

Policies and Procedures

The District's Policies and Procedures contain detailed procedures, standards, practices, and techniques to be used in the field. Watershed District Policies and Procedures include both those prepared internally as well as widely used external directives such as the Wetland Conservation Act and related manuals.

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Goal

To provide in one location all continuing, basic, and broad direction needed by Watershed District and key collaborator staff to implement and control, monitor, and adjust Watershed District programs and activities.

The policies and procedures are the basic and ruling components of the District's rule and the principal administrative source of continuing direction for the conduct of Watershed District programs and activities. Specific objectives, policies and standards are next reviewed for each of those resource areas. Program coordinators, collaborators and staff shall ensure that the direction issued in this section has applicability to all employees involved in water and related resource management.

Authority

Minnesota Statutes Section 103B.201
Minnesota Statutes Section 103B.231
Minnesota Statutes Section 103D.201
Minnesota Statutes Section 103D.335
Minnesota Statutes Section 103D.341

Objectives

The objectives of these policies and procedures is to:

1. Manage the watershed's water and related land resources so they remain clean.
2. Prevent public health and safety hazards.
3. Prevent property damage.
4. Promote beneficial uses.

5. Reduce the discharge of pollutants from stormwater to the maximum extent practicable (MEP).
6. Identify waterways, floodplains and wetlands in which land disturbance activity should be restricted, and, in appropriate cases, prohibited.
7. Give due consideration to alternatives and creative solutions in planning and using the water and related land resources of the watershed to encourage and pursue low impact development.

These objectives apply to the water and related resources of the Watershed that are often the subject or target for management actions and practices. They are:

- Ditches and water courses
- Floodplains
- Groundwater
- Soils and erosion control
- Stormwater
- Water quality
- Wetlands
- Wildlife

DITCHES and WATER COURSES

Objectives

1. To maintain ditch and conveyance systems.
2. To promote, preserve and enhance the water and related land resources of the Coon Creek Watershed.
3. To protect the water and related land resources of the Coon Creek Watershed from the adverse effects resulting from poor or incompatible land use activities.
4. To encourage compatibility between land use activities upstream and downstream and natural resource capacity.
5. To regulate land-disturbing activities affecting the course, current or cross section of ditches and water courses.
6. Regulate improvements by riparian property owners of the bed, banks, and shores of lakes, streams, and wetlands for preservation and beneficial use.

Policy

Construction, improvement or repair of a public or private drainage system in the District must:

1. Identify all public drainage ditches on the site, including ditch number and year of establishment;
2. Identify the acres of agricultural land directly affected by the ditch.
3. Identify the trend in land use for the affected drainage area.
4. Determine the drainage needs and flooding characteristics for land upstream and downstream.
5. Determine the primary role of the ditch in providing for agricultural

- drainage and/or stormwater conveyance.
6. Provide the approved/as-built elevations and grades of the public ditch through the subject property.
 7. Demonstrate that such proposed activity will not adversely impact downstream water quality or quantity.
 8. Provide stable channel and outfall.
 9. Comply with all federal, state and District wetland protection rules and regulations.
 10. Demonstrate concurrence with regional pond or subdivision drainage plans approved by the District, if applicable.
 11. If a drainage system is proposed to outlet a landlocked basin, provide sufficient dead storage volume to retain back-to-back 100-year, twenty-four-hour rainfalls and runoff.

Standards

1. Public ditches shall be inspected using the following criteria:
 - Presence of a 16.5 foot grass strip (Where required)
 - Stabilization of spoil banks
 - Presence of obstructions
 - Variation from approved plans
 - Sufficient hydraulic capacity (Manning's Coefficient)
2. Prior to realignment or repair, alternative measures to conserve, allocate and use the water should be considered (versus removing it from the area and watershed).

In upper 2/3s of watershed (All lands tributary to Coon Creek, upstream from Main Street in Coon Rapids) provision and/or discussion of alternative stormwater designs and attempts to avoid or minimize removing water from the site.

