

CHAPTER 120
STORM WATER MANAGEMENT REGULATIONS

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120-1. Purpose of Chapter. 1. The purpose of this chapter is to: a. Promote the public health, safety and general welfare.

b. Establish procedures to control the adverse impacts associated with storm water runoff.

c. Assist in the attainment and maintenance of water quality standards.

d. Reduce the effects of development and redevelopment on land and stream channel erosion.

e. Minimize damage to public and private property.

f. Reduce nonpoint source water pollution by minimizing impervious cover on development sites.

g. Promote the co-benefits of visible green infrastructure, including reduction of urban heat island effects, benefits to human health, city beautification and protection of coastal areas.

h. Help the city adapt to climate change and become more resilient to climate threats.

2. The approvals to be obtained by the person as required in this chapter shall be based on ch. 119 and vol. 2, building and zoning code, and the requirements designed to accomplish the purposes listed in sub. 1.

120-3. Definitions. Unless otherwise defined in this chapter, all terms defined in chs. 119, 200, 225, 290 and 295 have the same meaning as ascribed thereto.

1. **ADVERSE IMPACT** means any modification, alteration or effect on a feature or a characteristic of a wetland, water of the United States or municipal separated storm sewer system; including quality, quantity, hydrodynamics, surface area or species composition as defined by the Wisconsin department of natural resources; or human or natural use which is or may potentially be harmful or injurious to property, human health, welfare, or safety, or to biological productivity, diversity or stability.

2. **BEST MANAGEMENT PRACTICE (BMP)** means any acceptable method, structural or otherwise, for controlling the quantity and quality of storm water runoff.

3. **DETENTION** means the collection and temporary storage of surface water runoff for subsequent gradual discharge.

4. **DETENTION STRUCTURE** means a permanent storm water management structure whose primary purpose is to temporarily store storm water runoff and release the stored runoff at controlled rates.

5. **DEVELOPMENT** means to change the runoff characteristics of a parcel of land in conjunction with residential, commercial, industrial, or institutional construction or alteration. This includes the construction of buildings, roads, parking lots and paved or unpaved storage areas.

6. **DRAINAGE AREA** means that area contributing runoff to a single point.

7. **DRAINAGE FACILITY** means any component of the drainage system that has been constructed or altered by humans. It includes channels, ditches, swales, conduits and street and alley pavements.

8. **DRAINAGE SYSTEM** means the collection and conveyance of storm water runoff, snow melt runoff, surface water runoff or other drainage from the land. It includes all drainage facilities, watercourses, water bodies and wetlands.

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9. EROSION means the wearing away of land surface by the action of wind, water, gravity, ice or any combination of those forces.

9.5. GREEN INFRASTRUCTURE means any combination of landscaping, facilities or equipment that captures rain, at or near the site where it falls, by infiltration into the soil, evapotranspiration by plants, or storage for beneficial reuse. Green infrastructure includes, but is not limited to, rain gardens, wetlands, green roofs, bioswales, including dry ponds or other detention facilities designed to increase infiltration, permeable surfacing, landscaping with deeply rooted plants, cisterns with operational pumps that allow reuse of stored water for irrigation and other reuses permitted under the state plumbing code, rain barrels, trees, soil amendments and the removal of structures or pavement that allows revegetation or infiltration.

10. HYDRAULIC CONDITIONS means the physical characteristics of the drainage system including size, velocity, slope, material and capacity.

11. HYDROLOGIC CONDITIONS means the characteristics of surface water runoff including the direction of flow, flow rate and volume of water.

12. ILLEGAL CONNECTION means any unpermitted connection to the drainage system.

13. ILLICIT DISCHARGE means any discharge to the drainage system which is not composed entirely of storm water unless a permit has been obtained from the appropriate regulatory agency. This includes, but is not limited to, activities related to spills, dumping and disposal of any substance or material.

14. IMPERVIOUS SURFACE means a surface which has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. It includes semi-impervious surfaces such as compacted clay, as well as most conventional street and alley surfaces, roofs, sidewalks, parking lots and similar improvements.

14.5. IN-FILL means an undeveloped area of land located within an existing urban sewer service area surrounded by development, or development and natural or human-made features where development cannot occur.

15. LAND DISTURBING ACTIVITY means any human-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover, that may result in runoff and lead to an increase in soil erosion and movement of sediment into waters of the state. Land disturbing activity includes but is not limited to clearing and grubbing, demolishing, excavating, pit trench dewatering, filling and grading activities.

16. MANUAL OF STORM WATER MANAGEMENT PRACTICES means the document on guidance, specifications and techniques available for sale to the public for the activities described in s. 120-13.

16.5. MAXIMUM EXTENT PRACTICABLE means the highest level of performance that is achievable but is not equivalent to a performance standard identified in this chapter, as determined in accordance with s. 120-4.

