

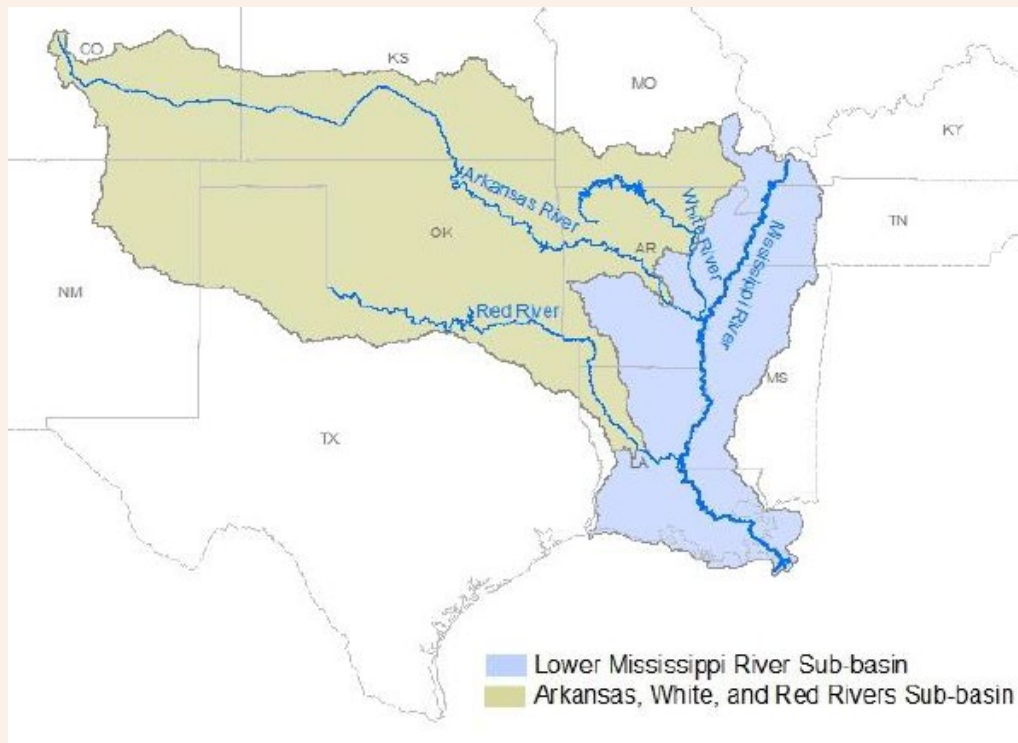


Louisiana Invasive Carp Management Program

Robert P. Bourgeois | Aquatic Invasive Species Coordinator

Invasive Carp Partnership

- ~\$35 million annually - Invasive carp research and control in the Mississippi River Basin
- LA part of LMR and ARW sub-basins
 - ~\$1 million annually in each sub-basin, cooperative/competitive grants
 - Encouraged to partner with other states and organizations



