



**STORM WATER  
MANAGEMENT PROGRAM**

**SPILLS HOTLINE:**

**FOR EMERGENCY CALL 911**

**For non-emergency spills call  
Davis County Environmental Health  
(801) 525-5100**

**After regular business hours call Layton City Police Department  
(801) 497-8300**

June 30, 2016

# LAYTON CITY CHARACTERISTICS

## General Information

The Layton City Storm Drain System falls under the Public Works Department for the City. The Public Works Director can be contacted at the following address and phone number:

Mr. Terry R. Coburn  
437 N. Wasatch Dr.  
Layton, UT 84041  
(801) 336-3700

Some general information for Layton City follows:

**Population:** 71,000

**Permit Number:** UTR090043

**Size:** 22.09 sq. miles

**Geographic Description:** Elevation 4400 ft.

**Receiving Waters:** Most of Layton drains into two waterways: Holmes Creek and Kays Creek (North and South Forks), which empty into the Great Salt Lake. Some of the western portion of the city drains directly through wetlands and into the Great Salt Lake.

**Annual Precipitation:** 18.40 inches per year

**Type of Community:** Davis County's largest city with moderate rates of residential growth that are expected to continue for many years. Current growth projections predict build-out to occur in the year 2034.

**Latitude:** 41°04' degrees N

**Longitude:** 111°57' degrees W

The Layton storm water system is an extensive system that consists of curb and gutters, inlet boxes, piping, a few typical open channel sections, swales, canals, and detention ponds. Most storm water facilities drain through piping into Kays Creek and Holmes Creek. Both creeks drain to the southwest into the Great Salt Lake. Holmes Creek runs through a portion of Kaysville before getting to the lake. There are over 25 detention basins that exist within the system. Most of the streets use curb and gutter to collect storm water runoff with the remaining using swales or ditches. Most of the swales and ditches are located in the western parts of the city that have not yet been fully developed. The City is served by a sanitary sewer system that is treated at the North Davis Sewer District.

## History

Because of the scarcity of water, Holmes Creek and Kays Creek were most important in the settling of Layton. Gradually a system of irrigation was developed. The area north and east of the north and center forks of Kays Creek was referred to as "Scotland" because the inhabitants were from Scotland. Many of the other settlers of Layton were English. From the center of Layton along the section line, a road was made to the farmlands on the west. This street was called Gentile Street because those who lived on the street did not embrace the Mormon faith and were called gentiles.

A small fort to protect the people from Indians was built on the south bank of Kays Creek overlooking the Sandridge road from Morris Town Hill. The road from the east was called Little Fort Lane. The main road from Salt Lake City to Ogden went through Layton. In 1857, the stagecoach lines carrying mail and

passengers between Montana, Salt Lake City and points north and west came through Layton. These coaches and freight wagons continued until the arrival of the railroad in 1869.

The first public building to be erected in Layton was a log schoolhouse in 1860. By 1875, the town was able to build a better schoolhouse of brick, which was heated with a stove. Thus, the old log schoolhouse with its dirt roof and open fireplace was abandoned.

Alfalfa hay and grain were the two crops most raised by the pioneers in large quantities. With hay and grain plentiful and fine pastures in the hollows, cattle, sheep, and horses were raised. The dairy and poultry industries were also of importance.

By 1869, Central Canal Company has begun to build a canal to bring water from the Weber River out on land north and west of Layton. In 1884, the Davis and Weber areas were incorporated and in 1896, they started building a dam at East Layton and later at Echo to store water for the later use. Since the Davis and Weber Canal took water to more of Sandridge, it has become one of the most fertile spots in Davis County.

The history of Layton is really an outgrowth of the history of Kaysville, because most of what is now Layton was, until 1890, included in Kaysville. There was a growing problem of taxation between residents of Kaysville and the area north of the city. People in the outlying rural areas objected to paying city taxes for which they saw little benefit. On March 1, 1902, Layton was legally deemed a farming community with no need for city government, and was officially separated from Kaysville. Layton was unincorporated until 1920, when it officially became a city. The new city was named after Christopher Layton, a prominent businessman, pioneer, LDS Church leader and farmer. Interestingly, Mr. Layton himself never lived within the boundaries of Layton; his home was in Kaysville.

