

CITY OF INDEPENDENCE

Stormwater Pollution Prevention Program (SWPPP)

May 2006

Amended to include TMDL requirements:

July 2008

Updated BMP responsible parties:

May 2009

I. INTRODUCTION

Purpose

The City of Independence is listed as a Mandatory Small Municipal Separate Storm Sewer System (MS4) under the Clean Water Act. This requires the submission of a General National Pollution Discharge Elimination System (NPDES)/State Disposal System (SDS) permit. The MS4 program is administered by the Minnesota Pollution Control Agency (MPCA).

The primary goal of this permit is “to restore and maintain the chemical, physical, and biological integrity of Waters of the State through management and treatment of urban stormwater runoff.” This is accomplished through management of MS4s through a Stormwater Pollution Prevention Program (SWPPP). The purpose of the SWPPP is to maintain water quality standards where there is compliance, and help bring waters that do not meet water quality standards into compliance by controlling stormwater runoff.

Existing Conditions and Issues

The City of Independence, MN is a city of approximately 3,600 people, located on the western edge of Hennepin County. It is a largely rural community, with farms and animal operations intermingled with more developed areas. The City’s existing storm sewer system consists of a limited amount of pipes and culverts, lift stations, and approximately 34 stormwater ponds implemented under the Nationwide Urban Runoff Program (NURP).

The community resides mostly within the jurisdiction of the Pioneer-Sarah Creek Watershed Management Commission, but part of the southeast portion of the City lies within the Minnehaha Creek Watershed District. Surface water bodies within the City include Lake Independence, Lake Sarah, Lake Robina, Lake Haughey, Fox Lake, Lake Irene, Pioneer Creek, Sarah Creek, and several tributaries.

The City is also in the midst of a Comprehensive Plan update, and has recently formed a Parks, Trails, and Open Spaces Task Force that will participate in the update process. In addition, there are a number of other community groups currently involved in stormwater/water quality projects, including the Independence Horse Owners Association, Lake Sarah and Lake Independence Citizens Associations, Lake Independence Stakeholders Group, Open Spaces Committee, among others. It is anticipated these groups will be valuable resources and participants in the implementation of the SWPPP.

Each of these issues and groups were taken into consideration in developing the SWPPP, and it is anticipated that future changes to the SWPPP will occur to reflect results of current and ongoing City activities.

Organization of the SWPPP

The SWPPP is formatted and organized utilizing the Best Management Practices (BMP) summary sheets that are required by the MPCA. The information included or referenced on the summary sheets is intended to meet all SWPPP requirements for each BMP, therefore no other narrative is provided as part of the SWPPP. The SWPPP covers six minimum control measures: Public Education and Outreach; Public Participation; Illicit Discharge, Detection and Elimination; Construction Site Runoff Control; Post-Construction Site Runoff Control; and Pollution Prevention/Good Housekeeping. The SWPPP is organized by minimum control measures in the order listed above. An overall index is presented to locate each minimum control measure section by page number. An sub-index is also available on the first page of each section, detailing unique BMP ID numbers and the specific permit reference.

Section II of the SWPPP details the incorporation of Total Maximum Daily Load (TMDL) requirements, and contains specific BMP summary sheets to support identified reductions.

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Minimum Control Measure 1: PUBLIC EDUCATION AND OUTREACH

Key to Unique BMP ID Numbers	Required BMP Title	Permit Reference
1a-1	Distribute Educational Materials	V.G.1.a
1b-1	Implement an Education Program	V.G.1.b
1c-1	Education Program: Public Education and Outreach	V.G.1.c
1c-2	Education Program: Public Participation	V.G.1.c
1c-3	Education Program: Illicit Discharge Detection and Elimination	V.G.1.c
1c-4	Education Program: Construction Site Run-off Control	V.G.1.c
1c-5	Education Program: Post-Construction Stormwater Management in New Development and Redevelopment	V.G.1.c
1c-6	Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations	V.G.1.c
1d-1	Coordination of Education Program	V.G.1.d
1e-1	Annual Public Meeting	V.G.1.e

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 1-PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1a-1

<p>*BMP Title: Distribute Educational Materials</p>
<p>*BMP Description:</p> <p>The City of Independence will distribute materials on stormwater issues to the general public, business owners, and other interested or affected parties as necessary. The City will investigate and research other materials generated by the EPA, state, and others, and will utilize these materials and/or modify them as allowable to make them more applicable to local issues. Educational materials will focus on what individuals and households can do to reduce stormwater pollution, and how citizens can become involved in local stormwater activities and programs. The goal of distributing this information is to gain greater support for the stormwater program, and to help the public understand why the program is important.</p> <p>Materials will be distributed through a number of means, but will most frequently utilize the City newsletter, which is currently published 3 times per year, and the City website. In addition, City staff will continue to display educational handouts and brochures at a specific area in City Hall. The City will continue to explore other opportunities for reaching more of the general population, and when specific needs are identified, fact sheets, brochures, or other materials will be developed and distributed.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Number of stormwater-related articles published in the City's newsletter per year. Number of stormwater brochures, etc. collected from other entities and displayed in City Hall. Number of fact sheets or brochures developed and distributed.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Research and collect various education materials from other agencies, jurisdictions, and non-profit groups, and provide a specific location in the public for these materials. Publicize the availability of this information. Years 1-5) Stormwater articles published in the City's newsletter at least 2 times per year. Year 2) Review collected materials and identify specific issues that have local relevance or importance. Select existing brochures that are applicable. Years 3-5) Based on review of existing information, distribute existing materials locally, and/or develop and distribute additional materials to local residents and business owners.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1b-1

***BMP Title:** Implement an Education Program

***BMP Description:**

The City will develop and implement an education program that addresses the 6 minimum control measures as outlined in the permit:

- 1) public education and outreach
- 2) public participation
- 3) illicit discharge detection and elimination
- 4) construction site stormwater runoff control
- 5) post-construction stormwater management
- 6) pollution prevention/good housekeeping

The program will fully address each of these 6 measures, as specifically outlined in following elements 1c-1 through 1c-6. Public education will be achieved through distribution of materials as outlined in previous BMP 1a-1. The goal of this education program is to increase the awareness of stormwater issues within the general public, and to achieve greater understanding of the MS4 permitting process for City staff and the general public.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Specific measurements for each minimum control measure, as defined in following elements 1c-1 through 1c-6. Ability of City staff to field questions from the public on MS4 permit requirements.

***Timeline/Implementation Schedule:**

The education program will be ongoing and will continue for the life of the permit (Years 1-5).

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Toni Hirsch

Department: Administration

Phone: 763-479-0527

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BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-1

***BMP Title:** Education Program: Public Education and Outreach

***Audience(s) Involved:**

General public and business owners.

***Educational Goals for Each Audience:**

Increase public awareness and understanding of stormwater issues within the community. Inform and educate the public about the impacts of stormwater runoff on water quality, and keep them aware of opportunities to participate in the overall program, or special events pertaining to water quality.

***Activities Used to Reach Educational Goals:**

- 1) Highlight stormwater issues through City sponsored community events and programs that focus on public participation, such as clean-up days and volunteer monitoring or planting programs.
- 2) Continue to advertise and participate in activities hosted by the County, watershed district, or other community groups.
- 3) Publish articles in the community newsletter that highlight seasonal stormwater issues and stormwater related community events and programs.
- 4) Post stormwater information on the City web site.
- 5) Stormwater educational materials provided at public places.
 - Stormwater information and educational materials displayed at City Hall.
 - Promote Pet Waste Disposal Program by providing information to dog owners (e.g. pet waste fact sheets distributed to dog owners with application for dog license).
- 6) Work with local schools and resource organizations to develop and implement a program for elementary school children focused on household stormwater management.

***Activity Implementation Plan:**

Activity #1

Years 1-5) Continue Annual Clean-Up Day each spring in cooperation with Hennepin County and the City of Maple Plain.

Activity #2

Years 1-5) Continue to publish advertisements for stormwater activities in the City newsletter, and post in the "Events" section of the City website.

Activity #3

Year 1) Solicit example material pertaining to minimum control measures from outside entities (i.e. state and federal agencies, watershed districts, other communities, etc.)

Years 1-5) Develop and publish at least 2 articles pertaining to stormwater each year, with all minimum control measures covered by the end of Year 5.

Years 1-5) Provide notices or updates as necessary on any City actions pertaining to stormwater issues.

Years 1-5) In the beginning of each year, contact watershed districts, Hennepin County, and other community groups asking for information on their events. Give approximate dates that the City newsletter will be published and a contact name for sending information. Publish info in newsletter.

Activity #4

Years 1-5) In the beginning of each year, contact watershed districts, Hennepin County, and other community groups asking for information on their events. Post info on City website.

Years 1) Develop a water resources/stormwater section of the City website.

