

Amendment 8 Public Hearings

Deirdre Boelke, NEFMC

May 22 – June 20, 2018



New England
Fishery Management Council

- The New England Council is hosting seven public hearings on Amendment 8.
- Amendment 8 is a large document that has been developed over several years.
- A summary, or public hearing document has been prepared to synthesize all the alternatives and potential impacts.
- All related materials can be found on the Council webpage at: <https://www.nefmc.org/library/amendment-8-2>.

Date and Time	Public Hearing Location
Tuesday, May 22 6:00-8:00 p.m.	Narragansett, RI URI, Graduate School of Oceanography
Thursday, May 24 6:00-8:00 p.m.	Rockport, ME Samoset
Wednesday, May 30 6:00-8:00 p.m.	Gloucester, MA Beauport Hotel
Tuesday, June 5 4:00-5:00 p.m.	Philadelphia, PA DoubleTree by Hilton
Tuesday, June 12 5:00-7:00 p.m.	Portland, ME Holiday Inn by the Bay
Tuesday, June 19 6:00-8:00 p.m.	Chatham, MA Chatham Community Center
Wednesday, June 20 2:00-4:00 p.m.	Webinar Hearing Call in information: +1 (415) 930-5321 Access Code: 346-818-026



Amendment 8 goals

1. To account for the role of Atlantic herring within the ecosystem, including its role as forage;
2. To stabilize the fishery at a level designed to achieve optimum yield;
3. To address localized depletion in inshore waters (this goal added after initial scoping).

Amendment 8 has two parts:

- Part 1 – Considering different methods to set overall catch limits (ABC control rule)
- Part 2 – Considering measures to address potential localized depletion and user conflicts



What is an ABC Control Rule?

- An acceptable biological catch (ABC) control rule is a formulaic approach for setting annual ABCs.
- ABC is the maximum catch allowed that is expected to keep a population sustainable taking uncertainty into account.
- Annual herring fishery catch limits are allocated at a reduced level below the ABC.
- ABC control rules often have specific “parameters”, or factors that determine how to adjust ABC under different biomass levels.