Today, Layton is a rapidly growing community of over 70,000 citizens. Recently, it became the most heavily populated city in Davis County. Hill Air Force Base is the major employer in the city and has played a major role in the city's growth. Layton has become an important shopping and business center in the area with numerous businesses including the Layton Hills Mall. Layton's numerous car dealerships, restaurants, shopping centers, movie theatres and mall have attracted regional attention. Weber State University has constructed the Davis County Campus located in Layton. Citizens of Layton enjoy living near the mountains, and the closeness of skiing and other recreational areas.

## Local Water Quality Concerns

The water quality within the city of Layton is relatively good. None of the streams or waterways have been identified as protected under Section 303(d) of the Clean Water Act. The hope and intent of this Storm Water Management program (SWMP) is to maintain that status and possibly even improve the current water quality.

Most of the storm water in Layton City drains into Kays Creek and Holmes Creek, which in turn empty into the Great Salt Lake. Holmes Creek does run through a portion of Kaysville before reaching the lake. At present, the City hasn't encountered any major problems related to the storm drain system capacity. However, in 2001 there was a large amount of erosion associated with a residential development that was under construction.

Like most communities along the Wasatch Front, some of the biggest concerns involve sediment loads (coming primarily from disturbed sites), fertilizers and pesticides coming from lawns and farmlands and oils and grease coming from the roadways and improper disposal of household chemicals and waste materials. Unlike some of the more residential communities, Layton has the additional concern of storm water runoff coming from commercial and industrial businesses within the community. There are a number of car dealerships and shopping centers that have large impervious areas that can generate a lot of runoff and larger than normal amounts of oil. Layton's SWMP has been geared toward large city applications, targeting the pollutants mentioned.

# Storm Water Management Program

The new storm water management program was based on the General Permit for Discharges from Small Municipal Separate Storm Sewer Systems effective March 1, 2016. The Permit will expire February 28, 2021. The original Permit created the foundation of the Storm Water Management Program. The new permit introduces new requirements to the existing program. These requirements and guidelines are shown below in a summarized version; the Permit in its entirety is attached in the appendix. Activities of the program will be based on the full text version of each requirement and not solely the summary shown below. The compliance activity or task corresponding with each requirement is described below each numbered item. Tasks requiring further work include a description and timeline to completion. The Storm Water Management Program is an evolving plan to ultimately improve the quality of storm runoff. This process requires a progression from education to action. As education level increases it is anticipated that behaviors will change to reduce the human contribution to storm water pollution. During the course of the permit this program will evolve. The six minimum control measures will be reviewed and focused on during two consecutive months of each year. For example, public education and outreach will be the focus during January and February of each year, public participation and involvement will be reviewed during March and April.

The appendix of this document contains divisions for each minimum control measure. The appendix will serve as a location for referenced materials and also a place to keep and store documents.

A Storm Water Management Program should:

- Reduce the discharge of pollutants;
- Protect water quality;
- Satisfy the appropriate water quality requirements of the Clean Water Act; and
- Address activities over the permit cycle time period.

Storm water management programs must include:

- Best Management Practices (BMPs) for each of the six minimum control measures;
  1. Public Education and Outreach
  2. Public Participation/Involvement
  3. Illicit Discharge Detection and Elimination
  4. Construction Site Runoff Control
  5. Post-Construction Runoff Control
  6. Pollution Prevention/Good Housekeeping
- Measurable goals for each minimum control measure (i.e., narrative or numeric standards used to gauge program effectiveness);
- Estimated months and years in which actions to implement each measure will be undertaken, including interim milestones and frequency; and
- The person or persons responsible for implementing or coordinating the storm water program.

## Permit Requirements

The activities selected to meet the permit requirements are the foundation of the storm water management program; however, the NPDES permitting authority can require changes in the mix of chosen BMPs and measurable goals if all or some of them are found to be inconsistent with the provisions of the Phase II Final Rule. Likewise, the permittee can change its mix of BMPs if it determines that the program is not as effective as it could be.

### Annual Reports

Reports must be submitted annually during the permit term. The reports must include:

- The status of compliance with permit conditions, including an assessment of the appropriateness of the selected BMPs and progress toward achieving the selected measurable goals for each minimum measure;
- Results of any information collected and analyzed, including monitoring data if any;
- A summary of the storm water activities planned for the next reporting cycle;
- A change in any identified BMP or measurable goals for any minimum measure; and
- Notice of relying on another governmental entity to satisfy some of the permit obligations (if applicable).