Years 2-5) Develop materials and provide links to stormwater resources.

Activity #5

Year 1) Solicit and research informational material pertaining to stormwater from outside entities (i.e. state and federal agencies, watershed districts, other communities, etc.)

Years 2-5) Display collected materials in City Hall, in a place where the public may view the materials at any time during business hours. Update the collection as new materials become available.

Year 2) Utilize outside resources to develop or obtain a pet waste information sheet.

Years 3-5) Distribute pet waste information sheet to anyone who applies for a pet license.

Activity #6

Year 1) Investigate existing school programs relating to stormwater. Inquire about sharing services or utilizing existing program. If necessary, identify responsible person to initiate and develop a unique local program.

Years 2-5) Implement school stormwater program.

***Performance Measures:**

Activity #1

- Monitor and record number of households participating, and the amount of waste collected at the annual clean-up day, and report in the community newsletter.

Activity #2

- Number of event notices published or posted.

Activity #3

- Number of storm water related articles (at least 2 each year pertaining to minimum control measures)
- All minimum control measures covered in 5-year period.
- Number of households to which newsletter was sent

Activity #4

- Number of storm water related articles and links

Activity #5

- Number of materials, or size of area dedicated to stormwater materials
- Number of animal licenses issued with pet waste information sheet attached.

Activities #2-#5

At the end of Years 2 and 4, survey citizens to determine if the stormwater articles were read and if they felt that their knowledge of stormwater issues has increased. This survey can be an insert in the City's newsletter.

Activity #6

- Number of students participating in program
- Number of schools participating in program

***Responsible Party for this BMP:**

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BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-2

***BMP Title:** Education Program: Public Participation

***Audience(s) Involved:**

General public including residents and business owners.

***Educational Goals for Each Audience:**

- 1) Inform and educate the public about the impacts of stormwater runoff on water quality and what they can do to actively protect local lakes and streams from polluted stormwater runoff.
- 2) Inform and educate the public about how the City manages stormwater runoff through its Stormwater Pollution Prevention Program (SWPPP), and how the public can provide input.

***Activities Used to Reach Educational Goals:**

- 1) The City will report in the community newsletter and the City website on activities related to managing stormwater and implementing the SWPPP. Topics for the newsletter may include information about the water quality of our City lakes and streams; events and programs the public can participate in to raise their awareness about stormwater impacts; specific stormwater management activities the City is implementing, the stormwater budget/fees, and notices of stormwater-related meetings and comment periods.
- 2) Evaluate the feasibility of City-sponsored events such as a park clean-up day, and solicit volunteers.
- 3) Inform the public of opportunities to participate in water quality events sponsored by the County or other governments or interest groups.

***Activity Implementation Plan:**

Activity #1

Years 1-5) Publish articles on stormwater management and the SWPPP in the community newsletter and on the City's website.

Activity #2

Year 1) Meet as City staff and identify specific stakeholders or community group leaders that can provide input on the possibility of City events.

Year 2) Develop at least one City-sponsored annual event relating to stormwater. Plan the event with the assistance of volunteers.

Years 3-5) Conduct a City-sponsored annual stormwater/clean-up event.

Activity #3

Years 1-5) Continue to post upcoming events in on the "Events" section of the City's website, and advertise in the City newsletter.

***Performance Measures:**

Activity #1

- Publish stormwater at least twice per year in the City's newsletter.
- At the end of Years 2 and 4, survey citizens to determine if the stormwater articles were read and if they felt that their knowledge of stormwater issues has increased. Survey will be conducted under the BMP Summary Sheet 1c-1 (Education Program: Public Education and Outreach) Performance Measure.

Activity #2

- Number of community members involved in planning and executing a City-sponsored event.
- Report on the event in the City's newsletter.

Activity #3

- Number of events posted and/or advertised in the newsletter each year.

***Responsible Party for this BMP:**

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**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-3

<p>*BMP Title: Education Program: Illicit Discharge Detection and Elimination</p>
<p>*Audience(s) Involved: General public and business owners; City Staff.</p>
<p>*Educational Goals for Each Audience:</p> <ol style="list-style-type: none">1) Increase public awareness and understanding of illicit discharge.2) Inform and educate the public about the impacts of illicit discharge on water quality and what they can do to actively protect local lakes and streams from illicit discharge.3) Inform and educate the public about how the City manages illicit discharge through its Stormwater Pollution Prevention Program (SWPPP).
<p>*Activities Used to Reach Educational Goals:</p> <p><u>Activity #1</u> The City will report in the community newsletter on the source and implications of illicit discharge, and will also inform the public on how to locate and report such discharge.</p> <p><u>Activity #2</u> Continue Annual Clean-Up Day each spring in cooperation with Hennepin County and the City of Maple Plain.</p>
<p>*Activity Implementation Plan:</p> <p><u>Activity #1</u> Publish at least one article on illicit discharge in the community newsletter, which defines illicit discharge and informs the public of how to report it.</p> <p><u>Activity 2</u> Publicize the Annual Clean-Up Day in the City's newsletter and on the "events" section of the website.</p>
<p>*Performance Measures:</p> <p><u>Activity #1</u> Publish an article on illicit discharge in one of the community newsletters in Year 2.</p> <p><u>Activity #2</u> Monitor and record number of households participating, and the amount of waste collected at the annual clean-up day, and report in the City newsletter.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-4

*BMP Title: Education Program: Construction Site Run-off Control
*Audience(s) Involved: General public, business owners, developers, contractors, City staff and maintenance crews.
*Educational Goals for Each Audience: 1) Increase public awareness and understanding of construction site run-off. 2) Inform and educate the public about the impacts of construction site run-off on water quality and what they can do to actively protect local lakes and streams from construction site run-off. 3) Inform and educate the public and developers/construction workers about how the City manages construction site run-off through its Stormwater Pollution Prevention Program (SWPPP) and existing City ordinances.
*Activities Used to Reach Educational Goals: 1) The City will report in the community newsletter on the source and implications of construction site run-off. 2) The City will maintain and update the existing handout containing a list and description of minimum erosion and sediment control measures/BMPs. This will continue to be made available to developers/contractors/construction site personnel.
*Activity Implementation Plan: <u>Activity #1</u> Year 2) Publish at least one article on construction site run-off articles in the community newsletter. <u>Activity #2</u> Year 1) Continue to distribute existing handout. Assess materials available with other similar communities, as well as outside entities, including, but not limited to non-profits, watersheds, soil and water conservation districts, water management organizations, extension, county, regional, state and federal agencies. Year 2) Revise existing handout based on research conducted. Years 2-5) Distribute new handout to developers/construction workers and other identified resources.
*Performance Measures: <u>Activity #1</u> Publish an article on construction site run-off in one of the community newsletters in Year 2. <u>Activity #2</u> Number of handouts distributed.
*Responsible Party for this BMP: Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-5

*BMP Title: Education Program: Post-Construction Stormwater Management in New Development and Redevelopment
*Audience(s) Involved: General public, developers, contractors, City staff and maintenance crews.
*Educational Goals for Each Audience: 1) Increase public awareness and understanding of the implications of increased runoff as a result of new development/redevelopment. 2) Inform and educate the public and developers/construction workers about post-construction stormwater management requirements.
*Activities Used to Reach Educational Goals: 1) The City will report in the community newsletter on the potential causes of increased stormwater runoff as a result of new development/redevelopment. 2) Provide a list of applicable references of the zoning code or other informational material pertaining to post-construction stormwater requirements that may be helpful to developers when developing a site plan.
*Activity Implementation Plan: <u>Activity #1</u> Year 1) Develop a regulation reference sheet for developers, and distribute with any inquiries about new development. Year 3) Publish at least one article on post-construction stormwater management in the City newsletter.
*Performance Measures: <u>Activity #1</u> Publish an article on post-construction stormwater management in one of the City newsletters in Year 3. <u>Activity #2</u> Number of reference sheets distributed.
*Responsible Party for this BMP: Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1c-6

<p>*BMP Title: Education Program: Pollution Prevention/Good Housekeeping for Municipal Operations</p>
<p>*Audience(s) Involved: City staff and maintenance crews.</p>
<p>*Educational Goals for Each Audience: Inform City staff and maintenance crews on the importance of monitoring and maintenance, and the required activities that should be monitored under the new permit, and the frequency of monitoring. Introduce them to new methods of recording inspections and maintenance activities.</p>
<p>*Activities Used to Reach Educational Goals: 1) Conduct informational session or distribute information for City staff and maintenance workers on monitoring requirements of the permit. 2) Introduce maintenance and inspection log sheets, and solicit input.</p>
<p>*Activity Implementation Plan: <u>Activity #1</u> Years 1-5) Conduct annual training session and/or distribute information. This should be held early in the year, prior to busy monitoring/inspection seasons. <u>Activity #2</u> Year 1) Prior to first period of monitoring, develop maintenance and inspection log sheets, and provide for review from those who would use them on a regular basis.</p>
<p>*Performance Measures: <u>Activity #1</u> Number of City staff in attendance at training. <u>Activity #2</u> Number of monthly log sheets completed. Evaluate monitoring sheets at the end of each year to determine completion, and address deficiencies or issues with record keeping.</p>
<p>*Responsible Party for this BMP: Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1d-1

