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Authority	Statute:		Date Issued: 4/26/99
	Resolution:	99-048-4(02); 00-011-1; 02-136-7; 07-005-1; 15-072-6; <u>17-021-2</u>	Date Revised: 1/22/07, 6/22/15, 2/27/17

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 abatement risk reduction measures. The District may assume jurisdiction for the purposes of reducing flood abatement 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 <u>reducing</u> flood <u>abatement risk</u> 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.
- 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

For watercourses within its jurisdiction, the District will develop Watercourse Management Plans.

These plans will identify the flood risks and the preferred alternatives 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. If conditions significantly change, then District staff will propose amendments to Watercourse Management Plans.



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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 <u>risk</u> reductionabatement 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:
 - 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.
 - 2. Modifications to the existing stream channel designed to increase channel capacity.
 - River lowering is the least preferred alternative for <u>reducing</u> flood <u>control risk</u> 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.



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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.

Pursuant to an intergovernmental agreement, removal of existing bridges and culverts, if such removal is necessary for the construction of structural flood control measures. District staff shall determine whether alternatives to bridge removal are feasible and cost effective prior to making a recommendation to the Commission that a historically significant bridge be removed. The Executive Director shall determine whether a bridge is historically significant according to an inventory based on the criteria of the State of Wisconsin's model preservation ordinance.

- C. The District may provide up to 100% of the costs for the following non-structural measures:
 - 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 System-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 System_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 flood-proofing structures when such expenditures are essential to implementing a Watercourse System_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 control risk reduction measures:



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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 abatementrisk reduction, including that which is necessary to restore flood abatementrisk 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 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.

IIIIV. Maintenance

- 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 abatement 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 control risk reduction measure, and where sediment is shown to increase water surface elevations during the 1% annual probability flood in an



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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.
- 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.

IV. Project Prioritization

- A. The District shall utilize a weighted benefit point system as set forth below as guidance in determining how projects included in the Watercourse System Plan will be prioritized.
- B. The District may also take into account the following factors in determining project prioritization:



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- 1. The status of a project relative to necessary permitting.
- 2. The status of a project relative to its technical readiness for implementation.
- 3. The availability of non-District funding for a project and the timeframe during which such funding can be secured.

WEIGHTED BENEFIT POINT SYSTEM FOR FLOOD CONTROL_PROJECTS

Benefit	Points	Unit of Measurement
Avoided Residential and Apartment First Floor	150	per structure or unit, times number
Flooding		of residents-1
Avoided Residential and Apartment Basement	50	per structure or unit, times number
Flooding		of residents
Avoided Manufacturing or Public Works Facility	45	per 1,000 square feet ²
Flooding		
Avoided Office or School Facility Flooding	100	per 1,000 square feet ³
Avoided Commercial Facility Flooding	37.5	per 1,000 square feet ⁴
Avoided Roadway Flooding, 18" or more	50	per 300 feet of arterial
	25	per 300 feet of collector
	15	per 300 feet of residential
Avoided Diversion of Emergency Vehicles	50	Per 300 feet of roadway

Notes:

- ¹ MMSD occupancy factors may be used to determine the average number of residents per structure within the project area.
- ²Based on an assumption of 1.8 employees per 1,000 square feet.
- Based on an assumption of 4 employees per 1,000 square feet.
- ⁴Based on an assumption of 1.5 employees per 1,000 square feet.