### Record Keeping

Records required by the NPDES permitting authority must be kept for at least 5 years and made accessible to the public at reasonable times during regular business hours. Records include documentation of policies and goals that have been established or met by the MS4. Records of operation and maintenance activities are also included. Records need not be submitted to the NPDES permitting authority unless the permittee is requested to do so.

## Nitrogen and Phosphorous Reduction

The 2016 version of the MS4 Permit requires that all Permittees must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4. Permittee must determine and target sources that are contributing to, or have the potential to contribute, nitrogen and phosphorus to the waters receiving the discharge authorized under this Permit.

The work to evaluate, identify, target, and provide outreach that addresses nitrogen and phosphorous sources will be accomplished through a collaborative effort within the Davis County Storm Water Coalition according to the 2016 Interlocal Agreement.

# PUBLIC EDUCATION AND OUTREACH

## Phase II Requirements

### 4.2.1.1. Target specific pollutants and sources

**Pollutants:** sediment, construction site waste, oil, fuels, e. coli, pet waste, grass, fertilizer, trash, septic waste, hydrocarbons, automotive fluids, swimming pool water, wash water, household hazardous waste, illicit discharges, landscaping materials

**Sources:** contractors, residents, MS4 facilities/activities, businesses, commercial facilities, developers, institutions

These prioritized lists of pollutants and sources were developed through the County Coalition using a survey and discussion in June 2010.

Layton City will use the website to inform the public about the potential impacts from the pollutants and what the sources can do to reduce the adverse affects. Topic of the website will change quarterly rotating through the listed pollutants. The website will allow visitors to comment on the topics and provide feedback to the City.

### 4.2.1.2. Provide and document information given to the general public about water quality impacts associated with illicit discharges and improper disposal of waste

Sample brochures have been included in the manila folder in the Public Education and Outreach section of Appendix B. These brochures are available for distribution in the Engineering Department. Information that has been posted on the city's website, the web address has been included in Appendix B. Additional brochures will be produced by the Coalition.

### 4.2.1.3. Provide and document information given to institutions, industrial and commercial facilities ANNUALLY about water quality impacts associated with illicit discharges and improper disposal of waste

Davis County Environmental Health Services has a warning letter to distribute with the municipalities in the event of a known discharge. A copy of this letter is included in Appendix B. Brochures have been developed for distribution to target audiences. The brochures are titled Tips for the Automotive Industry, Tips for Landscapers, Tips for Fueling Stations, and Tips for Mobile Cleaners. Jan. 2015-new brochures: Septic Systems & Pool Care.

### 4.2.1.4. Provide and document information given to engineers, construction contractors, developers, development review staff, and land use planners concerning the development of SWPPPs

The Davis County Stormwater Coalition developed a BMP Guidebook which is available on the City's website and is included in Appendix B. The appendix also contains a SWPPP review checklist which was created based on requirements in the Construction General Permit. This checklist is used to review plans. Contractor trainings were done in Feb 2012, Feb 2015 & Feb 2016.

- 4.2.1.5. Provide and document information and training given to municipal employees about water quality impacts associated with illicit discharges and improper disposal of waste.

Every year the public works employees will receive training on storm water pollution. An attendance list will be made with notes regarding the topics covered and date of training.

- 4.2.1.6. Provide and document information and training given to MS4 engineers, development and plan review staff, land use planners and others as applicable to learn about LID, green infrastructure practices and post-construction BMPs within the SWMP and to communicate requirements for post-construction BMPs.

Training will be provided with an attendance list will be made with notes regarding the topics covered and date of training.

- 4.2.1.7. Show evidence of focused messages and audiences. Define specific messages for each audience, identify methods to evaluate effectiveness, tie methods to goals of the program

The process to develop messages and distribute them to the target audience will be ongoing and iterative. The analysis of their effectiveness will take place each year as the program is assessed during its two-month review period. In February 2015 training on the new construction permit was hosted by the Davis County Stormwater Coalition. Feb 2016 a contractor training that reviewed common problems from construction sites was hosted at Clinton City. The Coalition hires a teacher to visit all the elementary schools in Davis County to teach about storm water pollution prevention.

- 4.2.1.8. Written documentation or rationale as to why particular BMPs were chosen for public education and outreach program.