17. NATURAL SYSTEMS means systems which predominantly consist of or use plants, animal, bacteria and other flora and fauna which are indigenous to the land, soil or water.

17.5. NRCS MSE3 or MSE4 PRECIPITATION DISTRIBUTION means a specific precipitation distribution developed by the U.S. department of agriculture, natural resources conservation service, using precipitation data from the U.S. department of commerce, national oceanic and atmospheric administration (NOAA) Atlas 14.

18. PERSON means any individual, association, organization, partnership, firm, corporation or other entity engaging in the development or redevelopment of a property, as the owner of the property. Separate corporate or individual ownership shall not be used to circumvent the intention of this chapter.

19. POST DEVELOPMENT means the conditions which exist following the completion of the land disturbing activity in terms of topography, vegetation, land use and rate, volume or direction storm water runoff.

20. PRE-DEVELOPMENT means the conditions as of January 1, 2002 that existed prior to the initiation of the land disturbing activity in terms of topography, vegetation, land use and rate, volume or direction of storm water runoff.

21. RECEIVING BODY OF WATER means any water body, watercourse or wetland into which surface waters flow either naturally or from human made conveyances.

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22. REDEVELOPMENT means any construction, alteration or improvement of land disturbance activity performed on sites where the entire existing site is predominantly developed to with residential, commercial, industrial or institutional uses.

23. REGULATORY AGENCY means any agency given authority to regulate or control the discharge content or rate.

24. RETENTION means the prevention of the discharge of a given volume of storm water runoff to the receiving body of water or drainage facility.

25. SEDIMENT means the fine particulate mineral or organic material that is in suspension or has settled in a body of water.

26. SEDIMENTATION FACILITY means any structure or area which is designed to hold runoff water until suspended sediments have settled.

27. STORM SEWER means a system of conveyances for storm water runoff, snow melt runoff and surface runoff and drainage. It includes roadway drainage systems, streets, catch basins and storm water inlets, curbs, gutters, ditches, swales, dug channels and storm drains.

28. STORM WATER MANAGEMENT means either of the following:

a. For quantitative control, a system of vegetative or structural measures, or both, that controls the increased volume and rate of storm water runoff caused by manmade changes in land.

b. For qualitative control, a system of vegetative, structural, or other measures that reduces or eliminates pollutants that might otherwise be carried by storm water runoff.

29. STORM WATER MANAGEMENT PLAN means the detailed analysis required by s. 120-9. A storm water management plan shall address storm water runoff control for quality, quantity or both as defined in subs. 35 and 36.

30. STORM WATER RUNOFF or RUNOFF means direct response of a watershed to precipitation and includes the surface and subsurface runoff that enters a ditch, stream, storm sewer or other concentrated flow during and following precipitation.

31. SUBDIVIDE means to divide a parcel of land, whether improved or unimproved, into 2 or more contiguous lots or parcels of land in accordance with the provisions of ch. 119.

32. SWALE means a structural measure with a lining of grass, riprap or other materials which can function as a detention structure and convey storm water runoff without causing erosion.

33. VEGETATION means all flora, especially trees, shrubs, vines, ferns, mosses and grasses.

34. WATERCOURSE means any natural or human-made stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway gully, ravine, street, roadway, swale or wash in which water flows in a definite direction, either continuously or intermittently and which has a definite channel, bed or bank.

35. WATER QUALITY means those characteristics of storm water runoff from a land disturbing activity that relate to the physical, chemical or biological integrity of water.

36. WATER QUANTITY means those characteristics of storm water runoff that relate to the rate and volume of the storm water runoff to downstream areas resulting from land disturbing activities.

37. WATERS OF THE STATE means those portions of Lake Michigan within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, water courses, drainage systems and other surface water or groundwater, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and retained completely upon the property of a person.

38. WATERSHED means a drainage area or drainage basin contributing to the flow of water into a receiving body of water.

120-4. Applicability of Maximum Extent Practicable. Maximum extent practicable shall apply when a person who is subject to a performance standard identified in this chapter demonstrates that satisfaction of the performance standard is not achievable and that a lower level of performance is appropriate. In making the assertion that a performance standard is not achievable and that a level of performance different from the performance standard is the maximum extent practicable, the person shall take into account the best available technology, cost effectiveness, geographic features and other competing interests such as

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protection of public safety and welfare, protection of endangered and threatened resources and preservation of historic properties.

120-5. Illicit Discharges and Illegal Connections. 1. DISCHARGES PROHIBITED.

No person may discharge, spill or dump substances or materials which are not entirely composed of storm water into receiving bodies of water, storm sewers or drainage facilities, or onto driveways, sidewalks, parking lots or other areas that drain into the drainage system.

