

# Yahara Chain of Lakes Lake Management Quarterly Update

September 24, 2020

# Current Water Levels

Lake	Date	Lake Level	Summer Min	Summer Max	100-year
Mendota	9/24/2020	850.50	849.60	850.10	852.8
Monona	8/22/2019	846.41	844.70	845.20	847.7
Waubesa	9/24/2020	846.11	844.50	845.00	847.0
Kegonsa	9/24/2020	843.74	843.00	843.50	845.2

<https://lwr.d.countyofdane.com/Lake-Levels>



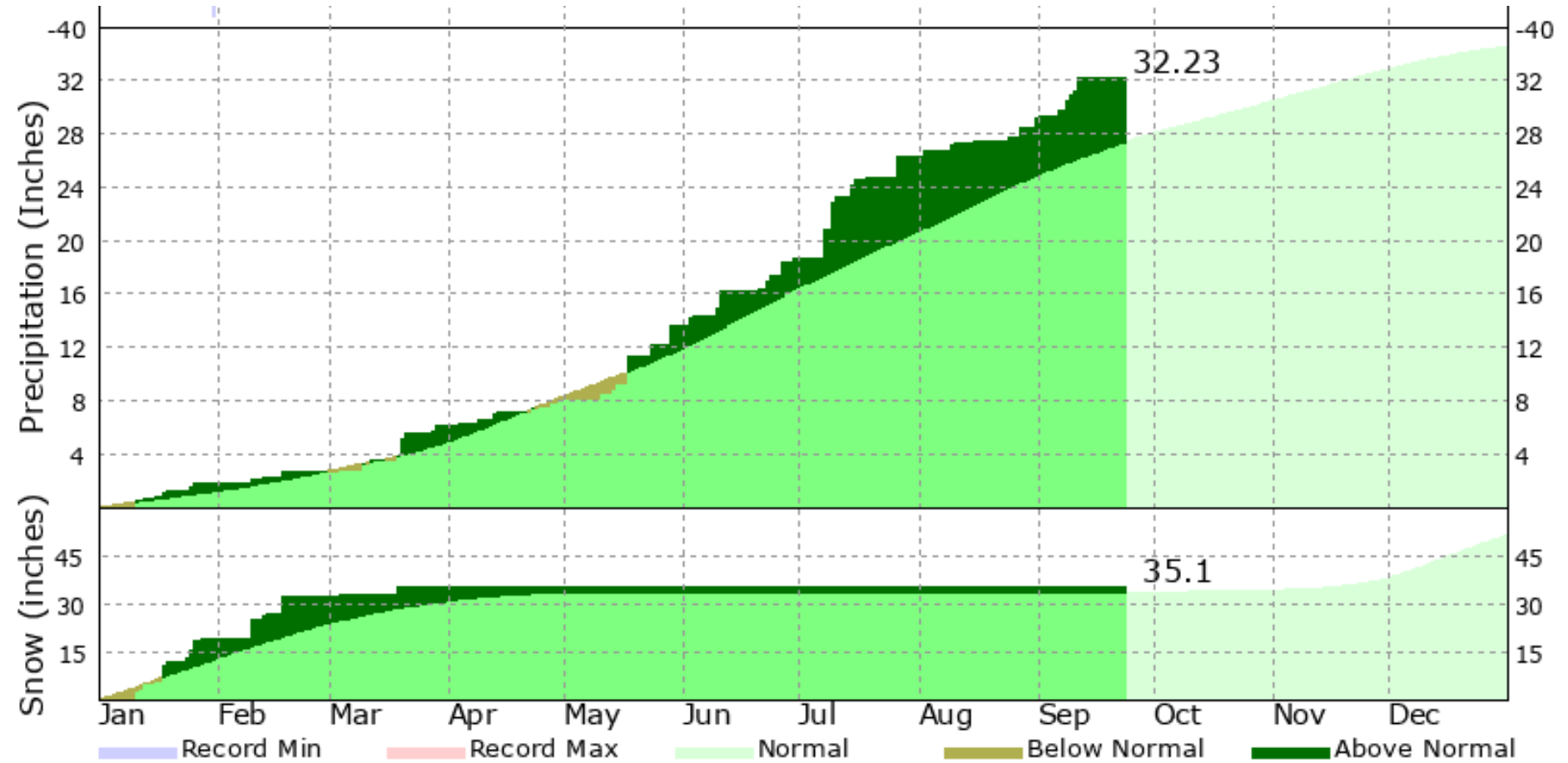
# Number of Days within Summer Minimum and Maximum Levels Year to Date