***BMP Title:** Coordination of Education Program

***BMP Description:**

The City will reach out to other organizations, municipalities, agencies and interest groups to coordinate its education program with the existing activities of these entities. Particular organizations with which the City will continue to cooperate include, among others:

- Independence Horse Owners Association
- Lake Stakeholders Group
- Lake Sarah Citizens Association
- Lake Independence Citizens Association
- Open Spaces Committee (City of Independence)
- Parks, Trails and Open Spaces Task Force (City of Independence)
- Pioneer-Sarah Creek Watershed Management Commission
- Minnehaha Creek Watershed District
- Hennepin County

The intent of coordinating with these groups and others is to become educated on the groups' individual activities, to utilize existing and proven resources, and to work together to coordinate a more regional program.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Number of agencies/groups/municipalities contacted.
Number of joint programs implemented by end of Year 5.

***Timeline/Implementation Schedule:**

Year 1) Develop a list of contacts, expanding on the list above. Contact each group and survey its education efforts. Identify overlaps in goals and education efforts.

Year 2) Follow up with those groups with common goals and programs with opportunity for sharing or collaboration.

Years 2-5) Execute at least one education program or resource in conjunction with another group.

Specific Components and Notes:

***Responsible Party for this BMP:**

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BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: PUBLIC EDUCATION AND OUTREACH

Unique BMP Identification Number: 1e-1

<p>*BMP Title: Annual Public Meeting</p>
<p>*BMP Description:</p> <p>The City will conduct an annual stormwater meeting to discuss stormwater issues and allow for public input to the SWPPP. The meeting will be public noticed as detailed in SMP 2a-1. The SWPPP will also be available for public review at Independence City Hall. The meeting will be conducted in conjunction with a standing City Council meeting, at Independence City Hall.</p> <p>At the meeting, interested persons will be provided the opportunity to make oral statements regarding the SWPPP. All input received will be considered by City staff and will be incorporated into the SWPPP as applicable.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Meeting completed (y/n) Number in attendance</p>
<p>*Timeline/Implementation Schedule:</p> <p>Meetings will be conducted annually prior to Annual Report submittal through the life of the Permit. The meeting will take place in April of each year, so public input can be appropriately solicited and considered prior to submittal of the Annual Report by June 30. The specific meeting date will be selected based on current City agenda items, so that proper time is allocated for SWPPP comments.</p>
<p>Specific Components and Notes:</p> <p>On occasion, representatives from local watershed districts or other groups interested in or with a stake in water issues may be asked to attend and/or present at an annual meeting.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us</p>

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

Minimum Control Measure 2: PUBLIC PARTICIPATION/INVOLVEMENT

Key to Unique BMP ID Numbers	Required BMP Title	Permit Reference
2a-1	Comply with Public Notice Requirements	V.G.2.a
2b-1	Solicit Public Input and opinion on the Adequacy of the SWPPP	V.G.2.b
2c-1	Consider Public Input	V.G.2.c

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 2-PUBLIC PARTICIPATION/INVOLVEMENT

Unique BMP Identification Number: 2a-1

<p>*BMP Title: Comply with Public Notice Requirements</p>
<p>*BMP Description:</p> <p>At least 30 days prior to each annual public information meeting on the SWPPP, the City will issue a public notice stating the date, time, and location of the meeting; along with a short description of the manner in which the meeting will be conducted, and information on the availability of the SWPPP document for public review and comment.</p> <p>The notice will be published in the Delano Eagle and The Pioneer, which serve the Independence area. It will also be sent to the MPCA, City and County officials, watershed districts, and any other persons or groups requesting to be informed of public meetings relating to the SWPPP.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Affadavit of publication or copy of notice as appeared in newspaper.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Years 1-5) In March of each year (once meeting date is set), develop and publish public notice, taking into account submittal deadlines for the newspaper and MPCA.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us</p>

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 2-PUBLIC PARTICIPATION/INVOLVEMENT

Unique BMP Identification Number: 2b-1

***BMP Title:** Solicit Public Input and opinion on the Adequacy of the SWPPP

***BMP Description:**

The City will use the education and outreach efforts outlined on BMP Summary Sheet 1c-2 (Education Program: Public Participation) for providing information to the general public about how the City manages stormwater runoff through its Stormwater Pollution Prevention Program (SWPPP), to encourage the public to learn about the SWPPP, and to facilitate public input and comment on the SWPPP.

As the annual public meeting on the SWPPP is planned to occur during a regular meeting of the City Council, the City will request that the SWPPP be placed on the meeting agenda at a time that will be conducive to the public attending and providing input on the SWPPP (i.e. not at the end of the agenda). At the meeting, the City will provide a brief presentation on the purpose, goals, and requirements of the SWPPP to educate, inform, and encourage citizens to provide input and comment on the SWPPP. The City will provide opportunity for interested persons to make oral statements or provide written comments on the SWPPP at the meeting. A reasonable amount of time will be made available at the meeting for a questions and comments relating to the SWPPP. Persons not able to attend the meeting may submit written comments on the SWPPP within the time identified in the public notice for the meeting. The public will have 30 days or more to provide written comments, which can be submitted via letter or email to the City.

The City will also solicit public input and provide opportunity for comment on the SWPPP at any other subsequent public meetings, as needed, regarding modifications of or amendments to the SWPPP.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

- 1) Track the number of attendees at the annual public meeting on the SWPPP (provide a sign-in sheet at the meeting).
- 2) Track the number of oral and written comments received on the SWPPP, and the number of questions addressed at the annual public meeting.
- 3) Hold additional public meeting(s) regarding modifications/amendments to the SWPPP and track public input.

***Timeline/Implementation Schedule:**

Years 1-5) The City will implement the education and outreach efforts according to the timeline/implementation schedule in BMP Summary Sheet 1c-2.

Years 1-5) Hold public meeting on the SWPPP annually.

Specific Components and Notes:

***Responsible Party for this BMP:**

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BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 2-PUBLIC PARTICIPATION/INVOLVEMENT

Unique BMP Identification Number: 2c-1

<p>*BMP Title: Consider Public Input</p>
<p>*BMP Description:</p> <p>The City will implement methods for considering public input into the SWPPP. At the end of the comment period as identified in the public notice, City staff will review all comments received. All oral and written comments received will be summarized and addressed in a document that will be posted on the City's website. All commentors providing email addresses will also be emailed this document. Based on the City's review, comments will be incorporated into the SWPPP.</p> <p>The goal of this BMP is to foster ownership in the SWPPP among the City's residents and other interested parties, and also to make the best and most representative SWPPP possible.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Number of public comments received, and number of comments incorporated into the SWPPP.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Years 1-5) Comment period will commence in March of each year, 30 days prior to the public meeting. Comment period will extend at least 30 days. The City will provide feedback on comments within 30 days of the meeting, and any revisions to the SWPPP will be incorporated and recorded in the annual report prior to June 30th of each year.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us</p>

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

Minimum Control Measure 3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

Key to Unique BMP ID Numbers	Required BMP Title	Permit Reference
3a-1	Storm Sewer System Map	V.G.3.a
3b-1	Regulatory Control Program	V.G.3.b
3c-1	Illicit Discharge Detection and Elimination Plan	V.G.3.c
3d-1	Public and Employee Illicit Discharge Information Program	V.G.3.d
3e-1	Identification of Non Stormwater Discharges and Flows	V.G.3.e

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

Unique BMP Identification Number: 3a-1

<p>*BMP Title: Storm Sewer System Map</p>
<p>*BMP Description:</p> <p>The City will develop and maintain an electronic map of the storm sewer system, and any changes or improvements to the system will be included in periodic updates. The storm sewer map will show:</p> <ul style="list-style-type: none">• Ponds, streams lakes & wetlands that are part of the MS4• Structural pollution devices that are part of the MS4• All pipes & conveyances in the MS4 system, as goal – but at minimum – those pipes \geq 24 inches in diameter• Outfalls, including discharges from Independence to other MS4s or waters and wetlands that are not part of Independence (and do not have operational control); structures that discharge storm water directly into groundwater; overland discharge points and all other points of discharge from the MS4's system <p>This map will act as a resource for use by various City departments to implement the various components of the SWPPP. It will also function as a public education tool.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>All components incorporated into the map. Number of maps distributed.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Data collection and field checking. Development of map and circulation for review by City staff. Year 2) Final map completed and submitted with the Annual Report by June 30, 2008. Distribute maps to City departments and other interested parties.</p>
<p>Specific Components and Notes:</p> <p>Information will be collected from various City departments, watershed districts, and the County to develop the map.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 3-ILLCIT DISCHARGE DETECTION AND
ELIMINATION

