City of Northfield

Stormwater Ordinance – Draft (June 7, 2010)

To be included in the City Code of Ordinances, Chapter 22, division 2 – Stormwater Management

Note: Performance standards and requirements that specifically pertain to the Rice Creek Subwatershed are written in italics.

DIVISION 2. – STORMWATER MANAGEMENT

Section xx-xxx. – Purpose, scope and definitions

(a) Purpose. The purpose of this division is to minimize negative impacts of stormwater runoff pollution on the city's water resources by regulating development activities and by assuring long-term effectiveness of existing and future stormwater management facilities on public and private property. This division sets forth rules and regulations to manage the stormwater runoff and establishes procedures for the development and approval of a stormwater management plan. This division is adopted pursuant to the authorization contained in Minnesota Statutes Chapter 103B and 462, and Minnesota Rules Chapter 7090.

(b) Applicability. A stormwater management plan meeting the standards and procedures established herein shall be submitted as part of an application for any Site Plan Review or Plat.

(c) Exceptions. A Stormwater Management Plan is not required for the following:

(1) Any part of a subdivision if a preliminary plat for the subdivision has been approved by the City Council on or before the effective date of this Article.

(2) Any site plans approved on or before the effective date of this Article.

(3) A lot for which a building permit has been approved on or before the effective date of this Article.

(4) Emergency work to preserve life, limb, or property.

(d) NPDES Construction Stormwater Permit. All stormwater management plans must comply with the most recent NPDES permit requirements as administered under the Minnesota NPDES General Stormwater Permit for Construction Activity, Permit Number MN R100001 and all subsequent revisions, except where more specific requirements are contained herein.

(e) TMDL Allocation Plans. All stormwater management plans must be in compliance with TMDL allocation plans, and other special plans as shall be adopted and amended from time to time.

(f) Compliance with city plans and permits. All stormwater management plans must be prepared in accordance with the city's Surface Water Management Plan (SWMP), Greenway System Action Plan and the city's current NPDES MS4 Permit.

(g) The city may waive requirements of this ordinance upon making a finding that compliance with the requirements will involve an unnecessary hardship and the waiver of such requirements will not adversely affect the standards and requirements set forth in this ordinance. The city may require, as a condition of the waiver, such dedication (e.g. land, easement, etc.), construction, or

fee in lieu of construction as a contribution to off-site facilities, as may be necessary to adequately meet said standards and requirements.

(h) Definitions. (see separate document)

Section xx-xxx. – Application, review and approval process

(a) No building permit, grading permit, erosion and sediment control permit, site plan approval or subdivision approval shall be issued until the city has approved a required stormwater management plan. A stormwater management plan application shall be made on a form provided by the city and shall include all accompanying documents required by the city. Approval of a stormwater management plan does not exempt the applicant from the requirements and permitting authority of other agencies having jurisdiction over the work performed nor from other permitting processes required by the city. The process and requirements for approval of a stormwater management plan are specified below:

(1) Site Plan.

a. Application. The submittal requirements listed herein shall be submitted with an application for a site plan review.

b. Stormwater management plan. The plan shall be prepared by a licensed professional engineer or other professional acceptable to the city.

c. Application fee. A fee shall be paid by the applicant. The fee shall cover the costs of application review and all routine inspections for monitoring compliance and enforcement. Any inspections and administration of the application triggered by a correction notice are not included in this fee. The amount of the fee shall be set by city council resolution from time to time.

d. Escrow deposit or financial security. The city shall require financial security in such form and amounts as deemed necessary to assure that the work, if not completed in accordance with the reviewed plans and specifications, will be corrected to eliminate conditions posing a danger to public health, safety and welfare, adjacent property and the environment. The security shall be in the form of a surety bond, cash bond, or an irrevocable letter of credit. The financial security must be in place prior to any work. The amount of financial security required will be calculated based on the work detailed in the plans and specifications. The city may require a portion of the security to be provided as a cash escrow based on the proposed work. The applicant may be required to maintain the escrow at a minimum amount set by the city.

