

## Chapter 10B

### LAND DISTURBANCE AND STORMWATER MANAGEMENT

#### **Section 10B-1. Purpose; Limitation on Liability; Conflicts; Definitions; Administration and Enforcement.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Purpose.* The purpose of this Section is to protect the health, safety and property of the people of Eureka by regulating and controlling the disturbance of land surface areas as it relates to prevention of erosion on disturbed areas and drainage of stormwater within the City. It is intended to ensure that consideration is given to the preservation and restoration of natural features in the grading or development of any public or private land, that proper provisions are made to assure control of sediments resulting from rainfall on graded areas, and that adequate facilities are constructed for the management of stormwater to assure the movement of emergency vehicles is not inhibited during storm periods; to protect the public from rapidly flowing water or flash floods; to minimize storm and flood losses resulting from uncontrolled runoff and to establish requirements for construction of stormwater management facilities in newly developed areas.
- (b) *Limitation on Liability Related to Stormwater Management Facilities.* Floods from stormwater runoff may occur which exceed the capacity of storm drainage facilities constructed and maintained as a result of this Section. This Section does not guarantee that properties will always be free from stormwater flooding or flood damage. This Chapter shall not create liability on the part of, or a cause of action against, the City or any officer or employee thereof for any flood damage, nor does this Section purport to reduce the need or the necessity of obtaining flood insurance.
- (c) *Conflicts and Other Permits.* Where any provision of this Section imposes restrictions different from those imposed by any other law or regulation, whether State, Federal or local, whichever is more restrictive or imposes a higher standard shall control. All applicable permits required by Federal, State and/or County agencies including, but not limited to, the United States Army Corps of Engineers, United States Federal Emergency Management Agency, Missouri Department of Natural Resources, Missouri Department of Conservation, and St. Louis County shall be secured by the property owner or developer and attached to the City's land disturbance permit application form.
- (d) *Definitions.* For the purposes of this Chapter, the following words and phrases shall have the meanings given herein.

AGRICULTURAL ACTIVITY — Normal farming operations, including improvements conducted under the auspices of the Soil Conservation Service.

**BOARD** — The Board of Aldermen of the City of Eureka, Missouri.

**CRITICAL DOWNSTREAM LOCATION** — A location within the drainage reach downstream of the subject site, consisting of a channel section, drainage swale, bridge, box culvert, storm sewer, or other conveyance facility or structure having a conveyance capacity which would be exceeded by stormwater runoff from a fifteen-year frequency, twenty-four-hour duration storm under existing land use conditions; or an existing structure or building located downstream of the subject site which has its lowest floor elevation less than one (1) foot above the maximum elevation in an adjacent channel attained by the one-hundred-year frequency, twenty-four-hour duration storm, assuming existing land use conditions with the proposed ultimate development of the subject site in place. The conveyance capacity of a structure operating under inlet control conditions shall be determined with a maximum headwater to diameter ratio (HW/D) of 1.25 with a headwater elevation equal to the top of curb, whichever is less.

**BUILDING COMMISSIONER** — The agent of the City of Eureka having primary responsibilities for enforcement of this Chapter.

**DESIGN YEAR STORM** — The selected or established frequency or return period of rainfall time-duration for which drainage facilities are to be designed.

**DEVELOPMENT** — Any change of land use or improvement on any parcel of land.

**DRAINAGE BASIN (OR WATERSHED)** — The catchment area from which stormwater is carried off by a watercourse or storm drainage system. The area served by a drainage system receiving storm and other surface-borne water. The definition of "drainage basin" boundaries is a product of natural topography and drainage system configuration.

**DRAINAGE FACILITY** — A man-made structure or natural watercourse for the conveyance of storm runoff. Examples are channels, pipes, ditches, swales, catch basins and street gutters.

**IMPERVIOUS SURFACE** — Surfaces on real property where infiltration of stormwater into the earth has been virtually eliminated by acts of humankind. Impervious surfaces shall include, but not be limited to roofs, paved driveways, patio areas, sidewalks, parking lots, storage areas and other oil or macadam surfaced areas which prevent percolation of stormwater into the earth's surface.

**LAND DISTURBANCE** — Any activity including mechanized clearing which removes the vegetative ground cover.

**LAND DISTURBANCE PERMIT** — A permit issued by the City that authorizes the commencement of land disturbance activities.

**OWNER** — Any person having legal title to, or a proprietary interest in, real property. Proprietary interest shall include, but not be limited to, estate administration, trusteeship, guardianship or actions under a valid power of attorney.

**PEAK RUNOFF** — The maximum rate at which stormwater travels across the surface of the ground.

**SITE** — The total area of the parcel, tract, lot or ownership of land upon which development or land disturbance is proposed irrespective of the actual limits or size of the proposed development or land disturbance activity.

**STORM DRAIN** — A closed conduit or open ditch, natural or specifically constructed, for conducting or conveying collected stormwater. Conduits and paved open ditches are termed "improved"; unpaved ditches are termed "unimproved."

**PRIVATE STORM DRAINAGE SYSTEM** — A drainage facility which serves only one (1) particular site and does not collect or transport stormwater from any drainage basin or roadway outside the site.

**PUBLIC STORM DRAINAGE SYSTEM** — Any drainage facility which serves more than one (1) property and collects or transports runoff from off site.

**STORM DRAINAGE DESIGN** — Design shall be in accordance with the requirements of the Metropolitan St. Louis Sewer District in the development of minor storm drainage systems, such as storm drains, relatively small culverts, associated streets and gutter flow hydraulics, natural drainage swales, storm inlets and detention facilities.

**SWALE** — A wide shallow ditch used to carry storm runoff.

**TOPSOIL** — Top organic layer of the soil profile.

**TREE** — Any self-supporting woody perennial plant, usually with one (1) main stem or trunk. For purposes of identifying existing trees, deciduous shade trees shall have a four-inch caliper, measured four and one-half (4½) feet above the ground and ornamental evergreen species shall be a minimum of six (6) feet in height.

**TREE CANOPY COVERAGE** — The area in square feet of a tree's spread determined by measuring the ground surface area that is covered by the branch spread of a single tree or clump or grove of trees.

**UNIMPROVED LAND** — Land or property having little or no impervious surface.

**WATERCOURSE** — A stream, usually flowing in a particular direction (though it need not flow continuous in a definite channel), having a bed or banks and usually discharging into some other stream or body of water.

(e) *Administration And Enforcement.* The provisions of this Chapter shall be administered and enforced by the Building Commissioner of the City of Eureka.

**Section 10B-2. Land Disturbance Permit Requirements.** [Ord. No. 2307 §2, 7-15-2014]

(a) A land disturbance permit is required for any land disturbance activity, including streets and utilities construction on any site in excess of one (1) acre in area, including projects less than one (1) acre that are part of a larger common plan or development or sale. All applications shall be submitted on forms issued by the City and shall contain all information as required. Land disturbance permit applications must be reviewed and approved by the Board of Aldermen prior to issuance.

