

## **Chapter 15: Storm Water Management**

### **6-15-101. Purposes and objectives.**

The purpose of this chapter is to protect the health, safety and welfare of the City and its inhabitants by improving the City's storm drainage system, managing and controlling storm water runoff, protecting property, preventing polluted water from entering the City's storm drainage system and public receiving waters as required by federal and state law. The objectives of this chapter are to:

- (a) Provide and maintain an adequate Municipal Separate Storm Sewer System (MS4) for handling storm water runoff.
- (b) Provide fair, equitable and non-discriminatory rates for using the storm drainage system which user fees will generate sufficient revenues for operating, improving and maintaining the storm drainage utility adequately. Rates shall be applied consistently for the same class of customers.
- (c) Establish a policy that fees should be set after considering such factors as:
  - (1) Intensity of development of land parcels;
  - (2) Types of development on land parcels;
  - (3) Cost of maintaining, operating, repairing and improving the system;
  - (4) Quantity and quality of the run-off generated;
  - (5) Public health, safety and welfare; and,
  - (6) Any other factors that should be considered.
- (d) Regulate the contribution of pollutants to the MS4 by storm water discharges by any user
- (e) Prohibit illicit connections and discharges to the MS4
- (f) Guide, regulate and control the design, construction, use, and maintenance of any development or other activity that results in the movement of soil on land within the city
- (g) Minimize increases in non-point source pollution caused by storm water runoff from development which would otherwise degrade local water quality
- (h) Reduce storm water runoff rates and volumes, soil erosion and non-point source pollution, wherever possible, through storm water management controls and to ensure that these management controls are properly maintained and pose no threat to public safety
- (i) Establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter.

## **6-15-102. Definitions.**

Where terms are not defined by this section, such terms shall have ordinarily accepted meanings such as the context implies.

For the purpose of this ordinance, the following terms, phrases and words shall mean:

“Authorized Enforcement Agency” – Employees or designees of the director of the municipal agency designated to enforce this chapter.

“Best Management Practices (BMPs)” – Includes schedules of activities, prohibitions of practices, maintenance procedures, design standards, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly into the waters of the State. BMPs also include treatment requirements, operating procedures, educational activities, and practices to control plant site runoff spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

“City” – Bountiful City, a municipal corporation of the State of Utah.

“City Engineer” – means the City Engineer or his/her authorized representatives.

“Clean Water Act” – The federal Water Pollution Control Act (33 U.S.C. § 1251 et seq.), and any subsequent amendments thereto.

“Construction Activity” – Activities subject to NPDES Construction Permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition

“County” – Davis County

“Council” – Bountiful City Council

“Culvert” – A covered channel or large diameter pipe that directs water flow below the ground surface.

“Customer” or “Person” – Any individual; public or private corporation and its officers; partnership; association; firm; trustee; executor of an estate; the State or its departments, institutions, bureaus, agencies; county; city; political subdivision; or any other governmental or legal entity recognized by law.

“Degradation” – (Biological or chemical) The breakdown of chemical compounds into simpler substances, usually less harmful than the original compound, as with the degradation of a persistent pesticide. (Geological) Wearing down by erosion. (Water) The lowering of the water quality of a watercourse by an increase in the amount of pollutant(s).

“Design Storm” – A theoretical selected storm event that is used as a basis for design, defined in

terms of the probability of occurrence over time.

“Discharge” – to dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means any solid or liquid matter into the MS4..

“Drainage”– Refers to the collection, conveyance, containment, and/or discharge of surface and storm water runoff.

“Equivalent Residential Unit (ERU)” – An ERU is equal to 3,828 square feet of impervious surface area. This is based on a single-family residential parcel in Bountiful City, which has an average of 3,828 square feet of impervious surface according to a study completed in April 2000.

“Erosion” – The wearing away of land surface by wind or water. Erosion occurs naturally from weather or runoff but can be intensified by land-clearing practices related to farming, residential or industrial development, road building, or timber-cutting.