Unique BMP Identification Number: 3b-1

<p>*BMP Title: Regulatory Control Program</p>
<p>*BMP Description:</p> <p>Ordinance language that prohibits non-stormwater discharge (including hazardous and non-hazardous materials) and has provision for enforcement procedures and violations. The City currently has ordinances pertaining to non-stormwater discharge (Chapter VII, Section 710 of Independence City Ordinances). This ordinance should be reviewed to determine compliance with provisions of the Permit.</p>
<p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Review past violations, and record any violations after the ordinance is revised/added, to determine effectiveness of new ordinance.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Existing ordinance review, comparison with similar communities. Year 2) Development of language if necessary, consultation with attorney. Year 3) Changes to present ordinance, or implementation of new ordinance if necessary.</p>
<p>Specific Components and Notes:</p> <p>City Council has regulatory authority concerning ordinances. City Administrator, City Planner, or Building Inspector has authority to put stop work order on non-compliant activities.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com</p>

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

Unique BMP Identification Number: 3c-1

<p>*BMP Title: Illicit Discharge Detection and Elimination Plan</p>
<p>*BMP Description:</p> <p>The City will develop an Illicit Discharge Detection and Elimination Plan, which addresses procedures for locating priority areas likely to have illicit discharge; procedures for tracing the source of illicit discharge; procedures for removing the source of illicit discharge; and procedures for program evaluation and assessment.</p> <p>Location of priority areas will rely heavily on input from the public, and the City will advertise a contact number for reporting illicit discharges. In addition, land uses will be reviewed to determine potential locations of discharges and likely sources. Other site inspections and testing will occur depending on the nature of the illicit substance, and the source will be removed and/or immobilized as soon as possible. Specific procedures will be developed and contained in an Illicit Discharge Detection and Elimination Plan.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Number of public complaints and if/how they were addressed. Number of tests or visual inspections conducted on illicit discharge locations. Number of illicit discharges detected. Reduction in number of public complains, required tests, or number of discharges detected over 5-year period.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Meet as City Staff to discuss appropriate procedures for reporting and addressing complaints of illicit discharge, as well as other required elements of the Illicit Discharge Detection and Elimination Plan described above.</p> <p>Year 2) Establish hotline or designate phone contact for citizens to report illicit discharge. Inform citizens through actions identified in BMP 1c-3. Finalize Plan.</p> <p>Years 3-5) Implement Plan and record calls, inspections/tests, numbers and types of illicit discharges, and maintenance performed.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 3-ILLCIT DISCHARGE DETECTION AND ELIMINATION

Unique BMP Identification Number: 3d-1

<p>*BMP Title: Public and Employee Illicit Discharge Information Program</p>
<p>*BMP Description:</p> <p>The City will use the education efforts outlined on BMP Summary Sheet 1c-3 (Education Program: Illicit Discharge Detection and Elimination) for providing information to the general public concerning the hazards associated with illegal discharges and the improper disposal of wastes. The City will develop a separate effort to provide training to City employees. This training will focus on those City employees that are involved in activities out in the community (e.g. Public Works/Engineering and Parks Department field staff) which may impact stormwater quality including; road salt and sand application, landscaping, and other activities. The City intends to provide each employee with broad based training followed by annual retraining which will focus on specific, yet to be determined issues.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <ol style="list-style-type: none">1) See BMP Summary Sheet 1c-3 for Measurable Goals concerning public education efforts regarding Illicit Discharge Detection and Elimination.2) Develop a training program for educating City employees about the hazards associated with illegal discharges and the improper disposal of wastes which relate to their work activities.3) Train all City employees who are involved in activities which could possibly result in illicit discharges to stormwater.4) Develop a training program to provide annual retraining, with specific focused training efforts, to City employees.5) Implement annual retraining and focused training efforts.
<p>*Timeline/Implementation Schedule:</p> <p>See BMP Summary Sheet 1c-3 for Timeline/Implementation Schedule concerning public education efforts regarding Illicit Discharge Detection and Elimination.</p> <p>Year 1) Develop training program for educating City employees about the hazards associated with illegal discharges and the improper disposal of wastes which relate to their work activities.</p> <p>Year 2) Train all City employees who are involved in activities which could possibly result in illicit discharges to stormwater.</p> <p>Year 3) Develop training program to provide annual retraining and focused training efforts to City employees and implement this training.</p> <p>Years 4-5) Continue annual retraining and focused training efforts.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant)</p> <p>Department: Water Resources</p> <p>Phone: 763-427-5860</p> <p>E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 3-ILLICIT DISCHARGE DETECTION AND ELIMINATION

Unique BMP Identification Number: 3e-1

<p>*BMP Title: Identification of Non Stormwater Discharges and Flows</p>
<p>*BMP Description:</p> <p>The City will develop a process to evaluate whether any of the following categories of non-stormwater discharges or flows are significant contributors of pollutants to our MS4:</p> <p>water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, street wash water, and discharges or flows from fire fighting activities.</p> <p>For any non-stormwater discharges or flows which the City finds to be a significant contributor of pollutants to the MS4 the City will develop an action plan to evaluate and address the impact the discharge is having on stormwater quality.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Number of action plans developed and implemented. Reduction (or increase) in non-stormwater discharges and flows, based evaluation of implementation phase.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Develop process to investigate and evaluate non-stormwater discharges and flows. Year 2) Conduct investigation and evaluation of non-stormwater discharges and flows and develop action plans for those which are identified as being significant contributors of pollutants to our MS4. Year 3) Implement the action plans for significant non-stormwater discharges and flows. Years 4-5) Continue with action plan concerning significant non-stormwater discharges and flows. Years 4-5) Evaluate the implementation phase of the action plans and make adjustments as necessary to prepare for a permanent program for Identification of Non-Stormwater Discharges and Flows to be put in place.</p>
<p>Specific Components and Notes:</p> <p>The process of identifying non-stormwater discharges and flows will be developed in cooperation with studies already done and underway for TMDL requirements of Lake Sarah and Lake Independence.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Dan Koch Department: Public Works Phone: 763-479-0530 E-mail: dkoch@ci.independence.mn.us</p>

Minimum Control Measure 4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Key to Unique BMP ID Numbers	Required BMP Title	Permit Reference
4a-1	Ordinance or other Regulatory Mechanism	V.G.4.a
4b-1	Construction Site Implementation of Erosion and Sediment Control BMPs	V.G.4.b
4c-1	Waste Controls for Construction Site Operators	V.G.4.c
4d-1	Procedure for Site Plan Review	V.G.4.d
4e-1	Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater Noncompliance	V.G.4.e
4f-1	Establishment of Procedures for Site Inspections and Enforcement	V.G.4.f

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4a-1

<p>*BMP Title: Ordinance or other Regulatory Mechanism</p>
<p>*BMP Description:</p> <p>The City will develop ordinance language or other regulatory documents that provides controls for managing construction site stormwater runoff, and has provision for enforcement procedures and violations. The City currently has Erosion Control Measures (ECM) as documented in Section 508 of the City Code (Grading, Erosion and Sediment Control Ordinance). This ordinance should be reviewed to determine compliance with provisions of the Permit.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Review past violations, and record any violations after the regulatory control measures are revised/added, to determine effectiveness of new regulations.</p>
<p>*Timeline/Implementation Schedule:</p> <p>If a program is not in existence or warrants complete revision of the existing regulations, a program must be developed and enforced to reduce pollutants in any stormwater runoff from construction activities that result in over 1 acre of disturbance within 6 months of the issue of this permit.</p> <p>Year 1) Existing control document review, comparison with similar communities. Year 2) Development of language if necessary, consultation with attorney. Year 3) Changes to present document, or implementation of new regulations if necessary.</p>
<p>Specific Components and Notes:</p> <p>City Council has regulatory authority concerning ordinances. City Administrator, City Planner, or Building Inspector has authority to put stop work order on non-compliant activities.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4b-1