Louisiana Invasive Carp Management Partners

Bayousphere



Research Lab

Nicholls State University
Thibodaux, Louisiana

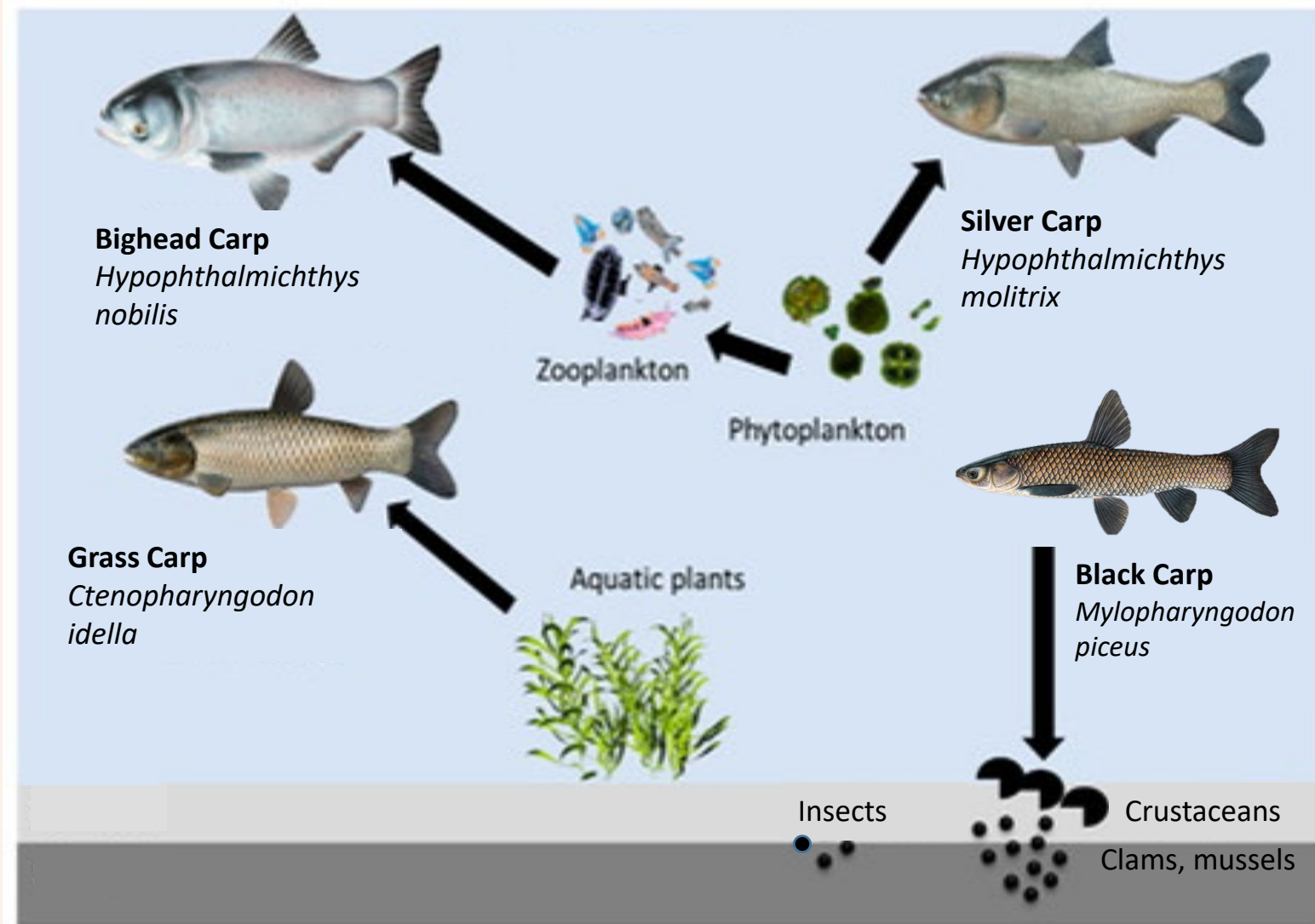


ERDC
ENGINEER RESEARCH & DEVELOPMENT CENTER

DISCOVER | DEVELOP | DELIVER



Invasive Carps Trophic Impacts



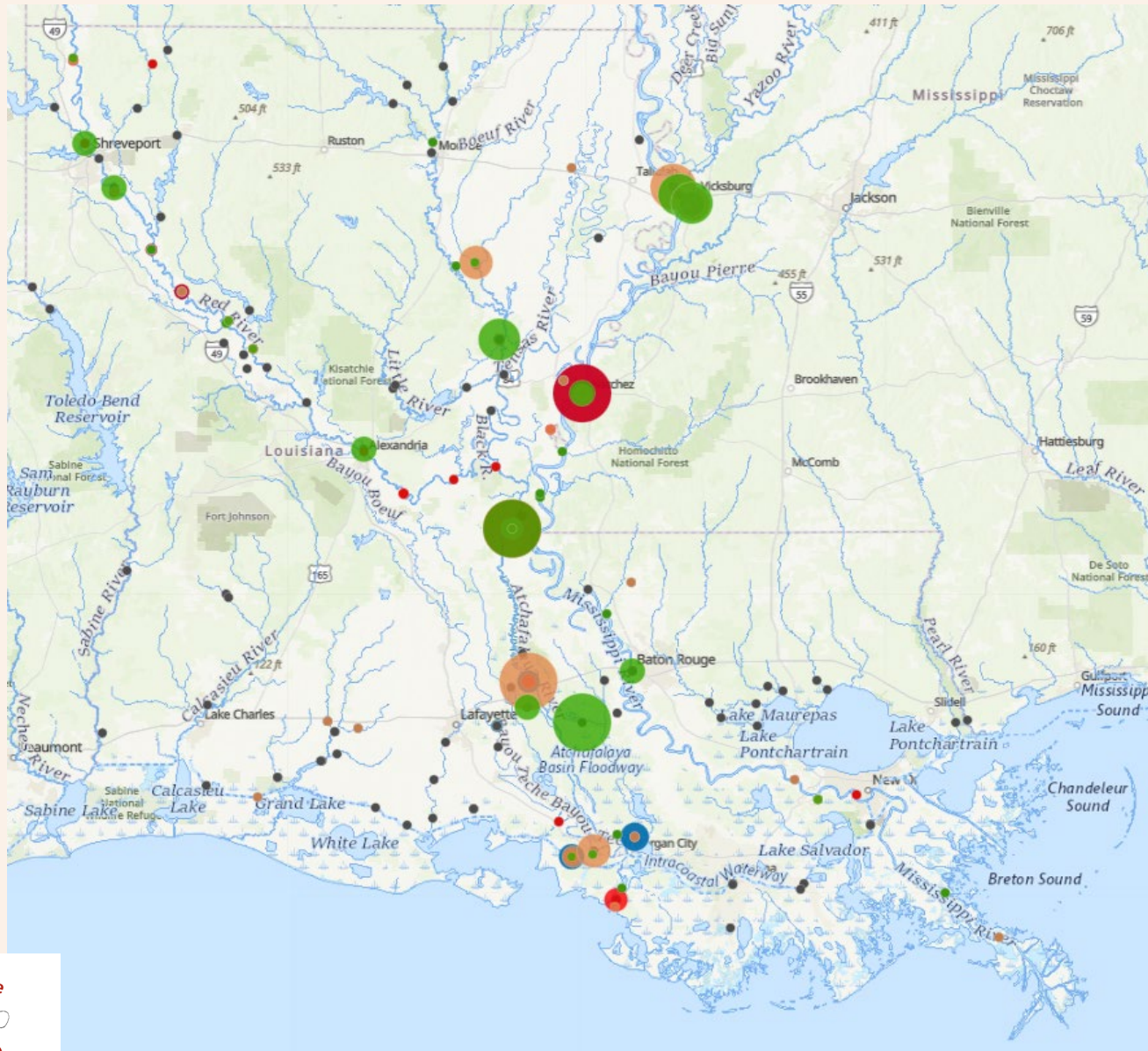


Management Questions

1. Do we have reproducing populations? Are they stable or increasing?
2. How do invasive carp move around LA?
3. Does invasive carp have impacts on LA fisheries?
4. How do we remove more invasive carp from LA?
5. What is the current status of invasive carp in LA?

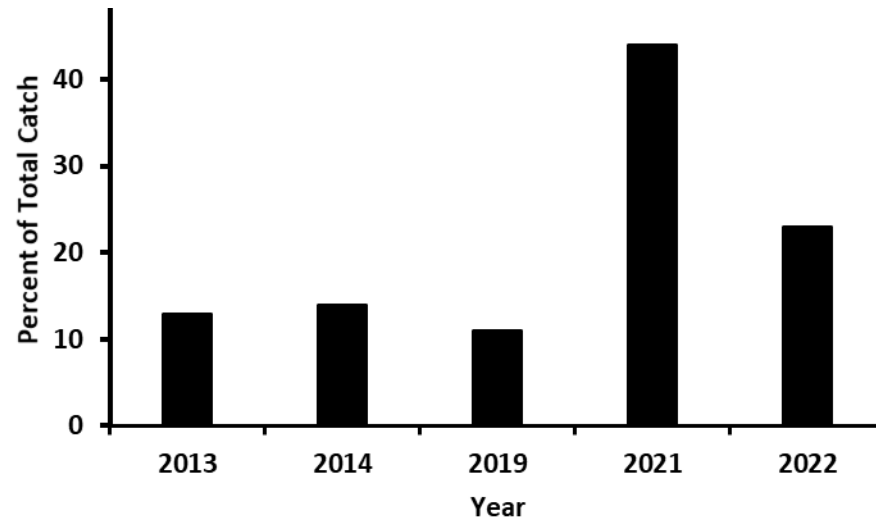
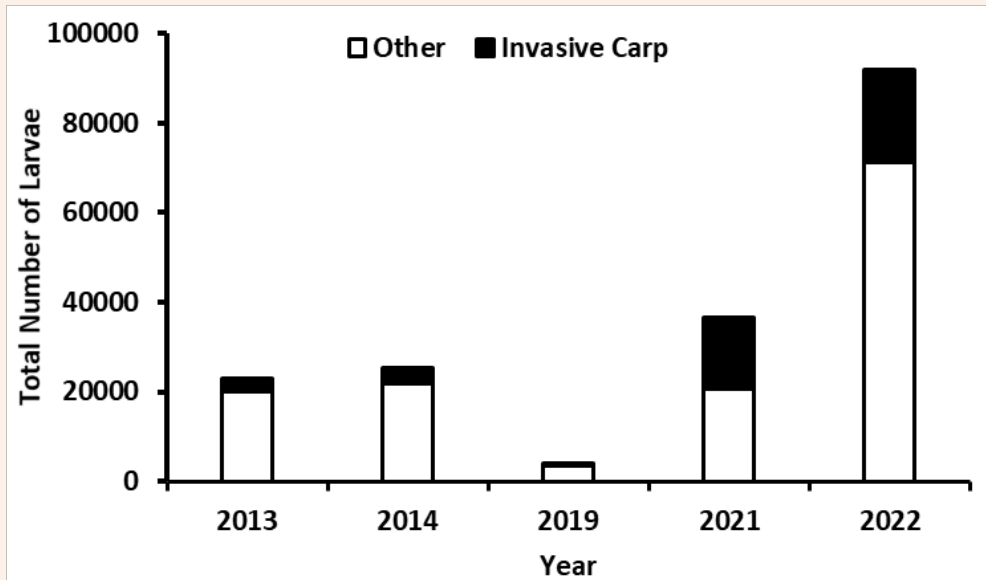