3. The need for repair of the ditch shall be determined. Based on the inspection standards above, the need for ditch repair will be determined as follows:

| Condition Rating | Timing of Action |
|-------------------------|---|
| Obstruction | Immediate repair |
| Poor | Immediate repair |
| Fair | Budget for next fiscal year |
| Good | Assess condition during next fiscal year |
| Excellent | Monitor condition through routine inspections |

FLOODPLAINS

Objectives

1. To secure safety from floods.
2. To prevent loss of life, property damage, and the losses and risks associated with flood conditions.
3. To preserve the location, character, and extent of natural drainage courses.
4. To preserve the natural integrity of drainage patterns
5. To provide a storm and surface water system capable of handling a 100 year storm.
6. To provide flood event water storage and flowage.

Policy

1. Maintain ditch and conveyance systems within the watershed to fulfill the role identified within the District's Comprehensive Management Plan and the drainage law.
2. Promote, preserve and enhance the water and related land resources of the Coon Creek Watershed.
3. Protect the water and related land resources of the Coon Creek Watershed from the adverse effects resulting from poor or incompatible land use activities.
4. Encourage compatibility between land use activities upstream and downstream.
5. Regulate land-disturbing activities affecting the course, current, cross section and quality of ditches and water courses.
6. Regulate improvements by riparian property owners of the bed, banks, and shores of lakes, streams, and wetlands for preservation and beneficial use.
7. Protect stream channels from degradation.
8. To regulate crossings of ditches and watercourses in the District to maintain channel profile stability and conveyance capacity.

Standards

1. The existence of floodplain on the property must be determined.
2. Proposed floodplain impacts must be identified and quantified
 - a. Such encroachment cannot lie within the floodway and cannot result in a violation of State or District floodplain, shoreland or wetland policies.
 - b. Construction or development subject to flood damage will have a minimum floor elevation of at least 1 foot above the 100-year flood profile.
 - c. Any structures, facilities, or embankments within the floodplain shall be capable of passing the 100-year flood without increasing the elevation of the 100-year flood profile or creating excessive velocities as determined by the District.
3. The floodplain storage volume after encroachment must be equal to

or greater than the floodplain storage volume prior to encroachment within the relevant reach (Compensatory storage must be provided).

GROUNDWATER

Objectives

1. To protect, preserve, and use natural surface and ground water storage and retention systems
2. To identify and plan for means to effectively protect and improve surface and groundwater quality
3. To establish uniform local policies and controls for surface and groundwater management
4. To promote ground water recharge
5. To secure the other benefits associated with the proper management of surface and ground water
6. Provide for the protection of groundwater and regulate its use to preserve it for beneficial purposes
7. To consider the availability of shallow ground water before establishing a drainage project.
8. Decrease Waste of Groundwater
9. Protect the ecological processes and biodiversity of ground water-dependent resources such as lakes and wetlands
10. Manage ground water-dependent ecosystems to satisfy legal mandates, including but not limited to, those associated with floodplains, wetlands, water quality and quantity, dredge and fill material, and endangered, threatened and special concern species.

Policy

It is the policy of the District to

1. To implement the purpose and intent of the water quality provisions of the District's Comprehensive Management Plan as they may relate to ground water.
2. To maintain the present and natural rate of recharge to the surficial aquifer, and when possible, enhance the rate of recharge.
3. To ensure a dependable water supply and ensure the integrity of natural drainage patterns.
4. To protect fresh water supplies from the dangers of drought, overdraft, pollution, or mismanagement.
5. To define the roles and responsibilities of governmental units in implementing land use controls for the protection of groundwater quality
6. To prevent property damage, and the losses and risks associated with flood conditions that may arise from high water tables. Surficial groundwater levels must be known before any appropriation of groundwater or excavation into the surficial aquifer.

7. Surficial groundwater extraction rates and recharge rates should be established to minimize local impacts on groundwater dependent resources.

