

**MINNEHAHA CREEK WATERSHED DISTRICT
BOARD OF MANAGERS**

RULES A, B, C, D, E, F, G and N

**REVISIONS
PURSUANT TO MINNESOTA STATUTES §103D.341**

Adopted January 15, 2005

DEFINITIONS

For the purposes of these [rules](#), the following words shall have meanings set below:

- **Agricultural activity** means the use of land for the production of agronomic, horticultural or silvicultural crops, including nursery stock, sod, fruits, vegetables, flowers, forages, cover crops, grains, and Christmas trees. Agricultural activity also includes grazing.
- **Alteration** or **alter** means any activity that will change or diminish the course, current, or cross-section of public waters and wetlands.
- **BMPs** (best management practices) are actions taken to prevent or reduce detrimental impacts to the environment while maintaining the natural characteristics of the environment.
- **Beds of a waterbody** means all portions of a waterbody located below the ordinary highwater level.
- **Dredge** means the removal of the sediment or other materials from the beds, banks or shores of, a waterbody by means of hydraulic suction, mechanical excavation or any other means.
- **Excavation** means the displacement or removal of sediment or other material.
- **Fast Track Permit** means a permit issued by staff for standard rip rap, sandblankets or maintenance fill projects which are installed according to technical specifications provided by District engineers, or an erosion control permit issued by staff in accordance with the criteria in Rule B.
- **Fill** means any material placed or intended to be placed on the bed or bank of any protected water or wetland. Fill must be clean, inorganic material that is free of pollutants
- **Floodplain** means the areas adjoining a watercourse or water basin which have been or hereafter may be covered by a 100 year regional flood.
- **General Permit** means a permit issued which is subject to staff and/or engineer review and board approval.
- **Land-disturbing activity** or **land disturbance** means any disturbance to the ground surface that, through the action of wind or water, may result in soil erosion or the movement of sediment into waters, wetlands or storm sewers or onto adjacent property. Land-disturbing activity includes but is not limited to the demolition of a structure or surface, soil stripping, clearing, grubbing, grading, excavating, filling and the storage of soil or earth materials.

- **Maintenance Fill** means 1" or less of evenly spread fill material that may be placed in the floodplain as bed preparation for sodding or seeding purposes.
- **NURP** means Nationwide Urban Runoff Program developed by the Environmental Protection Agency (EPA) to study stormwater runoff from urban development.
- **One-hundred year high water elevation** means the highest water elevation associated with a waterbody reached during a 24-hour precipitation event with a recurrence interval of 100 years, as specified by the District in a written guidance document or, if not so specified, as determined by the District in order to act on a permit application.
- **Ordinary high water level** means the boundary of a waterbody and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level shall be the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.
- **Person** means any natural person, partnership, unincorporated association, corporation, municipal corporation or political subdivision of the State of Minnesota.
- **PID** means Property Tax Identification Number and is an abbreviated method to substitute for the legal description for a parcel of property (ex. 03-117-24 33 0004 is Section 3 of Township 117; Range 24; Quarter Quarter 33 and Parcel 4).
- **Public waters** means all waters identified as public waters under Minn Stat.103G.005, Subd. 15.
- **Public waters wetlands** means all wetlands identified as public waters wetlands under Minn. Stat. 103G.005, Subd. 18.
- **Regional flood** means a flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur on an average frequency in the magnitude of the 100-year recurrence interval.
- **Residential appurtenance** means (a) a driveway; or (b) a structure or surface that throughout the watershed customarily is associated with residential use of a property and that does not exceed 5,000 square feet of hard surface.
- **Shoreline** means the ordinary high water level and the area waterward thereof.
- **Subwatershed** means one of the fifteen major subwatershed planning units within the Minnehaha Creek Watershed District.
- **Top of bank** means the ordinary high water level for a water basin or wetland, and the break in slope for a watercourse.
- **Waterbasin** means an enclosed natural depression with definable banks capable of containing water which may be partly filled with waters.
- **Waterbody** means all waterbasins, watercourses and wetlands as defined in these rules.
- **Watercourse** means any channel having definable beds and banks capable of conducting generally confined runoff from adjacent lands. During floods water

may leave the confining beds and banks but under low and normal flows water is confined within the channel. A watercourse may be perennial or intermittent.

- **Wetland buffer zone** means an area of native, unmaintained, vegetated groundcover abutting or surrounding a wetland. Buffer width is dependent on wetland size (see Rule D, subsection 2.c.).
- **Wetlands** means all wetlands identified as wetlands under Minnesota Stat. 103G.005, Subd 19. The term does not include “public waters wetlands” as defined under Minnesota Statutes 103G.005, subdivision 15a.

RULE A: PROCEDURAL REQUIREMENTS

1. **APPLICATION REQUIRED.** Any person undertaking any activity for which a permit is required by these rules shall first submit for review a permit application, engineering design data and such other information to the District as may be required by these rules to determine whether the improvements are in compliance with the criteria established by these rules. All permit applications must bear the original signature of the landowner. An interested person may intervene in a permit proceeding by filing a written request to intervene with the District before the final decision on the application. The request shall state the nature of the person's interest and a copy shall be hand-delivered to the applicant or received at the applicant's address stated in the application before the time of the final decision. An intervener shall have the rights of a party in the proceeding before the District.

2. **FORMS.** Permit applications shall be submitted using forms provided by the District, including a variance form if a variance is requested, which you can find on the [Permit Applications](#) page. Permit applications shall be addressed to:

Minnehaha Creek Watershed District
18202 Minnetonka Blvd.
Deephaven, MN 55391

3. **ACTION ON PERMIT APPLICATION.** The District shall act within 45 days of receipt of an application and set of exhibits in compliance with the submittal requirements of these rules, as determined by the District. Permit decisions will be made by the Board except as provided for in specific rules and as delegated to staff by written resolution. The notification requirements of paragraphs 5 and 6 of this rule will continue to apply to permit actions delegated to staff by Board resolution. The Board will review a staff permit decision on the applicant's request. Variance requests will be acted on by the Board pursuant to Rule I. The District may approve or deny an application and, if approving, may impose reasonable conditions. Conditions may include, as otherwise consistent with the rules, requirements for sureties, maintenance agreements and declarations and may require that those documents be properly executed or recorded before permit issuance. The District may reconsider a permit if it finds that a material error or misrepresentation was made in the application and that the correct information was available at the time of the application.

4. CONFORMITY WITH MUNICIPAL PLAN. The District will review applications for permits involving land development only after the applicant demonstrates that the plan has received preliminary approval from each municipality in which development is to take place. The requirement of preliminary municipal approval shall mean:

(a) Preliminary plat approval if required for the development; or

(b) If plat approval is not required, approval by the municipal planning commission or a written statement from the responsible municipal official that, on preliminary review, the development appears to meet municipal approval requirements.

5. NOTIFICATION PROCESS. Persons applying for a District permit must supply a certified list of property owners and mailing labels for each property on that list obtained from Hennepin County or Carver County who reside within 600 feet of a parcel on which the proposed project is to occur. District staff will send notice of the proposed project to the individuals on the mailing list for the applicant at the applicant's expense. A copy of the list will be retained with the application at the District office. The application will not be processed until the list has been submitted to the District. Notification is required for a permit application submitted under the following District Rules:

Rule B - Erosion Control

Rule C - Floodplain Alteration

Rule D - Wetland Protection

Rule E - Dredging

Rule F - Shoreland and Streambank Improvement

Rule G - Stream and Lake Crossings

Rule N - Stormwater Management

Notification is not required for a fast-track permit under Rule B, C, E or F.

6. ALTERNATIVE NOTIFICATION. ~~Before application is made, the Board, The District,~~ on written request, may approve alternative notification for any of the following projects:

(a) A linear project, including but not limited to a road, sidewalk or trail, one-half mile or more in length.

(b) A project on a parcel or contiguous parcels with an area of 100 acres or more, where no more than five percent of the area will be disturbed, provided the disturbed area does not include a wetland.

(c) A project where the applicant proposes to combine notification under this rule with notification required under the approval procedures of another governmental body.

The applicant must demonstrate that an alternative means of notification will provide adequate notice to residents near the proposed activity.

7. TIME FOR SUBMITTAL. A complete permit application which includes all required exhibits shall be received by the District at least 21 full days prior to the scheduled meeting date of the Board of Managers. Late submittals or submittals with incomplete exhibits will be scheduled to a subsequent meeting date.