Documentation and rationale will be an ongoing activity which will be tracked in the SWMP document & appendices.

# **PUBLIC PARTICIPATION / INVOLVEMENT**

## **Phase II Requirements**

- 4.2.2.1. Adopt a program or policy directive to create opportunities for public input-website feedback for SWMP and other topics

The City website will have a location for visitors to provide feedback regarding the storm water management program. The input will then be directed to the storm water engineer for review and response.

- 4.2.2.2. Make the revised SWMP available for review and input by July 1, 2016

- 4.2.2.3. Current version of SWMP available for public review and input

The new Storm Water Management Program will be made available on the City website. The website will have a location for visitors to provide feedback.

- 4.2.2.4. Must comply with State and Local public notice requirements

# ILLICIT DISCHARGE DETECTION AND ELIMINATION

## Phase II Requirements

- 4.2.3.1. Maintain a current storm system map of the MS4, with a name and location of outfalls  
The City storm drain system and outfall maps are included in Appendix A.
- 4.2.3.2. Prohibit through ordinance non-storm water discharges  
The City adopted Municipal Code 13.16 which prohibits illicit discharges in the City. This document is included in Appendix A.
  - 4.2.3.2.1. IDDE program must have legal authority to detect, investigate, eliminate and implement enforce enforcement procedures and actions  
The City adopted Municipal Code 13.16 which gives authority to the City to eliminate illicit discharges. This document is included in Appendix A.
- 4.2.3.3. Develop, implement and prepare a plan to detect and address non-storm water discharges. Plan shall include:
  - 4.2.3.3.1. Develop and implement written systematic procedures for locating and listing priority areas. Document the selection basis, and update annually.  
The priority area for 2016 is the heavy manufacturing/industrial zoning area. An inventory will be made of businesses with pollution potential from aerial imagery and business licensing. Industrial storm water permits will be reviewed and coordinated with the State as needed. Priority areas will be reevaluated in July 2017 based on inspections.
  - 4.2.3.3.2. Field inspection of priority areas: Inspection will take place in July
  - 4.2.3.3.3. Dry weather screening: 25 inspections each year (20% of total)
  - 4.2.3.3.4. If a discharge needs a separate permit, Permittee shall notify the Division
- 4.2.3.4. Develop and implement SOPs for tracing the source of an illicit discharge. These SOPs are included in Appendix G.
- 4.2.3.5. Develop and implement SOPs for characterizing the nature and threat of any illicit discharges. These SOPs are included in Appendix G.
  - 4.2.3.5.1. When the source is identified and confirmed, record the required information in the inspection sheet. Decision process must be documented.  
The documents shall be stored in Appendix D. Copies of letters and repair approvals were updated Jan 2015.
- 4.2.3.6. Develop and implement SOPs for ceasing the illicit discharge, including notification and follow-up.  
Municipal Code 13.60.90 and 13.60.100 contain the steps to eliminate illicit discharges.
  - 4.2.3.6.1. IDDE investigations must be thoroughly documented  
These documents shall be stored in Appendix D.
- 4.2.3.7. Permittees shall inform public employees, businesses, and general public of hazards associated with illicit discharges and improper disposal of waste.

The website and or newsletter will be utilized for distribution of information regarding illicit discharges.

4.2.3.8. Permittees shall promote or provide services for the collection of household hazardous waste.

The City website promotes Wasatch Integrated Waste Management by providing a link to their website.

4.2.3.9. Permittees shall publicly list and publicize a hotline for public reporting of spills and other illicit discharges. A written record shall be kept of all calls, all follow-up actions taken, and any feedback.

The City website has a link to the Davis County Health Department. The spill hotline is printed on the curb inlet markers. The spills reports are collected annually and placed in Appendix D.

4.2.3.9.1. Permittee must develop a written spill/dumping response procedure and flow chart for public referrals of illicit discharges.

The flow chart for spill reporting and spill response procedure SOP is included in Appendix G.

4.2.3.10. Permittees shall adopt and implement procedures for program evaluation and assessment including a database.

A drawing showing the location of spill incidents and high priority areas is maintained in the city database. High priority sites shall be inspected annually. An assessment of the IDDE program shall be made annually and revisions to the program will be made at that time. The city contracts to have 10% of the sewer lines and 5% of the storm drain system cleaned and televised.