Standards

Land use actions must demonstrate compliance with the following standards:

1. The quality of water infiltrated to the water table or surficial aquifer shall remain unchanged or improved by the land disturbance activity.
2. Water shall not be infiltrated within wellhead protection zone or drinking water supply management areas.
3. Low floors must be at least 2 feet above high water table elevation or mottled soils, whichever is higher, unless the applicant can show that the potential for property damage, and the losses and risks associated with high water table conditions are nonexistent or acceptably remote or as required by local ordinance
4. Ground water may not be discharged in a manner that causes erosion or flooding of the site or receiving channels or a wetland.
5. Water pumped from a project site shall be treated by temporary sedimentation basins, grit chambers, sand filters or other appropriate controls designed and used to remove particles of 100 microns or greater for the highest pumping rate.
6. The withdrawal from the Surficial Aquifer and the location of the place of discharge thereof shall conform to the standards of the Minnesota Pollution Control Agency and the Department of Natural Resources.
7. Buffer zones should be established around groundwater dependent resources within which extraction of surficial groundwater is prohibited or limited.

SOILS AND EROSION CONTROL

Objectives

1. To encourage land occupiers to conserve soil and water resources through the implementation of practices to that effectively reduce or prevent erosion, sedimentation, siltation and agriculturally related pollution.
2. To insure continued soil productivity.
3. To prevent soil erosion into surface water systems
4. Control or alleviate soil erosion and siltation of watercourses or water bodies.

Policy

It is the policy of the District to:

1. To reduce the siltation into, and the pollution of water bodies and streams.
2. To guide, regulate and control the design, construction, use and

maintenance of development to promote water quality and prevent pollution.

3. To control and minimize pollution caused by erosion and sedimentation.
4. To reduce siltation to, and the pollution of, water bodies and streams.

Standards

An applicant for an erosion and sediment control permit must demonstrate compliance with the following standards:

1. The Soils affected by the proposal must be identified
2. Soils with a soil-erodibility factor of 0.15 or greater need special attention through the use of best management practices
3. Disturbed areas must be stabilized with vegetation within 14 days.
4. Adjacent properties must be protected from sediment deposition.
5. Sedimentation, skimming, and nutrient removal are to be provided to the maximum extent practical for stormwater runoff prior to discharge to waters of the District. It is understood that there are occasions when it may be necessary to use a portion of a protected basin to serve as a sediment trap and to provide skimming facilities.
6. Plans and specifications must conform to the provisions of all pertinent Minnesota Pollution Control Agency Manuals.
7. All erosion and sediment controls proposed for compliance must be in place before any land-disturbing activity begins.
8. Any area of land from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be stabilized within 14 days from the substantial completion of such clearing and construction. The following criteria shall apply to vegetation efforts:
 - a) Reseeding must be done with an annual or perennial cover crop accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety percent (90%) of the seeded area.
 - b) Replanting with native woody and herbaceous vegetation must be accompanied by placement of straw mulch or its equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.
 - c) Any area of vegetation must exhibit survival of a minimum of seventy percent (70%) of the cover crop throughout the year immediately following vegetation. Vegetation must be repeated in successive years until the minimum seventy percent (70%) survival for one (1) year is achieved.

STORMWATER

Objectives

1. To protect, preserve, and use natural surface and ground water storage and retention systems.

2. To secure the other benefits associated with the proper management of surface and ground water.
3. Regulate the flow of streams and conserve stream water.
4. Divert or change all or part of a watercourse.
5. Repair, improve, relocate, modify, consolidate, and abandon all or part of drainage systems within a watershed district.
6. To regulate improvements by riparian property owners of the bed, banks, and shores of lakes, streams, and wetlands for preservation and beneficial use.
7. To construct and maintain drainage systems.
8. To deepen, widen, straighten, or change the channel or bed of a natural drainage way that is part of the drainage system or is located at the outlet of the drainage system.
9. To extend the drainage system into or through a municipality for a suitable outlet.
10. To construct dikes, dams, and control structures.
11. Before establishing a drainage project consider:
 - a. Private and public benefits and costs of the project
 - b. The present and anticipated agricultural land acreage availability and use
 - c. The present and anticipated land use within the drainage project or system
 - d. Flooding characteristics of property in the drainage project or system and downstream for the 5-, 10-, 25-, and 50-year flood events
 - e. The waters to be drained and alternative measures to conserve, allocate, and use the waters including storage and retention of drainage waters.