## March 1 – September 24 (208 days)

Lake	Average (2008-2019)	2019	2020
Mendota	109	22	79
Monona	88	11	79
Waubesa	95	13	79
Kegonsa	80	23	80
Stoughton Dam	-	206	208

# Annual Precipitation

## Year to Date



# Slow No Wake Status

## Wicawak Bay

July 16, 2020 to August 24, 2020

Previous 10 Emergency Orders

7/16/2020 - Emergency Slow-no-wake orders have been issued for the following lake(s):  
Wicawak Bay (formerly known as Squaw Bay) (Entire Surface),

**Please note: Slow-no-wake will be effective noon July 16, 2020. Slow-no-wake will be rescinded when Lake Monona water level is at or below elevation 846.40' for 5 consecutive days.**

Executive Order



Slow-no-wake Restriction Map

Green Lake = Normal Slow-no-wake Restrictions

Yellow Lake = Emergency Order: slow-no-wake within 500 feet of shore

Red Lake = Emergency Order: slow-no-wake entire surface area

<https://lwr.d.countyofdane.com/slownowake#>

# Aquatic Plant Harvesting



**Eurasian Water Milfoil**



**Coontail**

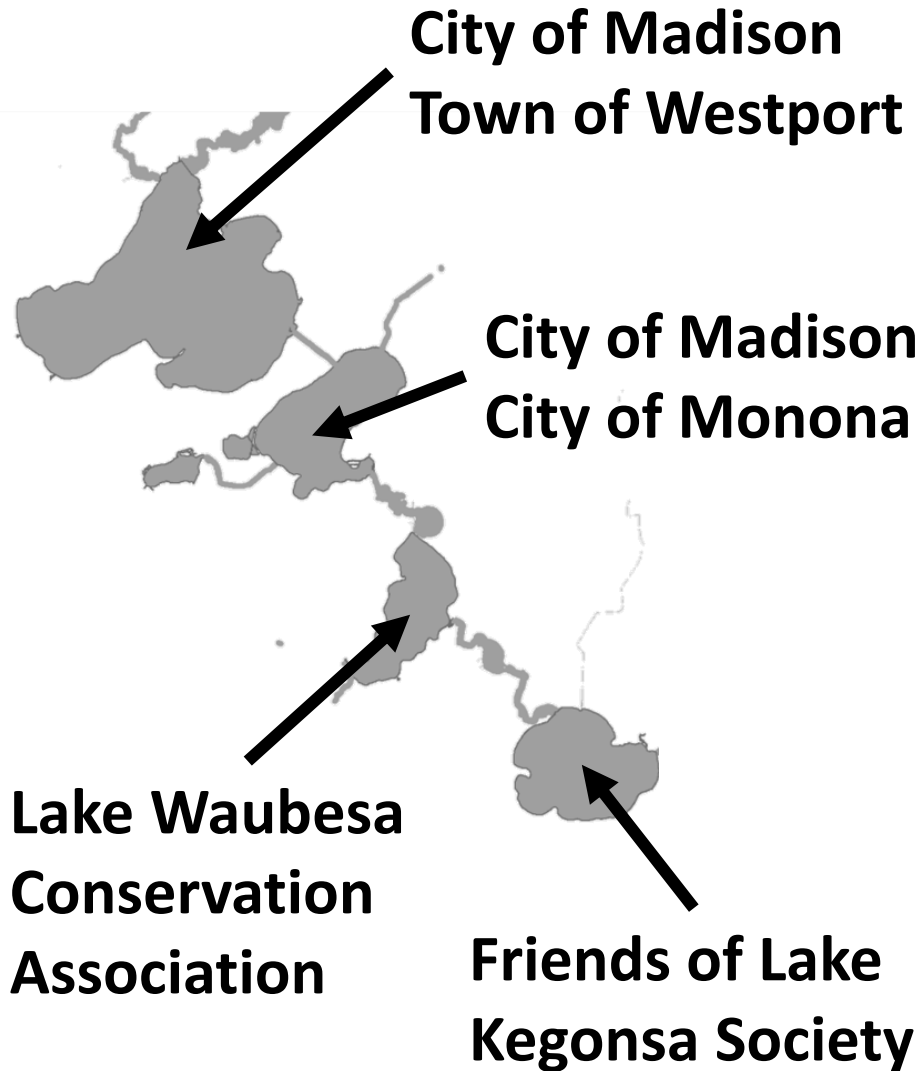


**Wild Celery**

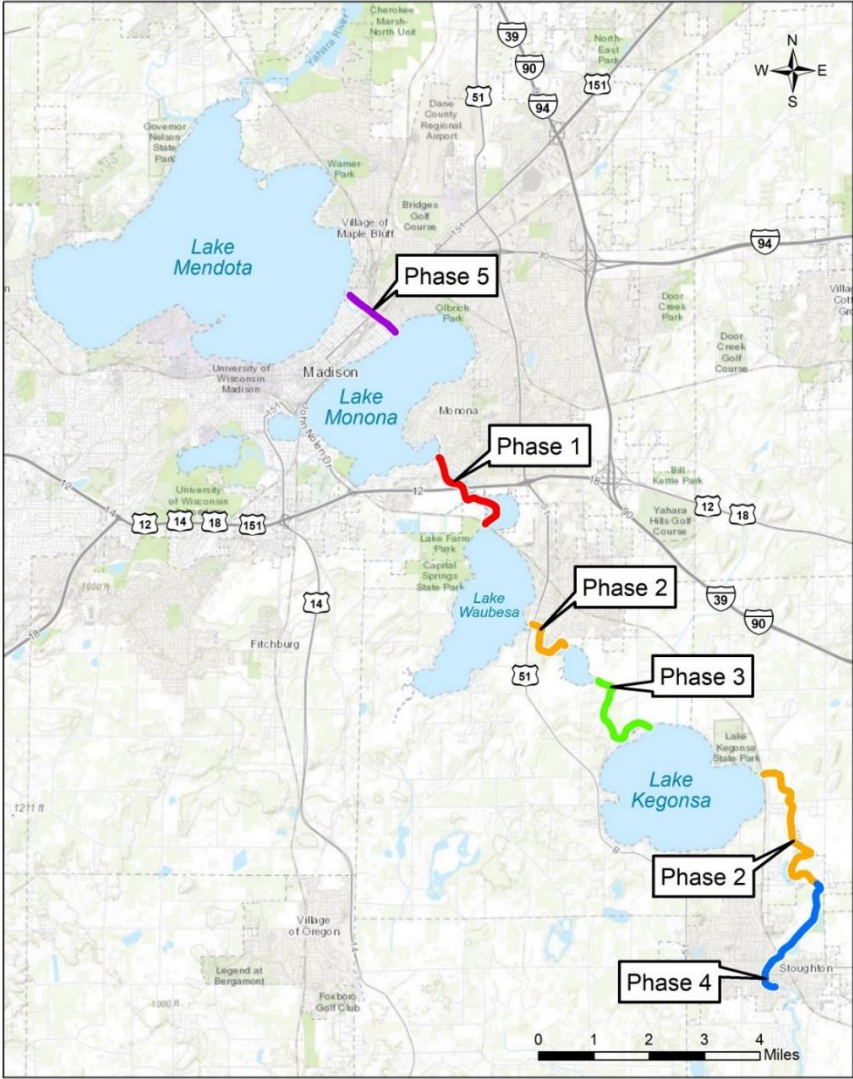
Species	Frequency of occurrence within vegetated areas (%)	Frequency of occurrence at sites shallower than maximum depth of plants	Relative Frequency (%)	Number of sites where species found	Average Rake Fullness
Eurasian water milfoil	60.44	42.97	29.89	165	1.06
Curly-leaf pondweed	1.10	0.78	0.54	3	1.00
Coontail	60.81	43.23	30.07	166	1.27
Muskgrasses	2.20	1.56	1.09	6	1.00
Elodea, Common waterweed	5.13	3.65	2.54	14	1.00
Water star-grass	6.23	4.43	3.08	17	1.00
Small duckweed	2.20	1.56	1.09	6	1.17
Slender naiad	0.73	0.52	0.36	2	1.00
American lotus	1.47	1.04	0.72	4	2.00
Clasping-leaf pondweed	11.36	8.07	5.62	31	1.00
Flat-stem pondweed	7.33	5.21	3.62	20	1.00
Sago pondweed	15.75	11.20	7.79	43	1.00
Wild celery	27.47	19.53	13.59	75	1.04
Filamentous algae	49.82	35.42	*	136	1.01

