Dear Members of C. Madison Commission on the Environment & Board of Public Works:

Please find attached as a PDF, for a 22 March 2011 letter from CRANES to the Yahara Lakes Advisory Group 2, regarding the need to lower Lake Mendota operating level ranges. Doing so in a controlled fashion will enhance Shoreline Vegetation Restoration, identified by the EPA as their #2 priority for water quality improvement. Given the City of Madison's formal position on lake levels, expressed by the past mayor in a policy letter to the WDNR and others, please consider incorporating the CRANES recommendations as conditions, for approval of the MOU going forward.

The CLEAN MOU process has yielded many excellent results and recommendations, but left unexamined the negative effects on Yahara Lakes water quality of non-natural lake levels. Currently, Lake Mendota is 4/.5-9 feet higher than conditions at the time of the Original Survey in the 1830s.

The map that follows the CRANES letter shows what has been lost since the 1930s (the portions in light blue; over 600 acres of wetlands in Lake Mendota and the Yahara River Estuary). The estimated loss of wetlands in Dane County overall is 50%. The next map, based on the 1830s Original Survey, shows that wetlands once spanned the Yahara/Mendota estuary. Six Mile Creek connected within a marsh with the Yahara River, which then was much narrower. There were barrier islands stretching from Governor's Island (which was then a peninsula!) to the west; the islands were traverse by a 4-season native American trail. News reports from as late as 1891 indicate that the estuary and lake yielded a massive harvest of clams. The area's streams were once a major exporter of natural pearls.

All this wetland habitat and its resident species have been much reduced in part due to the construction of the dam at Tenney Park, which initially was built to turn Lake Mendota into a very large mill pond. It continued to serve as a sewage facility after the dam was built, and twice later raised.

The dams effects have been exacerbated by the non-natural and unnecessarily high level of the Lake Mendota operational range called for by the WDNR lake level orders of 1979. Purported to protect native species, those orders instead harm native habitat and reduce species diversity; in some ways, Lake Mendota is manage to be a fish farm for Northern Pike, perhaps to the detriment of other fish and other species. The 1979 lake orders are so high that to some the operating range seems tilted toward a view of Lake Mendota as a waterpark for large motorboats and other powered lake vehicles.

Additionally, Lake Mendota twice has come uncomfortably close to overtopping the Tenney dam, with the potential to flood portions of the Isthmus. In 2008, there was over \$68 million in flood damage countywide.

The CRANES recommendations are a sensible way to explore a gradual return to natural lake levels, enhancing species diversity while also providing better flood protection for urban communities on the upper Yahara River, Lake Mendota, and downstream.

There is good reason to believe this would also result in a net gain for the economic returns from these wonderful natural resources, by reducing the algae and bacteria that, along with unnaturally high water levels, reduce recreational opportunities for residents and visitors alike.

## Regards,

Jon

cc: C Terrell, Secretary CRANES Board 2010-11

- +USA 608.242.8525 telephone (personal)
- +USA 608.469.0316 mobile (personal)

Jon Becker Co-founder & Board Vice-President/Treasurer 2010-11 Capital Region Advocacy Network for Environmental Sustainability CRANESinc.org/POB 3413, Madison, WI 53704 USA