Policy

It is the policy of the District to

1. To promote, preserve and enhance the water and related land resources of the Coon Creek Watershed.
2. To implement the nondegradation requirements of the NPDES program using 1988 as the baseline year and load allocation reductions or management practices noted in a District adopted Total Maximum Daily Loads (TMDLs) implementation plan.
3. To protect water and related land resources of the Coon Creek Watershed from the adverse effects resulting from poor or incompatible land use activities.
4. To implement applicable TMDLs.
5. To encourage compatibility between land use activities upstream and downstream and natural resource capacity.
6. To regulate land-disturbing activities affecting the course, current or cross section of ditches and water courses.
7. Regulate improvements by riparian property owners of the bed, banks, and shores of lakes, streams, and wetlands for

preservation and beneficial use.

Bridge and culvert crossings must:

8. Provide equivalent hydraulic capacity as existing condition.
9. Retain existing navigational capacity.
10. Not adversely affect water quality.
11. Represent the minimal impact solution to a specific need with respect to all other alternatives.
12. Be constructed to allow for future erosion, scour and sedimentation considerations.

Standards

1. Stormwater leaving the site must be routed to a public drainage system.
2. Drainage sensitive uses downstream from the proposed site must be accounted for and their ability to discharge in a timely manner must be assured. (Drainage Sensitive Uses are those land uses that require less than saturated conditions to grow or for the land to be used and therefore are dependent upon the subsurface, lateral effect of drainage ditches. A map of drainage sensitive lands can be found in Appendix C: page 55).
3. Stormwater plans must ensure that discharge rates from the proposal are controlled such that within Drainage-Sensitive Uses Areas the post-development 100-year peak flow rate shall not exceed predevelopment 25-year peak flow rate (by subwatershed).
4. In Non-Drainage Sensitive Uses Areas the post-development 100-year peak flow rate shall not exceed predevelopment 100-year peak flow rate (by subwatershed).
5. The proposal must infiltrate the first one inch of precipitation.

WATER QUALITY

Objectives

1. To control and minimize pollution caused by erosion and sedimentation.
2. To reduce siltation to, and the pollution of, water bodies and streams.
3. To protect and improve the quality of the lakes and wetlands within the watershed.
4. Improve the quality of the surface and subsurface discharges to the lakes and wetlands within the watershed by limiting nutrients and other contaminants.
5. To protect and, where needed, improve the physical, chemical, biological, and aesthetic quality of the water resource consistent with

the purposes of the Watershed District and State and National Water quality goals.

6. To produce water of a quality suitable for the beneficial uses identified in the land and resource management planning process.
7. To ensure safe drinking water subject to public use on National Forests, whether the source is a natural or developed water supply. Where State standards do not exist, observe EPA water quality criteria.
8. To ensure safe water quality for designated primary contact recreation areas. Where State standards do not exist, observe EPA water quality criteria.

Policy

It is the policy of the District to

1. To control and minimize pollution caused by erosion and sedimentation.
2. To reduce siltation to, and the pollution of water bodies and streams.
3. To preserve and improve the quality of the lakes and wetlands within the watershed.
4. Improve the quality of the surface and subsurface discharges to the lakes and wetlands within the watershed by limiting nutrients and other contaminants.
5. To pursue non-degradation of the waters of the District.
6. Promote and apply approved best management practices to all management activities as the method for control of non-point sources of water pollution, and for compliance with established state or national water quality goals.
7. Consider water quality needs of local, regional, and national public interests both in and outside the Watershed District in determining appropriate water quality management activities.
8. Establish objectives for managing the quality of the water resource in local water management plans and Storm Water Pollution Prevention Plans.
9. Include a water quality evaluation for all permit reviews and environmental analyses. Identify the water quality implications of proposed and alternative land management practices.
10. Evaluate the data collection activities of other agencies before additional water quality inventories or monitoring efforts are

undertaken.