2. EXEMPTIONS. The following activities are exempt from the provisions of this section unless found to have an adverse impact on the storm water:

a. Discharges authorized by a permit issued by the Wisconsin department of natural resources.

b. Discharges resulting from fire fighting activities, excluding training activities.

c. Discharges in compliance with ch. 290.

d. Discharges from uncontaminated ground water, potable water source, foundation drain and sump pump, air conditioning condensation, springs, lawn watering, individual residential car washing, water main and hydrant flushing, landscape irrigation, diverted stream flows, irrigation water, flows from riparian habitats and wetlands, street wash water and swimming pools if the water has been dechlorinated.

3. CONNECTIONS PROHIBITED. It shall be a violation of this chapter to connect a waste water building sewer or drain to the drainage system.

4. PENALTY. Violations shall be subject to enforcement procedures and penalties set forth in the building and zoning code.

120-7. Control of Storm Water Discharge.

1. APPLICABILITY. No person shall proceed with any residential, commercial, industrial or institutional improvement or subdivision of property without having provided for appropriate storm water measures that control or manage runoff from such development or redevelopment or future development of the subdivided property. A storm water management plan addressing storm water runoff quality control, quantity control or both must be submitted and approved pursuant to sub. 2 or waived pursuant to sub 4. A plan is required:

a. Before an existing drainage system is altered, rerouted, deepened, widened, enlarged, filled or obstructed in preparation for improvement.

b. Before or concurrent with the submittal and approval of an erosion and sediment control plan as specified in ch. 290.

c. Before the development or redevelopment is permitted for commencement of construction.

1.5 MILWAUKEE RIVER GREENWAY SITE PLAN REVIEW OVERLAY ZONE. This section shall not apply to any property located within the Milwaukee River greenway site plan review overlay zone, as shown on the city zoning map and established by common council file number 081568. Properties in the overlay zone shall be subject to the storm water management regulations of s. 120-14.

2. DEVELOPMENT CRITERIA. A storm water management plan is required if any of the following criteria are met:

a. The development or redevelopment causes a land disturbing activity of one acre or more.

b. The development or redevelopment causes the cumulative area of all land disturbing activities at a property to be one acre or more over a 3-year period.

c. The development or redevelopment occurring causes an increase of 0.5 acres or more of impervious area.

d. The construction or reconstruction of a public road will increase impervious surface by one-half acre or more.

3. EXEMPTIONS. The following activities are exempt from the storm water management plan requirements:

a. Agricultural activities not associated with development.

b. Maintenance, alteration, use or improvement to an existing structure or construction activity which does not significantly change or affect the water quality and hydrologic conditions of the surface water discharge which has a previously approved storm water management plan.

c. Maintenance activities undertaken by any municipal, state or federal governmental agency.

d. Storm water management measures to be undertaken by the city on an outfall in a specified watershed, when the city engineer has determined that the person need not prepare a storm water management plan.

e. Reconstruction of public roads when the area of impervious surface is not changing.

f. Pavement maintenance activities, such as sealing, milling and overlaying, or pulverizing.

4. WAIVERS. a. Requests to waive the storm water management plan requirements shall be submitted to the city engineer for approval.

b. The person shall also submit a narrative description and drawings of the proposed development or improvement. The city engineer may request other information that is reasonably necessary to evaluate the waiver.

c. The city engineer shall coordinate a review by city agencies and may grant a waiver if the development is primarily a storm water reduction or green infrastructure project and will not:

c-1. Increase the rate or volume of storm water runoff.

c-2. Have an adverse impact on a wetland, watercourse or receiving body of water.

c-3. Contribute to the degradation of water quality.

c-4. Otherwise impair attainment of the objectives of this chapter.

4.5. PEAK RUNOFF RELEASE RATE CALCULATIONS.

a. Peak runoff release rates shall be calculated using NOAA Atlas 14 precipitation depths and NRCS MSE3 precipitation distribution.

b. Refer to s. NR 151.123(1), Wis. Adm. Code, for maximum predevelopment runoff curve numbers for developments that include but are not limited to areas like new subdivisions and undeveloped urban areas.

5. RUNOFF RELEASE RATE.

a. If the development or redevelopment occurring causes an increase of 0.5 acres or more of impervious area, the release rate and requirements shall be governed by Milwaukee metropolitan sewerage district chapter 13 - surface water and storm water rules.

b. If the development or redevelopment occurring is subject to the requirements of sub. 2 and does not cause an increase of 0.5 acres or more of impervious area, the peak runoff flow rates under post-development conditions shall be at least 10% less than the peak runoff rates under pre-development conditions during 2-year and 100-year, 24-hour storm events.

c. If demolition or construction during redevelopment will disturb an area between 3.5 and 5 acres, then the runoff release rate shall be reduced by 15%.

d. If demolition or construction during redevelopment will disturb an area exceeding 5 acres, then the runoff release rate shall be reduced by 20%.

