield large benefits in further discharge controls.

Evaluation of Efforts on Minimum Control Measure 5 – Post-Construction Storm Water Management in New Development and Redevelopment

USKH is helping to facilitate the creation of an ordinance to address post-construction runoff from new development projects or redevelopment projects for the COF, starting with model ordinances and ordinances in use in other locations, and customizing them to reflect the political, social, and financial factors in the Fairbanks area. Efforts are underway to review model ordinances and catalog considerations unique to the subarctic environment and the Fairbanks community, and provide research for the types of enforcement means and sanctions that have been used successfully in other locations. These efforts are envisioned to provide a base of information and resources from which to begin drafting the ordinance for the co-permittees. The efforts for completing the required ordinance are well ahead of the scheduled compliance date of June 2009.

Some of the preliminary efforts for minimum control measure 5 are well ahead of schedule. It is the opinion of the preparer that the initial post-construction storm water management in new development and redevelopment efforts to date are helping to make reasonable progress toward the control of the discharge of sediment, petroleum products, and debris to waters of the U.S. from the MS4. The permit compliance schedule does not necessitate that these efforts be started yet. Successful development, implementation, and enforcement of the final post-construction storm water management in new development and redevelopment program can be expected to yield large benefits in further discharge controls.

Evaluation of Efforts on Minimum Control Measure 6 - Pollution Prevention and Good Housekeeping for Municipal Operations

Activities initiated or completed to date falling under the purview of the pollution prevention and good housekeeping for municipal operations minimum control measure include: street sweeping and drainage system cleaning by ADOT&PF, COF, and UAF; construction in accordance with FNSB flood management ordinances; and municipal operations in line with EPA's hazardous waste regulations.

These preliminary efforts for minimum control measure 6 are ahead of schedule. It is the opinion of the preparer that the initial pollution prevention / good housekeeping for municipal operations efforts to date are helping to make reasonable progress toward the control of the discharge of sediment, petroleum products, and debris to waters of the U.S. from the MS4. The permit compliance schedule does not necessitate that these efforts be started yet. Successful development, implementation, and enforcement of the final program for this minimum control measure can be expected to yield additional benefits in future discharge controls.