

City of Madison

City of Madison Madison, WI 53703 www.cityofmadison.com

Legislation Text

File #: 11110, Version: 1

Fiscal Note

No appropriation is required, but staff resources will need to be allocated as appropriate. **Title**

To a) authorize the Common Council of the City of Madison to request that the Wisconsin Department of Natural Resources review authorized lake levels on Lake Mendota, b) request from Dane County a review of their policy on summer minimum and maximum lake levels and its potential impact on residential flooding and wetland deterioration, and c) direct the City Engineer, the Parks Division, and the City Attorney to work with the National Weather Service, the Wisconsin Department of Natural Resources, the Cities of Middleton and Monona, and Dane County to establish pre-determined thresholds representing the onset of flooding for Lakes Mendota, Monona, and Waubesa.

Body

Preamble

One of Madison's greatest natural treasures are its surrounding lakes enjoyed by residents and visitors alike. In recent years concerns have been raised about the established lake levels and their impact on the quality of water, wetland deterioration and restoration, and potential flooding of residential areas such as Cherokee Park. These concerns have been prompted to a large extent by the floods of 1993, 2000 and now, 2008, all of which exceeded the presently established 100-year flood event for Lake Mendota.

The level of Lakes Mendota, Monona, and Waubesa are established by the Department of Natural Resources Order of January 18, 1979 and have not been formally reviewed since that time. Dane County is responsible for maintaining those levels following the criteria established by the DNR. The current lake level orders require the county to raise Lake Mendota to the summer minimum in March each year. The lake is drawn down in the winter to create flood storage and to reduce ice damage and puts it all back in March to theoretically help northern pike spawning. The DNR does not fine the county if it exceeds the maximum lake levels.

Residents residing in the area of Cherokee Marsh and Park have encountered significant flooding problems as maximum levels in Lake Mendota are maintained and in many cases exceeded. The federal government has proposed to increase the 100-year regional flood on Lake Mendota by one foot based on the flood of 2000. A number of additional residences are now located in a flood plain.

Lowering the elevation would reduce the likelihood of flooding during extreme weather events, such as the record snowfall this past winter and the rain that has fallen this June. It would also enhance the Parks Division's ability to maintain and restore areas of Cherokee Marsh that are eroding on an annual basis. There is an annual loss of approximately seven feet of shoreline along the Yahara River. The City has just purchased additional lands to increase the size of Cherokee Marsh at a cost of more than \$1 million and stands to lose the shoreline due to the continued erosion occurring along the riverbanks.

A lowering of the lake levels would also encourage the growth of wetland plants in Cherokee Marsh. By managing the lake levels at the minimum levels (2 to 3 inches lower) emergent plants would populate laterally. Maintaining the lake levels at the summer minimum is an action the county could take without changing the lake level orders from the DNR. The lake level issue is also a direct threat to the wetlands in Cherokee Marsh and other areas along the Yahara River and should be incorporated into a longer-term strategic plan. The ordinary high water level on Lake Monona at Olbrich Park, for example, is eroding the shoreline.

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Unlike many of Wisconsin' rivers and streams, the Yahara Lakes do not have pre-determined thresholds representing the onset of flooding. These thresholds would provide the public with definitions that would relate river and lake stages to potential damage, public safety and the closure of roads and highways.

River/lake forecast definitions are:

- Bankfull Stage, which represents the maximum safe water level which will not overflow the river banks and lake shorelines or cause any significant damage;
- Flood Stage, which is the gauge height which a watercourse overtops its banks and begins to cause damage;
- Moderate Flood Stage, where secondary roads are inundated; transfer to higher ground is necessary to save property and some evacuation may be required; and,
- Major Flood Stage, where there is extensive inundation and property damage and which is characterized by the evacuation of people, livestock and the closure of both primary and secondary roads.

The establishment of standardized thresholds would serve to better inform the public and elected officials regarding the implications of specific lake levels in our area. Such standardization would also provide more opportunities for intergovernmental cooperation between local municipalities, Dane County, and the Wisconsin Department of Natural Resources to update emergency preparedness plans for severe flooding, conduct more periodic reviews of lake level policies based on objective data, and reassure citizens that proper flood management and prevention, wetland restoration, and clean lakes are a top priority.

The Yahara Lakes are facing unprecedented challenges. If the climate pattern of recent years continues, there will be more intense storms with greater frequency of flooding and shoreline erosion. Residents are requesting help from their elected officials to reduce the risk of flooding.

NOW, THEREFORE, BE IT RESOLVED, that the City Engineer, Parks Division, and the City Attorney are hereby directed to work with the National Weather Service, the Wisconsin Department of Natural Resources, the Cities of Middleton and Monona, and Dane County to establish pre-determined thresholds representing the onset of flooding for Lakes Mendota, Monona, and Waubesa; and

BE IT FURTHER RESOLVED, that the Common Council of the City of Madison officially requests that the Wisconsin Department of Natural Resources review and revise the current lake level order for Lakes Mendota and Monona to reduce the risk of future flooding; and

BE IT FURTHER RESOLVED, that representatives from City staff, surrounding communities, Dane County, and Wisconsin Department of Natural Resources propose projects, such as additional flow capacity beneath the railroad trestle at the Yahara River entrance to Lake Waubesa to reduce the risk of future flooding; and

BE IT FURTHER RESOLVED, that Dane County conducts a review of their policy on summer minimum and maximum lake levels and its potential impact on residential flooding and wetland deterioration with the intent to maintain the Lakes Mendota and Lake Monona around the "Summer Minimum" elevation after the present flooding conditions subside; and

BE IT FINALLY RESOLVED, that it is the intent of the Common Council of the City of Madison to have these actions concluded prior to the spring 2009 run-off to reduce the risk of future floods.