EAFM Summer Flounder Recreational Discards MSE

Performance Metrics

April 2022

"Final" performance metrics that have been updated to reflect input from core stakeholder group following workshop #3 on March 1, 2022.

Management Objective 1: Improve the quality of the angler experience

Performance Metrics:

Priority metrics

1) Ability to retain a fish
    a. Percent of trips that harvest at least one fish
    b. Change from baseline (ie., status quo) in harvest per trip
2) Angler welfare
    a. Changes in consumer surplus/angler satisfaction at the trip/individual level

Lower priority/secondary metrics

3) Ability to retain a trophy fish
    a. Proportion/number of fish caught greater than 28 inches
4) Compliance rate (education and enforcement considerations)
    a. Not estimated in model – could potentially do some sensitivity runs with a range
        i. Some interest from core group but lower priority

Management Objective 2: Maximize the equity of anglers' experience

Performance Metrics:

Priority metrics

1) Ability to retain a fish
    a. Change in percent chance of retaining a fish, by state/region and mode
    b. Difference in percent chance of retaining a fish, by state/region and mode
        i. Core group interest in both metrics to evaluate by mode even with concerns about data availability and reliability
2) Retention rate
    a. Change in ratio of landed : discarded fish, by state/region and mode
    b. Difference in ratio of landed : discarded fish, by state/region and mode
        i. Similar interest, data concerns regarding metric evaluation by mode

Lower priority/secondary metrics

3) Number of unique regulations

a. Could evaluate as part of simulations – do "simpler" regulations scenarios (e.g., coastwide/1 set) perform better/worse compared to "complex" regulation scenarios (e.g., different measures by state and mode)

Management Objective 3: Maximize stock sustainability

Performance Metrics:

Priority metrics

1) Stock status: Reference points
    a. % chance of stock is overfished relative to spawning stock biomass (SSB) target (note: SSB reference point includes both male and female biomass)
    b. % chance of overfishing relative to Fmsy threshold
2) Stock status: Overall population
    a. SSB – same metric as that associated with 1a above
    b. Fishing mortality rate – same metric as that associated with 1b above
    c. Discard mortality
        i. # of discards per trip, by state/region and mode
3) Stock status: Female spawning stock biomass
    a. % of female catch – could potentially be done (some information available) but would require a sex-specific configuration of the operating model
        i. Core group interested in metric and some metric to consider sex

Management Objective 4: Maximize the socio-economic sustainability of fishery

Performance Metrics:

Priority metrics

1) Fishing effort
    - # of trips relative to status quo (increase or decrease in trips), by state/region and mode
        - Core group interested in metric by mode as well
2) Angler welfare
    - Changes in consumer surplus/angler satisfaction at the state/region level
3) Fishery investment
    - Changes in fishery investment measured by: sales, income, employment, and GDP produced by supporting businesses at the state-level or higher