4.2.3.11. Permittees shall at a minimum, annually train employees about the IDDE program

Trainings will be based off of SOPs developed for municipal activities.

4.2.3.12. The Division reserves the right to request documentation or further study of a particular non-storm water discharge of concern.

# CONSTRUCTION SITE RUNOFF CONTROL

## Phase II Requirements

- 4.2.4.1. Develop and adopt an ordinance that requires the use of erosion and sediment control practices at construction sites.
  - Section 13.16.080 “Erosion control on construction sites” details the City’s requirements for erosion and sediment control during construction.
- 4.2.4.1.1. At a minimum require contractors to prepare a SWPPP
  - Municipal Code 13.16.080(1)(a) requires a SWPPP.
- 4.2.4.1.2. Construction operators shall obtain and maintain a current UPDES permit. Municipal Code 13.16.080 requires an NOI.
- 4.2.4.1.3. Ordinance shall include a provision for access by qualified personnel to inspect construction BMPs on private property that discharge to MS4.
  - Municipal Code 13.16.080(1)(a) allows access.
- 4.2.4.2. Develop a written enforcement strategy and implement the enforcement provisions of the ordinance shall include:
  - 4.2.4.2.1. SOPs that include specific processes and sanctions to minimize the occurrence of, and obtain compliance from violators using appropriate escalating enforcement procedures and actions.
    - The procedures for escalating enforcement actions are included in the Appendix E.
  - 4.2.4.2.2. Documentation of all enforcement actions
    - Enforcement actions are recorded according to the documentation process.
- 4.2.4.3. Develop and implement SOPs for pre-construction SWPPP review and keep records for five years or until construction is completed, whichever is longer.
  - 4.2.4.3.1. Conduct a pre-construction SWPPP review
    - SWPPPs are a required part of the approval process. A checklist created from the requirements of the general permit for construction activities is used to review plans and is included in Appendix E.
  - 4.2.4.3.2. Incorporate consideration of potential water quality impacts and procedures for pre-construction review, use a checklist.
    - A SWPPP review checklist is included in Appendix E. Water quality consideration is part of the review process and checklist.
  - 4.2.4.3.3. Incorporate procedures for an evaluation of opportunities for use of low impact design (LID) and green infrastructure.
    - LID consideration is part of the review process and checklist.
  - 4.2.4.3.4. Identify priority construction sites, including sites discharging directly into water recognized as impaired or high quality
    - Prioritizing construction sites is part of the review process and checklist.
- 4.2.4.4. Develop and implement SOPs for construction site inspection and enforcement.
  - Inspection program must provide:
    - 4.2.4.4.1. Inspection of all new construction sites at least monthly
      - The City has a full-time inspector that inspects the sites regularly and documents these inspections using the State approved form.

- 4.2.4.4.2. Inspection of all phases of construction
- 4.2.4.4.3. Inspections of priority construction sites at least biweekly
- 4.2.4.4.4. Follow-up action as necessary
- 4.2.4.5. Permittee must ensure that staff are trained to conduct duties related to the construction storm water program
  - The City inspector responsible for storm water compliance is RSI certified, attends the annual Coalition contractor training and the Stormwater Expo.
- 4.2.4.6. Permittee shall adopt and implement a procedure to maintain records of all projects. (e.g. plan review, inspections, enforcement actions)
  - Inspections and SWPPP review are in the inspector's folders, plans in subdivision folder.