\*Relative frequency of filamentous algae is calculated based on the WILNDP

# Aquatic Debris Pick-up




# Task Force Recommendation Status: Sediment Removal





# Phase 1 Status



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## Yahara River Sediment Removal Project

### Multiphase Project to Reduce Flooding and Improve Water Flow

Currently, water comes into the Yahara Lakes faster than it goes out. Therefore, after repetitive and heavy rainfall events, the lake levels increase and can lead to flooding. The efficient movement of water through each lake is undermined by sediment build-up in the Yahara River. While sediment movement is a naturally occurring process, the accumulation of sediment in the Yahara River and Lakes is greatly increased by human activity, including urban development and winter sand operations.

Today, two inches of rain takes over two weeks to leave the Yahara Lakes system due to its sluggish nature. This project will remove sediment in the Yahara River in five phases with a goal to improve water flow so that the delivery of two inches of rain that normally takes two weeks to travel through the Yahara Lakes system will take half as long, or one week.

Project Phases Schedule Construction Updates Videos News Contact

### Project Phases

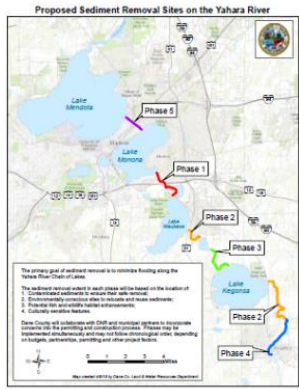

Dane County's sediment removal project in the Yahara Lakes system will take place in five phases, with each phase carried out as Dane County secures permitting - see [Phase Map](#) (PDF). The benefit to reduce flooding for all lakes is realized when sediment accumulation has been removed along the Yahara chain, thus it is critical that the phases are planned as timely as possible.

Several factors were considered for a five phase plan including:

- Readily available sediment and bathymetry data for developing engineering plans
- Presence of contaminated sediment that would impact permitting timelines
- Proximity of dewatering locations to the river
- Existence of culturally sensitive features

### Phase 1

The first phase, between Lakes Monona and Waubesa, is expected to be completed in 2020. The project will involve removal of approximately 40,000 cubic yards of sediment which equates to over 3,000 dump truck loads of sediment. The sediment will be removed hydraulically by suctioning the sediment from the river bottom and transferring through a pipeline to a dewatering basin. The sediment will be separated from the water at the dewatering basin and reused for other projects such as roadways.



**Proposed Sediment Removal Sites on the Yahara River**

The primary goal of sediment removal is to minimize flooding along the Yahara River Chain of lakes.