“Fill” – A deposit of earth material placed by construction activity.

“General Permit” – A permit issued under the UPDES program to cover a class or category of storm water discharges.

“Grading” – The cutting and/or filling of the land surface to a desired slope or elevation.

“Hazardous Waste” – By-products of society that can pose a substantial or potential hazard to human health or the environment when improperly managed. Possesses at least one of four characteristics (flammable, corrosivity, reactivity, or toxicity), or appears on special EPA lists.

“Illicit Connection” – Any physical connection to a publicly maintained storm drain system which has not been permitted by the public entity responsible for the operation and maintenance of the system.

“Impervious Surface” – A surface which prevents or retards the infiltration of water.

“Infiltration” – The downward movement of water from the surface to the subsoil. The infiltration capacity is expressed in terms of inches/hour.

“Inlet” – An entrance into a ditch, storm sewer, or other waterway.

“Mitigation” – Storm water control facilities located on a parcel, which either hold runoff for a short period of time before releasing it to the storm drainage system, or hold water until it evaporates or infiltrates into the ground.

“Municipal Separate Storm Sewer System (MS4)” – A municipally owned and operated storm water collection system that may consist of any or all of the following: curb & gutter, drainage swales, piping, ditches, canals, detention basins, inlet boxes, or any other system used to convey storm water that discharges

into canals, ditches, streams, rivers, or lakes not owned and operated by that municipality.

“Mulch” – A natural or artificial layer of plant residue or other materials covering the land surface which conserves moisture, holds soil in place, aids in establishing plant cover, and minimizes temperature fluctuations.

“Non-point Source” – A group of diffuse sources of storm water runoff (not a single location such as a pipe) such as agricultural or urban land from which pollutants are or may be discharged.

“Off-site” – Any area lying upstream of the site that drains onto the site and any area lying downstream of the site to which the site drains.

“On-site” – The entire property that includes the proposed development.

“Parcel” – The smallest, separately segregated unit of land having an owner. A parcel has boundaries and surface area, and is documented with a property number by the County.

“Plat” – A map or representation of a subdivision showing the division of a tract or parcel of land into lots, blocks, streets, or other divisions and dedications.

“Point Source” – Any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.

“Pollutant” – Generally, any substance introduced into the environment that adversely affects the usefulness of a resource. 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, and accumulations, so that same may cause or contribute to pollution; sediment, floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

“Receiving Waters” – Bodies of water or surface water systems receiving water from upstream constructed (or natural) systems.

“Retention” – The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

“Riparian” – A relatively narrow strip of land that borders a stream or river.

“Runon” – Storm water surface flow or other surface flow which enters property other than that where it originated.

“Runoff” – That part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water.

“Single-Family Residential Parcel” – Any parcel of land containing a single-family dwelling unit.

“Source Control” – A practice or structural measure to prevent pollutants from entering storm water runoff or other environmental media.

“Storm Drainage Facility” – Any facility, improvement, development, or property made for controlling storm water quantity and quality.

“Storm Drainage System” – All man-made storm drainage facilities and conveyances, and natural storm water drainage channels owned or maintained by the City that store, control, treat, and/or convey storm water.

“Storm Drainage Utility” or “Utility” – The utility created by this ordinance, which operates, maintains, regulates, and improves storm drainage facilities and programs within Bountiful City.

“Storm Water” – Runoff produced by precipitation events and snowmelt.

“Storm Water Pollution Prevention Plan (SWPPP)” – The set of drawings and other documents that comprise all the information and specifications for the programs, drainage systems, structures, BMPs, concepts and techniques intended to maintain or restore quality and quantity of storm water runoff to pre-development levels during and after construction.

“Swale” – An elongated depression in the land surface that is at least seasonally wet, is usually heavily vegetated, and is normally without flowing water. Swales direct storm water flows into primarily drainage channels and allow some of the storm water to infiltrate into the ground surface.

