

Lake Drawdowns in Lousiana:

Extending Lake Life, Stimulating Sportfish Production/Growth, and Improving Access



Office of Fisheries, Fisheries Management Division, Inland Fisheries Section

What is a Drawdown?

A planned & temporary reduction in water level in a lake or pond

Why are Drawdowns Needed?

- > To improve access for recreation
- > To restore favorable fisheries habitat in aging lakes

Pros of Drawdowns

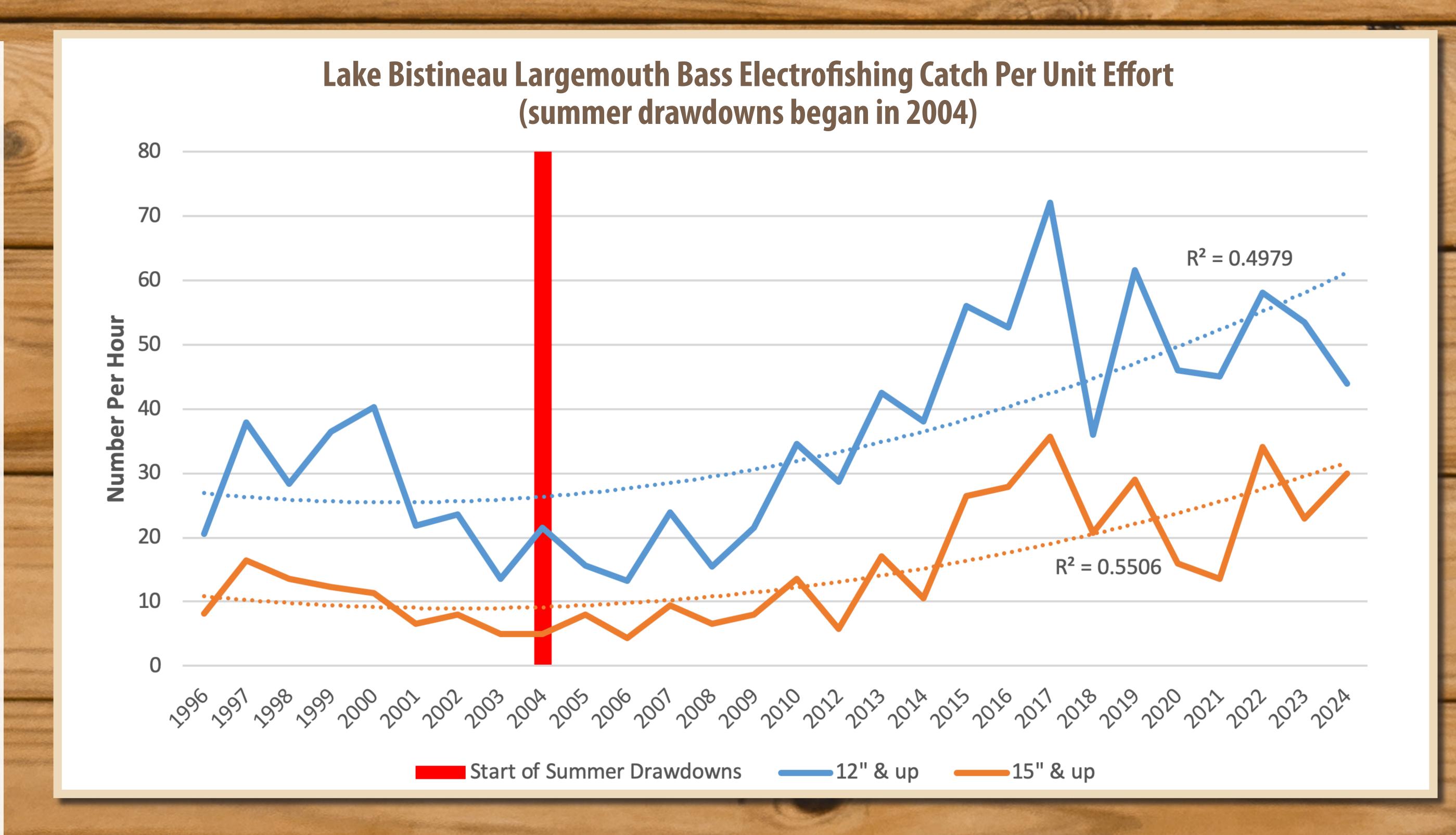
- Reduces aquatic vegetation by stranding plants on dry land highly effective in ideal weather conditions; most effective way to slow eutrophication
- Reduces organic buildup on the lake bottom by allowing decay, which hardens the lake bottom
- > Recycles nutrients trapped in the muck, increasing primary productivity, which ultimately benefits fisheries
- > Allows for repairs to shoreline structures such as piers and seawalls
- > Sportfish population improvements including
- Harder lake bottom leads to increased spawning activity
- Balance predator: prey ratios
- Increased angler access and success