- (b) Applications for land disturbance permits shall be accompanied by a detailed site development plan which shall include proposed tree clearing limits, a landscaping plan when applicable, a soil erosion control plan, and a stormwater pollution prevention plan (SWPPP) conforming to the provisions of this Section. Proposed tree clearing limits must be defined in a manner so as to be readily discernable (such as by aerial photographs and/or physical surveys and tree inventories). Such tree clearing limits must be represented in a manner that allows that which is authorized to be accurately translated to the subject property by stakes, paint, flags or other highly visible means. Where practical, drawings may be combined to contain all of the required components.
- (c) On land being platted, approval of the site development plan shall be required prior to approval of the final plat (final plan in planned districts) and shall encompass the entire area being final platted or developed.
- (d) A land disturbance permit shall not be required for sites of less than one (1) acre except as noted elsewhere in this Chapter.
- (e) Agricultural activities as defined in Section 10B-1 are exempt from the provisions of this Chapter except that a land disturbance permit is required for the mechanized clearing and removal of trees on sites in excess of one (1) acre.
- (f) An escrow agreement shall be in place with the City prior to issuance of the land disturbance permit. The escrow agreement shall include costs for revegetation, siltation control, erosion control and any other improvements related to accomplishing grading operations. Escrow requirements shall be in accordance with Section 10B-22.
- (g) At all times during any period of construction, remodel or renovation, the adjoining ground, streets (private or public), sidewalks and storm sewers shall be protected from accelerated and increased surface water, silt from erosion, and any other consequences of erosion.
- (h) Grading plans for more than one (1) acre shall provide sediment basins, diversions, grass waterways, protective fencing or barriers to avoid damage to adjoining properties, roads, streets, ditches and storm sewers. Said protective measures shall be installed prior to the commencement of grading by the applicant.
- (i) A separate escrow agreement shall be included for the replanting of trees on the entire portion of the disturbed property. The escrow shall be for thirty (30) trees per acre and in accordance with the escrow requirements specified in Section 10B-22. This escrow shall remain in place until such time that other required escrows are in place for public improvements or construction of improvements has begun on a development not requiring escrows for public improvements.
- (j) The limits of clearing shall be staked and/or marked and approved by the City prior to the start of any land disturbance activities. City staff may require photographic or videographic documentation of field conditions prior to and following land disturbance activities.

- (k) A land disturbance permit shall be obtained from the Missouri Department of Natural Resources for all land disturbance areas greater than one (1) acre or as amended by changes in the regulations. A copy of the permit shall be provided to the City prior to commencing land disturbance activities.
- (l) Land disturbance activity authorized under this Section must commence within six (6) months from the date of Board of Aldermen approval.
- (m) Land disturbance permits are valid for a period of one (1) year from the date of Board of Aldermen approval; however, the Board may authorize extensions of such permits.
- (n) The failure to comply with the requirements of this Section shall be punishable in Municipal Court with a maximum fine of seven hundred fifty dollars (\$750.00) for each day the violation exists and be subject to the imposition of a stop-work order. Additionally, each tree three (3) inches or greater in caliper that is removed in excess of that which is authorized on the plan which depicts tree clearing limits shall be punishable in Municipal Court pursuant to the general penalty provisions as set forth in Section 1-7 of this Code.

**Section 10B-3. Tree Preservation and Landscaping Requirements.** [Ord. No. 2307 §2, 7-15-2014]

- (a) The destruction within any two-year period of more than ten percent (10%) of the trees on any parcel of land subject to the provisions of this Chapter shall be prohibited without first obtaining any land disturbance permit.
- (b) It shall be required that a minimum of twenty percent (20%) of existing trees exclusive of acreage contained within any street right-of-way shall be retained after development. In determining such existing tree retainage, physical counts of individual trees shall be utilized; however, as approved by the City, percentage of tree canopy coverage may be utilized to satisfy this requirement. All cleared or disturbed areas shall be planted with trees of species and specifications as required by the City, thirty (30) trees per acre, in the following areas:
  - (1) Residential developments: outside the boundaries of individual lots, to include common ground, easements (as approved by the City), park areas, exterior slopes of detention basins, etc.
  - (2) Other developments: in areas not occupied by improved surfaces, except in areas in the front of buildings.
- (c) A landscaping plan demonstrating compliance with the specific requirements of the existing zoning of the site shall accompany all applications for land disturbance permits. The plan will be a drawing of the site sufficient in detail to illustrate the features of the plan. The plan may be incorporated with other drawings or documents but shall contain the following information.

- (1) The number, location, species, height and size in diameter [measured four and one-half (4½) feet above grade] of existing natural trees which are to be maintained or preserved for credit.
  - (2) The number, spacing, size and species of planting materials, including new trees and final ground cover, that will be planted as part of the landscaping plan.
  - (3) The size and location of any walls, earth berms and fences.
  - (4) Provisions for watering, soil stabilization, plant protection and maintenance.
  - (5) Location and description of any barriers to be erected to protect any vegetation from damage both during and after construction.
- (d) Tree protection shall be required prior to and during the activities associated with the land disturbance permit in accordance with administrative standards promulgated and enforced by the Building Commissioner but under no circumstances shall activities with the potential of causing damage to the root systems of trees be allowed within perimeter of the drop line of the trees being preserved, protected or planted as part of the landscaping plan.
- (e) If any of the trees required to be retained or trees planted as part of the landscaping plan should die within a period of twenty-four (24) months after completion of the activities associated with the land disturbance permit, the owner of the property shall replace said trees at a ratio of one (1) to one (1) with an approved tree having a minimum diameter of two (2) inches measured at a point one (1) foot above natural grade. Shrubbery or other plantings which die within twenty-four (24) months of completion of the activities shall be replaced in kind.
- (f) All landscaping work must be completed prior to the final inspection of a building or within one (1) year of issuance of the land disturbance permit, whichever is greater. If completion of the work or building is at such time of the year that the landscaping cannot be completed, a performance bond or other acceptable financial instrument for completion of the work may be accepted to allow the issuance of a certificate of use and/or occupancy.
- (g) Landscaping plans may be amended during or after development with the approval of the Building Commissioner but in all cases must comply with the current landscaping requirements of the zoning district in which the site is located.

**Section 10B-4. Erosion Control Requirements.** [Ord. No. 2307 §2, 7-15-2014]

(a) *Erosion Control Requirements - Generally.*

- (1) A soil erosion control plan shall be required prior to the issuance of any applicable land disturbance permit. The purpose of the plan is to clearly establish what measures will be taken to prevent erosion and off-site sedimentation during and after development. The erosion control plan shall consist of three (3) parts, a site grading and drainage plan, a schedule of work including revegetation of disturbed areas, and a narrative report describing the

nature and scope of the work. The plan shall be prepared and certified by a registered professional engineer licensed in the State of Missouri.

- (2) Erosion and sedimentation control measures must be designed to provide protection from the runoff from a fifteen-year return frequency, twenty-minute peak runoff in accordance with the runoff rates established by Metropolitan St. Louis Sewer District. In shopping centers containing a minimum area of five hundred thousand (500,000) square feet, temporary erosion control measures shall be designed so as to accommodate a five-year frequency, twenty-four-hour storm.
  - (3) All surfaces must be stable and non-erosive within thirty (30) working days after rough grading. All areas of grading shall be revegetated within ninety (90) days after rough grading has ceased. In no case shall any portion of the site be void of vegetation for a period of more than one (1) year. When such work is associated with the construction of a building, no certificate of use and/or occupancy shall be issued until such surfaces are stable and non-erosive. If completion of the work or building is at such time of the year that stabilization with ground cover is not possible, a performance bond or other acceptable financial instrument for completion of the work may be accepted to allow the issuance of a certificate of use and/or occupancy.
  - (4) The finished grade of any lot shall be established in compliance with the approved grading permit and plan on file with the City prior to the sale, conveyance or use as a display of any lot or parcel of land located within the City. All lots shall be seeded and strawed or sodded within ten (10) days after completion of the finish grading and prior to the issuance of an occupancy permit, except that a temporary occupancy permit may be issued by the Building Commissioner in cases of undue hardship because of unfavorable ground or weather conditions so long as a bond or other acceptable financial instrument is issued to the City. In those cases where a temporary occupancy permit is issued, the lot shall be seeded and strawed or sodded at the earliest possible time as determined by the Building Commissioner. The failure to comply with a directive of the Building Commissioner to seed and straw or sod shall be an offense punishable in the Municipal Code for each day such directive is not complied with, subject to a maximum penalty of seven hundred fifty dollars (\$750.00) per day, and be subject to the imposition of a stop-work order in addition to other remedies available to the City under the performance bond or financial instrument.
  - (5) The applicant shall notify the Building Commissioner, in writing, when rough grading and finish grading before seeding or sodding shall be completed. The Building Commissioner shall make field inspections after rough grading, after finish grading before seeding or sodding, and after seeding or sodding have been completed to determine that the work has been performed in accordance with City Codes.
- (b) *Site Grading And Drainage Plan.* The site grading and drainage plan shall include the following:

(1) *Existing features.*

- a. A drainage area map showing topography of the entire drainage basin(s) contributing to the site. The scale of the map shall be no smaller than one (1) inch equals two thousand (2,000) feet. The drainage map is to show total acreage of the site and the acreage of all drainage areas contributing to the site. A drainage area map of the site having a scale no smaller than one (1) inch equals fifty (50) feet shall also be submitted to show interior drainage areas as well as drainage through the site. Proposed drainage facilities shall be shown on this map.
- b. A site plan having a scale no smaller than one (1) inch equals fifty (50) feet and existing contour intervals of not more than five (5) feet. The plan shall show topographic features, such as highways, utilities, natural watercourses, existing drainage facilities and structures, adjacent property lines, North arrow, scale and vicinity map. The site plan is to also show the limits of the adopted one-hundred-year floodplain on the site and any critical environmental areas, such as streams, lakes, ponds and wetlands. The nature and extent of existing vegetation shall also be shown on the plan.

(2) *Proposed alterations of the site.*

- a. A plan drawing that shows the limits of clearing and grading, cuts and fills, and final contours at not more than two-foot intervals. The plan shall also show the location and type of all erosion and sediment control devices which shall remain in place and be maintained until new vegetation has been established. The plan shall identify the phasing of the grading, showing the area(s) to be denuded and the maximum time those areas will remain disturbed [not to exceed thirty (30) working days after completion of the work]. The plan shall show areas to be used for storage of topsoil and excavated subsoil and plans for access to the site during wet weather. No topsoil shall be removed from the site. The volume of any subsoils to be removed from the site shall be illustrated on the grading plan.
- b. A final site plan showing the location or relocation of all utilities, planned streets, roads, buildings, parking lots, and structures, and all permanent stormwater management facilities.
- c. Topsoil shall be redistributed over the site and incorporated with the top six (6) inches of the finished grade.

(3) *Temporary erosion and sediment control measures during active construction.*

Drawings shall be provided showing types of measures and facilities needed, the location of those measures and facilities with dimensional details. All permanent deviations in overland flow drainage patterns and the location of ingress and egress points with the planned protection provisions are to be indicated.

- (4) *Permanent erosion and sediment control measures for long-term protection.* Drawings shall be provided showing types of measures, any facilities needed, the location of those measures and facilities with dimensional details. All permanent deviations in overland flow drainage patterns are to be indicated.

(c) *Narrative Report To Accompany Plan.*

- (1) A brief description of the overall project shall incorporate an explanation of existing significant drainage problems contributing to erosion and siltation problems, particularly those that will be intensified by the alteration to the construction site.
- (2) The project design should insure that it does not promote or aggravate an existing off-site erosion, siltation or drainage problem. The narrative should include a description of the effect of land disturbing activities off site.
- (3) Runoff-producing factors under existing conditions and the estimated changes after construction must be provided.
- (4) For design of the erosion control measures and facilities, the peak runoff from a fifteen-year return frequency, twenty-minute peak runoff, in accordance with the runoff rates established by Metropolitan St. Louis Sewer District, must be calculated. In shopping centers containing a minimum area of five hundred thousand (500,000) square feet, temporary erosion control measures shall be designed so as to accommodate a five-year frequency, twenty-four-hour storm.
- (5) Long-range management of erosion and siltation control facilities must be addressed in the report.
- (6) The phasing or staging of the land disturbing activity is to be described, including information on the sequence of land clearing operations, specifying the maximum area and time span the area will be left denuded, the provisions for the removal, protection and stockpiling of soil, the types of major earthmoving and grading activities, dust control measures, and the order of placement of control facility installations.
- (7) Explanations for the selection of the erosion and siltation control measures utilized shall be provided.
- (8) A schedule is to be provided for inspection and maintenance of the erosion and sediment control facilities to insure maximum effectiveness of the protective measures and to assure that preventive maintenance efforts are to be carried out when needed. This should also include a description of plans for resodding or reseeded of vegetated areas and repair or reconstruction of damaged structural measures, and the method and frequency of removal and disposal of waste materials removed from the control facilities or project area, including the disposal of temporary structural measures after they have served their purpose.

## **Section 10B-5. Stormwater Management Requirements.**

### **Section 10B-5.1. Stormwater Management Requirements — General Provisions.** [Ord. No. 2307 §2, 7-15-2014]

(a) *Findings Of Fact.* It is hereby determined that:

- (1) Land development activities and associated increases in site impervious cover alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, stream channel erosion, sediment transport and deposition.
- (2) This stormwater runoff contributes to increased quantities of waterborne pollutants.
- (3) Illicit and non-stormwater discharges to the storm drain system can contribute to a wide variety of pollutants to waterways, and the control of these discharges is necessary to protect public health and safety and water quality.
- (4) Improper design and construction of stormwater best management practices (BMPs) can increase the velocity of stormwater runoff, thereby increasing stream bank erosion and sedimentation.
- (5) Clearing and grading during construction increases soil erosion and adds to the loss of native vegetation.
- (6) Impervious surfaces allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream baseflow.
- (7) Substantial economic losses can result from these adverse impacts on the waters of the County.
- (8) Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of stormwater runoff from land development activities.
- (9) The regulation of stormwater runoff discharges from land development activities in order to control and minimize increases in stormwater runoff rates and volumes, stream channel erosion, and nonpoint source pollution associated with stormwater runoff is in the public interest and will minimize threats to public health and safety.
- (10) Regulation of land development activities by means of performance standards governing stormwater management and site design will produce development compatible with the natural functions of a particular site or an entire watershed and thereby mitigate the adverse effects of stormwater runoff from development.

