South Washington Watershed District Rules

Adopted September 13, 2022

Effective October 1, 2022

SOUTH WASHINGTON WATERSHED DISTRICT

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Certification of Rules

CERTIFICATE OF RULES
SOUTH WASHINGTON WATERSHED DISTRICT
STATE OF MINNESOTA

STATE OF MINNESOTA)

COUNTY OF WASHINGTON)§

SOUTH WASHINGTON WATERSHED DISTRICT)

I, Brian Johnson, President of the South Washington Watershed District Board of Managers, certify that this is a true and correct copy of South Washington Watershed District Rules having been adopted by the South Washington Watershed District Board of Managers on the **13th** Day of **September, 2022**.

Brian Johnson *Date*

STATE OF MINNESOTA)

COUNTY OF WASHINGTON)§

On this **13th** day of **September, 2022,** before me a notary public within, and for said County, personally appeared Brian Johnson, to me personally known, and by me duly sworn, did say that he is the President for the South Washington Watershed District, a body politic and corporate under the laws of Minnesota, named in the foregoing instrument, on behalf of said District by authority of its Board of Managers, and that he has executed the same as its free act and deed on behalf of the District.

Notary *Date*

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Introduction

The South Washington Watershed District (the "District") adopts these Rules and Regulations as required by Minnesota Statute 103D.341 to accomplish the purposes in Chapter 103D, implement the powers of the managers, and the policies of the District as contained in the District Watershed Management Plan (the "Plan").

Statement of Need and Reasonableness

The Cottage Grove Ravine Watershed District was formed in 1993, changing its name to the South Washington Watershed District (SWWD) in 1995. SWWD adopted its first Watershed Management Plan (WMP) in 1997 and Rules in 1999.

In 2003, SWWD was enlarged to incorporate the former East Mississippi Watershed Management Organization (EMWMO), following recommendations from the 1999 Washington County Governance Study. In an effort to bring its standards up to date and to incorporate the new area, SWWD adopted its second and current WMP in 2007. The current WMP provides the basis for managing water resources and setting standards on a subwatershed or basin level rather than using a one size fits all approach. A Standards Manual was also completed in 2007 to "address and establish consistency in water quality and quantity modeling approaches" and "provide guidance on means and methods for achieving watershed standards. The Standards Manual was also meant to provide a foundation for a future rule update.

In 2010, after a two year process SWWD was again enlarged, this time to incorporate four of the five subwatersheds of the former Lower St. Croix Watershed Management Organization (LSCWMO). During the enlargement process, SWWD committed to managing the District on a subwatershed basis, rather than using a one size fits all approach. To that end, SWWD sets standards unique to the characteristics of each subwatershed when appropriate (i.e. when state or federal standards, or TMDL allocations require more stringent standards for individual subwatersheds). However, it remains SWWD's desire to streamline the regulatory process as much as feasible.

During the 2010 enlargement process, SWWD initiated a rule update. The update process was not meant to create new rules, but rather to consolidate and clarify existing Rules and Standards developed for the 1999 SWWD Rules, 2007 SWWD Standards Manual, and 2009 LSCWMO Rules and firmly establish the framework for managing the District's water resources on a subwatershed basis.

SWWD Rules were updated again in 2015 to reflect new requirements to ensure District compliance with its Municipal Separate Storm Sewer System (MS4) permit and incorporate additional guidance documents adopted by the District (i.e. Atlas 14 precipitation design events). Likewise, this 2022 update is being adopted to reflect modifications to the 2020 MS4 permit issued November 16, 2020.

General Policy Statement

Under the Minnesota Watershed Law, MN State Statute 103D, the South Washington Watershed District (SWWD) exercises a series of powers to accomplish its statutory purpose. These Rules are adopted to implement those purposes for which the SWWD was formed. Purposes include carrying out the policies contained in the Watershed Management Plan ("the Plan"), coordinating SWWD activities with other governmental agencies, ensuring that water and natural resources are considered, protected, and preserved within the District, ensuring that future regional water management needs are considered in the development of individual subdivisions, developments, and local water management plans (LWMP), and to protect the public health, safety, and welfare.

Land alteration affects the rate, volume, and quality of surface runoff, which ultimately must be maintained in the District through a combination of evaporation and infiltration of stormwater and, if necessary, designing and construction a conveyance system to outlet stormwater to the Mississippi or St. Croix Rivers at the south and east borders of the District.

Land alteration and utilization can also degrade the quality of runoff entering water bodies of the District due to non-point source pollution. Sedimentation in lakes and streams from on-going erosion processes and construction activities reduces the hydraulic capacity of water bodies and degrades water quality. Projects which increase the rate of stormwater runoff or degrade runoff quality increase the need for storage and can aggravate existing water quality problems and contribute to new ones. Projects which fill floodplain or wetland areas can increase the need for storage by reducing stormwater storage and hydraulic capacity of water bodies and degrade water quality by eliminating the filtering capacity of such areas. Dredging projects can also degrade water quality and eliminate the natural appearance of shoreland areas.

These Rules seek to protect the public health, welfare, and natural resources of the District, reduce the need for additional storage capacity and the potential need for the construction of systems to convey storm water, preserve floodplains and wetland storage capacity, maintain or improve the chemical and physical quality of the surface and groundwater, reduce sedimentation, preserve the hydraulic and navigational capacity of water bodies, preserve natural shoreland features, and minimize the public expenditure to avoid or correct such problems in the future.

Relationship to Municipalities

The District recognizes that the primary control and determination of appropriate land uses is the responsibility of the municipalities. Accordingly, the District will coordinate development permit application reviews with the municipality where the property is located. Primary responsibility for management of water quality and stormwater runoff lies with the District.

It is the intention of the managers to ensure that development of land within the District proceeds in conformity with these Rules, in addition to conforming with the development guides and plans adopted by municipalities. The District shall exercise control over development through its permit program described in these Rules to ensure maintenance of natural water storage areas, their shorelines, and protection of existing natural topography and vegetative features in order to preserve them for present and future beneficial uses.

The managers desire to serve as technical advisors to the municipal officials in the preparation of local surface water management plans (LWMP) and the review of individual development proposals prior to investment of significant public or private funds. The District will also review projects sponsored or undertaken by municipalities and other governmental organizations, and will require compliance with these Rules for government projects that have an impact on water resources in the District. To promote a coordinated review process between the District and the municipalities, the managers request that the municipalities involve the District early in the planning process.

The District urges municipalities to develop, as rapidly as possible, a LWMP, providing a coordinated system of managing surface water on a regional or subwatershed basis consistent with these Rules. Where such a municipal plan is adopted, the requirements of the District's Rules which are met by the municipal plan shall be deemed satisfied upon issuance of an appropriate municipal permit. In the absence of a LWMP on a municipal or subwatershed level, or where required by a Municipal LWMP, SWWD will continue to require individual site-by-site SWWD permits for projects involving land alteration.

Definitions

For the purpose of these Rules and Regulations, the terms defined in this section shall have the meaning attached to them:

100-year Event means the amount of runoff as defined by NOAA Atlas 14, MSE 3, that has a one percent chance of occurring at a given location within a one-year time period.

100-year Flood Level is the peak elevation of a water body resulting from a 100-year event.

Active Karst means a terrain having distinctive landforms and hydrology created primarily from the dissolution of soluble rocks within 50 feet of the land surface.

Best Management Practices (BMPs) means the most effective and practicable means of erosion prevention and sediment control, and water quality management practices that are the most effective and practicable means of to control, prevent, and minimize degradation of surface water, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, pollution prevention through good housekeeping, and other management practices published by state or designated area-wide planning agencies.

Common Plan of Development or Sale means one proposed plan for a contiguous area where multiple separate and distinct land-disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

Construction Activity means activities including clearing, grading, and excavating, that result in land disturbance of equal to or greater than one acre, including the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre. This includes a disturbance to the land that results in a change in the topography, existing soil cover, both vegetative and nonvegetative, or the existing soil topography that may result in accelerated stormwater runoff that may lead to soil erosion and movement of sediment. Construction activity does not include a disturbance to the land of less than five acres for the purpose of routine maintenance performed to maintain the original line and grade, hydraulic capacity, and original purpose of the facility. Routine maintenance does not include activities such as repairs, replacement and other types of non-routine maintenance. Pavement rehabilitation that does not disturb the underlying soils (e.g., mill and overlay projects) is not construction activity.

Critical Duration means the event duration that typically leads to the largest peak discharge.

Critical Duration Event Analysis means analysis to establish critical duration.

Dewatering means the removal of surface or ground water to dry and/or solidify a construction site to enable construction activity. Dewatering may require a Minnesota Department of Natural Resources (DNR) water appropriation permit and, if dewatering water is contaminated, discharge of such water may require an individual MPCA NPDES/SDS permit.

District means the South Washington Watershed District.