Invasive Carp Larval Tows





Invasive Carp Larval Tows



Bayousphere

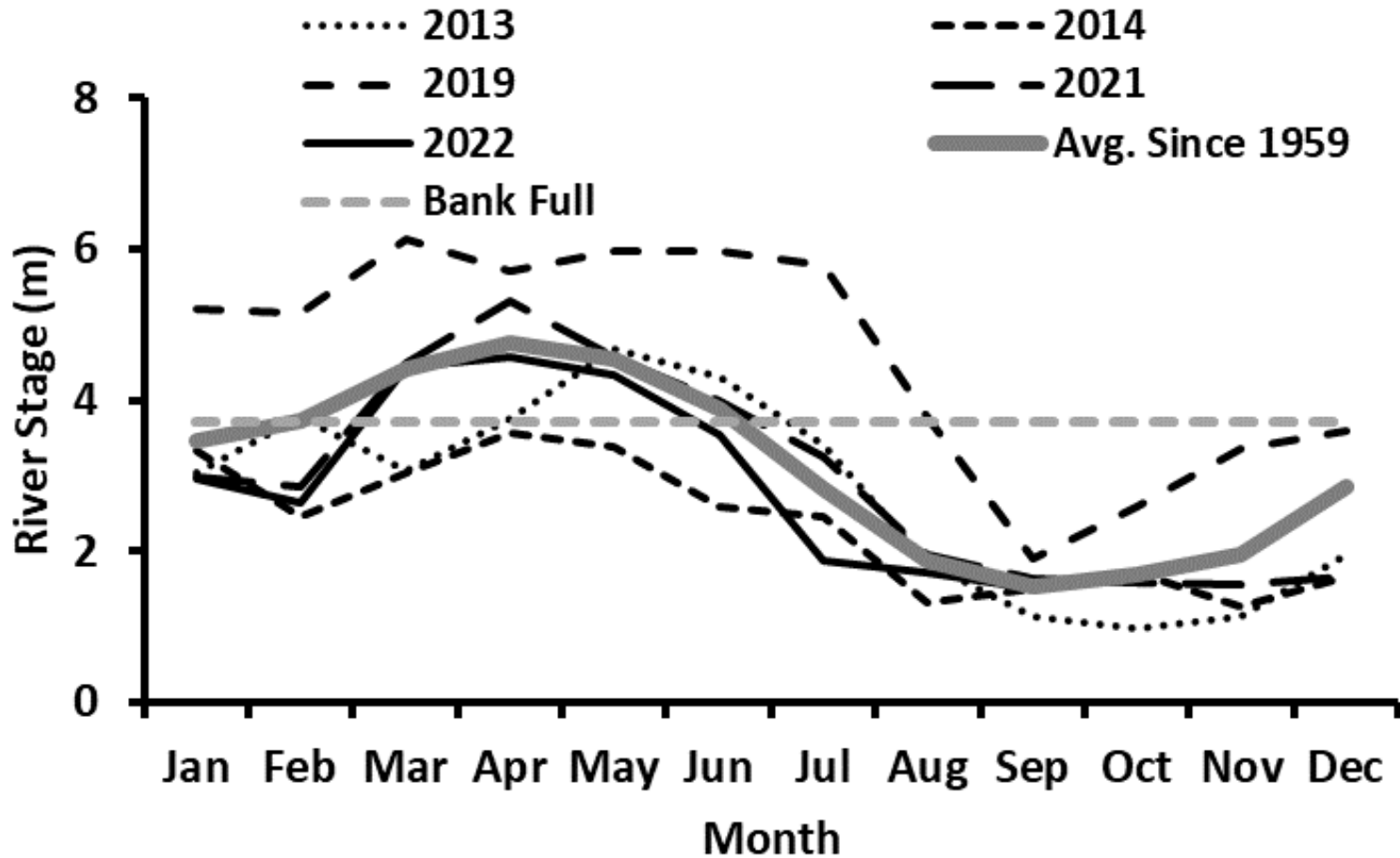


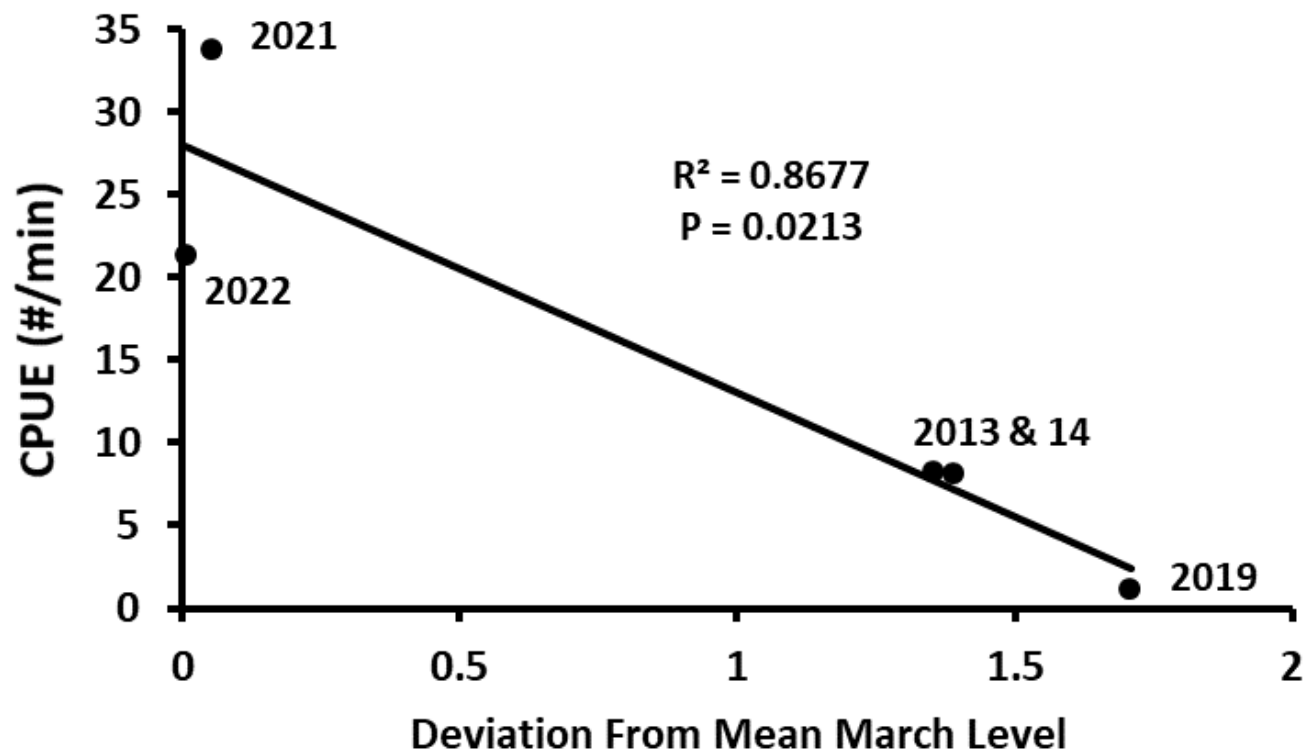
Research Lab

Nicholls State University
Thibodaux, Louisiana

Floodpulse

Need to break down by year and explain the monthly deviation from a typical floodpulse