“Treatment Control BMP” – A BMP that is intended to remove pollutants from storm water.

“Undeveloped Parcel” – Any parcel that has not been altered by grading, filling, or construction.

“UPDES (Utah Pollutant Discharge Elimination System)” – means the State-wide program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements under the Utah Water Quality Act (Title 19, Chapter 5, Utah Code Annotated). UPDES is described in the Rules of the Utah Administrative Code R317-8.

“Waters of the State” – All streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state of Utah or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and wildlife.

“Wetland” – An area that is regularly saturated by surface or ground water and subsequently characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include: swamps, bogs, marshes, and estuaries.

**6-15-103. Storm Drainage Utility Created.**

(a) There is hereby created and established a Bountiful City Storm Drainage Utility. All storm drainage facilities owned by the City constitute the physical assets of the Bountiful Storm Drain Utility.

(b) Responsibility of Administration.

The City Engineer shall administer, implement, and enforce the provisions of this chapter. Any powers granted or duties imposed upon the City may be delegated by the City Engineer to persons or entities acting in the beneficial interest of or in the employ of the City.

(c) 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 compliance with federal regulations, or that there will be no contamination, pollution, nor unauthorized discharge of pollutants.

**6-15-104. City Storm Drainage Utility facilities and assets.**

The Utility shall operate, maintain, and improve all existing City storm drainage facilities used for the conveyance of storm waters, through, under or over lands or watercourses, beginning at a point where the storm waters first enter the storm drainage system of the city and ending in each instance at a point where the storm waters exit from the system. However, the utility does not include government-owned streets or those facilities operated and maintained by or for the County or the State of Utah.

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**6-15-105. System of rates and charges.**

(a) Service fees imposed. The City will by resolution of the City Council impose storm drainage fee rates and charges on each parcel of real property within the City except governmentally-owned streets. The charges shall fund the administration, planning design, construction, water quality programming, operation, maintenance and repair of existing and future storm water facilities.

(b) Method of determining contribution of storm water.

(1) Contributions of storm water from non-residential parcels and residential parcels larger than four-unit buildings have been ascertained through aerial photography and by evaluating land surface and measuring the amount of impervious surface.

(2) Contributions of storm water from residential parcels up to and including four-unit buildings have been ascertained by sampling the amount of residential impervious areas.

(c) Storm drainage service fees shall be assessed on each parcel of real property within the City (including City-owned properties), except government-owned streets and City storm water facilities. Service fees shall be established by resolution of the City Council and may be differentiated according to the following classifications:

**Residential parcels:** Single-family residential parcels shall constitute one ERU per month.

**Undeveloped parcels:** Undeveloped parcels shall have no charges assessed.

**Other parcels:** Charges for all other parcels shall be computed by multiplying the total ERUs for a parcel by the monthly rate. Total ERUs are calculated by dividing total square feet of impervious surface by 3,828 (one ERU), rounded to the nearest half or whole number.

**Credit for on-parcel mitigation:** Non-residential parcels with mitigating storm water facilities, e.g. approved on-site detention/retention of storm water, approved discharge of storm water through a sewer connection or other approved and complete on-site detention methods that meet the City's design and maintenance standards may be eligible for a service fee credit. The parcel's owner or agent must make application for this credit to the City Engineer. The amount of credit is based on the following formula:

$$P = 50 + 50 (Q_r/Q_p)$$

Formula symbols have the following meaning:

- P = Percentage of storm drainage fees to be applied to the parcel
- 50 = Percentage representing Utility's fixed operation and maintenance costs
- 50 = Percentage representing costs for Utility's capital improvement program
- $Q_r$  = Restricted storm water discharge from a parcel
- $Q_p$  = Peak storm water discharge from the same parcel that would result if the mitigating facilities were not in place.

The City Engineer may, if requested, provide a complete on-site mitigation evaluation at the expense of the parcel's owner or authorized agent.

