State to roll out salvinia plan

By Adam Kealoha Causey • acausey@gannett.com • April 16, 2010 Shreveport Times

ELM GROVE — Whether it's barges equipped with aquatic lawnmowers or reworking old dams, Louisiana officials are eyeing ways to rid local bodies of water of a plant lake lovers know well: salvinia.

The worst case most local scientists and politicians point to is Lake Bistineau. The lake's surface has been carpeted with the lush, green fern for the past few summers. In 2009, salvinia covered at least 7,000 of its 17,000 acres.

But residents, businesses, fishermen and skiers could see more changes ahead.

The state Department of Wildlife and Fisheries plans on Saturday to announce a years-long plan aimed at controlling giant salvinia and improving water quality. It's something Shreveport officials could learn from as they try to protect Cross Lake — the city's water source — which still is a far cry from the salvinia takeover Bistineau has seen.

Among options the state will consider:

Cutting down many of Bistineau's bald cypress, the state tree. Some say they protect salvinia from cold and herbicide.

Rebuilding Bistineau's dam. It would allow more water to drain during draw downs — a key method of salvinia control — and place a skimming device to catch the plants as they flow through.

Constructing a weevil-breeding farm at Lake Bistineau State Park. The insects, native to Brazil just like salvinia, eat the plants.

"While initial control efforts have not been successful in the past, we feel confident that a collaborated effort between state officials, local officials and government agencies will not only control the plant, but also restore life to the lake and the surrounding community," Sen. Robert Adley said in a news release about the Saturday public meeting.

Adley's Senate District 36 includes Bossier, Webster and Bienville parishes, which contain Bistineau.

The dam is open now, courtesy of Wildlife and Fisheries. Water will keep running until the lake drops a full 7 feet, the maximum the mechanical wall will allow.

While that may hurt recreation and boat launch business, according to state biologist James Seales, it's probably no worse than the harm summertime salvinia blooms inflict.

"It shut down most fishing and boating action," Seales said.

Seales joined about a dozen supporters and interested observers — including former state representative and Bossier Parish special projects manager Billy Montgomery — Wednesday for a demonstration of a harvester known as a Watermower.

The red-white-and-blue painted contraption, which sets on a pontoon, includes a conveyor belt that should scoop salvinia out of water, push it into a blender-like shredder then spit it back into the reservoir.

Because Bistineau's water level is low, creator John Bourque let his machine run while propped up in his yard. He dumped salvinia hauled from south Louisiana, since most of the plants have not started their

spring growth locally, onto the belt. The plants were tossed onto the blades, and the hydraulic system discharged mush, which Bourque described as looking like a "cow patty."

Wildlife and Fisheries collected the gunk and will test it in lake water-filled buckets placed in various shades of light. Their goal: to see if ferns sprout from plant waste. Bourque said they won't.

"When I pass, it's gone — no chemicals," Bourque said of using his machine on the water. "I went green."

Bourque said his plan would be much cheaper and better for the environment than the state's use of herbicides such as Galleon, which can cost more than \$1,800 a gallon. Galleon is one of few chemicals the Environmental Protection Agency approves for use on salvinia.

While that might be good for taxpayers financially, Seales said, harvesting — which also has been tried on Caddo Lake — won't be the state's top weapon. A Wildlife and Fisheries report on Bistineau says the method is ineffective. Lowering the water seems to work best.

So far, the state has spent at least \$1.3 million to fight salvinia on Bistineau. Wildlife and Fisheries has asked for nearly \$8 million more to aid in the battle.

But getting innovative entrepreneurs involved is a key, Montgomery said. Bourque's equipment — now in at least a second or third version — has come a long way since its more "homemade" looking days.

"That's the answer," Montgomery said. "Partnering the state with business."

And that's among the choices Shreveport faces.

Mayor Cedric Glover said Tuesday during a City Council meeting that he won't allow a controversial salvinia containment boom, or fence, to be put on Cross Lake until after examining other choices, including meeting with SePRO, an Indiana company that uses Galleon. That should happen next week.

"It's one thing to kill the weeds. It's another thing itself to keep the water safe," Glover said. "This is not going to be a commercial for Galleon."

Many residents who live near the lake spoke against the boom during an April 6 meeting that drew 200 attendees.

Galleon didn't work during a state test last year on Bistineau, Seales said. The chemical must stay on or near the plants for two to three months, but it diluted too quickly. That's likely because Bistineau is a watershed for many bayous, creeks and ditches.

Bistineau also encourages salvinia and other plant growth because it is nutrient rich, experts say.

That, Wildlife and Fisheries suggests, may be because raw sewage runs into the lake. But there's not much proof.

Salvinia mats can double their size in a week during peak growing seasons, scientists say. That blocks sunlight, which cuts back on photosynthesis, which can kill fish and also hurt water quality.

Long-term draw downs could help track where untreated wastewater slips in.