

City of Elko



STORMWATER MANAGEMENT PROGRAM



STORMWATER MANAGEMENT PROGRAM

**FOR
ELKO, NEVADA**

DECEMBER 2011



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EXECUTIVE SUMMARY

The City of Elko is subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges for Small Municipal Separate Storm Sewer System (MS4) issued by the State of Nevada in December 2002. Although Elko was not automatically designated on the basis of a Bureau of the Census Urban Area (UA) designation, it was determined by the Nevada Division of Environmental Protection that discharges from the City's MS4 caused, or had the potential to cause an adverse impact on water quality. The initial permit was set to expire in December 2007. As no new general permit had been finalized, however, the permit was continued until re-issuance of a new general permit in July 2010. In that interim period, Elko continued to operate their MS4 in conformance with their existing program. This includes submitting annual reports to NDEP regarding achievement of performance objectives or proposed revisions to existing Best Management Practices (BMP) intended to meet objectives. The new permit became effective on July 6, 2010 and will expire in July 2015. A copy of the General Permit is provided as Appendix 1.

In accordance with Section V.B of the General Permit, the City has 18 months from the effective date of the permit (July 6, 2010) to submit a revised Stormwater Management Program (SWMP) to meet the new permit requirements. The new SWMP is due by January 6, 2012 to meet this requirement. Prior to submittal, the City must allow adequate time for public comment on the proposed revisions. The City presented the revised program at a regularly scheduled meeting of the City Council on January 10, 2012. The meeting was noticed in accordance with local and state public notice requirements. Comments received from the public have been provided in Appendix 5.

This revised SWMP has been prepared in accordance with the requirements of the new General Permit, specifically **Section V – Stormwater Management Program Requirements for Existing Permittees**. The City has been operating in accordance with their original SWMP dated October 2004. Much of the background information from that program remains unchanged and for the sake of efficiency has not been reiterated in this revised SWMP. Where existing Best Management Practices remain unchanged and will continue to be implemented by the City, those BMPs are cited and reference given to the description and rationale in the City's original SWMP. New BMPs are described and measurable goals, timelines and rationale are provided as required in Sections V. E – G of the Permit.

All of the Minimum Control Measures (MCM) have been assessed and addressed in this SWMP revision, as have the provisions of **Section II – Discharges to Water Quality Impaired Waters**. Based on revised regulatory standards, local conditions, and results under the previous permit term, the City has revised its Water Quality Monitoring Plan (WQMP) and has provided the revised Plan as Appendix 2 of this SWMP.

1. PROGRAM BACKGROUND & CURRENT STATUS

1.1 General

The City of Elko was re-issued their Small Municipal Separate Storm Sewer System (MS4) Permit (Permit No. NVS040000) on July 6, 2010. The permit requires the City to develop or modify their Stormwater Management Program (SWMP) to meet the obligations of the permit terms. The new permit is not significantly different than that under which the City had operated in the previous term. It includes the same six (6) Minimum Control Measures (MCM) upon which the initial program was predicated. A copy of the new General Permit is provided as Appendix 1.

As an initial step in the assessment of the current program, the City undertook an evaluation of the program progress to date as it relates to documented stormwater quality impacts and regulatory compliance with the permit conditions. As previously reported to NDEP in annual reporting documents, there are several elements of the program which have not been completed. These activities include a proposed pet waste program, a formal municipal operations (good housekeeping) program, and a finalized city ordinance relative to post-construction stormwater management. The City has given particular attention to these elements of the program to determine how best to address the objectives of the relevant MCMs and consider practical means within their control to achieve these goals.

The City has documented and mapped its storm drain system, including outfalls and storm sewers. A total of 31 outfalls have been identified with discharge to the Humboldt River. The City has developed and documented an Illicit Discharge Detection and Elimination (IDDE) program for a dry weather discharge/outfall inventory which has included frequent (six times per year), periodic investigations of all 31 outfalls. No illicit discharges were identified in the course of the program over the past several years. The City does have an ordinance in place addressing non-stormwater discharges to the MS4. Other than the dry weather discharge inventory, the City has not reported any active upstream investigation of contributing catchments.

The City is subject to Total Maximum Daily Load (TMDL) requirements of the General Permit because the reach of the Humboldt River to which the MS4 discharges has been assigned a final and EPA-approved TMDL for Phosphorus. In order to address this aspect of the permit requirements in a manner that is practical in terms of data development and analysis, as well as financially within the resources of the community to implement, the City has modified its Water Quality Monitoring Plan (WQMP). This plan has been provided as Appendix 2 of this SWMP.

1.2 MCMs Current Status

The current implementation status of all MCMs was provided in the City's 2011 Annual Report and is summarized briefly in the sections below. Further detail is provided in Section 2 under Proposed Revisions.

1.2.1 MCM 1 – Public Education and Outreach on Stormwater Impacts:

The City identified seven (7) specific activities (referred to as Best Management Practices or BMPs) under this measure, including development of the SWMP itself. That task was completed in 2004. The remaining BMPs are presented in Table 1.

Table 1.1
MCM 1 Implementation Status

Management Practice	Status
Define Target Groups and Facilities	Target groups were identified in 2008, including area businesses, residents and fifth grade students. Community-wide events are also initiated.
Develop Website Links	City website hosts variety of educational documents and will focus shortly on presentation of LID demonstration project. It also provides links to relevant external content. The City will be expanding Website links.
Educational Brochure Distribution	Developed and widely distributed four (4) brochures addressing specific target audiences.
Pet Waste Ordinance, Signs, Stations	Program has not been proposed due to lack of adequate resources for oversight and administration. Signs exist in parks.
Hazardous Waste Disposal and Recycling Programs	Successful continuation of HW program initiated in 2009, and recycling program since 2005.
Advertise City Stormwater Programs	City regularly and consistently advertises stormwater program participation opportunities and successes.

1.2.2 MCM 2 – Public Involvement and Participation

The City identified six (6) BMPs under this measure.

Table 1.2
MCM 2 Implementation Status

Management Practice	Status
Stormwater Advisory Committee	Created by City Council in 2007 and active to date.
Stormwater Education and Training	City has conducted education and training for students and other groups each year in various formats. An important component of this is the 5 th grade „Snapshot Days’ event. The City’s Environmental Coordinator will also be providing a series of articles for the local daily paper (The Elko Daily Free Press) regarding stormwater and how residents can influence water quality.
Storm Drain Stenciling	Some stenciling has been performed to date; next phase will include re-stenciling areas of significant redevelopment where stencils have been lost to reconstructed or repaired roadways and installation of remaining stencils. All new development requires stenciling at project completion.
Pollution Prevention Poster Contest	Poster Contest has been planned for 2012 and targets 6 th grade classes.
Voluntary Clean-up Days	Event has been completed every year since 2004 with steadily increasing participation and year-over-year increase in tonnage of waste removed.
Snapshot Days	The City carried out „Snapshot Days’ in 2007, 2008, 2009, and 2010 with 5 th grade students. The program provides classroom and field learning about the Humboldt River.

1.2.3 MCM 3 – Illicit Discharge Detection and Elimination

The City identified eight (8) BMPs under this measure.

Table 1.3
MCM 3 Implementation Status

Management Practice	Status
Coordinate with Other Agencies	Stormwater Advisory Committee is made up of representatives from agencies with some interest or capacity for coordinated effort.
Complete Storm Drain Map	Map has been completed and additional data is incorporated into mapping and database development.
Develop and Enforce IDDE Ordinance	Ordinance has been approved and implemented.
Develop and Implement IDDE Plan	Plan has been developed and implemented.
Conduct Public Education and Outreach	See MCM 2.
Assess Permissible Discharges	Ongoing.
Stormwater Advisory Committee Assessment	The committee continues to be an integral part of the SWMP and will review the revised SWMP as part of their responsibilities.
Train Staff	Training is continuously performed, primarily under the guidance of the City's Environmental Coordinator.

1.2.4 MCM 4 – Construction Site Run-off Controls

The City identified five (5) BMPs under this measure.

Table 1.4
MCM 4 Implementation Status

Management Practice	Status
Coordinate with Other Agencies	Stormwater Advisory Committee is made up of representatives from agencies with some interest or capacity for coordinated effort.
Develop List and Sources of BMPs	List has been developed and incorporated into City's Construction Site Best Management Practices Manual.
Public Education and Outreach	The City has detailed contractor obligations under this BMP in their manual of Best Practices.
Develop and Enforce New CSRC Ordinance	Ordinance has been adopted and is enforced.
Implement Construction Inspection Program	Program has been created and is implemented primarily through the Environmental Coordinator.

1.2.5 MCM 5 – Post-Construction Stormwater Management (PCSWM)

The City identified seven (7) BMPs under this measure.

Table 1.5
MCM 5 Implementation Status

Management Practice	Status
Stormwater Advisory Committee	Committee is established and active.
Develop List of BMPs	Under development – dependent upon completion of ordinance.
Develop and Enforce New Ordinance	Ordinance has been completed and is under review by relevant authorities, including the Stormwater Advisory Committee, legal counsel and eventually City Council. Currently, most commercial/industrial developments and subdivisions must submit a hydrology report and address peak runoff for post-construction conditions.
Modify Zoning Codes	Zoning Codes have been reviewed, but no new modifications have been deemed necessary to address stormwater alone.
PCSWM Training	Training will commence when the ordinance is approved.
Implement Non-Structural and Structural BMPs	LID Demonstration project has been undertaken and performance data is being collected for analysis of long-term utility. No further controls have been installed. Non-structural controls include the new and revised ordinances and public education efforts reflected elsewhere.
Implement LID Design Techniques	See above. The City is looking at data to ensure that climate-appropriate BMPs are included.

1.2.6 MCM 6 – Pollution Prevention/Good Housekeeping for Municipal Operations

The City identified three (3) BMPs under this measure.

Table 1.6
MCM 6 Implementation Status

Management Practice	Status
Develop MO Program	Initial assessment on department basis has been conducted. Ongoing effort to provide detailed evaluation proposed.
Train Staff	Pollution prevention training is regularly provided although MO program has not been officially adopted.
Implement MO Program	Although no documented formal program, standard procedures are conducted to ensure consistency and “awareness” level recognition of how municipal operations impact stormwater quality.

1.2.7 Water Quality Monitoring

The NPDES MS4 program is focused on water quality protection and requires that the City recognize the potential pollutants of concern from which they must protect the local receiving waters. Although all non-point source pollutants are expected and intended to be mitigated through the use of BMPs, certain pollutants identified as contributors to water impairments must be particularly considered during BMP development. These pollutants are represented in the State of Nevada 303(d) list of Impaired Waters,

and State and EPA-approved Total Maximum Daily Load (TMDL) reports. At the time of the initial development of the SWMP and the WQMP, the City referenced the then current state 303(d) list of Impaired Waters (2002) as the basis for plan development. This section is intended to provide a brief summary of the history of that information in the context of the City's evolving SWMP.

In 1993, the State approved a TMDL for the relevant reach of the Humboldt River (Osino to Palisade) for Total Phosphorus (TP) and Total Suspended Solids (TSS). This information was contained in the Non-Designated Area 208 Plan. Despite the fact that both the state and EPA have approved the TMDL, subsequent State lists (2002 and 2004) include a discussion about the TMDL development that called into question the scientific validity of the data used to establish the TMDL. Consequently, the TMDL exists, but it does not necessarily reflect actual conditions or impairments implied. In 2002, the State's 303(d) list was only partially approved by EPA, which required that the state include pH and chlorides as listing categories/impairments. Upon finalization of the approved list, the reach of the Humboldt River to which the City discharges was included for impairments of both pH and chlorides. This was, in large part, the report referenced by the City during development of the 2004 SWMP.

In 2004, the EPA-approved list shows existing TMDLs for TP and TSS. Additional pollutants of concern were total Iron, turbidity (a measure of clarity analogous to TSS) and zinc. This reach of the river was de-listed for pH and chlorides because the State determined that although the water body may exceed Requirements to Maintain Higher Water Quality (RMHWQs), this anti-degradation provision is not equivalent to an "impairment" in the intended sense of the 303(d) list.

The most current version of the State's EPA-approved 303(d) list was published in 2006. At this writing, the only pollutant of concern for which this reach of the Humboldt River is listed is Total Iron. The TMDL for TP is still in place, despite the repeated expressions of concern about the scientific validity of the data. Due to a change in reporting methodology, the existing TMDL was removed as a specific reference on the 303(d) list, and moved to the "De-Listed Waters List" (Attachment 2 to the report). The State's de-listing criteria includes the existence of an approved TMDL under the rationale that the waters are now subject to parameters that are intended to bring them within water quality standards on the basis of compliance with the TMDL. The reach was de-listed for turbidity as most recent State-sponsored testing indicates that the waters meet water quality standards. It was de-listed for zinc due to recognized flaws in the original listing (due primarily to contamination of samples during laboratory analysis). There is no specific mention of TSS either as a continuing pollutant of concern or as a de-listed pollutant due to the existing TMDL. The status of this pollutant is further confused by the de-listing of turbidity (a related but not identical measure).

The previous SWMP and WQMP were intended to address the recognized concerns established by the State. Since that time, there have been modifications to the pollutants of concern reflected in the State's reporting; the City's own monitoring has been evaluated; and, current economic conditions and available resources have been considered. The City has revised the WQMP to integrate the new information. The revised WQMP is expected to be more practical for the City based on their reduced resources, both in terms of labor and equipment, and to address the pollutants of concern and other potential contaminants on the basis of current local conditions.

2. PROPOSED REVISIONS TO MINIMUM CONTROL MEASURES

2.1 *Public Education and Outreach (PEO)*

Target groups for education/outreach efforts were initially identified in 2005, and the list is reviewed each year by the City's Environmental Coordinator and Stormwater Advisory Committee. Target groups include area businesses (particularly those closer to the Humboldt River), residents, and students. Fifth and sixth grade students in particular are selected for educational outreach. Community-wide events are also initiated. The City does not intend to make substantial changes to this strategy.

The City has made steady progress on the BMP to create website links. The City's website hosts a variety of stormwater related links, including: links to stormwater related organizations, the City's Construction Site BMP Handbook, and links to relevant external content (NDEP). The website also publicizes the City's leaf collection program, street sweeping schedule, and hazardous waste collection program. In the upcoming reporting term, the City will add a link to its Low Impact Development (LID) demonstration project. The City will also add a link or links to provide general stormwater information and/or educational documents, such as found at <http://www.lvstormwater.com/bmps.htm>. The City intends to post the future poster contest winners for the Snapshot Day program as well.

The City developed four (4) brochures addressing specific target audiences (Home, Auto, Tourism, Construction). Brochures were updated using NRCS Grant money. In 2005 the Auto brochure was mailed to auto repair/recycling/dealer and car washes (many located near the River). Each year, several hundred „Home' pamphlets are distributed during the spring „Take Pride in Elko Day'. Brochures are available at City Hall, Elko County Library, Elko Fire Stations, and Elko Landfill. The City intended to translate brochures into Spanish but has been unable to due to lack of resources. The City will continue to make English language brochures available as is currently done.

The City will utilize EPA's „After the Storm' brochure, which is available already translated into Spanish, for distribution at these locations and/or for educational events in poster format. The brochure is available at <http://cfpub.epa.gov/npdes/stormwatermonth.cfm>.

The Pet Waste Program was initially proposed in the original SWMP but the initiative is not practical due to lack of adequate resources for oversight and administration. However, the City of Elko Parks and Recreation Department has existing signs in local parks reminding owners to pick up pet waste. In lieu of the originally proposed ordinance, the City will incorporate proper pet waste disposal topics in other existing BMPs. For example, the City will consider use of available materials such as those at <http://www.pacshell.org/projects/petwasteRussell.htm>. Materials could be incorporated into the brochure program, or into a display poster for City Hall or for cleanup day events. If resources allow, the City will consider adding signs at public recreation facilities directly along the River, if none already exist.

The City has implemented and continues a successful hazardous waste disposal program (since 2009), and recycling program (since 2005). Information on the program is listed on the City's website and has been distributed as a flyer since 2008. No changes are proposed for this BMP on the basis of the continued participation observed.

The City regularly and widely advertises stormwater program participation opportunities and successes. These include the semi-annual spring Elko Clean Up & Green Up event, the household hazardous waste program, the leaf collection program and Christmas tree collection program. These events are advertised on local TV and radio and in newspapers. A similar program will be undertaken under the new permit term.

2.1.1 Rationale

The current practice of targeting specific groups supports original and revised SWMP goals and permit requirements for the PEO program. Targeting businesses in proximity to the River is an effective way to reduce pollution. The 5th and 6th grade age groups are a good age for learning and participating in community events. Reviewing target group lists each year keeps the program flexible to the community's specific and potentially changing needs.

The City's website has been a good public resource. Although financial resources are limited, the City envisions enhancing this BMP by capitalizing on and publicizing the success of its outreach with the public schools by posting winning posters or photos of River cleanup events.

The existing educational brochure program is widespread and consistently implemented. The success of the program is displayed by the high level of participation in community-wide cleanup events. The use of existing Spanish language brochure material(s) will allow the City to expand outreach as intended without the need to hire or find a translator.

The support and resources for a Pet Waste ordinance in the community is not available. Furthermore, although limited, the data available does not indicate that the Humboldt River is impaired for pathogens, nor has the IDDE program indicated wide-scale illicit connections which might contribute pathogens. Incorporating the element of pet waste management into existing City outreach and education programs via brochure, poster, and/or website link will support this MCM BMP and promote general positive behavior and public awareness regarding stormwater pollution.

The current Household Hazardous Waste and Recycling practices support original and revised SWMP goals and Permit requirements for the PEO program. The success of the BMP is seen in its increasing popularity. The program diverts recyclable wastes from disposal and reduces the disposal of substances that could pollute ground and surface water.

Table 2.1
Proposed MCM 1 BMPs

Management Practice	Changes from 2004? (Y/N)	Goals/Timeframe
Define Target Groups and Facilities	N	Continually re-assess appropriate target audiences; annual messaging.
Develop Website Links	N	Continue to identify appropriate content and external links on an ongoing basis.
Educational Brochure Distribution	N	Focus on providing Spanish language translations to existing material, or available translations of relevant and publicly available material. In addition to the brochures, the Environmental Coordinator will be providing a series of stormwater articles for publication in the local paper, The Elko Daily Free Press.
Pet Waste Ordinance, Signs, Stations	Y	City will not pursue ordinance but will integrate messaging into other outreach materials on an ongoing basis.
Hazardous Waste Disposal and Recycling Programs	N	Continue as currently operated in scope and frequency.
Advertise City Stormwater Programs	N	Continue as currently operated in scope and frequency.

2.2 Public Involvement/Participation (PIP)

The City established the SWAC in 2005 by soliciting public involvement and advertising the SWAC. All SWAC meetings are publicly noticed. The SWAC met monthly during the early stages of SWMP implementation and now meets quarterly. The SWAC annually reviews the effectiveness of the SWMP MCMs and develops recommendations for the year ahead. The City will continue existing efforts with no proposed changes.

The City has conducted education and training for its target groups consistently every year in various formats. This has included training/education documents for contractors, the elementary school „Snapshot Day’ events (see detail below), training of City staff on a rolling basis, Earth Day presentations in collaboration with the Elko Band Council, Environmental Department, and with the Te-Moak tribe of the Western Shoshone. The City will continue these existing efforts and proposes no changes for the next permit term.