11. Conduct water quality data collection activities within the guidelines of an inventory or monitoring plan reviewed by the Technical Advisory Committee.
12. Specify the accuracy, precision and threshold limits of detection for each parameter or test conducted by water quality analytical laboratories used by the Watershed District.
13. For potable water, all water quality testing laboratories used by the Watershed District shall be certified by either the State.
14. Use the Environmental Protection Agency's (EPA) STORET/ Equis system as the primary depository for stream and lake water quality data. Ensure that all water quality data placed on the STORET/Equis system is:
 - a. collected and analyzed by procedures recognized as standard methods or
 - b. entered with descriptive qualifiers which specify the method of collection or analysis.
15. Monitor all water provided for public domestic purposes and primary contact water sports, to ensure public health and safety. Design monitoring systems consistent with applicable State or Federal regulations for the specific water use.

Standards

The Watershed District is required to review its water quality standards at least once every 5 years as part of the new NPDES permit and revise them as necessary. The District will participate in review of State standards and work toward change where consideration is not given to the following factors:

1. Standards should reflect local water quality objectives; be related to beneficial uses, and recognize natural background and variability.
2. Compliance with approved best management practices for control of nonpoint sources should constitute compliance with water quality standards and these practices should be based upon site-specific conditions and should include a consideration of political, social, economic, and technical feasibility.
3. Water quality standards that reflect nonpoint source conditions should be used to measure effectiveness of best management practices.

4. Consideration should be given to evaluating certain water quality concerns, such as sediment, by observing a surrogate such as channel condition.
5. Anti-degradation policy should include a consideration of both time and space and should not be based on change at a single point.

It is presumed that a Best Management Practice (BMP) complies with this performance standard if it is:

1. Sized to capture the prescribed water quality volume
2. Designed in accordance with specific design standards outline in an approved stormwater design manual
3. Constructed properly
4. Maintained properly.

WETLANDS Objectives

1. To achieve no net loss in the quantity, quality and biological diversity of Minnesota's existing wetlands
2. To increase the quantity, quality and biological diversity of Minnesota's existing wetlands by restoring or enhancing diminished or drained wetlands
3. To avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality and biological diversity of wetlands
4. To replace wetland values where avoidance of activity is not feasible and prudent
5. Increase the quantity, quality, and biological diversity of Minnesota's wetlands by restoring or enhancing diminished or drained wetlands
6. To protect, preserve, and use natural surface and ground water storage and retention systems
7. To minimize public capital expenditures needed to correct flooding and water quality problems
8. To establish uniform local policies and controls for surface and groundwater management
9. To reclaim or fill wet or overflowed land
10. To regulate improvements by riparian property owners of the bed, banks, and shores of lakes, streams, and wetlands for preservation and beneficial use.

Policy

It is the policy of the District to

1. To provide for the protection, preservation, proper maintenance and beneficial use of wetlands.
2. To minimize the disturbance to wetlands and to prevent damage from excessive sedimentation, eutrophication or pollution.

3. To protect and enhance the ecological function of wetlands and the benefits and values they provide to society.

Standards

The Minnesota Wetland Conservation Act (WCA), as amended and its implementing rules contained in Minnesota Rules chapter 8420, as amended.

Any person proposing to impact a wetland in the District is subject to and must establish compliance with the Wetland Conservation Act, as amended.

Within area(s) delineated as wetland, the applicant and property owner shall not:

1. Fill or place materials, substances or other objects, nor erect or construct any type of structure, temporary or permanent, except as permitted through the Wetland Conservation Act.
2. Drain or cause to be drained through ditching, pumping or alteration of the wetlands water source or engage in any other actions which adversely change the wetlands hydroperiod beyond normal circumstances such that a wetland can become nonwetland, except as permitted through the Wetland Conservation Act.
3. Excavate or dig within a jurisdictional wetland except as permitted through the Wetland Conservation Act.
4. Clear vegetation, pond water or alter the landscape position in a manner that results in adverse environmental impact.