**Credit for regional storm water mitigation:** Non-residential parcels with mitigating storm water facilities, that serve the City's regional storm water needs as prescribed by the storm water master plan and utilizing methods that meet the City's design and maintenance standards, may be eligible for a service fee credit. The credit may be granted if property owners have not already been compensated for or agreed to construct the facilities as part the development process. The parcel's owner or agent must make application for this credit to the City Engineer.

If a request for mitigation credit is granted, the credit shall be applied to all charges from the time of the appealed billing, and will be reflected on the next billing thirty days after appeal is granted.

**Credit for maintenance of long-term storm water controls:** Non-residential properties with long-term storm water controls or measures that meet the city's standards for reducing storm water runoff pollution may be eligible for a service fee credit of up to 20%. The credit may be granted if the storm water controls are kept in effective operating condition as shown by an annual inspection report that must be provided to the city. The parcel's owner or agent must make application for this credit to the City Engineer annually.

**Low income relief:** A single family residential parcel owner who qualifies for the City's low income relief, as determined by resolution of the City Council and set forth in the fee schedule, may also be eligible for a reduction in the service charge for their parcel.

**6-15-106.**      **Billing and collection.**

(a) Utility Enterprise Fund – This ordinance creates the Storm Drainage Utility Fund. All revenues received from storm drainage user fees shall be placed in the enterprise fund as a designated fund, to be left separate and apart from all other City funds. The collection, accounting, and expenditure of all storm water utility funds shall be in accordance with the Utah Uniform Fiscal Procedures Act.

(b) Billing – The City shall bill property owners for storm drainage utility services. Billing amounts shall be included as a separate line item on utility bills. A billing will also be sent to owners of parcels within the city who are not City utility customers.

(c) Collection – Partial payments on a combined utility bill shall be applied consistent with the billing procedures established by the City. Fees and charges shall be considered delinquent if not paid as determined by the procedures established by the City and will be a debt to the City, which shall be subject to recovery in a civil action. Pursuant to 10-8-38 Utah Code Ann., the City may cause the water service to the property to be shut off for failure to pay for the storm drainage service furnished, as set forth on the billing.

**6-15-107.**      **Appeal of charges.**

(a) Any non-residential customer who disagrees with the storm drainage user fee for his or her parcel may apply to the City Engineer for a user fee adjustment. The adjustment request must state the grounds for adjustment and must be filed in writing with the City Engineer no later than thirty days after receipt of billing. The City Engineer shall review the request and basis for user charges to determine whether an error was made in the calculation or application of the fee.

(b) An appeal of a City Engineer's decision may be brought before the City Manager within thirty days after the date of the City Engineer's decision. The decision of the City Manager is final and conclusive. If an appeal of charges is successful, credit will be applied to all charges from the time of the appealed billing, and will be reflected on a future billing after the appeal is granted.

**6-15-108.**      **Prohibitions.**

It is unlawful for any person to:

(a) Track mud or sediment onto public streets by construction or delivery vehicles. Provisions shall be made at all construction sites to clean the vehicles before vehicles leave the site.

(b) Washout concrete trucks at sites other than pre-approved designated areas. Dumping of excess concrete shall not be allowed.

(c) Stockpile construction or yard improvement materials or debris in the street or in the gutter. This includes but is not limited to ramps being constructed for temporary access across the existing curb and gutter; stockpiling of topsoil or other fill material; stockpiling of sand, gravel, landscape rock, bark, mulch or any other material that may be considered a source of pollution in the storm water system.

**6-15-109.**      **Illicit discharges.**

(a) No person shall discharge or cause or allow to be discharged into the municipal storm drain system or watercourses any materials, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other than storm water.