The City initiated the storm drain stencil program in 2004 with a grant from NRCS that purchased 400 stencils. The initial effort (approximately 150 stencils installed) was undertaken with help from a local Boy Scout troop, who also distributed 500 brochures to local households during stenciling activities. In 2010 some of the installed stencils were removed during a construction project which replaced curbs and gutters. Over the course of the new Permit term, the City will plan to re-install the lost stencils and install the remaining stencils. The City will again look to partner with local volunteer groups (e.g. Boy or Girl Scout troops, student groups) to minimize impact on City funds. All new construction projects are also required to install the stencils prior to project completion.

The City has developed a plan for the Pollution Prevention Poster event, but has not yet implemented it due to staffing shortages. The City currently plans to combine this BMP with the popular Snapshot Day event.

The City conducts twice annual (spring and fall) community clean-up days in which volunteers target areas throughout the community. A substantial portion of the waste is collected from ephemeral drainages that discharge to the Humboldt River. These events not only remove debris and potential pollutants that could reach the River, but provides an important community-wide educational and involvement opportunity. The City will continue these existing efforts and proposes no changes under the current permit term.

The City carried out „Snapshot Days’ in 2007, 2008, 2009, and 2010. This program was undertaken with local 5th grade students. The event provides a classroom segment with a PowerPoint presentation on the water cycle and water pollution, following by a hands-on water testing learning activity at the Humboldt River. The City will continue existing efforts and consider adding the Pollution Prevention Poster Contest into the program. The contest could be announced to students involved in the program. The winning poster could then be used as display material in other events such as Cleanup days or displayed at City Hall.

2.2.1 Rationale

The current practice and frequency of SWAC involvement supports the original and revised SWMP goals and permit requirements for the Public Involvement/Participation (PIP) program. The current efforts meet the measurable goals of an active committee that consists of a wide variety of representatives from the community.

The current education practice supports the original and revised SWMP goals and permit requirements for the PIP program. The success of this BMP is evidenced by the popularity of the City’s programs and the consistently high level of public participation.

The stenciling program will be re-initiated and once renewed, the current practice will support the original and revised SWMP goals and permit requirements for the PIP program.

Voluntary clean-up days have proven very popular and well attended. The current practice supports the original and revised SWMP goals and permit requirements for the PIP program. The success of this BMP

is evidenced by the popularity of the City's programs and the consistently high (and generally increasing) level of public participation.

The current "Snap Shot" days BMP supports the original and revised SWMP goals and permit requirements for the PIP program. The success of this BMP is evidenced by the popularity of the program. The poster contest idea is well thought out and could serve as an excellent complement to the Snapshot Day BMP.

Table 2.2
Proposed MCM 2 BMPs

Management Practice	Changes from 2004? (Y/N)	Goals/Timeframe
Stormwater Advisory Committee	N	Continue function and frequency of meetings.
Stormwater Education and Training	N	Continue on same basis; ongoing.
Storm Drain Stenciling	Y	Will focus on re-stenciling in renovated areas and area-wide. Initial effort concluded in 2013; rest is ongoing.
Pollution Prevention Poster Contest	N	The contest will remain the same and be conducted on an annual basis in coordination with Snapshot Days.
Voluntary Clean-up Days	N	Events will continue on same frequency and operating basis.
Snapshot Days	N	Event will continue on same frequency and operating basis.

2.3 Illicit Discharge Detection and Elimination

In accordance with requirements of Section VI.C, the City has developed, implemented and is enforcing a program to detect and eliminate illicit discharges into the MS4. As part of the program, the City completed a map of the storm sewer system piping and outfalls. An ordinance to prohibit non-stormwater discharges to the system (City of Elko Municipal Code Section 9-5-7) was already in place; however, in 2007 the City Council additionally passed Ordinance 670 which addresses illegal discharges and dumping into the system and codifies the enforcement mechanisms available to City. These include authorization to inspect controls on private properties and enforcement action alternatives. A copy of the ordinance has been provided in Appendix 3.

The City has incorporated educational messages about impacts from illegal dumping in its public education and outreach campaign, and further enforces the messaging through an ongoing stenciling campaign at catch basins throughout the MS4, activities that are described in greater detail in Sections 2.1 and 2.2. of this SWMP.

The City has not found any of the permissible non-stormwater discharges identified in the permit (Section VI.C.1.f) to be significant contributors of pollutants to the MS4 and consequently has not developed a program to address these discharges. Currently, there are no variances for occasional or incidental non-stormwater discharges codified in ordinance or policy and the City enforces all other discharges through the prohibition in Ordinance 670.

2.3.1 Rationale

The City has completed a storm sewer map in electronic format based primarily on paper mapping, as-built drawings and engineering plans. In some instances, the extent of piping or other infrastructure has been field investigated, although not all of the system has yet been manually inspected and confirmed.

All of the known outfalls are included in the periodic observations for dry weather flow and comprehensive photographic documentation is ongoing. The geographic information system (GIS) database for the system is regularly updated when new and more accurate information is derived from a capital project or routine maintenance. The City expects to create a comprehensive set of standard specifications for the development of electronic data to create a more consistent database. These standards will also be applicable to contractors developing private properties. As-built information on new developments that contribute to or extend the MS4 will be required to meet these submittal specifications. Although the City would like to be able to continuously update the information in the mapping and database in "real time," existing resources make this extremely difficult. It is the City's goal to accumulate the information over the reporting term and annually update the information in the database as a single task.

As indicated above, the City has implemented the necessary municipal regulatory controls to prohibit non-stormwater discharges and enforce the ordinance through prescribed measures. A copy of Ordinance 670 was included with the City's 2009 annual report, and has been provided with the SWMP as Appendix 3. The City allocated resources and has staffed a new position during the previous permit term for an Environmental Coordinator who is primarily responsible for the implementation of the IDDE program. The Environmental Coordinator works with City officials (e.g. Police, Fire, and Board of Health) as necessary to identify and report illicit or illegal discharges, as well as enforce required corrective actions. This distribution of responsibility has been demonstrated to be effective over the prior three reporting years. Although several illicit connections were identified in the first several years of the program, there have been zero (0) identifiable dry weather discharges over the last two (2) years of the comprehensive program.

The City's IDDE Plan was finalized in October 2007. The plan initially was designed to evaluate both dry and wet weather flows. Resource constraints may require that the City reduce the level of effort to exclusively address dry weather conditions. The City's existing program does not specifically describe procedures for locating priority areas, tracing and removing sources of discharges, or program evaluation. The City has relied upon standard operating procedures described in EPA-recommended guidance manuals as the basis for their program administration. During this permit term, the City will revise their IDDE program to reflect current levels of monitoring (e.g. dry weather), methods employed, parameters for which laboratory analysis will be conducted, and basis for program evaluation. It is the City's goal to have this revised program completed by fiscal year end 2013.

The program will be undertaken by the Environmental Coordinator under the direction and supervision of the City's Development Manager. The measurable goal associated with this BMP is the successful revision of the IDDE Plan through appropriate documentation and the implementation of the revised plan by fiscal year end 2013.

**Table 2.3
Proposed MCM 3 BMPs**

Management Practice	Changes from 2004? (Y/N)	Goals/Timeframe
Coordinate with Other Agencies	N	Continue on same operating basis.
Complete Storm Drain Map	Y	Base Map has been completed. Focus will be on updating data on an annual basis and development of standard specifications for electronic data submittal.
Develop and Enforce IDDE Ordinance	N	Enforcement will rely upon authority designated by the ordinance.
Develop and Implement IDDE Plan	Y	City will update IDDE plan to reflect elements required in the General Permit, and implement a program within practical and financial means. Anticipate completion of the Plan by end of 2013.
Conduct Public Education and Outreach	N	Relies on 2.1 and 2.2. above.
Assess Permissible Discharges	N	City will continue on same operating basis.
Stormwater Advisory Committee Assessment	N	SWAC will continue to assess program outcomes on same periodic basis.
Train Staff	N	Training will be conducted on same operating basis.

2.4 Construction Site Stormwater Run-off Controls

In accordance with requirements of the Permit, the City developed and enacted Ordinance 671 in April 2007. The ordinance was codified in Title 9, Chapter 7 of the City Code. The ordinance addresses construction activity for sites greater than 1-acre, but additionally includes sites between 6,000 sq.ft. and 1-acre, including project sites related to work performed by City agencies. This captures a significantly higher percentage of new development within the community. A copy of the chapter within the City Code is provided as Appendix 4 of this SWMP.

The ordinance incorporates by reference all of the performance standards included in the City's "Construction Site Best Management Practices Handbook" which includes requirements for erosion and sediment controls, and controls of waste, washout and other potential pollutants. The regulation requires the submittal of a Stormwater Pollution Prevention Plan (SWPPP) for review by the City prior to permit issuance, and includes inspection and access authority to allow enforcement of the regulations and performance standards.

2.4.1 Rationale

The City has been operating with this ordinance in place for over four (4) years and has found it to be very effective. Every permitted site is inspected a minimum of two (2) times, but may also be inspected on a more frequent basis. The City has developed and employs a checklist for use during these inspections. It provides assurance that all elements of the regulation are inspected, and generates documentary record of the City's efforts under this authority. The City has requirements associated with larger subdivision development which are codified in the zoning ordinance. The Planning Department is responsible for Site Plan Review for smaller developments. Submittal requirements for controls related to construction activity (e.g. subject to the ordinance) are detailed in the regulations.

The City's Environmental Coordinator is responsible for implementation of the inspection and enforcement activity under the program. Site plan review and subdivision reviews fall within the purviews of local planning agencies.

The City's goals for this Minimum Control Measure are to continue the successful administration and implementation of the program; maintain the minimum two (2) inspections per site during construction; and document 100% of site inspections, results of inspection, required corrective actions and confirmation of corrective action completion. The City will maintain an inventory of open projects, document project conclusion, and develop an annual report of the number of new projects and site visits as part of their program evaluation process.

Table 2.4
Proposed MCM 4 BMPs

Management Practice	Changes from 2004? (Y/N)	Goals/Timeframe
Coordinate with Other Agencies	N	Continue on same operating basis.
Develop List and Sources of BMPs	N	City will rely upon the BMP Handbook and update as appropriate on an ongoing basis.
Public Education and Outreach	N	See 2.1 and 2.2 above.
Develop and Enforce New CSRC Ordinance	Y	Ordinance has been developed and focus has moved to enforcement on an as-needed basis.
Implement Construction Inspection Program	Y	Program has been developed and implemented. Will continue on operating basis as described in SWMP.

2.5 Post-Construction Stormwater Management Requirements for New Development and Significant Redevelopment Projects

The City is in the process of developing the regulatory mechanism necessary to meet the requirements of this MCM. A Draft Post-Construction Site Runoff Control ordinance was completed in 2011 and must go through an extensive review process prior to enactment. The Draft was developed in coordination with the Stormwater Advisory Committee and their approval will be necessary prior to continuing with further legal reviews. The Draft was developed prior to the issuance of the new General Permit. Consequently, the SWAC will include an evaluation during final revision to ensure that any changes reflected in the State's permit will be incorporated as necessary to conform to requirements. Specifically, performance standards stipulated in the general MS4 permit must be reviewed and incorporated as appropriate into the ordinance, or included by reference in the Best Management Practices Handbook to be developed in association with the ordinance. In addition, jurisdictional authority over specified land use development types described in Sections VI.E.3.b.i through viii must be integrated into the ordinance.

The City intends to develop the Best Management Practices Handbook for this MCM to be used as a reference for developers in much the same manner as the Construction Site BMP's Handbook is currently used. In addition, the Zoning Ordinance already has a provision that allows the Planning Department to deny subdividing of land that is deemed unsuitable for development with specific regard to stormwater management. Specifically, the ordinance states that

"No land shall be subdivided which is determined by the planning commission to be unsuitable for use by reason of flooding, concentrated runoff, inadequate drainage, adverse soil or rock formation, extreme topography, erosion susceptibility or similar conditions which are likely to prove harmful to the health, safety and general welfare of the community or the future property owners. The planning commission, in applying the provisions of this section, shall state the particular facts upon which its conclusions are based, and shall also define the conditions under which the land may, in its opinion, become suitable for the proposed development. Land located within any floodway as designated on the city flood insurance rate maps shall be deemed

unsuitable for development by local, state and federal regulation. Any subdivider proposing development of such land shall have the right to present evidence to the city council contesting such determination of unsuitability, whereupon the city council may affirm, modify or withdraw the restriction. (Ord. 624, 10-26-2004).

The City already has a Hillside Development ordinance (in place since 2002) that protects against impacts from construction and development on steep terrain. In addition, the City requires most commercial/industrial developments and subdivisions to submit a hydrology report and address peak runoff for post-construction conditions.

Currently, the City's proposed ordinance requires a Stormwater Management Plan (SMP) to accompany all applications for permits required under this ordinance. Within that document, applicants must identify how they are meeting the performance standards for stormwater management design, and how structural and non-structural BMPs will be maintained in perpetuity (both as legal instruments for title transfer and from an operational perspective).

2.5.1 Rationale

The City is working to create a program within their development framework that allows them to efficiently and effectively guide appropriate development within the community. The City will enact an Ordinance as soon as practicable, recognizing that this is a legal and political process as well as an environmental imperative. The ordinance will be designed to best take advantage of the resources of the jurisdictional authorities involved; rely upon a referenced BMPs Handbook that can be adapted and updated without requiring an ordinance revision and the consequent administrative burden; and to meet the minimum requirements of the MS4 permit.

As indicated in the permit, the goals of the MCM include prevention of stormwater discharges from post-construction sites causing or contributing to downstream violations of water quality standards of any pollutant of concern to the maximum extent practicable; and to promote the improvement of ambient water quality by reducing the discharge of pollutants in stormwater.

The City anticipates enactment of the required ordinance within this permit term, with the attendant development of a Best Management Practices manual to identify appropriate water quantity and quality control measures consistent with the City's goals. Upon implementation of the ordinance and program, the City will prepare and submit the required written evaluation regarding the potential for the program to cause or contribute to elevated levels of pollutants of concern in surface waters.

**Table 2.5
Proposed MCM 5 BMPs**

Management Practice	Changes from 2004? (Y/N)	Goals/Timeframe
Stormwater Advisory Committee	N	Will continue to operate on same basis.
Develop List of BMPs	N	BMPs and performance standards will be compiled in Handbook that will be incorporated by reference in ordinance. Anticipate completion prior to permit term (2015).
Develop and Enforce New Ordinance	N	Ordinance under development. Anticipate completion and enactment by 2015.
Modify Zoning Codes	N	No current revisions planned, however any changes necessary on the basis of proposed new ordinance conflict will be addressed.
PCSWM Training	N	Will conduct training on same basis.
Implement Non-Structural and Structural BMPs	N	Element to be addressed in BMP Handbook (estimated completion 2015).
Implement LID Design Techniques	N	Element to be addressed in BMP Handbook (estimated completion 2015).

2.6 Pollution Prevention/Good Housekeeping for Municipal Operations

The City completed an assessment of existing operations that have the potential to impact stormwater quality, including Solid Waste Disposal, Water Reclamation Facilities, the Streets Department, the Parks and Recreation Department and the Facilities Maintenance Department. As with most cities, responsibility for the operational aspects of the stormwater management program is a de-centralized function. The City has attempted to address this in several ways. The primary avenue is through the SWAC which includes operational entities and representatives from the municipal policy-making bodies (City Council and Mayor). The department assessment referenced above was another means of compiling information that will be used to develop a more formal Municipal Operations Program (MOP) during the course of this permit term. The City continues to operate using best practices but will address specifics of the program through a finalized MOP. An example of the City's current attention to these issues is the recent modification to bulk salt storage. The City has moved the salt into a semi-rigid domed structure that prohibits exposure to precipitation either directly or through run-on from surrounding impervious surfaces. Comparable BMPs have been developed and are currently in practice throughout City operations. The City also records and reports upon the amount of materials removed from storm drain assets such as catch basins and gutters from regular maintenance activity. A comprehensive checklist of data collection demands to track and evaluate metrics of success will be part of the MOP.

Training is conducted regularly and the City expects to rely on publicly available training materials as well as those provided through appropriate professional organizations such as the American Public Works Association which continues to compile environmentally responsible municipal operations standards and guidance.

A significant component of the program will be the recordkeeping and documentation standards the City will implement in order to track specific activities and such other documentation as required by the permit (e.g. NPDES Industrial Permits for regulated operators in the City).

2.6.1 Rationale

The City administrative organization encourages autonomous operation and management of respective functions among Department heads, however, the greatest impacts on water quality improvement and protection will be achieved through collaborative efforts. The City anticipates development of the formal MOP prior to the end of the permit term. The MOP will document procedures and protocols, identify the

people responsible for activities within the respective departments, and determine the metrics through which the individual program elements will be evaluated. The timeline for this BMP is likely to be longer than some activities, as the eventual document and program must be reviewed and approved by all operational entities for which specific responsibilities are identified.

The measurable goal for this BMP is completion and implementation of the new MOP prior to the end of this permit term.

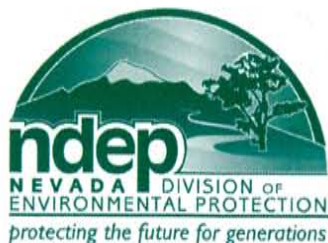
Table 2.6
Proposed MCM 6 BMPs

Management Practice	Changes from 2004? (Y/N)	Goals/Timeframe
Develop MO Program	N	Program and MOP will be developed; estimated completion 2015.
Train Staff	N	Continue to train on an ongoing basis.
Implement MO Program	N	Anticipate program implementation immediately upon completion of the MOP and training of responsible personnel (estimated 2015.)

2.7 Water Quality Monitoring

The City's Water Quality Monitoring Plan (Appendix 2) was evaluated during the course of this SWMP development. A discussion of the context in which that evaluation took place is provided in Section 1.2.7. That evaluation indicated that several modifications to the plan were required in order that the City could use the information derived from the monitoring as intended within the context of this permit. In addition, the existing plan as written was not practical for the community in terms of cost and labor. The revised WQMP is intended to put the City in a position to efficiently collect data, evaluate the data, and utilize the information to determine if or how existing BMPs should be modified to achieve preferred program outcomes. A discussion of findings to date from historic sampling and monitoring conducted by the City under the previous permit term is provided in the WQMP.

Appendix 1
Nevada MS4 General Permit



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Jim Gibbons, Governor

Allen Biaggi, Director

Leo M. Drozdoff, P.E., Administrator

National Pollutant Discharge Elimination System

General Permit for Discharges from

Small Municipal Separate Storm Sewer Systems

Permit No. NVS040000

Operators of the following small municipal separate storm sewer systems are authorized to discharge stormwater to waters of the United States under the National Pollutant Discharge Elimination System in compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et. seq.) and in accordance with the conditions and requirements set forth in this permit:

Carson City, Portions of Douglas County, Lyon County and the Indian Hills General Improvement District Located within the Carson City Urbanized Area, the City of Elko, Nellis Air Force Base and the Coyote Springs Development.

This permit becomes effective on **July 6, 2010**.

This permit and the authorization to discharge expire at midnight, **July 5, 2015**.

Signed and issued this 6th day of July, 2010.

