Recreational Fishing Analyses
Overview

Economic Impacts of Recreational Fishing Regulations

- Description of input-output model
  - Data sources
  - Methods for calculating numbers of affected trips
  - Analysis procedures
  - Limitations

Affected Human Environment (Recreational Harvesting Sector)

- Brief description of data and types of analyses
  - Long-term trends in NE recreational fishing
  - The role of groundfish in NE region recreational fisheries
  - Party/charter fisheries
  - Effectiveness of management regulations
Input-Output Model

**Data Sources**

- MRFSS catch and effort database to identify the number of potentially affected recreational trips under each alternative

Expenditure Items

**Trip-Related Items**
- Food and refreshments
- Lodging
- Private transportation
- Public transportation
- Boat fuel
- Guide or package fees
- Access/boat launching fees
- Equipment rental
- Bait
- Ice

**Fishing Equipment (2-month)**
- Rods, reels, and lines
- Other tackle and gear

**Semi-Durables (2-month)**
- Camping equipment
- Binoculars
- Fishing clothing
- Taxidermy fees
- Magazines
- Club dues

**Durables (annual)**
- Motor boats and accessories
- Non-motorized boats
- Boating electronics
- Boat mooring, storage, maintenance, and insurance
- Saltwater fishing vehicles
- Cabin or second home
Economic Impacts

$5

$1

$0.05

$3.25

$0.10

$0.10

$0.05

$0.05

$0.10

$0.50

$0.05

$1

$0.10

$10.20

County Line
Methods for Calculating Numbers of Affected Trips

- Retrospective assessment
  - Impacts examined by estimating the number of recreational fishing trips in 2001 (MRFSS data base) that would have been affected by the proposed management measures
    - All 2001 fishing trips estimated to be constrained by the proposed measures were considered to be “affected” trips

- Demand models/welfare measures are not available for Atlantic cod and haddock

- Losses estimated for two hypothetical scenarios:
  - 25% reduction in the overall number of marine recreational fishing trips from ME – NY
  - 50% reduction in the overall number of marine recreational fishing trips from ME – NY
Analysis Procedures

- Estimated reductions in anglers’ expenditures = (predicted reduction in trips) X (average trip expenditures)
  - Calculated for each state and mode of fishing (i.e., private boat trips or party/charter boat trips)

- Regional economic impact losses = (estimated reductions in anglers’ expenditures) X (IMPLAN sector multipliers)

- Losses in sales, income, and employment from ME – NY estimated for each trip reduction scenario (25% and 50% reduction)
Limitations

- Uncertainty surrounding how anglers will respond to the proposed measures

- Lack of welfare measures to capture losses borne by individual anglers (i.e., consumer surplus)
Affected Human Environment (Recreational Harvesting Sector)

- Brief description of data and types of analyses
  - Long-term trends in NE recreational fishing
    - Catch, trips, effort by mode in NE from 1990-2001
  - The role of groundfish in NE recreational fisheries
    - Trends in catch and landings of groundfish in comparison to all species from 1990-2001
- Party/charter fisheries
  - Distribution of multispecies permits and the number of vessels reporting since implementation of logbooks
  - Vessel dependence on passenger income
  - Effectiveness of management measures
    - Historical compliance rates