e. Application review. The city's development review committee shall review the application for completeness and compliance with standards as part of the site plan review. City staff may request changes or additional information from the applicant.

f. Reviewed plans. If the plans meet the performance standards and requirements of this Ordinance, the city shall endorse in writing or stamp on the plans "Reviewed." However, construction activities may begin only upon approval of the site plan review application. Such reviewed plans shall not be changed or deviated from by the applicant without authorization from the city. One set of

reviewed plans shall be returned to the applicant, and that set shall be kept on the site of project site at all times during which the authorized work is in progress.

(2) Platted development.

a. Application. The submittal requirements listed herein shall be submitted with applications for preliminary and final plat.

b. Stormwater management plan. The plan shall be prepared by a licensed professional engineer or other professional acceptable to the city.

c. Application fee. A fee shall be paid by the applicant. The fee shall cover application review and all routine inspections for monitoring compliance and enforcement. Any inspections and administration of the application triggered by a correction notice are not included in this fee. The amount of the fee shall be set by city council resolution from time to time.

d. Escrow deposit or financial security. The city shall require financial security in such form and amounts as deemed necessary to assure that he work, if not completed in accordance with the reviewed plans and specifications, will be corrected to eliminate conditions posing a danger to public health, safety and welfare, adjacent property and the environment. The security shall be in the form of a surety bond, cash bond, or an irrevocable letter of credit. The financial security must be in place prior to any work. The amount of financial security required will be calculated based on the work detailed in the plans and specifications. The city may require a portion of the security to be provided as a cash escrow based on the proposed work. The applicant may be required to maintain the escrow at a minimum amount set by the city.

e. Application review. The city's development review committee shall review the application for completeness and compliance with standards as part of preliminary and final plat review. City staff may request changes or additional information from the applicant.

f. Reviewed plans. If the plans meet the performance standards and requirements of this Ordinance, the city shall endorse in writing or stamp on the plans "Reviewed" at time of final plat review. However, construction activities may begin only upon approval of the final plat application. Such reviewed plans shall not be changed or deviated from by the applicant without authorization from the city. One set of reviewed plans shall be returned to the applicant, and that set shall be kept on the project site at all times during which the authorized work is in progress.

Section xx-xxx. – Post-Construction Performance Standards for Stormwater Management

(a) Water Quality Criteria

(1) Best management practices shall be implemented that reduce the total suspended solids load by ninety (90) percent, and the phosphorus load by sixty (60) percent from the runoff generated by the 2-year, 24-hour event for the developed site as a whole, as compared to no runoff management controls. These standards may be met through the runoff volume

reduction criteria below (subsection (c) of this section). If the criteria are met through ponding, the following guidelines for the design of wet detention basins shall be followed:

a. A permanent pool ("dead storage") volume below the principal spillway (normal outlet) which shall be greater than or equal to the runoff from a 2.5-inch storm over the entire contributing drainage area assuming full development.

b. A permanent pool average depth (basin volume/basin area) which shall be $\geq$ 4 feet, with a maximum depth of $\leq$ 10 feet.

c. Basin side slopes above the normal water level should be no steeper than 3:1, and preferably flatter. A basin shelf with a minimum width of 10 feet and 1 foot deep below the normal water level is recommended to enhance wildlife habitat, reduce potential safety hazards, and improve access for long-term maintenance.

d. The pond should be wedge shaped with the inlet at the narrowest end and the outlet at the widest end. A length to width ration of 3:1 or greater shall be used whenever possible. Distance between outfalls and outlets should be maximized.

e. Skimmers or other similar devices are required on pond outlets. Designs shall provide for skimmers that extend a minimum of 4 inches below the water surface and minimize the velocities of water passing under the skimmer to less than 0.5 feet per second for the 1-year 24-hour event.

