

Risk Policy Concept Update

March 30, 2026

Science and Statistical Committee



**New England
Fishery Management
Council**

Terms of Reference

- Consider the information provided on the revised Risk Policy Concept, including factor revisions, mechanics of developing z-scores, example linking the Risk Policy with an ABC Control Rule, and options for the SSC's use of the Risk Policy.
- Provide feedback on the proposed application of the Risk Policy Concept.



Today's Report:

Update in four parts:

- Risk Policy Concept (factors & data) – J. Peros
- Risk Policy Mechanics and demonstration – Dr. Brothers

SSC Questions

- Risk Policy application with ABC Control Rule – Dr. Brothers
- SSC Use of Risk Policy and Next Steps – J. Peros

SSC Questions, Public Comment, Discussion



Risk Policy Working Group Membership:

Some changes since last report to the SSC

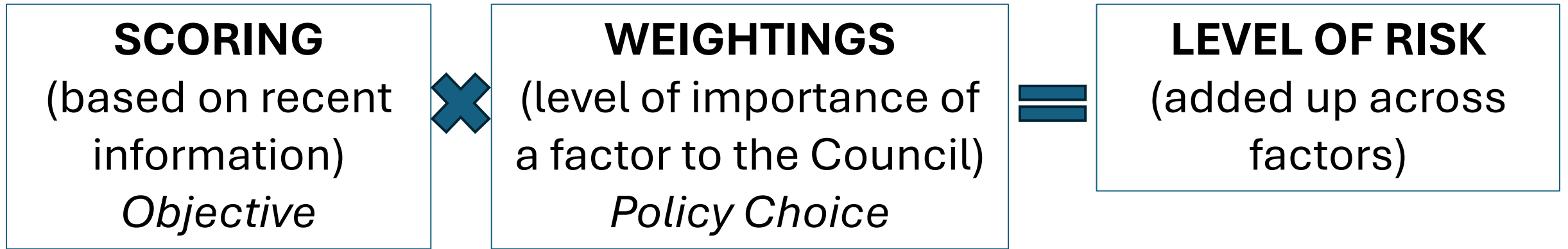
Risk Policy Working Group Members	
Megan Ware, ME, <i>Chair</i>	Dr. Lisa Kerr (SSC)
Dan Salerno, NH, Vice-Chair	Jonathon Peros (Council Staff)
Dr. Jonathan Deroba (NEFSC)	Dr. Naresh Pradhan (Council Staff)
Moira Kelly (GARFO)	Dr. Kevin St. Martin (SSC)
Melanie Griffin, MA	Dr. Joe Carracappa (NEFSC)
Dr. Jason McNamee (SSC)	Geoff Smith, ME
Bill Lucey, CT	Dr. Gareth Lawson (SSC)



Scoring, Weighting, and Level of Risk

FACTORS

(Key elements to characterize risk)



- The results for each factor are aggregated into a “Z-score” for level of risk that is plotted along the Risk Policy curve.



Risk Policy Concept + ABC Control Rules

Factors (5)

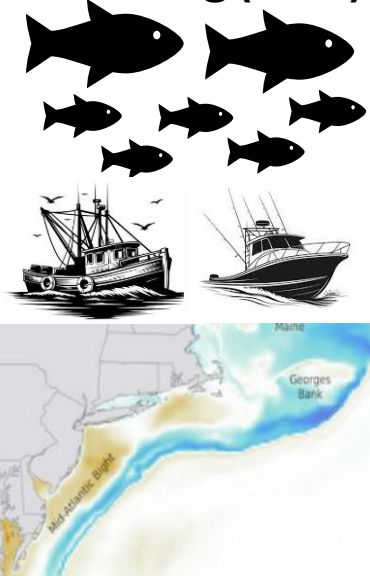


1. Global Weighting



Weights apply to all stocks

2. Scoring (data)

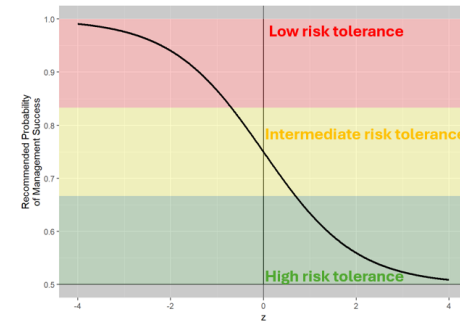


3. Z-Score

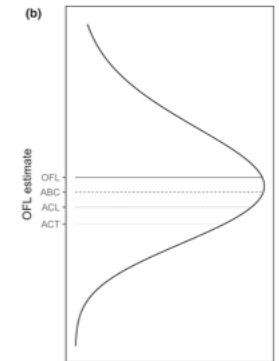
Combination of weights and scores.