Cons of Drawdowns

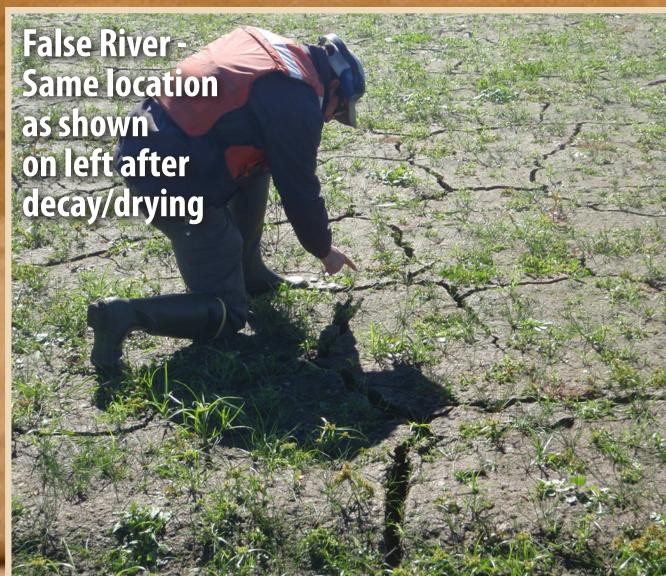
- > May temporarily reduce access/recreational use
- > Aesthetically unpleasing & smelly due to decay
- > Can stimulate regeneration of undesirable cypress and tupelo trees

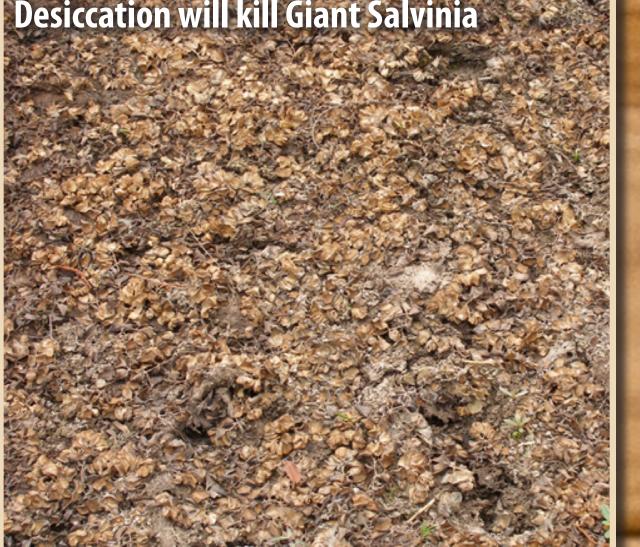
Factors Affecting Success of Drawdowns

- > Drawdowns are planned to take advantage of prevalent weather patterns, but variations in those patterns can occur. Too much rain during the drawdown or not enough rain during refill can both negatively affect the success of the drawdown
- > Physical characteristics of the waterbody such as bottom contours, presence or absence of "swamp trees", watershed size, depth, and type of control structure can also affect success of a drawdown











MISCONCEPTION

"They have been doing the same thing for 20 years and we still have the nuisance vegetation."

"We lose all of our good fish through the control structure, then they restock. It's the definition of insanity."

"Why do they draw down the lake during the summer/fall? What it needs is a good freeze."

FACT

Eradication of nuisance vegetation is not an expected outcome. Reduction of nuisance vegetation species is one of the expected outcomes.

LDWF does not stock fish for this purpose. Very few fish are lost through the control structure. Drawdowns increase reproductive success beyond even what stocking can accomplish, by improving spawning habitat and recycling nutrients. Successful drawdowns are usually followed by a few strong year classes of fish.

It is true that a hard freeze is very effective at killing invasive aquatic plants. However, with Louisiana winters being so mild, the likelihood of getting a hard freeze is very low. Therefore, we get more consistent results by using drawdowns to impact plants with heat rather than with cold.