Steve McGoff, P.E.
Staff Engineer III
Bureau of Water Pollution Control



I. Permit Coverage and Authorized Discharges

- I.A. This permit covers all or part of any Urbanized Area (“UA”) within the State of Nevada, as defined in the Definitions in Part VIII. The Permittees currently covered under this permit are: Carson City, portions of Douglas County, Lyon County and the Indian Hills General Improvement District located within the Carson City UA, the City of Elko, Nellis Air Force Base and the Coyote Springs Development.
- I.B. This permit authorizes the discharge of stormwater from small municipal separate storm sewer systems (“MS4s”), as defined in 40 CFR§122.26(b)(16). The Permittee is authorized to discharge stormwater under the terms and conditions of this General Permit if the Permittee:
 - I.B.1. Operates a small MS4 within the permit area described in Part I.A;
 - I.B.2. Is not a “large” or “medium” MS4 as defined in 40 CFR§122.26(b)(4) or (7);
 - I.B.3. Submits a Notice of Intent (“NOI”) in accordance with Part III of this permit; and
 - I.B.4. Is located fully or partially within an UA as determined by the latest Decennial Census by the Bureau of Census; or
 - I.B.5. Is a small MS4 located outside of a UA, serving a jurisdiction with a population of at least 10,000 and has population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census; or
 - I.B.6. Is designated for permit authorization by the Nevada Division of Environmental Protection (“NDEP”) pursuant to 40 CFR§122.32.
- I.C. Operators of unregulated small MS4s wishing to obtain coverage under this permit may apply for coverage under this permit at any time.
- I.D. This permit authorizes stormwater discharges to waters of the United States from designated small MS4s, except those discharges excluded in Part I.F.
- I.E. The Permittees are authorized to accept, pass through, and discharge, without requiring Best Management Practices (“BMP”) or other measures, the following non-stormwater sources provided that NDEP has not determined these sources to be substantial contributors of pollutants to the Permittee’s MS4:
 - I.E.1. Potable water line flushing during testing or fire hydrant testing;
 - I.E.2. Diverted stream flows not requiring a separate permit;
 - I.E.3. Springs or rising ground waters;

- I.E.4. Uncontaminated groundwater infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow);
- I.E.5. Discharges from potable water sources not requiring a separate permit;
- I.E.6. Residential foundation and footing drains;
- I.E.7. Air conditioning condensate;
- I.E.8. Irrigation water from lawns and landscaping;
- I.E.9. Water from residential crawl space pumps;
- I.E.10. Individual residential car washing;
- I.E.11. Flows from natural riparian habitats and wetlands not requiring a separate permit;
- I.E.12. De-chlorinated swimming pool discharges;
- I.E.13. Water incidental to street sweeping (including associated side walks and medians) and that is not associated with construction activities;
- I.E.14. Discharges or flows from fire fighting activities; and
- I.E.15. Dewatering activities not requiring a separate permit.

I.F. This permit does not authorize the following discharges:

- I.F.1. Discharges that are mixed with sources of non-stormwater unless such non-stormwater discharges are:
 - I.F.1.a In compliance with a separate National Pollutant Discharge Elimination System (“NPDES”) permit; or
 - I.F.1.b Determined not to be a substantial contributor of pollutants to waters of the U.S.
- I.F.2. Stormwater discharges associated with industrial activity as defined in 40 CFR §122.26(b)(14)(i)-(ix) and (xi). The discharges are authorized under NDEP’s General Permit NVR050000;
- I.F.3. Stormwater discharges associated with construction activity as defined in 40 CFR §122.26(b)(14)(x) or 40 CFR §122.26(b)(15). These discharges are authorized under NDEP’s General Permit NVR100000;
- I.F.4. Stormwater discharges currently covered under another NPDES permit;
- I.F.5. Discharges that would cause or contribute to an instream exceedance of water quality standards. The Permittee’s Stormwater Management Program (“SWMP”) must include a description of the Best Management Practices (“BMPs”) that will be used to ensure that this will not occur. NDEP may require corrective action or an application for an individual NPDES permit or

alternative general permit if an MS4 is determined to cause an instream exceedance of water quality standards;

- I.F.6. Discharges of any pollutant into any water for which a Total Maximum Daily Load (“TMDL”) has been either established or approved by NDEP unless the Permittee’s discharge is consistent with that TMDL. Information on TMDLs can be found on NDEP’s website. This eligibility condition applies at the time the Permittee submits an NOI for coverage. If conditions change after the Permittee has permit coverage, the Permittee may remain covered by this General Permit provided the Permittee complies with the applicable requirements of Part II. The Permittee must incorporate any limitations, conditions and requirements applicable to the Permittee’s discharges, including monitoring frequency and reporting required, into the Permittee’s SWMP in order to be eligible for permit coverage. For discharges not eligible for coverage under this permit, the Permittee must apply for and receive an individual or other applicable general NPDES permit prior to discharging; and
- I.F.7. Discharges that do not comply with NDEP’s anti-degradation policy for water quality standards.

II. Discharges to Water Quality Impaired Waters

II.A. Impaired Waters Listing on 303(d) List

- II.A.1 The Permittees must evaluate whether stormwater discharges from any part of the MS4 contributes directly or indirectly to the listing of a waterbody on the most current 303(d) list (i.e., impaired waterbody). Information concerning the most current 303(d) list can be found on NDEP’s website. If Permittees have discharges meeting this criterion, or if there is a TMDL on receiving waters, the Permittees must comply with Part II.B. Part II does not apply if the Permittees do not have discharges meeting this criterion.

II.B. Total Maximum Daily Load

- II.B.1 The Permittees must determine whether the MS4 discharges to a waterbody for which a TMDL has been developed and approved by NDEP. If there is a TMDL, the Permittees must comply with Part II.B.2.
- II.B.2 If a TMDL is approved for any waterbody into which the Permittees discharge, the Permittees shall:
- II.B.2.a Determine and report whether the approved TMDL is for a pollutant likely to be found in stormwater discharges from the Permittees’ MS4;
- II.B.2.b Determine and report whether the TMDL includes a pollutant wasteload allocation or other performance requirements specifically for stormwater

discharge from the Permittees' MS4. If there is no waste load allocation ("WLA") or other performance requirements specifically for stormwater from the Permittee's MS4, the Permittee must comply with Part II.B.3;

- II.B.2.c Determine and report whether the TMDL addresses a flow regime likely to occur during periods of stormwater discharge;
- II.B.2.d Assess whether the WLAs are being met through implementation of existing stormwater control measures or if additional control measures are necessary;
- II.B.2.e Document all control measures that are currently being implemented or planned to be implemented and are consistent with the WLA. These measures shall be reported in the Annual Report. A schedule of implementation for all planned controls shall be included in the Stormwater Management Program ("SWMP") as described in Sections IV and V.
- II.B.2.f Estimate reductions of pollutants through established and accepted BMP performance studies, calculations, models or other evidence that shows that the WLA will be addressed through the implementation of the approved SWMP, and shall be reported in the Annual Report;
- II.B.2.g The Monitoring Program required by Section V shall be customized to determine whether the stormwater controls are adequate to meet the WLA to the Maximum Extent Practicable ("MEP"); and,
- II.B.2.h If no WLA currently exists, but is developed during the term of this permit, then the Permittees' BMPs outlined in the approved, updated SWMP are expected to be sufficient for the duration of the existing permit period; and
- II.B.2.i The need for an iterative approach to control pollutants in stormwater discharges is recognized. If the Permittees determine that additional or modified controls are necessary, the SWMP will be updated pursuant to Part VI.I and will describe the type and schedule for the control additions and/or revisions, and an analysis that demonstrates the overall effectiveness.
- II.B.3 The Permittees must determine whether the MS4 discharges to a water on the current State of Nevada 303(d) List of Impaired Waters. If a waterbody is listed, the Permittees shall include a section in the Annual Report describing the conditions(s) for which the water(s) was listed, evaluating possible BMPs that might practicably be implemented, examining whether these BMPs would make a substantial improvement on water quality, and identifying any BMPs that are selected for implementation.

III. Obtaining Coverage for New Applicants

- III.A. If the Permittee is automatically designated under 40 CFR§122.32(a)(1) or designated by NDEP in this permit, the Permittee is required to submit an NOI form along with a description of the Permittee's SWMP within ninety (90) days after designation. The NOI form can be obtained by contacting NDEP.
- III.B. If a Permittee is designated as a regulated Small MS4 by NDEP after the issuance date of this General Permit, the Permittee is required to submit an NOI form along with a description of the Permittee's SWMP to NDEP within ninety (90) days of notice by NDEP.
- III.C. If a late NOI is submitted, the Permittee's coverage is only for discharges that occur after permit coverage is granted. NDEP reserves the right to take appropriate enforcement actions for any unpermitted discharges.
- III.D. Unless notified by NDEP to the contrary, Permittees who submit an initial NOI in accordance with the requirements of this permit are authorized to discharge stormwater from small MS4s under the terms and conditions of this General Permit thirty (30) days after the date the NOI is postmarked. NDEP may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information as discussed in Part VII.S.
- III.E. The Permittee may also jointly submit an NOI to NDEP with one or more MS4s. Each MS4 shall fill out its own separate NOI.
- III.F. The Permittee shall submit the completed NOI, which has been signed in accordance with the signatory requirements of Part VII.I of this General Permit, and the required filing fee to NDEP at the following address:

Stormwater Coordinator
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart St., Suite 4001
Carson City, NV 89701

IV. Stormwater Management Program Requirements for New Permittees

- IV.A. The new Permittee shall develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from the Permittee's small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA. The SWMP shall include management practices; control techniques and system, design, and engineering methods; and such other provisions as NDEP determines appropriate for the control of such pollutants. The Permittee's initial

SWMP must include the following information and comply with each of the six minimum control measures (“MCMs”) described in Part VI:

- IV.A.1. The BMPs that the Permittee or another entity will implement for each of the stormwater MCMs;
- IV.A.2. The measurable goals for each of the BMPs including, as appropriate, the months and years in which the Permittee will undertake required actions, including interim milestones and the frequency of the action; and
- IV.A.3. The person(s) responsible for implementing or coordinating the BMPs for the Permittee’s SWMP.
- IV.B. In addition to the requirements listed above, the new Permittee shall provide a rationale for how and why the Permittee selected each of the BMPs and the measurable goals for the Permittee’s SWMP. The information required for such a rationale is described in the section for each minimum measure. The new Permittee shall develop and fully implement the Permittee’s program within five (5) years from the issuance date of the new permit.
- IV.C. The initial SWMP shall be submitted to NDEP for review and approval one (1) year from the issuance date of the NOI.
- IV.D. Prior to submitting the initial SWMP to NDEP, the Permittee shall make the draft SWMP available to the public for review and comment. The Permittee shall comply with all public noticing requirements pursuant to Nevada Revised Statutes (“NRS”) 241.020 concerning this draft SWMP. The draft must be made available to the public with sufficient time to meet the minimum noticing period, hold the public meeting and allow time necessary to review and incorporate the public comments. This can be done:
 - IV.D.1. At a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the proposed SWMP. This may be a regular meeting of an existing board. It may also be a separate meeting, specifically to deal with the initial SWMP. If multiple Permittees are working together, they may have a group meeting to discuss the draft SWMP;
 - IV.D.2. On the internet by making the draft SWMP available to the public on a website, providing the public the opportunity to provide comments on the internet or some other method, and making available the opportunity for the public to request an open meeting to ask questions about and make comments on the draft SWMP;
 - IV.D.3. Include a summary of comments received and intended responses with the final SWMP; and

- IV.D.4. Make a copy of the final SWMP available for public inspection, either at a municipal office or on the internet.
- IV.E. When the Permittee's initial SWMP has been approved by NDEP, the Permittee shall file an Annual Report with NDEP by December 1 of the year following NDEP's approval, and continue thereafter for the term of the permit. The Annual Report shall include the items outlined in Part VI.N and those listed on the Annual Report Template.
- IV.F. New Permittees may partner with other MS4s to develop and implement the Permittee's SWMP. The description of the Permittee's SWMP must clearly describe which Permittees are responsible for implementing each of the MCMs.
- IV.G. New Permittees within the Carson City UA shall also maintain a separate Clear Creek Master Stormwater Management Program ("CCSWMP") that is described in more detail in Part VI.G.

V. Stormwater Management Program Requirements for Existing Permittees

- V.A. Existing Permittees shall revise, implement and enforce a SWMP designed to reduce the discharge of pollutants from the Permittees' MS4 to the MEP to protect water quality, and to satisfy the appropriate water quality requirements of the CWA;
- V.B. The Permittees shall submit the revised SWMP to NDEP as a permit modification no later than eighteen (18) months after the effective date of this permit;
- V.C. Prior to submitting the revised SWMP to NDEP, the Permittee shall make the draft SWMP available to the public for review and comment. The Permittee shall comply with all public noticing requirements pursuant to NRS 241.020 concerning this draft SWMP revision. The draft must be made available to the public with sufficient time to meet the minimum noticing period, hold the public meeting and allow time necessary to review and incorporate the public comments. This can be done:
 - V.C.1. At a meeting that is open to the public, where the public attendees are able to ask questions about and make comments on the revised SWMP. This may be a regular meeting of an existing board. It may also be a separate meeting, specifically for to deal with the revised SWMP. If multiple Permittees are working together, they may have a group meeting to discuss the draft SWMP;
 - V.C.2. On the internet by making the draft revised SWMP available to the public on a website, providing the public the opportunity to provide comments on the internet or some other method, and making available the opportunity for the public to request an open meeting to ask questions about and make comments on the draft revised SWMP;

- V.C.3. Include a summary of comments received and intended responses with the final revised SWMP; and
- V.C.4. Make a copy of the final revised SWMP available for public inspection, either at a municipal office or on the internet.
- V.D. The Permittees shall fully implement the updated SWMP as soon as practicable, but in no case later than two (2) years after approval of the revised SWMP by NDEP, unless NDEP establishes an alternative implementation date for one of the MCMs. While the SWMP is being updated in accordance with this permit, the Permittee shall continue to fully implement its existing SWMP;
- V.E. The revised SWMP shall identify existing BMPs and any new BMPs that the Permittees or another entity will implement;
- V.F. The revised SWMP shall identify the measurable goals for the new BMPs, as appropriate, including the months and years in which the Permittees will undertake required actions;
- V.G. The revised SWMP shall provide information explaining how and why the Permittees selected each new BMP and measurable goals for the SWMP;
- V.H. Implementation of new and existing BMPs consistent with the provisions of the SWMP as required by this permit and approved by NDEP constitutes compliance with the standard of reducing pollutants to the MEP; and
- V.I. Permittees may partner with other MS4s to develop and implement the Permittee's SWMP. The description of the Permittee's SWMP must clearly describe which Permittees are responsible for implementing each of the MCMs.

VI. Minimum Control Measures. The following six MCMs must be included in each Permittee's initial or revised SWMP:

VI.A. Public Education and Outreach

- VI.A.1. **Permit requirement.** The Permittee shall implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.
- VI.A.2. **Decision process.** The Permittee shall document the Permittee's decision process for the development of a stormwater public education and outreach program. The Permittee's rationale statement shall address the overall public education program and the individual BMPs, measurable goals and persons

responsible for the program. The rationale statement, at a minimum, must include the following information:

- VI.A.2.a The plan the Permittee will use to inform individuals and households about the steps available to reduce stormwater pollution;
- VI.A.2.b The plan the Permittee will use to inform individuals and groups about how to become involved in the stormwater program;
- VI.A.2.c The selected target audiences for the Permittee's education program that are likely to have significant stormwater impacts (including commercial, industrial and institutional entities) and the reason(s) those target audiences were selected;
- VI.A.2.d The target pollutant sources that the Permittee's public education program is designed to address;
- VI.A.2.e The plan the Permittee will use for public outreach, including the mechanisms (e.g., printed brochures, newspapers, media, workshops, etc.) the Permittee will use to reach the Permittee's target audiences, and the number of people expected to be reached by the public outreach plan during the term of the permit;
- VI.A.2.f The person(s) responsible for overall management and implementation of the Permittee's stormwater public education and outreach program and, if different, is the person(s) responsible for each of the BMPs identified in this program; and
- VI.A.2.g The measures the Permittee will use to evaluate the success of this minimum measure, including how the Permittee selected the measurable goals for each of the BMPs.

VI.B. Public Involvement/Participation

- VI.B.1. **Permit requirement.** The Permittee shall, at a minimum, comply with all State and local public noticing requirements when implementing a public involvement/participation program.
- VI.B.2. **Decision process.** The Permittee shall document the decision process for the development of a stormwater public involvement/participation program. The Permittee's rationale statement must address the overall public involvement/participation program and the individual BMPs, measurable goals, and person(s) responsible for the program. The rational statement shall include the following information, at a minimum:

- VI.B.2.a The steps taken by the Permittee to involve the public in the development and submittal of the Permittees NOI and SWMP;
- VI.B.2.b The plan the Permittee will use to actively involve the public in the development and implementation of the program;
- VI.B.2.c The target audiences for the Permittee's public involvement program, including a description of the types of ethnic and economic groups engaged. The Permittee is encouraged to actively involve all potentially affected stakeholder groups, including commercial and industrial businesses, trade associations, environmental groups, homeowners associations, and educational organizations, among others;
- VI.B.2.d The types of public involvement activities included in the Permittee's program. These public involvement activities may include:
- VI.B.2.d.i Citizen representatives on a stormwater management panel;
- VI.B.2.d.ii Public hearings;
- VI.B.2.d.iii Working with citizen volunteers willing to educate others about the program; and
- VI.B.2.d.iv Volunteer monitoring for stream or lake clean-up activities.
- VI.B.2.e The person(s) responsible for the overall management and implementation of the Permittee's stormwater public involvement/participation program and, if different, the person(s) responsible for each of the BMPs identified for this program.
- VI.B.2.f Metrics the Permittee will use to evaluate the success of this MCM, including how the Permittee selected the measurable goals for each of the BMPs.