<p>*BMP Title: Construction Site Implementation of Erosion and Sediment Control BMPs</p>
<p>*BMP Description:</p> <p>The City Public Works/Engineering Departments, including the Building Inspector, will review its Erosion Control Measure documentation to determine which specific BMPs are most effective in keeping erosion under control and containing sediment on the construction site and off the streets. The results of this review will be incorporated into the existing City handout that is distributed to all local builders, contractors, and developers. Each year, information from inspectors and permit regulators will be collected to determine effectiveness of BMPs. Revisions to the list of BMPs will be completed based on those control measures that resulted in permit non-compliance.</p> <p>Once each year, a BMP workshop will be hosted for all local builders, contractors, and developers. The BMPs outlined in the guidance document are explained in detail, and installation and BMP maintenance will also be discussed. Evaluation forms will be provided at the end of the workshop to gather feedback on the event.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <ol style="list-style-type: none">1) Number of attendees at workshop.2) Review Workshop evaluation comments submitted by the attendees and determine the percentage that believed the BMP Workshop was meaningful and would help them do their job correctly.3) Review MPCA inspection data to determine which BMPs commonly resulted in permit on-compliance, and adjust BMP list accordingly.
<p>*Timeline/Implementation Schedule:</p> <p>During the year following the completion of the stormwater ordinance and the selection of the ten (10) BMPs, start the implementation of these BMPs.</p> <p>Years 1-5) Annual BMP Workshop in February.</p> <p>Years 2-5) Add five (5) new BMPs that the BMP Review Board feels are justifiable.</p>
<p>Specific Components and Notes:</p> <ol style="list-style-type: none">1) Make certain that the BMPs selected by the BMP Review Board are consistent with the requirements of the Phase II General Stormwater Permit for Construction Activity.
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant)</p> <p>Department: Water Resources</p> <p>Phone: 763-427-5860</p> <p>E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4c-1

<p>*BMP Title: Waste Controls for Construction Site Operators</p>
<p>*BMP Description:</p> <p>The City will implement or incorporate by reference waste controls for construction site operators. These waste controls will include provisions for discarded building materials, concrete truck washout, chemicals used at the construction site, litter, and disposal of sanitary waste.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Review past violations, and record any violations after the waste control measures are revised/added, to determine effectiveness of new measures.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Review existing ordinances and regulatory provisions governing construction site waste. Compare existing with other similarly-sized communities. Year 2) Development of language if necessary. Year 3) Changes to present document, or implementation of new regulations if necessary.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Bruce Satek Department: Building Inspector Phone: 763-479-0531 E-mail: bsatek@ci.independence.mn.us</p>

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4d-1

<p>*BMP Title: Procedure for Site Plan Review</p>
<p>*BMP Description:</p> <p>The City will review its current method of site review to determine if proper consideration is given on water quality impacts. Currently, any grade/fill permit applications are reviewed by City water resource staff and a representative from the Pioneer-Sarah Watershed before a permit is granted. In addition, the applicant is required to have all erosion control measures in place before grading of any kind is allowed.</p>
<p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
<p>*Measurable Goals:</p> <p>Review past number of permits denied based on water quality issues. Track future permits denied based on same issues to determine effectiveness of new procedures.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 1) Review existing site plan review. Compare existing with other similarly-sized communities. Year 2) Development of language if necessary. Year 3) Changes to present procedure, or implementation of procedure if necessary.</p>
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4e-1

*BMP Title: Establishment of Procedures for the Receipt and Consideration of Reports of Stormwater Noncompliance
*BMP Description: The City will develop procedure for receiving reports from the public and other entities on stormwater noncompliance, and will formulate a procedure for responding to reports. The basis of this reporting system will be a City-established hotline or other contact number for reporting construction site stormwater noncompliance. Specific procedures will be documented and made available to the public.
Location(s) in SWPPP of detailed information relating to this BMP: The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.
*Measurable Goals: Number of public complaints and if/how they were addressed. Number of follow-up inspections conducted, and the results of the inspection. Number of noncompliant controls detected, and documented follow-up actions. Reduction in number of public complains, required inspections, or records of non-compliance detected over 5-year period.
*Timeline/Implementation Schedule: Year 1) Meet as City Staff to discuss appropriate procedures for reporting and addressing complaints of construction stormwater noncompliance. Year 2) Establish hotline or designate phone contact for citizens to report stormwater noncompliance. Inform citizens through actions identified in BMP 1c-4. Years 3-5) Implement Plan and record calls, inspections/tests, numbers and types of stormwater noncompliance, and maintenance performed or actions taken.
Specific Components and Notes:
*Responsible Party for this BMP: Name: Craig Jochum (consultant) Department: Water Resources Phone: 763-427-5860 E-mail: craigj@haa-inc.com

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 4-CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Unique BMP Identification Number: 4f-1

*BMP Title: Establishment of Procedures for Site Inspections and Enforcement
*BMP Description: <p>The City will develop procedures for inspection and enforcement of construction site control measures related to erosion and sediment as well as site waste. The City will formalize its construction site inspection program by specifying conditions that could lead to inspections, establishing inspection procedure, and enforcing control measures.</p>
Location(s) in SWPPP of detailed information relating to this BMP: <p>The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.</p>
*Measurable Goals: <p>Number of inspections conducted. Number of noncompliant controls detected, and documented follow-up actions. Percentage rate of compliance by construction contractors. Reduction in number of public complaints, required inspections, or records of non-compliance detected over 5-year period.</p>
*Timeline/Implementation Schedule: <p>Year 1) Evaluate current inspection procedures. Year 2) Improve and document new procedures for inspection and develop guidelines for inspection and enforcement. If necessary include new enforcement language and procedures in existing ordinances. Year 3) Formalize procedures and communicate requirements and expectations to contractors and developers.</p>
Specific Components and Notes: <p>This BMP will work in concert with the provisions of BMP 4e-1.</p>
*Responsible Party for this BMP: <p>Name: Bruce Satek Department: Building Inspector Phone: 763-479-0531 E-mail: bsatek@ci.independence.mn.us</p>

Minimum Control Measure 5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Key to Unique BMP ID Numbers	Required BMP Title	Permit Reference
5a-1	Development and Implementation of Structural and/or Non-structural BMPs	V.G.5.a
5b-1	Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment	V.G.5.b
5c-1	Long-term Operation and Maintenance of BMPs	V.G.5.c

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5a-1

***BMP Title:** Development and Implementation of Structural and/or Non-structural BMPs

***BMP Description:**

City water resources staff will review a combination of structure and non-structure BMPs to manage post-construction stormwater. Existing guidance and regulations will also be assessed for consistency and effectiveness. The findings and results of these reviews will be incorporated into a post-construction stormwater management plan. This plan will help to better define requirements and provide better understanding for contractors, developers and the general public about controlling and maintaining stormwater management measures after construction.

Examples of non-structural BMPs to be considered include: policies and ordinances to direct growth, protect sensitive areas, increase open space, provide buffers, and minimize impervious surfaces, among others. Examples of structural BMPs include wet ponds and detention structures, swales, rain gardens, and infiltration basins. The City currently applies Nationwide Urban Runoff Program requirements, and sediment basins have been a part of the City's program since around 1995.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

- 1) Update wet detention pond design standards annually along with investigating new post-construction BMPs.
- 2) Track the number of new wet detention ponds created per calendar year.
- 3) Determine the acres of new impervious surface that has been put in place each calendar year.
- 4) Photograph receiving streams annually so comparisons per calendar year can be made in regards to scouring and acres of new impervious surface.

***Timeline/Implementation Schedule:**

Years 1-5) Review and update structural and non-structural BMPs.

The Engineering Department will continue to conduct reviews of all construction projects with stormwater management being a major component and focus of the review.

A post-construction stormwater management plan will be developed and implemented by June 30, 2008.

Specific Components and Notes:

- 1) All wet detention ponds should be designed to remove 60% of phosphorus load.
- 2) The wet detention ponds should release stormwater at a rate that is equal to or less than pre-development rates.
- 3) Review site plans to make sure that there is maximum infiltration of stormwater taking place.

***Responsible Party for this BMP:**

Name: Craig Jochum (consultant)

Department: Water Resources

Phone: 763-427-5860

E-mail: craigj@haa-inc.com

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5b-1

***BMP Title:** Regulatory Mechanism to Address Post Construction Runoff from New Development and Redevelopment

***BMP Description:**

The City will review existing ordinance language or other regulatory documents that provide controls for managing post-construction stormwater runoff. The review will ensure that existing ordinances and documentation has provision for enforcement procedures and violations. The City currently has Erosion Control Measures (ECM) and ponding requirements as documented in Section 508 of the City Code (Grading, Erosion and Sediment Control Ordinance). Applicable documents should be reviewed to determine compliance with provisions of the Permit.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Review past violations, and record any violations after the regulatory control measures are revised/added, to determine effectiveness of new regulations.

***Timeline/Implementation Schedule:**

Year 1) Existing ordinance review, comparison with similar communities.
Year 2) Development of language if necessary, consultation with attorney.
Year 3) Changes to present document, or implementation of new regulations if necessary.