6. RUNOFF DISCHARGE QUALITY CONTROL. a. Runoff quality shall meet or exceed the following criteria:

a-1. For new development, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this paragraph.

a-2. For redevelopment, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this paragraph.

a-3. For in-fill development under 5 acres that occurs within 10 years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 40%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed a 40% total suspended solids reduction to meet the requirements of this paragraph.

a-4. For in-fill development under 5 acres that occurs 10 or more years after October 1, 2002, by design, reduce to the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirements of this paragraph.

a-5. Any other regulatory agency requirements specific to the discharge produced by the development.

b. Applicability. This subsection applies to whenever a storm water management plan is required in the separate storm sewer system or if storm water runoff from the development or redevelopment is subject to the requirements of sub. 2 and storm water runoff from that development or redevelopment discharges into waters of the state.

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6.5. GREEN INFRASTRUCTURE REQUIRED. a. If a stormwater management plan is required under sub. 2 and is not waived under sub. 4, then the development or redevelopment shall include green infrastructure with a detention volume equal to at least one-half inch multiplied by the total area of new or redeveloped impervious surface. A green infrastructure plan required under this paragraph shall be submitted and approved as part of the stormwater management plan.

b. A green infrastructure plan required under par. a shall include:

b-1. A description of the project and the dimensions of the new impervious surface.

b-2. A description of the proposed green infrastructure and the dimensions of the green infrastructure.

b-3. One or more drawings showing the new impervious surface and the green infrastructure.

b-4. Calculations showing the detention volume needed and the detention volume provided by the proposed green infrastructure.

b-5. If applicable, a description of any conditions that support a reduction in green infrastructure implementation to a maximum extent practicable according to s. 120-4, and a description of any suggested alternate green infrastructure arrangement. Any reduction in or alternate green infrastructure arrangement must be approved by the city engineer.

b-6. An annual maintenance plan for the proposed green infrastructure.

c. A green infrastructure plan shall determine the detention volume provided by the proposed green infrastructure through project-specific modeling, a calculating tool identified by the department or a schedule of green infrastructure detention volume estimates according to type made available by the department.

7. MAINTENANCE OF EFFORT. For a redevelopment site where the redevelopment will be replacing an older development that was subject to s. 120-7, the responsible party shall meet the total suspended solids reduction and peak flow control standards applicable to the older development or meet the redevelopment standards of this chapter, whichever is more stringent.

8. MAXIMUM EXTENT PRACTICABLE. If a design cannot meet the total suspended solids reduction performance standard of sub. 6, the storm water management plan shall include a written, site-specific explanation of why the total suspended solids reduction performance standard cannot be met and why the total suspended solids load will be reduced only to the maximum extent practicable.

9. INTENT TO PROCEED. The department of public works shall be notified 3 working days before any work is commenced on the site. The contact phone number shall be listed in the storm water management plan.

120-9. Storm Water Management Plan. The person shall be responsible for the preparation and implementation of the storm water management plan. Sufficient information shall be furnished to the city engineer for evaluating the environmental characteristics of the affected areas. Such information shall include the potential and predicted impacts on watercourses, the effectiveness and acceptability of the proposed measures for reducing adverse impacts and a maintenance program.

1. GENERAL INFORMATION. The storm water management plan shall be prepared by a registered professional engineer. It shall contain the person's name, address and telephone number. The plan shall also contain but is not limited to narrative descriptions and explanations, maps, charts and graphs, tables, photographs, calculations and supporting reference information to books, publications, manuals and other documents used. The department of public works reserves the authority to determine the appropriateness of the methodology used.

2. EXISTING SITE CONDITIONS. The description of the existing site conditions shall include:

a. The hydrologic parameters.
b. The location of areas where storm water collects or percolates into the ground.

c. Groundwater levels.
d. Vegetation, including grasses, forbs, trees, shrubs, wildflowers and aquatic plants that are native to Wisconsin, as well as any oldfield successions of native and non-native plants.

e. Topography.

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- f. Soils.
- g. Location and description of impervious areas.
- h. Locations of all structures and buildings.
- i. Locations of floodplains.
- j. Locations of all receiving bodies of water on or adjacent to the site or into which storm water flows. Information regarding current water quality and classification, if any, shall be provided.
- k. Existing storm water runoff conditions from adjacent tributary areas.
- l. Location and hydraulic conditions of the storm sewer systems.

3. SITE ALTERATIONS. The description of the proposed site alterations shall include:

- a. Areas where vegetation is disturbed or planted, including areas of grasses, forbs, trees, shrubs, wildflowers and aquatic plants that are native to Wisconsin, as well as any oldfield successions of native and non-native plants.
- b. Changes in topography.
- c. The size and location of any building or structure.
- d. Site use and any Standard Industrial Classification (SIC) code number.
- e. Changes of impervious surface areas and a description of the surfacing material.

4. PREDICTED IMPACTS. The description of the predicted impacts on water quality and quantity from the proposed development shall include:

- a. Drainage facilities.
- b. Receiving bodies of water.
- c. Floodplains.
- d. Ground water levels.