8. TABLED PERMITS. Permit applications tabled at a board meeting due to revisions needed for compliance with District rules will be addressed at the next board meeting if the revisions are submitted within 3 working days of being tabled. Otherwise, permit applications and resubmittals will be treated pursuant to paragraph 7 of this rule. The District may require re-notification pursuant to paragraphs 5 and 6 if resubmittal constitutes a substantial change in the proposed project or if 90 days have elapsed between the date of the Board's action to table and the date of resubmittal.

9. PERMIT RENEWALS AND TRANSFERS. A permit is valid for a one year period from the date the applicant is advised in writing that the District has approved the permit unless it is otherwise suspended or revoked. To renew or transfer a permit, the permittee must notify the District in writing, prior to the permit expiration date, of the reason for the renewal or transfer request. The District may impose different or additional conditions on a renewal or deny the renewal in the event of a material change in circumstances other than a change in District rules. A transfer shall be approved unless the District finds that the proposed transferee has not demonstrated the ability to perform the authorized work in accordance with the conditions of the permit, in which case the Board District may impose conditions on or deny the transfer. Permit transfer does not extend the permit term.

10. REGULAR MEETINGS. [Regular meetings of the Board of Managers](#) are conducted on the second and fourth Thursday of each month, no earlier than 6:00 p.m.

11. BASIS FOR DECISIONS. All interpretations of these rules and permit decisions under these rules will incorporate and be consistent with District purposes set forth in sections 103B.201 and 103D.201 of the Minnesota Statutes.

RULE B: EROSION CONTROL

1. **POLICY.** It is the policy of the Board of Managers to require preparation and implementation of erosion control plans for land disturbing activities, in order to limit erosion from wind and water; reduce flow volumes and velocities of stormwater moving off-site; reduce sedimentation into water bodies; and protect soil stability during and after site disturbance. These measures should reflect the following principles:

- (a) Minimize, in area and duration, exposed soil and unstable soil conditions.
- (b) Minimize disturbance of natural soil cover and vegetation.
- (c) Protect receiving water bodies, wetlands and storm sewer inlets.
- (d) Retain sediments from disturbed properties on site.
- (e) Minimize off-site sediment transport on trucks and equipment.
- (f) Minimize work in and adjacent to water bodies and wetlands.
- (g) Maintain stable slopes.
- (h) Avoid steep slopes and the need for high cuts and fills.
- (i) Minimize disturbance to the surrounding soils, root systems and trunks of trees adjacent to site activity that are intended to be left standing.
- (j) Minimize the compaction of site soils.

2. **PERMIT REQUIREMENT.** Unless specifically excepted by section 3 of this rule, land-disturbing activity shall require a permit incorporating an erosion control plan approved by the District and shall be conducted in accordance with that plan. A fast-track permit may be issued for routine erosion control projects on a finding that the application:

- (a) Complies with the submission requirements of section 4 of this rule;
- (b) Includes an erosion control plan that:
 - (1) Complies with section 5 of this rule;
 - (2) Provides for maintenance and inspection in accordance with section 9 of this rule; and

(3) Provides that there will be no stockpiling of more than 50 cubic yards of soil or other material subject to erosion by wind or water that is not covered, vegetated, enclosed, fenced on the down gradient side or otherwise effectively protected from erosion.

Any request for a variance from a requirement of this rule must be decided by the Board of Managers.

3. EXCEPTIONS. The following land-disturbing activity shall not be subject to the requirements of this rule:

(a) Activity that: (1) disturbs an area of less than 5,000 square feet; and (2) involves the grading, excavating, filling, or storing on site of less than 50 cubic yards of soil or earth material.

(b) Routine agricultural activity.

(c) Emergency activity immediately necessary to protect life or prevent substantial physical harm to person or property.

(d) Activity otherwise subject to this rule, where the District has entered into a written agreement with the municipality where the activity takes place providing that the District will not exercise erosion control permitting authority within the City under the circumstances in question.

4. PERMIT APPLICATION. A [written application](#) for an erosion control permit shall be submitted by the owner of a site or an authorized representative. The application shall contain the following:

(a) Site address.

(b) Property owner's name, address and telephone number.

(c) Names, addresses, telephone numbers and responsibilities of all contractors, subcontractors and other persons who will engage in the land-disturbing activities.

(d) Names, addresses and telephone numbers of persons responsible for preparing the erosion control plan.

(e) Documentation of all applicable county, municipal or township approvals for the proposed action or a statement that no such approvals are required.

(f) Application date.

(g) A statement that the applicant: (a) consents to site inspection by the District and its authorized agents at reasonable times as necessary to evaluate the permit application or determine compliance with the requirements of this rule; and (b) will notify the District and afford access for District inspection as set forth at paragraph 10.

(h) Signature of each property owner with a certification that he or she understands that the proposed activity must be conducted in compliance with this rule and the approved erosion control plan, and that the application is complete and accurate to the best of his or her belief. When a property owner is not a natural person, the application shall bear a signature of one authorized to act on the owner's behalf and documentation of the signatory's authority.

(i) An erosion control plan as described at paragraph 5 of this rule.

(j) A soils engineering report as described at paragraph 6 of this rule, if requested by the District.

(k) A geological report as described at paragraph 6 of this rule, if requested by the District.

(l) A statement that the applicant is aware of fee requirements set forth at Rule J of the District's rules and agrees to pay that fee as determined due by the District.

5. EROSION CONTROL PLAN. The erosion control plan is a stand-alone document that shall include the following:

(a) A vicinity map showing:

(1) The site location in relation to surrounding roads, steep slopes, other significant geographic features, buildings and other significant structures.

(2) All receiving waterbodies within 1000 feet of the area to be disturbed, and all stormwater ponds, ditches, storm sewer catch basins and other stormwater conveyances within 100 feet and downgradient of the area to be disturbed.

(b) Site plans for existing and final proposed conditions drawn to appropriate scale. The plans shall contain:

(1) Contours sufficient to show drainage on and adjacent to the site.

(2) Site property lines.

(3) Identification and location of all on-site water features and facilities including any lake, stream or wetland; any natural or artificial water diversion or detention area; any surface or subsurface drainage facility or stormwater conveyance; and any storm sewer catch basin.

(4) Location of all trees and vegetation on site, with identification of that which is intended to be retained.

(5) Location of buildings and structures on site.

(6) Proposed grading or other land-disturbing activity including areas of grubbing, clearing, tree removal, grading, excavation, fill and other disturbance; areas of soil or earth material storage; quantities of soil or earth material to be removed, placed, stored or otherwise moved on site; and delineated limits of disturbance.

(7) Locations of proposed runoff control, erosion prevention, sediment control and temporary and permanent soil stabilization measures.

(c) Plans and specifications for all proposed runoff control, erosion prevention, sediment control, and temporary and permanent soil stabilization measures.

(1) Plans and specifications shall conform to the provisions of the manual, "Protecting Water Quality in Urban Areas" (Minnesota Pollution Control Agency, reprinted 1994), as revised, or if a facility or measure is not addressed in that manual, then to the provisions of the "Erosion and Sediment Control Manual" (Hennepin Conservation District, 1989), as revised.

(2) All erosion and sedimentation controls proposed for compliance with this rule will be in place before any land-disturbing activity commences.

(3) Plans shall provide that stockpiles of soil or other materials subject to erosion by wind or water shall be covered, vegetated, enclosed, fenced on the downgradient side or otherwise effectively protected from erosion in accordance with the amount of time the material will be on site and the manner of its proposed use.

(4) Plans shall include measures and procedures to reasonably minimize site soil compaction and shall provide that all compacted soil shall be broken up to a depth of at least six inches before revegetation.

(5) ~~Plan shall provide that all Silt fence shall conform to Sections 3886.1 and 3886.2, Standard Specifications for Construction, Minnesota Department of Transportation (2000 ed.), as it may be amended.~~ Silt fence shall be the color orange if available meeting that specification.

(6) Plans shall provide that all fabric fences used for erosion and sedimentation control and all other temporary controls shall not be removed until the District has determined that the site has been permanently restabilized and shall be removed within 30 days thereafter.

(7) Plans shall provide for permanent stabilization of all areas subject to land disturbance and specify at least four inches of topsoil spread during final site treatment wherever topsoil has been removed.

(d) A detailed schedule indicating dates and sequence of land alteration activities; implementation, maintenance and removal of erosion and sedimentation control measures; and permanent site stabilization measures.

(e) A detailed description of how erosion control, sediment control and soil stabilization measures implemented pursuant to the plan will be monitored, maintained and removed.

(f) On the request of an applicant proposing to landscape an improved residential property and a finding that certain required information is not needed to assess the characteristics of the property and the adequacy of proposed control measures, the District may reduce the submittal requirements of this section.