(b) *Intent and Purpose.* The purpose of this Section is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within the City. This Section seeks to meet that purpose through the following objectives:

- (1) To protect the safety and welfare of citizens, property owners, and businesses by minimizing the negative impacts of increased stormwater discharges from new land development and redevelopment.
  - (2) To control the rate, quality and volume of stormwater originating from development and redevelopment sites so that surface water and groundwater are protected and flooding and erosion potential are not increased.
  - (3) To encourage responsible development to occur in the City.
  - (4) To control nonpoint source pollution and stream channel erosion.
  - (5) To maintain the integrity of stream channels and networks for their biological functions, drainage, and natural recharge of groundwater.
  - (6) To protect the condition of State (and U.S.) waters for all reasonable public uses and ecological functions.
  - (7) To provide long-term responsibility for and maintenance of stormwater BMPs.
  - (8) To establish legal authority to carry out all the inspection and monitoring procedures necessary to ensure compliance with this Chapter.
  - (9) To enable the City to comply with the National Pollutant Discharge Elimination System permit and applicable Federal and State regulations.
- (c) *Applicability.* This Chapter shall be applicable to all land development, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Subsection 10B-5.1(d). These provisions apply to any new development or redevelopment site within the City that meets one or more of the following criteria:
- (1) Land development that disturbs one (1) acre or more.
  - (2) Redevelopment that creates or adds three thousand (3,000) square feet or more of impervious cover.
  - (3) Land development in or near an ecologically and/or environmentally sensitive area that disturbs more than three thousand (3,000) square feet.
  - (4) Land development activities that are smaller than the minimum applicability criteria set forth above if such activities are part of a larger common plan of development, even though multiple, separate and distinct land development activities may take place at different times on different schedules.
- (d) *Exemptions.* The following activities are exempt from this Chapter:
- (1) Projects that are exclusively for agricultural and silvicultural uses. Agricultural or silvicultural roads that are used to access other lands subject to this Chapter are not exempt. Agricultural structures that are used for other uses subject to this Chapter are not exempt.

- (2) Maintenance and repair to any stormwater BMP deemed necessary by the City.
- (3) Any emergency project that is immediately necessary for the protection of life, property, or natural resources.
- (4) Linear construction projects, such as pipeline or utility line installation that does not result in the creation of impervious cover or land disturbance greater than one (1) acre, as determined by the City. Such projects must be designed to minimize the number of stream crossings and width of disturbance, and are subject to City erosion and sediment control practices.
- (5) Any part of a land development that was approved by the City prior to the effective date of this Chapter.

**Section 10B-5.2. Stormwater Management Requirements — Definitions.** [Ord. No. 2307 §2, 7-15-2014]

- (a) Unless specifically defined below, words or phrases in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter its most reasonable application:
- (b) As used in this Chapter, the following terms shall have the meanings indicated:

**ACCELERATED EROSION** — Erosion caused by development activities that exceeds the natural processes by which the surface of the land is worn away by the action of water, wind, or chemical action.

**APPLICANT** — A property owner or agent of a property owner who has filed an application for a stormwater management permit.

**BUILDING** — Any structure, either temporary or permanent, having walls and a roof, designed for the shelter of any person, animal, or property, and occupying more than one hundred (100) square feet of area.

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

**DEDICATION** — The deliberate appropriation of property by its owner for general public use.

**DETENTION** — The temporary storage of storm runoff in a stormwater management practice with the goals of controlling peak discharge rates and providing gravity settling of pollutants.

**DETENTION FACILITY** — A detention basin or alternative structure designed for the purpose of temporary storage of stream flow or surface runoff and gradual release of stored water at controlled rates.

**DEVELOPER** — A person who undertakes land disturbance activities.

**DRAINAGE EASEMENT** — A legal right granted by a landowner to a grantee allowing the use of private land for stormwater management purposes.

**EROSION AND SEDIMENT CONTROL PLAN** — A plan that is designed to minimize the accelerated erosion and sediment runoff at a site during construction activities.

**FEE IN LIEU** — A payment of money in place of meeting all or part of the stormwater performance standards required by this Chapter.

**HOTSPOT** — An area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

**HYDROLOGIC SOIL GROUP (HSG)** — A Natural Resource Conservation Service classification system in which soils are categorized into four (4) runoff potential groups. The groups range from A soils, with high permeability and little runoff production, to D soils, which have low permeability rates and produce much more runoff.

**IMPERVIOUS COVER** — Those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc).

**INDUSTRIAL STORMWATER PERMIT** — A National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

**INFILTRATION** — The process of percolating stormwater into the subsoil.

**INFILTRATION FACILITY** — Any structure or device designed to infiltrate retained water to the subsurface. These facilities may be above grade or below grade.

**JURISDICTIONAL WETLAND** — An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as "hydrophytic vegetation."

**LAND DISTURBANCE ACTIVITY** — Any activity which changes the volume or peak flow discharge rate of rainfall runoff from the land surface. This may include the grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

**LANDOWNER** — The legal or beneficial 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 which provides for long-term maintenance of stormwater management practices.

**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, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

**OFFSET FEE** — A monetary compensation paid to a local government for failure to meet pollutant load reduction targets.

**OFF-SITE FACILITY** — A stormwater management measure located outside the subject property boundary described in the permit application for land development activity.

**ON-SITE FACILITY** — A stormwater management measure located within the subject property boundary described in the permit application for land development activity.

**RECHARGE** — The replenishment of underground water reserves.

**REDEVELOPMENT** — Any construction, alteration or improvement exceeding two thousand (2,000) square feet in areas where existing land use is high-density commercial, industrial, institutional or multifamily residential.

**STOP-WORK ORDER** — An order issued which 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 runoff pollutant loads, discharge volumes, peak flow discharge rates and detrimental changes in stream temperature that affect water quality and habitat.

**STORMWATER MANAGEMENT PLAN (SWMP)** — The document describing the operator's plan for stormwater management.

**STORMWATER POLLUTION PREVENTION PLAN (SWPPP)** — A plan created by constructors to show their plans for sediment and erosion control. Typically these plans are part of an overall design that details procedures to be followed during various phases of construction.

**STORMWATER RETROFIT** — A stormwater management practice designed for an existing development site that previously had either no stormwater management practice in place or a practice inadequate to meet the stormwater management requirements of the site.

**STORMWATER RUNOFF** — Flow on the surface of the ground, resulting from precipitation.

**STORMWATER TREATMENT PRACTICES (STPs)** — Measures, either structural or nonstructural, that are determined to be the most effective, practical means of preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

**WATER QUALITY VOLUME (WQV)** — The storage needed to capture and treat ninety percent (90%) of the average annual stormwater runoff volume. Numerically (WQV) will vary as a function of long-term rainfall statistical data.

WATERCOURSE — A permanent or intermittent stream or other body of water, either natural or man-made, which gathers or carries surface water.

**Section 10B-5.3. Stormwater Management Requirements — Permit Procedures and Requirements.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Permit Required.* No landowner or land operator shall receive any of the building, grading or other land development permits required for land disturbance activities without first meeting the requirements of this Chapter prior to commencing the proposed activity.
- (b) *Application Requirements.* The stormwater management plan shall be prepared to meet the requirements of Section 10B-8, the maintenance agreement shall be prepared to meet the requirements of Section 10B-20, and fees shall be those established by the City.
- (c) *Application Review Fees.* The fee structure shall be established by the City. 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 building permit for the development.
- (d) *Permit Duration.* Permits issued under this section shall be valid from the date of issuance through the date the City notifies the permit holder that all stormwater management practices have passed the final inspection required under the permit conditions.

**Section 10B-5.4. Stormwater Management Requirements — Waivers to Stormwater Management Requirements.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Waivers For Providing Stormwater Management.*
  - (1) Every applicant shall provide for stormwater management as required by this Chapter, unless a written request is filed to waive this requirement. Requests to waive the stormwater management plan requirements shall be submitted to the City for approval.
  - (2) The minimum requirements for stormwater management may be waived in whole or in part upon written request of the applicant, provided that at least one (1) of the following conditions applies:
    - a. It can be demonstrated that the proposed development is not likely to impair attainment of the objectives of this Chapter.
    - b. Alternative minimum requirements for on-site management of stormwater discharges have been established in a stormwater management plan that has been approved by the City and the implementation of the plan is required by local ordinance.
    - c. Provisions are made to manage stormwater by an off-site facility. The off-site facility is required to be in place, designed and adequately sized to provide a level of stormwater 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 stormwater practice.

