



Update on the 2021 Atlantic Menhaden Fishing Season

**NOAA
FISHERIES**

Sustainable Fisheries Branch
NMFS Beaufort Laboratory
Beaufort, NC

GSMFC Fall Meeting
October 17, 2022
San Antonio, Texas

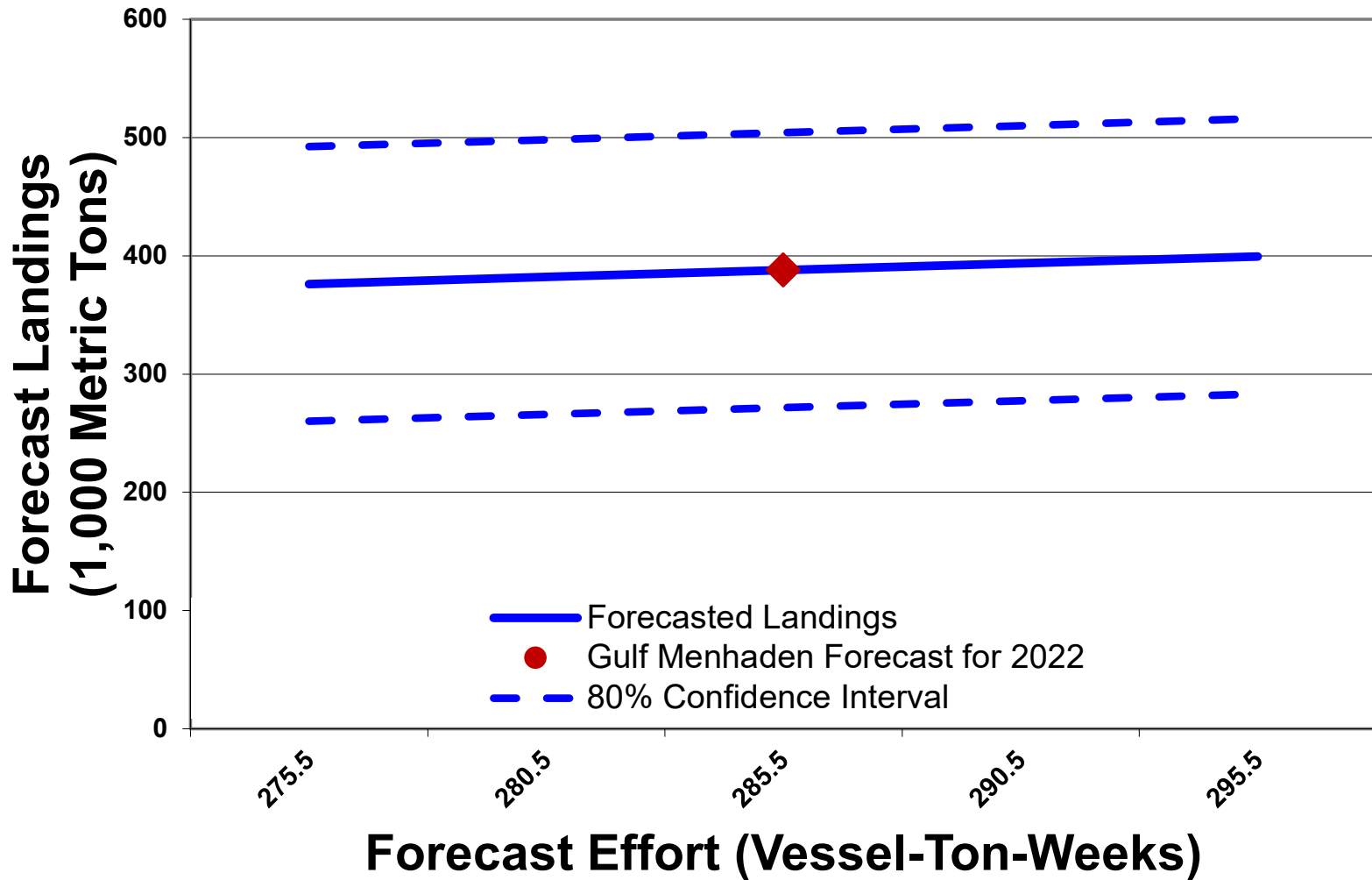
Forecast Background

- Forecasts were begun 50 years ago, using historical landings and effort data predict the following year's landings
- Initially, two forecasts were conducted annually, one for the Atlantic fishery, another for the Gulf of Mexico fishery
 - Atlantic stopped in 2012
- Methods are a multiple linear regression of:
 - Estimated effort
 - Previous year's landings and effort