6. SOILS ENGINEERING AND GEOLOGY REPORTS. On a determination that the condition of the soils is unknown or unclear and that additional information is required to find that an applicant's proposed activity will meet the standards and purposes of this rule, the District may require soil borings or other site investigation to be conducted and may require submission of a soils engineering or geology report. The report shall include the following as requested by the District:

(a) Data and information obtained from the requested site investigation.

(b) A description of the types, composition, permeability, stability, erodibility and distribution of existing soils on site.

(c) A description of site geology.

(d) Conclusions and revisions, if any, to the proposed land-disturbing activity at the site or the erosion control plan, including revisions of plans and specifications.

7. **ADDITIONAL INFORMATION.** The District may require any additional information or data, as it finds relevant and necessary to evaluate and act on an application.

8. **SURETY.** The District may require the applicant to file a bond or other surety in accordance with Rule K. For a fast-track permit, the surety must be in the form of a performance bond, a letter of credit or a cash escrow. The surety shall be maintained until:

(a) Final site stabilization and removal of erosion and sedimentation controls, as determined by the District, and the payment of all fees and amounts due to the District;

(b) Forty-five (45) days after written notification to the District under paragraph 11(d), if the District has failed to respond in writing; or

(c) Such earlier time as the District may advise the applicant in writing.

9. **MAINTENANCE.** The permittee shall be responsible at all times for the maintenance and proper operation of all erosion and sediment control facilities. On any property on which land-disturbing activity has occurred pursuant to a permit issued under this rule, the permittee shall, at a minimum, inspect, maintain and repair all disturbed surfaces and all erosion and sediment control facilities and soil stabilization measures every day work is performed on the site, and at least weekly, until land-disturbing activity has ceased. Thereafter, the permittee shall perform these responsibilities at least weekly until vegetative cover is established. The permittee shall maintain a log of activities under this section for inspection by the District on request.

10. **NOTIFICATION AND INSPECTION.** The applicant or its authorized agent shall notify the District in writing at the following points:

(a) On completing installation of perimeter erosion and sedimentation controls.

(b) On completing land-disturbing activities and putting into place measures for final soil stabilization and revegetation.

(c) When the site has been permanently stabilized and revegetated.

(d) When all temporary erosion and sedimentation controls have been removed from the site.

At each stage indicated, the applicant shall not proceed with site activity until the District has been notified. At the stage indicated at paragraph 10(a), the applicant shall not proceed with site activity until the District has been notified and allowed two full business days to inspect the site and, as necessary, confer with the applicant. Within the two days specified, the District may advise the applicant that it is extending the period for inspection by up to five additional business days.

RULE C: FLOODPLAIN ALTERATION

1. POLICY. It is the policy of the [Board of Managers](#) to:

(a) Preserve existing water storage capacity below 100-year high water elevations on all waterbodies in the watershed to minimize the frequency and severity of high water;

(b) Minimize development below projected 100-year high water elevations that will unduly restrict flood flows or aggravate known high water problems.

2. REGULATION. No person shall alter or fill land below the projected 100-year high water elevation of a waterbody without a permit from the District. A Fast Track permit may be issued for 1" or less of fill in preparation for sodding or seeding.

3. CRITERIA.

(a) The filling shall not cause a net decrease in storage capacity below the projected 100-year high water elevation unless it is shown that the proposed filling, together with the filling of all other properties on the affected reach of the waterbody to the same degree of encroachment as proposed by the applicant, will not cause high water or aggravate flooding on other properties and will not unduly restrict flood flows. The allowable fill area shall be calculated by a professional engineer registered in the State of Minnesota. Creation of floodplain storage capacity to offset fill shall occur within the original permit term. If offsetting storage capacity will be off-site, it shall be created before floodplain filling.

(b) Ice ridge regrading within the floodplain must conform to the original cross-section of the lakebed. Approval for ice ridge regrading or removal of ice ridge material from the floodplain requires the applicant to demonstrate that the ice ridge resulted from ice action during the previous winter. No additional material may be placed within the floodplain except in accordance with this Rule.

(c) All new residential, commercial, industrial and institutional structures shall be constructed such that all door and window openings are at a minimum of two feet above the 100-year high water elevation.

4. REQUIRED EXHIBITS. The following exhibits shall accompany the permit application. One set - full size; one set - reduced to maximum size of 11"x17".

(a) Site plan showing property lines, delineation of the work area, existing elevation contours of the work area, ordinary high water elevation (OHW), and regional flood elevation. All elevations must be reduced to NGVD (1929 datum).

(b) Grading plan showing any proposed elevation changes.

(c) Preliminary plat of any proposed land development.

(d) Determination by a professional engineer of the 100-year high water elevation before and after the project.

(e) Computation by a professional engineer of cut, fill and change in water storage capacity resulting from proposed grading.

(f) Soil boring results if available.

(g) If not otherwise subject to District Rule B (Erosion Control), an erosion control plan conforming to paragraphs 5(b) through (f) and section 9 of Rule B.

5. EXCEPTION.

If the 100-year elevation of a waterbasin is entirely within a municipality, the waterbasin does not outlet during the 100-year event, and ~~that~~ the municipality has adopted a floodplain ordinance prescribing an allowable degree of floodplain encroachment, the ordinance governs the allowable degree of encroachment and no permit is required under this rule.

RULE D: WETLAND PROTECTION

1. POLICY. It is the policy of the Board of Managers to:

(a) achieve no net loss in the quantity, quality, and biological diversity of Minnesota's existing wetlands;

(b) increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands;

(c) avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality and biological diversity of wetlands;

(d) minimize direct or indirect impacts from activities that destroy or diminish the quantity, quality and biological diversity of wetlands;

(e) rectify the impact of any such activity by repairing, rehabilitating, or restoring the affected wetland environment;

(f) reduce or eliminate the impact of such activity over time by preservation and maintenance operation during the life of the activity;

(g) compensate for the impact on the wetlands by restoring a wetland;

(h) compensate for the impact on the wetlands by replacing or providing substitute wetland resources or environments.

2. REGULATION AUTHORITY UNDER WETLAND CONSERVATION ACT AND WATERSHED LAW.

(a) The Wetland Conservation Act, as amended, and ~~the rules implementing the Wetland Conservation Act~~ its implementing rules as set forth in Minnesota Rules chapter 8420, as amended, specifically including sequencing requirements, are incorporated as a part of this rule and shall govern draining and filling in wetlands in all cases where the District is the local government unit under that Act. Wetland replacement, where permitted, shall occur in the same subwatershed as the associated wetland impact.

(b) Sections 3 and 4, below, are adopted under the District's watershed authority and applies whether or not the District is the Wetland Conservation Act local government unit in the municipality where the excavation is to occur.

3. EXCAVATION

~~(b) Excavations in wetlands for the purposes of wildlife enhancement must comply with the criteria described in the DNR publication "Excavated Ponds for Waterfowl" (1992). Excavation in wetlands for any other purpose is subject to the following requirements.~~

(a) Excavation is governed by the substantive and procedural standards, criteria and requirements set forth in the Wetland Conservation Act, as amended, and the rules implementing the Wetland Conservation Act as set forth in Minnesota Rules chapter 8420, as amended, with the exception that replacement for excavation not subject to the Wetland Conservation

Act shall ~~must~~ be at the ratio of 1 acre of replaced wetland for each acre of excavated wetland.

(b) Excavations in wetlands for the purposes of wildlife enhancement must comply, in addition, with the criteria described in the DNR publication "Excavated Ponds for Waterfowl" (1992).

(c) Excavation shall be deemed self-replacing if an applicant demonstrates that the wetland to be excavated is degraded; the proposed activity would increase the wetland's function and value, as determined using the current version of the Minnesota Routine Assessment Method or other method approved by the District; and the enhanced wetland function and value are likely to be preserved.

(d) The application shall identify spoils placement on upland and specify how the deposited materials will be stabilized and vegetated.

~~(e)~~ (e) Wetland replacement, where permitted, shall occur in the same subwatershed as the associated wetland impact.