VI.C. Illicit Discharge Detection and Elimination

VI.C.1. **Permit requirement.** The Permittee shall:

- VI.C.1.a Develop, implement and enforce a program to detect and eliminate illicit discharges (as defined in 40 CFR§122.26(b)(2)) into the Permittee's MS4;
- VI.C.1.b Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the U.S. that receive discharges from those outfalls;
- VI.C.1.c To the extent allowable under State, or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-stormwater

discharges into the Permittee's MS4 and implement appropriate enforcement procedures and actions;

- VI.C.1.d Develop and implement a plan to detect and address non-stormwater discharges, including illegal dumping, into the Permittee's MS4;
 - VI.C.1.e Inform public employees, businesses, and the general public about the hazards associated with illegal discharges and improper disposal of waste;
 - VI.C.1.f Address the discharges listed in Part I.E or flows (i.e., illicit discharges) only if the Permittee identifies them as significant contributors of pollutants to the Permittee's MS4; and
 - VI.C.1.g The Permittee may also develop a list of other similar occasional incidental non-stormwater discharges (e.g. non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-stormwater discharges must not be reasonably expected to be significant sources of pollutants to the MS4 either because of the nature of the discharges or conditions the Permittee has established for allowing these discharges to the Permittee's MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive waterbodies, BMPs on the wash water, etc.). The Permittee shall document in the SWMP any local controls or conditions placed on the discharges. The Permittee shall include a provision prohibiting any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to the MS4.
- VI.C.2. **Decision process.** The Permittee shall document the decision process for the development of a stormwater illicit discharge detection and elimination ("IDDE") program. The Permittee's rationale statement must address the overall IDDE program and the individual BMPs, measurable goals, and person(s) responsible for administering the program. The rational statement shall include the following information, at a minimum:
- VI.C.2.a The plan the Permittee will use to develop a storm sewer map showing the location of all outfalls and the names and location of all receiving waters. Describe the sources of information the Permittee will use for the maps, and how the Permittee plans to verify the outfall locations with field surveys. If the Permittee has already completed the map, describe how the map was developed. Also, discuss how the Permittee will update the map and the frequency of the updates;
 - VI.C.2.b The mechanism (ordinance or other regulatory mechanism) the Permittee will use to effectively prohibit illicit discharges into the MS4 and why the mechanism was chosen. If the Permittee needs to develop this mechanism, describe the plan and the schedule to do so. If the Permittee's

ordinance or regulatory mechanism has already been developed, include a copy of the relevant sections with the SWMP;

- VI.C.2.c The Permittee's plan to ensure that by using appropriate enforcement procedures and actions the illicit discharge ordinance (or other regulatory mechanism) is implemented;
- VI.C.2.d The Permittee's plan to detect and address illicit discharges to the system, including discharges from illegal dumping and spills. The Permittee's plan shall include dry weather field screening for non-stormwater flows and field tests of selected chemical parameters as indicators of discharge sources. The Permittee's plan shall also address on-site sewage disposal systems that overflow ("Sanitary Sewer Overflows") into the storm drainage system. The Permittee's description must address the following, at a minimum:
 - VI.C.2.d.i Procedures for locating priority areas which include areas with a higher likelihood of illicit connections (e.g., areas with older sanitary sewer lines, for example) or ambient sampling to locate impacted reaches;
 - VI.C.2.d.ii Procedures for tracing the source of an illicit discharge, including the specific techniques that will be used to detect the location of the source;
 - VI.C.2.d.iii Procedures for removing the source of the illicit discharge;
 - VI.C.2.d.iv Procedures for program evaluation and assessment;
 - VI.C.2.d.v The plan the Permittee will use to inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste. Discuss how this plan will coordinate with the public education minimum measure and the pollution prevention/good housekeeping minimum measure programs;
 - VI.C.2.d.vi The person(s) responsible for overall management and implementation of the stormwater IDDE program and, if different, is the person(s) responsible for each of the BMPs identified for this program; and
 - VI.C.2.d.vii Discuss how the Permittee will evaluate the success of this MCM, including how the Permittee selected the measurable goals for each of the BMPs.

VI.D. Construction Site Stormwater Runoff Control

- VI.D.1. **Permit requirement.** The Permittee shall develop, implement, and enforce a program to reduce pollutants from any stormwater runoff to the Permittee's MS4 from construction activities that result in a land disturbance of greater than or equal to one (1) acre. Reduction of stormwater discharges from construction activity disturbing less than one (1) acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one (1) acre or more. If NDEP waives the requirements for stormwater discharges associated with small construction activity in accordance with 40 CFR§122.26(b)(15)(i), the Permittee is not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites. The Permittee's program must include the development and implementation of, at a minimum:
- VI.D.1.a An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, or local law;
 - VI.D.1.b Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;
 - VI.D.1.c Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
 - VI.D.1.d Procedures for site plan review which incorporate consideration of potential water quality impacts;
 - VI.D.1.e Procedures for receipt and consideration of information submitted by the public; and
 - VI.D.1.f Procedures for site inspection and enforcement of control measures.
- VI.D.2. **Decision process.** The Permittee shall document the decision process for the development of a construction site stormwater control program. The Permittee's rationale statement must address the overall construction site stormwater control program and the individual BMPs, measurable goals, and responsible person(s) for the program. The rationale statement must include the following information, at a minimum:
- VI.D.2.a The mechanism (ordinance or other regulatory mechanism) the Permittee will use to require erosion and sediment controls at construction sites and why that mechanism was chosen. If the Permittee needs to develop this mechanism, describe the plan and the schedule to do so. If the Permittee's

ordinance or regulatory mechanism is already developed, include a copy of the relevant sections with the SWMP;

- VI.D.2.b The Permittee's plan to ensure compliance with the erosion and sediment control regulatory mechanism, including the sanctions and enforcement mechanisms that will be used to ensure compliance. Describe the procedures the Permittee will use when imposing certain sanctions. Possible sanctions include monetary penalties such as fines and non-monetary penalties such as stop-work orders, bonding requirements, and/or permit denials for non-compliance;
- VI.D.2.c The Permittee's requirements for construction site operators to implement appropriate erosion and sediment control BMPs and control waste at construction sites that may cause adverse impacts to water quality. Such waste includes discarded building materials, concrete truck washouts, chemicals, litter, and sanitary waste;
- VI.D.2.d The Permittee's procedures for site plan reviews, including reviews of pre-construction site plans which incorporate potential water quality impacts. Describe the Permittee's procedures and the rationale for how the Permittee will identify certain sites for site plan review, if not all plans are reviewed. Describe the estimated number and percentage of construction sites that will have pre-construction site plans reviewed;
- VI.D.2.e The Permittee's procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with the Permittee's public education program;
- VI.D.2.f The Permittee's procedures for site inspection and enforcement of control measures, including how the Permittee will prioritize sites for inspection;
- VI.D.2.g The person(s) responsible for overall management and implementation of the construction site stormwater control program and, if different, the person(s) responsible for each of the BMPs identified for this program; and
- VI.D.2.h Describe how the Permittee will evaluate the success of this minimum measure, including how the Permittee selected the measurable goals for each of the BMPs.

VI.E. Post-Construction Stormwater Management Requirements for New Development and Significant Redevelopment Projects

- VI.E.1. The Permittees shall develop a post-construction stormwater management BMP program for new development and significant redevelopment ("NDSR") projects that is suited for the unique hydrologic, hydrogeologic and regional

conditions of the Permittee's locality. The program shall focus on planning procedures consistent with the goals identified in Part VI.E.2.

- VI.E.2. The post-construction stormwater management program shall have the following goals:
 - VI.E.2.a To prevent stormwater discharges from post-construction projects from causing or contributing to downstream violations of water quality standards of any pollutant of concern to the MEP; and
 - VI.E.2.b To promote the improvement of ambient water quality by reducing the discharge of pollutants in stormwater.
- VI.E.3. The post-construction stormwater management program shall address at a minimum the following elements:
 - VI.E.3.a Describe how the Permittees will review and enhance the SWMP post-construction program requirements in a manner appropriate for the unique hydrologic, hydrogeologic and regional conditions and needs of the Permittee's locality. The review shall address the following elements:
 - VI.E.3.a.i Describe how the Permittees will develop, implement and enforce a program to address post-construction urban runoff from NDSR projects that disturb areas ≥ 1 acre, including projects < 1 acre that are part of a larger common plan of development or sale, that discharge into the MS4 by ensuring that NDSR projects are complying to the MEP with the requirements of this program;
 - VI.E.3.a.ii Describe how the Permittees will develop low-impact development ("LID") measures that will remain in effect after construction is complete and are effective and appropriate for the Permittee's locality and its environment. The program will outline the selected LID measures found effective and appropriate for the Permittee's locality along with a summary and schedule for implementation in the MS4;
 - VI.E.3.a.iii Describe how the Permittees will develop any additional structural and non-structural BMPs that will remain in effect after construction is complete and are effective and appropriate for Permittee's locality and its environment. The program will outline the selected BMP measures found effective and appropriate for the Permittee's locality along with a summary and schedule for implementation in the MS4;
 - VI.E.3.a.iv Describe procedures to assure that future regional flood management projects assess the impacts on the water quality of receiving water bodies;

- VI.E.3.a.v Describe how the Permittees will develop and implement an ordinance or other regulatory mechanism to address urban stormwater runoff from NDSR projects;
- VI.E.3.a.vi Describe how the Permittees will provide verification of maintenance provisions for structural BMPs located on private property that are subject to post-construction structural BMP requirements;
- VI.E.3.a.vii Describe how the Permittees will develop and implement an inventory and tracking system for post-construction structural stormwater BMPs. The inventory and tracking system shall use at a minimum the following items: project or property owner's name, project location, project acreage, BMP type and description, inspection or contact date and summary of recommendations or any necessary corrective actions undertaken;
- VI.E.3.a.viii Describe how the Permittees will inspect and enforce the proper installation and long-term maintenance of post-construction structural stormwater BMPs ; and
- VI.E.3.a.ix Describe how the Permittees will update its MS4 maps to show areas of NDSR, including any new stormwater major infrastructure that was constructed to serve these areas.
- VI.E.3.b All NDSR projects submitted to the permitting authority subsequent to program implementation as identified in VI.E.3.b.i that fall into one of the following categories shall be subject to one or more of the SWMP design standards developed in accordance with Part VI.E.4:
- VI.E.3.b.i Residential subdivisions five (5) acres or greater in size;
- VI.E.3.b.ii Single-family residences subject to local ordinances governing hillside development;
- VI.E.3.b.iii 100,000 square foot commercial and industrial developments;
- VI.E.3.b.iv Automotive repair shops (with Standard Industrial Classification ("SIC") codes 5013, 7532, 7533, 7534, 7537, 7538, and 7539);
- VI.E.3.b.v Retail gasoline outlets disturbing greater than one (1) acre;
- VI.E.3.b.vi Restaurants disturbing greater than one (1) acre;
- VI.E.3.b.vii Parking lots greater than one (1) acre potentially exposed to urban runoff; and

- VI.E.3.b.viii Any other NDSR projects the Permittees deem necessary to be included in this part.
- VI.E.4. **Design Standards.** The post-construction stormwater management program shall describe how NDSR projects specified in the previous section will implement the design standards outlined in this section. Subject to Section VI.E.4.e, the design standards program shall address at minimum the following criteria:
- VI.E.4.a **Peak-Urban Runoff Discharge Rates.** Describe how the Permittees will develop design standards for peak-urban runoff from NDSR projects that will provide protection against downstream erosion;
- VI.E.4.b **Site Design BMPs.** Describe how the post-construction stormwater management program will develop and implement site design BMPs in the site layout during the design and approval process to meet the goals of this program identified in Part VI.E.2;
- VI.E.4.c **Source Control BMPs.** The post-construction stormwater management program shall describe how source control BMPs will be implemented. The design standards program shall include the following source-control BMPs that are consistent with the goals of this program:
- VI.E.4.c.i Slopes and channel design or protection to minimize erosion;
- VI.E.4.c.ii Outdoor material storage areas designed to minimize the risk of stormwater runoff contacting and carrying away pollutants to the MS4; and
- VI.E.4.c.iii Trash storage areas designed to minimize the risk of stormwater runoff contacting and carrying away pollutants to the MS4.
- VI.E.4.d **Structural Treatment Control BMPs.** The post-construction stormwater management program shall describe how treatment control BMPs will be developed and implemented. “Treatment control BMPs” and “treat” refer to any onsite or offsite process that provides for infiltration or detention of stormwater or that removes pollutants through any physical, chemical, or biological process. The design standards program shall describe in sufficient detail how the Permittees will size treatment control BMPs using accepted hydrologic engineering quantitative methods and the following design criteria:
- VI.E.4.d.i **Volumetric Treatment Control BMP design criteria.** The post-construction stormwater management program shall describe how the Permittees will design volume-based BMPs to treat the increase of stormwater discharges from projects listed in Part VI.E.3.b. The

Permittees shall use one of the following conditions to develop the volumetric treatment control BMP design criteria:

- VI.E.4.d.i.1 Historical rainfall records for the Permittee's locality to determine the maximized capture stormwater volume for the area for the 24-hour event using the formula recommended in Urban Runoff Quality Management, Water Environment Federation Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
- VI.E.4.d.i.2 The volume of annual runoff based on unit basin storage water quality volume, to achieve at least 80% of volume treatment by the method recommended in hydrology manuals, textbooks or similar technical publications; or
- VI.E.4.d.i.3 An alternative treatment design criteria, appropriate for the unique hydrologic, hydrogeologic and regional conditions of the Permittee's locality. Any alternative design criteria shall be submitted to NDEP with sufficient technical data to establish the appropriateness of the alternative treatment design criteria.
- VI.E.4.d.ii **Flow-Based BMP design criteria.** The post-construction stormwater management program shall describe how the Permittees will design flow-based BMPs to treat stormwater discharges from projects listed in Part VI.E.3.b. The Permittees shall use one of the following conditions to develop flow-based BMP design criteria:
 - VI.E.4.d.ii.1 Historical rainfall data for the Permittee's locality to determine the maximum flow rate of runoff from rainfall per hour, for each hour of a storm event; or
 - VI.E.4.d.ii.2 The maximum flow rate of runoff produced by the 80th percentile hourly rainfall intensity (for each hour of the storm event), as determined from the local historical rainfall record; or
 - VI.E.4.d.ii.3 The maximum flow rate of runoff for each hour of a storm event, as determined from the local historical rainfall record that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 80th percentile hourly rainfall intensity; or
 - VI.E.4.d.ii.4 An alternative treatment design criteria, appropriate for the unique hydrologic, hydrogeologic and regional conditions of the Permittee's locality. Any alternative design criteria shall be submitted to NDEP with sufficient technical data to establish the appropriateness of the alternative treatment design criteria.

VI.E.4.e If the Permittees will not use some or all of the design standards described in this section, the Permittees shall provide justification using documentation and engineering analyses, and propose reasonable alternatives that are appropriate for the unique hydrologic, hydrogeologic and regional conditions in Permittee's locality.

VI.E.4.f **Effect of the Post-Construction Stormwater Management Program on Water Quality Standards and Drinking Water Supply**

VI.E.4.f.i The Permittees shall provide a written evaluation whether the criteria developed as part of the post-construction stormwater management program will tend to cause or contribute to elevated levels of pollutants of concern in surface waters within Permittee's locality and shall submit the evaluation to NDEP as part of the post-construction program; and

VI.E.4.f.ii If any criteria developed under the post-construction stormwater management program in accordance with the provisions of this permit would have a reasonable potential of causing or contributing to any water quality or water quantity impairment, or violates Nevada law, they shall be rescinded, and the Permittees shall determine whether alternate criteria can be implemented without causing water quality or water quantity impairments or violating Nevada law.

VI.F. **Pollution Prevention/Good Housekeeping for Municipal Operations**

VI.F.1. **Permit requirement.** The Permittee shall:

VI.F.1.a Develop and implement an O&M program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations; and

VI.F.1.b Using training materials that are available from EPA, NDEP, or other organizations, the Permittee's program must include employee training to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance.

VI.F.2. **Decision process.** The Permittee shall document the decision process for the development of a pollution prevention/good housekeeping program for municipal operations. The Permittee's rationale statement must address both the overall pollution prevention/good housekeeping program and the individual BMPs, measurable goals, and person(s) responsible for the program. The rationale statement must include the following information, at a minimum:

- VI.F.2.a The Permittee's O&M program to prevent or reduce pollutant runoff from the Permittee's municipal operations. The Permittee's program shall specifically list the municipal operations that are impacted by this O&M program. The Permittee shall also include a list of industrial facilities the Permittee owns or operates that are subject to NDEP's Industrial Stormwater General Permit or individual NPDES permits for discharges of stormwater associated with industrial activities that ultimately discharge to the Permittee's MS4. Include the NDEP permit number or a copy of the Industrial NOI form for each facility.
- VI.F.2.b Any employee training program the Permittee will use to prevent and reduce stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance. Describe any existing, available materials the Permittee plans to use. Describe how this training program will be coordinated with the outreach programs developed for the public information minimum measure and the illicit discharge minimum measure.
- VI.F.2.c The Permittee's program description shall specifically address the following areas:
- VI.F.2.c.i Maintenance activities, maintenance goals, and long-term inspection procedures for controls to reduce floatables and other pollutants to the Permittee's MS4;
- VI.F.2.c.ii Controls for mitigating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas the Permittee operates. These measures shall include:
- VI.F.2.c.ii.1 A description of salt and salt/sand storage piles at any of the Permittee's facilities. Salt and salt/sand piles shall be enclosed or covered by a storm resistant shelter to prevent exposure to rain, snow, snowmelt and/or runoff. If applicable, describe any temporary practices used to prevent exposure of salt and salt/sand piles to rain, snow, snowmelt and/or runoff. Sand may be stored outside and uncovered if BMPs such as setback from the storm sewer inlet, drop inlet protection, perimeter controls, or sedimentation basins are maintained to prevent discharge of sand to the MS4;
- VI.F.2.c.ii.2 Permittees must develop and implement standard operating procedures ("SOP") for vehicle fueling, and receiving of bulk fuel deliveries at maintenance yard operations;

- VI.F.2.c.ii.3 Permittees shall develop and implement an SOP for vehicle maintenance and repair activities that occur at municipal maintenance yard operations; and
- VI.F.2.c.ii.4 Permittees shall eliminate the unpermitted discharge of equipment and vehicle wash wastewater to waters of the U.S. from municipal maintenance yard operations by either installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the activity and/or applying for and obtaining a separate NPDES permit.;
- VI.F.2.c.ii.5 Procedures for the proper disposal of waste removed from the Permittee's MS4 and the Permittee's municipal operations, including dredge spoil, accumulated sediments, floatables, and other debris;
- VI.F.2.c.ii.6 The person(s) responsible for overall management and implementation of the pollution prevention/good housekeeping program and, if different, the person(s) responsible for each of the BMPs identified for this program; and
- VI.F.2.c.ii.7 Describe how the Permittee will evaluate the success of this minimum measure, including how the Permittee selected the measurable goals for each of the BMPs.

VI.G. Carson City UA Discharges to Clear Creek

- VI.G.1. Permittees within the Carson City UA shall also maintain a separate Clear Creek Master Stormwater Management Program ("CCSWMP"). The CCSWMP must be developed, implemented, and enforced to reduce the discharge of pollutants to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of a construction area, unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained, shall be provided. The CCSWMP shall include the following:
- VI.G.1.a A detailed description of BMPs that have been, or will be, implemented on construction projects located in the Clear Creek watershed;
- VI.G.1.b A detailed description of sediment controls for all down-slope boundaries (and for those side-slope boundaries deemed appropriate as dictated by

individual site conditions) that have been, or will be, used on construction areas located in the Clear Creek watershed;

- VI.G.1.c A detailed description of control techniques that have been or will be used by the Permittee to the MEP to ensure no illicit discharge of pollutants into Clear Creek;
- VI.G.1.d A detailed description of system design and/or engineering methods the Permittee has used, or plans to use, to protect Clear Creek from illicit discharges of pollutants;
- VI.G.1.e A schedule of implementation for all future short-term and long-term activities describing program development, implementation and maintenance;
- VI.G.1.f An annual monitoring program to ensure the overall quality and health of Clear Creek;
- VI.G.1.g An inventory and tracking program for all maintenance yards that have the potential to discharge pollutants into Clear Creek;
- VI.G.1.h The Permittee's inspection program on its MS4 or construction sites to ensure that no illicit discharges of pollutants enter Clear Creek; and
- VI.G.1.i The Permittee may partner with other MS4s to develop and implement the CCSWMP.