(b) The commencement, conduct or continuance of any discharge to the storm drain system is prohibited except as described as follows:

- (1) water line flushing or other potable water sources,
- (2) landscape irrigation or lawn watering,
- (3) diverted stream flows,
- (4) rising ground water,
- (5) ground water infiltration to storm drains,
- (6) uncontaminated pumped ground water,
- (7) foundation or footing drains,
- (8) crawl space pumps,
- (9) air conditioning condensation,
- (10) springs,
- (11) individual residential washing of vehicles,
- (12) natural riparian habitat or wet-land flows,
- (13) swimming pools (if dechlorinated to less than one PPM chlorine),
- (14) residual street wash water
- (15) emergency fire fighting activities,
- (16) discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.
- (17) Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.

(c) The prohibition shall not apply to any non-storm water discharge permitted under a UPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the State of Utah, 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 drain system.

(d) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

(e) This prohibition expressly includes, without limitation, connections of sanitary sewer lines to the MS4.

**6-15-110. Development Storm Water Discharge Permit Required .**

(a) Owners and operators of any development or re-development sites within the jurisdictional limits of the City which disturb one acre or more of surface area, or are part of a common plan of development that disturbs one acre or more and have not passed a final storm water inspection for notice of termination are required to obtain a Storm Water Discharge Permit from the City.

(b) No person shall be granted a storm water discharge permit without the approval of a Storm Water Pollution Prevention Plan by the City Engineer.

(c) A storm water discharge permit will only be approved where storm drains have adequate capacity for the accommodation of such water.

(d) No storm water discharge permit is required for the following activities:

- (1) Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
- (2) Existing nursery and agricultural operations conducted as a permitted main or accessory use.
- (3) Additions or modifications to existing single-family structures unless otherwise specifically required in this chapter.

**6-15-111. Permit Application Requirements**

(a) Application for a construction storm water discharge permit shall be filed with the City Engineer. Applicants are required to obtain a permit prior to commencement of work. Each permit application shall bear the name and address and contact information of the owner of the site, developer of the site, contractor(s) working at the site, and of any consulting firm retained by the applicant. The application shall be accompanied by a filing fee and a site specific storm water pollution prevention plan.

(b) The applicant is required to file a letter of credit or cash deposit in an amount deemed sufficient by the Engineering Department to cover all costs of implementation and maintenance of the approved Storm Water Pollution Prevention Plan including costs for improvements, landscaping, and maintenance of improvements for such period as specified by the city, and also to cover engineering and inspections costs and the cost to repair improvements installed on the site and damaged by uncontrolled erosion and sediment from the construction site.

**6-15-112. Permit Fees.**

(a) The City shall charge and the Permittee shall pay upon issuance of the permit, fees for costs associated with the work performed under the permit. Such costs could include costs for reviewing the project and issuing the permit, inspections of the project, deterioration of existing Public Improvements or diminution of the useful life of existing Public Improvements, and other costs to the City associated with the work to

be done under the permit. All costs shall be assessed in a non-discriminatory manner.

(b) The City Engineer may reduce or waive permit fees or penalties or portion thereof provided for in this Chapter, when he/she determines that such permit fee or penalty:

- (1) pertains to construction or rehabilitation of housing for Persons whose income is below the median income level for the City; or
- (2) pertains to work by a contractor on City owned systems at the request of the City.

(c) Additional charges to cover the reasonable cost and expenses of any required engineering review, inspection, and work site restoration associated with each undertaking may be charged by the City to each Permittee, in addition to the initial permit fee.

(d) The fee structure for review of any storm water discharge permit application shall be established by the City Engineer. All of the monetary contributions shall be credited to a local budgetary category to support local plan review, inspection and program administration, and shall be made prior to the issuance of any permit for the development.

**6-15-113. Permit - Contents - Duration and Extensions.**

(a) Each permit application shall state the estimated starting and completion dates of construction. Work shall be completed within a reasonable period of time from the starting date or as determined by the City Engineer. Such determination shall be based upon factors reasonable related to the work to be performed under the permit. Such factors may include, in addition to other factors related to the work to be performed, the following:

- (1) The scope of work to be performed under the permit;
- (2) Protecting existing public improvements impacted by the work;
- (3) The seasons of the year during which the work is to be performed as well as the current weather and its impact on public safety and the environment.