4. BUFFER

(a) ~~(d)~~ Any activity for which a permit is required under District Rule C (Floodplain Alteration), D (Wetland Protection), G (Waterbody Structures) or N (Stormwater Management) The project must provide for a buffer zone of the following size width adjacent to each wetland and public waters wetland:

Size of Wetland	Width of Buffer Zone
0 - 1 acre	16.5 feet
1 - 2.5 acres	20 feet
2.5 - 5 acres	25 feet
> 5 acres	35 feet

- ~~• Buffer zones are required around wetlands, and public water wetlands.~~
- ~~• Buffer zones must also be created around all replacement wetlands.~~
- ~~• Activities including, but not limited to mowing, yard waste disposal and fertilizer application shall not occur within the buffer zone.~~

(b) The buffer is required:

(1) On that part of the wetland edge that is downgradient from the land disturbance; and

(2) Around each wetland that will be disturbed.

(c) A buffer shall be documented by declaration or other recordable instrument approved by the District and recorded in the office of the county recorder or registrar before activity under the MCWD permit commences. A buffer on public land or right-of-way may be documented in a written agreement executed with the District in place of a recorded instrument. The agreement shall state that if the land containing the buffer is conveyed, the public body shall require the buyer to comply with this subsection.

(d) Buffer vegetation shall not be cultivated, cropped, pastured, mowed, fertilized, subject to the placement of mulch or yard waste, or otherwise disturbed, except for periodic cutting or burning that promotes the health of the buffer, actions to address disease or invasive species, mowing for purposes of public safety, temporary disturbance for placement or repair of buried utilities, or other actions to maintain or improve buffer quality, each as approved by District staff or when implemented pursuant to a written agreement executed with the District. Pesticides and herbicides may be used in accordance with Minnesota Department of Agriculture rules and guidelines. No new structure or hard surface shall be placed within a buffer. No fill, debris or other material shall be excavated from or placed within a buffer.

3 5. REQUIRED EXHIBITS. The following exhibits shall accompany the [Combined Joint Notification \(CJN\) form](#). One set - full size; one set - reduced to a maximum size of 11"x17".

(a) Site plan showing:

(1) Property lines and corners and delineation of lands under ownership of the applicant;

(2) Existing and proposed elevation contours; including the existing runout elevation and flow capacity of the wetland outlet;

(3) Area of the wetland portion to be filled.

(b) Complete delineation of the existing wetland(s), including data sheets with detailed information on field indicators (soils, hydrology and vegetation) and summary report. Wetland delineations should be performed during the normal growing season for this area of the State (May 1 - October 15). Delineations performed outside of this time frame may or may not be permitted, depending on potential wetland impact in relation to the entire development or project. Wetland boundaries ~~need to~~ shall be staked in the field.

- (c) Identification and area of the total watershed area presently contributing stormwater runoff to the wetland.
- (d) A replacement plan, if required, outlining the steps followed for the sequencing process and including documentation supporting the proposed mitigation plan. A description of the nature and amount of the proposed fill material and details of the annual monitoring plan must also be included.
- (e) Wetlands proposed to be excavated for wildlife ponds must also submit a cross section and construction specifications which include the following design criteria:
- (1) Ponds should be irregular shaped and a minimum size of 2500 square feet
 - (2) Pond depth not to exceed 5 feet and to have an undulating bottom
 - (3) Ratios of basin side slopes ranging from 3:1 to 10:1 (horizontal:vertical)
 - (4) The spoil disposal site must be identified and found not to be below the OHW of a public water or public water wetland, wetland subject to the Wetland Conservation Act of 1991, or floodplain. However, fill may be placed in a wetland subject to the Wetland Conservation Act to the extent permitted in Minnesota Statutes 103G.2241, subd, 10.
 - (5) Vegetation restoration plan which includes the disturbed area being seeded to native grasses for a minimum of 150 feet around the dugout
 - (6) The reserved organic soils should be spread over the entire excavated area to encourage and support plant growth
- (f) Information showing whether the subject wetland is protected by either the State or municipality or both.

RULE E: DREDGING

1. **POLICY.** It is the policy of the Board of Managers to preserve the natural appearance of shoreline areas; recreational, wildlife and fisheries resources of surface waters; surface water quality and ecological integrity of the riparian environment.

2. REGULATIONS. No person shall dredge in the beds, banks or shores of any ~~protected~~ public water or wetland in the District without first securing a permit from the District, and posting a bond or letter of credit pursuant to Rule K.

3. GENERAL STANDARDS. All permitted dredging shall comply with the following standards:

(a) The spoil disposal site must be identified and found not to be below the OHW of a public water or public water wetland, wetland subject to the Wetland Conservation Act of 1991, or floodplain and not prone to erosion.

(b) In cases of an identifiable source of sediment under the control of the applicant, the plan shall include remedial action to minimize deposition of sediment into a waterbody or off-site.

(c) Before District review, all dredging proposals that involve navigational access to docking structures shall be submitted to and approved, in the case of public waters, by the Minnesota Department of Natural Resources and, in the case of Lake Minnetonka, by the Lake Minnetonka Conservation District. Proposed dredging in Lake Minnetonka is subject to the dredging standards of the DNR, MCWD and LMCD Dredging Joint Policy Statement (April 1993).

(d) The proposed project shall represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives such as dock extensions, aquatic nuisance plant removal without dredging, beach sandblankets, excavation above the bed of public water, less extensive dredging in another area of the public water, or management of an alternative water body for the intended purpose.

(e) The dredging shall be limited to the minimum dimensions necessary for achieving the stated purpose. (Reference General Permit 95-6150, 'Excavation for Navigation', paragraph 5).

(f) If the dredging will be accomplished by means of hydraulic dredging the following additional standards will apply:

(1) The spoil disposal site shall have a minimum storage capacity equal to four times the calculated volume of solid material to be removed, a minimum free board between the top of the projected water surface elevation and the top of the dike of one foot, if no outlet from the spoil disposal is proposed.

(2) The construction of the spoil containment site shall be with earthen dikes. No such dike shall exceed 5.5 feet in height at any point. Dikes shall have a minimum 4 foot wide top and side slopes of 2:1 (H:V) or flatter. The dikes shall be adequately compacted by traversing with appropriate equipment during construction.

(3) Proposed embankments which differ from the standard in 3(f)(2) shall comply with generally accepted engineering principles and be designed and certified by a professional engineer registered in the State of Minnesota.

(4) Spoil containment sites of limited storage volume which propose a discharge back into a receiving water body through a control structure shall meet applicable State water quality guidelines for the receiving water body. Weekly monitoring of the instantaneous discharge shall be performed and paid for by the applicant. The results shall be promptly forwarded to the District Engineer for comparison to state water quality standards for turbidity and total suspended solids.

(5) A restoration plan prepared by a qualified individual shall show proposed methods of retaining waterborne sediments on site during the period of operation. The plan shall show final grades and how the site will be restored, covered and/or vegetated after construction. Sites with high erosion potential characterized by steep slopes or erodible soils may require a cash deposit to ensure performance and any necessary remedial actions.

4. CRITERIA.

(a) Dredging shall be permitted only:

(1) To maintain, or remove sediment from, an existing public or private channel, not exceeding the original or originally permitted extent of dredging, whichever is less, and subject to such further limitations on method or extent of dredging as this rule may provide; or

(2) To implement or maintain an existing legal right of navigational access; or

(3) To remove sediment to eliminate a source of nutrients, pollutants, or contaminants; or

(4) To improve the public recreational, wildlife, or fisheries resources of surface waters; or

(5) For actions by public entities for public purposes.

(b) No dredging shall be permitted:

(1) Above the ordinary high water level or into the upland adjacent to the lake or watercourse.

(2) That would enlarge a natural watercourse landward or that would create a channel to connect adjacent backwater areas for navigational purposes.

(3) Where the dredging will alter the natural shoreline of a lake.

(4) Where the dredging might cause increased seepage or result in subsurface drainage.

(5) Where any portion of the dredged area contains any slope steeper than 3:1 (H:V) in a marina or channel, or steeper than 10:1 (H:V) for an area adjoining residential lakeshore.

(c) Dredging identified in 4(b)(1-3) above may be permitted where the project complies with applicable DNR rules.

5. REQUIRED EXHIBITS. The following exhibits shall accompany the permit application. One set - full size; one set - reduced to maximum size of 11"x17".

(a) Site plan showing property lines, delineation of the work area, existing elevation contours of the adjacent upland area, ordinary high water elevation, and regional flood elevation (if available). All elevations must be reduced to NGVD (1929 datum).

(b) Profile, cross sections and/or topographic contours showing existing and proposed elevations and proposed side slopes in the work area. (Topographic contours should be at intervals not greater than 1.0 foot.)

(c) In the case of projects using hydraulic means of sediment removal and on-site spoil containment the applicant shall supply:

(1) Cross section of the proposed dike.

(2) Stage/storage volume relationship for the proposed spoil containment area.