5. BEST MANAGEMENT PRACTICES. The description of the proposed best management practices to be used for the protection of water quality and the reduction of water quantity shall include:

- a. Detention, retention and sedimentation facilities, including plans for discharges from the facilities, maintenance plans and predictions of water quality.
- b. Areas of the site to be used or reserved for percolation including a prediction of the impact on groundwater quality.
- c. Green infrastructure.
- d. Any other relevant volume controls or measures not described in pars. a or b.

e. Infiltration practices shall be permitted according to s. NR 151.124, Wis. Adm. Code, provided the person presents evidence of sufficient soil infiltration rates using scientifically credible field test methods to show that the infiltration rates are 0.6 inches per hour or above and the soil profile is not clay.

f. Swale treatment for transportation purposes may be used according to s. NR 151.249, Wis. Adm. Code, provided the transportation facility development does not conflict with the criteria specified in s. 120-7-2. In case of a conflict, the more restrictive criteria of s. 120-7-2 shall be used.

g. A plan for the control of erosion and sedimentation in accordance with ch. 290.

h. Any other relevant source control practices not described in par. d.

i. Any other information which the person or the city believes is reasonably necessary for an evaluation of the development.

6. GUARANTEE. a. The plan shall also be accompanied by an irrevocable letter of credit, certified check or surety bond to guarantee implementation and completion of storm water management plans. By submitting the guarantee, the person consents to allowing the city to inspect the best management practices constructed to meet requirements of the storm water management plan. After construction of the storm water management facilities has been completed, the person shall submit to the city engineer a written certification prepared and stamped by a registered professional engineer that the facilities have been constructed in accordance with the storm water management plan. After the city engineer receives the certification, that portion of the guarantee not utilized under s. 120-17 shall be released or returned.

b. The plan shall also be accompanied an irrevocable letter of credit, certified check, surety bond, or letter of financial guarantee from the person to ensure the facilities are maintained. The guarantee shall be in effect until the facilities are recertified as required by s. 120-15.

120-11. Off-Site Drainage Facilities. The city engineer may approve storm water discharges of unacceptable quality into off-site drainage facilities, or in volumes or rates in excess of those allowed by this chapter. The following conditions must be met:

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1. It is not feasible to manage the total runoff within the site.
2. Adverse impact from the site will be minimized.
3. The design, construction, operation and maintenance of the off-site drainage facilities and the facilities leading to them are in accordance with the requirements of this chapter.
4. The person will be responsible for the costs of design, construction, maintenance and operation of the off-site drainage facilities and facilities leading to them. The person may enter into a private agreement with the owner of the property on which such off-site drainage facilities exist, to share in any of the cost responsibilities.
5. For each operation or maintenance shared responsibility agreement, the city engineer shall be provided with a deed restriction which contains the requirements of the agreements.
6. The city engineer is provided with an easement for access to the drainage facilities.

120-13. Manual of Storm Water Management Practices.

1. The city engineer with the assistance of the commissioners of the departments of neighborhood services and city development shall compile a manual of storm water management practices. The manual shall be made available for sale to the public and updated periodically. The manual will be used for the preparation of a storm water management plan.
2. The manual shall incorporate current best management practices (BMPs) for controlling the quality and quantity of storm water runoff. The manual shall contain:
 - a. Guidance and specifications for the preparation of a storm water management plan, including techniques for calculating and presenting the information required in the plan.
 - b. Detailed design specifications for BMPs used to improve the water quality.
 - c. Minimum specifications for the construction of BMP facilities which use current sound engineering practices.
 - d. Techniques and BMPs which emphasize the use of natural systems.
 - e. Techniques and BMPs for source control measures to manage water quality.

- f. Techniques and BMPs which control volume in an effort to improve water quality.
- g. Minimum requirements for the maintenance plan.
3. The manual is available for purchase from the department of public works.

120-14. Control of Storm Water Discharge for the Milwaukee River Greenway Site Plan Review Overlay Zone.

1. PURPOSE. The common council finds that the Milwaukee River corridor between the former North Avenue dam and the city limits at Silver Spring Drive contains native vegetation, wildlife habitat, natural bluffs, stream banks and waterways, and other valuable natural resources in need of protection. The regulations of this section are established to provide this protection by reducing the quantity of polluted storm water runoff, encouraging the planting of native vegetation, stabilizing stream banks and bluffs, mitigating flooding of the Milwaukee River and its tributaries, and reducing flows to the city's combined sewer system.
2. APPLICABILITY. This section applies only to all properties within the Milwaukee River greenway site plan review overlay zone, as shown on the city zoning map and established by common council file number 081568.
3. CONFLICTING REQUIREMENTS. The provisions of this section are intended to supplement, not replace, other provisions of this chapter. If any provision of this section conflicts with any other provision of this chapter, any other section of this code, or any applicable state or federal law, the more restrictive provision shall apply.
4. DEVELOPMENT CRITERIA. A storm water management plan is required if any of the following criteria are met:
 - a. The development or redevelopment causes a land disturbing activity of one-half acre or more.
 - b. The development or redevelopment causes the cumulative area of all land disturbing activities at a property to be one-half acre or more over a 3-year period.
 - c. The development or redevelopment occurring causes an increase of 0.5 acres or more of impervious area.
5. RUNOFF RELEASE RATE. a. If the development or redevelopment occurring causes an increase of 0.5 acres or more of