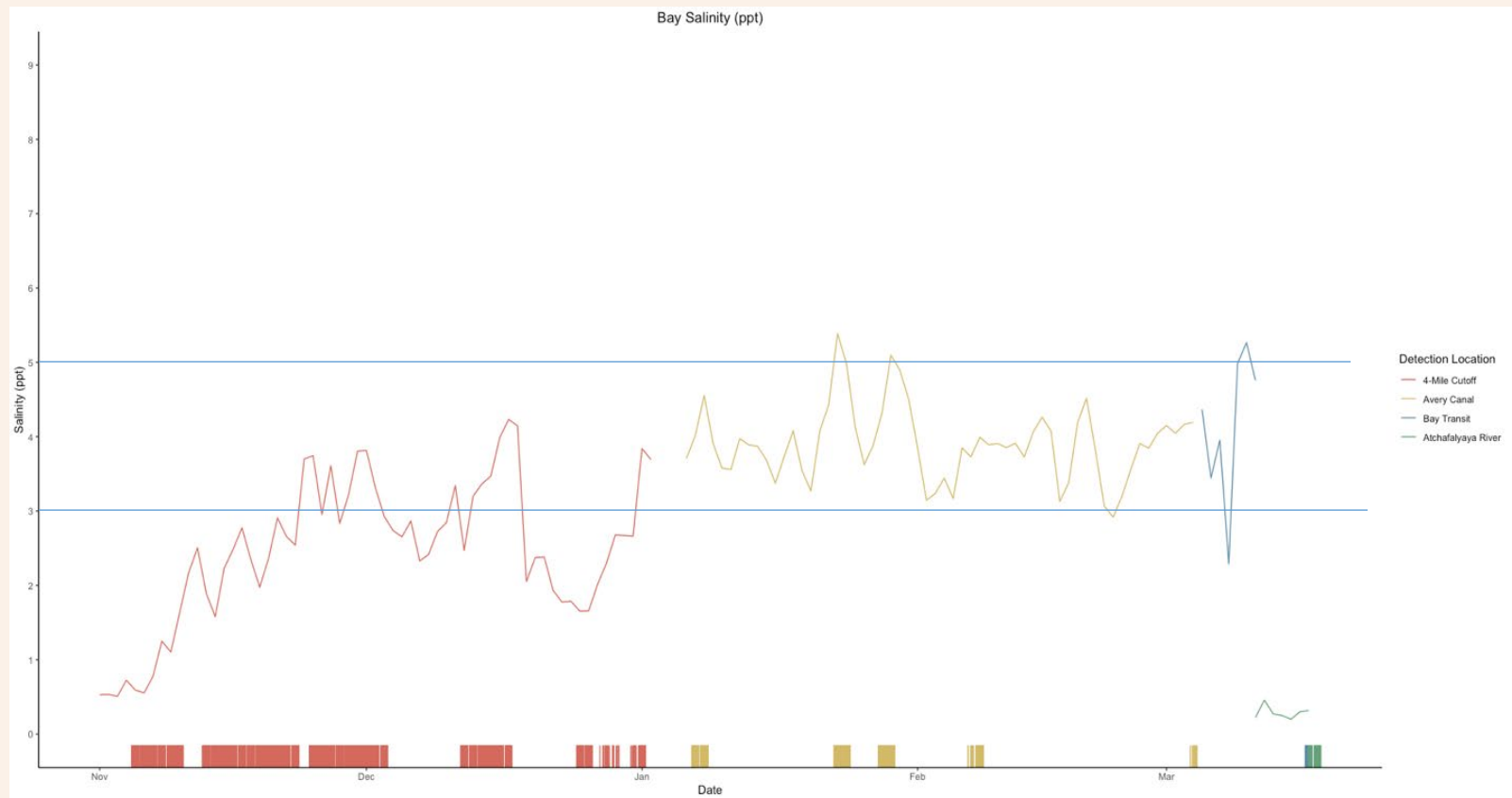


This is only for samples collected in the Atchafalaya and Mississippi, which would be affected by the Mississippi Floodpulse.

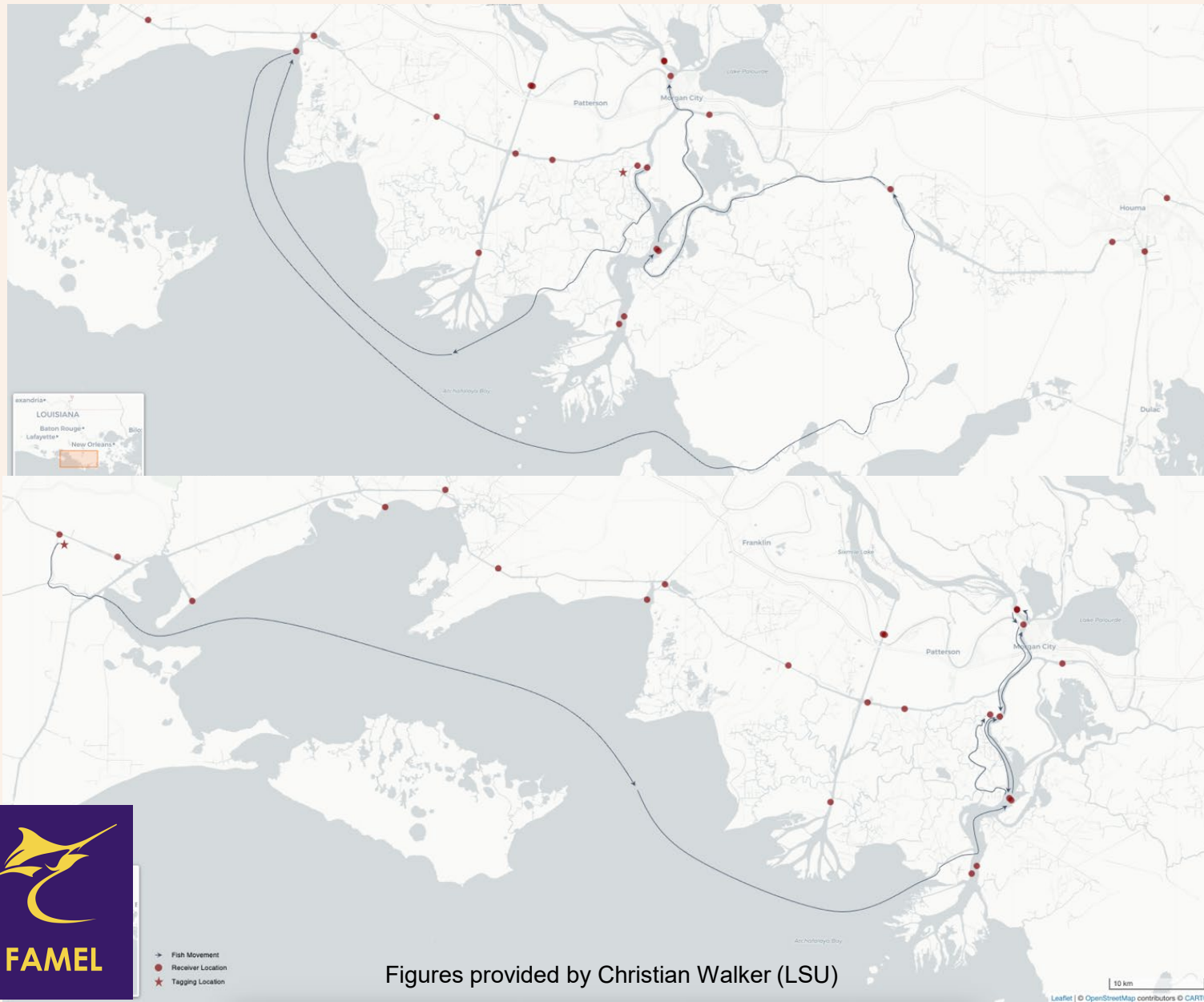
The x-axis is the absolute value of the deviation from a normal floodpulse level. 2021 and 22 had very typical levels for March