VI.H. Sharing Responsibility for MCMs

- VI.H.1. Implementation of one or more of the MCMs may be shared with another MS4, or the Permittee may fully take over the MCM. The Permittee may rely on another entity only if:
 - VI.H.1.a The other entity, in fact, implements the control measure;
 - VI.H.1.b The particular control measure, or component of that measure, is at least as stringent as the corresponding permit requirement; and
 - VI.H.1.c The other entity agrees to implement the control measure on the Permittee's behalf. Written acceptance of this obligation is required. This obligation must be maintained as part of the description of the Permittee's SWMP. If the other entity agrees to report on the MCM, the Permittee must supply the other entity with the reporting requirements contained in Part VI.N of this permit. If the other entity fails to implement the control measure on the Permittee's behalf, then the Permittee still remains liable for any discharges due to that failure to implement the MCM.

VI.I. Reviewing and Updating the SWMP

- VI.I.1. The Permittee shall complete an annual review of its SWMP in conjunction with preparation of the Annual Report required under Part VI.N of this permit.
- VI.I.2. The Permittee may change or update the SWMP during the life of the permit in accordance with the following procedures:
 - VI.I.2.a Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to NDEP.
 - VI.I.2.b Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP with an alternate BMP may be requested at any time. Unless denied by NDEP, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented sixty (60) days from submittal of the request. If the request is denied, NDEP will send the Permittee a written response giving a reason for the decision. The Permittee's modification requests must include the following:
 - VI.I.2.b.i An analysis of why the BMP is ineffective or infeasible (including cost prohibitive);
 - VI.I.2.b.ii Expectations on the effectiveness of the replacement BMP; and
 - VI.I.2.b.iii An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
 - VI.I.2.c Change requests or notifications must be made in writing to NDEP and signed in accordance with Part VII.I of this permit.

VI.J. SWMP Updates Required by NDEP.

- VI.J.1. NDEP may require changes to the SWMP as needed to:
 - VI.J.1.a Address impacts on receiving water quality caused, or contributed to, by discharges from the MS4;
 - VI.J.1.b Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; or
 - VI.J.1.c Include such other conditions deemed necessary by NDEP to comply with the goals and requirements of the CWA.

VI.J.2. Changes requested by NDEP must be made in writing, set forth the time schedule for the Permittee to develop the changes, and offer the Permittee the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by NDEP will be made in accordance with 40 CFR§124.5, 40 CFR§122.62, or, as appropriate, 40 CFR§122.63.

VI.K. Transfer of Ownership, Operational Authority, or Responsibility for SWMP Implementation.

VI.K.1. The Permittee shall implement the SWMP on all new areas added to the Permittee's portion of the MS4 (or for which the Permittee becomes responsible for implementation of stormwater quality controls) as expeditiously as practicable, but not later than one (1) year from the addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately;

VI.K.2. Within ninety (90) days of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the Permittee shall have a plan for implementing the SWMP on all affected areas. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP must be included in the Annual Report;

VI.K.3. Only those portions of the SWMP that are specifically required as permit conditions shall be subject to the modification requirements of 40 CFR§124.5. Addition of components, controls, or requirements by the Permittee(s) and replacement of an ineffective or infeasible BMP implementing a required component of the SWMP with an alternate BMP expected to achieve the goals of the original BMP shall be considered minor changes to the SWMP and not modifications to the permit.

VI.L. Water Quality Monitoring

VI.L.1. The Permittee must evaluate program compliance, the appropriateness of identified BMPs, and progress toward achieving identified measurable goals. If the Permittee discharges to an impaired waterbody for which a TMDL has been approved and has no WLA developed for stormwater, the Permittee will comply with Part II.B.3.

VI.L.2. Permittees shall submit a stormwater monitoring plan for the following year on or before November 1 each year.

VI.L.3. When the Permittee conducts monitoring at the Permittee's permitted small MS4, the Permittee shall comply with the following:

- VI.L.3.a **Representative monitoring.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.
- VI.L.3.b **Test Procedures.** Test procedures for the analysis of pollutants shall conform to regulations (40 CFR, Part 136) published pursuant to Section 304(h) of the CWA, under which such procedures may be required unless other procedures are approved by NDEP.
- VI.L.4. Records of monitoring information shall include:
- VI.L.4.a The date, exact place, and time of sampling or measurements;
- VI.L.4.b The names(s) of the individual(s) who performed the sampling or measurements and the firm where the individual works;
- VI.L.4.c The date(s) analyses were performed;
- VI.L.4.d The names of the individuals who performed the analyses;
- VI.L.4.e The analytical techniques or methods used; and
- VI.L.4.f The results of such analyses.
- VI.L.5. Monitoring results must be reported on a Discharge Monitoring Report (“DMR”);
- VI.L.6. Analyses shall be performed by a State of Nevada-certified laboratory. Results from this lab must be included in the Annual Report; and
- VI.L.7. After considering monitoring data, stream flow, discharge flow and receiving water conditions, NDEP may, for just cause, modify the monitoring frequency and/or sample type by issuing an order to the Permittee.

VI.M. Record Keeping

- VI.M.1. The Permittee shall retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the NOI for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of NDEP at any time; and

- VI.M.2. The Permittee shall submit the records to NDEP only when specifically asked to do so. The Permittee must retain a description of the SWMP required by this permit (including a copy of the permit language) at a location accessible to NDEP. The Permittee must make the records, including the NOI and the description of the SWMP, available to the public if requested to do so in writing.

VI.N. Annual Reporting and Fees

- VI.N.1. Permittees shall submit an Annual Report to NDEP by December 1 of each year of the permit term using the Annual Report Template found on NDEP's website;
- VI.N.2. New Permittees shall remit an Annual Report by December 1 of the year following the initial approval of the SWMP by NDEP;
- VI.N.3. If the Permittee performs any additional monitoring beyond that required by the stormwater monitoring plan the results of such monitoring shall be reported in the Annual Report;
- VI.N.4. Permittees shall also remit an annual permit renewal fee in accordance with Nevada Administrative Code ("NAC") 445A.232 on or before July 1 of every year until the permit is terminated;
- VI.N.5. New Permittees shall also remit a service fee in accordance with NAC 445A.232 on or before July 1 of the year following initial approval of the NOI and every year thereafter until the permit is terminated;
- VI.N.6. Permittees working together to develop and/or implement their SWMPs may complete a shared Annual Report. The shared Annual Report is one report outlining and explaining group activities with the tasks performed by individual Permittees (BMPs, measurable goals, schedules of planned activities, etc.) included. Individual Permittees activities may be incorporated into the Annual Report in one of two ways, either:
- VI.N.6.a Providing the details specific to their MS4 to a person(s) who incorporates that information into the group Annual Report, or
- VI.N.6.b Providing the details specific to their MS4 on a separate sheet that will be attached to the group Annual Report.
- VI.N.7. An original signed copy of all reports required herein shall be submitted to NDEP at the following address:

Stormwater Coordinator
Bureau of Water Pollution Control
Nevada Division of Environmental Protection
901 S. Stewart, Suite 4001
Carson City, NV 89701

VII. Standard Permit Conditions

VII.A. Duty to Comply

- VII.A.1. The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

VII.B. Penalties for Violations of Permit Conditions

- VII.B.1. NRS 445A.675 provides that any Permittee who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.705.

VII.C. Continuation of the Expired General Permit

- VII.C.1. If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedures Act and remain in force and effect. Any Permittee who was granted permit coverage prior to the expiration date will automatically remain covered by the continued permit until the earlier of:
- VII.C.1.a Reissuance or replacement of this permit, at which time the Permittee must comply with the renewal NOI conditions of the new permit to maintain authorization to discharge; or
 - VII.C.1.b Issuance of an individual permit for the Permittee's discharges; or
 - VII.C.1.c A formal permit decision by NDEP not to reissue this General Permit, at which time the Permittee must seek coverage under an alternative General Permit or an individual permit.

VII.D. Continuing Permit Coverage for Existing Permittees

- VII.D.1. To continue coverage under this General Permit, Permittees currently covered under the expired General Permit NVS040000 shall submit a renewal NOI to NDEP within ninety (90) days of the effective date of this permit to remain included under the original NOI. The Permittee must verify that their information on the renewal NOI is valid and accurate before submitting the

renewal NOI for continued coverage. No additional filing fee is required to file this renewal NOI.

VII.E. Need to Halt or Reduce Activity Not a Defense

- VII.E.1. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

VII.F. Duty to Mitigate

- VII.F.1. The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

VII.G. Duty to Provide Information

- VII.G.1. The Permittee shall furnish any information to NDEP that is requested to determine compliance with this permit or other information.

VII.H. Other Information

- VII.H.1. If the Permittee becomes aware that it has failed to submit any relevant facts in the Permittee's NOI or submitted incorrect information in the NOI or in any other report to NDEP, the Permittee must promptly submit such facts or information.

VII.I. Signatory Requirements

- VII.I.1. All NOIs, reports, certifications, or information submitted to NDEP, or that this permit requires be maintained by the Permittee shall be signed and certified as follows:
- VII.I.1.a **NOIs.** All NOIs shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA);
- VII.I.1.b **Reports and other information.** All reports required by the permit and other information requested by NDEP or an authorized representative of NDEP shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- VII.I.1.b.i **Signed authorization.** The authorization is made in writing by a person described above and submitted to NDEP.
- VII.I.1.b.ii **Authorization with specified responsibility.** The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility for environmental matter for the regulated entity.
- VII.I.1.b.iii **Changes to authorization.** If an authorization is no longer accurate because a different operator has the responsibility for the overall operation of the MS4, a new authorization satisfying the requirement of Part VII.I shall be submitted to NDEP prior to or together with any reports, information, or NOIs to be signed by an authorized representative.
- VII.I.1.c **Certification.** Any authorized person as defined in Parts VII.I signing documents under Part VII.I shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

VII.J. Property Rights

- VII.J.1. The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

VII.K. Proper Operation and Maintenance

- VII.K.1. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit and with the conditions of the SWMP. Proper O&M also includes adequate laboratory controls and appropriate quality assurance procedures. Proper O&M requires the operation of backup or auxiliary

facilities or similar systems, installed by the Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

VII.L. Inspection and Entry

VII.L.1. The Permittee shall allow NDEP or an authorized representative (including an authorized contractor acting as a representative of NDEP) upon the presentation of credentials and other documents as may be required by law, to do any of the following:

VII.L.1.a Enter the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

VII.L.1.b Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;

VII.L.1.c Inspect at reasonable times any facilities or equipment (including monitoring and control equipment) practices, or operations regulated or required under this permit; and

VII.L.1.d Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

VII.M. Permit Actions

VII.M.1. This permit may be modified, revoked and reissued, or terminated for cause. The Permittee's filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

VII.N. Permit Transfers

VII.N.1. This permit is not transferable to any person except after written notice to NDEP. NDEP may require modification or revocation and reissuance of the permit to change the name of the Permittee and incorporate such other requirements as may be necessary under the CWA.

VII.O. Anticipated Noncompliance

VII.O.1. The Permittee shall give advanced written notice to NDEP of any planned changes in the permitted small MS4 or activity which may result in noncompliance with this permit.

VII.P. State Environmental Laws

- VII.P.1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA; and
- VII.P.2. No condition of this permit releases the Permittee from any responsibility or requirements under other environmental statutes or regulations.

VII.Q. Severability

- VII.Q.1. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit in any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

VII.R. Procedures for Modification or Revocation

- VII.R.1. Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5.

VII.S. Requiring an Individual Permit or an Alternative General Permit

- VII.S.1. **Request by NDEP.** NDEP may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the permitting authority to take action under this paragraph. Where NDEP requires the Permittee to apply for an individual NPDES permit, NDEP will notify the Permittee in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the Permittee to file the application, and a statement that on the effective date of issuance or denial of the individual NPDES permit or the alternative general permit as it applies to the individual Permittee, coverage under this General Permit shall automatically terminate. NDEP may grant additional time to submit the application upon request of the applicant. If the Permittee fails to submit in a timely manner an individual NPDES permit application as required by NDEP under this paragraph, then the applicability of this permit to the Permittee is automatically terminated at the end of the day specified by NDEP for application submittal.
- VII.S.2. **Request by Permittee.** Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the Permittee must submit an individual application in accordance with the requirements of 40 CFR§122.33(b)(2), with reasons

supporting the request, to NDEP at the address listed in Part VI.N.7. The request may be granted by issuance of any individual permit or an alternative General Permit if the reasons cited by the Permittee are adequate to support the request.

- VII.S.3. **General permit termination.** When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the Permittee is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES Permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative General Permit, whichever the case may be. When an individual NPDES permit is denied to an operator otherwise subject to this permit, or the operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES Permittee is automatically terminated on the date of such denial, unless otherwise specified by the permitting authority.

VII.T. Transfer of Ownership or Control

- VII.T.1. In the event of any change in control or ownership of storm drain systems covered by this permit, the Permittee shall notify the succeeding owner or controller of the existence of this permit, by letter, a copy of which shall be forwarded to NDEP. All transfer of permits shall be approved by NDEP.

VII.U. Availability of Reports

- VII.U.1. Except for data determined to be confidential under NRS 445A.665, all reports and plans prepared in accordance with the terms of this permit shall be available for public inspection at NDEP's office. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.

VII.V. Furnishing False Information and Tampering with Monitoring Devices

- VII.V.1. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained by the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required to be maintained under the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, is guilty of a gross misdemeanor and shall be punished by a fine of not more than \$25,000 or by imprisonment. This penalty is in addition to any other penalties, civil or criminal, pursuant to NRS 445A.300 to 445A.730, inclusive.

VII.W. Penalty for Violation of Permit Conditions

VII.W.1. NRS 445A.675 provides that any person who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.710.

VII.W.2. Permit Modification, Suspension or Revocation

VII.W.2.a After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

VII.W.2.a.i Violation of any terms or conditions of this permit;

VII.W.2.a.ii Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

VII.W.2.a.iii A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

VII.X. Liability

VII.X.1. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Federal, State or local laws, regulations, or ordinances.

VII.Y. Property Rights

VII.Y.1. The issuance of this permit does not convey any property rights, in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

VII.Z. Severability

VII.Z.1. The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

VIII. Definitions

VIII.A. All applicable definitions contained in Section 502 of the CWA and 40 CFR §122 shall apply to this permit and are incorporated herein by reference. For

convenience, simplified explanations of some regulatory/statutory definitions have been provided.

- VIII.A.1. **Best Management Practices (“BMPs”)** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
- VIII.A.2. **Clean Water Act (“CWA” or “The Act”)** means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.
- VIII.A.3. **Control Measure**, as used in this permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to Waters of the United States.
- VIII.A.4. **Discharge**, when used without a qualifier, refers to “discharge of a pollutant” as defined at 40 CFR §122.2.
- VIII.A.5. **Illicit Connection** means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.
- VIII.A.6. **Illicit Discharge** is defined at 40 CFR §122.26(b)(2) and refers to any discharge to a municipal separate storm sewer that is not entirely composed of stormwater, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the MS4) and discharges resulting from fire fighting activities. For the purposes of this permit, illicit discharges do not include discharges into the MS4 authorized in Part I.D.
- VIII.A.7. **Low Impact Development (“LID”)** features are considered public domain treatment controls. LID is an approach to land development or redevelopment that works to manage stormwater close to its source. LID employs principles and techniques used in designing sites (starting from site layout, and grading and compaction phases of construction) that disturb only the smallest area necessary, minimize soil compaction and imperviousness, preserve natural drainages, vegetation and buffer zones, and utilize on-site storm water treatment techniques. LID sites reduce and compensate for development’s impact(s) on hydrology and water quality. Rather than conventional hardpiping from impervious surfaces, implementing LID principles and practices, stormwater can be managed in a way that reduces the impact of built-up areas and promotes the natural movement of stormwater within an

ecosystem or watershed. Applied on a broad scale, LID can support and promote a watershed's hydrologic and ecological functions.

- VIII.A.8. **Maximum Extent Practicable** ("MEP") - Refers to the technology-based discharge standard for MS4s to reduce pollutants in stormwater discharges that was established by CWA §402(p).
- VIII.A.9. **Municipal Separate Storm Sewer System** ("MS4") means a Large, Medium, or Small MS4 (e.g. "the Truckee Meadows MS4"). The term is used to refer to either the system operated by a single entity, or a group of systems within an area that are operated by multiple entities (e.g. the Truckee Meadows MS4 includes MS4s operated by the City of Reno, the City of Sparks and Washoe County). MS4 is defined at 40 CFR§ 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying stormwater; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.
- VIII.A.10. **Notice of Intent** ("NOI") means an entity files an NOI with NDEP requesting coverage under this permit.
- VIII.A.11. **Non-Structural BMP**: Refers to techniques that aim to change human behavior to reduce the amount of pollutants that enter stormwater systems (pollution prevention). Non-structural measures may include minimization and/or disconnection of impervious surfaces; development design that reduces the rate and volume of runoff; public outreach and education; restoration or enhancement of natural areas.
- VIII.A.12. **"The Permittee" and "The Permittees"** as used in this permit is intended to refer to the Permittee and that party's responsibilities to meet the requirements of this permit.
- VIII.A.13. **Permitting Authority** means the Nevada Division of Environmental Protection.
- VIII.A.14. **Post-Construction Stormwater** is a term used to distinguish stormwater practices used during site construction (otherwise known as "construction

stormwater” or “erosion and sediment control”) from those that are used on a permanent basis to control runoff once construction is complete and a Notice of Termination has been approved by NDEP.

- VIII.A.15. **Sites that are tributary** are defined as sites that discharge directly into a CWA section 303(d)-listed waterbody segment.
- VIII.A.16. **Small Municipal Separate Storm Sewer System** is defined at 40 CFR§ 122.26(b)(16) and refers to all separate storm sewers that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States, but is not defined as “large” or “medium” municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.
- VIII.A.17. **Source Control** means techniques that aim to reduce the quantity and improve the quality of stormwater at or near its source by using infrastructure, natural physical resources, or changes in practices.
- VIII.A.18. **Stormwater BMP** is a generic term that has been used interchangeably with stormwater practice or stormwater treatment practice. Stormwater BMPs can be either “structural” or “non-structural.”
- VIII.A.19. **Stormwater** is defined at 40 CFR §122.26(b)(13) and means stormwater runoff, snowmelt runoff, and surface runoff and drainage.
- VIII.A.20. **Stormwater Management Program (“SWMP”)** refers to a comprehensive program to manage the quality of stormwater discharged from the MS4.
- VIII.A.21. **Structural BMPs or Structural Treatment Controls** can be public domain treatment controls or manufactured (proprietary) treatment controls. Public domain treatment controls are those that can be designed by an engineer and have been implemented and tested by numerous communities throughout the nation. Manufactured (proprietary) treatment controls are patented devices that have been engineered and constructed by private companies. In either case, engineering plans must be developed.

