



Commission Policy

Subject: Watercourse Policy <u>Flood Risk Reduction Policy</u>	Index: 1-01.15
Authority Statute: <u>secs. 200.31(1) and 200.35(8)</u>	Page: 1 of 10
Resolution: 99-048-4(02); 00-011-1; 02-136-7; 07-005-1; 15-072-6; 17-021-2, <u>20-053-4</u>	Date Issued: 4/26/99
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Policy Purpose: The purpose of the District's flood risk reduction efforts is to reduce the number of structures within the regional floodplain, as defined by MMSD Rules, sec. 13.103(13), along watercourses within the District's jurisdiction, as identified in MMSD Rules, Chapter 13, Appendices 1 to 6. While the District will address regional flood risks, other governmental units and landowners are responsible for local drainage and stormwater management, as indicated by MMSD Rules, sec. 13.206.

I. Jurisdiction

In MMSD Rules, Chapter 13, the Commission will identify watercourses where the District may reduce flood risks.

I. Jurisdiction

~~A. Jurisdiction refers to the streams and watercourses for which the Commission has determined the District should serve as the primary management agency with respect to the construction and maintenance of flood risk reduction measures. The District may assume jurisdiction for the purposes of reducing flood risk over perennial streams that meet at least one of the following criteria:~~

- ~~1. streams within the District whose flooding poses potential major flood damage;~~
- ~~2. streams within the District with tributary drainage in more than one community within the District; or~~
- ~~3. streams within the District for which the District has completed channel improvements.~~

~~B. The District may exercise jurisdiction for the purposes of reducing flood risk over intermittent streams that meet at least two of the following criteria:~~

- ~~1. streams within the District whose flooding poses potential major flood damage;~~
- ~~2. streams within the District with tributary drainage in more than one community within the District; or~~
- ~~3. streams within the District for which the District has completed channel improvements.~~

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- C. ~~For the purpose of this policy, “stream” includes the estuary reaches of the Kinnickinnic, Menomonee, and Milwaukee Rivers and those reaches shall be considered perennial.~~

II. Watercourse Management Plans

II. Watercourse Management Plans

- A. For watercourses within its jurisdiction, the District will develop Watercourse Management Plans. These plans will identify flood risks and the preferred alternatives to reduce flood risks for watercourse improvements. District staff will present Watercourse Management Plans to the Commission for adoption. A Watercourse Management Plan becomes effective after adoption by the Commission. In response to changed conditions or new information If conditions significantly change, then District staff will propose updates/amendments to Watercourse Management Plans.
- B. Watercourse Management Plans will consider climate change. These plans will consider alternatives to reduce future flood risks.
- C. To the extent practical, the District will design and construct flood risk reduction projects to achieve other benefits, such as reduced risks to public health and safety, improved opportunities for access to and use of riparian areas, reduced sewerage system inflow and infiltration, green infrastructure, and improved habitat in riparian areas.
- D. The District will implement cost effective solutions developed with stakeholder input.

III. Funding

A. Funding in General

For the development and implementation of Watercourse Management Plans, all funding is subject to Commission approval.

B. Bridges and Culverts

1. The District will fund 100% of bridge and culvert removal when necessary to reduce flood risk and when the owner finds that the bridge or culvert is unnecessary.
2. The District may fund bridge and culvert modification or replacement to obtain the capacity needed under and through the structure to reduce flood risk. For modifying or replacing a non-District bridge or culvert, the level of District funding will be no more than the lowest cost alternative for modifying or replacing the structure to obtain the required flow capacity. Also, actual District

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funding will depend upon the remaining useful life of the structure, modifications needed to obtain the required flow capacity, and other relevant factors.

3. The District will seek to maximize funding from the bridge owner and minimize the District's contribution. When circumstances allow, the District will schedule bridge replacement to maximize the bridge owner's eligibility for state or federal funding and the District will support the bridge owner's efforts to obtain grant funding.

C. Voluntary Structure Acquisition and Removal and Voluntary Floodproofing

1. Selection of the Alternative to be Implemented

When a District Watercourse Management Plan identifies voluntary floodproofing or voluntary structure acquisition and removal as the preferred alternatives, the District will collaborate with the local governmental unit and the owner to determine the alternative to be implemented, including consideration of a no-action alternative.

2. District Funding

The District will fund voluntary floodproofing and voluntary structure acquisition and removal according to the criteria in Tables 1 and 2.