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Craig Jochum (consultant)
Department: Water Resources
Phone: 763-427-5860
E-mail: craigj@haa-inc.com

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 5-POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Unique BMP Identification Number: 5c-1

***BMP Title:** Long-term Operation and Maintenance of BMPs

***BMP Description:**

The City will include in its Post-Construction Stormwater Management Plan, provisions for the long-term operation and maintenance of post-construction BMPs. This will include inspections during construction to ensure that BMPs are being constructed as originally designed, and regular monitoring and maintenance to ensure that BMPs are functioning properly. Many of these inspections will be developed and completed in accordance with BMP 6b-3.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Log of inspections completed, and any maintenance measures performed.

Number of post-construction BMPs inspected per year.

Percent of maintenance issues reported that were addressed.

Evaluate record of maintenance to review patterns and BMP effectiveness, and adjust BMPs accordingly.

***Timeline/Implementation Schedule:**

Year 1) Develop a log to record inspection results and any cleaning or maintenance performed/recommended. This will be developed prior to the first period of monitoring in Year 1.

Years 1 through 5) Inspect post-construction BMPs as outlined in BMP 6b-3, and maintain log of inspection and cleaning (where necessary) for life of the permit

Year 5) Evaluate maintenance record and review BMPs for effectiveness. Recommend new BMPs as necessary.

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Bruce Satek

Department: Building Inspector

Phone: 763-479-0531

E-mail: bsatek@ci.independence.mn.us

Minimum Control Measure 6: POLLUTION PREVENTION/GOOD HOUSEKEEPING

Key to Unique BMP ID Numbers	Required BMP Title	Permit Reference
6a-1	Municipal Operations and Maintenance Program	V.G.6.a
6a-2	Street Sweeping**	
6b-2	Annual Inspection of All Structural Pollution Control Devices	V.G.6.b.2
6b-3	Inspection of a Minimum of 20 percent of the MS4 Outfalls, Sediment Basins and Ponds Each Year on a Rotating Basis	V.G.6.b.3
6b-4	Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas	V.G.6.b.4
6b-5	Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures	V.G.6.b.5
6b-6	Record Reporting and Retention of all Inspections and Responses to the Inspections	V.G.6.b.6
6b-7	Evaluation of Inspection Frequency	V.G.6.b.7

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-1

***BMP Title:** Municipal Operations and Maintenance Program

***BMP Description:**

The City will develop a maintenance program directed at City staff and maintenance crews, in accordance with the educational program outlined in BMP 1c-6. This will help to achieve the goal of reducing or preventing pollutant runoff from City operations. The program will utilize existing training materials from the EPA and other state and local agencies.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Number of City staff in attendance at each annual training program.

Survey of maintenance crews to identify if information received in training was useful, and if it was implemented on the job site.

Inspection of various job sites and daily activities to check for compliance with goals of reducing pollutant runoff from City operations.

***Timeline/Implementation Schedule:**

Year 1) Identify City staff and maintenance staff that would benefit from operations and maintenance training. Collect existing training materials and develop a training program.

Years 2-5) Conduct training program annually, earlier in the year so there is time before the busy inspection season would begin.

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6a-2

***BMP Title:** Street Sweeping**

***BMP Description:**

The City will review its current street sweeping program for effectiveness, and will utilize public input to identify high priority areas that may be swept more often or earlier in existing sweeping periods. Street sweeping is conducted by the City once a year, in the spring. Additional street sweeping is conducted when new development warrants, and is the responsibility of developers.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Street sweeping was conducted annually (y/n)
Survey residents to determine if street sweeping was effective.

***Timeline/Implementation Schedule:**

Years 1-5) This program is in place and will continue to occur annually in each permit year.
Year 3) Evaluate program effectiveness and recommend changes if needed.
Year 5) Revise program to include necessary changes.

Specific Components and Notes:

Street sweeping is conducted once per year, in the spring. The sweeping is completed using a combination of brush and vacuum equipment. The waste generated from street sweeping activities is collected and hauled to the City Public Works facility, where it is stockpiled and re-used.

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-2

***BMP Title:** Annual Inspection of All Structural Pollution Control Devices

***BMP Description:**

The City will implement an annual inspection program for all structural pollution control devices. Existing devices will be inventoried and will include trap manholes, grit chambers, sumps, floatable skimmers and traps, separators, and other small settling or filtering devices. The City is currently in the process of developing a sump pump monitoring program that will be included in the SWPPP when it is finalized.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

List and/or map of all structural pollution control devices in the City.

Inspections completed annually (y/n)

Number of inspections completed annually, and recorded results of inspections.

***Timeline/Implementation Schedule:**

Year 1) Data collection and field checking for structural pollution control devices. Development of list/map and circulation for review by City staff.

Year 2) Final map completed and submitted with the Annual Report by June 30, 2008. Distribute maps to City departments and other interested parties.

Years 2-5) Annual inspections of each structural pollution control device.

Specific Components and Notes:

This BMP will occur in conjunction with developing a stormwater system map, as outlined in BMP 3a-1.

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-3

***BMP Title:** Inspection of a Minimum of 20 percent of the MS4 Outfalls, Sediment Basins and Ponds Each Year on a Rotating Basis

***BMP Description:**

A minimum of 20% of the ponds, sediment basins and outfalls in the City will be inspected annually in rotation until all have been inspected during the Permit period. Records will be kept of inspection results, date and any maintenance performed or recommended. Inspections will be performed in the fall, when water levels are lower and structures can be seen. This will also ensure that structures are in proper condition to handle spring water flows.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Number of outfalls and ponds inspected (20% minimum/year)
Number of outfalls or ponds where sediment was removed or other cleaning was necessary

***Timeline/Implementation Schedule:**

Year 1: Develop a log to record inspection results and any cleaning or maintenance performed/recommended. This will be developed prior to the first period of monitoring in Year 1.
Year 1) Data collection and field checking for outfalls, sediment basins and ponds. Development of list/map and circulation for review by City staff.
Years 1 through 5: Inspect 20% of current outfalls and ponds annually in the fall and maintain log of inspection and cleaning (where necessary) for life of the permit

Specific Components and Notes:

This BMP will occur in conjunction with developing a stormwater system map, as outlined in BMP 3a-1.

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-4

***BMP Title:** Annual Inspection of All Exposed Stockpile, Storage and Material Handling Areas

***BMP Description:**

The City will identify and maintain a list of all permanent exposed stockpile, storage and material handling areas on job sites or at City maintenance facilities. This includes, but is not limited to: topsoil, salt, lumber, coal, or parts. A plan for annual inspection of each area will be developed. Records will be kept of inspection results, date and any maintenance performed or recommended.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Number of exposed stockpile, storage and material handling areas inspected each year.
Number of exposed stockpile, storage and material handling areas where maintenance was necessary.
Track improvements in maintenance records during the permit period, and/or document continuous problem areas.

***Timeline/Implementation Schedule:**

Year 1: Develop a log to record inspection results and any cleaning or maintenance performed/recommended. This will be developed prior to the first period of monitoring in Year 1.
Year 1) Data collection and field checking for exposed stockpile, storage and material handling areas. Development of list/map and circulation for review by City staff.
Years 1 through 5: Inspect exposed stockpile, storage and material handling areas annually each fall and maintain log of inspection and cleaning (where necessary) for life of the permit.

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-5

***BMP Title:** Inspection Follow-up Including the Determination of Whether Repair, Replacement, or Maintenance Measures are Necessary and the Implementation of the Corrective Measures

***BMP Description:**

The City will develop inspection follow-up protocol for each of the resources and areas described in BMPs 6b-2 through 6b-4. In general, a log will be kept documenting inspections and any maintenance issues. Larger issues (such as replacement of a device or other issues that may require additional funds or resources) will be reviewed and approved by City staff. Corrective measures will be documented and logged with the date of implementation, which should occur as soon as possible, usually during the same year as the inspection documenting the problem. When corrective action is not practicable in this timeframe, the reasons for waiting to implement corrective measures should be documented in the Annual Report.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Number of maintenance issues addressed each year.
Timeframe in which corrective action occurs.
Log of implementation dates for corrective actions.

***Timeline/Implementation Schedule:**

Year 1) Develop the protocol for recording and reporting maintenance issues to the Public Works Department. Communicate protocol to staff performing inspections.

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Dan Koch
Department: Public Works
Phone: 763-479-0530
E-mail: dkoch@ci.independence.mn.us

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-6

***BMP Title:** Record Reporting and Retention of All Inspections and Responses to the Inspections

***BMP Description:**

The City will develop inspection reporting protocol for each of the resources and areas described in BMPs 6b-2 through 6b-4. In general, a log will be kept documenting inspections and any maintenance issues. Responses to any issues will also be documented. Responses may include corrective or protective measures, or documentation stating why the issue was not resolved. Specific dates of any repairs will also be logged. The results of annual inspections will be summarized in the Annual Report.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

Number of issues and responses.
Log of all inspections and responses.