The City Engineer shall be notified by the Permittee of commencement of the work a minimum of twenty-four hours prior to commencing work. The permit shall be valid for the time period specified in the permit or as amended.

(b) If the work is not completed during such period, prior to the expiration of the permit, the Permittee may apply to the City Engineer for an additional permit or an extension, which may be granted by the City Engineer for good cause shown. The length of the extension requested by the Permittee shall be subject to the approval of the City Engineer.

(c) The Storm Water Pollution Prevention Plan shall be amended as required for an extension.

**6-15-114. Permit - No Transfer or Assignment.**

Permits shall not be transferable or assignable, and work shall not be performed under a permit in any place other than that specified in the permit. Nothing herein contained shall prevent a Permittee from subcontracting the work to be performed under a permit; provided, however, that the holder of the permit shall be and remain responsible for the performance of the work under the permit, and for all bonding, insurance and other requirements of this Chapter and under said permit. Subcontractors shall also be appropriately licensed, insured and bonded.

**6-15-115. Storm Water Pollution Prevention Plan**

(a) A Storm Water Pollution Prevention plan shall be required with all permit applications providing for erosion and sediment control and storm water management during the land disturbing activity and after the activity has been completed. The Storm Water Pollution Prevention Plan must meet the requirements of the current UPDES Storm Water General Permit for Construction Activities.

(b) For development or redevelopment occurring on a previously developed site, an applicant shall be required to include within the Storm Water Pollution Prevention Plan measures for controlling existing storm water runoff discharges from the site in accordance with the standards of this Ordinance.

**6-15-116. Long-Term Storm Water Management Requirements**

Controlling Peak Runoff from Sites. All site designs shall establish storm water management practices to control the peak flow rates of storm water discharge associated with specified design storms having a 10-year return frequency or a 25-year return frequency if located in the Residential Foothill subzone. These practices shall mirror pre-development peak runoff from the site.

Owners and operators of development and re-development sites within the jurisdictional limits of the City which disturb one acre or more of surface area, or are part of a common plan of development that disturbs one acre or more and have not passed a final storm water inspection for notice of termination are required to meet the following requirements:

(a) Controlling Runoff Volume from New Development Sites. New development projects must manage on-site and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to the 80<sup>th</sup> percentile rainfall event by the use of practices that infiltrate, evapotranspire, and/or harvest rainwater.

(b) Controlling Runoff Volume from Redevelopment Sites. Redevelopment projects must be developed such that either:

- (1) There is no more than 10% increase to impervious surface area at project completion; or
- (2) At project completion the net increase in volume associated with precipitation from all rainfall events less than or equal to the 80<sup>th</sup> percentile rainfall event is managed on site by the use of practices that infiltrate, evapotranspire, and/or harvest rainwater.

(c) Additional Storm Water Design Requirements. Storm water discharges from land uses or activities with higher potential pollutant loadings, as determined by the City Engineer, may require the use of specific structural best management practices and pollution prevention practices based on policy established by the City Engineer. Prior to design, applicants are required to consult with the Engineering Department to determine if they are subject to additional storm water design requirements.

6-15-117 Storm Water Management Design Criteria

(a) Peak Runoff Calculations. Hydrologic design calculations for the pre-development and post-development conditions must show that the proposed storm water management measures are capable of controlling runoff from the site in compliance with this ordinance based on specified design storms. A description and source of all parameters used in the calculations shall be included. The calculations should be based on one of the following:

- (1) Rational Method
- (2) National Resources Conservation Service (NRCS) Method
- (3) Unit Hydrograph derived from locally-observed data
- (4) Any methodology as approved by the city engineer

(b) Retention Volume Calculations. Calculations used to determine Retention Volumes including the 80<sup>th</sup> Percentile Storm Depth, Project Volume Retention Goal, Water Quality Volume, and Volumetric Runoff Coefficient shall be based on methods described in the current edition of the Utah Division of Water Quality publication: *A Guide to Low Impact Development within Utah*,

(c) Practices used for the on-site management of precipitation and specific design performance criteria shall be according to a list of approved practices provided by the Engineering Department.