Example control rule alternatives

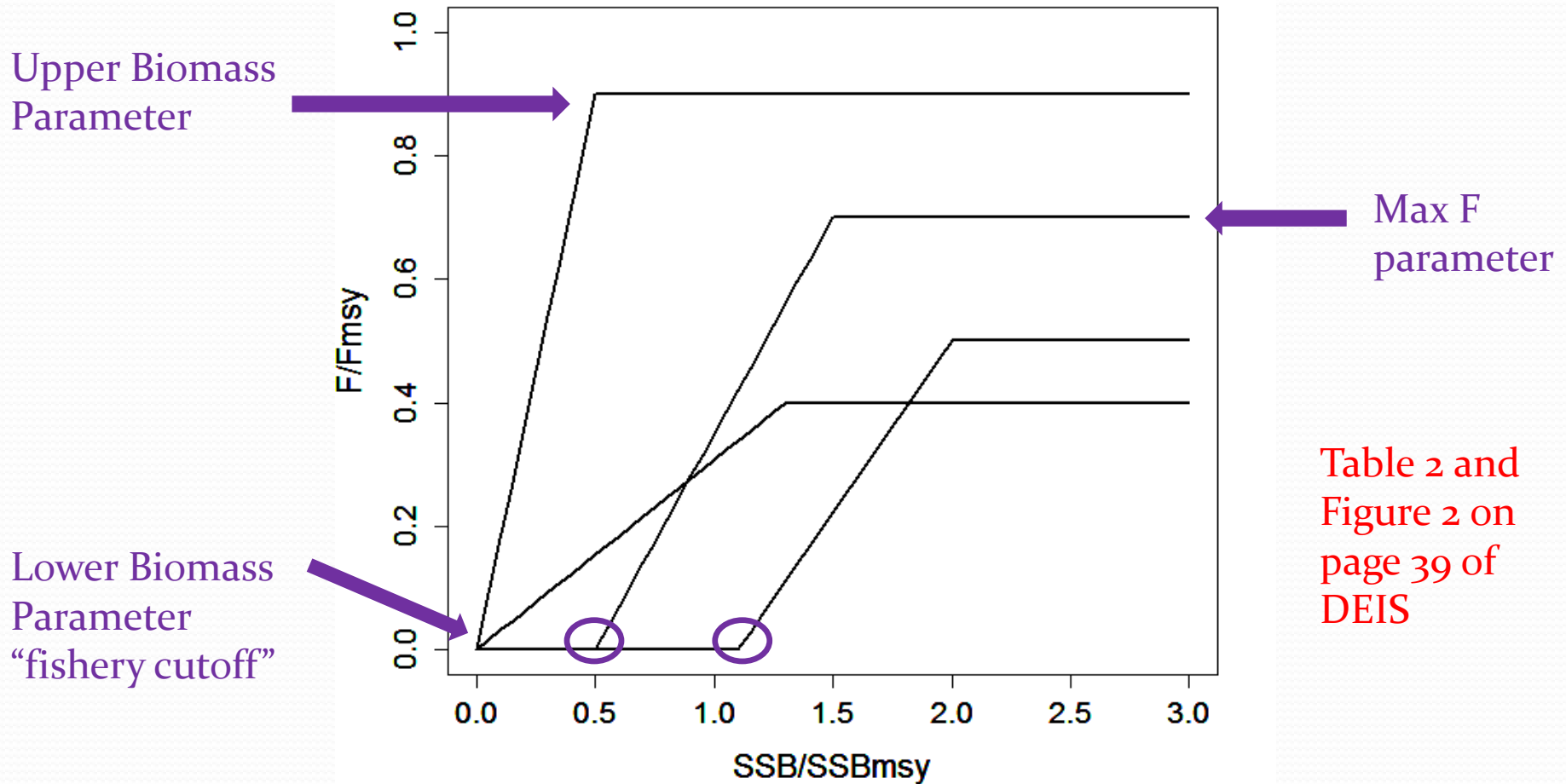


Table 2 and Figure 2 on page 39 of DEIS



Management Strategy Evaluation (MSE)

- The Council used MSE to develop ABC CR alternatives.
- MSE is a process for comparing the performance of alternatives under multiple, often competing objectives.
- Models are developed that simulate how a control rule would function under different scenarios of growth, production, etc.
- Herring, in particular, has many competing interests and tradeoffs with respect to achieving “maximum net benefits to the nation” (overall charge of federal fisheries management).
- MSE results help illustrate uncertainty and evaluate tradeoffs.
- The Council hosted two workshops to get input from the public that was folded into the alternatives and analysis.



Amendment 8 ABC CR Alternatives

- Ten Alternatives (**Table on page 10 of public hearing document**)
- No Action - hybrid approach that sets a constant catch for 3 years at the level expected to produce $\leq 50\%$ probability of exceeding Fmsy in year 3.
- Alt. 1 (Strawman A) – resemble No Action, but have CR parameters with max F of 90% and F declines when biomass falls below 50%Bmsy.
- Alt. 2 (Strawman B) – Fishing limited at 50% Fmsy, and declines further when biomass less than 2* Bmsy, no fishery when biomass $< 1.1*Bmsy$.
- Alt. 3 – Similar F as current rule, but reduce F when biomass $< 70\%$ Bmsy, and no fishery when $< 30\%$ Bmsy.
- Alt 4a-4f – series of rules that meet desired performance of specific metrics identified by the Council.

NO PREFERRED ALTERNATIVE

Alternatives for setting 3-year ABCs

- **Alt. 1** – No Action - ABC set at the same level for three years
- **Alt. 2** – ABC set for three years with annual application of CR
ABCs likely to vary by year based on short-term projections

NO PREFERRED ALTERNATIVE

What is Localized Depletion?