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impervious area, the release rate and requirements shall be governed by Milwaukee metropolitan sewerage district ch. 13 - surface water and storm water rules.

b. If the development or redevelopment occurring meets any of the criteria in sub. 4 and does not cause a land disturbing activity of 0.5 acres or more of impervious area, the peak runoff flow rates under post-development conditions shall be at least 50% less than the peak runoff rates under pre-development conditions.

6. RUNOFF DISCHARGE QUALITY CONTROL. a. Any development or redevelopment shall, by design, reduce to the maximum extent practicable the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls. No person shall be required to exceed an 80% total suspended solids reduction to meet the requirement of this paragraph.

b. This subsection applies whenever a storm water management plan is required in the separate storm sewer system or if storm water runoff from the development or redevelopment meets any of the criteria of sub. 4 and storm water runoff from that development or redevelopment discharges into waters of the state.

7. ADDITIONAL REGULATIONS. The following additional storm water management regulations shall apply to development or redevelopment within the Milwaukee River greenway site plan review overlay zone:

a. Storm water best management plans shall show topographical lines and bluff lines.

b. Storm water best management practices shall be located as close to the source of runoff as possible, and shall emphasize techniques that incorporate native plants, shrubs and trees and mimic natural landscape features.

c. Storm water management facilities shall not be permitted within the primary environmental corridor, as mapped by the southeastern Wisconsin regional planning commission, unless the city engineer determines, based on evidence provided by the developer, that such facilities are necessary to protect public safety or bluff stability. The placement of storm water management facilities within the 50-foot setback from top of bluff required by the overlay zone's design standards,

as adopted by the common council in file number 081569, shall be permitted if these facilities emphasize the use of such storm water management practices as rain gardens, vegetated swales and similar techniques, and do not adversely impact bluff stability and public access.

d. Every storm water management facility shall be designed and constructed in a manner to minimize erosion and bluff instability. The permit requirements of ch. 30, Wis. Stats., shall also apply to any alterations to the river bank.

e. A storm water management plan required pursuant to this section shall be prepared in accordance with the manual of storm water management practices, including both the provisions that apply citywide and the provisions that apply only to the Milwaukee River greenway site plan review overlay zone.

120-15. Maintenance of Drainage Facilities.

1. Every 5 years the person shall submit a written recertification for the approved storm water management plan from a registered professional engineer that the drainage facility is operating as originally designed along with an updated irrevocable letter of credit, certified check or surety bond or letter of financial guarantee from the person as provided in s. 120-9. By submitting the guarantee, the person consents to allowing the city to inspect the best management practices prescribed in the storm water management plan.

2. When applicable, the facilities shall be maintained in accordance with the agreements set forth in s. 120-11.

3. Minimum maintenance requirements and procedures outlined in the manual of storm water management practices described in s. 120-13 shall also be used.

4. Violations of this section shall be subject to the enforcement procedures and penalties set forth in s. 120-17.

120-17. Enforcement. 1. NUISANCE. The following activities are deemed a public nuisance:

a. Any development that is commenced without an approved storm water management plan.

b. Any drainage facility which is not constructed in accordance with the approved storm water management plan.

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c. Any drainage facility not maintained in accordance with ss. 120-9, 120-11 or 120-15.

d. Any activity which adversely impacts on water quality.

2. COMPLIANCE ORDER. a. Any public nuisance under this section shall be subject to the provisions of chs. 79, 115 and 116.

b. When the commissioner of the department of neighborhood services determines that a willful violation of the provisions of this chapter exists or has reasonable grounds to believe that one does, the commissioner may order the person to correct the violation by issuing a notice of violation, citation or stop-work order.

c. Any person who commences activity without an approved plan may be required to restore the land to its original condition within 10 days.

d. If the person fails to take corrective action after being noticed, the department of neighborhood services shall take whatever steps are necessary as soon as possible to correct the violation, including but not limited to, using city forces or engaging contractors.

