Amendment 3 update

Progress Report

Timeline

- ✓ Scoping hearings – May 2007
- ✓ Approve framework of alternatives – June 2007
- ○ Approve draft amendment and DEIS, specifications for alternatives and identify preferred alternatives – Nov. 2007
- ○ Public hearings on draft amendment – Jan. 2007
- ○ Approve final alternative – Feb. 2008
- ○ Submit final document – Mar. 2008

Summary of alternatives

- Six alternatives plus status quo
- Overlay existing regulations
- 3 pairs with ACLs controlled by hard TACs
- 3 pairs of alternatives with ACLs and in-season triggers (no hard TAC)
- All with gear restricted areas or skate closed areas

Measures

- Establish winter skate possession limit
- Reduce wing fishery and/or establish a bait fishery possession limit.
- Raise minimum mesh size when targeting skates
- Seasonal spawning maximum size limits
- Gear restricted areas
- Hard/soft TAC with accountability measures
- TAC set aside to encourage gear research
- Monitoring and framework adjustment program
- Sector allocation program

Progress checklist

- ✓ Establish winter skate possession limit
- ✓ Reduce wing fishery and/or establish a bait fishery possession limit.
- ○ Raise minimum mesh size when targeting skates
- ✓ Seasonal spawning maximum size limits
- ✓ Gear restricted areas
- ○ Hard/soft TAC with accountability measures
- ○ TAC set aside to encourage gear research
- ○ Monitoring and framework adjustment program
- ○ Sector allocation program (specification of baseline to qualify)

PDT analysis

- Possession limits
  - Evaluate effectiveness of various wing and whole skate over a range of possession limits
  - Results depend on skate discards & discard mortality in each fishery
  - Results depend on whether vessels take more trips or target other species to compensate
  - Catch reductions at various possession limits have been estimated – economic analysis
  - Work finished and reviewed by the PDT

PDT analysis

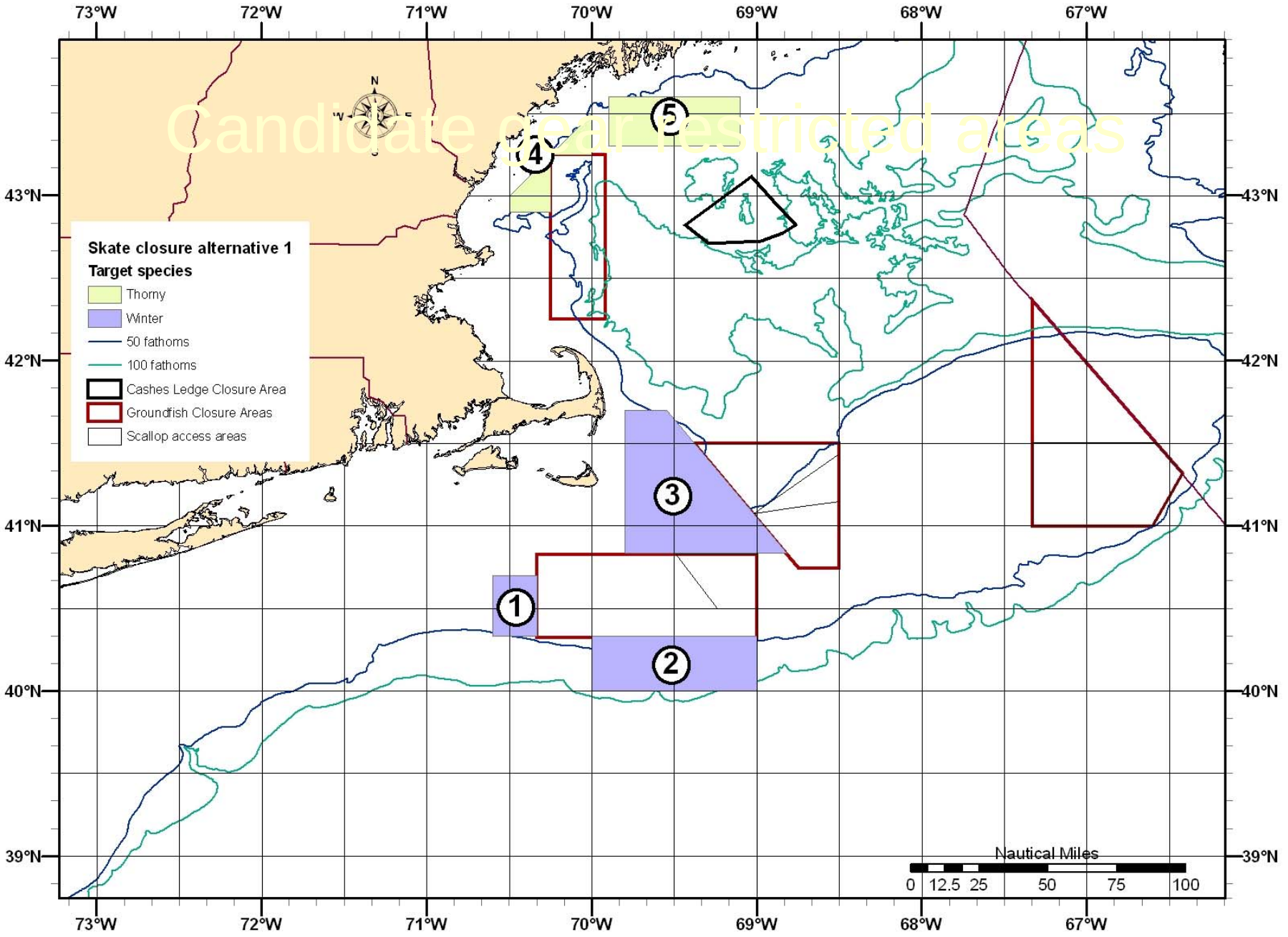
- Minimum mesh
  - Observed size frequency of skate catch analyzed
  - Problems evaluating L_{50} in a mixed fishery
  - L_{50} difficult to estimate because of low contrast between survey size frequency and commercial size frequency
  - Little or no evidence of size selectivity by larger mesh
  - Pending PDT review