“**Localized depletion** is a reduction of population size, independent of the overall status of the stock, over a relatively small spatial area as a result of intensive fishing.

Problem statement –

“.....concerns with concentrated, intense commercial fishing of Atlantic herring in specific areas and at certain times that **may cause detrimental socioeconomic impacts on other user groups (commercial, recreational, ecotourism)** who depend upon adequate local availability of Atlantic herring to support business and recreational interests both at sea and on shore....”



LD and user conflict alternatives

Table on page 11 in Public Hearing Document

Alt 1. No Action (no MWT gear in Area 1A Jun-Sep)

Alt 2. 6nm closure in Area 114 (Jun-Aug) or (Jun-Oct)

Alt 3. Extend Area 1A prohibition of MWT gear year-round

Alt 4. 12 nm prohibition of MWT gear

Alt 5. 25 nm prohibition of MWT gear

Alt 6. 50 nm prohibition of MWT gear

Alt 7. Prohibit MWT gear in five 30-minute squares

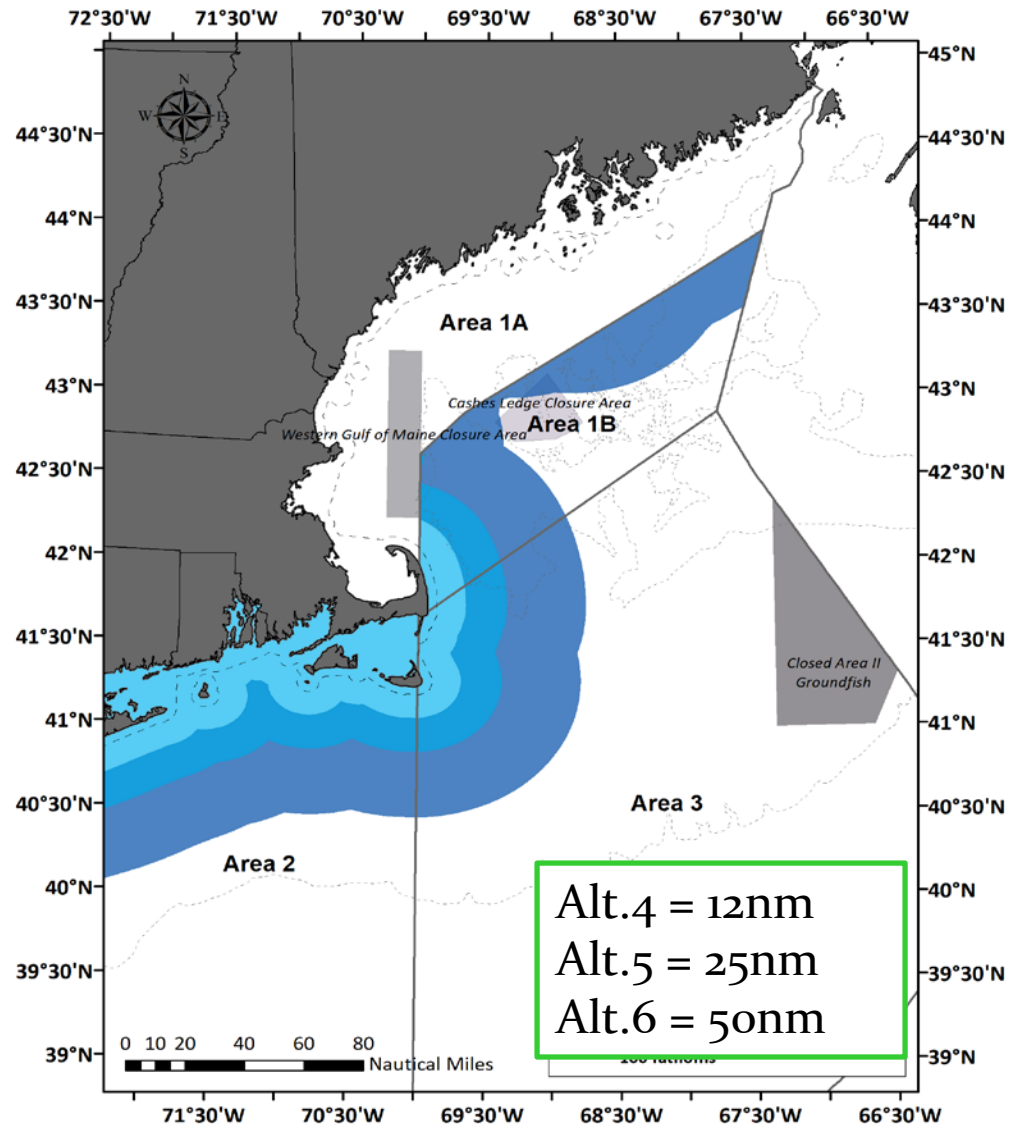
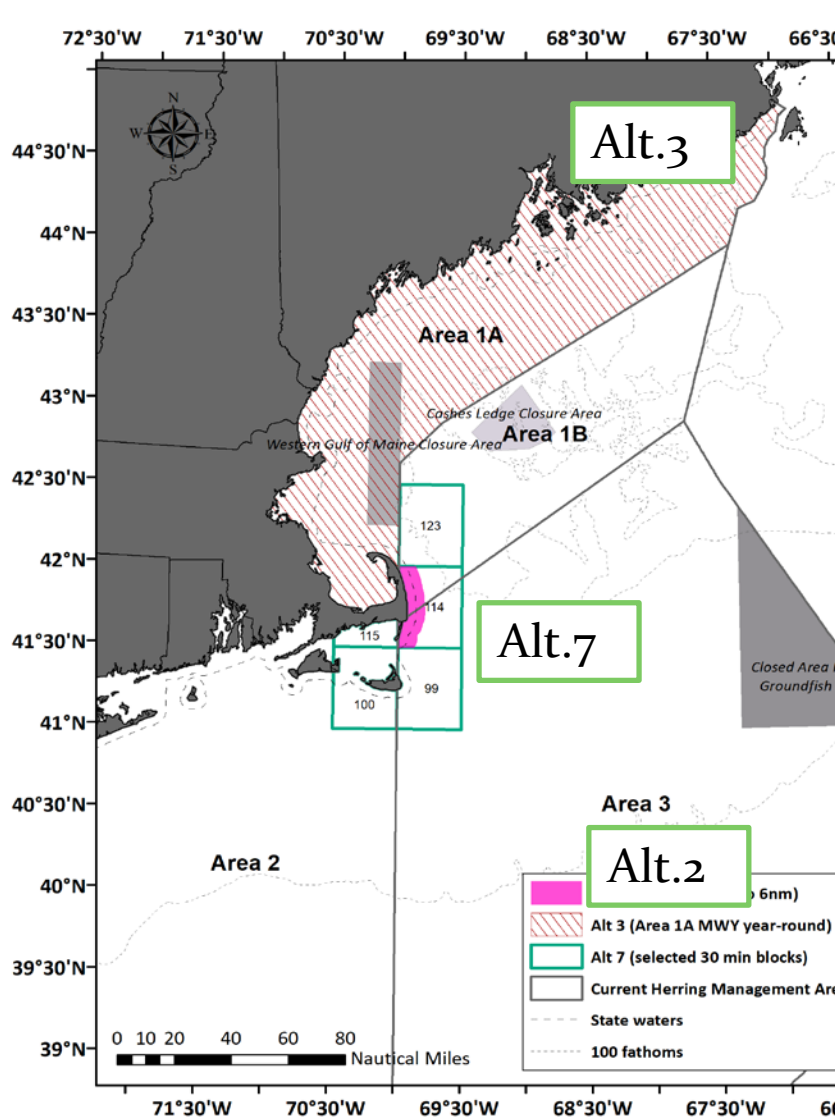
Alt 8. Revert boundary between Areas 1B/3

