## 2020 RES-419

1

## AFFIRMING THE DANE COUNTY LAKE LEVEL MANAGEMENT GUIDE FOR THE YAHARA CHAIN OF LAKES

Lake level management of the four major lakes in Dane County (Lake Mendota, Lake Monona,
Lake Waubesa and Lake Kegonsa) is a challenging task, complicated by the occurrence of

6 extreme rainfall events and a wide range of public opinion on preferred levels.

7 Managing lakes to reduce severity and occurrence of flood events is a goal that our community

8 supports. Following the 2018 flood event, Dane County convened a technical work group

9 consisting of experts from Dane County, City of Madison, University of Wisconsin-Madison, and

10 Wisconsin Department of Natural Resources to evaluate and model scenarios to improve flood

11 resiliency. The technical work group produced a report that was subsequently used be a task

- 12 force to review the findings and make policy recommendations.
- 13 The task force included a recommendation that was not previously vetted by the technical work
- 14 group which is stated as follows: "Dane County will continue to implement any tools that may be

available to lower lake levels to DNR designated seasonal minimum levels as soon as possible

and work to maintain lakes at that level. This directive will be implemented where possible and

17 to the extent that managing any given lake will not create flooding on other lakes or other

18 unintended consequences." Similar language was also adopted in Res-227, 2018.

19 In 2020, additional analysis was conducted by the technical work group to review summer

- 20 minimum and midrange operation to determine if managing at the two different levels impacted
- flooding. The conclusions drawn from the analysis revealed that operating at either summer
- 22 minimum or midrange had little or no impact on peak flood levels. The technical work group
- 23 made the following recommendation:

24 "Operation of water levels should follow the Dane County Lake Level Guide for the Yahara

25 Chain of Lakes, which establishes midrange as the summer goal but provides flexibility for

26 proactive management guided by weather forecasts. For example, when water levels are at 27 midrange and weather forecasts predict rainfall in the future, the dams should be opened to

midrange and weather forecasts predict rainfall in the future, the dams should be opened to
 increase flow and reduce water levels to summer minimum. Alternatively, when water levels are

at summer minimum and weather forecasts predict dry conditions, the dams should be closed to

30 reduce flow and increase water levels near summer midrange."

- Flooding does not occur on any of the lakes when they are within the DNR-designated range.
- 32 Allowing for management flexibility within the range as prescribed in the Dane County Lake

Level Management Guide is the most straight-forward approach to a complex situation. The

- 34 directive to maintain lakes at summer minimums was well-intentioned but had the unintended
- consequence of creating an expectation that it would reduce flood events. The Dane County
- Lake Level Management Guide for the Yahara Chain of Lakes was prepared by Dane County

37 staff, adopted by the Lakes & Watershed Commission, and peer reviewed by professionals from

- 38 the University of Wisconsin, Wisconsin Department of Natural Resources, USGS Wisconsin
- 39 Water Science Center and private and public water resource professionals.

40 NOW, THEREFORE BE IT RESOLVED, that the Land Conservation Committee, Environment,

- 41 Agriculture & Natural Resources Committee and the Lakes & Watershed Commission, through
- 42 their charge from the Dane County Board, to review and make recommendations on lake

- 43 management, wish to express confidence in the lake level management and progress in
- 44 improvements of water flow through the Yahara chain of lakes that the Dane County Land &
- 45 Water Resources Department is implementing;
- 46 **BE IT FINALLY RESOLVED**, that the Dane County Board of Supervisors and Dane County
- 47 Executive affirm that management of the Yahara Chain of Lakes shall follow the Dane county
- 48 Lake Level management Guide for the Yahara Chain of Lakes and that previous directives to
- 49 operate at the seasonal minimum are hereby rescinded.