Appendix 2
Water Quality Monitoring Plan

**WATER QUALITY MONITORING PROGRAM
IN SUPPORT OF NPDES STORMWATER MANAGEMENT PROGRAM**

**FOR
ELKO, NEVADA**

NOVEMBER 2011



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APPENDIX 1SUMMARY OF ANALYTICAL RESULTS

EXECUTIVE SUMMARY

The City of Elko is subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges for Small Municipal Separate Storm Sewer System (MS4) issued by the State of Nevada in December 2002. Although Elko was not automatically designated on the basis of a Bureau of the Census Urban Area (UA) designation, it was determined by the Nevada Division of Environmental Protection that discharges from the City's MS4 did, or had the potential to, cause an adverse impact on water quality. The initial permit was set to expire in December, 2007. As no new general permit had been finalized, however, the permit was continued until re-issuance of a new general permit in July 2010. In that interim period, Elko continued to operate their MS4 in conformance with their existing program. This includes submitting annual reports to NDEP regarding achievement of performance objectives or proposed revisions to existing Best Management Practices (BMP) intended to meet objectives. The new permit became effective on July 6, 2010 and will expire in July, 2015.

In accordance with Section V.B of the General Permit, the City has 18 months from the effective date of the permit (July 6, 2010) to submit a revised Stormwater Management Program (SWMP) to meet the new permit requirements. The new SWMP must be submitted by January 6, 2012 to meet this requirement. Prior to submittal, the City must allow adequate time for public comment on the proposed revisions. No new Notice of Intent submittal is required, as the revised SWMP will be submitted as a permit modification.

This revised Water Quality Monitoring Program (WQMP) has been prepared to support the objectives of the SWMP and provide the City with information adequate to evaluate and modify existing Best Management Practices (BMPs), if required. The BMPs were codified in the initial SWMP and will be reconsidered in the context of program results reported through annual reports prepared throughout the first permit term, including analytical results of the existing WQMP.

The City has been collecting wet weather samples since 2008. Samples have been collected at two (2) locations within a single sub-watershed (upgradient and at the outfall discharge to the Humboldt River) and four (4) in-stream samples distributed geographically to cover water quality within the City limits, as well as upstream and downstream, respectively, of the City limits. Analytical parameters remained the same throughout the sampling period. Several of the parameters are based on regulatory obligations specific to Total Maximum Daily Load (TMDL) pollutant loading allowances. Other parameters are either based on other state water quality standards or have been included voluntarily to provide the City with information on pollutants of local concern.

The City developed a WQMP that originally called for use of automated samplers and a sampling protocol that required significant financial and labor resources. Due to resource constraints over the reporting period, the City has been conducting the sampling on a different basis, relying upon grab samples from the locations originally specified in the WQMP.

Results of sampling are provided in the report. In general, and as expected, there is some evidence of contribution of pollutants from the urbanized watershed, although the in-stream water quality impacts do not appear significant. The total number of samples collected to date is inadequate to establish definitive impacts and more data collected over time will provide a more reliable dataset from which to draw conclusions.

The revised monitoring program proposed in this WQMP will allow the City to continue to collect relevant data for the purposes of modifying, eliminating, or adding BMPs that may more effectively protect water quality within the Humboldt River.

1. PROGRAM BACKGROUND & EXISTING CONDITIONS

The City of Elko was re-issued their Small Municipal Separate Storm Sewer System (MS4) Permit (Permit No. NVS040000) on July 6, 2010. The permit requires of the City to develop or modify their Stormwater Management Program to meet the obligations of the permit terms. Section VI.L of the permit refers to the City's Water Quality Monitoring requirements. Details of the City's proposed actions to meet this permit condition are provided in Section 2.

This Section documents the City's rationale for proposed changes to the Water Quality Monitoring Program. The rationale is based on the sampling results to date, and practical experience with implementation of the program.

1.1 Existing Monitoring Program Description

The City's 2004 - 2005 SWMP stated that the City would be subject to Total Maximum Daily Load (TMDL) requirements of the permit (Section II.B. of the 2002 MS4 permit) since certain reaches of the Humboldt River have been assigned final and approved TMDLs (Phosphorus and Total Suspended Solids [TSS] were cited in the 2004 SWMP). The City's recent annual report reported the City's understanding that the reach to which the City's MS4 outfalls discharge is listed as impaired only for iron as the pollutant of concern, and that there are no approved TMDLs applicable to this reach. This reach of the Humboldt River was *delisted* for phosphorus, turbidity and zinc impairments according to the most recently available Nevada 303(d) listings (the 2006 report published in 2009). The waters were delisted for turbidity as the waters were found to be in compliance with water quality standards, and zinc due to flaws in the original designation methodology. However, phosphorus was delisted because there is an approved TMDL now in place for that pollutant. A change in the reporting format in the 2006 State List of Impaired Waters (i.e. 303(d) list) created the confusion around the status of phosphorus as a pollutant of concern. In addition, although turbidity (a water clarity measure that is frequently used as an approximation of TSS) was delisted, there is no reference to the TSS TMDL on the 303(d) de-listed waters attachment. Consequently, the City will continue to evaluate whether their discharges meet the TMDL requirements for phosphorus and water quality standards for TSS. NDEP anticipated publication of a revised *Integrated List of Waters* (combined 303(d) and 305(b) listed waters) late in 2011, however at the date of this report, the list had not yet been published. This list must be re-visited at that time to determine if there are other impairments or pollutants of concern to be considered for the monitoring program and BMP implementation.

1.1.1 Monitoring Program Sampling Protocols

As reported in the City's annual reports, they have been collecting samples at two (2) conveyance system locations within one of the City's largest sub-drainage basins for the past two (2) years. One of these sites (referred to as the "8-Mile Dam") is an up-gradient location chosen to provide baseline water quality data relative to the stormwater sheet flow that is captured and conveyed through the collection/drainage system from the furthest reaches of the system (i.e. undeveloped land use). The second of these sites is located at the outfall of this drainage system to the Humboldt River, and is referred to as "the 8-Mile Outfall." Figure 1-2 depicts monitoring locations. Figure 2-1 depicts all outfall locations within the City.

Grab samples were collected within approximately one (1) hour of storm water discharge at the outfall first, after which a grab sample was procured from the up-gradient location.

In addition to these conveyance system samples, the City has been collecting in-stream grab samples at four (4) locations along the Humboldt River. Most of these locations have been included in the City's program for the past three years, although all of them have been included for at least the past two (2) years. The sampling takes place semi-annually during one wet weather event and during the dry season, if flow is present. Samples are collected at an upstream site outside of the City limits, a downstream site outside of the city limits, and two (2) locations within the city limits in areas of greatest outfall density per stream-mile. These locations are referred to (in order of most upstream to most downstream) as:

- Upgradient
- Gravel Ponds
- Errecart Boulevard
- Miller Ranch

The current sampling protocol does not include flow/volume information. Precipitation information is available through Elko Regional Airport data.

1.1.2 Sampling Results

A total of thirty-two (32) samples were collected over the course of the three-year reporting period. Only two (2) of these samples were collected in 2008. Six (6) rainfall events were sampled in 2009, resulting in a total of twelve (12) samples associated with water quality entering (8-Mile Dam) and discharging (8-Mile outfall) from the drainage conveyance system, and four (4) in-stream samples collected during one rainfall event. There were an additional four (4) in-stream samples collected in Autumn 2009, representative of ambient conditions during the dry season.

Four (4) rainfall events were sampled in 2010, resulting in a total of eight (8) samples associated with water quality entering and discharging from the conveyance system from the 8-Mile drainage sub-basin. During one of these events, an additional four (4) in-stream grab samples were collected. Conditions did not allow an autumn/dry season in-stream sampling event in 2010. A complete summary of sampling results is provided in Appendix 1. Figure 1-1 provides a plan of existing sampling locations.

Based on the 303(d) list referenced during development of the initial monitoring plan, total iron, total phosphorus, total suspended solids (TSS), turbidity, chlorides and pH were included in the analytical suite of parameters for sampling. The City voluntarily included lead, arsenic, mercury and zinc within their analyses on the basis of local conditions. Chlorides and pH were added at that time as the EPA required inclusion of these parameters as a condition of the agency's approval of the State's final list of impaired waters. This reach of the Humboldt was subsequently listed as impaired for those parameters. The SWMP provides a more detailed discussion of the State's 303(d) list development process over the past decade.

In general, and as expected, there is some evidence of contribution of pollutants from the urbanized watershed, although the in-stream water quality impacts do not appear significant. The total number of samples collected to date is inadequate to establish definitive impacts and more data collected over time will provide a more reliable dataset from which to draw

conclusions. Observations on the basis of the limited information, however, include the following:

- Parameters for which the City has been voluntarily testing, including arsenic, lead, mercury and zinc have consistently been reported at non-detectable (i.e. below analytical detection limits) or ambient levels. These analytes will be eliminated from future monitoring programs.
- Chlorides standards are regularly exceeded, however, there is little evidence of contribution of chlorides from the City's system based on results from up-gradient watershed sampling versus outfall discharge sampling; in addition, there is little differentiation between wet weather and dry weather in-stream concentrations of chlorides. Chlorides are naturally occurring and there has been discussion within regulatory agencies regarding the difficulty of determining what constitutes natural background conditions versus contributions from other sources. In the current 303(d) list of impaired waters, the City's reach of the Humboldt is no longer listed for this impairment. In-stream sampling results indicate that all but one sample (at a downstream location outside of City limits) met water quality standards.
- Results for phosphorus, for which there is an approved TMDL on this reach of the Humboldt River, do not indicate that there is a significant contribution provided by the MS4. Concentrations of phosphorus at the up-gradient monitoring location (receiving sheet flow from surrounding undeveloped land uses) are regularly entering the system at concentrations greater than the local water quality standard for this segment of the river. However, they are not significantly higher at the discharge point, where variation in concentrations would suggest in-system contributions. In-stream samples indicate that this reach consistently achieves the water quality standard for assigned beneficial uses.
- TSS (and turbidity) continue to represent one of the more significant pollutants of concern, although given the nature of the City's conveyance system (i.e. washes, culverts and natural conveyances), this is an expected result. The City intends to address this pollutant type for consideration of further BMP development.
- Fecal coliform data is very limited within this sample set, and shows greater concentration during dry weather in-stream sampling rather than wet weather events. This is an unusual finding given that the City has performed consistent dry weather inventories of outfalls without reported evidence of illicit discharges.

2. PROPOSED MONITORING PROGRAM

Water quality monitoring requirements are described in **Section VI.L** of the City's MS4 permit. This section additionally references requirements of **Section II.B – Total Maximum Daily Load** since the Humboldt River has an approved TMDL for phosphorus. For purposes of monitoring, the City will continue to address TSS as a primary pollutant of concern. Based on results of sampling over the prior reporting period, both phosphorus and TSS are likely to be present in the City's discharges. The state has yet to establish a waste load allocation for stormwater. The City has developed and implemented a SWMP over the past five (5) years through which Best Management Practices (BMPs) were developed, implemented and evaluated on an annual basis. The SWMP has been revised to meet the terms of the recently published MS4 permit.

This monitoring plan has been developed to meet the requirements of **Section VI.L – Water Quality Monitoring**. The permit does not specify procedures, sampling protocols or other details of the monitoring program. The program must:

- Provide "representative monitoring" insofar as samples and measurements taken as required shall be representative of the volume and nature of the monitored discharge; and,
- Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(h) of the Clean Water Act.

The proposed program is intended to provide the City with information that allows it to evaluate potential impacts to water quality within the Humboldt River as a result of MS4 discharges. The City's stormwater drainage system is relatively small and the vast majority of the outfalls discharge to an approximately 1.5 mile reach along the river (see Figure 2-1). To date, the City has not observed any discharge sampling results to indicate that the water quality of MS4 discharges deviates substantially from expected quality for the land uses present within their system. Further, dry weather inventories have consistently demonstrated minimal illicit discharges (i.e. dry weather flow). The primary goal of this proposed monitoring program is to obtain baseline data on the City's primary receiving water (Humboldt River) for use in determining long-term water quality trends. Identification of these trends can later be used in defining design criteria for stormwater BMPs and BMP effectiveness. The wet weather program proposed here will be used in tandem with the City's continuing dry weather outfall inventory program as described in the Illicit Discharge Detection and Elimination (IDDE) program.

2.1 Sampling Protocols

The City has already identified four (4) in-stream sampling locations which represent upstream, mid-stream and downstream locations relative to the limits of the City's MS4 system, and an outfall location representative of MS4 discharges. The City will continue to use those locations for the first two (2) years of the monitoring program. Results will be evaluated to determine if shorter stream-mile intervals within the mid-stream section of the river are required, additional or different analytical parameters should be included or other modifications to the network are appropriate.

2.1.1 Sampling Network and Schedule

Existing locations to be sampled include (1) Upgradient, (2) Gravel Ponds, (3) Errecart Boulevard, and (4) Miller Ranch, shown on Figure 2-2. In addition, the 8-Mile Dam outfall will continue to be sampled as representative of one of the largest catchment areas in the system. Much of the City's precipitation comes in the form of snow during winter months, and much of the run-off in spring is snowmelt. Historical climate data indicates that the small amount of precipitation that does fall as rain comes essentially evenly throughout the rest of the year. The City proposes to sample once per quarter at each of the five (5) locations (five samples per event – see Section 2.1.2 below), except Spring during which the City will obtain (2) samples. Monitoring periods are:

- January 1 – March 31
- April 1 – June 30 (Spring)
- July 1 – September 30
- October 1 – December 31
- An ambient sample from the River in lieu of the summer sample could be collected during any other quarterly monitoring period immediately preceding a sampled storm event.

Years 1 - 2: Sample five (5) storm events plus one (1) ambient

Years 3 – 5: Sample five (5) storm events plus one (1) ambient (possibly additional or different sampling locations based on evaluation of Years 1 and 2 results)

Because the summer quarter is often very dry and either there are insufficient qualifying storm events or there is insufficient flow for sampling, a sample collected during ambient conditions during any quarter may be substituted for the summer quarter sample. This sample should be collected under normal flow conditions with at least 72 hours of dry weather preceding the collection. If a qualifying storm event doesn't occur in the quarter, a second sample in the following quarter should be collected.

A “qualifying storm event” is not defined in the permit itself. In general, permitting authorities nationally have been adopting a standard that eliminates a specific volume storm event (e.g. greater than .1-inch of precipitation) and replacing that with any storm event that produces discharge from the outfalls. That will be the standard adopted by the City. Samples will be submitted and analyzed by a State of Nevada certified laboratory.

2.1.2 Sampling Protocols

The program will involve collection of grab samples retrieved manually. Each sampling event will consist of five grab samples per event (at each of five locations). Samples will be collected and analyzed for the following parameters:

- Total Phosphorus
- Total Suspended Solids
- E. Coli
- Iron
- Chloride
- pH

- Temperature
- Turbidity

Elko only has four months per year that average greater than one inch of rain per month, and 79 days per year where greater than 0.01 inch or more falls during a rain event. In addition, precipitation may be highly localized and variable in intensity. As a consequence, discharge from outfalls is not necessarily consistent from storm to storm (e.g. time at which discharge may appear will vary as will volume). The City will seek to collect the 8-mile outfall sample within 30 minutes of initial discharge when sufficient volume is available. In-stream samples will be collected only if the “qualifying” threshold – observed discharge at the outfall – has been met. This threshold will be evaluated after the first year of the program, and if modifications are necessary, they will be documented in the Annual Report. Total volumes for sample bottles should be determined based on requirements stipulated by the receiving analytical laboratory.

For each sampling event, the City will record the following:

- The date, sample location and time of sampling and measurements
- The names of the individuals who performed the sampling or measurements and their employer
- The dates the analyses were performed
- The names of the individuals who performed the analyses
- The analytical techniques or method used
- The results of the analyses

2.1.3 Data Analysis

The purpose of the monitoring program is to determine if the City’s SWMP and the practices employed through that program are having a beneficial impact on water quality in the Humboldt River. There are no waste load allocations associated with the approved TMDLs for this reach of the Humboldt. It is the City’s intent to determine through a consistent water quality sampling protocol employed over a period of time whether or not the City is contributing to known impairments and, if so, to what degree. In addition, through extension of the monitoring to both upstream and downstream locations of the City’s MS4 contribution to the Humboldt River, the City will have an opportunity to identify the extent to which their discharges are influencing the downstream portions of the river reach versus impacts which pre-exist their contribution to the receiving water body.

The data from the program will be evaluated annually, and a comprehensive report of findings for the five-year reporting period will be provided to NDEP upon conclusion of Year 5 sampling.

2.1.4 Recordkeeping and Reporting

The City is required to maintain records of all monitoring information detailed in **Section VI.M.1** of the MS4 permit. The retention period for all records is three (3) years from the date of the sample or for the term of the permit.

Appendix 1 to the WQMP
Summary of Analytical Results

DATE	ARSENIC mg/L	CHLORIDE mg/L	IRON mg/L	LEAD mg/L	MERCURY mg/L	pH	TEMP °C	PHOS mg/L	TSS mg/L	TURBIDITY NTU	ZINC mg/L	FECAL CFU/100ml
8-Mile Dam												
3/25/2009	0.005	21	0.27	<0.002	<0.0002			0.10	6	6.7	<0.02	
3/30/2009	0.006	27	1.2	<0.002	<0.0002			0.14	22	26	0.02	<2
4/9/2009	0.007	28	0.43	<0.002	<0.0002			0.15	18	11	<0.02	
4/21/2009	0.005	10	1.9	<0.002	<0.0002	8.38	22.5	0.27	44	32	<0.02	
5/1/2009	0.005	13	0.39	<0.002	<0.0002	8.85	19.9	0.18	14	8.4	<0.02	
5/6/2009	0.008	16	0.34	<0.002	<0.0002	9.10	19.9	0.19	16	6.2	<0.02	
8-Mile Outfall												
3/25/2009	0.003	20	0.16	<0.002	<0.0002			0.10	6	3.7	<0.02	
3/30/2009	0.004	20	0.45	<0.002	<0.0002			0.17	18	7.2	<0.02	<2
4/9/2009	0.006	22	0.15	<0.002	<0.0002			0.16	6	3	<0.02	
4/21/2009	0.004	11	1.8	<0.002	<0.0002	8.34	22.2	0.24	44	30	0.036	
5/1/2009	0.023	78	2.8	0.007	<0.0002	8.35	20.1	0.30	150	120	0.09	
5/6/2009	0.019	28	2.1	<0.005	<0.0002	8.53	20.9	0.26	110	110	0.07	
Humboldt River												
Spring												
3/30/2009												
Up-gradient	0.008	23	1.3	0.003	<0.0002			0.08	45	12	<0.02	<2
Gravel Ponds	0.007	23	1.2	<0.002	<0.0002			0.07	39	16	<0.02	<2
Errecart Br	0.007	23	1.2	<0.002	<0.0002			0.03	40	13	<0.02	<2
Miller Ranch	0.007	24	1.4	<0.002	<0.0002			0.08	52	19	<0.02	<2
Humboldt River												
Autumn												
11/5/2009												
Up-gradient	0.009	23	0.24	<0.002	<0.0002	8.31	48.2	0.03	7	4.3	<0.02	6
Gravel Ponds	0.008	23	0.25	<0.002	<0.0002	8.31	48.2	<0.02	6	4.7	0.04	6
Errecart Br	0.008	27	0.19	<0.002	<0.0002	8.37	51.1	<0.02	6	3.9	<0.02	4
Miller Ranch	0.009	36	0.29	<0.002	<0.0002	8.22	56.3	0.04	11	5.0	<0.02	4