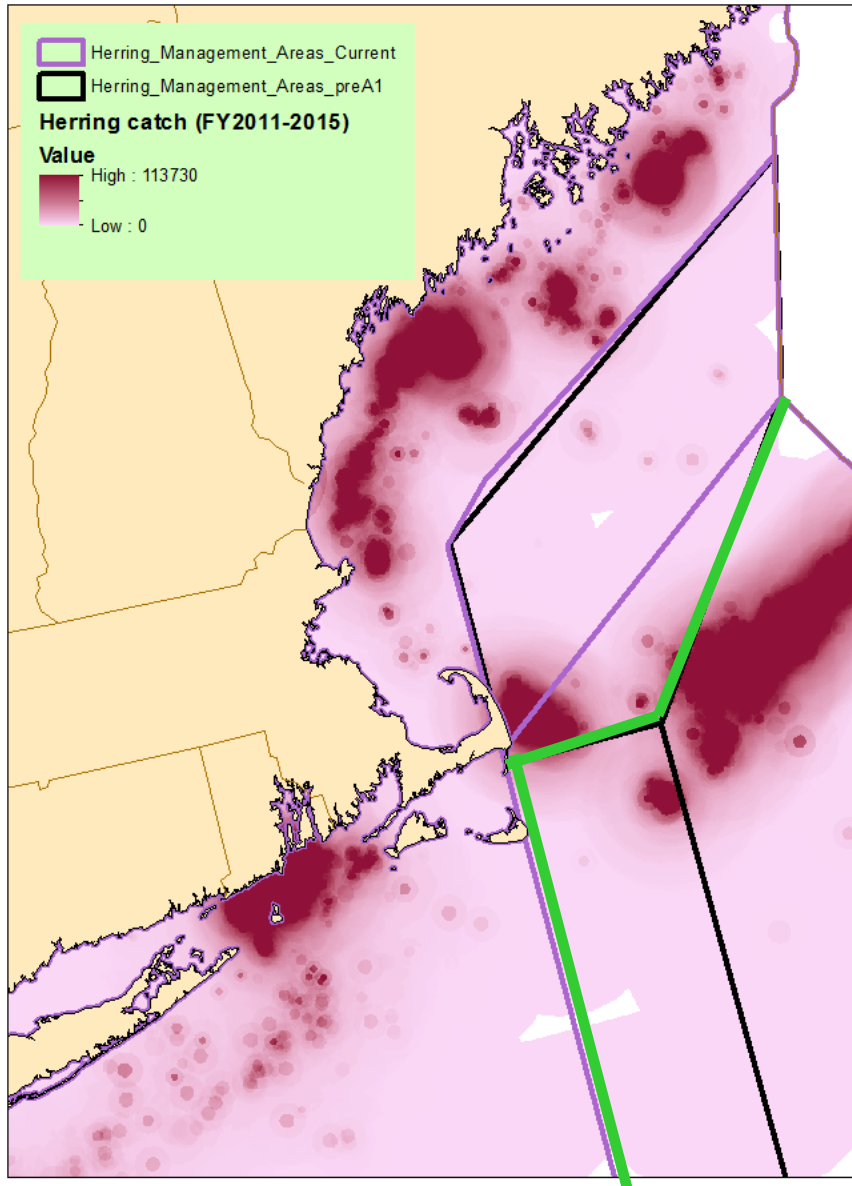
Alt 9. Remove seasonal closure of Area 1B

*Alts 4-7 have
seasonal and
spatial
sub-options
Year-round or
Jun-Sept
Areas 1B, 2 and 3
or
Areas 1B and 3*

NO PREFERRED ALTERNATIVE

LD and user conflict Alternatives 2-7





Alternative 8

Current Boundary – purple

Pre-Amendment I – black

GREEN is proposed boundaries.