DNR Catchment Area means the Hydrologic Unit 08 areas delineated and digitized by the Minnesota DNR. The catchment areas are available for download at the Minnesota DNR Geospatial Commons website. DNR catchment areas may be locally corrected, in which case the local corrections may be used.

Drainage System means those features of the watershed such as lakes, ponds, streams and waterways, infrastructure, and pumps which contain and convey water resources of the District.

Energy Dissipation means methods employed at pipe outlets to prevent erosion caused by the rapid discharge of water scouring soils.

Erosion Prevention means measures employed to prevent erosion such as soil stabilization practices, permanent cover or construction phasing.

~~**Exempted Public Improvement Project** is a linear project on existing infrastructure which does not increase impervious area above one cumulative acre. Examples include mill and overlay or sewer or water system reconstructions.~~

Existing hydrologic conditions means those conditions in place prior to the start of the current project, except for wetlands where alterations have significantly changed the wetland hydrology in which case existing means those hydrologic conditions that established the current wetland

Floodplain is the area along channels and waterways, including the area around lakes, marshes, lowlands, and ponding areas which would become inundated as the result of a flood occurring on the average once every 100 years.

Fully reconstructed means areas where impervious surfaces have been removed down to the underlying soils. Activities such as structure renovation, mill and overlay projects, and other pavement rehabilitation projects that do not expose the underlying soils beneath the structure, pavement, or activity are not considered fully reconstructed. Maintenance activities such as catch basin repair/replacement, utility repair/replacement, pipe repair/replacement, lighting, and pedestrian ramp improvements are not considered fully reconstructed.

General permit means a permit issued under Minn. R. 7001.0210 to a category of

owners/operators whose operations, emissions, activities, discharges, or facilities are the same or substantially similar.

Groundwater means the water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground.

High Priority Wetlands are wetlands with high functional values as identified in the Watershed Management Plan.

Impaired Waters means a water with an USEPA approved TMDL for any of the impairments listed in this item, and waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators), turbidity, TSS, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment).

Impervious Surface means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, driveways, parking lots, and concrete, asphalt, or gravel roads. Bridges over surface waters are considered impervious surfaces.

Infeasible means not technologically possible or not economically practicable and achievable in light of the best industry practices.

Infiltration Basins are depressions that when inundated with surface water runoff have the capacity to pass water down into the subsurface at a relatively high rate.

Initiated immediately means taking an action to commence soil stabilization as soon as practicable, but no later than the end of the workday, following the day when the land-disturbing activities temporarily or permanently ceased. If construction work on the site will be cease for 14 or more additional calendar days, or seven (7) calendar days on a project that is within one mile (aerial radius measurement) of, and flows to, one or more of the following: “impaired waters”, “other special waters”, “prohibited waters”, and/or “restricted waters” as defined), stabilization can be immediately initiated by:

a) Prepping the soil for vegetative or non-vegetative stabilization; or

b) Applying mulch or other non-vegetative product to the exposed soil area; or

c) Seeding or planting the exposed area; or

d) Starting any of the activities in a - c on a portion of the area to be stabilized, but not on the entire area; or

e) Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization

Karst Sensitive Areas are those with less than 50 feet of surficial materials overlying unconsolidated St. Peter Sandstone or the soluble dolomitic Prairie du Chien Group.

Lake Augmentation is any artificial addition of water to a lake, or a project which diverts water to a lake which did not previously drain naturally to the lake.

Landlocked area corresponds to a depression where there is no readily available surface overflow for stormwater drainage during a 100-year or larger event.

Linear project means construction of new or fully reconstructed roads, trails, sidewalks, or rail lines that are not part of a common plan of development or sale. For example, roads being constructed concurrently with a new residential development are not considered linear projects because they are part of a common plan of development or sale.

LGU means Local Government Unit.

Local Water Management Plan is the plan adopted by a municipality which is the criteria used by each municipality to address stormwater management.

Minimum Building Grade Elevation is the lowest ground elevation next to a building or structure.

Municipal separate storm sewer system or MS4 means a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches,
man-made channels, or storm drains:

a) owned or operated by a state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district, or drainage district or similar entity, or an Indian tribe or an authorized Indian tribe organization, or a designated and approved management Agency under section 208 of the federal Clean Water Act, United States Code, title 33, section 1288, that discharges into waters of the state;

b) designed or used for collecting or conveying stormwater;

c) that is not a combined sewer; and

d) that is not part of a publicly owned treatment works as defined in 40 CFR 122.2.

Municipal separate storm sewer systems do not include separate storm sewers in very discrete areas, such as individual buildings.

National Pollutant Discharge Elimination System (NPDES) means the program for issuing, modifying,

revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act, as amended (33 U.S.C. 1251 et seq. Section 1342 and 40 CFR parts 122, 123, 124 and 450).

Natural Buffer means an area of undisturbed cover surrounding surface waters within which construction activities are restricted. Natural buffer includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

Normal Wetted Perimeter means the area of a conveyance, such as a ditch or channel, that is in contact with water during flow events that are expected to occur from a two-year, 24-hour storm event.

Other Special Waters" means Trout Lakes identified in Minn. R. 6264.0050, subp. 2. and Trout Streams listed in Minn. R. 6264.0050, subp. 4.

Permanent Cover means surface types that will prevent soil failure under erosive conditions. Examples include: gravel, concrete, perennial cover, or other landscaped material that will permanently arrest soil erosion. Permanent cover consists of a uniform perennial vegetative cover (i.e., evenly distributed, without larger bare areas) with a density of 70 percent of the native background vegetative cover or equivalent permanent stabilization measures. Permanent cover does not include temporary BMPs such as wood fiber blanket, mulch, and rolled erosion control products.

Person means an individual, firm, partnership, association, private corporation, city, village, county, township, school district or other political subdivisions.

A **Plat** is a legal document used to subdivide property which includes a drawing or map of the subdivision, meeting all the requirements of the applicable Minnesota Statutes.

Project(s) means all construction activity planned and/or conducted under this ordinance. The project occurs on the site or sites as described in the site plan.

Public health, safety and welfare extends to and includes any act or thing tending to improve or benefit or in any way affect the general public either as a whole or as to a particular community or part thereof. This definition is to be construed liberally to give meaning and effect to the goals and purposes of the South Washington Watershed District and also statutes and ordinances relating to floodplain management and shoreland use.

~~**Public Improvement Project** is a linear project (i.e. roadways) establishing impervious area cumulatively above one acre as a result of the project, even if the project is phased over several years.~~

Public Waters means all water basins and watercourses described in Minn. Stat. Sect. 103G.005 subp. 15.

Rate of Runoff is the peak volume of runoff per unit of time for a given storm event.

Rules means the Rules and Regulations of the South Washington Watershed District

Runoff means the amount of excess precipitation or snowmelt that is not permanently stored in depressional areas, evaporated, intercepted, or infiltrated into the soil.

Sediment Control means methods employed to prevent suspended sediment in stormwater from leaving the site (e.g. silt fences, compost logs and storm drain inlet protection).

Semi-landlocked area corresponds to a depression where there is no available surface overflow or outlet for stormwater drainage up to a 25-year storm.

~~**SCS** means Soil Conservation Service or Natural Resource Conservation Service (NRCS).~~

Stabilize, Stabilized, Stabilization means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Grass seeding, agricultural crop seeding or other seeding alone is not stabilization. Mulch materials must achieve approximately 90 percent ground coverage (typically 2 ton/acre).

Storage Volume is the maximum quantity of water that is stored in a ponding area during a storm event.

Stormwater means precipitation runoff, stormwater runoff, snowmelt runoff, and any other surface runoff and drainage.

Structural Stormwater BMP means a stationary and permanent BMP that is designed, constructed, and operated to prevent or reduce the discharge of pollutants in stormwater.

Surface Water or Waters means all streams, lakes, ponds, marshes, wetlands, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private, except that surface waters do not include stormwater treatment systems.

Technical Professional is the qualified representative designated by the Managers for the work being reviewed or performed.

Traditional Agriculture is agricultural practices that produce food or fiber. This type of agriculture does not include nurseries, feedlots, or tree farms.

~~**Type II** means the SCS rainfall distribution pattern typical of the District.~~

Volume of runoff is the amount of runoff in cubic units often noted as acre-feet.

Watershed Management Plan is the District's Watershed Management Plan, as defined by Minnesota Statutes 103B.231.

Water Resources of the District include lakes, ponds, streams, wetlands, landlocked and semi-landlocked areas, and other water features.

Watershed means an area bounded peripherally by a drainage divide, which collects precipitation and provides runoff to a particular drainage system.

Waterway means any natural or artificial channel including associated flood plains which provide a course for water flowing either continuously or intermittently.

WCA means Wetland Conservation Act (Minnesota Laws 1991 Chapter 354, as amended).