(3) Detail of any proposed outlet structure, showing size, description and invert elevation.

(4) Stage/discharge relationship for any proposed outlet structure from the spoil containment area.

(5) Site plan showing the locations of any proposed outlet structure and emergency overflow from the spoil containment area.

(d) Site plan showing the proposed location of floating silt curtains.

(e) Support data:

(1) Description and volume computation of material to be removed.

(2) Description of equipment to be used.

(3) Construction schedule.

(4) Location map of spoil containment area.

(5) Erosion control plan for containment area.

(6) Restoration plan for any proposed permanent on-site spoil containment site showing final grades, removal of control structure, and a description of how and when the site will be restored, covered or revegetated after construction.

(7) Detail of any proposed floating silt curtain including specifications for the silt curtain.

(f) In the case of projects where dredging:

(1) Might cause increased seepage or result in subsurface drainage, or

(2) Will remove sediment to eliminate a source of nutrients, pollutants, or contaminants, a minimum of two soil bearing logs extending at least two feet below the proposed work elevation shall be required.

6. FAST-TRACK PERMIT. A fast-track permit may be issued by District staff for the removal of accumulated sediment caused by a stormwater outlet. The application otherwise must comply with all provisions of this rule. In addition to the requirements of sections 3 and 5 of this rule, the following criteria shall be met:

(a) Authorization shall apply only to removal of sediment identified as non-native material accumulated due to stormwater runoff or erosion.

(b) Dredging shall not materially change the elevation or contour of the bed of the affected basin.

(c) No dredging in a public water shall occur between March 15 and June 1. No dredging in another waterbody shall occur between March 15 and June 1 unless the applicant demonstrates that fish spawning does not occur in the waterbody.

RULE F: SHORELINE & STREAMBANK IMPROVEMENTS

1. POLICY. It is the policy of the Board of Managers to:

(a) Assure that improvement of shoreline and streambank areas to prevent erosion complies with accepted engineering principles in conformity with DNR construction guidelines;

(b) Preserve the natural appearance of shoreline and streambank areas; and

(c) Encourage and foster bioengineering, landscaping and preservation of natural vegetation as preferred means of stabilizing shorelines and streambanks.

2. REGULATIONS.

(a) ~~No person shall construct a shoreline or streambank improvement, such as riprap, or a retaining wall, to prevent erosion, or for any other purpose, such as boat ramps and sand blankets, without first securing a permit from the District, and posting a bond or letter of credit pursuant to Rule K.~~ No person shall install an improvement to prevent erosion of the shoreline of a water basin or public waters wetland or the bank of a watercourse, including but not limited to riprap, a retaining wall, a bioengineered installation, a sand blanket or a boat ramp, without first securing a permit under this Rule and providing a surety pursuant to Rule K. Planting of vegetation not intended to provide deep soil structure stability does not require a permit under this Rule.

(b) A fast track permit may be issued for routine riprap projects that conform to the requirements set forth in paragraph 3(b) of this rule.

(c) A fast track permit may be issued for routine sandblanket projects that conform to the requirements set forth in paragraph 6 of this rule.

(d) Maintenance of an existing shoreline or streambank improvement does not require a permit under this rule unless it involves the addition of new material to the improvement or, for projects other than riprap, structural change in the improvement.

(e) An improvement within the meaning of the rule shall also include any water control structure affixed to the bed or bank of a waterbody.

3. CRITERIA FOR RIPRAP PLACEMENT. Riprap placement shall comply with the following criteria:

(a) General standards:

(1) Riprap material ~~should~~ shall be durable, natural stone and of a gradation that will result in a stable shoreline embankment. Stone, granular filter and geotextile shall conform to Sections 3601.1 and 3601.2, Standard Specifications for Construction, Minnesota Department of Transportation (2000 ed.), as it may be amended. All materials shall be nonpolluting.

(2) The finished slope of the rock fragments, boulders and/or cobbles ~~should~~ shall not be steeper than a ratio of 3 feet horizontal to 1 foot vertical (3:1) under normal conditions. Steeper slopes will generally require larger sized riprap. ~~The minimum finished slope shall be no~~

~~steeper than 2:1 (horizontal to vertical). Any rock/boulder stabilization project with a proposed finished slope steeper than 2:1 (horizontal to vertical) shall be evaluated in accordance with the conditions for as retaining walls.~~

(3) Horizontal encroachment from a shoreline shall be the minimum amount needed and shall not interfere unduly with water flow. Under normal conditions, no riprap or filter materials ~~should~~ shall be placed more than 5 feet waterward of ~~the a shoreline,~~ measured from the ordinary high water level (OHW) elevation. ~~The encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of water.~~ The maximum shoreline encroachment waterward of the OHW is 10 feet. Streambank riprap shall not reduce the cross-sectional area of the channel or result in a stage increase of more than 0.01 feet at or upstream of the treatment.

(4) A transitional layer consisting of graded gravel, at least 6 inches deep, and an appropriate geotextile filter fabric shall be placed between the soil material of the existing shoreline and the riprap to prevent erosion of the embankment and to prevent settlement.

~~(5) Riprap placement should not be attempted when underlying soils are not capable of supporting resulting loads. In these cases, a qualified soils specialist should be consulted.~~ The design shall reflect the engineering properties of the underlying soils and any soil corrections or reinforcements. For a shoreline, the design shall conform to engineering principles for dispersion of wave energy and resistance to deformation from ice pressures and movement, considering prevailing winds, fetch and other factors that induce wave energy. For a streambank, design shall conform to engineering principles for the hydraulic behavior of open channel flow, considering channel slope, velocity and tractive forces.

(6) Riprap shall conform to MnDOT Class III/IV. The thickness of the riprap layers should be at least 1.25 times the maximum stone diameter. Toe boulders shall be at least 50 percent buried and may be as large as 30 inches in diameter.

(7) Riprap shall extend no higher than the top of bank, or two feet above the 100-year high water elevation, whichever is lower.

(8) A riprap placement design for a streambank or channel shall be certified as structurally sound and in accordance with the requirements of this Rule by a registered professional engineer in the State of Minnesota in the practice of civil engineering.

(b) Routine riprap projects eligible for a fast track permit: Shoreline Riprap projects shall qualify for a fast track permit issued and signed by an authorized representative of the District so long as the project meets the following specifications:

(1) Riprap material shall be durable stone meeting the size and gradation requirements of MnDOT Class III or IV riprap;

(2) The finished slope of the stone shall not be steeper than 3 feet horizontal to 1 foot vertical (3H:1V);

(3) Property corners and lines that delineate the lineal feet of shoreline to be treated shall be located and staked prior to beginning work;

(4) Riprap or filter materials shall not be placed more than 5 feet waterward of the staked OHW or NOHW, and shall not be placed on property not owned by the applicant; the encroachment into the water is the minimum amount necessary to provide protection and does not unduly interfere with the flow of the water.

(5) A transitional granular filler meeting the requirements of MnDOT 3601.B, at least 6 inches in depth, shall be placed between the native shoreline and the riprap to prevent erosion of the fine grained soils. A geotextile fabric meeting the requirements of MnDOT 3733 shall be placed beneath the transitional layer to enhance stability; and

(6) Underlying native soils shall not be classified as organic soils or peat.

(c) Riprap installed pursuant to a District permit shall be maintained within slope and encroachment constraints established in the permit.

4. RIPRAP REQUIRED EXHIBITS. The following exhibits shall accompany the riprap permit application. One full-size; one set-reduced to maximum size of 11" x 17".

(a) Site plan showing:

- Survey locating the existing OHW contour, ~~meander of the existing~~ shoreline or streambank, floodplain elevation, and location of property lines;
- Elevation contours of the upland within 15 feet of the OHW and referenced to accepted datum; and
- Plan view of locations and lineal footage of the proposed riprap treatment.

The plan shall show the location of an upland baseline parallel to the shoreline with stationing. The baseline shall be staked in the field by the applicant and maintained in-place until project completion. Baseline origin and terminus each shall be referenced to three fixed features measured to the closest 0.05 foot, with measurements shown and described on the plan. Perpendicular offsets from the baseline to the OHW shall be measured and distances shown on the plan at 20-foot stations. The plan shall be certified by a registered engineer or surveyor.

(b) Cross section detailing the proposed riprap, drawn to scale, with the horizontal and vertical scales noted on the drawing. The detail should show the finished riprap slope, transitional layer design and placement, distance lakeward of the riprap placement, ordinary high water level elevation and material specifications.

(c) Description of the underlying soil materials ~~which~~ that will support the riprap.