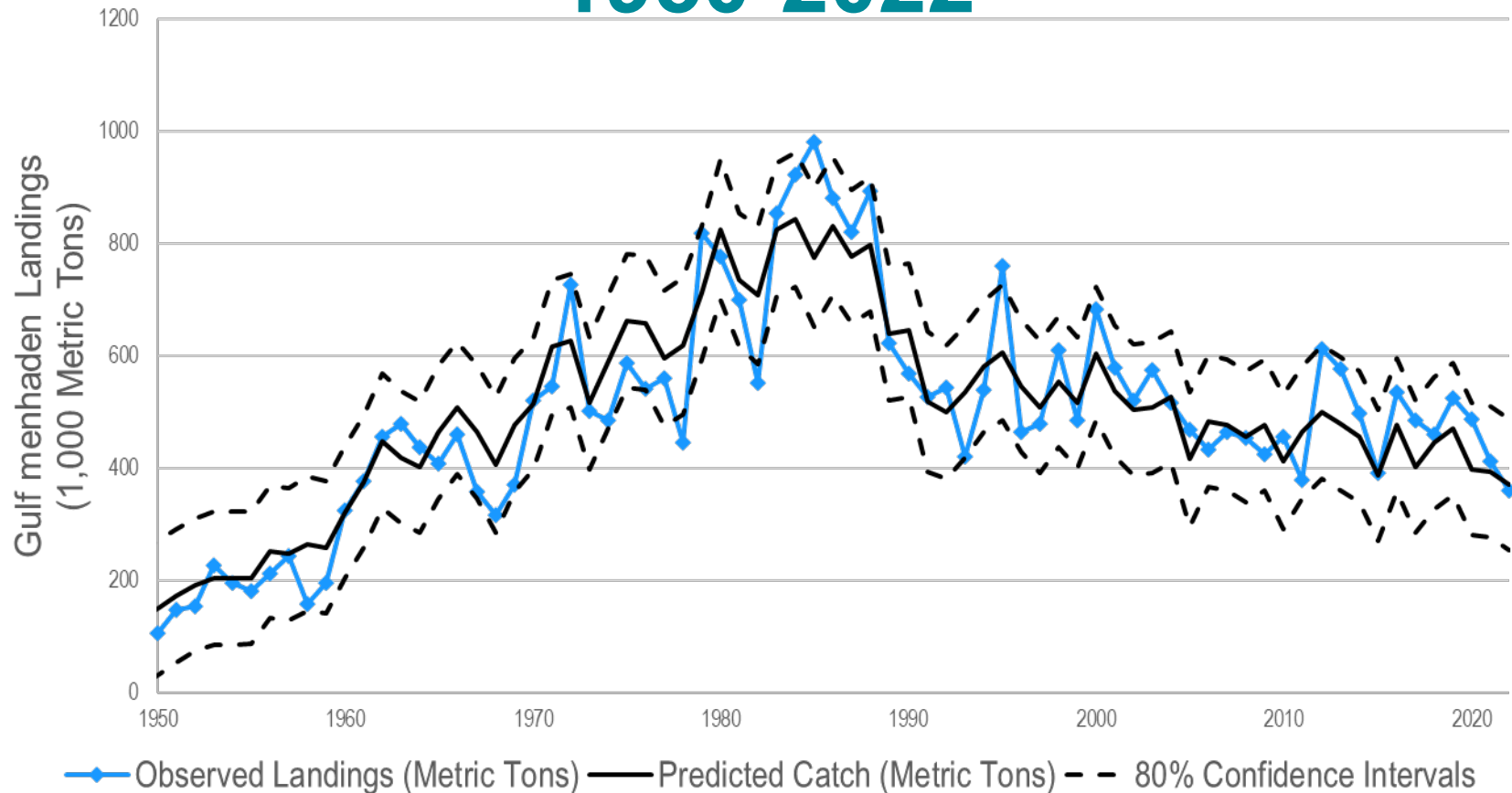
2022 Gulf Menhaden Forecast

- For 2022, we expect:
 - As in 2021, three factories active: Moss Point, Empire, and Abbeville
 - 34 vessels: 29 regular factory vessels, up to 5 run boats, and one bait boat
 - We estimate 285,500 vessel-ton-weeks of nominal fishing effort in 2022
- Forecast for 2022 landings of 387,900 mt
 - w/ 80% CI of 272,000 and 504,000 mt