Alternative 9

Area IB currently closed Jan-April.

If open all year, effort may spread out and reduce user conflicts in late spring-fall.

Affected Environment (**Section 3.0 of DEIS**)

- Description of each valued ecosystem component (VEC)

3.1 Target species (At. Herring)

3.2 Non-target (bycatch)

3.3 Predator species (non-protected – fish, tuna)

3.4 Protected species (mammals and seabirds)

3.5 Physical Environment (EFH)

3.6 Human Communities

Herring Fishery, mackerel fishery, lobster fishery, predator fisheries (tuna, gf), ecotourism (whale and bird watching)



Potential Impacts (Section 4.0 of DEIS)

- **ABC CR (Section 4.1.1)**

Long-term analysis (MSE model outputs summarized in decision tables and web diagrams)

Short-term analysis (various biomass levels selected from the past to show range of ABC values under different CRs, and ABC CRs applied to previous assessment to calculate example ABCs for 2016-2018)

- **Localized Depletion and user conflict measures (4.1.2)**

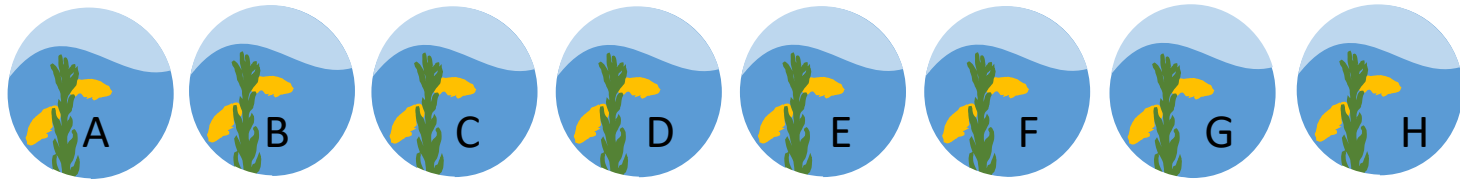
Very challenging to analyze, many data limitations and complex issue to tease out. More research needed.

PDT summarized forage info, mapped fisheries, overlap analysis, description of possible effort shifts, etc.



A8 ABC Control Rule MSE Infographic

8 Operating models represent possible states of nature:



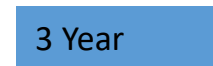
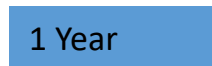
9 Possible control rules:



15 Performance measures of management success reflect objectives:

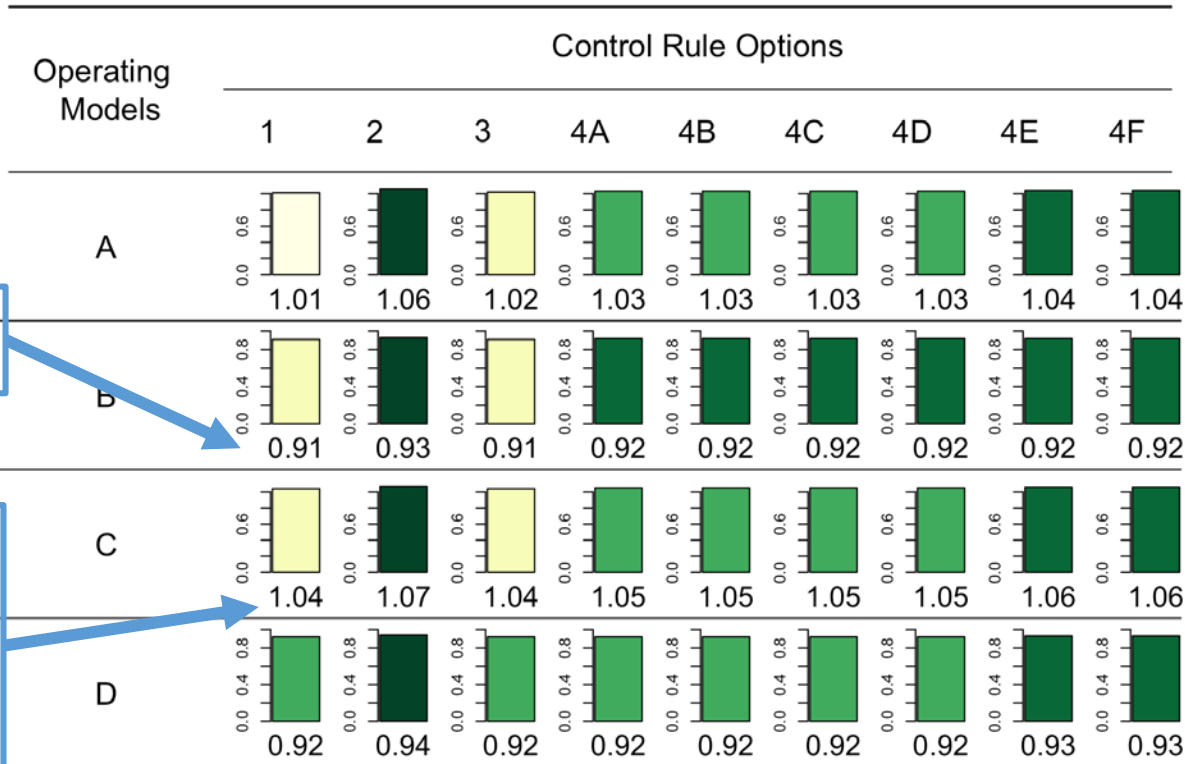


2 Timeframes for control rule implementation:

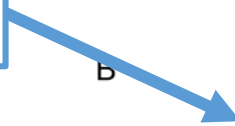


Read with care...

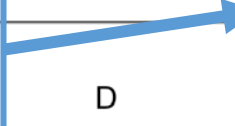
Tuna Weight Status



Very similar performance



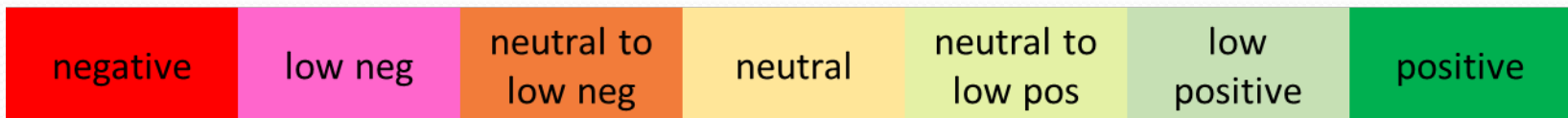
Worst ranking performance still falls within acceptable range



Economic Impact Considerations

- What were the herring/mackerel landings/revenue from an area/season?
- How likely are effort shifts: to other gear types, areas or seasons?
- How likely would a closure hamper harvesting OY?
- What degree of overlap has existed with other user groups?

A8 Impact Categories:



Many issues to consider and balance – very complex



What's next?

- Public comment period ends June 25, 2018
- Staff then compiles and summarizes all comments.
- Herring PDT, AP and Committee meetings in late summer/early fall to review all comments and make final recommendations.
- **Council Final Action September 25-27, 2018.**
- Staff works with NMFS to finalize EIS (Oct-Dec).
- Proposed and final rules publish (Jan - March).
- **Potential implementation in May 2019.**



How to comment?

- Oral comments at this meeting.
- Submit written comments directly to the Council.
- Written comments due by 5:00PM on June 25, 2018.
- Address, fax, or email info on page 3 of PH document.
- Most useful comments identify a preferred alternative and provide brief rationale why.

- Questions?

Herring Plan Coordinator contact info:

Deirdre Boelke

dboelke@nefmc.org

978-465-0492 ext. 105