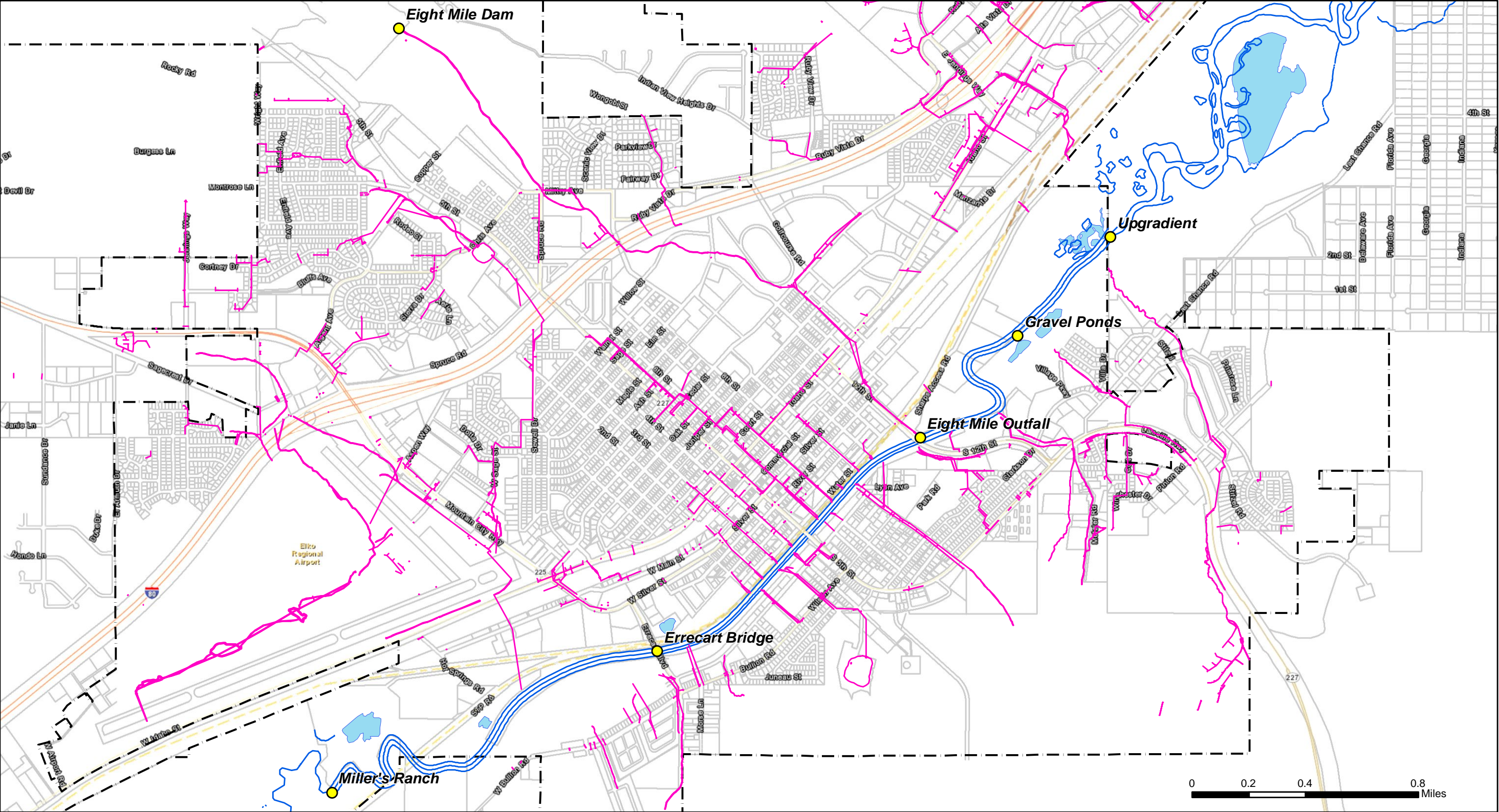
Note - temps appear to be reported in F

Humboldt River												
Spring												
4/29/2008												
Up-gradient	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gravel Ponds	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Errecart Br	0.0096	21	1.2	<0.010	<0.00010	N/A	N/A	0.094	52	21	0.014	N/A
Miller Ranch	<0.00010	21	0.78	<0.010	<0.00010	N/A	N/A	0.072	30	19	0.011	N/A

DATE	ARSENIC mg/L	CHLORIDE mg/L	IRON mg/L	LEAD mg/L	MERCURY mg/L	pH	TEMP °C	TEMP °C	PHOS mg/L	TSS mg/L	TURBIDITY NTU	ZINC mg/L	FECAL CFU/100ml	Cu mg/L	S04
8-Mile Dam															
3/30/2010	0.005	19	0.47	<0.002	<0.0002	8.30		20.8	0.13	50	5.4	<0.02	n/a	n/a	n/a
5/3/2010	0.004	13	0.91	<0.002	<0.0002	8.36		22.0	0.17	49	22	0.02	n/a	n/a	n/a
5/4/2010	0.012	31	0.47	<0.002	<0.0002	8.48		22.1	0.17	19	12	<0.02	n/a	0.029	42
6/2/2010	0.007	30	0.11	<0.004	<0.0002	8.64		21.5	0.28	6	1	0.02	n/a	n/a	n/a
8-Mile Outfall															
3/30/2009	0.006	25	0.49	<0.002	<0.0002	8.28		20.9	0.19	14	14	<0.02	n/a	n/a	n/a
5/3/2010	0.004	14	0.60	<0.002	<0.0002	8.22		22.3	0.20	12	13	<0.02	n/a	n/a	n/a
* 5/4/2010	0.012	31	0.38	<0.002	<0.0002	8.49		21.9	0.18	23	12	<0.02	n/a	0.029	42
6/2/2010	0.005	18	0.98	0.004	<0.0002	8.40		21.4	0.12	20	12	0.09	n/a	n/a	n/a
Humboldt River															
Spring															
3/30/2010															
Up-gradient	0.007	30	1.3	<0.002	<0.0002	8.42		20.8	0.05	85	12	<0.02	<2	n/a	n/a
Gravel Ponds	0.007	29	1.4	<0.002	<0.0002	8.43		20.8	0.05	99	11	<0.02	<2	n/a	n/a
Errecart Br	0.007	29	1.1	<0.002	<0.0002	8.41		20.8	0.04	94	11	<0.02	2	n/a	n/a
Miller Ranch	0.007	29	1.3	<0.002	<0.0002	8.45		20.9	0.04	69	10	<0.02	2	n/a	n/a
Humboldt River															
Autumn															
Up-gradient															
Gravel Ponds															
Errecart Br															
Miller Ranch															

* Note: Data collected on 5/4/2010 due to peculiar water color of 8-Mile Creek Outfall @ Humboldt River

WQMP Figures

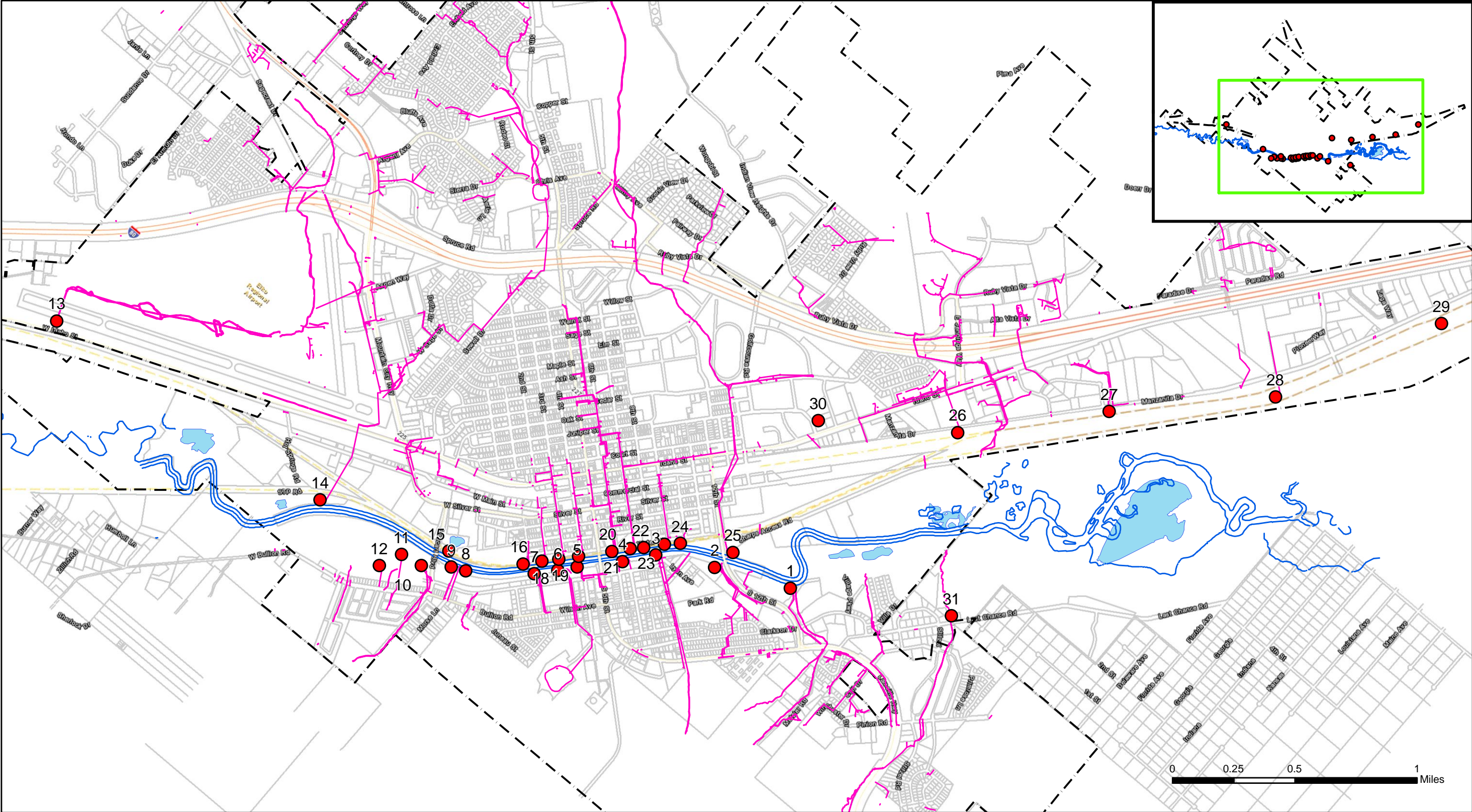


Legend

- Existing Monitoring Locations
- Stormdrains and Channels
- Humboldt River
- Waterbodies
- City Boundary



Scale:	1 in = 0.3 miles	Client:	City of Elko, Nevada
Date:		Project:	Elko Stormwater Management Program
Job No:		Drawing:	Fig 1-1. Locus Map showing Existing Monitoring Locations
Designed by:			
Drawn by:			
Checked by:			
Approved by:			

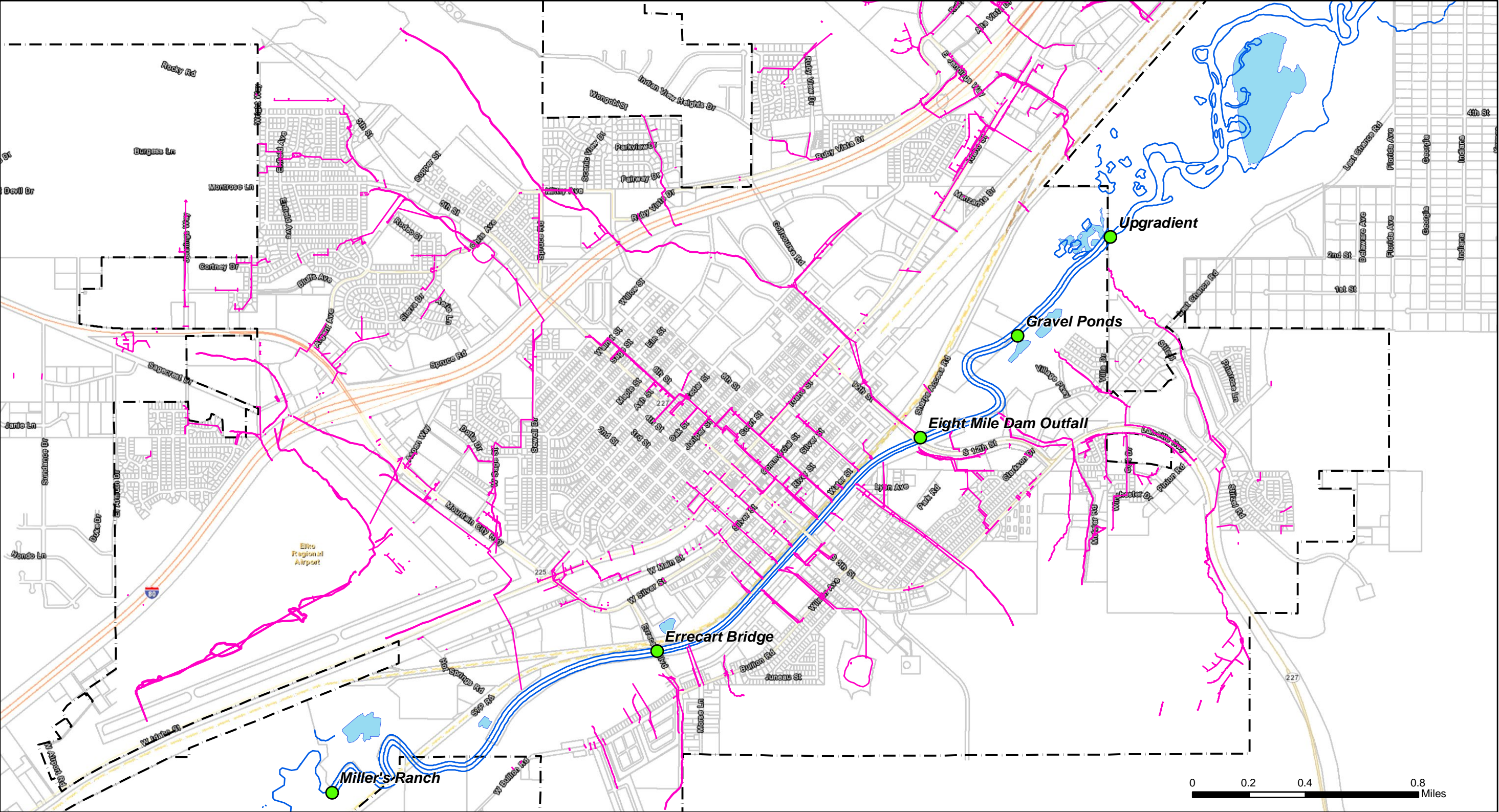


Legend

- Outfall_Locations
- Stormdrains and Channels
- City Boundary
- Humboldt River
- Waterbodies



Scale:	1 in = 0.4 miles	Client:	City of Elko, Nevada
Date:		Project:	Elko Stormwater Management Program
Job No:		Drawing:	Fig 2-1. Locus Map showing Outfall Locations
Designed by:			
Drawn by:			
Checked by:			
Approved by:			



Legend

- Proposed In-stream Monitoring Locations
- Stormdrains and Channels
- Humboldt River
- Waterbodies
- City Boundary



Scale:	1 in = 0.3 miles	Client:	City of Elko, Nevada
Date:		Project:	Elko Stormwater Management Program
Job No:		Drawing:	Fig 2-2. Locus Map showing Proposed Monitoring Locations
Designed by:			
Drawn by:			
Checked by:			
Approved by:			

Appendix 3
City Ordinance 670

**CITY OF ELKO
ORDINANCE NO. 670**

**AN ORDINANCE CREATING A NEW CHAPTER 6 TO TITLE 9 OF THE ELKO CITY CODE ENTITLED
ILLEGAL DISCHARGE AND CONNECTION TO STORM WATER FOR PROVIDING REGULATIONS
OF ILLEGAL DISCHARGE AND CONNECTIONS TO THE ELKO CITY STORM WATER
CONVEYANCE SYSTEMS OR STORM WATER.**

WHEREAS, the U.S. Congress passed the Federal Water Pollution Act commonly referred to the Clean Water Act; and

WHEREAS, the U.S Environmental Protection Agency established the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act; and

WHEREAS, the Nevada Division of Environmental Protection has issued a General Permit to the City of Elko regulating the discharge of pollutants from Small Separate Storm Sewer Systems (MS4); and

WHEREAS, the City of Elko is responsible for compliance with its MS4; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ELKO, NEVADA:

SECTION 1: A new Chapter 6 of Title 9 of the Elko City Code entitled "Illegal Discharge and Connection to Storm Water" is hereby adopted to read as follows:

CHAPTER 6

ILLEGAL DISCHARGE AND CONNECTION TO STORM WATER

Section

PURPOSE
DEFINITIONS
APPLICABILITY
RESPONSIBILITY FOR ADMINISTRATION
SEVERABILITY
ULTIMATE RESPONSIBILITY
DISCHARGE PROHIBITIONS
SUSPENSION OF MS4 ACCESS
INDUSTRIAL OR CONSTRUCTION ACTIVITY
MONITORING OF DISCHARGE
REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER
POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES
WATERCOURSE PROTECTION
NOTIFICATION OF SPILLS
ENFORCEMENT
APPEAL OF NOTICE OF VIOLATION
INJUNCTIVE RELIEF
VIOLATIONS DEEMED A PUBLIC NUISANCE
CRIMINAL PROSECUTION
REMEDIES NOT EXCLUSIVE

9-6-1 PURPOSE

The purpose of this chapter is to provide for the health, safety and general welfare of the citizens through regulation of non-storm water discharges to the storm sewer system or storm water. This ordinance establishes methods for controlling the introduction of pollutants into the Municipal Separate Sewer System (MS4) in order to comply with the NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) permit process and to:

- A. To regulate the contribution of pollutants to the municipal separate storm water sewer system (MS4) by storm water discharges by any user,
- B. To prohibit Illegal Connections and Discharges to the municipal separate storm sewer system, and
- C. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

9-6-2 DEFINITIONS

For the purpose of this ordinance, the following shall mean:

AUTHORIZED ENFORCEMENT
AGENCY:

Means the director of the municipal agency designated to enforce this ordinance or the director employees or the director designees.

BEST MANAGEMENT PRACTICES
(BMPs):

Means schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving water, or storm water conveyance systems; and also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

CLEAN WATER ACT:

Means the federal Water Pollution Control Act (33 U.S.C. 1251et seq.), and any subsequent amendments thereto.

CONSTRUCTION ACTIVITY:

Means activities subject to NPDES Construction Permits issued by the State of Nevada. NPDES construction activities on one (1) acre or more. Construction activities on from 6000 ft² to one (1) acre not subject to NPDES construction permits are also included in this definition. Such activities include but are not limited to clearing and grubbing, grading, excavating and demolition.

HAZARDOUS MATERIALS:

Means any material, substance or waste that is or has the characteristic of being hazardous, toxic, ignitable, reactive or corrosive, including, without limitations, petroleum, PCB's, asbestos, materials known to cause cancer or reproductive problems and those materials, substances and/or waste, including infectious waste, medical waste, and potentially infectious waste, which are or later become regulated by any local governmental authority, the State of Nevada, or the United States Government, including, but not limited to, substances defined as "hazardous substances," "hazardous materials," "toxic substances," or "hazardous wastes" in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 43 U.S.C. § 9601, et seq.; the Hazardous Materials Transportation Act, 40, U.S.C. § 1801, et seq.; the Resource Conservation and Recovery Act, 43 U.S.C. § 6901, et seq.; all corresponding and related State of Nevada and local statutes, ordinances and regulations, including without limitation, any dealing with underground storage tanks; and in any other environmental law, regulation or ordinance now existing or hereinafter enacted.