***Timeline/Implementation Schedule:**

Year 1) Develop the protocol for recording and reporting maintenance issues to the Public Works Department. Communicate protocol to staff performing inspections.
Years 1-5) Record and report all inspections, responses, repairs, and/or justification for no action.
Years 2-5) Summarize results of annual inspections in each Annual Report.

Specific Components and Notes:

When communicating new protocol, emphasis will be placed on the importance of timely and accurate recording and reporting of inspections. Consistent recording and reporting will allow the City to better evaluate current practices, and will make the Annual Report process much easier.

***Responsible Party for this BMP:**

Name: Dan Koch
Department: Public Works
Phone: 763-479-0530
E-mail: dkoch@ci.independence.mn.us

**Indicates a REQUIRED field. Failure to complete any required field will result in rejection of the application due to incompleteness.*

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: 6-POLLUTION PREVENTION/GOOD HOUSEKEEPING

Unique BMP Identification Number: 6b-7

***BMP Title:** Evaluation of Inspection Frequency

***BMP Description:**

The City will utilize follow-up, recording and reporting functions described in BMPs 6b-5 and 6b-6 to collect data and help evaluate inspection frequency. After 2 years of inspection, the City will review records to determine the frequency and patterns of maintenance required for each stormwater resource. The frequency of inspections will be adjusted according to this evaluation. If maintenance or sediment removal is required within the first 2 years, inspection at that site or resource will be increased to 2 times annually. If maintenance or sediment removal is not required within the first 2 years, inspection will be reduced to every 2 years.

Location(s) in SWPPP of detailed information relating to this BMP:

The information included or referenced on this Summary Sheet is intended to meet all SWPPP requirements for this BMP.

***Measurable Goals:**

2-year inspection records for each resource.
Number of sites or resources for which inspection is reduced.

***Timeline/Implementation Schedule:**

Years 2 and 4) After inspection activities are completed for the year, review past 2 years of inspection records to determine necessary adjustments in the inspection schedule.
Years 3 and 5) Make necessary adjustments based on evaluation, and communicate to staff performing inspections.

Specific Components and Notes:

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

II. TOTAL MAXIMUM DAILY LOAD (TMDL) REQUIREMENTS

Lake Sarah and Lake Independence are listed as Impaired Waters under Section 303(d) of the Clean Waters Act. For each impaired water, a Total Maximum Daily Load (TMDL) document must be prepared to assess the pollutant load reductions needed for the water body to comply with Minnesota water quality standards. The TMDL document addresses the specific sources of pollution, target reductions from each source, and strategies to achieve the reductions.

As a designated MS4, the City of Independence must incorporate the strategies identified in the TMDL document into its SWPPP within 18 months of the adoption date of the TMDL document. The following sections discuss the TMDL status, as well as the status of TMDL/SWPPP incorporation, for each impaired lake.

Lake Sarah

Currently, Total Maximum Daily Loads (TMDLs) are being developed for Lake Sarah, and the City is participating in the process. The findings and final requirements of the TMDL process will be incorporated into the SWPPP when they are available. The target TMDL completion date, according to the MPCA, is 2011.

Lake Independence

Lake Independence (MNDNR Lake ID# 27-0176-00) is an 851-acre lake located in the Pioneer-Sarah Creek Watershed. The lake is used extensively for recreational use by local residents as well as the region. The lake receives runoff from a 7,631-acre predominantly agricultural watershed which contains portions of three municipalities, Medina, Independence and Loretto.

Over the past 15 years, the water quality of the lake has declined and algal blooms now occur throughout much of the summer season, negatively impacting recreational use. In 2002, the MPCA listed Lake Independence as impaired for aquatic recreation under Section 303(d) of the Clean Waters Act. The main cause of the impairment is excessive nutrients, particularly phosphorous. Historic data shows that the total phosphorus concentration of the lake exceeds the water quality standard threshold for Class 2 recreational waters.

To address these issues, a community stakeholders committee was appointed by the Pioneer-Sarah Creek Watershed Management Commission (PSCWMC). This group worked for two years to execute the *Lake Independence Phosphorous TMDL*, adopted in January 2007. A summary of the document findings are presented below.

The stakeholder committee established a water quality goal of 36 ug/L for the mean growing season total phosphorus concentration for Lake Independence. Since the Minnesota water quality standards require that the mean phosphorus concentration not exceed 40 ug/L, achieving this goal would satisfy the Margin of Safety requirement of the TMDL process.

The existing phosphorus load to Lake Independence was determined to be 2,381 pounds annually. Achieving the desired water quality goal of 36 ug/L will require a phosphorus loading reduction of 1,081 pounds/year, or 45 percent of the current load. The stakeholder committee determined that the required phosphorus loading reductions would come from the following sources:

- Agricultural cropland 284 lbs/year (32 percent)
- Livestock manure management 370 lbs/year (29 percent)
- Urban Development 146 lbs/year (14 percent)
- Internal loading reduction 209 lbs/year (18 percent)
- Loretto Sewage Treatment Facility 53 lbs/year (5 percent)

- Shoreline and goose management 11 lbs/year (2 percent)
- Failing Septic Systems 8 lbs/year (< 2 percent)

Implementation Plan (section 7.0 of the TMDL document) presents a work plan to achieve the specified reduction under each source. Each community is responsible for a proportionate amount of phosphorus load reduction in each source category, which was agreed upon by the municipalities. Each community must fulfill the tasks identified in the work plan to achieve the designated reductions.

Currently, the existing phosphorous loading attributed to the City of Independence is 891 pounds per year. To achieve its portion of the TMDL, the City must reduce its load to 356 pounds per year. This equates to 535 pounds of phosphorous per year ($891 - 356 = 535$) that must be reduced by controlling the various sources that contribute to the lake (*Lake Independence Phosphorous TMDL*, January 2007).

Table 1 summarizes the proposed annual loading reduction goals designated to the City of Independence by source, the identified strategies to address the reduction, and a reference to a location in the SWPPP where the TMDL actions have been incorporated.

Specific pollutant reduction calculations for BMPs under each source have not been calculated at this time, however the City has identified the reasons why it believes the specified actions will work toward the proposed reductions in the “anticipated reduction” column of the table. The City will continue to work with the PSCWMC and Three Rivers Park District (TRPD) on identifying specific calculations as resources and guidance become more readily available. TRPD will continue its existing annual water quality monitoring for Lake Independence, which will help to provide more data on the effectiveness of the BMPs over time. Additional inflow monitoring will also be initiated during and after implementation of the TMDL to quantify actual external load reductions. The flow and water quality data will be used to estimate phosphorus loading to the lake to confirm the TMDL approved load and waste load allocations. Additional monitoring and sampling may also be initiated to locate specific sources of nutrient loading in the watershed. The monitoring activities will primarily be the responsibility of TRPD, with support from PSCWMC and each city in the watershed.

TABLE 1. CITY OF INDEPENDENCE PROPOSED REDUCTION AND BMPs BY SOURCE

Phosphorous Sources	Proposed Annual Loading Reduction (lbs/yr.)¹	BMP Summary (see SWPPP for specific actions/strategies)	Location in SWPPP	Anticipated Reduction
Agricultural Cropland	187	Initiate informational campaign targeting priority landowners through news releases, meetings and informational fliers.	TMDL-1 Education Program: Phosphorous Reduction	Having goals for more pointed ways of informing residents will increase the efficiency of existing tools (website, newsletters), and will expand the base of people reached.
Animal Waste	260	Update potential project sites and contact landowners to inform them of funding and projects that they can initiate to benefit the lake and their properties.	TMDL-1 Education Program: Phosphorous Reduction	
Urban Development	80	Identify and document current street sweeping schedules that Medina and Independence have in place. If necessary, work with the cities to implement a continual spring and fall schedule for sweeping within the lakeshed. Initiate water quality informational and educational campaign for all the lakeshore and watershed landowners through news releases, meetings and informational fliers. Construct urban BMPs within the watershed and on the shoreline of Lake Independence	See existing BMP: 6a-2 Street Sweeping TMDL-1 Education Program: Phosphorous Reduction TMDL-2 Shoreline Stabilization and Protection Projects	The City currently sweeps streets once per year, but is open to additional sweeping in targeted areas if necessary. Lakeshore development has been slowing in recent years, and the City feels the time is right to focus on stabilization of individual properties along the shoreline. The City is also currently going through a revision of its existing shoreland ordinance, and these projects will support future properties protected by ordinance.
Failing Individual Sewage Treatment Systems	6	Complete an MPCA Sewage System Compliance Inspection for all ISTSs in the lakeshed, and prioritize failing and non-compliant systems for remediation. Repair or Replace all failing and non-conforming systems within 12 months of inspection, and monitor Compliance with ISTS Maintenance Requirements.	TMDL-3 Management of ISTSs	The City has not been as diligent in identifying failing and non-compliant ISTS in the past. A more structured program of identification, mitigation, and monitoring will make a difference.
Sewage Effluent	0	N/A	N/A	
Geese	8	Provide informational letters and fliers to all lakeshore property owners to obtain permission to remove geese from private property. Contract with Dr. Jim Cooper to remove geese from Lake Independence.	TMDL-1 Education Program: Phosphorous Reduction TMDL-4 Annual Goose Removal	An individual goose can contribute around 0.3 lb. of phosphorus per year. Effective reduction of geese can make a noticeable difference.