Invasive Carp Movement-Low Salinity

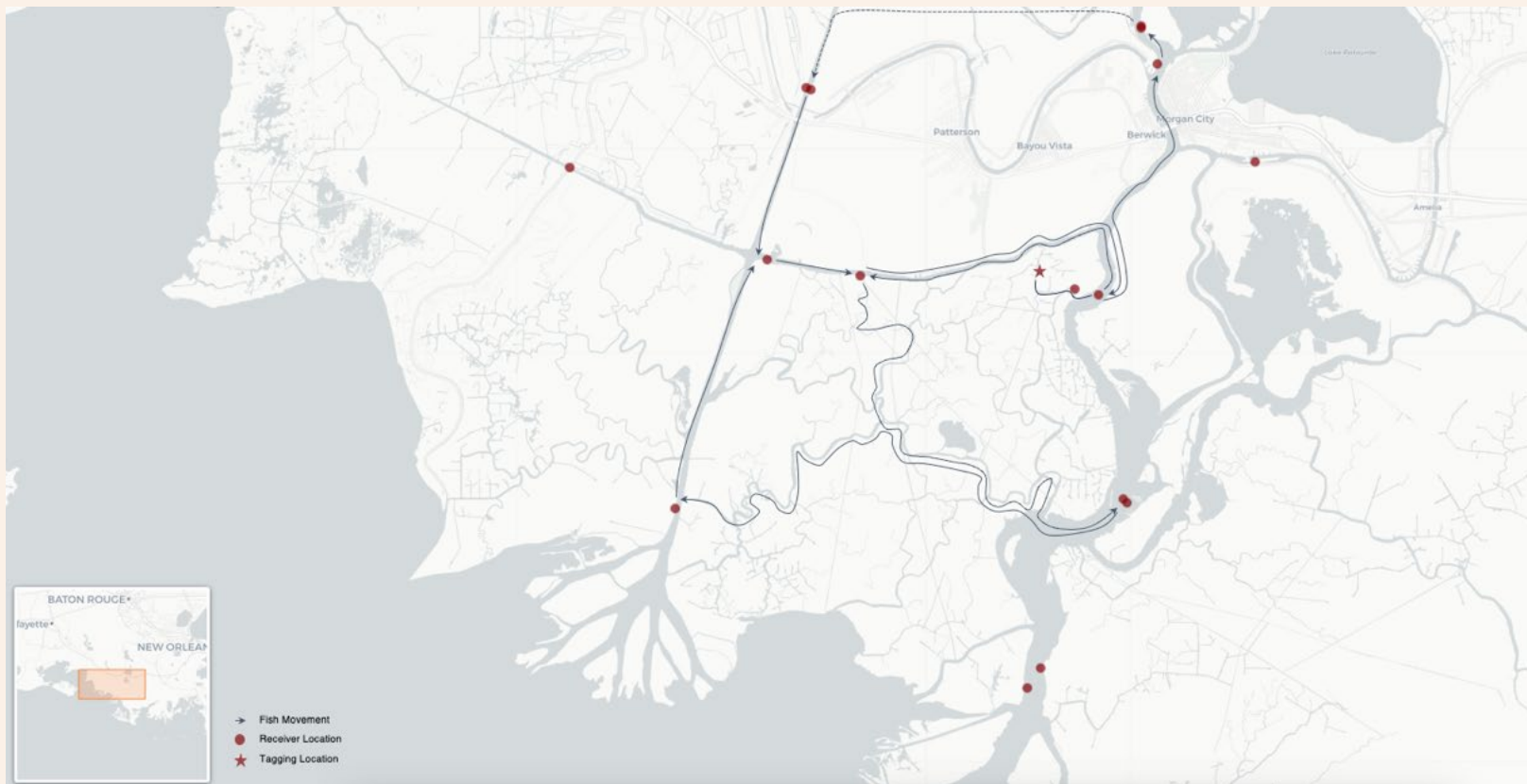




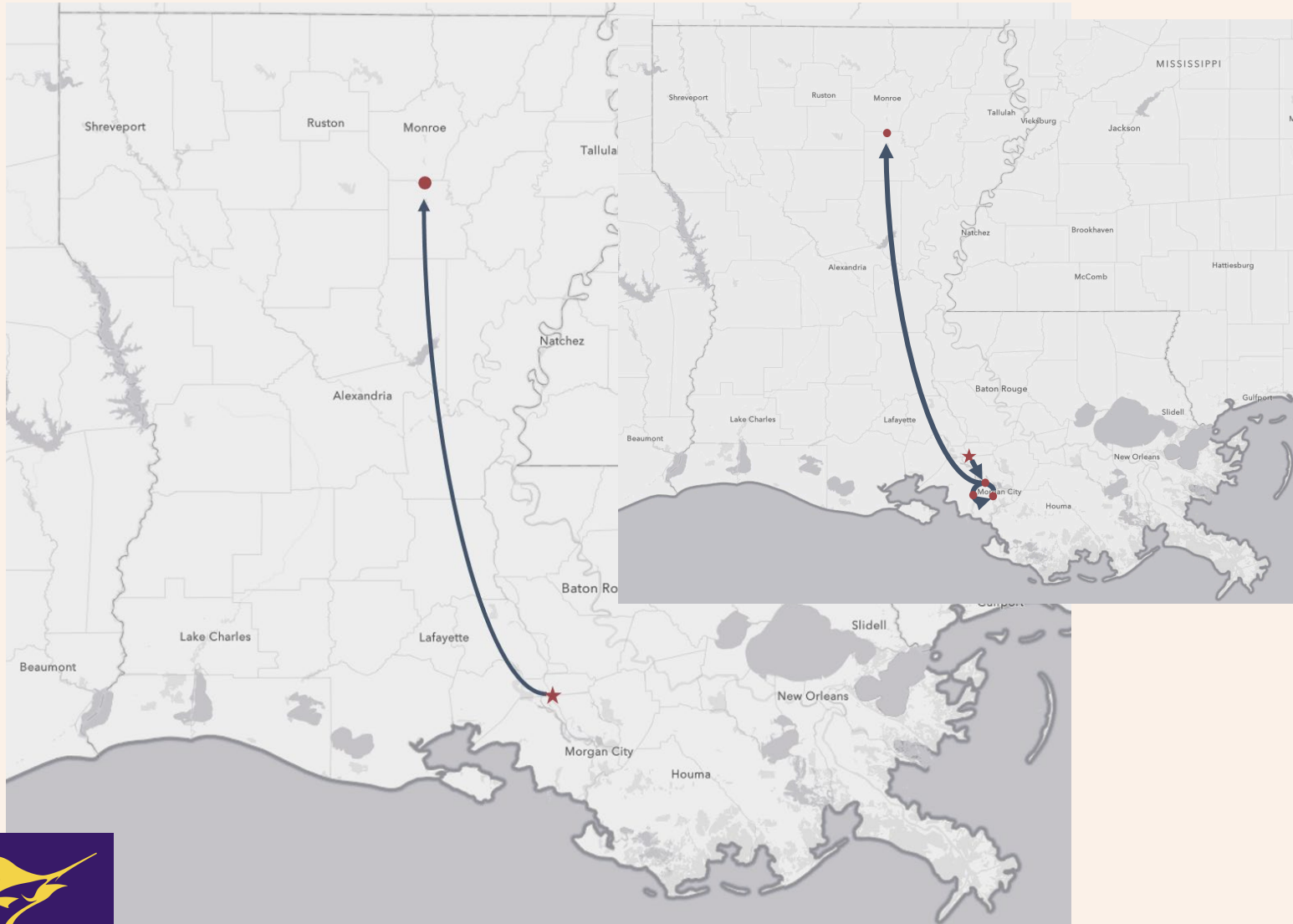