f. Side slopes shall be seeded with native seed mix appropriate to the site conditions. Upland buffers on side slopes are required. Buffers shall include a mixture of deciduous and coniferous shrubs and include access for pond maintenance. Trees are encouraged as part of the upland buffer. Buffers shall be designed to provide maintenance access to the facility.

g. The applicant shall provide the city with a two year warranty on all vegetation to ensure plant establishment and survival.

h. Pond designs that incorporate filtered bottom withdrawal, vegetated swale discharges, or constructed wetland treatment cells to limit temperature increases are encouraged.

i. Pond designs that incorporate tree shading to limit future temperature increases are encouraged.

(2) Infiltration/filtration methods, described under runoff volume control are the preferred approach to satisfying the water quality treatment requirements in all areas of the city where practical and subject to the limitations of (c) (4) below. *Infiltration/filtration methods described under runoff volume control are the required approach to satisfying the water quality treatment requirements in areas that drain to Rice Creek and its tributaries.*

(3) For all projects, street catch basins must have a three (3) foot sump.

(b) Runoff Rate Control Criteria

(1) Expansion/redevelopment projects. For the 2-year, 10-year, and 100-year 24-hour SCS Type II storm events and the 100-year 10-day snowmelt event (Table 1), the proposed post development runoff rate must not exceed the existing conditions runoff rate at all points leaving the site. The city may reduce or waive the need for expanded on-site improvements if downstream facilities can accommodate the additional rate increase. In flood prone areas and landlocked subwatersheds, greater restrictions may apply. Pervious curve numbers shown in Table 3 shall be used for existing and new turf grass.

(2) *All new development in the City and any development in the Rice Creek Subwatershed. For the 2-year, 10-year and 100-year 24-hour SCS Type II storm events and the 100-year 10-day snowmelt event (Table 1), the proposed post development runoff rate must not exceed the rate for pre-settlement conditions. Pre-settlement conditions shall be defined as the estimated land cover in the area before European settlement as determined by historic topographic and photographic data. Runoff curve numbers shown in Table 2 shall be used for determining presettlement conditions. In flood prone areas and landlocked subwatersheds, greater restrictions may apply. Pervious curve numbers shown in Table 3 shall be used for existing and new turf grass.*

Table 1.Precipitation for different storm events

SCS Type II 24-hour storm event	**Precipitation**
1-Year	2.3 inches
2-Year	2.8 inches
10-Year	4.25 inches
100-Year	6.1 inches
SCS Type II 10-day snow melt	
100- year 10-day snow melt	7.05 inches

Table 2. Runoff curve numbers for pre-settlement "Prairie" conditions

Hydrologic Soil group	A	B	C	D
Runoff Curve Number	30	58	71	78

Table3: SCS Pervious Curve Numbers for Turf Grass

Hydrologic Soil group	A	B	C	D
Runoff Curve Number	61*	61	74	77

*Curve number of 61 is used for both A and B soils to reflect the standard landscaping practice of placing loamy soils on top of compacted subgrade in preparation for the placement of turf grass.

(4) The stormwater system must be designed to provide discharge capacity or level of service for the following system components. The city may allow variance to these standards if regional ponding systems are located downstream.

Local storm sewer – 5-year event
Trunk storm sewer – 10-year event
Storm ponds, pipe and drainageways connecting ponds, and open channels – 100-year event.

(5) For stormwater collection systems not designed to meet rate control standards (e.g. catch basins), a clogging factor of 50% will be used to size intake structures

(6) No orifice having a diameter less than eight inches is allowed in the design of rate control structures within the city. If a structure having an opening less than 8 inches is required to meet rate control requirements, the required rate control for a site will be increased to allow a rate consistent with an opening of this size.