Table 1
District Funding Amounts for Residential Structures with One to Four Units

<u>Result of Cost Analysis</u>	<u>Alternative Selected by Owner and Local Government</u>	<u>District Funding Amount</u>
<u>Floodproofing ≤ 50% Acquisition and removal</u>	<u>Floodproofing</u>	<u>100% of floodproofing cost</u>
	<u>Acquisition and Removal</u>	<u>100% of floodproofing cost</u>
<u>Floodproofing > 50% Acquisition and removal</u>	<u>Floodproofing</u>	<u>50% of acquisition and removal cost</u>
	<u>Acquisition and Removal</u>	<u>100% of acquisition and removal cost</u>

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Table 2
District Funding Amounts for All Other Structures*

<u>Result of Cost Analysis</u>	<u>Alternative Selected by Owner and Local Government</u>	<u>District Funding Amount</u>
<u>Floodproofing ≤ 50% Acquisition and removal</u>	<u>Floodproofing</u>	<u>100% of floodproofing cost</u>
	<u>Acquisition and Removal</u>	<u>100% of floodproofing cost</u>
<u>50% Acquisition and removal < Floodproofing < 75% Acquisition and removal</u>	<u>Floodproofing</u>	<u>100% of floodproofing cost</u>
	<u>Acquisition and Removal</u>	<u>100% of acquisition and removal cost</u>
<u>Floodproofing ≥ 75% Acquisition and removal</u>	<u>Floodproofing</u>	<u>75% of acquisition and removal cost</u>
	<u>Acquisition and Removal</u>	<u>100% of acquisition and removal cost</u>

*residential structures greater than four units and commercial, industrial, governmental, and institutional structures

3. Supplemental Funding

If the alternative to be implemented has costs higher than the District funding amount, then the local governmental unit, the owner, or a combination of them must provide the supplemental funding.

4. Intergovernmental Cooperation Agreement

The District and the local governmental unit will prepare and execute an intergovernmental cooperation agreement to identify each party's responsibilities. Generally, this agreement will indicate that the District will provide funding, according to Tables 1 and 2, and the local governmental unit will do the floodproofing or acquisition and removal work.

5. Floodproofing

a. The District may fund any floodproofing option allowed by applicable floodplain zoning requirements. Whether the land is residential, commercial, or manufacturing and industrial will determine floodproofing options.

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- b. When the District funds voluntary floodproofing, enough floodproofing must occur to achieve compliance with all applicable floodplain zoning requirements.

6. Property Interest

The District will obtain a permanent property interest, such as an easement, in any property where the District has funded voluntary acquisition and removal or voluntary floodproofing. These easements will prevent any action that would increase flood risk. In the case of property acquisition and removal, the easement will require the property to remain as open space under public ownership.

7. Acquisition and Removal Cost

“Acquisition and removal cost” may include, but is not limited to, costs for appraisal, survey, environmental inspections, purchase, title, recording, closing, building demolition or deconstruction, relocation, and property restoration after removal. For each project, the District and the local governmental unit will collaborate to identify the relevant costs and include them in the intergovernmental cooperation agreement.

D. Land Conservation

The District may fund preservation of property in open land uses to continue environmentally valuable features, such as natural storage and infiltration. These expenditures may take the form of conservation easements, fee-simple acquisition, purchase of development rights or other methods approved by the Commission.

III. Purposes Eligible for District Funding

- A. ~~The District will limit its funding of watercourse improvements to those streams and stream reaches for which the Commission has chosen to assume jurisdiction for flood risk reduction purposes.~~

- B. ~~The District may provide up to 100% of the capital costs, including, but not limited to, land acquisition, purchase of right of way, and construction, for the following structural measures:~~

1. ~~Storage facilities, such as detention and retention ponds, that receive the flows from two or more upstream communities, and/or control the flows moving toward two or more downstream communities.~~

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2. ~~Modifications to the existing stream channel designed to increase channel capacity.~~
 - ~~River lowering is the least preferred alternative for reducing flood risk and would be used when other alternatives are not feasible.~~
 - ~~River lowering will be considered when the bottom elevation of a stream segment is not low enough to enable an outfall from a previously installed storm sewer.~~
3. ~~Modifications designed to restore or maintain natural vegetation and habitat in a channel, and that mitigate a potential increase to flood exposure that may result from restoration.~~
4. ~~Containment structures such as earthen dikes, concrete floodwalls and levees that prevent lateral overland flow from a channel to adjacent land areas.~~
5. ~~Removal of existing bridges and culverts when necessary to reduce flood risk and when the owner finds that the bridge or culvert is no longer necessary.~~
6. ~~Bridge and culvert modification or replacement when needed to obtain sufficient capacity under and through the structure to reduce flood risk. For modifying or replacing a non-District bridge or culvert, the level of District funding will be no more than the lowest cost alternative for modifying or replacing the structure to obtain the required flow capacity. Also, actual District funding will depend upon the remaining useful life of the structure, modifications needed to obtain the required flow capacity, and other relevant factors.~~

~~The District will seek to maximize funding from the bridge owner and minimize the District's contribution. When circumstances allow, the District will schedule bridge replacement to maximize the bridge owner's eligibility for state or federal funding and support the bridge owner's efforts to obtain grant funding.~~

- C. ~~The District may provide up to 100% of the costs for the following non-structural measures:~~