- d. The City finds that meeting the minimum on-site management requirements is not feasible due to the natural or existing physical characteristics of a site.
- e. Non-structural practices will be used on the site that reduce a) the generation of stormwater from the site, b) the size and cost of stormwater storage and c) the pollutants generated at the site. These non-structural practices are explained in detail in the current design manual and the amount of credit available for using such practices shall be determined by the City. In instances where one (1) of the conditions above applies, the City may grant a variance from strict compliance with these stormwater management provisions, as long as acceptable mitigation measures are provided. To be eligible for a variance, the applicant must demonstrate to the satisfaction of the City that the variance 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.

**Section 10B-5.5. Stormwater Management Requirements — Mitigation Options.** [Ord. No. 2307 §2, 7-15-2014]

- (a) Where compliance with minimum requirements for stormwater management is waived by the City, the applicant will satisfy the minimum requirements by meeting one (1) or more of the mitigation measures and/or in amounts determined 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 granting 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 stormwater management facility or other drainage improvements on previously developed properties, public or private, that currently lack stormwater management facilities designed and constructed in accordance with the purposes and standards of this Chapter.
  - (3) Monetary contributions (cash in lieu thereof) to fund stormwater management activities such as research and studies (examples: 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 stormwater management practices).

- (4) In lieu of a monetary contribution, as approved by the City, an applicant may obtain a waiver of the required stormwater management by entering into an agreement with the City for the granting of an easement or the dedication of land by the applicant to be used for the construction of an off-site stormwater management facility.
- (b) Compliance with any mitigation options contained in Section 10B-5.5 shall be achieved prior to the issuance of any building permits, City execution of plats or other documents to be recorded with the St. Louis County Recorder of Deeds or City approval of any other instruments necessary for the sale, lease or development of the subject properties.

**Section 10B-6. General Performance Criteria for Stormwater Management.** [Ord. No. 2307 §2, 7-15-2014]

Unless judged by the City to be exempt or granted a waiver, the following performance criteria shall be addressed for stormwater management at all sites:

- (a) All site designs shall establish stormwater management practices to control the peak flow rates of stormwater discharge associated with specified design storms and reduce the generation of stormwater as indicated in the City of Eureka Design Guide. These practices should seek to utilize pervious areas for stormwater treatment and to infiltrate stormwater runoff from driveways, sidewalks, rooftops, parking lots, and landscaped areas to the maximum extent practical to provide treatment for both water quality and quantity.
- (b) Stormwater discharges to critical areas with sensitive resources (i.e., cold water fisheries, shellfish beds, swimming beaches, recharge areas, water supply reservoirs) may be subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
- (c) Certain industrial sites are required to prepare and implement a stormwater pollution prevention plan (SWPPP), and shall file a notice of intent (NOI) under the provisions of the National Pollutant Discharge Elimination System (NPDES) general permit. The stormwater pollution prevention plan requirement applies to both existing and new industrial sites.
- (d) Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots," may require the use of specific structural STPs and pollution prevention practices.
- (e) Prior to design, applicants are required to consult with the City to determine if they are subject to additional stormwater design requirements.
- (f) The calculations for determining peak flows as found in the City of Eureka Design Guide shall be used for sizing all stormwater management practices.

**Section 10B-7. Basic Stormwater Management Design Criteria.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Minimum Control Requirements.* All stormwater management practices will be designed so that the specific storm frequency storage volumes (e.g., recharge, water quality, channel protection, ten-year, one-hundred-year) as identified in the City of Eureka Design Guide are met, unless the City grants the applicant a waiver or the applicant is exempt from such requirements. In addition, if hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City reserves the right to impose any and all additional requirements deemed necessary to control the volume, timing and rate of runoff.
- (b) *Site Design Feasibility.*
  - (1) Stormwater management practices for a site shall be chosen based on the physical conditions of the site. Among the factors that should be considered:
    - a. Topography.
    - b. Maximum drainage area.
    - c. Depth to water table.
    - d. Soils.
    - e. Slopes.
    - f. Terrain.
    - g. Head.
    - h. Location in relation to environmentally sensitive features or ultra-urban areas.
  - (2) Applicants shall consult the City of Eureka Design Guide for guidance on the factors that determine site design feasibility when selecting a stormwater management practice.
- (c) *Conveyance Issues.*
  - (1) All stormwater management practices shall be designed to convey stormwater to allow for the maximum removal of pollutants and reduction in flow velocities. This shall include, but not be limited to:
    - a. Maximizing of flowpaths from inflow points to outflow points.
    - b. Protection of inlet and outfall structures.
    - c. Elimination of erosive flow velocities.
    - d. Providing of underdrain systems, where applicable.
  - (2) The City of Eureka Design Guide provides detailed guidance on the requirements for conveyance for each of the approved stormwater management practices.

- (d) *Pretreatment Requirements.* Every stormwater treatment practice shall have an acceptable form of water quality pretreatment, in accordance with the pretreatment requirements found in the current stormwater design manual. Certain stormwater treatment practices, as specified in the City of Eureka Design Guide, are prohibited even with pretreatment in the following circumstances:
- (1) Stormwater is generated from highly contaminated source areas known as "hotspots."
  - (2) Stormwater is carried in a conveyance system that also carries contaminated, non-stormwater discharges.
  - (3) Stormwater is being managed in a designated groundwater recharge area.
  - (4) Certain geologic conditions exist (e.g., Karst) that prohibit the proper pretreatment of stormwater.
- (e) *Treatment/Geometry Conditions.* All stormwater management practices shall be designed to capture and treat stormwater runoff according to the specifications outlined in the City of Eureka Design Guide. These specifications will designate the water quantity and quality treatment criteria that apply to an approved stormwater management practice.
- (f) *Landscaping Plans Required.* All stormwater management practices must have a landscaping plan detailing both the vegetation to be in the practice and how and who will manage and maintain this vegetation. This plan must be prepared by a registered landscape architect or other qualified professional as approved by the City.
- (g) *Maintenance Agreements.* All stormwater treatment practices shall have an enforceable operation and maintenance agreement to ensure the system functions as designed. This agreement will include any and all maintenance easements required to access and inspect the stormwater treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater treatment practice. In addition, a legally binding covenant specifying the parties responsible for the proper maintenance of all stormwater treatment practices shall be secured prior to issuance of any permits for land disturbance activities.
- (h) *Non-Structural Stormwater Practices.* The use of non-structural stormwater treatment practices is encouraged in order to minimize the reliance on structural practices. Credit in the form of reductions in the amount of stormwater that must be managed can be earned through the use of non-structural practices that reduce the generation of stormwater from the site. These non-structural practices are explained in detail in the current design manual, and applicants wishing to obtain credit for use of non-structural practices must ensure that these practices are documented and remain unaltered by subsequent property owners.