Discharges into wetlands should not cause extreme fluctuations of water levels. Discharges that exceed the standards below shall be considered and regulated as adverse impact.

| Wetland Type | Type 8 -Sedge Meadows -Seasonally Flooded Basins | Type 4 &5 -Scrub-Shrub -Wet-Meadow -Seasonally - Permanently Flooded | Type 4 &5 -Floodplain forests -Seasonally - Permanently Flooded | Cultivated hydic soil or Sand/gravel pit |
|----------------------------|---|--|---|--|
| Standard | | | | |
| Storm Bounce | Existing | Existing + 0.5 ft. | Existing + 1 ft. | No limit |
| Discharge Rate | Existing | Existing | Existing or less | Existing or less |
| Inundation on 1-2yr event | Existing | Existing + 1 day | Existing + 2 days | Existing + 7 days |
| Inundation for 10 yr event | Existing | Existing + 7 days | Existing + 14 days | Existing + 21 days |
| Run out control | No change | No change | 0'-1 ft above RO | 0-4 ft above RO |

WILDLIFE

Objectives

1. To preserve wildlife.
2. Protect and enhance fish and wildlife habitat and water recreational facilities.
3. Consider the effect on fish and wildlife before establishing a drainage project.
4. Improve and manage habitat to benefit at-risk and declining species and discourage invasive species.
5. To maintain and improve wildlife and fish habitat.
6. To cooperate with other agencies, conservation organizations, concerned landowners, and individuals in all appropriate aspects of wildlife, fish, and threatened, endangered, and sensitive species habitat management.
7. To protect, manage, and improve riparian areas while implementing land and resource management activities.
8. To manage riparian areas in the context of the environment in which they are located, recognizing their unique values.
9. To protect Watershed District resources from animal damage.
10. To protect activities taking place within the watershed and to reduce threats to human health and safety from animal damage.

Policy

It is the policy of the District to:

1. To prevent loss of wildlife and vegetation and the habitats on which they depend.
2. To protect, preserve and manage unique resource areas and unique and/or endangered species of plants and animals that populate these areas from adverse impacts associated with land use change.
3. Recognize the Minnesota Department of Natural Resources as the public agency with management responsibilities for fish & wildlife within the Coon Creek Watershed District and include them as partners in planning and implementation of activities that effect wildlife and fish.
4. Generally rely upon a contracted expert to provide the expertise and conduct nuisance control within the Watershed District to determine property losses, and to determine methodology for animal damage management.
5. Use an integrated approach to the prevention of animal damage and management of animal damage control programs.
6. Watershed District resources must be adequately protected during animal damage management activities authorized by the State of Minnesota and conducted by the District's Animal Damage Control program.
7. When the Watershed District conducts animal damage management activities, such as beaver removal, the District must comply fully with state and federal laws.

Standards

1. Establish the presence of endangered, threatened or special concern species or communities on-site and the source of that information.
2. Assess the potential effect on wildlife and vegetation and the habitats on which they depend.
3. The District may require applicant to provide a habitat management plan when the District determines applicant cannot avoid direct or indirect impacts on the habitat in question.

Assessment of significant adverse impacts should be based on the following factors:

1. The amount of vegetation/habitat removal and/or alteration within the development site
2. The amount of habitat of similar type and quality within the development site that remains contiguous
3. The existing and proposed amount of lot coverage
4. The existence of contiguous habitat of similar type and quality on adjoining land
5. Mitigation efforts that directly address the negative effects of the proposed land use on wildlife habitat.

In carrying out animal damage management activities, Watershed District employees shall:

1. Rely upon the District's Animal Damage Control program or private contractors to provide the expertise and conduct animal control on public ditches, to determine methodology for animal damage management.
2. Conduct animal damage management, such as controlling beaver populations in stormwater ponds, and necessary environmental analysis and disclosure on watershed lands consistent with the Comprehensive plans.
3. Coordinate with the Minnesota Department of Natural Resources and other local and state agencies to improve effectiveness of control program activities conducted in the Watershed District.
4. Use an integrated approach to the prevention of animal control and management. Consider a full range of methods, including physical barriers, repellents, habitat manipulation, biological controls, pesticides, and hunting and trapping. Use licensed hunting, fishing, and trapping as a control technique where practicable.