# POST-CONSTRUCTION RUNOFF CONTROL

## Phase II Requirements

- 4.2.5.1. Develop and adopt an ordinance that requires long-term post-construction storm water controls at new development and redevelopment.  
Municipal Code 13.16 covers these requirements. The Code is in Appendix A.
- 4.2.5.2. Develop an enforcement strategy which includes:
  - 4.2.5.2.1. Procedures that include specific processes and sanctions to minimize occurrence of, and obtain compliance from, repeat violators using escalating enforcement procedures.  
Municipal Code 13.16 provides the authority to penalize violators in an escalating manner. The internal guidance of the enforcement is explained in “Escalating Enforcement Actions for Water Pollution Prevention Violators” included in Appendix F. Maintenance agreements provide a mechanism for inspections to take place and maintenance to be done.
  - 4.2.5.2.2. Document how the requirements will protect water quality (how BMPs were selected, pollutant removal expected, and technical basis supporting performance claims)  
The documentation is kept in Appendix F.
- 4.2.5.3. Permittee’s new development/redevelopment program must have requirements to ensure that BMPs will prevent/minimize impacts to water quality.  
All site plans are reviewed and water quality measures are assessed site by site. Maintenance agreements are required for private storm water facilities.
  - 4.2.5.3.1. Include non-structural BMPs such as requirements/standards to minimize development in sensitive areas. No homes are allowed in the flood plain.
  - 4.2.5.3.2. Include a process to evaluate and encourage a LID approach.
  - 4.2.5.3.3. Develop a plan to retrofit existing developed sites that are adversely impacting water quality. See permit for criteria.  
These sites must be identified through the high-priority area inspections performed as part of the IDDE program. They will be addressed on a case by case basis.
  - 4.2.5.3.4. Each development must manage rainfall on-site by the use of infiltration, evaporation and/or harvest or reuse the 90<sup>th</sup> percentile storm event (0.6”). Case by case documentation for alternative design criteria.  
The City’s hydrologic methods for drainage management are outlined in the “Layton City Development Guidelines and Design Standards” in Appendix A. The City is in the process of calculating the amount of retention necessary for the future development. In March 2017 the city will meet with the Nature Conservancy and irrigation companies to discuss design alternatives that allow the retention of the 90<sup>th</sup> percentile storm event to take place on their property. Following their approval a list of projects will be developed and incorporated into the City’s storm drain master plan. By December 2017 we will submit these projects for appropriate permitting approvals. In 2018-2019 the budget

will include an allotment for modification to existing storm water facilities and proposed projects. In 2019-2020 the construction of these new projects will begin. There are three options for the retention projects. Developing land in the western portion of the City can participate in the retention projects on the Nature Conservancy property where the water will be used to provide habitat and sustain wetlands. Areas that are able to direct their storm water into the irrigation reservoirs will retain runoff there for reuse. Layton City has agreements already in place for the reservation of pond depth for storm water storage. Preferred options for retention may be utilized on a “banking” approach. Other developments will provide the necessary retention onsite unless there is documentation of an infeasibility or acceptable alternative. Map of retention option areas is included in Appendix F.

- 4.2.5.4. All permittees shall adopt and implement procedures for site plan review which consider water quality impacts. Including:
  - 4.2.5.4.1. Review plans for all new development and redevelopment sites to ensure the plans include long-term storm water management measures. The City’s Development Guidelines and SWPPP review checklist includes steps for this requirement.
  - 4.2.5.4.2. Permittees shall provide developers and contractors with preferred design specifications to more effectively treat storm water for different development types. Developers and contractors are referred to the Davis County Storm Water Coalition BMP Guidebook for specifications. Additional specifications will be added as they are researched and found acceptable to the City.
  - 4.2.5.4.3. Permittees shall keep a representative copy of information that is provided to design professionals. The Davis County Storm Water Coalition BMP Guidebook is available on the City website and there is a paper copy in the SW engineer’s office. This document is also included in Appendix B.
- 4.2.5.5. All Permittees shall adopt and implement SOPs for site inspection and enforcement of post-construction storm water control measures. Standard operating procedures for site inspection are included in Appendix E. There are also SOPs for pond maintenance and street sweeping in Appendix G.
  - 4.2.5.5.1. The ordinance shall include provisions for both construction-phase and post-construction access for Permittees to inspect storm water control measures on private properties that discharge to the MS4. Municipal Code 13.16.080(1)(a) allows access. Maintenance agreements are required for every project that includes private storm water facilities. The maintenance agreement template is in Appendix F.
  - 4.2.5.5.2. Permanent structural BMPs shall be inspected at least once during installation by qualified personnel. Construction projects are inspected by City staff; any storm water related structures will be reviewed by a qualified person.

4.2.5.5.3. Inspections must be conducted annually, at least once every five years by the MS4 (more frequently if necessary to verify adequate maintenance). Inspection report must include the following:

- Inspection date
- Name and signature of inspector
- Project Location
- Current ownership information
- Description of the condition of the storm water control measure including quality of: vegetation and soils; inlet and outlet channels and structures; catch basins; spillways; weirs, etc; and sediment and debris accumulation;
- Specific maintenance issues or violations found that need to be corrected with deadlines and re-inspection dates

Inspection reports will be kept in Appendix F.