**Section 10B-8. Requirements for Stormwater Management Plan Approval.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Stormwater Management Plan Required For All Developments.* No application for development will be approved unless it includes a stormwater management plan (SWMP) detailing in concept how runoff and associated water quality impacts resulting from the development will be controlled or managed. This plan must be prepared by an individual approved by the City and must indicate whether stormwater will be managed on site or off site and, if on site, the general location and type of practices. The stormwater management plan(s) shall be referred for comment to all other interested agencies, and any comments must be addressed in a final SWMP. This final plan must be signed by a professional engineer (PE) licensed in Missouri, who will verify that the design of all stormwater management practices meet the submittal requirements outlined in the stormwater design manual. No building, grading, or sediment control permit shall be issued until a satisfactory final stormwater management plan, or a waiver thereof, shall have undergone a review and been approved by the City after determining that the plan or waiver is consistent with the requirements of this Chapter.
- (b) *Stormwater Management Concept Plan Requirements.* A stormwater management concept plan shall be required with all permit applications and will include sufficient information (e.g., maps, hydrologic calculations, etc.) to evaluate the environmental characteristics of the project site, the potential impacts of all proposed development of the site, both present and future, on the water resources, and the effectiveness and acceptability of the measures proposed for managing stormwater generated at the project site. The intent of this conceptual planning process is to determine the type of stormwater management measures necessary for the proposed project, and to ensure adequate planning for management of stormwater runoff from future development. To accomplish this goal the following information shall be included in the concept plan:
- (1) A map (or maps) indicating the location of existing and proposed buildings, roads, parking areas, utilities, structural stormwater management and sediment control facilities. The map(s) will also clearly show proposed land use with tabulation of the percentage of surface area to be adapted to various uses; drainage patterns; locations of utilities, roads and easements; the limits of clearing and grading; A written description of the site plan and justification of proposed changes in natural conditions may also be required.
  - (2) Sufficient engineering analysis to show that the proposed stormwater management measures are capable of controlling runoff from the site in compliance with this Chapter and the specifications of the City of Eureka Design Guide.
  - (3) A written or graphic inventory of the natural resources at the site and surrounding area as it exists prior to the commencement of the project and a description of the watershed and its relation to the project site. This description should include a discussion of soil conditions, forest cover, topography, wetlands, and other native vegetative areas on the site. Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.

- (4) A written description of the required maintenance burden for any proposed stormwater management facility.
  - (5) The City may also require a concept plan to consider the maximum development potential of a site under existing zoning, regardless of whether the applicant presently intends to develop the site to its maximum potential. For development or redevelopment occurring on a previously developed site, an applicant shall be required to include within the stormwater concept plan measures for controlling existing stormwater runoff discharges from the site in accordance with the standards of this Chapter to the maximum extent practicable.
- (c) *Final Stormwater Management Plan Requirements.* After review of the stormwater management concept plan, and modifications to that plan as deemed necessary by the City, a final stormwater management plan must be submitted for approval.
  - (d) *Performance Bond/Security.* The City may, at its discretion, require the submittal of a performance security or bond prior to issuance of a permit in order to ensure that the stormwater practices are installed by the permit holder as required by the approved stormwater management plan. The amount of the installation performance security shall be the total estimated construction cost of the stormwater management practices approved under the permit, plus fifty percent (50%). The performance security shall contain forfeiture provisions for failure to complete work specified in the stormwater management plan. The installation performance security shall be released in full only upon submission of as-built plans and written certification by a Missouri registered professional engineer that the stormwater practice has been installed in accordance with the approved plan and other applicable provisions of this Chapter. The City will make a final inspection of the stormwater practice to ensure that it is in compliance with the approved plan and the provisions of this Chapter. Provisions for a partial pro rata release of the performance security based on the completion of various development stages can be done at the discretion of the City.

**Section 10B-9. Construction Inspection.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Notice of Construction Commencement.*
  - (1) The applicant must notify the City in advance before the commencement of construction. Regular inspections of the stormwater management system construction shall be conducted by City staff, City-approved individuals or by a Missouri professional engineer or his or her designee who has been approved by the City. All inspections shall be documented and written reports prepared that contain the following information:
    - a. The date and location of the inspection.
    - b. Whether construction is in compliance with the approved stormwater management plan.
    - c. Variations from the approved construction specifications.

- d. Any violations that exist.
- (2) If any violations are found, the property owner shall be notified in writing of the nature of the violations and the required corrective actions. No added work shall proceed until any violations are corrected and all work previously completed has received approval by the City.
- (b) *As-Built Plans.* All applicants are required to submit as-built plans for any stormwater management practices located on site after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer. A final inspection by the City is required before the release of any performance securities can occur.
- (c) *Landscaping and Stabilization Requirements.* Any area of land from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be revegetated within ten (10) days from the substantial completion of such clearing and construction. Revegetation criteria is contained in the City of Eureka Design Guide.

**Section 10B-10. Enforcement and Penalties.**

- (a) *Violations.* Any development activity that is commenced or is conducted contrary to this Chapter may be restrained by injunction or otherwise abated in a manner provided by law.
- (b) *Notice Of Violation.* When the City determines that an activity is not being carried out in accordance with the requirements of this Chapter, it shall issue a written notice of violation to the owner of the property. The notice of violation shall contain:
  - (1) Name and address of the owner or applicant.
  - (2) Address when available or a description of the building, structure or land upon which the violation is occurring.
  - (3) Statement specifying the nature of the violation.
  - (4) Description of the remedial measures necessary to bring the development activity into compliance with this Chapter and a time schedule for the completion of such remedial action.
  - (5) Statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed.
  - (6) Statement that the determination of violation may be appealed to the municipality by filing a written notice of appeal within fifteen (15) days of service of the notice of violation.
- (c) *Stop-Work Orders.* Persons receiving a notice of violation will be required to halt all construction activities. This stop-work order will be in effect until the City

confirms that the development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a notice of violation in a timely manner can result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this Chapter.

- (d) *Civil And Criminal Penalties.* In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this Chapter shall be punished by a fine of not less than seven hundred fifty dollars (\$750.00) or by imprisonment for a period not to exceed six (6) months, or by both such fine and imprisonment. Such person shall be guilty of a separate offense for each day during which the violation occurs or continues.
- (e) *Restoration Of Lands.* Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the City may take necessary corrective action, the cost of which shall become a lien upon the property until paid.
- (f) *Holds On Occupation Permits.* Occupation permits will not be granted until corrections to all stormwater practices have been made and accepted by the City.

#### **Section 10B-11. Stormwater Illicit Discharge and Connection.**

##### **Section 10B-11.1. Stormwater Illicit Discharge and Connection — Purpose and Intent.** [Ord. No. 2307 §2, 7-15-2014]

The purpose of this Section is to provide for the health, safety, and general welfare of the citizens of the City through the regulation of non-stormwater discharges to the storm drainage system to the maximum extent practicable as required by Federal and State law. This Section establishes methods for controlling the introduction of pollutants into the Municipal Separate Storm Sewer System (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this Section are:

- (a) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
- (b) To prohibit illicit connections and discharges to the municipal separate storm sewer system.
- (c) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this Chapter.

##### **Section 10B-11.2. Stormwater Illicit Discharge and Connection — Definitions.** [Ord. No. 2307 §2, 7-15-2014]

For the purposes of this Section, the following definitions shall apply:

**AUTHORIZED ENFORCEMENT AGENCY** — Employees or designees of the City who are designated to enforce this Chapter.

**BEST MANAGEMENT PRACTICES (BMPs)** — Schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or stormwater conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

**CLEAN WATER ACT** — 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. Currently these include construction projects resulting in land disturbance of five (5) acres or more. Beginning in March 2003, NPDES Stormwater Phase II permits will be required for construction projects resulting in land disturbance of one (1) acre or more. Such activities include but are not limited to clearing and grubbing, grading, excavating, and demolition.

**HAZARDOUS MATERIALS** — Any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

**ILLEGAL DISCHARGE** — Any direct or indirect non-stormwater discharge to the storm drain system, except as exempted in this Chapter.