(d) Design Feasibility. All site designs shall be within feasibility constraints as determined by the City Engineer. A list of feasibility constraints will be provided by the Engineering Department.

If the standard to control runoff volume on a site is not feasible due to constraints, then said standard must be met to the maximum extent feasible and an alternative treatment design shall be provided for all runoff under said standard that is not controlled on site.

(e) Soils Information: If a storm water management control measure fundamentally depends on the hydrologic properties of soils (e.g., infiltration basins), then a soils report shall be submitted. The soils report shall be based on on-site boring logs or soil pit profiles and soil survey reports.

(d) Maintenance Agreements. All storm water treatment facilities shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. The agreement shall include:

- (1) Provisions allowing for access, inspections, and corrective action
- (2) Provisions for the Engineering Department to notify the responsible party if storm water facilities are found to contain any defects or are not being adequately maintained;
- (4) Provide that if the property is not maintained or repaired within the prescribed schedule, the City Engineer may perform the maintenance and repair at its expense, and assess the owner(s) of the facility for the cost of necessary work and any penalties; and
- (5) Any other provisions necessary to accomplish the goals of this Chapter as determined by the City Engineer.

**6-15-118. Storm Water Discharge Permit Waiver.**

(a) Every applicant shall provide storm water management as required by this chapter unless a written request is filed to waive this requirement or any part thereof. Requests to waive the storm water management requirements shall be submitted to the City Engineer for approval.

(b) The minimum requirements for storm water management may be waived in whole or in part upon written request of the applicant, provided that at least one of the following conditions applies:

(1) It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this ordinance.

(2) Provisions are made to manage storm water by an off-site facility. The off-site facility is required to be in place, to be designed and adequately sized to provide a level of storm water control that is equal to or greater than that which would be afforded by on-site practices and there is a legally obligated entity responsible for long-term operation and maintenance of the facility.

(c) In instances where one of the conditions above applies, the City Engineer may grant a waiver from strict compliance with these storm water management provisions, as long as acceptable mitigation measures are provided. However, to be eligible for a waiver, the applicant must demonstrate to the satisfaction of the City Engineer that the waiver will not result in the following impacts to downstream waterways:

- (1) Deterioration of existing culverts, bridges, dams, and other structures;
- (2) Degradation of biological functions or habitat;
- (3) Accelerated streambank or streambed erosion or siltation;
- (4) Increased threat of flood damage to public health, life, property

(d) Furthermore, where compliance with minimum requirements for storm water management is waived, the applicant will satisfy the minimum requirements by meeting one of the mitigation measures selected by the city. Mitigation measures may include, but are not limited to, the following:

- (1) The purchase and donation of privately owned lands, or the grant of an easement to be dedicated for preservation and/or reforestation. These lands should be located adjacent to the stream corridor in order to provide permanent buffer areas to protect water quality and aquatic habitat,
- (2) The creation of a storm water management facility or other drainage improvements on previously developed properties, public or private, that currently lack storm water management facilities designed and constructed in accordance with the purposes and standards of this ordinance,
- (3) Monetary contributions (Fee-in-Lieu) to fund storm water management activities such

as research and studies (e.g., regional wetland delineation studies, stream monitoring studies for water quality and macroinvertebrates, stream flow monitoring, threatened and endangered species studies, hydrologic studies, and monitoring of storm water management practices.)

(e) Fee in Lieu of Storm Water Management Practices. Where the Engineering Department waives all or part of the minimum storm water management requirements, or where the waiver is based on the provision of adequate storm water facilities provided downstream of the proposed development, the applicant shall be required to pay a fee in an amount as determined by the Engineering Department. When an applicant obtains a waiver of the required storm water management, the monetary contribution required shall be in accordance with a fee schedule (unless the developer and the storm water authority agree on a greater alternate contribution) established by the Engineering Department, and based on the cubic feet of storage required for storm water management of the development in question. All of the monetary contributions shall be credited to an appropriate capital improvements program project, and shall be made by the developer prior to the issuance of any building permit for the development.