The sediment removal sites for each phase will be based on the location of:

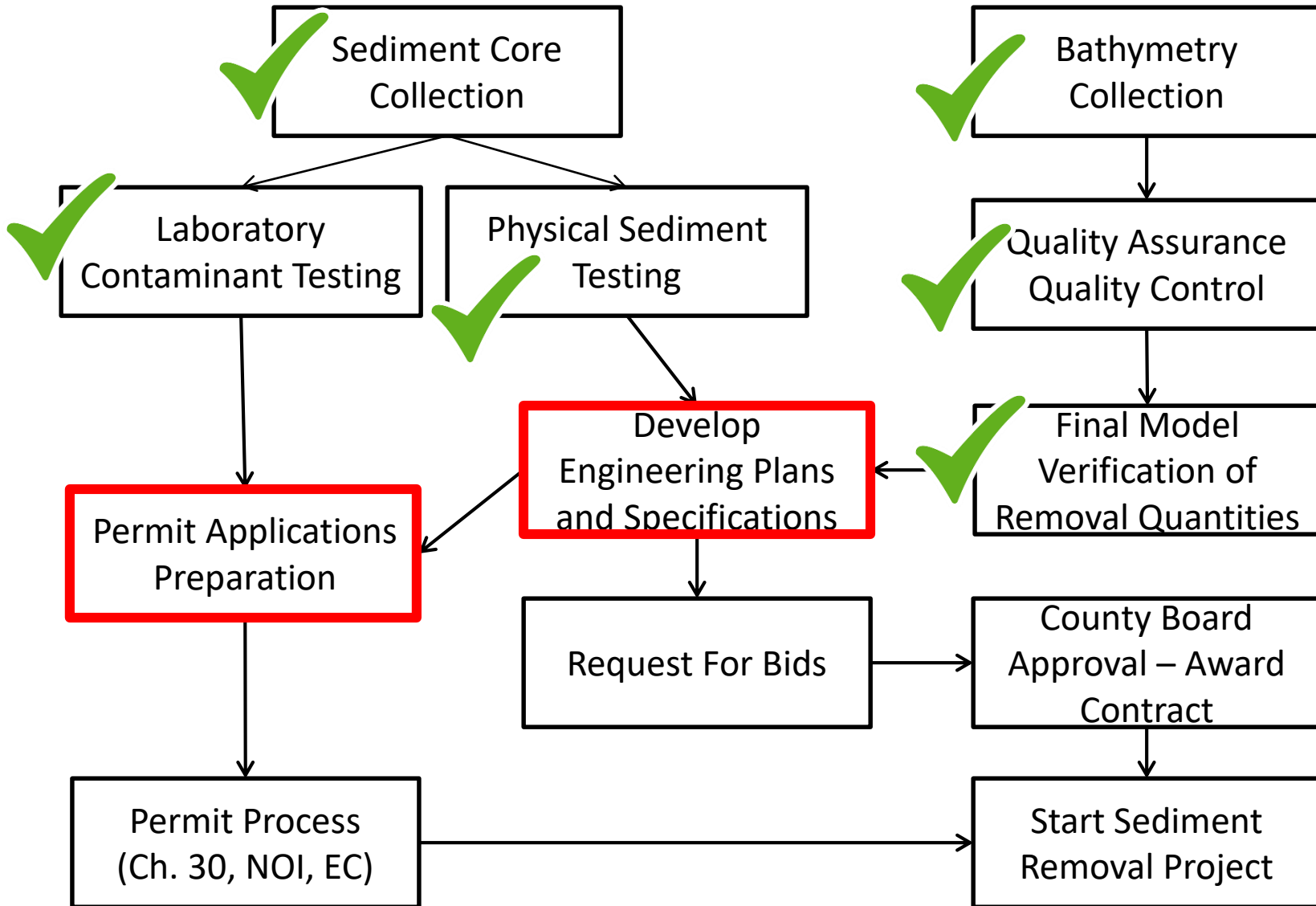
1. Contaminated sediment to be removed with dredging
2. Sediment accumulation sites to be removed with dredging
3. Proximity to and availability of dewatering basins
4. Culturally sensitive features

Dane County will collaborate with staff and resources to ensure that the sediment removal project is completed in a timely and cost-effective manner. Please see the implementation schedule and map for more information on the project. Sediment removal sites are subject to change based on the availability of dewatering basins, permitting and other project details.

Map prepared by Dane County Land & Water Resources Department

<https://lwr.d.countyofdane.com/yahara-river-sediment-removal>

# Phase 2 Status



**Questions?**