(7) An emergency spillway or outlet from ponding areas shall be installed at a minimum of one foot below the lowest building opening and shall be designed to have a capacity to overflow water at an elevation below the lowest building opening at a rate not less than three times the 100-year peak discharge rate from the basin or the anticipated 100-year peak inflow rate to the basin, whichever is higher. A narrative shall be submitted describing the secondary flow paths for events larger than the 100-year event.

(c) Runoff Volume Control Criteria

(1) New development and expansion/redevelopment projects. Projects must infiltrate the first 0.75 inches of runoff from impervious surfaces.

(2) *Rice Creek subwatershed. For the 2-year 24-hour SCS Type II event (Table 1), the proposed post development runoff volume must not exceed the presettlement conditions runoff volume at all points where runoff leaves the site. Infiltration/filtration basins must be setback at least 300 feet from the centerline of Rice Creek to minimize thermal impacts to groundwater and Rice Creek.*

(3) When designing infiltration for volume control, on-site testing and detailed analyses are strongly encouraged to determine the infiltration rates of the proposed infiltration facility. Documented site-specific infiltration or hydraulic conductivity measurements completed by a licensed soil scientist or engineer is required for all regional infiltration facilities, which are defined as infiltration facilities with proposed drainage areas greater than two acres or with proposed drainage areas with 0.7 acres or more of impervious surfaces. In the absence of a detailed analysis, the saturated infiltration rates listed in Table 4 must be used A soil boring with blow counts is required at the location of a proposed regional infiltration facility. The soil boring is required to go to depth of at least five feet below the proposed bottom of the infiltration facility. If bedrock is suspected, the soil boring must go to a depth of at least ten feet below the proposed bottom of the infiltration facility. The soils must be classified using the Unified Soil Classification system. The least permeable soil horizon will dictate the infiltration rate. *Infiltration practices shall be designed to infiltrate the required runoff volume within 24 hours within the Rice Creek Subwatershed and* 72 hours for any development elsewhere in the City.

Table 4.Hydrologic soil groups and saturated infiltration rate

Hydrologic Soil group	A	B	C	D
Saturated infiltration rate (inches per hour)	0.50	0.25	0.10*	0.01*

* Infiltration is not allowed in C and D soils without soil corrections

(4) The following standards apply to infiltration facilities or practices:

a. Pretreatment of stormwater runoff is required to protect the infiltration systems from clogging with sediment and to protect ground water quality.

b. Must conform to the minimum setbacks required by the Minnesota Department of Health

c. Cannot be used within fifty feet (50') of a municipal, community, or private well unless specifically allowed by an approved wellhead protection plan.

d. Cannot be used on areas with less than three feet (3') vertical separation from the bottom of the infiltration system and the seasonal high water table or bedrock, or 10 feet where fractured bedrock is present.

e. Cannot be used for runoff from fueling and vehicle maintenance areas and industrial areas with exposed materials posing contamination risk.

f. Cannot be used in type C and D soils without soil corrections.

(5) Where achieving volume control standards through infiltration is not possible due to site limitations (see immediately preceding subsection), or where space limits opportunities for site redevelopment and expansion, the city may reduce and/or waive volume control standards. In considering reducing or waiving volume control requirements, the following will be considered in order of decreasing preference:

a. Modifications to the site design to incorporate additional LID or "better site design" practices as described in the Minnesota Stormwater Manual, to the extent practical.

b. Use of filtration practices.

c. Opportunities for storage and reuse of water on-site.

d. Contribution of a fee in lieu of on-site volume control measures (SWAC). Fee is contributed towards achievement of the volume control requirement through an off-site city-owned and managed facility.

(d) General Performance Standards

(1) All stormwater treatment must be designed to address the actual amount of impervious surface or the following impervious surface coverage amounts for the entire development site, whichever is higher.

a. Residential lots (1 or 2 dwelling units) – 40%

b. Commercial and Industrial lots – 85%

c. *All plats in the Rice Creek Watershed – 65%*

(2) Unless superseded by the City's requirements, stormwater management practices shall be designed according to the most current technology as reflected in the MPCA publication "Minnesota Stormwater Manual," as supplemented and amended from time to time.