**ILLICIT CONNECTIONS** — Either of the following: any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system, including but not limited to any conveyances which allow any non-stormwater discharge, including sewage, process wastewater, and wash water to enter the storm drain system and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by an authorized enforcement agency, or any drain or conveyance connected from a commercial or industrial land use to the storm drain system which has not been documented in plans, maps, or equivalent records and approved by an authorized enforcement agency.

**INDUSTRIAL ACTIVITY** — Activities subject to NPDES industrial permits as defined in 40 CFR 122.26 (b)(14).

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER DISCHARGE PERMIT** — A permit issued by EPA [or by a State under authority delegated pursuant to 33 U.S.C. § 1342(b)] that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

**NON-STORMWATER DISCHARGE** — Any discharge to the storm drain system that is not composed entirely of stormwater.

PERSON — Any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or as the owner's agent.

POLLUTANT — Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

PREMISES — Any building, lot, parcel of land, or portion of land whether improved or unimproved, including adjacent sidewalks and parking strips.

STORM DRAINAGE SYSTEM — 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, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

STORMWATER — Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

STORMWATER POLLUTION PREVENTION PLAN — A document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site and the actions to eliminate or reduce pollutant discharges to stormwater, stormwater conveyance systems, and/or receiving waters to the maximum extent practicable.

WASTEWATER — Any water or other liquid, other than uncontaminated stormwater, discharged from a facility.

**Section 10B-11.3. Stormwater Illicit Discharge and Connection — Discharge Prohibitions.**  
[Ord. No. 2307 §2, 7-15-2014]

(a) *Prohibition Of Illegal Discharges.* No person shall discharge or cause 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 stormwater. The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

- (1) The following discharges are exempt from discharge prohibitions established by this Chapter: water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising groundwater, groundwater infiltration to storm drains, uncontaminated pumped groundwater, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air-conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or

wetland flows, swimming pools (if dechlorinated: typically less than one part per million chlorine), firefighting activities, and any other water source not containing pollutants.

- (2) Discharges specified in writing by the authorized enforcement agency as being necessary to protect public health and safety.
- (3) Dye testing is an allowable discharge, but requires a verbal notification to the authorized enforcement agency prior to the time of the test.
- (4) The prohibition shall not apply to any non-stormwater discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(b) *Prohibition Of Illicit Connections.*

- (1) The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.
- (2) 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.
- (3) A person is considered to be in violation of this Chapter if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

**Section 10B-11.4. Stormwater Illicit Discharge and Connection — Suspension of MS4 Access.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Suspension Due To Illicit Discharges In Emergency Situations.* The City may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the United States, or to minimize danger to persons.
- (b) *Suspension Due To The Detection of Illicit Discharge.* Any person discharging to the MS4 in violation of this Chapter may have his or her MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement agency will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing. A person commits an offense if the person reinstates

MS4 access to premises terminated pursuant to this Section, without the prior approval of the authorized enforcement agency.

**Section 10B-11.5. Stormwater Illicit Discharge and Connection — Industrial or Construction Activity Discharges.** [Ord. No. 2307 §2, 7-15-2014]

Any person subject to an industrial or construction activity NPDES stormwater discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City prior to the allowing of discharges to the MS4.

**Section 10B-11.6. Stormwater Illicit Discharge and Connection — Monitoring of Discharges.** [Ord. No. 2307 §2, 7-15-2014]

- (a) *Applicability.* This section applies to all facilities that have stormwater discharges associated with industrial activity, including construction activity.
- (b) *Access to Facilities.*
  - (1) The City shall be permitted to enter and inspect facilities subject to regulation under this Chapter as often as may be necessary to determine compliance with this Chapter. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.
  - (2) Facility operators shall allow the City ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES permit to discharge stormwater, and the performance of any additional duties as defined by State and federal law.
  - (3) The City shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's stormwater discharge.
  - (4) The City has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure stormwater flow and quality shall be calibrated to ensure their accuracy.
  - (5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City and shall not be replaced. The costs of clearing such access shall be borne by the operator.
  - (6) Unreasonable delays in allowing the City access to a permitted facility is a violation of a stormwater discharge permit and of this Chapter. A person who is the operator of a facility with a NPDES permit to discharge stormwater

associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this Chapter.

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

**Section 10B-12. Requirement to Prevent, Control, and Reduce Stormwater Pollutants by Use of Best Management Practices.** [Ord. No. 2307 §2, 7-15-2014]

The City will adopt requirements identifying best management practices for any activity, operation, or facility which may cause or contribute to pollution or contamination of stormwater, the storm drain system, or waters of the United States. The owner or operator of a commercial or industrial establishment shall provide, at his or her own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premises, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of stormwater associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this Section. These BMPs shall be part of a stormwater pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES permit.

**Section 10B-13. Watercourse Protection.** [Ord. No. 2307 §2, 7-15-2014]

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

**Section 10B-14. Notification of Spills.** [Ord. No. 2307 §2, 7-15-2014]

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into stormwater, the storm drain

system, or waters of the United States, said person shall take all necessary steps to ensure the discovery, containment, and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the authorized enforcement agency in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the City within three (3) business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three (3) years.

**Section 10B-15. Enforcement.** [Ord. No. 2307 §2, 7-15-2014]

(a) *Notice Of Violation.*

- (1) Whenever the City finds that a person has violated a prohibition or failed to meet a requirement of this Chapter, the authorized enforcement agency may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:
  - a. The performance of monitoring, analyses, and reporting;
  - b. The elimination of illicit connections or discharges;
  - c. That violating discharges, practices, or operations shall cease and desist;
  - d. The abatement or remediation of stormwater pollution or contamination hazards and the restoration of any affected property; and
  - e. Payment of a fine to cover administrative and remediation costs; and
  - f. The implementation of source control or treatment BMPs.
- (2) If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

(b) *Appeal Of Notice Of Violation.* Any person receiving a notice of violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within fifteen (15) days from the date of the notice of violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within fifteen (15) days from the date of receipt of the notice of appeal. The decision of the City or the City's designee shall be final.

(c) *Enforcement Measures After Appeal.* If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within fifteen (15) days of the decision of the municipal authority

upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

- (d) *Cost Of Abatement Of The Violation.* Within fifteen (15) days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. Any person violating any of the provisions of this article shall become liable to the City by reason of such violation. The liability shall be paid in not more than twelve (12) equal payments. An interest rate of five percent (5%) per annum shall be assessed on the balance beginning on the 30th day following discovery of the violation.

**Section 10B-16. Injunctive Relief.** [Ord. No. 2307 §2, 7-15-2014]

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

**Section 10B-17. Compensatory Action.** [Ord. No. 2307 §2, 7-15-2014]

In lieu of enforcement proceedings, penalties, and remedies authorized by this Chapter, the City may impose upon a violator alternative compensatory actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, etc.

**Section 10B-18. Violations Deemed Public Nuisance.** [Ord. No. 2307 §2, 7-15-2014]

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

**Section 10B-19. Criminal Prosecution.** [Ord. No. 2307 §2, 7-15-2014]

Any person that has violated or continues to violate this Chapter shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty of up to seven hundred fifty dollars (\$750.00) per violation per day and/or imprisonment for a period of time not to exceed six (6) months. The City may recover all

attorney's fees, court costs and other expenses associated with enforcement of this Chapter, including sampling and monitoring expenses.

**Section 10B-19.1. Criminal Prosecution — Remedies Not Exclusive.**

The remedies listed in this Chapter are not exclusive of any other remedies available under any applicable Federal, State or City law, and it is within the discretion of the authorized enforcement agency to seek cumulative remedies.