WCA Rules means Minnesota Board of Water and Soil Resources (BWSR) Minnesota Rules Chapter 8420, as amended.

Wetlands (as defined in Minn. R. 7050.0186, subp. 1a.B.) means those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. Wetlands must have the following attributes:

a) a predominance of hydric soils; and

b) inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and

c) under normal circumstances support a prevalence of such vegetation. [Minn. R. 7050.0186, subp. 1a.B]

Rule 1 Administrative Procedures

1.1 Applicability

Developers of proposed projects covered by these Rules must provide the District with the required submittals ~~through the District website at www.swwdmn.org~~. However, review and permitting procedures, and associated fees, vary based on municipal management.

1.1.1 Areas managed under municipal LWMP approved by SWWD

It is the policy of SWWD to limit duplication of effort and minimize the expense incurred by SWWD, municipalities, and applicants. Generally, SWWD review and permitting will not be required for projects in Municipalities where a SWWD approved municipal LWMP is adopted and controls are up to date. In those Municipalities, the requirements of these Rules shall be deemed satisfied upon issuance of the appropriate Municipal permit and submission of final plans to the District. Projects will be subject to SWWD review and permitting, when required under the municipal LWMP, when the applicant is seeking a variance to LMWP requirements, when a new connection to the District's MS4 is proposed, or when the SWWD Board of Managers deems a permit necessary. Municipalities are responsible for maintaining all supporting documentation necessary to demonstrate compliance with these Rules and must make those documents available on request.

1.1.2 Areas not managed under municipal LWMP

Any person undertaking any activity for which a permit is required by these Rules in areas not covered under a SWWD approved municipal LWMP shall be subject to SWWD review and permitting.

1.2 Forms

Applicants must complete the Site Review/Permit Application Form on the SWWD website (www.swwdmn.org) in addition to supplying required exhibits.

1.3 Exhibits

Developers of proposed projects covered under these Rules must provide the following submittals in .pdf file format.

A) Existing conditions
B) Grading and utility plan
C) Erosion control plan consistent with the State NPDES permit
D) Engineering design calculations, including:
    1) Total project area and area of disturbance
    2) Volume of all constructed or modified water bodies
    3) Areas of delineated wetlands and of wetland impacts resulting from project
    4) Drainage divides and areas for existing and proposed conditions
    5) Hydrologic model results for existing and proposed conditions using a 24 hour Type II storm event for return periods of 2, 10, and 100 years

6) The normal water surface elevation, 100 year flood elevation, dead storage volume, and flood storage volume for all ponds, or other water bodies involved
7) Supporting data used to calculate CN values
8) Floodplain alteration calculations
9) Water quality calculations
10) Rating curves for all outlets from water bodies within the development

E) Engineering design details
F) Landscape/vegetation plan
G) Soils borings and locations on site
H) Projects utilizing infiltration practices must also submit:
1) Construction details and specifications
2) Timing of construction of infiltration practices
3) Operation and maintenance plan
4) Calculations and supporting data for infiltration practices used in overall hydrologic calculations

1.4 Application Review

Complete applications are considered by the SWWD Board of Managers. The District Technical Professional must receive from the applicant a complete review/permit application and all necessary supporting documents a minimum of 22 days prior to a meeting at which the application is to be considered. Applications will not be considered complete until necessary applications are also filed with the Municipality where the project is to take place.

The District Technical Professional will place complete applications on the next applicable board meeting agenda when all required information is received. The Technical Professional will submit a report with recommendations to the Managers along with the complete application.

1.5 Action by Board

The Managers will approve or deny completed applications, in accordance with Minnesota Statutes, Section 15.99, as amended.

1.6 SWWD Permitting

1.6.1 Issuance of Permits

When required, the Board of Managers shall issue a permit when the applicant has satisfied all SWWD rules or a request for a variance is approved and all required fees have been paid and escrows established.

1.6.2 Expiration

All permits issued by SWWD shall remain valid unless:

A) Work is not initiated within one year of permit issuance
B) Work is idle for 12 consecutive months
C) Work is not completed within 3 years of permit issuance date

Any permittee may apply, in writing, for an extension. The application must state the reasons for extension and include any plan changes. Extension applications must be received at least 30 days prior to the permit's expiration. SWWD will consider the application based on the rules in effect on the date the application for extension is received.

1.6.3 Modifications

Modification of approved activity, plans, or specifications requires prior approval of the SWWD Board of Managers.

1.6.4 Project Suspension or Permit Revocation

The SWWD Board of Managers may suspend or revoke a permit that is approved in error or on the basis of incorrect information supplied by the applicant. Managers may also suspend or revoke a project or permit when contractors are violating SWWD Rules, or not fulfilling the conditions of the permit.

1.6.5 Fees and Escrows

SWWD shall charge fees and require escrows in accordance with a schedule adopted annually by written resolution of the Board of Managers and in accordance with Minnesota Statutes 103D.345. Private projects are subject to the SWWD Fee and Escrow Schedule established by written resolution of the Board of Managers. Unused escrows will be returned to project applicant based on a schedule adopted by written resolution of the Board of Managers. Return of unused escrows will be based on the schedule in place at the time the permit was issued.

1.7 Compliance

District or municipal approval of a project or issuance of a District or municipal permit based on incorrect plans, specifications or other data shall not prevent the District from thereafter requiring the correction of errors in the approved plans, specifications, and data, or from preventing any activity being carried on in violation of SWWD rules.

Rule 2 Erosion and Sediment Control

2.1 Policy

2.1.1 Establish consistent methods, procedures, and criteria for erosion and sediment control.

2.2 Applicability

A District permit under Rule 2 is required for the following activities within the District:

A) Land alterations that remove or cover surface vegetation of 1 acre or more,
B) Land disturbing activity on a slope of greater than 12%
C) Land disturbing activity that disturbs more than 100 lineal feet of road ditch, grass waterway, or other land area where surface drainage flows in a defined open channel; including the placement, repair, or removal of any underground pipe utility or other facility within the cross-section of the channel
D) Any new public or private roads or access drives longer than 125 feet
E) Development that requires a subdivision plat, as defined in the applicable local land division ordinance, or
F) Projects that could reasonably be expected to introduce sediment to water resources of the District.

2.3 Standards

2.3.1 Minimum Standards

The minimum sediment and erosion control requirements of the District are those specified in the current NPDES Phase II General Permit for construction activity, as established by the Minnesota Pollution Control Agency. Guidance for selecting appropriate best management practices is provided in the following:

- ~~*SWWD Standards Manual*, 2007~~
- ~~*Protecting Water Quality in Urban Areas, Best Management Practices for Dealing with Stormwater Runoff from Urban, Suburban and Developing Areas*, MPCA, 2000~~
- ~~*Minnesota Small Sites BMP Manual, Stormwater Best Management Practices for Cold Climates*, Met Council/Barr Engineering Company, 2001~~
- Minnesota Stormwater Manual, https://stormwater.pca.state.mn.us/index.php/Main_Page

2.3.2 Municipal Responsibility

Each municipality shall develop an erosion and sediment control ordinance and incorporate erosion and sediment control standards into the municipality's inspection process and ensure that vegetative cover or comparable protection is established before a lot is recorded with the County. All municipalities must identify an Erosion Control Inspector/Specialist and perform inspections and other activities as required by applicable State and Federal Laws.

2.4 Exceptions

A permit under Rule 2 will not be required for traditional agricultural practices provided that a grass or natural vegetation buffer zone extending a minimum of ~~sixteen (16)~~ fifty (50) feet is maintained along any waterbody or wetland and no fertilizer is used in the zone. In addition, mowing or grazing within the buffer zone is prohibited.

Rule 3 Wetland Management

3.1 Policy

3.1.1 Use a functional assessment approach to define a wetlands best value allowing for multiple or singular use.

3.1.2 Maximize the preservation of wetlands providing critical flood control function.

3.1.3 Preserve high priority wetlands.

3.1.4 Participate in wetland permitting activities within the District, in support of the responsible local governmental unit (LGU).

3.2 Applicability

3.2.1 Activities within the District where the primary receiving water body is a wetland as defined by the United States Army Corps of Engineers Manual (1987) are subject to SWWD permit requirements under Rule 3. Wetlands without a SWWD designated management class will require delineation and functional assessment by a wetland professional prior to project application.

3.2.2 Wetlands which are clearly identified in historic local surface water management plans as integral to stormwater conveyance and management under full development may be granted a variance by the SWWD. However, all other applicable permits from other agencies still must be addressed.

3.2.3 Projects for which SWWD receives a Letter of Compliance are not subject to SWWD permitting, unless required under the municipal LWMP or the applicant requests a variance.

3.3 Standards

3.3.1 Wetland Conservation Act

The SWWD has adopted the provisions of the Wetland Conservation Act of 1991 and accompanying rules of the Minnesota Board of Water and Soil Resources (Minnesota Rules Chapter 8420, as amended). The SWWD intends that LGUs administer the Wetland Conservation Act, unless a particular city or township has elected not to assume that role in its jurisdictional area. In these cases, the SWWD will serve as the LGU for administration.