Invasive Carp Movement-Low Salinity



Invasive Carp Movement-within LA

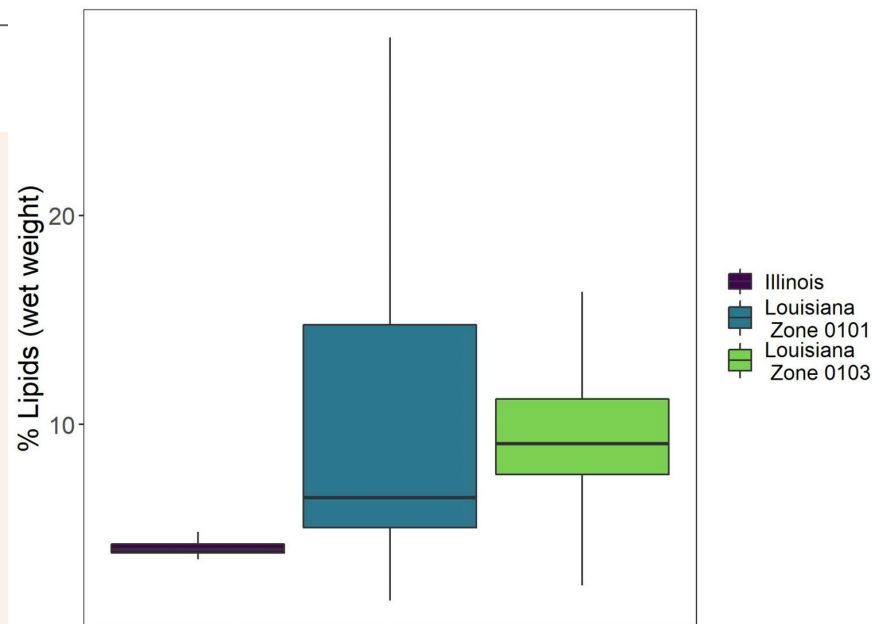
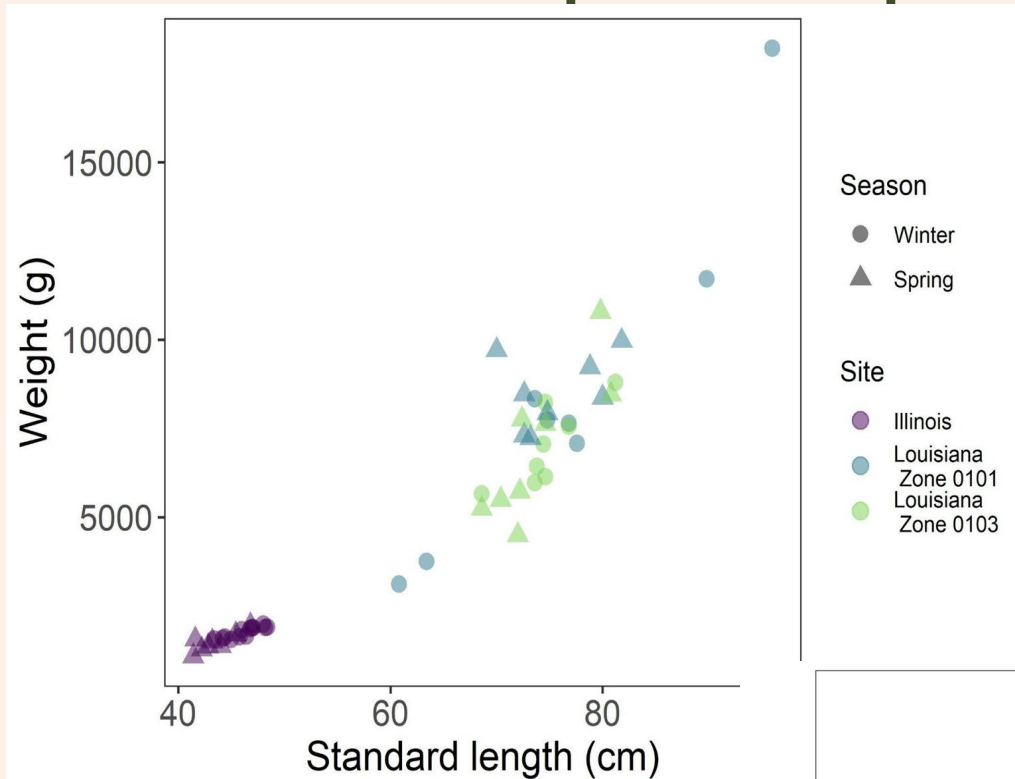