(3) All structural or engineered stormwater treatment facilities shall be located in an outlot or in a drainage and utility easement dedicated to the city. Facilities may be located within the right of way at the city's discretion. Access of sufficient size shall be provided to each treatment facility to perform maintenance activities identified in the maintenance plan.

(4) All applicants shall submit as-built plans for all structural or engineered facilities at project completion. The plans must show the final design specifications for all facilities. Plans must certify that the facilities meet the performance standards and be signed by a registered professional engineer.

(5) Stormwater management plans must show construction staging and specifically address measures to preserve the infiltration capacity of proposed infiltration facilities to ensure that the performance of such facilities are not impaired at the conclusion of construction. Plans shall also demonstrate methods of staging construction to minimize soil compaction of landscaped areas during construction. Soil testing and decompaction may be required if site construction activities negatively impact soil permeability.

(6) A planted vegetated buffer width of 50 feet shall be established and maintained around all wetlands, stormwater ponds and infiltration/filtration facilities. Buffers shall be measured perpendicular from the high water level of a constructed facility or the delineated wetland edge, and shall be provided and maintained at all times. Monuments/signs shall be located to delineate the buffer. The monuments/signs should be placed at an interval of approximately 100 feet and at locations where the buffer line deviates by more than 30 degrees. The signs should conform to local standards and be at least four feet high, made of non-degradable material, and minimally contain the words: Buffer – Do Not Mow or Fill. Contact City of Northfield for Further Information

Section xx-xxx. – Flood Control

(a) The lowest floor elevation of any structure shall be at least two feet above the elevation of the highest known historic high groundwater elevations.

(b) The lowest floor elevation of any structure shall be at least two feet above the 100-year surface water flood elevation for the area

(c) Delineation of the 100-year flood is required in all areas mapped as "A" on the FEMA Flood Insurance Rate Map.

Section xx-xxx. – Shoreland Areas

(a) The following standards apply to development in shoreland areas as defined by the Shoreland Overlay District:

(1) For any project, runoff from parking areas with 10 or more spaces or in excess of 3,000 square feet must meet the water quality criteria of Section xx.xxx subsection (a) (page 6). Treatment of runoff through volume reduction and infiltration practices is encouraged.

(2) *For any new development or redevelopment/expansion project an undisturbed vegetative buffer of not less than 50 feet from the water body shall be maintained. For projects adjacent to the Cannon River, an undisturbed vegetative buffer of not less than 100 feet shall be maintained and for projects adjacent to Rice Creek, an undisturbed vegetative buffer of not less than 300 feet shall be maintained.* Buffers shall be measured perpendicular from the edge of water on each side of the water body and shall be provided and maintained at all times for all permitted activities adjacent to the water body. Within the undisturbed buffer, vegetation shall not be cultivated, cropped, pastured, mowed, fertilized, subject to the placement of mulch or yard waste, or otherwise disturbed, except for periodic cutting or burning that promotes the health of the buffer, actions to address disease or invasive species, mowing for purposes of public safety, temporary disturbance for placement or repair of buried utilities, or other actions to maintain or improve buffer quality, each as approved by the City or when implemented pursuant to a written agreement executed with the City. No new private structure or impervious surface shall be placed within a buffer. No fill, debris or other material shall be excavated from or placed within a buffer. Exceptions for areas such as water crossings, limited water access and restoration of the buffer are allowed if the exceptions are documented in the stormwater management plan application. Replacement of existing impervious surface within the buffer is allowed.