~~(d) Gradation, average diameter, quality and type of riprap material to be used. Normally, a Class III gradation is sufficient (see below).~~

~~(e) Gradation, quality and type of filter blanket material to be used. Normally, Type I gradation is sufficient.~~

~~(f) Manufacturer's material specifications for proposed geotextile fabric(s).~~

~~(g) Materials used shall be non-polluting.~~ Material specifications for stone, filter material and geotextile fabric.

(e) Specification of erosion control and site stabilization practices.

5. GUIDELINES. The engineer shall publish or make available to interested persons a typical cross-sections for shoreline and streambank protection in compliance with this rule.

6. CRITERIA FOR LAYING SANDBLANKETS. All permitted sandblanketing shall comply with the following standards.

(a) The sand or gravel used must be clean prior to being spread. The sand must contain no toxins or heavy metal, as defined by the MDNR, and must contain no weed infestations such as, but not limited to, water hyacinth, alligator weed, and Eurasian watermilfoil, or animal life infestations such as, but not limited to, zebra mussels or their larva. Violators will be prosecuted to the full extent of the law.

(b) The sand layer must not exceed six inches in thickness, 50 feet in width along the shoreline, or one-half the width of the lot, whichever is less, and may not extend more than ten (10) feet waterward of the ordinary high water mark.

(c) Only one installation of sand or gravel to the same location may be made during a four year period. After the four years have passed since the last blanketing, the location may receive another sandblanket. No more than two applications may be made by an individual landowner during their residency at an individual project site.

(d) Exception. Beaches which are operated by governmental entities, and available to the public, shall be exempted from the following restrictions:

(i) that sandblankets be no more than 50 feet in width. See subsection (6. b.) of this rule; and (ii) that sandblankets be installed no more frequently than once every four years. See subsection (6.c.) of this rule. Permits shall be required for all public beach sandblankets.

7. SANDBLANKET REQUIRED EXHIBITS. The following exhibits shall accompany the sandblanket permit application.

(a) Site plan showing property lines, delineation of the work area, existing elevation contours of the adjacent upland area, ordinary high water elevation, and regional flood elevation (if available). All elevations must be reduced to NGVD (1929 datum).

(b) Profile, cross sections and/or topographic contours showing existing and proposed elevations and proposed side slopes in the work area. (Topographic contours should be at intervals not greater than 1.0 foot).

(c) A completed Sandblanket Permit Application form, available from the District.

8. CRITERIA FOR RETAINING WALLS.

(a) A new retaining wall, or repair/reconstruction of an existing retaining wall that increases floodplain encroachment beyond that required by technically sound and accepted repair/reconstruction methods, is permitted only pursuant to a variance or an exception under District Rule I. The applicant must demonstrate that there is no adequate stabilization alternative.

(b) Wooden seawalls and/or steel sheetpiling retaining walls shall comply with accepted engineering principles.

~~(b)~~ (c) The applicant shall submit a structural analysis prepared by a professional engineer registered in the State of Minnesota, in the practice of civil engineering, which shows showing that the wall will withstand expected ice and wave action and earth pressures.

~~(c)~~ (d) The applicant shall submit a survey prepared by a registered land surveyor locating the finished wall and shall file a certificate of survey with the District.

~~(d) Refer to the following section for retaining walls along streambanks.~~

~~9. CRITERIA FOR STREAMBANK STABILIZATION. The physical characteristics of creeks and streams create site specific erosion control issues. There are a number of erosion and sediment control practices designed for use along channels. Emphasis should be placed on the structural stability of the project rather than secondary factors such as convenience or cost. In addition to an application, required exhibits include:~~

- ~~• site plan prepared by an engineer or registered land surveyor showing property lines; the ordinary high water (OHW) elevation and floodplain elevation; existing streambank and contour elevations~~
- ~~• cross section detailing the proposed erosion control practice; including slope dimensions (length, width, height) of proposed project and distance waterward~~
- ~~• material specifications~~
- ~~• documentation of structural stability (design calculations by a professional engineer)~~

~~The engineer shall make available to interested persons recommended criteria for streambank stabilization projects.~~

~~10. CRITERIA FOR OTHER SHORELINE IMPROVEMENTS. Other shoreline improvements, such as boat ramps, shall comply with accepted engineering principles.~~

RULE G: STREAM & LAKE CROSSINGS
WATERBODY CROSSINGS & STRUCTURES

1. POLICY. It is the policy of the Board of Managers to discourage the use of beds and banks of waterbodies for the placement of roads, highways, and utilities.

2. REGULATION. No person shall ~~use the bed or bank of any waterbody within the District for the placement of~~ place a road, highway, or utility or associated structure in contact with the bed or bank of any waterbody within the District without first securing a permit from the District.

3. CRITERIA. Use of the bed or bank:

- (a) Shall meet a demonstrated public benefit;
- (b) Shall retain adequate hydraulic capacity;
- (c) Shall retain adequate navigational capacity;
- (d) Shall preserve wildlife passage along each bank by means that: (i) account for wildlife that are native to the site or may be present and (ii) are approved by a qualified wildlife biologist; (see <http://www.wildlifecrossings.info> for more information, which will open in a new browser window)
- (e) Shall not adversely affect water quality; and
- (f) Shall represent the "minimal impact" solution to a specific need with respect to all other reasonable alternatives. The term "minimal impact" shall refer to all resources protected under the purposes of the District set forth at Sections 103B.201 and 103D.201 of the Minnesota Statutes.

4. REQUIRED EXHIBITS. The following exhibits shall accompany the permit application. One set - full size; one set - reduced to maximum size of 11"x17".

- (a) Construction plans and specifications.
- (b) Analysis prepared by a professional engineer or qualified hydrologist showing the effect of the project on hydraulic capacity and water quality.
- (c) An erosion control and restoration plan.
- (d) The written approval required by paragraph 3(d).
- (e) Information necessary to evaluate impacts under paragraph 3(f), as determined by District staff in consultation with the applicant.

5. MAINTENANCE. A declaration or other recordable instrument stating terms for maintenance of hydraulic and navigational capacity and approved by the District shall be recorded in the office of the county recorder or registrar before activity under the MCWD permit commences. In lieu of recordation, a public permittee or a permittee without a property interest sufficient for recordation may assume the maintenance obligation by means of a written agreement with the District. The agreement shall state that if the ownership of the structure is transferred, the public body shall require the transferee to comply with this subsection.

RULE N: STORMWATER MANAGEMENT

1. POLICY. It is the policy of the Board of Managers to:

(a) Require stormwater facilities to be included in land development projects where practicable and effective.

(b) Manage stormwater and snowmelt runoff on a regional or subwatershed basis throughout the District to:

(1) promote effective water quality treatment, where feasible, prior to discharge to surface waterbodies and wetlands;

(2) limit developed peak rates of runoff into major surface water bodies to less than or equal to existing peak rates;
and

(3) promote infiltration of both precipitation and runoff.

2. APPLICABILITY OF STORMWATER MANAGEMENT PERMIT REQUIREMENTS.

FIGURE 1. SUMMARY OF STORMWATER MANAGEMENT PERMITTING AND REGULATORY REQUIREMENTS ON THE BASIS OF DEVELOPMENT TYPE AND DENSITY

PROJECT	REGULATORY REQUIREMENTS				
SINGLE FAMILY HOME CONSTRUCTION	NO PERMIT				
SUBDIVISION SINGLE FAMILY DENSITY ≤ 2 UNITS/AC	NO PERMIT	BMP'S		RUNOFF RATE CONTROL, BMP'S	RUNOFF QUALITY AND RATE CONTROL, BMP'S
SUBDIVISION SINGLE FAMILY DENSITY > 2 UNITS/AC; MULTI-UNIT RESIDENTIAL DENSITY < 8 UNITS/AC	NO PERMIT	BMP'S	RUNOFF RATE CONTROL, BMP'S	RUNOFF QUALITY AND RATE CONTROL, BMP'S	
COMMERCIAL INDUSTRIAL AND INSTITUTIONAL; MIXED USE; MULTI-UNIT RESIDENTIAL DENSITY ≥ 8 UNITS/AC	BMP'S	RUNOFF RATE CONTROL, BMP'S		RUNOFF QUALITY AND RATE CONTROL, BMP'S	
ROADS, STREETS & HIGHWAYS (< 1 ACRE NEW IMPERVIOUS SURFACE)	BMP'S				
ROADS, STREETS & HIGHWAYS (≥ 1 ACRE NEW IMPERVIOUS SURFACE)	RUNOFF RATE CONTROL, BMP'S		RUNOFF QUALITY AND RATE CONTROL BMP'S		

1/2 | 2 | 3 | 4 | 5 | 8 | 10 | 15 | 20 | >20

SITE ACREAGE

NOTE: Density calculation is based on total site area including dedicated areas.