4.2.5.6. Permittees shall provide adequate training for all staff involved in post-construction storm water management, planning and review, and inspections and enforcement. Records shall be kept including dates, names and positions of staff in attendance.

Opportunities for training occur frequently. The trainings attended by City staff will be documented. The record will be kept in Appendix F.

4.2.5.7. Permittee must maintain an inventory of all post-construction structural storm water control measures. This inventory shall include both public and private sites.

The City maintains a map of all post-construction BMPs. This map is part of the City's GIS database.

4.2.5.7.1. Each entry must include

- Project's name
- Owner's name and contact information
- Location
- Start/end date
- Short description of each measure (type, number, design/performance specs)
- Short description of maintenance requirements (frequency of required maintenance/inspections)
- Inspection information (date, findings, follow-up activities, prioritization of follow-up, compliance status)

The document will be kept in Appendix F.

4.2.5.7.2. Permittee must update the inventory based on inspections (4.2.5.5.)

The map will be updated with owners and inspection information each year.

# POLLUTION PREVENTION / GOOD HOUSEKEEPING

## Phase II Requirements

- 4.2.6.1. Permittee shall develop and keep a written inventory of Permittee-owned or operated facilities.  
An inventory of City owned property is included Appendix G. Also a GIS file was created to map these facilities.
- 4.2.6.2. All permittees must initially assess the written inventory (4.2.6.1) for their potential to discharge pollutants to storm water. A description of the assessment process and findings must be included in the SWMP document.  
An assessment of City owned property is included in Appendix G.
- 4.2.6.3. Identify the “high-priority” facilities or operations.  
The properties with the highest pollution potential are the Public Works Shop and the Parks Shop. This is due to the onsite activities and chemicals including fuel stations. Map of high-priority facilities is in Appendix G.
- 4.2.6.4. Each “high-priority” facility must develop a facility-specific SWPPP to protect water quality and reduce the discharge of pollutants.
- 4.2.6.5. The following inspections shall be conducted at “high-priority” facilities:
  - 4.2.6.5.1. Weekly visual inspections of “high priority” facilities in accordance with the developed SOPs. Inspections must be documented. [Form in App. G.](#)
  - 4.2.6.5.2. Quarterly comprehensive inspections of “high priority” facilities. Inspections must be documented. [Blank forms in App. G.](#)
  - 4.2.6.5.3. Quarterly visual observation of storm water discharges from the “high priority” facility. Inspections must be documented. [Inspections will be kept in App. G.](#)
- 4.2.6.6. SOPs shall be developed and implemented for the following:
  - 4.2.6.6.1. Buildings and facilities: O&M program shall address Permittee-owned facilities. Address the use, storage and disposal of chemicals and ensure with employee training for those responsible. Spill prevention plans must be in place. SOPs must address dumpsters/waste management including cleaning, washing, painting, etc and sweeping/cleaning the surrounding area. The Permittee must inventory all floor drains inside Permittee-owned facilities. Ensure that the floor drains discharge to appropriate locations. [The janitor supervisor has a checklist of regular trainings that are completed to train on chemical handling and spills. The trainings are a mix of video and hands-on presentations.](#)
  - 4.2.6.6.2. Materials storage areas, heavy equipment storage areas and maintenance areas: Permittee shall develop and implement SOPs to protect water quality at each facility. [Part of high-priority SWPPPs.](#)
  - 4.2.6.6.3. Parks and open space: O&M program shall address: SOPs for proper application, storage and disposal of fertilizers, pesticides, and herbicides. Minimize use, use according to manufacturer’s instructions. Also address trash containers at parks, scheduled cleaning, and sufficient locations. Also address proper cleaning of facilities. [SOPs are included in Appendix G.](#)