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1. ~~Acquisition of improved real property and the demolition or removal of associated structures from the floodplain, when such expenditures are essential to implementing a Watercourse Management Plan alternative adopted by the Commission.~~
 2. ~~Expenditures associated with the relocation of the residents of properties acquired for the purpose of implementing a Watercourse Management Plan alternative adopted by the Commission.~~
 3. ~~Expenditures associated with maintaining property in open land uses for the purposes of preserving environmentally valuable features such as natural storage, infiltration and conveyance. Such expenditures may take the form of conservation easements, fee simple acquisition, purchase of development rights or other methods the Commission deems to be advisable. The Executive Director shall ensure that the District is named on any deed related to a fee simple acquisition, or purchase of development rights or conservation easement, to which it has contributed.~~
 4. ~~Direct costs associated with floodproofing structures when such expenditures are essential to implementing a Watercourse Management Plan alternative adopted by the Commission.~~
- D. ~~The District may fund up to 100% of the following operation and maintenance expenditures associated with structural and non structural flood risk reduction measures:~~
1. ~~Operation and maintenance necessary to achieve the optimum results from a structural measure that the District has constructed. In the event a structural measure constructed by the District serves multiple objectives, MMSD will be responsible for the operations and maintenance pertaining to flood risk reduction, including that which is necessary to restore flood risk reduction functionality after a storm.~~

~~In the event that the District has constructed a structural measure that serves multiple objectives, other parties who benefit from the secondary purpose, such as local governments, are responsible for the operations and maintenance pertaining to the secondary objective. This applies regardless of whether the land on which the measure is constructed is owned by the District or by another party. The Commission shall approve an appropriate agreement~~

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~~regarding operations and maintenance responsibilities and funding prior to initiating construction of a structural measure that serves multiple objectives.~~

2. ~~Expenditures necessary for the enforcement of a conservation easement.~~

IV. Operation and Maintenance

A. Location of Work

District operation and maintenance will be limited to watercourses within the District's jurisdiction, as identified in MMSD Rules, Chapter 13.

B. Facilities Constructed by the District

1. The District will operate and maintain facilities constructed by the District to the extent necessary to maintain the functionality identified in the Watercourse Management Plan, except as provided in par. 2.
2. Local governmental units will operate and maintain facilities constructed or modified as part of a District flood risk reduction project when these facilities have a local purpose. These facilities may include, but are not limited to, bridges, culverts, and stormwater drainage facilities. Before the commencement of construction, the District and the governmental unit will execute an intergovernmental cooperation agreement to indicate the conditions for transferring responsibility from the District to the other governmental unit.

C. Removal of Debris

1. "Debris" may be either a single item or a group of items and may be either man-made or natural, including, but not limited to: uprooted trees, tree limbs, shopping carts, furniture, picnic tables, construction materials, mattresses, bikes, strollers, tires, rocks, sand, sediment, or gravel.
2. The District will remove debris if the District determines the debris will raise the water surface elevation during the regional flood to a level that:
 - a. adds a structure to the regional floodplain or
 - b. increases the regional flood elevation by one tenth of a foot or more at a structure already in the regional floodplain.
3. If debris is on land owned by others, then the requirements of MMSD Rules, sec. 13.203, apply.

IV. Maintenance

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- A. ~~The District will limit its performance of watercourse maintenance activities to those streams and stream reaches over which the Commission has chosen to assume jurisdiction for flood risk reduction purposes.~~
- B. ~~District watercourse maintenance will be performed as follows:~~
1. ~~The District will establish a baseline condition for debris removal in specific streams based on the water surface elevation during the 1% annual probability flood. The District will limit its maintenance activities to the removal of natural debris or man-made items from watercourses in order to prevent or eliminate obstructions that would raise surface water elevations during the 1% annual probability flood in an amount that would cause an increased number of structures above the baseline condition being flooded.~~
 2. ~~The District will establish a baseline condition for sediment removal in specific streams based on the water surface elevation during the 1% annual probability flood. The District will limit its sediment removal activities to those segments of streams in which the District has constructed a structural flood risk reduction measure, and where sediment is shown to increase water surface elevations during the 1% annual probability flood in an amount that would result in an increase number of structures above the baseline condition being flooded.~~
 3. ~~The District will perform sediment removal only after it receives any required permits or approvals pursuant to Wisconsin Department of Natural Resources regulations.~~
 4. ~~The District may initiate watercourse maintenance work or may perform watercourse maintenance consistent with Commission policy as a result of a request by a local government.~~
 5. ~~This policy is not intended to preclude local governments from undertaking watercourse maintenance or sediment removal that is environmentally responsible and in accordance with any state or federal law or rules.~~

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6. ~~The District will cooperate with the Wisconsin Department of Natural Resources, University of Wisconsin—Extension, and local governments in informing riparian owners of the impact of property maintenance practices on erosion control and flooding.~~

V. Flood Risk Reduction Facilities with features Requested by Others

If another party requests features that supplement the flood risk reduction facilities identified in a Watercourse Management Plan, then, before the commencement of construction, the District and the other party will execute a memorandum of understanding, an intergovernmental cooperation agreement, or other agreement to indicate how construction, operation, and maintenance costs will be shared. The District will fund costs related to the facilities identified in the Watercourse Management Plan, with the other party funding costs related to the supplementary features, modified to the extent required by related easements, permits, or the conditions of grants or other funding assistance.