As provided herein, before creating any impervious surface or changing the contours of a parcel of land in a way that affects the direction, peak rate or water quality of storm flows from the parcel, a developer of land for residential, commercial, industrial, institutional, or public roadway, sidewalk or trail uses shall submit a stormwater management plan to the District, and secure a permit from the District approving the plan. Any activity that will divert storm flows out of the watershed must demonstrate that the diversion is not injurious to water resource management purposes set forth in sections 103B.201 and 103D.201 of the Minnesota Statutes. All permit applications shall conform to and be reviewed in accordance with the provisions of Rule A of these rules. The plan shall provide for compliance with the requirements of this rule for BMP's, rate control and water quality control, as applicable. The applicability of the stormwater management requirements set forth in this rule to a given development or redevelopment is set forth at paragraphs (a) through (e) of this section and summarized in Figure 1.

(a) **Single-Family Homes.** A permit is not required for the construction or reconstruction of a single-family home or its residential appurtenances.

(b) **Single-Family, Developed or Redeveloped Subdivisions.** A permit is not required from the MCWD for construction on less than two (2) acres with a density of two (2) units or less per acre. A permit is required for residential development or redevelopment of subdivisions with a density of two (2) units or less per acre on sites of two (2) acres or more, as follows:

(1) For development or redevelopment of subdivisions of two (2) acres or more but less than eight (8) acres, the best management practices provisions set forth in section 3 of this rule are required;

(2) For development or redevelopment of subdivisions of eight (8) acres or more but less than twenty (20) acres, the best management practices provisions set forth in section 3 and the water quantity control provisions set forth in section 4 of this rule are required;

(3) For development or redevelopment of subdivisions of twenty (20) acres or more, the best management practices provisions set forth in section 3, the water quantity control provisions set forth in section 4, and the water quality provisions set forth in section 5 of this rule are required.

(c) **Medium Density Residential Land Development.** A permit is not required for the development or redevelopment on a site of less than two (2) acres of residential subdivisions with single-family units at a density of more than two (2) units per acre or multi-unit residential development or redevelopment, at a density of less than eight (8) units per acre. A permit is required for development or redevelopment on a site of two (2) acres or more of residential subdivisions with a density of more than two (2) units per acre or multi-unit residential development or redevelopment at a density of less than eight (8) units per acre, as follows:

(1) For development or redevelopment of two (2) acres or more but less than five (5) acres, the best management practices provisions set forth in section 3 of this rule are required;

(2) For development or redevelopment of five (5) acres or more but less than eight (8) acres, the best management practices provisions set forth in section 3 and the water quantity control provisions set forth in section 4 of this rule are required;

(3) For development or redevelopment of eight (8) acres or more, the best management practices provisions set forth in section 3, the water quantity control provisions set forth in section 4, and the water quality provisions set forth in section 5 of this rule are required.

(d) Commercial, Industrial, or Institutional Development or Redevelopment; Mixed Use; High Density Residential Development or Redevelopment. A permit is required for commercial, industrial, institutional or mixed use development or redevelopment, or for multi-unit residential development or redevelopment at a density greater than or equal to eight (8) units per acre, as follows:

(1) For all development or redevelopment, the best management practices provisions set forth in section 3 of this rule are required;

(2) For development or redevelopment activities on sites of one-half (1/2) acre or more but less than eight (8) acres, the best management practices provisions set forth in section 3 and the water quantity control provisions set forth in section 4 of this rule are required;

(3) For development or redevelopment activities on sites of eight (8) acres or more, the best management practices provisions set forth in section 3, the water quantity control provisions set forth in section 4, and the water quality provisions set forth in section 5 of this rule are required.

(e) **Roads, Streets, Highways, Sidewalks, and Trails.** A permit is not required for the maintenance or improvement of a public or private road, street, highway, sidewalk, trail or other linear way not otherwise regulated under paragraphs (a) through (d), if the project does not result in a net increase in impervious surface. A permit is required for a public or private road, street, highway, sidewalk, trail or other linear way that results in a net increase in impervious surface area, as follows:

(1) For projects that result in a net increase in impervious surface of less than one (1) acre, the best management practices in section 3 of this rule will be required;

(2) For projects that result in a net increase in impervious surface of one (1) acre or more, but the total project area is less than five (5) acres, the best management practices provisions set forth in section 3 and the water quantity

control provisions set forth in section 4 are required to treat the increase;

(3) For projects that result in a net increase in impervious surface of one (1) acre or more and the total project area is five (5) acres or more, the best management practices provisions set forth in section 3, the water quantity control provisions set forth in section 4, and the water quality provisions set forth in section 5 of this rule are required to treat the increase;

(4) Sidewalks and trails that do not exceed ten (10) feet in width and are bordered by a pervious buffer of at least five feet on each side do not require a permit and are not included in any calculation of net increase in impervious surface when part of a road or street project. The interruption of pervious buffer by streets, driveways or other impervious surfaces crossing a sidewalk or trail does not invalidate this exception provided that these impervious surfaces do not exceed 25 percent of the area of the required pervious buffer.

(f) **Surety.** A performance bond or other surety in a form satisfactory to the District is required for all activity, including clearing, grading, and excavation, that results in the disturbance of five (5) or more acres of land. The District will not require a performance bond or other type of surety from cities, townships, municipal corporations, counties, the state or federal government, or agencies of any of the aforementioned.

(g) **Common Scheme of Development.** In determining stormwater management requirements under this section, development or redevelopment on adjacent sites under common or related ownership shall be considered in the aggregate. The requirements applicable to a development or redevelopment under this section shall be determined with respect to all development that has occurred on the site, or on adjacent sites under common or related ownership, since the date this rule took effect.

(h) **Additional Development or Redevelopment on Developed Sites.** When the impervious area on a site is increased by 50 percent or more, the requirements imposed by this rule will be determined with respect to the site in a pre-development condition. When the impervious area on a site is increased by less than 50 percent, the requirements imposed by this rule will be determined with respect to only the additional impervious surface and site alteration proposed.

(i) **Impact on Downstream Waterbodies.** No activity subject to a permit under MCWD Rule B, C, D or N may alter stormwater flow so as to:

(1) Increase the bounce in water level for any downstream lake or wetland beyond the limit specified below for the lake or wetland susceptibility class, during a precipitation event of critical duration with any return frequency up to 100 years in the subwatershed drainage area in which the site is located; or

(2) Increase the duration of inundation for any downstream lake or wetland beyond the limit specified below for the lake or wetland susceptibility class, during a precipitation event of critical duration with a return frequency of one, ten, or 100 years in the subwatershed drainage area in which the site is located.

No water may be discharged from a point source onto or into the ground, or into a waterbody, so as to: (a) increase the bounce in water level or duration of inundation for any downstream lake or wetland beyond the limit specified below applicable to the one-year precipitation event for the lake or wetland susceptibility class; or (b) increase the one- or 100-year peak flow of, sedimentation into or erosion of the bed or banks of a watercourse.

Susceptibility Class	Permitted Bounce Up to 100-Year Event	Inundation Period for One-Year Event	Inundation Period for 10- and 100-Year Event
Highly susceptible wetland	Existing	Existing	Existing
Moderately susceptible	Existing + 0.5 feet	Existing plus 1 day	Existing plus 2 days
Slightly susceptible wetland	Existing + 1.0 feet	Existing plus 2 days	Existing plus 14 days
Least-susceptible wetland/Lake	No limit	Existing plus 7 days	Existing plus 21 days

3. BEST MANAGEMENT PRACTICES REQUIREMENTS.

~~BMPs consist of site design, structural and non-structural practices.~~

(a) BMPs addressing the potential water resource impacts associated with the proposed activity must be incorporated in all projects requiring a permit under this rule to limit creation of impervious surface, maintain or enhance on-site infiltration and peak flow control and limit pollutant generation on and discharge from the site. BMPs include site design, structural and non-structural practices.

(b) BMP's must be designed and installed in accordance with generally accepted design practices and, if specifications for the BMP are contained in consistent with specifications of the MPCA manual "Protecting Water Quality in Urban Areas (revised July 1991) and its future subsequent revisions, consistent with that manual. The Board in its discretion may allow a BMP not addressed in the MPCA manual on a demonstration of its effectiveness or if its application will generate new and useful data or information regarding its effectiveness.