A) The SWWD shall appoint a person to serve on the technical evaluation panel (TEP) in accordance with WCA Rules part 8420.0240. The person must be a technical professional with expertise in administration of the WCA.
B) Exemption, No Loss determinations, and wetland boundary or type determinations under Minnesota Rules parts 8420.0210, 8420.0220, and 8420.0225 shall be made by

the LGU. The LGU may seek the advice of the TEP on questions of wetland delineation and type. The LGU's decision is final unless appealed within thirty (30) days of its decision.

C) Sequencing and replacement plan decisions under Minnesota Rule part 8420.0520-8420.0550 shall be made following the same procedures as for SWWD permit review, plus the additional notice and time requirements of part 8420.0230 and as described in this section of the Rules.

D) The functions, values, and acreage lost as a result of a wetland alteration shall be replaced as required by the WCA Rules.

E) The applicant is responsible for ongoing monitoring of wetlands (natural and mitigated) for a period of 5 years to document no net loss due to altered hydrology. Reports will be submitted annually.

F) The SWWD shall ensure that the replacement plan monitoring, vegetative management and enforcement requirements of WCA Rules part 8420.0600-8420.0630 are fulfilled.

G) Any wetland alteration shall not reduce the existing storage volume in the immediate watershed. Storage volume will be determined as stated elsewhere in these Rules.

H) The applicant is to provide all copies needed for proper distribution and recording at the time application is made.

I) Wetland alterations shall meet all other requirements of these Rules.

J) Any requirements or conditions the SWWD deems necessary to ensure the procedures of this section must be carried out.

K) All wetlands within the property of the permitted project shall be:
    1) Delineated by the techniques described in the 1987 Corps of Engineers Wetland Delineation Manual,
    2) Delineated during the May 1 to October 15 growing season, unless otherwise accepted by the TEP,
    3) Evaluated with the Minnesota Routine Assessment Method for Evaluating Wetland Functions, Version 3.0 (MNRAM 3.0) or updated versions, and
    4) Classified according to SWWD's wetland management classification system in Appendix A. Based on the wetland's management classification, proposals must conform to the buffer width requirements, mitigation standards, and hydrologic guidelines in these Rules.

L) A pre-permit application meeting between the permit applicant and the SWWD or TEP is strongly encouraged for all projects involving wetlands and wetland banks.

M) The applicant shall submit five copies of the Combined Wetland Permit Application (CWPA) and one SWWD permit application form for consideration. Once the CWPA has been received, the SWWD with have up to 10 working days to review it for completeness and send a notice of application to the TEP. If the SWWD determines the CWPA is not complete, the permit applicant will be notified. The TEP will be given at least 15 working days to review and comment on the CWPA. The SWWD will review the application based on the policies and standards of the SWWD Watershed Management Plan, the WCA, and these Rules. After the TEP has been given opportunity to review and

comment on the CWPA, the SWWD will prepare and make recommendations to the LGU based on the TEP comments regarding the CEPA's conformance to the WCA rules and guidelines. The permit applicant and any TEP member can request a meeting to further discuss the CWPA at anytime. The LGU will review the TEP recommendations. A *Notice of Decision* will be sent within 10 working days of a decision, in accordance with the WCA Rules part 8420.0230, Subpart 2.

N) For projects requiring wetland replacement, a Wetland Replacement Plan shall be submitted with Part 1 and 2 of the CWPA. The permit review process will be as described in Standard 12.

O) For wetland banking applications, a Bank Application Form and appropriate BWSR forms and checklists shall be submitted. The permit review process will be as described in Standard 12, but a majority of the TEP members must meet on the site prior to the LGU decision. The permit applicant is responsible for obtaining all other permit approvals (i.e. U.S. Army Corps of Engineers)

P) The SWWD may permit the excavation of some wetlands. However, no excavation will be allowed in wetlands classified as Type 7 or Type 8 wetlands as defined by the Cowardin classification system developed by the U.S. Fish and Wildlife Service. The SWWD may permit excavation in existing wetlands when the following apply:

    1) All property owners contiguous to the wetland or within 1000 feet of the proposed activity join in the application.
    2) The excavated spoil material will not be placed within a wetland.
    3) The wetland is a Manage 2 wetland, using SWWD criteria in Appendix B.
    4) No more than 50 percent of a Type 1, 2, or 6 wetland is impacted, unless it is an approved action as stated in Minnesota Rules 8420.0541 and will not result in a conversion of wetland to upland or deep water habitat (greater than 2.0 meters).
    5) No more than 5% of the total wetland area or one half acre, whichever is less, of a Type 3, 4, or 5 wetland is impacted.

    Consideration will be given to allow excavations of excavations of existing wetland areas so that adjacent replacement wetlands are hydrologically and ecologically connected to existing wetlands or if the proposed excavation is certain to result in greater functions and values as determined by MNRAM 3.0 or an updated version.

Q) The decision of the SWWD to approve, approve with conditions, or reject a No Loss, Exemption or Wetland Replacement Plan Application becomes final thirty (30) days after the date on which the decision is mailed to those required to receive notice of the decision.

R) The determination, application, or decision made under these Rules may be appealed to the BWSR under WCA Rules part 8420.0250.

S) Prior to the SWWD issuing a permit for the construction of wetland replacement sites, the permit applicant must submit a draft *Declaration of Restrictions and Covenants*, an

Affidavit of Landowner, and *Consent to Replacement Wetland*. Once the SWWD Attorney has approved the draft *Declaration of Restrictions and Covenants*, which shall include a metes and bounds survey of the wetland replacement area, the *Declaration of Restrictions and Covenants*, must be recorded. Proof of recording the *Declaration of Restrictions and Covenants* and *Consent to Replacement Wetland*, along with a signed and notarized *Affidavit of Landowner* must be submitted to the SWWD Attorney prior to impacting a wetland.

T) The applicant shall post a cash surety or letter of credit equivalent to 150 percent of the estimated construction cost of the replacement wetland or the cost of obtaining suitable wetland banking credits, to be determined by the permit applicant and approved by the SWWD Engineer. Additional cash sureties may be required based upon conditions imposed on the applicant by the SWWD.

U) Replacement wetlands will require monitoring, vegetation management, and annual reporting for 5 years after completion with possible extensions defined in the WCA Rules part 8420.0600-8420.0630. Monitoring programs are the responsibility of the applicant and to be performed according to the WCA Rules. The SWWD may perform this monitoring and vegetation management under some circumstances, at the expense of the applicant. If at the end of 5 years, the replacement wetland components meet the approved performance standards, future monitoring will not be required.

3.3.2 Water Quantity and Quality

SWWD designates a management class for each inventoried wetland based on its function and susceptibility to stormwater runoff. Water quantity and quality standards are assigned by management class and included in Appendix A. Water quality standards reflect annual conditions. Applicants are responsible for completion of a functional assessment for wetlands not currently inventoried and classified.

3.3.3 Buffer Strips

A) SWWD designates a management class for each inventoried wetland based on its function and susceptibility to stormwater runoff. Buffer standards are assigned by management class and wetland size. Buffer strip standards are listed in Appendix A.

B) Wetland buffer strip requirements apply to any project which has a wetland (as defined by the United States Army Corps of Engineers Manual 1987) wholly or partially within the project limits or is immediately adjacent to the project limits. If a delineated wetland is 100 feet or less from the proposed project limits as indicated by construction boundary, buffer standards will apply.

C) Buffer averaging can be used only when necessary, provided that the minimum buffer width is equal to or greater than one-half the average required buffer width. Additional buffer width is required for slopes greater than 15%; however, this additional width may be credited towards the overall average width. Buffer width must be expanded

horizontally 3-feet per every 1% increase in slope above 15% or to top of bluff, whichever is less.

D) Variances to buffer width requirements may be granted in cases where narrower buffer strips may be necessary to allow a reasonable use of the parcel, as defined by the SWWD, and where, in combination with other best management practices, equivalent water quality treatment performance is provided.

3.3.4 Wetland Mitigation

SWWD designates a management class for each inventoried wetland based on its function and susceptibility to stormwater runoff. Wetland mitigation standards are assigned by management class and are listed in table Appendix A. Applicants are responsible for completion of a functional assessment for wetlands not currently inventoried and classified.

A) Loss of wetland area is considered an impact will be mitigated on-site whenever practical. The project applicant is responsible for demonstrating that on-site mitigation is technically infeasible or sound by a sequencing analysis. Where on-site replacement is determined unsuitable, replacement of wetland impacts shall be located within the hydrologic subwatershed. In such cases, wetland replacements will target areas which exhibit flood prone conditions, as determined by the SWWD. Credits will be allowed for mitigating wetland impacts.

