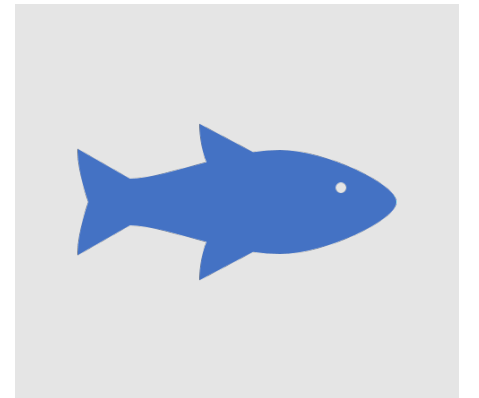


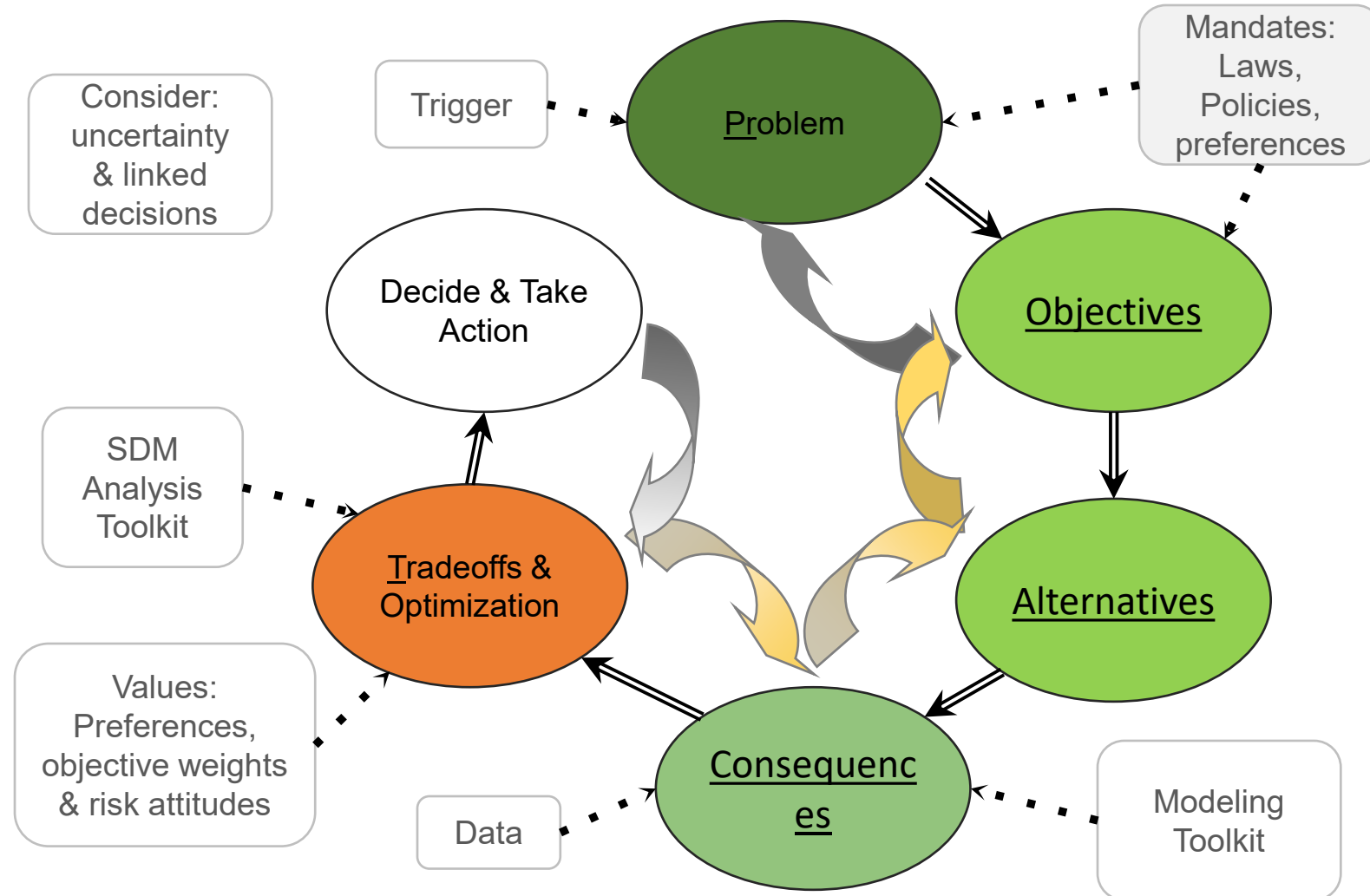
Supporting the Future of the Summer Flounder Fishery