(c) No new point source may discharge to a wetland without pretreatment for sediment and nutrient removal. Pretreatment may be provided by non-structural means. An activity changing flow that discharges from an existing point source is not a new point source.

(d) All applications for which compliance only with BMP's is required shall delineate buildings and structures showing that door and window openings are a minimum of two feet above the 100 year high water elevation. The following table is a summary of the MPCA BMPs and their effectiveness for removal of metals, phosphorus, nitrates, and suspended solids from stormwater, and for controlling rates and volumes of runoff. Guidance as to these and other BMP's is available at the District office.

EFFECTIVENESS OF SELECTED BMP'S								
BMP Type	Metals	Total Phos.	Dissolved Phos.	Nitrates	Total Suspended Solids	Floatables	Runoff Rate Control	Runoff Volume Control
Structural								
Infiltration- (no overflow)	high	high	high	high	High	high	yes	yes
Dry Detention- (24 hr)	mod.	low	low	low	Mod.	outlet specific	yes	low
Oil/grit separators	mod.	low	no	no	Low	yes	no	no
Skimmers	no	no	no	no	No	yes	no	no
Grass strip/swale	mod.	low	low	low	Mod.	low	low	low
Diversions	no	no	no	no	Design specific	no	partial	partial
Non-structural								
Wetlands	yes	yes*	yes*	yes*	Yes	yes	yes	partial
organic litter- management	low	yes	yes	yes	Yes	yes	no	no
Street sweeping	yes	yes	yes	**	Yes	yes	no	no
fertilizer management	**	mod-high	mod-high	**	No	no	no	no
catch basin cleaning	low	no	no	no	Low***	no	no	no
sub-grade preparation								
non-phos. fertilizers								

Temporary								
Temporary silt fence	yes	yes	no	no	Yes***	no	no	no
Straw bales	yes	yes	no	no	Yes***	no	no	no
Temporary sediment basin	yes	yes	design specific	**	Yes	outlet specific	design specific	low
Rock entrance pad	no	no	no	no	Yes	no	no	no

* Natural wetlands can also contribute nutrients ** No data to evaluate effectiveness

*** Small volumes only

4. CONTROL REQUIREMENTS.

(a) Development on a site shall not increase the peak rate of stormwater runoff at the downgradient site boundary from the rate existing before the proposed-development. The criterion shall be analyzed and met for runoff-producing events of critical duration with return frequencies of 1, 10 and 100 years in the subwatershed in which the site is located.

(b) Natural existing low areas will be used, where feasible, for detention of runoff to comply with rate control criteria. Reservoir routing procedures and critical duration runoff events shall be used for design of detention areas and outlets.

(c) The proposed project shall not adversely affect water levels off the site during or after construction.

(d) Runoff tributary to the project must be accommodated in the analyses and design of new stormwater management facilities.

(e) The volume of runoff may not increase due to the project when the receiving area of said runoff is landlocked and not capable of handling the increased volume of runoff. In addition, the applicant shall either own or have proper rights over the landlocked property to handle water from the development. Back-to-back 100-year runoff events will be used to analyze holding capacity and freeboard for landlocked areas.

(f) All stormwater rate control facilities shall be located above the projected 100-year flood elevation for the site and within drainage, utility and/or flowage easements to provide access and to prevent future alteration or encroachment.

(g) Water quantity control methods and facilities used or constructed pursuant to this rule shall be in conformance with approved Municipal Stormwater Management Plans. Outfall structures shall incorporate designs to minimize erosion and scouring.

New buildings and structures shall have door and window openings a minimum of two feet above the 100 year high water elevation.

5. WATER QUALITY REQUIREMENTS.

(a) Facilities shall be established on site to meet the water quality standards of this section. Facilities, including wet detention ponds and other systems using BMP's in addition to or in place of ponding, shall be designed to reduce phosphorus loading at the downgradient site boundary by at least 50 percent on an annual average removal basis. The applicant shall demonstrate that this requirement is met using a model and methodology that is acceptable to the District. Total tributary drainage area shall be used to calculate permanent pool volume. Pond outlets shall remove floatables from runoff before discharge for a one-year event. All ponds must provide a ten (10) foot safety bench at a slope no steeper than 10:1 (H:V) and two (2) feet of freeboard above the 100 year pond level.

(b) Quality control facility outfall structures shall incorporate designs to minimize erosion and scouring.

(c) New buildings and structures shall have door and window openings a minimum of two feet above the 100 year high water elevation.

6. REQUIRED EXHIBITS (SUBMIT IN DUPLICATE).

(a) If the water quantity or water quality provisions set forth in sections 4 and 5 of this rule apply to a proposed development, plans certified by a professional engineer registered in the State of Minnesota and reflecting the following items shall accompany the permit application (one set of plans must be full size; one set must be reduced to a maximum size of 11" x 17"):

(1) Property lines and delineation of lands under ownership of the applicant.

(2) Delineation of the subwatershed contributing runoff from off-site and proposed and existing subwatersheds on-site.

(3) Proposed and existing stormwater facilities location, alignment, and elevation.

(4) Delineation of existing on-site wetland, marshes, shoreland, and/or floodplain areas.

(5) Identification, description, permeability and approximate delineation of site soils in both existing and proposed as-developed condition, for applications proposing infiltration as a stormwater management practice.

(6) Existing and proposed normal, and 100 year water elevations on-site.

(7) Existing and proposed site contour elevations at two foot intervals, related to NGVD, 1929 datum.

(8) Construction plans and specifications of all proposed stormwater management facilities.

(9) Stormwater runoff volume and rate analyses for the 1, 10 and 100 year critical events, existing and proposed conditions.

(10) All hydrologic, water quality, and hydraulic computations completed to design the proposed stormwater management facilities.

(11) Documentation indicating conformance with an existing municipal stormwater management plan. When a municipal plan does not exist, documentation that the municipality has reviewed the project.

(12) Delineation of any flowage easements or other property interests dedicated to stormwater management purposes, including, but not limited to, county or judicial ditches.

(13) Documentation that the project has received a National Pollutant Discharge Elimination System (NPDES) Stormwater Permit from the Minnesota Pollution Control Agency (MPCA) if required by the MPCA, once available.

(b) A maintenance agreement shall be submitted for: stormwater treatment ponds, outlet structures for such ponds, culverts, outfall structures, and all other stormwater facilities. The maintenance agreement shall specify the methods, schedule and responsible parties for maintenance and must include at a minimum, the elements contained in the District's Maintenance Agreement Form. A Maintenance Agreement Form will be provided to the applicant for use by the applicant as a maintenance agreement or as guidance if the applicant desires to draft a separate

maintenance agreement. The maintenance agreement must be filed of record in the county recorder's office before any land-altering activity occurs at the site.

(c) Geotechnical soil boring results if available.

7. EXCEPTIONS.

(a) If the District has approved a municipal stormwater management plan for a municipality, or for a subwatershed within a municipality, the requirements of this rule may be deemed satisfied upon showing of compliance by an individual developer with the municipal plan.

(b) The peak flow requirement of this rule will be waived on a determination by the Board of Managers that a downstream facility(ies) is in place or has been ordered and the facility(ies) is designed with adequate capacity to limit the peak runoff rate from the subwatershed under fully developed conditions. The peak flow requirement of this rule may also be waived on a determination by the Board of Managers that the time of concentration of the downstream receiving water body is sufficiently long such that limiting the peak rate of runoff from the project has either no practical effect or an adverse effect.

(c) The water quality requirement of this rule will be waived on a determination by the Board of Managers that a downstream facility(ies) is in place or has been ordered and the facility(ies) is designed to remove at least 50% of the total phosphorus from runoff entering the facility from the subwatershed under fully developed conditions.

(d) The requirement of paragraph 4(a) or paragraph 5(a) that peak flow or stormwater quality be managed on site will be waived on a determination by the Board of Managers that meeting the requirement on site is infeasible; that an off-site facility treating the runoff from the applicant's development or its equivalent will allow the applicant to meet the requirement or provide equivalent management; and that the applicant, before commencing any land-altering activity, will hold the legal rights necessary for design, construction and long-term operation and maintenance of the facility.

* * * *

I, James B. Calkins, Secretary of the Minnehaha Creek Watershed District, do hereby certify that I have compared the above rule with the original thereof as the same was revised and adopted on January 13, 2005, by the Board of Managers, and as appears of record and on file with the District, and find the same to be a true and correct transcript thereof.

IN TESTIMONY WHEREOF, I have hereunto set my hand this ____ day of
January, 2005.

James B. Calkins, Secretary