3. RECOVERY OF COSTS. a. If the person has filed an irrevocable letter of credit, certified check or surety bond as required in s. 120-9, the appropriate guarantee shall be executed.

b. If the person has not filed an irrevocable letter of credit, certified check or surety bond as required in s. 120-9, the cost shall be billed to the person, payable within 30 days.

c. If the person has filed an irrevocable letter of credit, certified check, or surety bond, but is less than the actual cost:

c-1. The appropriate guarantee shall be executed.

c-2. The difference in cost shall be billed to the person, payable within 30 days.

d. If the person fails to pay within 30 days, the bill shall become a lien on the real property and collectible in accordance with s. 66.0627, Wis. Stats.

4. PENALTIES. In addition to any penalty provided herein or by law, a person who is convicted of violating any provision of this chapter shall forfeit not more than \$2000 for each violation together with the costs of such action. Upon failure to pay the forfeiture, the person shall be subject to imprisonment in the county house of correction for no more than 80 days for each offense. Each day of violation shall constitute a separate offense.

120-19. Appeals. Appeals not under the jurisdiction of the standards and appeals commission, s. 200-17, may be submitted to the administrative review appeals board as provided in s. 320-11.

Storm Water Management Regulations 120-(HISTORY)

LEGISLATIVE HISTORY CHAPTER 120

Abbreviations:

am = amended
cr = created

ra = renumbered and amended
rc = repealed and recreated

rn = renumbered
rp = repealed

<u>Section</u>	<u>Action</u>	<u>File</u>	<u>Passed</u>	<u>Effective</u>
Ch. 120	cr	920650	10/30/92	11/18/92
120-1-1-d	am	060587	10/24/2006	11/10/2006
120-1-1-e	am	011255	1/22/2002	2/5/2002
120-1-1-e	rp	060587	10/24/2006	11/10/2006
120-1-1-f	rn to 120-1-1-e	060587	10/24/2006	11/10/2006
120-1-1-f	cr	080195	7/30/2008	8/16/2008
120-1-1-g	cr	180803	9/25/2018	10/12/2018
120-1-1-h	cr	180803	9/25/2018	10/12/2018
120-3*	rc	060587	10/24/2006	11/10/2006
* Note: Sec. 120-3-20 is effective May 1, 2007.				
120-3-0	am	951346	1/23/96	2/9/96
120-3-1	am	151776	4/15/2016	5/4/2016
120-3-5	am	110060	5/24/2011	6/14/2011
120-3-6	rn to 120-3-7	950892	11/6/95	11/14/95
120-3-6	cr	950892	11/6/95	11/14/95
120-3-6	am	011255	1/22/2002	2/5/2002
120-3-7	rn to 120-3-8	950892	11/6/95	11/14/95
120-3-8	rn to 120-3-9	950892	11/6/95	11/14/95
120-3-9	rn to 120-3-10	950892	11/6/95	11/14/95
120-3-9.5	cr	180803	9/25/2018	10/12/2018
120-3-10	rn to 120-3-11	950892	11/6/95	11/14/95
120-3-11	rn to 120-3-12	950892	11/6/95	11/14/95
120-3-12	rn to 120-3-13	950892	11/6/95	11/14/95
120-3-13	rn to 120-3-14	950892	11/6/95	11/14/95
120-3-14	rn to 120-3-15	950892	11/6/95	11/14/95
120-3-14	am	011255	1/22/2002	2/5/2002
120-3-14.5	cr	151776	4/15/2016	5/4/2016
120-3-15	rn to 120-3-16	950892	11/6/95	11/14/95
120-3-15	cr	151776	4/15/2016	5/4/2016
120-3-16	rn to 120-3-17	950892	11/6/95	11/14/95
120-3-16.5	cr	151776	4/15/2016	5/4/2016
120-3-17	rn to 120-3-18	950892	11/6/95	11/14/95
120-3-17	rn to 120-3-18	011255	1/22/2002	2/5/2002
120-3-17	cr	011255	1/22/2002	2/5/2002
120-3-17.5	cr	151776	4/15/2016	5/4/2016
120-3-18	rn to 120-3-19	950892	11/6/95	11/14/95
120-3-18	rn to 120-3-19	011255	1/22/2002	2/5/2002
120-3-18	am	110060	5/24/2011	6/14/2011
120-3-19	rn to 120-3-20	950892	11/6/95	11/14/95
120-3-19	rn to 120-3-20	011255	1/22/2002	2/5/2002
120-3-20	rn to 120-3-21	950892	11/6/95	11/14/95
120-3-20	rn to 120-3-21	011255	1/22/2002	2/5/2002
120-3-21	rn to 120-3-22	950892	11/6/95	11/14/95
120-3-21	rn to 120-3-22	011255	1/22/2002	2/5/2002
120-3-22	rn to 120-3-23	950892	11/6/95	11/14/95
120-3-22	rn to 120-3-23	011255	1/22/2002	2/5/2002
120-3-23	rn to 120-3-24	950892	11/6/95	11/14/95
120-3-23	rn to 120-3-24	011255	1/22/2002	2/5/2002