Section xx-xxx. – Low Impact Development

(a) Low impact development (LID) practices are preferred for all projects to the greatest extent reasonable, subject to the limitations described in Section xx.xxx subsection (c) (4).The city encourages the following LID or better site design practices as described in the Minnesota Stormwater Manual where they do not conflict with the requirements of this ordinance

(1) Better site design practices:
- a. Natural area conservation
- b. Site restoration to prairie or forest
- c. Stream and shoreline buffers
- d. Disconnection of impervious cover
- e. Roof top disconnection
- f. Use of grass channels for conveyance
- g. Reduction of impervious surfaces
- h. Use of trees to shade impervious surfaces

(2) Engineered or structural practices
- a. Bioretention
- b. Infiltration
- c. Filtration

Section xx-xxx. – Maintenance Agreement and Maintenance Plan for Private Stormwater Management Facilities

(a) During the application process, the applicant and the City shall determine which party will be responsible for stormwater facility ownership and long term maintenance responsibilities.

(b) If the applicant is determined to have ownership and maintenance responsibilities, the applicant and city shall enter into an Agreement that documents all responsibilities for operation and maintenance of all stormwater practices. Such responsibility shall be documented in a maintenance plan and executed through an Agreement. The Agreement shall be executed and recorded with the parcel.

(c) The stormwater maintenance agreement shall be in a form approved by the city, and shall, at a minimum:

(1) Designate the owner or other responsible party which shall be permanently responsible for maintenance of the structural or nonstructural measures.

(2) Pass responsibility for such maintenance to successors in title.

(3) Grant the city and its representatives the right of entry for the purposes of inspecting all stormwater measures at reasonable times and in a reasonable manner. This includes the right to enter a property when the city has a reasonable basis to believe that a violation of this Ordinance or maintenance agreement is occurring or has occurred and to enter when necessary for abatement of a public nuisance or correction and enforcement of a violation of this Ordinance or agreement.

(4) Allow the city to repair and maintain the facility, if after proper and reasonable notice by the city to the owner of the facility. The Agreement shall permit the city to certify the costs of the maintenance/correction to the taxes for the subject property.

(5) Include a maintenance plan that contains, but is not limited to the following:

a. Identification of all structural stormwater practices.

b. A schedule for regular inspection, monitoring, and maintenance for each practice. Monitoring shall verify whether or not the practice is functioning as designed and may include, but is not limited to quality, temperature, and quantity of runoff.

c. Identification of the responsible party for conducting the inspection, monitoring and maintenance for each practice.

(6) Identify a schedule and format for reporting compliance with the maintenance plan to the city.

Section xx.xxx. – Application submittal requirements

(a) Project narrative describing stormwater management objectives, site conditions and how the proposed practices will address objectives and the requirements of this ordinance.

(b) Plans showing predevelopment and post development conditions

(c) All calculations demonstrating compliance with the requirements of this ordinance

(d) All other data, plans, and figures required by the city (see checklist provided by the City).

Section xx.xxx – Enforcement by legal or administrative action

(a) Any action or inaction which violates the provisions of the Ordinance, the requirements of an approved stormwater management plan, and/or the requirements of a development agreement shall be a misdemeanor, and each day during which any violation is committed, continued or permitted, shall constitute a separate offense.

(b) Violation of any provisions of this division may be enforced by civil action including an action for injunctive relief and by any administrative penalties approved by the city.

Definitions

Applicant. A property owner or agent of a property owner who has filed an application for a stormwater management plan.

Best Management Practice (BMP). A stormwater practice that will be operational after the construction phase of a project and that is designed to become a permanent part of the stie for the purposes of managing stormwater runoff. Examples of BMPs can be found in; *Protecting Water Quality in Urban Areas*, Minnesota Pollution Control Agency 2000; *Minnesota Urban Small Sites BMP Manual,* Metropolitan Council 2001; *State of Minnesota Stormwater Manual*, MPCA 2005.

Buffer. An area of land at or near a streambank, wetland, or waterbody that has intrinsic water quality value due to the ecological and biological processes it performs or is otherwise sensitive to changes which may result in significant degradation to water quality.

Dedication. The deliberate appropriation of property by its owner for general public use.