$$Z = \sum (w_i s_i)$$

4. Risk Tolerance



5. Set ABC using Risk Policy + HCR (Example)



Risk Policy Updates

- Terminology → Risk Tolerance (High, Low)
- Factors → Fewer Factors (5), goals, scoring guidance
- Mechanics → Shape of the curve changed, scaling



Overview of Factors, Recommendations

- NEFMC initially approved 7 factors for use. At the January NEFMC meeting, the Council recommended advancing 5 factors for use in 2026.

	Factor	Council Recommendation	Keep for 2026?
Stock Status and Uncertainty	Biomass/Stock Status	Use in 2026. No changes proposed at this time.	✓
	Recruitment	Use in 2026. Adjustments to how factor is scored.	✓
	Assessment Type and Uncertainty	Remove for 2026 and catalogue. Revisit later this year, form sub-group.	✗
Climate and Ecosystem Considerations	Climate Vulnerability	Use in 2026. No change proposed at this time.	✓
	Fish Condition	Remove for 2026 and catalogue. Revisit later this year, support for ecosystem characterization factor.	✗
Economic and Community Importance	Commercial Fishery	Use in 2026. Changes to scoring questions, AP input.	✓
	Recreational Fishery	Use in 2026. Updates to scoring questions, AP input.	✓

Biomass (SSB) / Stock Status



- **Risk associated** with current productivity of the stock
- **Relationship to Risk:** As status (SSB/SSBMSY) increases, risk tolerance increases
- **Use in 2026**, no changes to scoring proposed
- **Directionality:** Two way, can increase and decrease risk tolerance

	← Lower Risk Tolerance				Higher Risk Tolerance →				
FACTOR	-4	-3	-2	-1	0	1	2	3	4
SSB / Stock Status	Below threshold		<75% but above Threshold		Neutral		Rebuilt		Well Above Target

Recruitment



- **Risk associated** with future productivity of the stock
- **Relationship to Risk:** As recruitment increases, risk tolerance increases
- **NEW** **Use in 2026**, changes to how factor is scored (quantiles)
- **Directionality:** Two way, can increase and decrease risk tolerance



FACTOR	-4	-3	-2	-1	0	1	2	3	4
Recruitment	Persistent Low Recruitment		Recent Low Recruitment		Average, No Trend		Recent Large Year Classes		Multiple Large Year Classes

Climate Vulnerability





- **Risk associated** with climate change
- **Relationship to Risk:** As climate vulnerability increases, risk tolerance decreases
- **NEW Use in 2026**, old guidance, plus PDT input for stock level scoring
 - Vulnerability score and directional effect of climate change (Hare et al)
- **Directionality:** One way, only decreases risk tolerance



FACTOR	-4	-3	-2	-1	0	1	2	3	4
Climate Vulnerability	High Negative Direction	High	Moderate, Negative Direction	Moderate	Low				

Commercial Fishery Characterization





- **Risk associated** with socioeconomic health of the commercial fishery
-  **Relationship to Risk:** As socioeconomic stress increases, risk tolerance increases
- **Use in 2026,**  changes to scoring questions, consider AP input
- **Directionality:** One way, can only increase risk tolerance



FACTOR	-4	-3	-2	-1	0	1	2	3	4
Commercial Fishery Characterization					Minimal stress	Low stress	Moderate stress	Elevated stress	High stress

Recreational Fishery Characterization



- **Risk associated** with socioeconomic status of the recreational fishery
-  **Relationship to Risk:** As socioeconomic stress increases, risk tolerance increases
- **Use in 2026,**  changes to scoring questions, consider AP input
- **Directionality:** One way, can only increase risk tolerance



FACTOR	-4	-3	-2	-1	0	1	2	3	4
Recreational Fishery Characterization					Minimal stress	Low stress	Moderate stress	Elevated stress	High stress

Questions?