- 4.2.6.6.4. Vehicle and Equipment: O&M program shall address vehicle maintenance and repairs. Evaluate fueling areas. Part of high-priority SWPPPs.
- 4.2.6.6.5. Roads, highways, and parking lots: O&M program shall address SOPs and schedule for sweeping streets, or any other BMP to reduce road debris. This includes road maintenance activities. All streets within Layton are swept bi-annually except for Highway 89 and I-15.
- 4.2.6.6.6. Storm water collection and conveyance system: O&M program shall address SOPs and schedule for regular inspection, cleaning and repair of facilities. Permittees should prioritize cleaning areas based on water quality concerns. Permittee-owned structural BMPs should be inspected annually. Develop, ensure and document proper disposal methods of all waste removed from storm water conveyance system. City crews clean on an as-needed basis. Third party crews clean approx. 5% of system each year.
- 4.2.6.6.7. Other facilities and operations: Identify any facilities or operations not listed above that would discharge contaminated runoff. Develop, implement, and document appropriate BMPs to protect water quality. Randall's Oil and Smith's distribution center. Smith's has a system of headgates to control runoff in the event of a spill. Randall's is relocating with SPCC measures being constructed with new site.
- 4.2.6.7. If Permittee contracts with a third-party to conduct municipal maintenance or allows private development to conduct their own maintenance, the contractor shall be held to the same standards as the Permittee. Ensure with documentation and inspections. Third-party work is inspected and SOPs are available.
- 4.2.6.8. Permittee must develop and implement a process to assess water quality impacts in the design of all new flood management structural controls. Document the process.
  - 4.2.6.8.1. Existing flood management structural controls must be assessed to determine possibilities to improve water quality. Document the process and determinations. The Flood Control Authority is the Davis County Public Works. They are an MS4 Permittee.
- 4.2.6.9. Construction Projects under the direction of the Permittee shall comply with the requirements applied to private projects. SWPPPs are included with the drawing set for construction projects.
- 4.2.6.10. Permittees shall provide training for all employees who have construction, operation, or maintenance job functions that are likely to impact storm water quality. City staff will be trained according to the SOPs that are developed relating to their responsibilities.

**Due to the constantly changing content of the Appendices they are not available online. They can be viewed at the Layton City Municipal Building by contacting Ash Thoman at (801) 336-3707, and setting up an appointment.**

## **APPENDIX A**

### **GENERAL DOCUMENTS**

**City Code 13.16**

**Storm Drain System and Outfall Maps**

**Development Guidelines and Design Standards**

**Davis County Stormwater Coalition Interlocal  
Agreement**

**Davis County Board of Health Resolution on Illicit  
Discharges**

## **APPENDIX B**

### **PUBLIC EDUCATION AND OUTREACH**

**Sample Brochures**

**Davis County letter**

**Davis County BMP Guide**

**SWPPP Review Checklist**

**Lesson Plan for 4<sup>th</sup> Grade Teacher Program**

**4<sup>th</sup> Grade Program School Schedule**

**Water Fair Evaluation Summary**

**Storm Drain Inlet Decal Project Instructions**

**Coalition Activity List**

**APPENDIX C**

**PUBLIC PARTICIPATION/INVOLVEMENT**

## **APPENDIX D**

# **ILLICIT DISCHARGE DETECTION AND ELIMINATION**

**Spills Response flowchart**  
**SOP for Outfall Screening**  
**Outfall Reconnaissance Inventory/Sample Collection**  
**Field Sheet**  
**Illicit Discharge / Cross-Connection Inspections**  
**Spills Reports**

## **APPENDIX E**

# **CONSTRUCTION SITE RUNOFF CONTROL**

**SWPPP Review Checklist**  
**Site Inspection SOP**  
**SWPPP Compliance Inspection Form**  
**Escalating Enforcement Actions**

## **APPENDIX F**

### **POST-CONSTRUCTION RUNOFF CONTROL**

**Escalating Enforcement Actions**

**4.2.5.2.2. Documentation**

**Maintenance Agreement for Stormwater Facilities**

**Retention Options Map**

**4.2.5.5.3. Post-Construction Inspection Sheet**

**Post-Construction Training Information**

**Post-Construction Inspections Completed**

**APPENDIX G**

**POLLUTION PREVENTION  
AND  
GOOD HOUSEKEEPING**

**Inventory and Assessment of City-owned property  
Standard Operating Procedures (SOPs) for Municipal  
Activities  
Site Maps of High-Priority Facilities  
Sample Weekly Inspection Checklist  
Sample Quarterly Comprehensive Inspections  
Completed Quarterly Visual Inspection Report**

**APPENDIX H**

**TABLE OF ACTIVITIES**

**Target Audiences**  
**Target Pollutants**  
**Measurable Goals**  
**Documentation**  
**Responsible Party**

**APPENDIX I**

**MUNICIPAL SEPARATE STORM**

**SEWER SYSTEM PERMIT**