(f) Dedication of Land. In lieu of a monetary contribution, partially or totally, an applicant may obtain a waiver of the required storm water management by entering into an agreement with the City Engineer for the granting of an easement or the dedication of land by the applicant, to be used for the construction of an off-site storm water management facility. The agreement shall be entered into by the applicant and the City Engineer prior to the recording of plats or, if no record plat is required, prior to the issuance of the building permit.

#### **6-15-119. Review and Approval**

(a) The Engineering Department will review each application to determine its conformance with the provisions of this regulation. Within 14 days after receiving a complete application, the Engineering Department shall, in writing:

- (1) Approve the permit application;
- (2) Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
- (3) Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.

(b) Failure of the Engineering Department to act on an original or revised application within the specified time period shall authorize the applicant to proceed in with the plans as filed unless such time is extended by agreement between the applicant and the Engineering Department.

#### **6-15-120. Inspection**

(a) Field inspections shall be conducted by the Engineering Department or other designated agent as outlined in the inspection procedure provided by the Engineering Department.

(b) Where it is necessary to make an inspection to enforce the provisions of this ordinance, or where the City Engineer has reasonable cause to believe that there exists upon a premises a condition which is contrary to or in violation of this ordinance the City Engineer or designee is authorized to enter the premises at reasonable times to inspect or to perform the duties imposed by this ordinance, provided that if such premises be occupied that credentials be presented to the occupant and entry requested. If such premises be unoccupied, the City Engineer shall first make a reasonable effort to locate the owner or other person having charge or control of the premises and request entry. If entry is refused, the City Engineer shall have recourse to the remedies provided by law to secure entry.

#### **6-15-121. As Built Plans**

All applicants are required to submit actual "as built" plans for any storm water management practices located on-site after final construction is completed. The plan must show the final design specifications and maintenance requirements for all storm water management facilities and must be certified by a professional engineer. A final inspection by the Engineering Department is required before the release of any performance securities can occur.

#### **6-15-122. Enforcement**

(a) Stop-Work Order; Revocation of Permit. In the event that any person holding a building permit or site development permit pursuant to this ordinance violates the terms of the permit or implants site development in such a manner as to materially adversely affect the health, welfare, or safety of persons residing or working in the neighborhood or development site or as to be materially detrimental to the public welfare, environment, or injurious to property or improvements in the neighborhood, the Engineering Department may suspend or revoke the site development permit and/or building permit. If cause for permit suspension or revocation is a storm water discharge permit violation that does not pose an immediate or imminent threat to water quality, the Engineering Department must first follow an enforcement procedure which includes providing notice of the violation and opportunity to correct it before suspending or revoking the site development permit and/or building permit.

(b) Violation and Penalties. Whenever the Engineering Department 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 to the responsible person or property owner. Such notice may require, without limitation:

- (1) The performance of monitoring, analyses, and reporting;
- (2) The elimination of illicit connections or discharges;
- (3) That violating discharges, practices, or operations shall cease and desist;
- (4) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;
- (5) Payment of a fine to cover administrative and remediation costs; and
- (6) The implementation of source control or treatment BMPs.

(c) Any person violating any of the provisions of this ordinance shall be deemed guilty of a Class C misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense.

(d) Any work done or condition created or allowed, in violation of this ordinance is hereby declared to be a public nuisance, which may be abated by a civil legal action by the City Attorney.

**6-15-123. Appeals**

Any enforcement action taken by the City Engineer according to this Chapter may be appealed to the City Manager by filing a written notice of appeal within ten days of the action of the City Engineer. The City Manager shall hear such appeal, and render his/her decision within 14 days following notice of such appeal.