PDT analysis

- Seasonal spawning size limits
  - Accepted supporting science and recommendations
  - Limited data based on skates in the Gulf of Maine
  - Serious implementation and enforcement concerns – some have been addressed
  - Qualitative evaluation finished

PDT analysis

- Gear restricted areas
  - Five semi-annual GRAs identified based on detailed analysis of sea sampling and survey data
  - Evaluated with a 2-bin model
    - Model modified to apply to regions and incorporate discard mortality
  - Work finished and reviewed by PDT
  - Closed Area Model better suited to evaluate effects, but is unavailable for use


Candidate gear restricted areas
73°W
72°W
71°W
70°W
69°W
68°W
67°W
43°N
42°N
41°N
40°N
39°N
Skate closure alternative 1
Target species
Thorny
Winter
50 fathoms
100 fathoms
Cashes Ledge Closure Area
Groundfish Closure Areas
Scallop access areas
1
2
3
4
5
Nautical Miles
0 12.5 25 50 75 100

Closed area analysis

- Two bin model
  - Effort shift is unconstrained by other regulations and economics
  - Accounts for existing area closures
  - Assumes catch changes by differences inside and outside of closures
  - Underestimates mortality and economic effects

Analysis of rebuilding potential and catch limits

- PDT developed a demographic model to estimate thorny and winter skate rebuilding potential
- Applied model results to catch time series
- Results would determine catch limits during rebuilding and mortality targets
- Model and proposed limits reviewed by the SSC

SSC Consensus (see doc #1)

- Demographic matrix approach to estimate stock dynamics is fundamentally sound
- Factors affecting skate complex and response to fishing pressure are unknown
- Magnitude and trend in fishing mortality is unknown

SSC Consensus

- Unable to estimate catch that would achieve rebuilding objectives with present information – could be either higher or lower than present levels
- The stock(s) is unlikely to significantly rebuild (from further catch reductions) if fishing mortality is (already) below the reference points
- Significant rebuilding is unlikely without reducing discards

SSC Recommendations

- Several methods to do an analytical assessment and estimate MSY using existing data should be pursued
- An adaptive, outcome based analysis should be explored to determine whether previous reductions in catch have resulted in biomass increases.
- If there is a link between catch reductions and biomass increases, an adaptive program could achieve rebuilding objectives.

Next direction

- Resources are currently unavailable to prepare an analytical assessment that addresses the deficiencies identified by the SAW
- Conflicts with GARM and trawl/vessel survey calibrations
- Cannot wait for Dec ’08 data poor assessment workshop
- Executive committee remanded issue back to the PDT for more work and catch target recommendations to be reviewed by SSC in April

Recent developments

- 2007 landings increased by ~2000 mt (10%)
- Most of increase in a single fishery – gillnets on Multispecies B DAS
- Bait fishery and trawled wing fishery landings have not increased
- Total catch is below average for the time series, due to decreasing discards
- Relationship between catch and changes in winter skate biomass – zero correlation.

PDT work in progress

- Update EIS
  - Data intensive
  - Considerable more work needed
    - Economic and social analysis
      - Less incidental landings and bycatch
      - More targeting
    - Characterization of the fishery through 2007
- Complicated effects due to interactions with other fisheries and layered regulations
- Impact analysis
  - Integrated biological analysis
  - Economic and social analysis
  - Need rebuilding catch limits and mortality reduction targets

To be continued . . .

- Considerable work remains to be done, new timeline needs to accommodate time to develop catch limits and mortality reduction targets, and prepare document
- Difficulty convening PDT meetings due to conflicts with the GARM and trawl calibration work

Revised Timeline

- ✓ Scoping hearings – May 2007
- ✓ Approve framework of alternatives – June 2007
- ○ SSC approves catch limits and mortality reduction targets, recommended by the PDT
- ○ PDT develops and finalizes draft DEIS – Aug. 2008
- ○ Committee and Council approves draft amendment and DEIS, specifications for alternatives and identify preferred alternative(s) – Sept/Oct 2008
- ○ Public hearings on draft amendment – November 2008
- ○ Approve final alternative – Nov. 2008
- ○ Submit final document – Jan. 2008