¹Source: *Lake Independence Phosphorous TMDL*, January 2007

TMDL Best Management Practices

Key to Unique BMP ID Numbers	TMDL BMP Title
TMDL-1	Education Program: Phosphorus Reduction
TMDL-2	Shoreline Stabilization and Protection Projects
TMDL-3	Management of Individual Sewage Treatment Systems
TMDL-4	Annual Goose Removal

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: LAKE INDEPENDENCE TMDL

Unique BMP Identification Number: TMDL-1

***BMP Title:** Education Program: Phosphorous Reduction

***Audience(s) Involved:**

- “Priority landowners” of agricultural cropland, as identified by TRPD and PSCWMC
- Livestock operators
- Landowners in Lake Independence watershed (see also BMP 1c-1)
- Lakeshore homeowners

***Educational Goals for Each Audience:**

Priority Landowners

- Increase awareness and understanding of the benefit of buffer strips, and make them aware of any technical assistance and funding available.

Livestock Operators

- Inform livestock operators of beneficial projects they can undertake to benefit the lake and their properties, and make them aware of any technical assistance and funding available.

Landowners in Lake Independence Watershed

- Increase awareness and understanding of the benefits of urban BMPs such as rain gardens and pond construction, and make them aware of any technical assistance and funding available.

Lakeshore homeowners

- Increase awareness and understanding of the implications of an uncontrolled goose population, and make homeowners aware of any technical assistance and grant money available.
- Increase awareness and understanding of the benefits of shoreline stabilization and buffering, and make homeowners aware of any technical assistance and grant money available.

***Activities Used to Reach Educational Goals:**

- Advertisement and participation in activities hosted by the County, PSCWMC, or other community and government groups that cover the topics listed above, including informational meetings.
- Articles in the community newsletter that provide information on the topics listed above.
- Direct mailings to specific groups listed above.
- Informational materials provided at public places, such as City Hall.
- Regular postings to stormwater section of City website.
- Site visits with individual property owners.

***Activity Implementation Plan:**

Priority Landowners

- **Years 2008 – 2015** - Publish one article relating to the benefit of buffer strips in the City newsletter.
- **Years 2008 – 2015** – Post information relating to buffer strips on the city website.
- **Ongoing** – With assistance from other agencies, send direct information mailing to each identified “priority landowner.”

Livestock Operators

- **[Already completed]** – Compile list of all livestock operators within the city which are within Lake Independence watershed.
- **[Already completed]** – With assistance from PSCWMC and TRPD, create informational materials that identify potential projects and funding available to individual livestock owners.
- **2008 – 2009** – Publish one article relating to eligible projects and project funding in the city newsletter.
- **2008 - 2009** – Post information relating to grant programs on the city website.
- **[Already completed]** – With assistance from PSCWMC and TRPD, contact every livestock operator within the City’s portion of the watershed via phone or direct mail.

Landowners in Lake Independence Watershed

- **Every other year, beginning 2008** – Co-host a workshop for homeowners on the benefits of rain gardens.
- **2008 – 2012 (annually)** – Publish one article relating to rain gardens and other structural BMPs in the city newsletter.
- **2008 – 2012 (annually)** – Collect information from other organizations and post links and document on the City’s website.

Lakeshore homeowners

- **2008** – Compile list of all homeowners/landowners located on the shores of Lake Independence.
- **2008 – 2012 (annually)** – Distribute information on shoreline stabilization to homeowners via direct mail.
- **Ongoing** – Publish at least one article on goose management in City newsletter each year prior to late summer capture and removal.
- **Ongoing** – Distribute information on benefits of goose removal, and ways to deter geese from private property, via direct mail.

***Performance Measures:**

Priority Landowners

- Number of landowner letters sent.
- Number of buffer projects undertaken.

Livestock Operators

- Number of operators on initial list vs. number of operators contacted.
- Number of operators utilizing funding programs and/or undertaking beneficial projects on their property.

Landowners in Lake Independence Watershed

- Attendance at workshop.
- Number of rain gardens or other urban BMPs implemented.

Lakeshore homeowners

- Number of homeowners contacted.

***Responsible Party for this BMP:**

Name: Toni Hirsch

Department: Administration

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BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: LAKE INDEPENDENCE TMDL

Unique BMP Identification Number: TMDL-2

***BMP Title:** Shoreline Stabilization and Protection Projects

***BMP Description:**

Work with LICA, TRPD, PSCWMC, and Hennepin County Environmental Services to plan and execute shoreline protection and stabilization projects. Efforts should focus on priority areas as previously identified by TRPD.

Location(s) in SWPPP of detailed information relating to this BMP:

See also Section 7.1.3 of *Lake Independence Phosphorous TMDL*, January 2007.

***Measurable Goals:**

Number of linear feet of shoreline stabilized under new projects.
Number of landowners participating in stabilization and protection projects.

***Timeline/Implementation Schedule:**

2007 – 2015 (Years 2 through 5 of current permit [2007-2011] and Years 1 through 4 of subsequent permit [2012-2015])

Specific Components and Notes:

Public areas of shoreline stabilization may be partially funded by the participating agencies. Grant assistance will be sought to assist private landowners with similar projects.

***Responsible Party for this BMP:**

Name: Dan Koch

Department: Public Works

Phone: 763-479-0530

E-mail: dkoch@ci.independence.mn.us

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: LAKE INDEPENDENCE TMDL

Unique BMP Identification Number: TMDL-3

<p>*BMP Title: Management of Individual Sewage Treatment Systems</p>
<p>*BMP Description:</p> <p>Reduction of loading from ISTSs through increased inspections of septic systems, required remediation of failing systems, and more frequent pump-out of all septic system tanks.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>See also Section 7.1.4 of <i>Lake Independence Phosphorous TMDL</i>, January 2007.</p>
<p>*Measurable Goals:</p> <p>Number of ISTSs inspected. Number of failing ISTSs brought into compliance.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Year 3 (2008)</p> <ul style="list-style-type: none">- Develop annual ISTS maintenance inspection program to ensure that tanks are pumped on a 3-year interval.- Develop reporting form for homeowners to report pumping events. <p>Years 3 and 4 (2008-2009)</p> <ul style="list-style-type: none">- Review files to identify systems with outdated compliance inspections.- Contact homeowners with outdated compliance inspections and schedule inspection.- Complete inspections.- Develop priority ranking scheme based on system condition and proximity to Lake Independence.- Rank all failing and non-conforming systems. <p>Years 4 and 5 (2009-2010)</p> <ul style="list-style-type: none">- Meet on-site with owners of failing and non-compliant ISTSs to provide technical assistance to repair/replace system.- Repair/replace failing and non-conforming ISTSs.
<p>Specific Components and Notes:</p> <p>Financial obligation for repair and/or replacement of failing or non-conforming ISTSs will often reside with the homeowner.</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Dan Koch Department: Public Works Phone: 763-479-0530 E-mail: dkoch@ci.independence.mn.us</p>

BMP Summary Sheet

MS4 Name: City of Independence

Minimum Control Measure: LAKE INDEPENDENCE TMDL

Unique BMP Identification Number: TMDL-4

<p>*BMP Title: Annual Goose Removal</p>
<p>*BMP Description:</p> <p>A reduction in phosphorus loading will be achieved by reducing the resident goose population. TRPD, Medina and Independence will develop a cooperative program to capture and remove geese from the lake in late summer when the birds are flightless.</p> <p>Location(s) in SWPPP of detailed information relating to this BMP:</p> <p>See also Section 7.1.5 of <i>Lake Independence Phosphorous TMDL</i>, January 2007.</p>
<p>*Measurable Goals:</p> <p>Number of ISTSs inspected. Number of failing ISTSs brought into compliance.</p>
<p>*Timeline/Implementation Schedule:</p> <p>Ongoing (annually)</p> <ul style="list-style-type: none">- Work with LICA to contact each lakeshore homeowner via phone or by mail to request permission to enter the property to collect any geese.- Contract with Dr. Jim Cooper to remove geese.
<p>Specific Components and Notes:</p>
<p>*Responsible Party for this BMP:</p> <p>Name: Toni Hirsch Department: Administration Phone: 763-479-0527 E-mail: thirsch@ci.independence.mn.us</p>