Drainageway. A natural or artificial watercourse with a definite bed and banks that conducts continuously or periodically flowing water.

Detention. The temporary storage of stormwater runoff in a stormwater BMP with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

Easement. A legal right granted by a landowner to a grantee allowing the use of private land for conveyance or treatment of stormwater funoff and access to stormwater practices.

Fee in Lieu Contribution. A payment of money in place of meeting all or part of the stormwater performance standards required by this ordinance.

Impaired Waters. Those streams, rivers, and lakes that currently do no meet their designated use classification and associated water quality standards under the Clean Water Act.

Impervious Cover. Those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc.)

I**nfiltration**. The process of percolating stormwater into the subsoil.

Infiltration Facility. Any structure designed to infiltrate retained water to the subsurface. These facilities may be above grade or below grade.

Landowner. The legal owner of land, including those holding the right to purchase or lease the land, or any other person holding proprietary rights in the land.

Maintenance Agreement. A legally recorded document that acts as a property deed restriction, and that provides for long-term maintenance of stormwater BMPs or practices.

Municipal Separate Storm Sewer System (MS4). Publicly-owned facilities by which stormwater is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, catch basins, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainageways, reservoirs, and other drainage structures.

National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit. A permit issued by the EPA or by a state under authority delegated pursuant to 33 USC § 1342(b), that authorizes the discharge of pollutants to waters of the State, whether the permit is applicable on an individual, group, or general area-wide basis.

New Development. Any land development that occurs on previously undeveloped land or land used for agricultural uses.

Non-Stormwater Discharge. Any discharge to the storm drain system that is not composed entirely of stormwater.

Non-Structural Practice. A stormwater control and treatment technique that uses natural processes, restoration, or enhancement of natural systems, or design approaches to control runoff and/or reduce pollutants levels. Such measures are used in lieu or or to supplement structural practices on a land development site. Non-structural measures include, but are not limited to : minimization and/or disconnection of impervous surfaces; development design that reduces the rate and volume of runoff; restoration or enhancement of natural areas such as riparian area, wetlands, and forest; and on-lot practices such as rain barrels, cisterns, and vegetated area that intercept roof and driveway runoff.

Nonpoint source Pollution. Pollution from any source other than from any discernible, confined, and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, mining, construction, subsurface disposal and urban runoff sources.

Off-Site Facility. A stormwater BMP located outside the subject property boundary described in the stormwater management plan.

On-Site Facility. A stormwater BMP located within the subject property boundary described in the stormwater management plan.

Owner. Includes fee owner, contract purchaser, and lessee for whom construction is being undertaken.

Redevelopment/expansion. Land development that occurs within designated areas based on local land use where the surrounding area is generally developed, and where the site is either vacant or has previously been used or developed.

Regional Facility. Stormwater BMPs designed to control and treate stormwater runoff from multiple properties or a particular land use district, and where the or developers of the individual properties may participate in the provision of land, financing, design, construction, and/or maintenance of the facility.

Responsible Party. Any individual, partnership, co-partnership, firm, company, association, or any other legal entity; or their legal representatives, agents, or assigns that is name on a

stormwater maintenance agreement as responsible for long-term operation and maintenance of one or more stormwater BMPS.

Stop Work Order. An order issued by the city that requires that all construction activity on a site be stopped.

Stormwater Management. The use of structural or non-structural practices that are designed to reduce stormwater funoff pollutant loads, discharge volumes, peak flow discharge rates and detrimental changes in stream temperature that affect water quality and habitat.

Stormwater Runoff. Flow on the surface of the ground, resulting from precipitation.

Structural Practice. An engineered physical device designed and constructed to trap or filter pollutants from runoff, or reduce runoff velocities.

Water Resources. Water resources include ground water, surface water bodies (rivers, creeks, wetlands) and their riparian buffers, and stormwater management facilities and their established vegetative buffers.