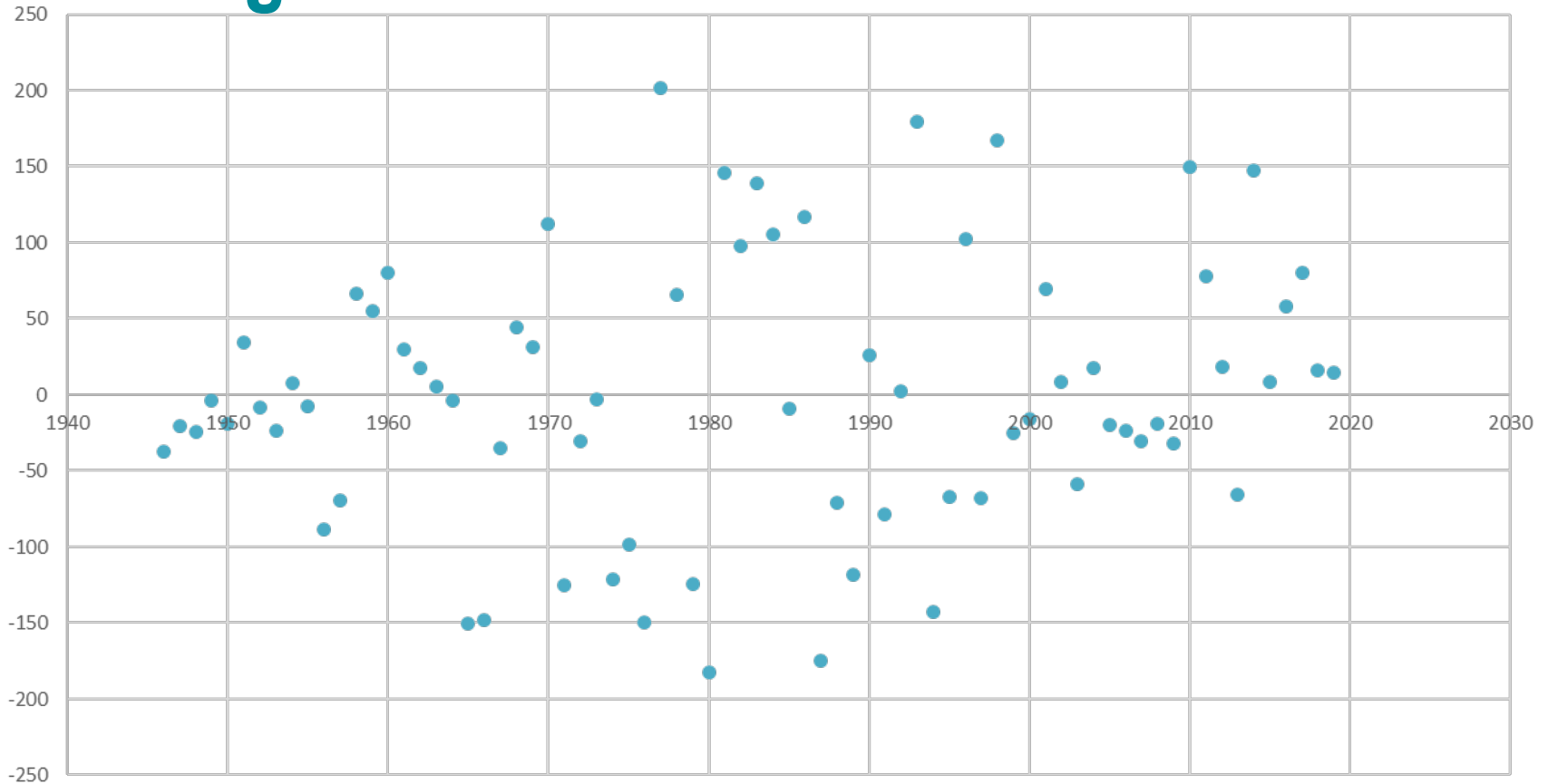
2022 Gulf Menhaden Forecast, Continued



Predicted and Observed Landings 1950-2022



Residuals of Forecasted and Observed Landings



Next Steps

- Assess the inputs to the regression model
- Assess the model itself
- Examine results for precision and accuracy