Invasive Carp Movement-within LA



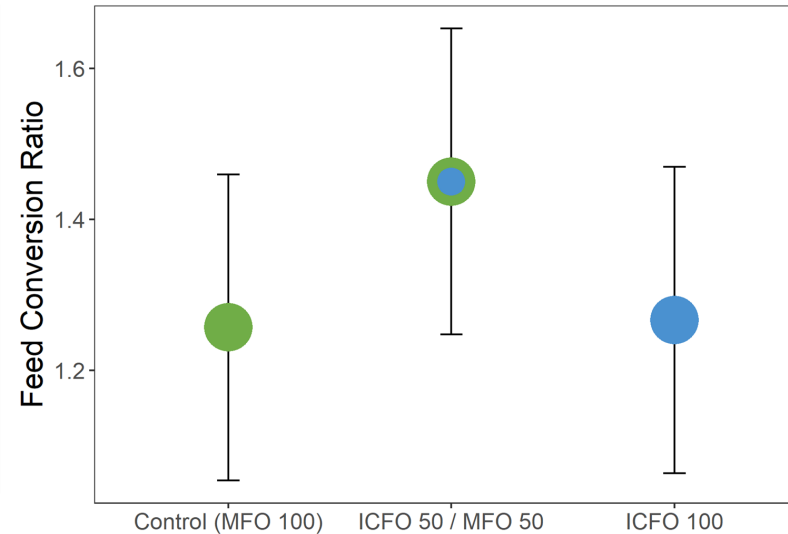
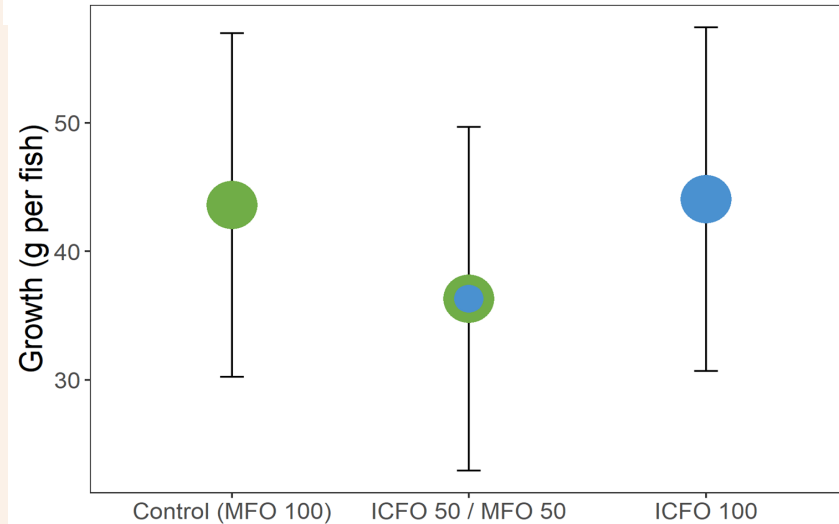
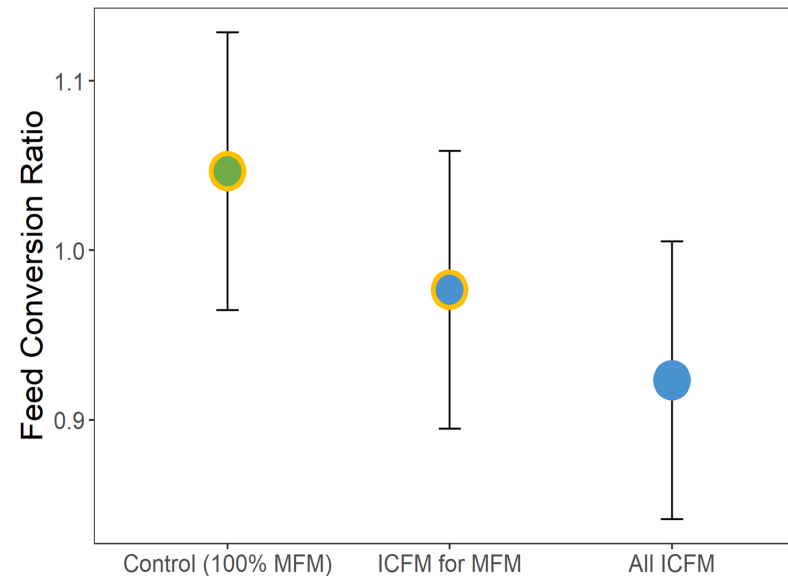
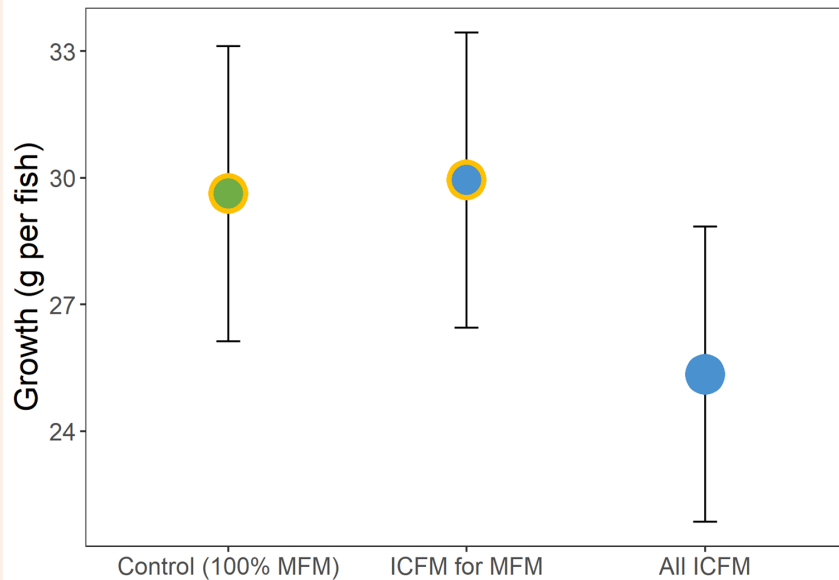
FAMEL