B) Replacement of wetland impacts on projects by public road authorities are provided through the State wetland bank, or through a separate wetland bank managed by the Minnesota Department of Transportation Metro Division.

C) Mitigation of wildlife impacts will be accomplished through maintaining connectivity to surrounding habitat areas.

D) For unavoidable wetland impacts to District “Protect” class wetlands, the associated buffer impact must also be mitigated or created in addition to the wetland mitigation.

3.4 Exceptions

A permit under Rule 3 will not be required for:

3.4.1 Use and maintenance of an unimproved access strip through a buffer, not more than 20 feet in width, for recreational access to a lake, stream, or wetland.

3.4.2 Streambank stabilization or lakeshore erosion control projects.

Rule 4 Waterbody Crossings

4.1 Policy

4.1.1 Minimize property damage and infrastructure loss associated with the overflow of the 100-year, critical duration event.

4.1.2 Protect natural waterways from channel instability induced by additional runoff.

4.2 Applicability

A District permit under Rule 4 is required for work on roads, highways, utilities, or associated structures that cross the bed or bank of any waterbody.

4.3 Standards

4.3.1 Crossings

The portion of a road, highway, utility, or associated structure that crosses the bed or bank of any waterbody shall not be installed, modified, or replaced without first demonstrating a public benefit and ensuring that the crossing will retain adequate hydraulic capacity and navigational capacity if applicable, preserve wildlife passage along each bank, not adversely affect water quality, and represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives. Projects must follow the DNR manual Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001, when applicable. All applicable projects must meet the following:

A) Provide analysis demonstrating the stream's physical characteristics and the effect of the project on hydraulic capacity and water quality
B) Construction must be timed to take advantage of seasons with no or low stream flow.
C) Construction must be timed to avoid spawning seasons if applicable
D) Sizing and placement of stream crossings must meet the following:
    1) Regardless of the stream's width to depth ratio, minimum culvert width shall meet or exceed stream bankfull width. Combined width of multiple culverts is satisfactory
    2) Culvert length shall extend beyond side slope toe
    3) Slope of culvert shall match stream thalweg slope
    4) Culverts shall be buried 1/6th of their height
    5) When using multiple culverts, offset culvert inverts. Use the fewest and largest multiples possible. A minimum vertical separation of 1 foot is required between the lowest placed culvert and multiples.
    6) Alignment of culvert shall match stream alignment

Rule 5 Floodplain Management

5.1 Policy

5.1.1 Maintain and explore requirements established for floodplain management, including floodplain alterations, development within floodplains, and minimum building elevations.

5.1.2 Manage floodplains in a manner that reflects the rate and volume of runoff from ultimate development.

5.1.3 Incorporate appropriate opportunities for multiple floodplain uses (e.g., greenspace, recreation, and ecological enhancement).

5.2 Applicability

5.2.1 A District permit under Rule 3 is required for the following activities within the District:

A) Land alterations that remove, cover, or disturb a surface area of one acre or more
B) All work within the waters or floodplains of the District
C) Subdivisions, plats, and developments within a floodplain of the District

5.3 Standards

5.3.1 Flood Level Determination

A) Ultimate development of the tributary watershed or a more critical interim situation shall be assumed.
B) For flood level determination, the design criteria shall be the 2, 10, and 100-year storm events as established in NOAA Atlas 14.
C) Critical storage areas shall be identified through hydrologic modeling and other means.

Flood levels shall be provided, if available, by the District Technical Professional upon request.

5.3.2 Minimum Building Elevations

A) Adjacent to all water resources of the District, the minimum low opening elevation on all buildings will be at least two feet above the 100-year flood elevation or one foot above the emergency overflow of the basin, whichever is greater. The emergency overflow elevation is the elevation at which water will be conveyed from a basin after it exceeds the 100-year flood level.
B) The minimum building elevation for each lot shall be noted on the grading plan.

5.3.3 Floodplain Alterations

The following floodplain alterations are prohibited:

A) Alterations, which are not consistent and in conformance with the Plan. Such alterations may include the outletting of landlocked areas and modifying lake outlet elevations or increasing lake/pond outlet size and discharge rate.
B) Alterations that will unreasonably impact other communities or resources.
C) Alterations, which will unreasonably impact the water resources of the District.
D) Alterations filling portions of the 100-year floodplain without 1:1 mitigation.
E) Alterations not in conformance with applicable Minnesota Law.

5.3.4 Floodplain Preservation and Uses

A) Floodplains adjacent to existing and future waters and waterways shall be preserved by dedication and/or perpetual easement to the community in which they are located. These easements shall cover those portions of the property which are adjacent to the water or waterway and which lie below one (1) foot above the 100-year flood elevation. The local governing unit shall be responsible for all necessary stormwater facility maintenance within the drainage easement.
B) The Board of Managers may determine that certain areas of the District are, or will be, in a flood situation and will designate those areas as critical storage areas.
C) Buildings or other improvements to be located in the floodplain or materials to be stored in the floodplain will be permitted only when:
    1) It can be shown that the building or improvements to be located in the floodplain will not be significantly damaged by flooding; or
    2) It can be shown that the improvements and materials will not unreasonably endanger life or property; or
    3) It can be shown that the improvements and materials will not unreasonably affect the water resource.

Rule 6 Landlocked Basins

6.1 Policy

6.1.1 Maintain requirements established (adopted) for floodplain management including floodplain alterations, development within floodplains, and minimum building elevations.

6.1.2 Maintain the post-development 2-year, 10-year, and 100-year peak rate of runoff at the pre-development level for the critical duration precipitation event, both on-site and at key regional locations identified by the District.

6.1.3 Minimize property damage and infrastructure loss associated with the overflow of the 100-year, critical duration event.

6.2 Applicability

A District permit under Rule 6 is required for the following activities within the District:

A) Land alterations that remove, cover, or disturb a surface area of one acre or more and drain to a landlocked basin, or
B) Projects that propose to outlet a landlocked basin.

6.3 Standards

6.3.1 Stormwater Runoff Volume

Stormwater runoff volume for applicable projects must not exceed the existing runoff volumes for the 2, 10, and 100 year 24 hour duration rainfall event. Projects are subject to Design Criteria in Rule 7.

6.3.2 Outletting

Outlets from landlocked basins are not allowed unless subwatershed planning which results in no negative impacts to downstream resources has been approved by the SWWD.

6.3.3 Minimum Building Elevations

Minimum low openings within areas draining to landlocked basins must be two feet above the natural overflow elevation of the landlocked basin.

Rule 7 Stormwater Management and Water Quality

7.1 Policy

7.1.1 Maintain the post-development 2-year, 10-year and 100-year peak rate of runoff at the pre-development level for the critical duration precipitation event, both on-site and at key regional locations identified by the District.

7.1.2 Reduce the probability of downstream flood damages through the use of maximum allowable inter-municipality / inter-jurisdictional peak discharges and runoff volumes.

7.1.3 Use consistent design standards, evaluation tools and performance measures for managing runoff.

7.1.4 Minimize property damage and infrastructure loss associated with the overflow of the 100-year, critical duration event.

7.1.5 Protect natural waterways from channel instability induced by additional runoff.

7.1.6 Use design criteria and performance standards to ensure appropriate best management practices (BMP) for mitigating development impacts to surface and groundwater resources.

7.1.7 Use innovative methods and techniques to maintain and improve water quality when appropriate.

7.2 Applicability

7.2.1 A District permit under Rule 7 is required for the following activities within the District:

A) Land alterations that remove, cover, or disturb a surface area of one acre or more, or
B) Result in the augmentation or diversion of stormwater to a receiving water body

7.2.2 In case of emergency action performed without a District Permit, the Managers shall be notified of the action and pertinent facts as soon as possible. A permit shall be required so that the action taken conforms to the Plan and Rules. In the event the Managers determine the facts do not warrant issuance of a permit (retroactive), the action will be considered a violation of these Rules and Regulations and treated accordingly.

7.3 Standards

7.3.1 NPDES

SWWD hereby adopts and incorporates by reference the standards established by the Minnesota Pollution Control Agency's NPDES/SDS Construction Stormwater General Permit MNR100001 (CSW Permit) as amended in its entirety as now constituted and from time to time amended.

7.3.~~1~~2 Stormwater Peak Runoff Rate

The on-site rate of stormwater runoff for all proposed projects must not exceed the pre-project runoff rates for the 2, 10, and 100 year 24 hour duration rainfall events as estimated by NOAA Atlas 14 (http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=mn). Where timing of peak runoff is of particular concern, SWWD may require a critical duration event analysis. BMPs should be designed following guidance provided in the SWWD Standards Manual or MN Stormwater Manual.

