

Rock-Koshkonong Lake District

Webcams mark plans for new website

By Jeff Brown
Reporter staff

If Rock-Koshkonong Lake District Board of Commissioners Chairman Brian Christianson has his way, boaters, anglers and snowmobilers will soon be able to monitor conditions on Lake Koshkonong by visiting the district's website and watching live video streams from webcams mounted along the shores of the lake.

Christianson's enthusiasm for the webcams and other features that might be included on the website was apparent during a board of commissioners meeting on Thursday night, June 12.

During the the meeting, professor Chin Wu, the director of UW-Madison's Environmental/Ecological Fluid Mechanics and Coastal Sustainability Lab, gave a presentation during which he showed commissioners several websites maintained by his department.

The websites—one for the Yahara chain of lakes near Madison, one for the Apostle Islands in Lake Superior, one for Port Washington on Lake Michigan—display streaming video from live-view webcams, diagrams that model waves, currents, water temperatures and water levels, and weather updates and forecasts.

Chin said the Apostle Island website is especially popular during the winter, when people flood the website to view the video stream and check on the condition of the stunning ice formations that develop inside and around 'sea caves' carved into the rocky shores of the islands by wave action over many thousands of years.

Chin said the websites offer a lot more than simply a live look-in, how-

mean less in profits for businesses located around the lake and would lower the value of lakeshore property.

Last July the Wisconsin Supreme Court ruled that the DNR should have taken into account economic impact evidence when setting the water level on the lake and remanded the case to Rock County circuit court. Earlier this year, the Rock County judge who was assigned to the case sent the decision back to the DNR.

At last month's board of commissioners meeting, Christianson said he was pushing the DNR to collaborate with the district to perform a study that quantified the economic impact of changes in the lake's water level.

Chin told the commissioners that water temperature data and ice thickness predictions featured on the websites for the Yahara chain of lakes are very popular with Madison-area anglers. No doubt they'd be popular with anglers on Lake Koshkonong too, to say nothing of area snowmobilers.

Rob Montgomery, a hydraulic engineer hired by the district to oversee the experimental dredging project on Lake Koshkonong last year, told commissioners it made sense to place a webcam on the hydro house at the Indianford Dam, as well as the point along the lake's south shore just east of Newville and also perhaps at Mud Lake, near the site of the dredging project.

Christianson said he hoped to have at least one webcam in place on the lake or the river by the time of the annual meeting of the district's electors on Saturday, Aug. 16, so that live video could be streamed to the meeting inside the Fort Atkinson High School auditorium.

Chin said the websites offer a lot more than simply a live look-in, however—they also offer visitors a plethora of data on water flows, wind velocity, wave action, water temperatures and water levels, even predictions regarding ice thickness.

For Christianson, the application of such technology to Lake Koshkonong, a wide and shallow windswept lake whose shoreline often takes a beating from waves, are obvious.

“We could use that to demonstrate what shoreline is getting the most wind fetch and wave fetch,” said Christianson. Wind fetch, a measure of the length of water over which wind travels, quantifies the power waves accumulate when blown across large bodies of water.

Commissioner Joan Huedepohl said having a record of changes in the lake’s water level over time might provide valuable data for use in the district’s ongoing dispute with the state Department of Natural Resources over setting the water level on the lake.

In 2005, the district sued the DNR after the agency denied the district’s request to raise the water level 7.2 inches. The district claimed that in making its decision, the DNR improperly excluded evidence that showed a lower water level would

ing inside the Fort Atkinson High School auditorium.

That might be overly ambitious, given some of the difficulties inherent in setting up the webcams: placing each webcam in a spot where it will be protected from weather, wildlife and vandals, locating or establishing a wireless network close to each webcam with sufficient bandwidth to allow streaming video, and integrating the video feeds into the backend of the district’s website, which was recently re-designed by Therese Oldenburg of Firepoint Media.

“I want to do all of this and more,” said Christianson. “I just love the ‘Wow’ factor on this. We’re probably the only organization here with the resources to do this. We’re the largest lake district in the state and I’d like to show other lake districts what they can do.”

Montgomery agreed, but said it was important for commissioners to think carefully about what features to include on the new website, how much they cost to set up and how much they cost to maintain.

“There is a ‘Wow’ factor here,” said Montgomery. “There’s a lot of variables here, in terms of what you decide to do now or later and which piece you pick first. If you get into this, you’ve got to stay into it.”