Market Development-Carp Used as Catfish Feed

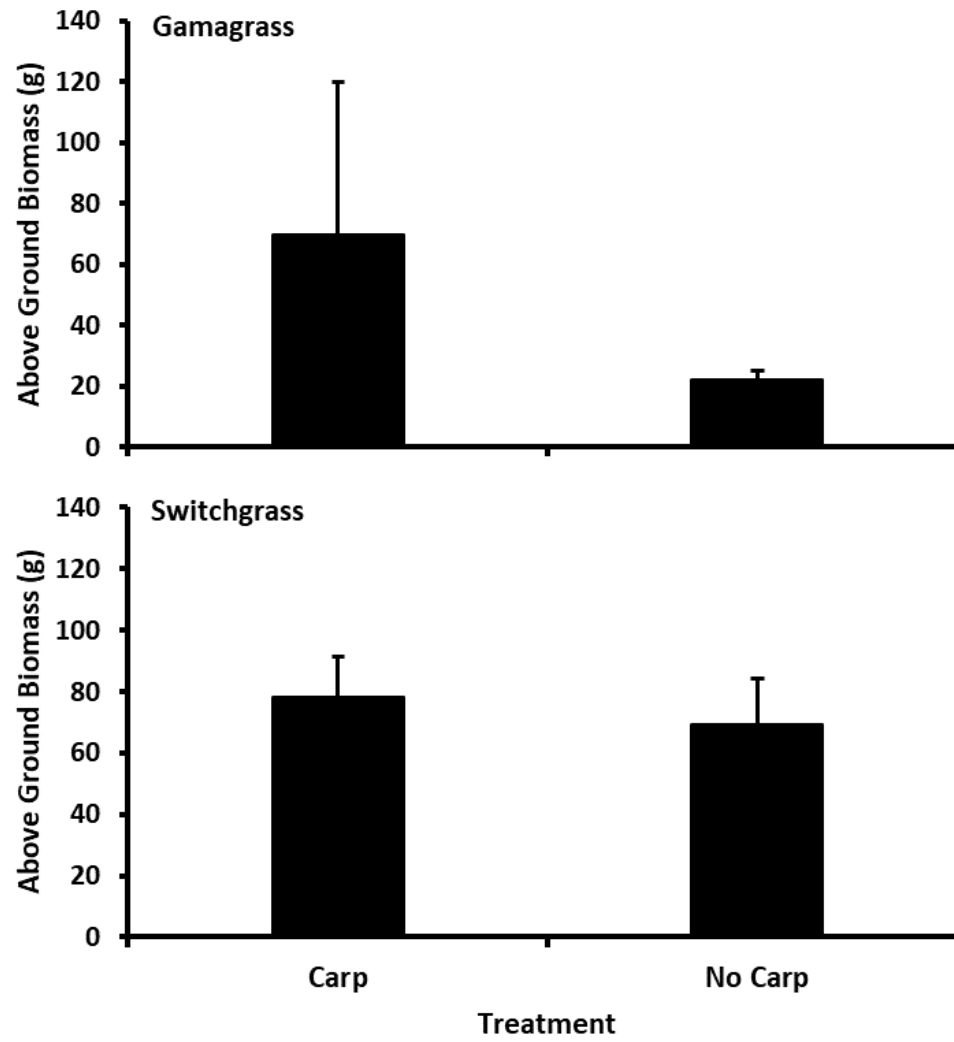




Market Development-Carp Used as Catfish Feed



Market Development-Carp as Fertilizer



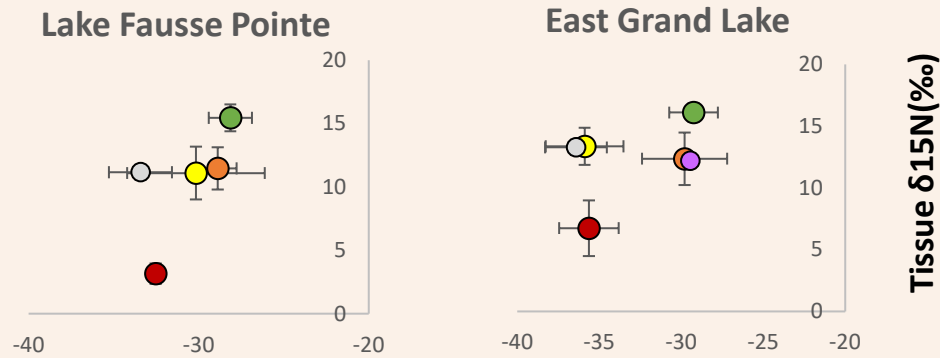
Market Development-Fishery Survey

- Survey of commercial fishermen and wholesalers to further understand the obstacles to increase harvest (LDWF)
 - The average price is roughly \$0.15 a pound. Fishermen need a price of the mid \$0.20s to be worth the effort.
 - Dealers mainly buy carp as bait. Dealers are limited by storage space in the off-season. Bait is the only commercially viable market for the dealers.
 - Non-carp fishermen are being surveyed to determine what could bring them into the fishery.



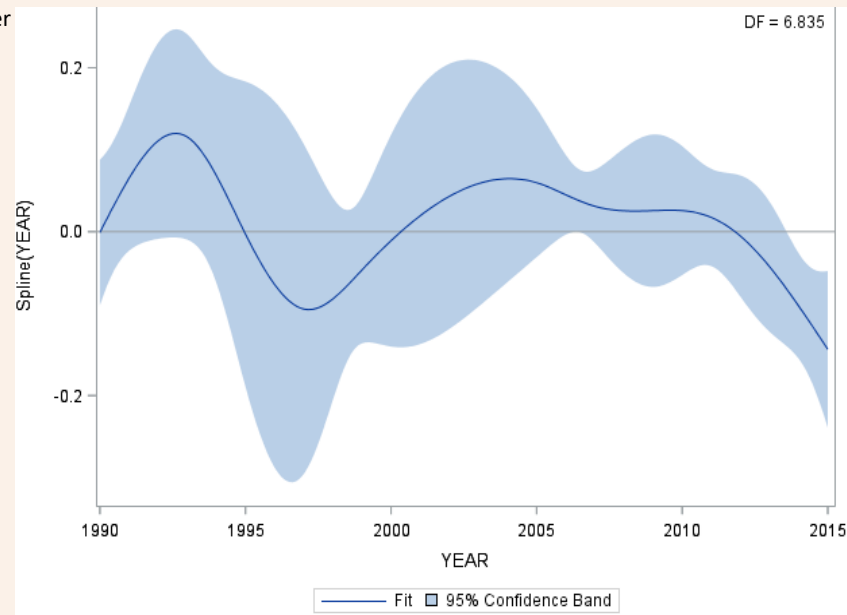
Impacts to Native Fisheries

Dietary Overlap and Fish Condition



- Largemouth Bass
- Bigmouth Buffalo
- Silver Carp
- Gizzard Shad
- Plankton/organic matter

Bigmouth Buffalo East Grand Lake





Projects in Progress

- Carp used as Rainbow Trout feed (LUMCON)
- Impacts of carp on native fish condition and abundance (LSU)
- Mesocosm study of invasive carp and Paddlefish (USACE-ERDC)
- Impacts on the lower trophic levels of the food web in Atchafalaya River Basin (ULL)
- Seasonality of reproduction in Atchafalaya River Basin (NSU)
- Telemetry in the Atchafalaya River Basin and Red River (LSU)
- Testing of gear to aid removal of invasive carp by commercial fishermen (LDWF)



Management Questions Summary

1. Do we have reproducing populations? Is it stable or increasing?

- Carp are reproducing and appears to be increasing. Larval counts in May appear to be correlated to the March flood pulse.

2. How do invasive carp move around LA?

- Carp do migrate seasonally from the backwaters to the main river to spawn.
- Carp are using low-salinity waters to move between rivers.
- Carp have come to LA from out of state. So far none of our tagged fish have left LA.



Management Questions Summary

3. Does invasive carp impact LA fisheries?

- Impacts are uncertain but early data shows the potential is there. Additional samples are needed to determine the potential impacts.

4. How do we remove more invasive carp from LA?

- The survey of wholesale dealers shows selling carp is limited to bait.
- The survey of fishermen shows that they are capable of catching more fish if the prices were higher or had additional markets to sell their catch.
- It makes suitable starter food for catfish which is the start of increasing outlets for carp caught in LA.

5. What is the current status of invasive carp in LA?

- More data is needed.



Rob Bourgeois
rbourgeois@wlf.la.gov