7.3.~~2~~3 Stormwater Runoff Volume

~~All projects must maintain the annual average existing conditions infiltration capacity of the site. Standard is applied to entire site, expressed as total annual runoff volume resulting from typical climatic conditions. Public Improvement projects are exempt from Rule 7.3.2. Requirement may be met through credits earned for projects within the same subwatershed. BMPs should be designed following guidance provided in the SWWD Standards Manual or MN Stormwater Manual.~~

All projects must treat the water quality volume on any project where the sum of new impervious surface and fully reconstructed impervious surface equals one or more acres.

A) For non-linear projects, water quality volume (calculated as an instantaneous volume) must be calculated as one (1) inch times the sum of the new and the fully reconstructed impervious surface.

B) For linear projects, water quality volume (calculated as an instantaneous volume) must be calculated as the larger of one (1) inch times the new impervious surface or one-half (0.5) inch times the sum of the new and the fully reconstructed impervious surface. Where the entire water quality volume cannot be treated within the existing right-of-way, a reasonable attempt to obtain additional right-of-way, easement, or other permission to treat the stormwater during the project planning process must be made. Volume reduction practices must be considered first. Volume reduction practices are not required if the practices cannot be provided cost effectively. If additional right-of-way, easements, or other permission cannot be obtained, the owner/operator of construction activity must maximize the treatment of the water quality volume prior to discharge.

C) Volume reduction practices (e.g., infiltration or other) to retain the water quality volume on-site must be considered first when designing the permanent stormwater treatment system. Wet sedimentation basins and filtration systems are not considered volume reduction practices.

D) For discharges to a trout stream, the system must be designed so the discharge from the project minimizes any increase in the temperature of trout streams resulting from the one (1) or two (2) year 24-hour precipitation events. This includes all tributaries of designated trout streams located within the same Public Land Survey System (PLSS) Section. The design must incorporate one or more of the following measures, in order of preference:

1) Provide stormwater infiltration or other volume reduction practices to reduce runoff. Infiltration systems must discharge all stormwater routed to the system within 24 hours;
2) Provide stormwater filtration. Filtration systems must discharge all stormwater routed to the system within 24 hours;
3) Minimize the discharge from connected impervious surfaces by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls;
4) If ponding is used, the design must include an appropriate combination of measures such as shading, vegetated swale discharges or constructed wetland treatment cells that limit temperature increases. The pond must be designed as a dry pond and should draw down in 24 hours or less; and
5) Other methods that minimize any increase in the temperature of the trout stream.

E)

7.3.~~3~~4 Stormwater Quality

~~A) All projects must meet minimum NPDES Phase II Permit requirements for on-site treatment.~~

B) All projects must provide treatment necessary to meet applicable annual total phosphorus loading rates listed below, or maintain existing loading rates, whichever is less.

Receiving Water body	Maximum Allowable Total Phosphorus Loading Rate(lbs/ac/yr)
Armstrong Lake	0.18
Colby Lake	0.34
La Lake	1.65
Markgrafs Lake	0.61
Mississippi River	0.22
Powers Lake	0.06
Ravine Lake	0.075
Wilmes Lake	0.10

C) All projects must provide treatment necessary to provide a net reduction of off-site Total Suspended Solids (TSS) discharge rates from existing conditions on an average annual basis.

C) No direct (untreated) discharges of stormwater to natural or improved waterbodies are allowed.

D) BMPs should be designed following guidance provided in the SWWD Standards Manual or MN Stormwater Manual. Phosphorus removal rates in excess of maximum removal rates listed in table 10.6 of the MN Stormwater Manual may not be claimed.

7.3.4 Alternative Compliance Sequencing

~~Sites with the following characteristics are generally unsuitable for infiltration practices:~~

~~A) Runoff originating from fueling and vehicle maintenance areas;~~
~~B) Within HSG D type soils;~~
~~C) Within 100 feet of a private well or within the emergency response zone for a wellhead protection area;~~
~~D) Within 50 feet of a septic tank or drain field;~~
~~E) On areas with less than 3 feet vertical separation from the bottom of the infiltration system to the elevation of seasonal high groundwater or top of bedrock; or~~
~~F) Within 300 feet of an identified sinkhole or other karst feature.~~

Infiltration Systems are prohibited in the following areas (See "higher level of engineering review" in the Minnesota Stormwater Manual for more information): ***[Item 20.9]***

a) Areas that that receive runoff from vehicle fueling and maintenance areas;

b) Areas where infiltrating stormwater may mobilize high levels of contaminants in soil or groundwater;

c) Areas where soil infiltration rates are field measured at more than 8.3 inches per hour unless the soils are amended to slow the infiltration rate below 8.3 inches per hour;

d) Areas with less than three (3) feet of separation distance from the bottom of the infiltration system to the elevation of the seasonally saturated soils or the top of bedrock;

e) Areas of predominately Hydrologic Soil Group type D soils (clay);

f) Within a Drinking Water Supply Management Area (DWSMA) as defined in Minn. R. 4720.5100, subp. 13, if the system will be located:

i. In an Emergency Response Area (ERA) within a DWSMA classified as having high or very high vulnerability as defined by the Minnesota Department of Health; or

ii. In an ERA within a DWSMA classified as moderate vulnerability unless a higher level of engineering review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater has been approved by the affected City; or

iii. Outside of an ERA within a DWSMA classified as having high or very high vulnerability unless a higher level of engineering

review sufficient to provide a functioning treatment system and to prevent adverse impacts to groundwater has been approved by the affected City.

g) Areas within 1,000 feet upgradient or 100 feet downgradient of active karst features; and

h) Areas that receive runoff from the following industrial facilities not authorized to infiltrate stormwater under the NPDES stormwater permit for industrial activities:

i. automobile salvage yards;

ii. scrap recycling and waste recycling facilities;

iii. hazardous waste treatment, storage, or disposal facilities;

iv. wood preserving facilities; or

v. air transportation facilities that conduct deicing activities.

For sites where infiltration practices are determined to be unsuitable for on-site infiltration, the following Alternative Compliance Sequencing steps shall be taken in the order shown:

A) Use of alternative volume control practices as described in the Minnesota Stormwater Manual, sized to treat the water quality volume under Rule 7.3.3.

B) Use of on-site filtration practices and biofiltration using an impermeable liner and under drain, sized to filter sized to treat the water quality volume under Rule 7.3.3.

C) Use of off-site volume control practices sized according to Rule 7.3.3. Off-site volume control practices can be used to provide for stormwater management based on the following criteria:

1) New off-site practices shall be constructed within the same drainage area or subwatershed as the project site, as defined by SWWD.

2) Off-site practices are required to be constructed and operational prior to constructing imperviousness within the contributing drainage area.

3) Routine maintenance of existing structural BMPs is not acceptable for mitigation.

D) Use of wet sediment basins sized per the standard described within the MPCA General Construction Permit, 2003, and as amended.

7.3.5 Maintenance and Easement

A) Stormwater management easements shall be provided by the applicant for access for facility inspections and maintenance and preservation of stormwater runoff conveyance, infiltration, and dentition areas and facilities, including the overflow route.

B) Land use for stormwater management facilities which lie below the 100 year flood elevation shall be preserved by dedication and or perpetual easement to the LGU.

C) A maintenance agreement shall be recorded with the County as part of the LGU development approval process. Minimum requirements for the maintenance agreement include:

1) A list of the responsible party(s) (LGU and facility owner/manager)
2) Contact information
3) A formalized maintenance schedule, with scheduled activities
4) A "Failure to Perform" provision laying out remedial actions if the responsible party does not perform as expected
5) Maintenance debris handling plans
6) Emergency response

D) Municipalities will determine responsibility for maintenance of stormwater management facilities within Municipal easements. SWWD will require maintenance or retrofitting of facilities when it can show failure of the facility to meet approved design specifications or standards. SWWD encourages municipalities to collect sureties from developers to be held in escrow for future stormwater maintenance or retrofitting or otherwise take steps to ensure maintenance.

7.3.6 Regional Assessment

SWWD will evaluate proposed projects for cumulative effects on a subwatershed basis, assuming full development to ensure there are no unanticipated, adverse downstream regional impacts. Based on Regional Assessment, SWWD may apply more stringent standards or require alternative design approaches for all future development in the subwatershed.

7.4 Trading and Credits

Non-residential development and non-residential re-development projects may earn credits for reducing flow volume from a site. Credits may be awarded as a reduction in the Storm Water Utility Fee, or may be transferred for use in meeting the SWWD volume standard on another project within the same subwatershed. Credit calculation methods and program requirements will be set by the SWWD Board of Managers.

7.5 Design Criteria

Applicable activities must comply with the following design criteria:

A) State NPDES Construction Stormwater Permit
B) Detention ponds are not acceptable for meeting volume control standards.
C) Regional infiltration facilities, those which receive drainage from greater than ten acres or can provide temporary maximum storage for more than one inch of runoff depth from the total contributing impervious area, should not be used in areas of low suitability (Map 6.5 SWWD WMP). Where suitability is marginal or low, regional infiltration basins should have contingency plans developed for how to manage and respond to chemical spills that may enter the drainage network.
D) Where new or increased discharges to open channels are proposed:
   1) It must be demonstrated that design velocities will not cause channel instability during the 100 year event.
   2) Appropriate energy dissipation at the outfall is required.