**Section 10B-20. Stormwater Operation and Maintenance.**

**Section 10B-20.1. Stormwater Operation and Maintenance — Definitions.** [Ord. No. 2307 §2, 7-15-2014]

As used in this Section, the following terms shall have the meanings indicated:

**BEST MANAGEMENT PRACTICE (BMP)** — Structural device, measure, facility, or activity that helps to achieve stormwater management control objectives at a designated site.

**PLAN** — A document approved at the site design phase that outlines the measures and practices used to control stormwater runoff at a site.

**Section 10B-20.2. Stormwater Operation and Maintenance — Design.** [Ord. No. 2307 §2, 7-15-2014]

- (a) All stormwater BMPs shall be designed in a manner to minimize the need for maintenance and reduce the chances of failure. Design guidelines are outlined in the most recent version of the City of Eureka Design Guide.
- (b) Stormwater easements and covenants shall be provided by the property owner for access for facility inspections and maintenance. Easements and covenants shall be recorded with the City prior to the issuance of a permit.
- (c) Final design shall be approved by the City.

**Section 10B-20.3. Stormwater Operation and Maintenance — Routine Maintenance.** [Ord. No. 2307 §2, 7-15-2014]

- (a) All stormwater BMPs shall be maintained according to the measures outlined in the most recent version of the City of Eureka Design Guide, and as approved in the permit.
- (b) The person(s) or organization(s) responsible for maintenance shall be designated in the plan. Options include:
  - (1) Property owner.
  - (2) Homeowner's association, provided that provisions for financing necessary maintenance are included in deed restrictions or other contractual agreements.

- (3) The City, solely at the discretion of the City.
- (c) Maintenance agreements shall specify responsibilities for financing maintenance.

**Section 10B-20.4. Stormwater Operation and Maintenance — Nonroutine Maintenance.**  
[Ord. No. 2307 §2, 7-15-2014]

Nonroutine maintenance includes maintenance activities that are expensive but infrequent, such as pond dredging or major repairs to stormwater structures.

- (a) Nonroutine maintenance shall be performed on an as-needed basis based on information gathered during regular inspections.
- (b) If nonroutine maintenance activities are not completed in a timely manner or as specified in the approved plan, the City may complete the necessary maintenance at the owner's/operator's expense.

**Section 10B-20.5. Stormwater Operation and Maintenance — Inspections.** [Ord. No. 2307 §2, 7-15-2014]

- (a) The person(s) or organization(s) responsible for maintenance shall inspect stormwater BMPs on a regular basis as outlined in the plan.
- (b) Authorized representatives of the City may enter at reasonable times to conduct on-site inspections or routine maintenance.
- (c) For BMPs maintained by the property owner or homeowner's association, inspection and maintenance reports shall be filed with the City as provided for in the plan.
- (d) Authorized representatives of the City may conduct inspections to confirm the information in the reports filed under Subsection (c) above.

**Section 10B-20.6. Stormwater Operation and Maintenance — Enforcement and Penalties.**  
[Ord. No. 2307 §2, 7-15-2014]

- (a) If a responsible party fails or refuses to meet the requirements of the maintenance covenant, the City, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, the City shall notify the party responsible for maintenance of the stormwater management facility in writing. Upon receipt of that notice, the responsible person shall have fifteen (15) days to effect maintenance and repair of the facility in an approved manner. After proper notice, the City may assess the owner(s) of the facility for the cost of repair work and any penalties; and the cost of the work shall be a lien on the property, or prorated against the beneficial users of the property, and may be placed on the tax bill and collected as ordinary taxes by the City.

- (b) *Violations.* Any development activity that is commenced or is conducted contrary to this Chapter may be restrained by injunction or otherwise abated in a manner provided by law.
- (c) *Notice Of Violation.* When the City determines that an activity is not being carried out in accordance with the requirements of this Chapter, it shall issue a written notice of violation to the owner of the property. The notice of violation shall contain:
  - (1) Name and address of the owner or applicant.
  - (2) Address when available or a description of the building, structure or land upon which the violation is occurring.
  - (3) Statement specifying the nature of the violation.
  - (4) Description of the remedial measures necessary to bring the development activity into compliance with this Chapter and a time schedule for the completion of such remedial action.
  - (5) Statement of the penalty or penalties that shall or may be assessed against the person to whom the notice of violation is directed.
  - (6) Statement that the determination of violation may be appealed to the City by filing a written notice of appeal within fifteen (15) days of service of notice of violation.
- (d) *Stop-Work Orders.* Persons receiving a notice of violation will be required to halt all construction activities. This stop-work order will be in effect until the City confirms that the development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a notice of violation in a timely manner can result in civil, criminal, or monetary penalties in accordance with the enforcement measures authorized in this Chapter.
- (e) *Civil And Criminal Penalties.* In addition to or as an alternative to any penalty provided herein or by law, any person who violates the provisions of this Chapter shall be punished by a fine of not less than seven hundred fifty dollars (\$750.00) or by imprisonment for a period not to exceed six (6) months, or by both such fine and imprisonment. Such person shall be guilty of a separate offense for each day during which the violation occurs or continues.
- (f) *Restoration Of Lands.* Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the City may take necessary corrective action, the cost of which shall become a lien upon the property until paid.
- (g) *Holds On Occupation Permits.* Occupation permits will not be granted until corrections to all stormwater practices have been made and accepted by the City.

**Section 10B-21. Appeals and Variances.** [Ord. No. 2307 §2, 7-15-2014]

- (a) Any appeals of administrative decisions or request for a variance from strict compliance with the requirements of this Section shall be heard by the Board of Adjustment, in accordance with the City of Eureka Zoning Ordinance Chapter 23, Article XIV.
- (b) The Board of Adjustment shall not grant a variance from the requirements of the Land Disturbance and Stormwater Management Code unless it finds that:
  - (1) The interpretation, ruling or order is erroneous or constitutes an erroneous application of the particular provisions of the Land Preservation Act or other related laws or ordinances, or is otherwise contrary to law; or
  - (2) A variance is necessary and feasible whereby the Board shall make the following findings:
    - a. Good and sufficient cause based on an unreasonable burden or hardship has been proven;
    - b. The granting of the variance would not result in any increase in quantity or velocity of flow, degradation of water quality, or negative impacts upon adjoining or downstream properties, nor upon the stormwater system;
    - c. The degree of variance is the minimum necessary to afford relief from the unreasonable burden or hardship imposed by the applicable provisions.
    - d. The variance may be granted without defeating the public health, safety and welfare purposes and intent of the applicable provisions.

**Section 10B-22. Land Disturbance Escrow Requirements.** [Ord. No. 2307 §2, 7-15-2014]

Land disturbance escrows shall be established at a minimum of one hundred fifty percent (150%) of the amounts deemed necessary for the installation, operation and removal of siltation control devices, installation, operation and removal of sedimentation control measures and reestablishment of adequate ground cover and related topographical conditions. The basis for such necessary escrow components shall be the current unit prices established by St. Louis County Department of Planning.

**Section 10B-23. Areas Where Pre-Existing Ponds or Lakes are Located in Same Watershed Procedure.** [Ord. No. 2307 §2, 7-15-2014]

In cases where there are pre-existing ponds or lakes located in the same watershed which, in the opinion of the City, could be impacted by stormwater flow from a particular development for which a land disturbance permit is granted, appropriate measures shall be taken by a City-engaged, developer-paid professional to establish a baseline depth and at a minimum a final depth at the completion of the project. If the City determines that the body of water has been negatively impacted, the developer shall be required to take any necessary corrective measures as approved by the City or a City-engaged, developer-paid professional.