ILLEGAL DISCHARGE:

Means any direct or indirect non-storm water discharge to the storm water conveyance system or storm water except as exempted in Section 7 of this ordinance.

ILLEGAL CONNECTIONS:

Means an illegal connection defined as either of the following:

- a. Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm water conveyance system including but not limited to any conveyances which allow non-storm water discharge including but not limited to sewage and process wastewater to enter the storm water conveyance system and any connections to the storm water conveyance system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency; or

b.

A

ny drain or conveyance connected from a commercial or industrial land use to the storm water conveyance system which has

not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

INDUSTRIAL ACTIVITY:	Means activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26(b)(14).
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER DISCHARGE PERMIT:	Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.
NON-STORM WATER DISCHARGE:	Means any discharge to storm water conveyance system and or storm water that is not composed entirely of storm water.
PERSON:	Means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or the owners agent.
POLLUTANT:	Means anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that the same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes ; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; waste and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.
PREMISES:	Means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.
STORM WATER CONVEYANCE SYSTEM:	Means publicly owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made drainage channels, reservoirs, and any other drainage structures.
STORM WATER (Stormwater):	

Means any surface flow runoff, and drainage consisting entirely of water from any form of

natural precipitation, and resulting from such precipitation.

STORM WATER POLLUTION
PREVENTION PLAN:

Means a document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to storm water, storm water conveyance systems, and/or receiving waters to the maximum extent practicable.

WASTEWATER:

Means any water or other liquid, other than uncontaminated storm water, discharged from a facility.

WATER COURSE:

Means any drainage or structure through which water may pass or drain.

9-6-3 APPLICABILITY

This ordinance shall apply to all water generated on any developed and undeveloped lands, unless explicitly exempted by an authorized enforcement agency, entering the storm water conveyance system or storm water.

9-6-4 RESPONSIBILITY FOR ADMINISTRATION

The City of Elko or its designee shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Director of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

9-6-5 ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

9-6-6 DISCHARGE PROHIBITIONS

A. Prohibition of Illegal Discharges

No person shall discharge or cause to be discharged into the municipal storm water conveyance system or watercourses any materials, including but not limited to pollutants and Hazardous Material or waters containing any pollutants, as describe herein, that cause or contribute to a violation of applicable water quality standards, other than storm water.

The commencement, conduct or continuance of any illegal discharge to the storm water conveyance system is prohibited except as follows:

1. The following discharges are exempt from discharge prohibitions established by this ordinance: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools (if de-chlorinated B typically less than one part per million chlorine), fire fighting activities, and any other source not containing pollutants or hazardous materials.
2. Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.
3. Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.
4. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm water conveyance system.

B . Prohibition of Illegal Connections

1. The construction, use, maintenance or continued existence of illegal connections to the storm water conveyance system is prohibited.
2. This prohibition expressly includes, without limitation, illegal connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
3. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

9-6-7 SUSPENSION OF MS4 ACCESS

A. Suspension Due to Illegal Discharges in Emergency Situations

The City of Elko may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons.

B. Suspension Due to the Detection of Illegal Discharge

Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illegal discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing.

A person commits an offense if the person reinstates MS4 access to the premises terminated pursuant to this Section, without the prior approval of the authorized enforcement agency.

9-6-8 INDUSTRIAL OR CONSTRUCTION ACTIVITY

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in form acceptable to the City of Elko prior to allowing of discharges to the MS4. Land disturbance activities on a land parcel of 6000 ft² to one (1) acre not subject to NPDES construction permits are also included in this definition.

9-6-9 MONITORING OF DISCHARGES

A. Applicability.

1. This Section applies to all facilities that have storm water discharges associated with industrial activity including construction activity.

B. Access to Facilities.

1. The City of Elko or its designee shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.
2. Facility operators shall allow the City of Elko or its designee ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.
3. The City of Elko or its designee shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facilities storm water discharge.
4. The City of Elko or its designee has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.

5. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City of Elko and shall not be replaced. The costs of clearing such access shall be borne by the operator.

6. Unreasonable delays in allowing the City of Elko or its designee access to a permitted facility is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.

7. If the City of Elko or its designee has been refused access to any part of the premises from which storm water is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

9-6-10 REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES

The City of Elko requires the identification and use of Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm water conveyance system, or waters of the United States. The City of Elko requires as a minimum the use of its BMP manual to identify and utilize appropriate BMPs. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm water conveyance system or water courses through the use of these structural or non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illegal discharge, may be required to implement, at said persons expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the MS4. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this Section. These BMPs shall be part of a storm water pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

Whenever the City of Elko finds that a person has not properly implemented the storm water pollution prevention plan or the storm water pollution prevention plan requires modification to prevent the discharge or possible discharge of pollutants to the storm water conveyance system or storm water, the City of Elko may at its sole discretion, allow a time frame not to exceed ten calendar days for the person to correct the identified deficiencies.

9-6-11 WATERCOURSE PROTECTION

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

9-6-12 NOTIFICATION OF SPILLS

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm water conveyance system, or water of the United States said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such release of hazardous materials said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous material, said person shall notify the authorized City enforcement agency in person or by phone or by facsimile or by electronic mail no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City of Elko within three business days of the person or phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.

9-6-13 ENFORCEMENT

Notice of Violation

Whenever the City of Elko finds that a person has violated a prohibition or failed to meet a requirement of this ordinance, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

A. The performance of monitoring, analyses, and reporting;

The elimination of illegal connections or discharges;

That violating discharges, practices, or operations shall cease and desist;

The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and

The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or contractor and the expense thereof shall be charged to the violator.

9-6-14 APPEAL OF NOTICE OF VIOLATION

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within 30 days from the date of the Notice of Violation. Hearing on appeal before the Elko City Council shall take place within 45 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

9-6-15 INJUNCTIVE RELIEF

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this ordinance. If a person has violated or continues to violate the provisions of this ordinance, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which could create further violations or compelling the person to perform abatement or remediation of the violation.

9-6-16 VIOLATIONS DEEMED A PUBLIC NUISANCE

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be abated pursuant to the provision of NRS Chapter 268 or restored at the violator's expense, and/or civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

9-6-17 CRIMINAL PROSECUTION

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution and shall be subject to a criminal penalty of 1,000 dollars per violation per/day. In addition, any person that has violated or continues to violate this ordinance may be subject to criminal prosecution under federal or state laws.

The authorized enforcement agency may recover all attorneys fees, court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.

9-6-18 REMEDIES NOT EXCLUSIVE

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

SECTION 2: All ordinances or parts of ordinances in conflict herewith are hereby repealed, but only to the extent of such conflict.

SECTION 3: If any section, paragraph, clause or provision of this Ordinance shall for any reason be held to be invalid, unenforceable or unconstitutional by any court of competent jurisdiction, the invalidity, unenforceability of such section, paragraph, clause or provision shall not affect any remaining provisions of this Ordinance.

SECTION 4: That upon adoption, the City Clerk of the City of Elko is hereby directed to have this Ordinance published, by title only, together with the Councilmen voting for or against its passage, in the Elko Daily Free Press newspaper, a newspaper printed and published in the City of Elko, for at least one publication.

SECTION 5: This Ordinance shall be effective upon the publication mentioned in Section 4.

PASSED AND ADOPTED this 13th day of March, 2007, by the following vote of the Elko City Council.

AYES: Mayor Michael Franzoia, Councilmen: Glen Guttry, Chris Johnson, Jay Elquist, Jim Conner

NAYS: None

ABSENT: None

ABSTAIN: None

APPROVED this 13th day of March, 2007.

CITY OF ELKO

By: _____
MICHAEL J. FRANZOIA, Mayor

ATTEST:

By: _____
SHANELL OWEN, City Clerk

**CITY OF ELKO
ORDINANCE NO. 671**

**AN ORDINANCE CREATING A NEW CHAPTER 7 TO TITLE 9 OF THE ELKO CITY
CODE ENTITLED "CONSTRUCTION SITE RUNOFF CONTROL" PROVIDING
REGULATIONS OF CONSTRUCTION SITES AND CONSTRUCTION SITE
DISCHARGES TO THE ELKO CITY STORM WATER CONVEYANCE SYSTEMS OR
STORM WATER.**

WHEREAS, the U.S. Congress passed the Federal Water Pollution Act commonly referred to the Clean Water Act; and

WHEREAS, the U.S Environmental Protection Agency established the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act; and

WHEREAS, the Nevada Division of Environmental Protection has issued a General Permit to the City of Elko regulating the discharge of pollutants from Small Separate Storm Sewer Systems (MS4); and

WHEREAS, the City of Elko is responsible for compliance with its MS4; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ELKO, NEVADA:

For amendment purposes, words which are in highlighted and underlined are additions to the Ordinance, and words which are lined through are deleted from the Ordinance.

SECTION 1: A new Chapter 7 of Title 9 of the Elko City Code entitled Construction Site Runoff Control is hereby adopted to read as follows:

CHAPTER 7

CONSTRUCTION SITE RUNOFF CONTROL

Section

- 9-7-1 PURPOSE
- 9-7-2 DEFINITIONS
- 9-7-3 APPLICABILITY
- 9-7-4 RESPONSIBILITY FOR ADMINISTRATION
- 9-7-5 SEVERABILITY
- 9-7-6 ULTIMATE RESPONSIBILITY
- 9-7-7 CONSTRUCTION SITE DISCHARGE REGULATIONS AND REQUIREMENTS
- 9-7-8 REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER
POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES
- 9-7-9 INSPECTION
- 9-7-10 ENFORCEMENT
- 9-7-11 APPEAL OF NOTICE OF VIOLATION
- 9-7-12 INJUNCTIVE RELIEF
- 9-7-13 VIOLATIONS DEEMED A PUBLIC NUISANCE
- 9-7-14 CRIMINAL PROSECUTION
- 9-7-15 REMEDIES NOT EXCLUSIVE

9-7-1 PURPOSE

The purpose of this chapter is to provide for the health, safety and general welfare of the citizens through regulation of construction activities to manage and control pollution from construction sites. This ordinance establishes methods for controlling pollution from construction sites in accordance with the NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) permit process.

- A. Provide for protection of storm water, ground water, water bodies, watercourses, and wetlands pursuant to and consistent with the Clean Water Act, and NPDES permit granted to the City of Elko,
- B. Manage and control the amount of pollutants in storm water discharges and the municipal storm sewer systems, soil erosion, sediment discharge, sediment on public roadways, and
- C. Ensure adequate drainage, storm water management and soil conservation measures are utilized at the site of construction activity.

9-7-2 DEFINITIONS

For the purpose of this ordinance, the following shall mean:

AUTHORIZED ENFORCEMENT AGENCY:	Means the director of the municipal agency designated to enforce this ordinance or the director employees or the director designees.
BEST MANAGEMENT PRACTICES (BMPS):	Means schedules of activities, prohibitions of practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving water, or storm water conveyance systems; and also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.
CLEAN WATER ACT:	Means the federal Water Pollution Control Act (33 U.S.C. 1251et seq.), and any subsequent amendments thereto.
CLEARING:	Means any activity which removes the vegetative cover.
CONSTRUCTION ACTIVITY:	Means activities subject to NPDES Construction Permits issued by the State of Nevada. NPDES construction activities on one (1) acre or more. Construction activities on land from 6000 ft ² to one (1) acre not subject to NPDES construction permits are also included in this definition. Such activities include but are not limited to clearing and grubbing, grading, excavating and demolition.

CONSTRUCTION SITE:	Means any land where Construction Activity as defined in this ordinance is performed.
EROSION CONTROL:	Means any measure that prevents erosion.
GRADING:	Means excavation or fill of material, including the resulting conditions thereof.
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER DISCHARGE PERMIT:	Means a permit issued by EPA (or by a State under authority delegated pursuant to 33 USC 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.
NON-STORM WATER DISCHARGE: conveyance	Means any discharge to storm water system and or storm water that is not composed entirely of storm water.
PERIMETER CONTROL:	Means a barrier that prevents sediment from leaving a site either by filtering sediment laden runoff, or diverting it to a sediment trap or basin.
PERSON: owner	Means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the or the owner's agent.
PHASING:	Means clearing a parcel of land in distinct phases, with stabilization of each phase before clearing the next phase.
POLLUTANT: and substances	Means anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that the same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous and wastes ; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; waste and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.
PREMISES:	Means any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

SEDIMENT CONTROL:	Means any measure that prevents sediment from leaving the site.
STABILIZATION:	Means any practice that prevents exposed soil from eroding.
START OF CONSTRUCTION:	Means the first land-disturbing activity associated with development, including land preparation such as clearing, grading and filling, installation of streets and walkways, excavation for basements, footings, foundations, and erection of temporary forms.
STORM WATER CONVEYANCE SYSTEM:	Means publicly owned facilities by which storm is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made drainage channels, reservoirs, and any other drainage structures.
STORM WATER (STORMWATER):	Means any surface flow runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.
STORM WATER POLLUTION PREVENTION PLAN (SWPPP):	Means a document which describes the Best Management Practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to storm water, storm water conveyance systems, and/or receiving waters to the maximum extent practicable.
WATERCOURSE:	Means any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water which have been delineated by the City of Elko.

9-7-3 APPLICABILITY

Off site impacts of erosion and sedimentation from a construction site are prohibited and polluting substances such as construction materials and waste shall be contained on the site where such substances cannot drain or be transported by storm water into a watercourse or the storm water conveyance system. Best Management Practices shall be implemented for all construction sites. The performance standards set forth in the City of Elko Construction Site Best Management Practices Handbook together with such addendum, all of which are on deposit in the office of the City of Elko, are adopted by reference and incorporated here in and made part hereof as if set forth in full.

9-7-4 RESPONSIBILITY FOR ADMINISTRATION

The City of Elko or its designee shall administer, implement, and enforce the provisions of this ordinance. Any powers granted or duties imposed upon the authorized enforcement agency may be delegated in writing by the Director of the authorized enforcement agency to persons or entities acting in the beneficial interest of or in the employ of the agency.

9-7-5 SEVERABILITY

These provisions of this ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance or the application thereof to any person, establishment, or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this Ordinance.

9-7-6 ULTIMATE RESPONSIBILITY

The standards set forth herein and promulgated pursuant to this ordinance are minimum standards; therefore this ordinance does not intend nor imply that compliance by any person will ensure that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

9-7-7 CONSTRUCTION SITE DISCHARGE REGULATIONS AND REQUIREMENTS

- A. Construction permit submittal is required on all projects that may require a grading, site development, building, site drainage, or encroachment permits that will disturb an area of 6000 square feet or more (including public works projects).
- B. Prior to issuance of an above referenced permit, the following must be submitted:
 - 1. Construction permit submittal checklist;
 - 2. Performance standards compliance checklist;
 - 3. Copy of Notice of Intent;
 - 4. Copy of signed Confirmation Letter;
 - 5. Copy of SWPPP.
- C. The installation and maintenance of storm water controls are to be in accordance with standards as set forth in the BMP manual or manufacture specifications.

9-7-8 REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES

The City of Elko requires the identification and use of Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm water conveyance system, or waters of the United States. The City of Elko requires as a minimum the use of its BMP manual to identify and utilize appropriate BMPs. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm water conveyance system or water courses through the use of these structural or non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illegal discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the MS4. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this Section. These BMPs shall be part of a storm water pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

9-7-9 INSPECTION

- A. All construction sites which fall within this chapter shall be subject to the inspection provisions provided herein.
- B. The City of Elko or its designee shall be permitted to enter and inspect any construction site.
- C. Whenever the City of Elko or its designee finds that a person has not properly implemented the storm water pollution prevention plan or the storm water pollution prevention plan requires modification to prevent the discharge or possible discharge of pollutants to the storm water conveyance system or storm water, the City of Elko or its designee may at its sole discretion, allow a time frame not to exceed ten calendar days for the person to correct the identified deficiencies. If an inspector determines the installed storm water controls are placing the City of Elko at risk of violating its NPDES permit, the inspector may order change to the storm water controls. If the change to the storm water controls is not acceptable or is not immediately implemented, enforcement action may be taken.
- D. Emergency control measures may be ordered when pollutants are actually leaving the site.
- E. A compliant of violation shall be promptly investigated by inspection.

9-7-10 ENFORCEMENT

Notice of Violation

Whenever the City of Elko or its designee finds that a person has violated a prohibition or failed to meet a requirement of this ordinance, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- A. That violating discharges, practices, or operations shall cease and desist;
- B. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- C. Payment of a fine to cover administrative and remediation costs; and
- D. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or contractor and the expense thereof shall be charged to the violator.

9-7-11 APPEAL OF NOTICE OF VIOLATION

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within 30 days from the date of the Notice of Violation. Hearing on appeal before the Elko City Council shall take place within 45 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

9-7-12 INJUNCTIVE RELIEF

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this ordinance. If a person has violated or continues to violate the provisions of this ordinance, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which could create further violations or compelling the person to perform abatement or remediation of the violation.

9-7-13 VIOLATIONS DEEMED A PUBLIC NUISANCE

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this Ordinance is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be abated pursuant to the provision of NRS Chapter 268 or restored at the violator's expense, and/or civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

9-7-14 CRIMINAL PROSECUTION

Any person that has violated or continues to violate this ordinance shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of 1,000 dollars per violation per/day. In addition, any person that has violated or continues to violate this ordinance may be subject to criminal prosecution under federal or state laws.

The authorized enforcement agency may recover all attorneys' fees, court costs and other expenses associated with enforcement of this ordinance, including sampling and monitoring expenses.

9-7-15 REMEDIES NOT EXCLUSIVE

The remedies listed in this ordinance are not exclusive of any other remedies available under any applicable federal, state or local law and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

SECTION 2: All ordinances or parts of ordinances in conflict herewith are hereby repealed, but only to the extent of such conflict.

SECTION 3: If any section, paragraph, clause or provision of this Ordinance shall for any reason be held to be invalid, unenforceable or unconstitutional by any court of competent jurisdiction, the invalidity, unenforceability of such section, paragraph, clause or provision shall not affect any remaining provisions of this Ordinance.

SECTION 4: That upon adoption, the City Clerk of the City of Elko is hereby directed to have this Ordinance published, by title only, together with the Councilmen voting for or against its passage, in the Elko Daily Free Press newspaper, a newspaper printed and published in the City of Elko, for at least one publication.

SECTION 5: This Ordinance shall be effective upon the publication mentioned in Section 4.

PASSED AND ADOPTED this 10th day of April, 2007, by the following vote of the Elko City Council.

AYES: Councilmen: Glen Guttry, Chris Johnson, Jim Conner, Jay Eqluist

NAYS: None

ABSENT: Mayor Michael Franzoia

ABSTAIN: None

APPROVED this 10th day of April, 2007.

CITY OF ELKO

By: _____
MICHAEL J. FRANZOIA, Mayor

ATTEST:

SHANELL OWEN, City Clerk

Appendix 5
Comments Received by the Public