3) A maintenance plan should be developed to illustrate how accumulated sediment will be handled or how channel failures will be remediated.
4) Where possible, open channels should include buffers of herbaceous vegetation and should provide connectivity with adjacent upland habitat.
5) For channels three feet or less in depth, one half foot of freeboard shall be provided.
6) For channels deeper than three feet and up to five feet in depth, one foot of freeboard shall be provided.

E) To the maximum extent practicable, the volume control rule shall be fully met onsite. Site conditions may make infiltration undesirable or impossible. The applicant must make soil corrections and/or investigate other locations on the site for feasible infiltration locations. Infiltration practices are not allowed in the following circumstances:
1) For runoff from fueling and vehicle maintenance areas;
2) Within HSG D type soils;
3) Within 100 feet of a private well or within the emergency response zone for a wellhead protection area (1-year time of travel);
4) Within 50 feet of a septic tank or drain field;
5) On areas with less than 3 feet vertical separation from the bottom of the infiltration system to the elevation of seasonal high groundwater or top of bedrock; or
6) Within 300 feet of an identified sink hole or other Karst feature.

F) If the applicant claims that infiltration is infeasible or allowed onsite, the applicant must provide supporting documentation and follow Rule 7.3.5.
G) A minimum buffer width of 60 feet is required for new developments along areas defined as a bluff or ravine.

7.6 Exceptions

The following projects or activities are generally exempt from the standards of Rule 7.

A) Traditional Agriculture
~~B) Exempt Public Improvements~~

Rule 8 Groundwater Management

8.1 Policy

8.1.1 Promote the use of optimal infiltration areas which achieve reasonable reductions in surface water runoff volume which minimize risk to groundwater quality.

8.2 Applicability

A District permit under Rule 4 is required for the following activities within the District:

A) Land alterations that remove, cover, or disturb a surface area of one acre or more, or
B) Proposed projects on sites with known karst features.

8.3 Standards

8.3.1 Karst

Karst sensitivity analysis is required for projects located in karst sensitive areas. At a minimum, the following are required:

A) Site review to identify any active karst features including sinkholes, springs, caves, or sinking streams, and
B) All active karst features located during a project must be reported to SWWD upon discovery. Additionally, the following actions are recommended:
    1) Developers, communities, public works agents and others managing stormwater should conduct thorough geotechnical investigations prior to proceeding with projects or building in active karst areas. The level of geotechnical investigation will depend on the likelihood of active karst being present. Karst features should be identified and reported to the appropriate state (such as DNR and MGS) and local agencies (such as the city, township or county). Any known occurrences should be surveyed for specific location and permanently recorded on the property deed. For transition karst areas, local discretion and the likelihood of karstic features should be used to determine the amount of geotechnical investigation.
    2) Knowledge of or the presence of sinkholes is an absolute indication of active karst. In these cases, an easement or reserve area should be identified on the development plats for the project so that all future landowners know of the presence of active karst on their property.
    3) In many cases, identified sinkholes can and should be remediated and stormwater directed away. In other cases, remediation is not possible and the normal regional hydrologic patterns must be maintained. In this case, however, precautions should be taken to extensively pretreat any water that drains into a known sinkhole area. If at all possible, runoff should be routed away from active karst features.
    4) Discharges from stormwater management facilities or directly from impervious surfaces should not be routed directly to a sinkhole.

5) Sinkholes developing within stormwater management facilities should be reported to the MGS and MDH as soon as possible after the first observation of occurrence. They should then be repaired, abandoned, adapted, managed and/or observed for future changes, whichever of these are appropriate.
6) Where ponds and wetlands are deemed necessary, they should be designed and constructed with a properly engineered liner approved by the District. A minimum of three feet of unconsolidated soil material should exist between the bottom of the pond or wetland and the surface of the bedrock layer. Pond and wetland depths should be fairly uniform and limited to no more than ten feet in depth.

Rule 9 Water Appropriation

9.1 Policy

9.1.1 Manage groundwater using a regional and local approach.

9.2 Applicability

All proposed appropriations of surface or groundwater are subject to permit under Rule 9.

9.3 Standards

9.2.1 In all cases of appropriation of waters requiring a DNR permit, a copy of the permit application must be filed with the Managers for their review and approval.

9.2.2 The Managers will act on the DNR permit application within 30 days, or as required by the DNR, after receipt of the complete application.

Rule 10 Greenways and Open Spaces

10.1 Policy

10.1.1 Coordinate placement of stormwater management practices such as ponds to minimize potential negative impacts to greenways or open spaces due to seasonal aesthetic concerns, or to minimize potential functional (fragmentation) issues with the landscape.

10.1.2 Identify and protect key natural areas with multiple benefits including groundwater recharge.

10.2 Applicability

A District permit under Rule 10 is required for the following activities within the District:

A) Land alterations that remove, cover, or disturb a surface area of one acre or more, or
B) Result in the augmentation or diversion of stormwater to a receiving water body

10.3 Standards

10.3.1 Greenway and Open Space Protection

Greenways and open space protection will be considered by the SWWD Board of Managers when evaluating applications for alterations to wetlands, buffer areas, floodplains, shoreline areas and for water crossings and placement of stormwater management practices.

Rule 11 Illicit Discharge and Connection

11.1 Policy

11.1.1 Use design criteria and performance standards to ensure appropriate best management practices (BMP) for mitigating development impacts to surface and groundwater resources

11.2 Applicability

This Rule shall apply to all water entering the storm drain system of the District's MS4 generated on any developed and undeveloped lands unless explicitly exempted by the District. A permit and stormwater management plan is required under this rule for new direct connections and replacement of existing connections to the District's MS4.

11.3 Standards

11.3.1 Connection to the District's MS4 System

A) New direct connections and replacement of existing connections will be completed using a method that is approved by the District.

B) Peak flow rate, the total volume of flow, and the timing of the flow for new connections must be managed to not cause new water conveyance problems or exacerbate existing water conveyance problems. Enlargement of existing connections is considered a new connection.

11.3.2 Discharge Prohibitions

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

B) The construction, use, maintenance or continued existence of illicit connections to the storm drain system without a District permit is prohibited.

   a. 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.

   b. A person is considered to be in violation of this Rule if the person connects a line conveying sewage to the District's MS4, or allows such a connection to continue.

11.3.3 Suspension of MS4 Access

A) The District may, without prior notice, suspend MS4 discharge access 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 District's MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the District may

take steps as deemed necessary to prevent or minimize damage to the District's MS4 or Waters of the United States, or to minimize danger to persons or the environment.

B) Any person discharging to the District's MS4 in violation of this Rule may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The District will notify a violator of the proposed termination of its MS4 access. The violator may petition the District for a reconsideration and hearing. A person commits an offense subject to enforcement if the person reinstates MS4 access to premises terminated pursuant to this Section, without the prior approval of the District.

11.3.4 Monitoring of Discharges

All facilities that have storm water discharges associated with industrial activity, including construction activity, shall comply with the following:

A) The District shall be permitted to enter and inspect facilities subject to regulation under this Rule as often as may be necessary to determine compliance with this Rule. The discharger shall make the necessary arrangements to allow access to representatives of the District.

B) Facility operators shall allow the District ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.

C) If the District has been refused access to any part of the premises from which stormwater is discharged, then the District may seek issuance of a search warrant from any court of competent jurisdiction.

11.3.5 Requirement to Prevent, Control, and Reduce Stormwater Pollutants by the Use of Best Management Practices.

The owner or operator of a commercial or industrial establishment shall provide, at their 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. Any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required by the District 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.

11.3.6 Watercourse Protection

Every person owning property, through which a watercourse passes, shall keep and maintain that part of the watercourse within the property free of trash, debris, 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.

11.3.7 Notification of Spills

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 result or may result in illegal discharges or pollutants discharging into storm water, the storm drain system, or water of the U.S., said person shall take all necessary steps to ensure the 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 release. In the event of a release of non-hazardous materials, said person shall notify the District in person or by phone or facsimile no later than the next business day following discovery of the release.

11.4 Enforcement

11.4.1 Notice of Violation

Whenever the District finds that a person has violated a prohibition or failed to meet a requirement of this Rule, the District 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) Payment of fee to cover administrative and remediation costs;
E) The implementation of source control or treatment BMPs.

11.4.2 Abatement

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.

11.4.3 Appeal of Notice of Violation

Any person receiving a Notice of Violation may appeal the determination of the Disctrict. The notice of appeal must be received within 5 days from the date of the Notice of Violation. Hearing on the appeal before the District Board of Managers shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the District shall be final.