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SSC use and interaction with Risk Policy

- The way the Scientific and Statistical Committee (SSC) interacts with the Risk Policy (and Acceptable Biological Catch (ABC) Control Rules) is still being developed, and several key decisions remain open.
- **Today:** Seeking input on how the SSC will use the Risk Policy when it is being applied quantitatively.
 - Ideas were brought to Risk Policy Working Group on March 9, 2026.
 - How the Risk Policy interacts with ABC CRs is a key question that is still being addressed. Consideration of where Data Updates are applied.
- Council direction on how its bodies will apply/use Risk Policy (PDT, SSC)



Straw person Concepts for SSC use

Topics for Discussion: Consider the full catch recommendation process.

- How/where does the SSC use/apply the Risk Policy quantitatively.
 - SSC recommendations consider Risk Policy and ABC Control Rules (distinct tools).
 - Full process is not known (new ABC CRs being developed in GF FW68).
- Incorporation of Data Updates (Risk Policy vs. ABC Control Rules)
- Council staff drafted a range of ideas that can be considered, intended to generate discussion.
 - Ideas for discussion. Can address the details of the how based on feedback.



Straw person Concepts

1. Strict Application – Was the process followed? Limited role.
2. Adjustments to Scores – Can adjust to scores of individual factor (impacts X-axis output, where you land on the curve).
 - a) Expert opinion for applying “recent information”

3. Adjustments to “Probability of Success” (unconstrained) – moving along the curve up or down. Assumes relationship with ABC CR.
4. Adjustments to “Probability of Success” but within Risk Zones. Allows for flexibility after Z-score generated.
5. Advisory ABC. Outputs from the Risk Policy with ABC CR are starting point only.

RPWG Interest



Risk Policy Concept + ABC Control Rules

SSC Use Options relative to Risk Policy Steps

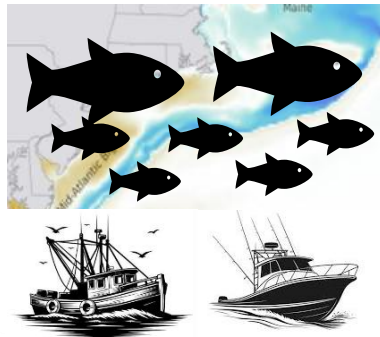
1. Strict Application of Process
2. Adjustments to Scores

NEW 2a. *SSC Expert Opinion*
Focus on Recent Information?

3. & 4. Adjustments to
“Probability of Success”

5. Advisory ABC –
starting point only.

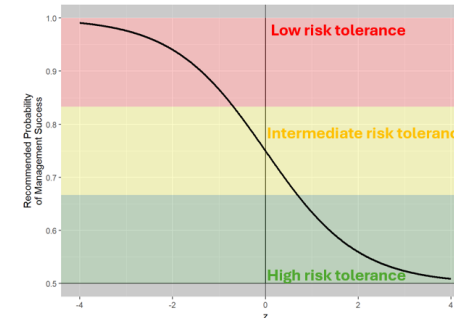
1. Global Weighting 2. Scoring (data) 3. Z-Score



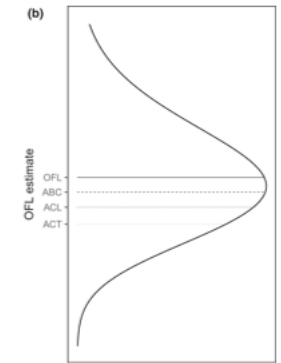
$$Z = \sum (w_i s_i)$$

Combination of weights and scores.

4. Risk Tolerance



5. Set ABC using Risk Policy + HCR (Example)



Outlook for 2026.



- Changes in June: Council approve revised Risk Policy Concept (Beta Phase) that will allow for quantitative applications of the Risk Policy. Some continued qualitative applications.
 - Council to complete global weightings (1 weight for each factor that applies to all stocks).
 - Revised Concept document, revised scoring guidance. New guidance on use, document mechanics.
 - Revised Risk Policy Matrix (as needed).
- Transitioning from sole use of “Alpha phase” in June (Risk Policy matrix + qualitative application).



Upcoming Meetings for Risk Policy:

- *March 9th – RPWG Meeting (webinar)*
- *March 30th – SSC Meeting (today)*
 - *Revised factors and scoring, SSC use*
 - *Mechanics of Risk Policy, worked example with an ABC Control Rule*
- *April 15th – April Council Meeting (Portland)*
 - *Same four topics as SSC meeting, plus SSC input*
- *May – TBD – RPWG Meeting*
- *June 23rd-25th – June Council Meeting – Approve Concept and Council Weightings*



Questions?



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