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120-3-24	rn to 120-3-25	950892	11/6/95	11/14/95
120-3-24	rn to 120-3-25	011255	1/22/2002	2/5/2002
120-3-25	rn to 120-3-26	011255	1/22/2002	2/5/2002
120-4	cr	151776	4/15/2016	5/4/2016
120-5-1	am	950892	11/6/95	11/14/95
120-5-2-b	am	011255	1/22/2002	2/5/2002
120-5-2-d	am	060587	10/24/2006	11/10/2006
120-7-1-0	am	011255	1/22/2002	2/5/2002
120-7-1-0	am	060587	10/24/2006	11/10/2006
120-7-1	am	950892	11/6/95	11/14/95
120-7-1-c	am	060587	10/24/2006	11/10/2006
120-7-1.5	cr	081664	5/25/2010	6/12/2010
120-7-2	rn to 120-7-3	011255	1/22/2002	2/5/2002
120-7-2	cr	011255	1/22/2002	2/5/2002
120-7-2	rc	060587	10/24/2006	11/10/2006
120-7-2-a	am	950892	11/6/95	11/14/95
120-7-2-c	am	950892	11/6/95	11/14/95
120-7-2-d	cr	110060	5/24/2011	6/14/2011
120-7-2-f	cr	950892	11/6/95	11/14/95
120-7-3	rn to 120-7-4	011255	1/22/2002	2/5/2002
120-7-3	rc	011255	1/22/2002	2/5/2002
120-7-3-d	cr	950892	11/6/95	11/14/95
120-7-3-e	cr	110060	5/24/2011	6/14/2011
120-7-3-f	cr	110060	5/24/2011	6/14/2011
120-7-4-a	am	060587	10/24/2006	11/10/2006
120-7-4-c-1	am	011255	1/22/2002	2/5/2002
120-7-4-d	rp	011255	1/22/2002	2/5/2002
120-7-4.5	cr	151776	4/15/2016	5/4/2016
120-7-5	cr	011255	1/22/2002	2/5/2002
120-7-5	rc	060587	10/24/2006	11/10/2006
120-7-5-b	am	110060	5/24/2011	6/14/2011
120-7-5-c	cr	110060	5/24/2011	6/14/2011
120-7-5-d	cr	110060	5/24/2011	6/14/2011
120-7-6	cr	011255	1/22/2002	2/5/2002
120-7-6	rc	031208	3/19/2004	4/7/2004
120-7-6-a-3	am	151776	4/15/2016	5/4/2016
120-7-6-b	rc	060587	10/24/2006	11/10/2006
120-7-6.5	cr	180803	9/25/2018	10/12/2018
120-7-7	cr	011255	1/22/2002	2/5/2002
120-7-7	rn to 120-7-9	151776	4/15/2016	5/4/2016
120-7-7	cr	151776	4/15/2016	5/4/2016
120-7-8	cr	151776	4/15/2016	5/4/2016
120-9-1	am	011255	1/22/2002	2/5/2002
120-9-2-d	am	080195	7/30/2008	8/16/2008
120-9-3-a	am	080195	7/30/2008	8/16/2008
120-9-5-0	am	151776	4/15/2016	5/4/2016
120-9-5-c	rn to 120-9-5-d	080195	7/30/2008	8/16/2008
120-9-5-c	cr	080195	7/30/2008	8/16/2008
120-9-5-c	rc	180803	9/25/2018	10/12/2018
120-9-5-d	rn to 120-9-5-e	080195	7/30/2008	8/16/2008
120-9-5-e	rn to 120-9-5-f	080195	7/30/2008	8/16/2008
120-9-5-e	rn to 120-9-5-g	151776	4/15/2016	5/4/2016
120-9-5-e	cr	151776	4/15/2016	5/4/2016
120-9-5-f	rn to 120-9-5-g	080195	7/30/2008	8/16/2008
120-9-5-f	rn to 120-9-5-h	151776	4/15/2016	5/4/2016
120-9-5-f	cr	151776	4/15/2016	5/4/2016
120-9-5-g	rn to 120-9-5-i	151776	4/15/2016	5/4/2016

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120-9-6	am	060587	10/24/2006	11/10/2006
120-9-6-a	am	080195	7/30/2008	8/16/2008
120-9-6-a	am	151776	4/15/2016	5/4/2016
120-13-1	am	980963	12/18/98	1/1/99
120-13-1	am	060587	10/24/2006	11/10/2006
120-13-3	cr	011255	1/22/2002	2/5/2002
120-14	cr	081664	5/25/2010	6/12/2010
120-15-1	am	060587	10/24/2006	11/10/2006
120-15-1	am	151776	4/15/2016	5/4/2016
120-17-2-b	am	980963	12/18/98	1/1/99
120-17-2-d	am	980963	12/18/98	1/1/99
120-17-2-d	am	011255	1/22/2002	2/5/2002
120-17-4	am	011255	1/22/2002	2/5/2002

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