11.4.4 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 3 days of the decision of the District Board of Managers, then representatives of the District 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 for the purposes set forth above.

11.4.5 Cost of Abatement

Within 30 days after abatement of the violation, the District shall notify the property owner of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 10 days. If the amount due is not paid within a timely manner as determined by the decision of the District Board of Managers, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

11.4.6 Injunctive Relief

It shall be unlawful for any person to violate any provision or fail to comply with any of the requirements of this Rule. If a person has violated or continues to violate the provisions of this Rule, the District 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.

11.4.7 Violations Deemed a Public Nuisance

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of the provisions of this Rule 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.

11.4.8 Relation to Other Rules

None of the enforcement provisions of this Rule shall abridge or alter the right of the District to seek remedies provided for under Rule 11 herein.

11.5 Exceptions

A) The following discharges are exempt from discharge prohibitions established by this Rule:

1) Water line flushing or other potable water sources;
2) Landscape irrigation or lawn watering;
3) Diverted stream flows;
4) Rising ground water;
5) Ground water infiltration to storm drains;
6) Uncontaminated pumped ground water;
7) Foundation or footing drains (not including active ground water dewatering systems);
8) Crawl space pumps;
9) Air conditioning condensation;
10) Springs;
11) Non-commercial washing of vehicles;
12) Natural riparian habitat or wetland flows;
13) Swimming pools (if dechlorinated – typically less than one PPM chlorine);

14) Firefighting activities;
15) Street wash water;
16) And any other water source not containing pollutants.

B) Discharges specified in writing by the District as being necessary to protect public health and safety.

C) Dye testing is an allowable discharge, but requires a verbal notification to the District prior to the time of the test.

D) Any non-storm water 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.

Rule 12 Variances

12.1 Applicability

The Board of Managers may grant variances from these Rules when they find that due to unique physical conditions of the land or waters involved, extraordinary and unnecessary hardship may result from strict compliance. Such variances will not have the effect of nullifying the intent and purpose of these Rules or the WMP.

12.2 Standards

12.2.1 Application

An application for a variance shall be submitted to the Managers and shall document the exceptional conditions and peculiar hardship claimed and resulting impacts for approval of the variance.

12.2.2 Board Action

The Board shall approve or deny the variance within 60 days of receipt of a variance request in accordance with MN statute 15.99, as amended.

12.2.3 Expiration

A variance shall become void one year after granted unless used.

Rule 13 Enforcement and Severability

13.1 Enforcement

13.1.1 Violations

Violation of these Rules, a stipulation agreement made with the District, or a permit issued by the Board of Managers pursuant these Rules is a misdemeanor.

13.1.2 District Court Action

The Board of Managers may exercise all powers conferred upon it by Minnesota Statutes Chapter 103D in enforcing these Rules, including criminal prosecution, injunction, action to compel performance, restoration, abatement, or other appropriate action.

13.1.3 Administrative Order

The District may issue a cease and desist order when it finds that a proposed or initiated project presents a serious threat of flooding, soil erosion, sedimentation, or adverse effect on water quality or otherwise violates any Rule of the District.

13.2 Severability

If for any reason a section or subdivision of these Rules should be held invalid, such designation shall not affect the validity of the remaining Rules.

Appendix A

Figure VI.3.3.1
SWWD Wetland Management Plan
Decision Flow Chart

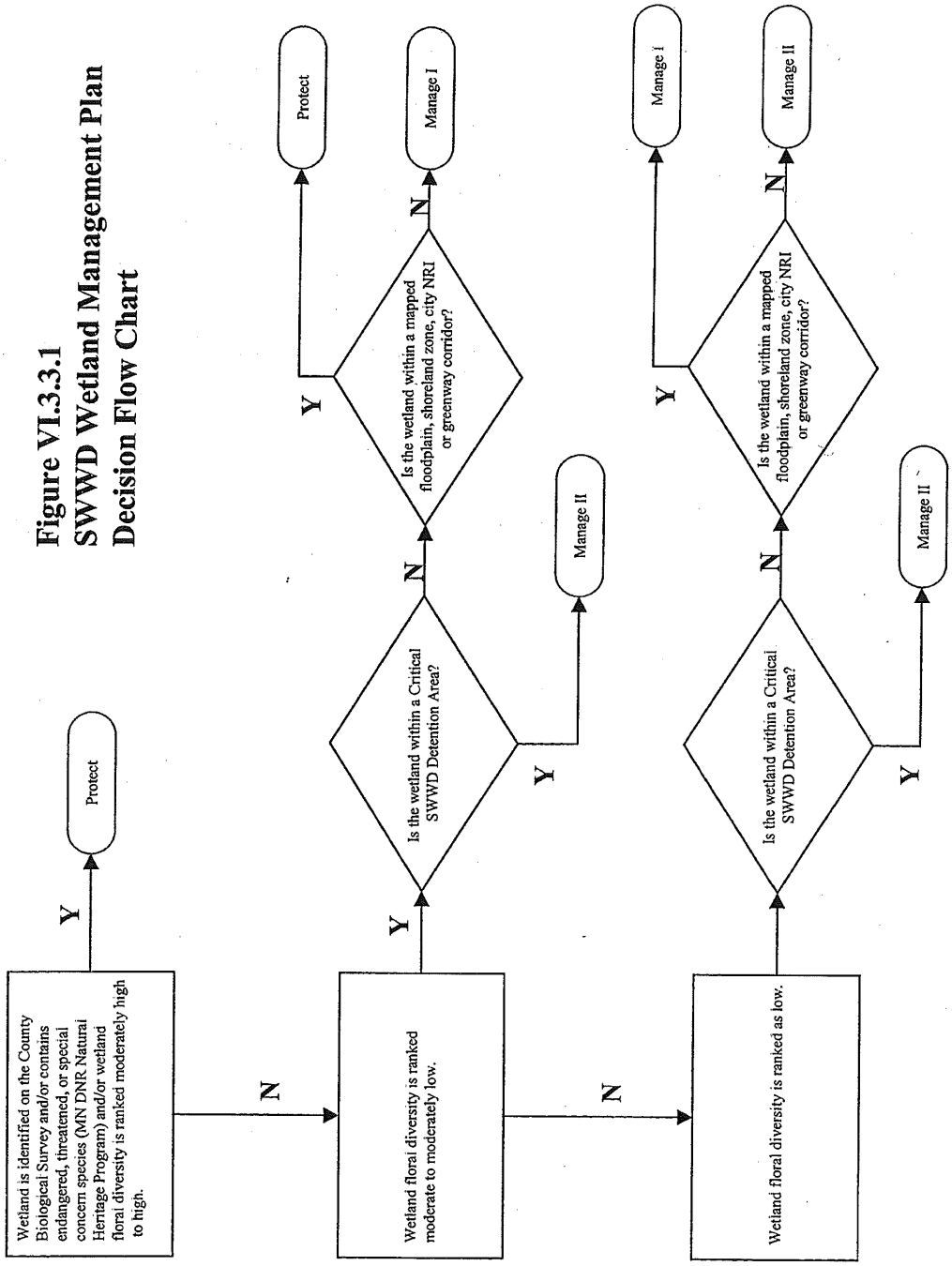

Table 5.3: Protection standards for wetland management classes

Criteria	Protect	Manage 1	Manage 2
Water Quality			
Phosphorus Inflow Load (average annual pounds)	Maintain predevelopment	60% post-development load reduction	60% post-development load reduction
Water Quantity			
Storm bounce 10-year rainfall	Existing	Existing plus 1.0 foot	No limit
Discharge rate (inflow) 2-year & 100-year rainfall	Existing	Existing or less	Existing or less
Inundation period 1-year rainfall	Existing	Existing plus 2 days	Existing plus 7 days
Inundation period 2-year rainfall	Existing	Existing plus 14 days	Existing plus 14 days
Run-out control elevation (free flowing)	No change	0 to 1.0 feet above existing run out	0 to 4.0 feet above existing run out
Run-out control elevation (landlocked)	Based on SWWD Floodplain Map	Based on SWWD Floodplain Map	Based on SWWD Floodplain Map
Buffer Width			
Wetlands < 1 acre	75 feet	50 feet	25 feet
Wetlands > 1 acre	100 feet	75 feet	50 feet
Impact Mitigation			
Area replacement ratio	3:1	2:1	2:1
Volume replacement ratio	2:1	2:1	2:1

1) Proposed developments that may affect a wetland area must maintain the annual average predevelopment infiltration capacity of the site. Predevelopment infiltration capacity will be evaluated over the entire site and expressed as total annual runoff volume resulting from typical climatic conditions. Maximum phosphorus runoff concentrations for predevelopment conditions cannot exceed 0.320 mg/L.
2) Rainfall events are 24-hour duration, following Rule 7.3.1.