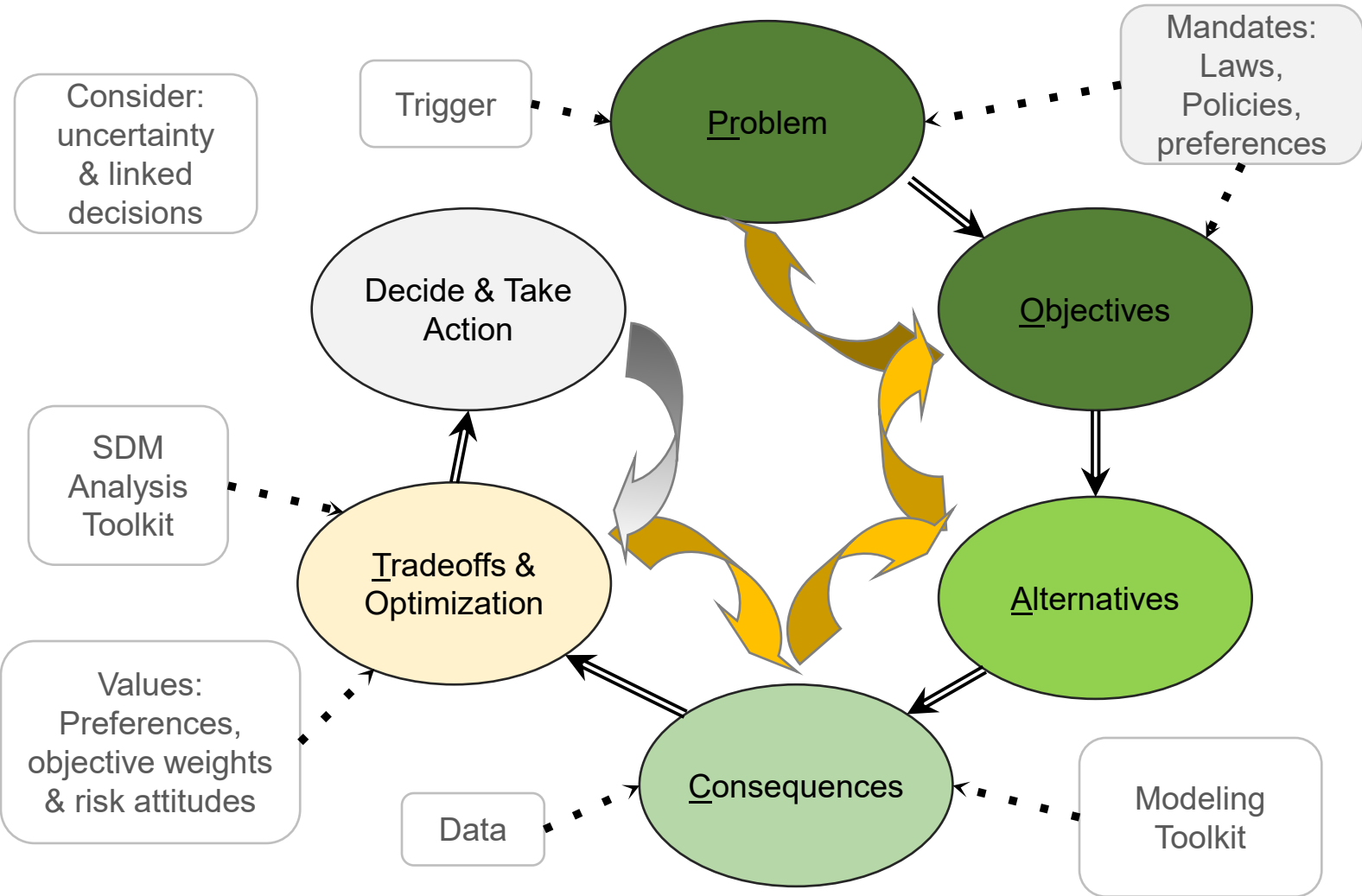
Workshop 4

Process Check-in

Where we are



Where we're going



Process

Expectations – Quoted from the Agenda document

- **Inquiry-based process**
- **Cooperative process**
- **Evidence based results**

- Management strategy evaluation is more of an **inquiry-based process**, one of imagining the world as we would like it to be and exploring ways to get there.
- The process will be more effective if we all come into it with an open mind to **exploring the set of possibilities, helping each other to ask and answer these what if questions** and **let the model** of the system we create together **inform the outcomes** of those possibilities.
- the intent of the process is to **inform decision making rather than to produce a decision**
- *Impartial Dialogue: **We are not pursuing a preconceived outcome.***

At the outset, all outcomes are on the table. We will **explore possible outcomes or decisions without advocacy**, **letting the process reveal the strategies that achieve our objectives.**

Products

- A set of objectives for the fishery and their importance
- Identify the relative performance of proposed management strategies
 - May identify a recommended strategy

Process

Open Dialogue: We will maintain a public agenda, convening the group to engage in authentic open communication.

Generous Dialogue: We will ask open questions, offer our own stories and ideas, and listen to one another with generosity.

Impartial Dialogue: We will not pursue a preconceived outcome. At the outset, all outcomes are on the table. We will explore possible outcomes or decisions without advocacy, letting the process reveal the strategies that achieve our objectives.

Equitable Dialogue: We will have a single conversation — one voice at a time, with roughly equal time to share. We will each step up or step back as needed. Each person has an equal opportunity for their voice to be heard, valued, and considered.

Growing Dialogue: We will lean into learning and exploration, welcome diverse opinions and perspectives, and support mutual growth and understanding.

Courageous Dialogue: We will bring our heads and hearts to this space, holding hard truths while looking towards what is possible and how we can best contribute.

Process

Addressing Differences of Opinion

1. Seek consensus
2. Proceed along multiple paths
 1. Explore 2 or more sets of inputs
 - Objectives
 - Models
 2. Prototyping & parking lot
 - Start simple
 - Expand as time permits
3. Facilitator decision – **speak to me**
 - Parking lot
 - Documented in notes and report
4. Working Group decision
 - Modeling team
 - Council representation
5. Council decision

Workshop 4 interaction

Raise Hands to speak (will drop if unnecessary)

- Will drop if unnecessary

Live Notes

- [Link to Summer Flounder MSE Notes](#)

Process Summary

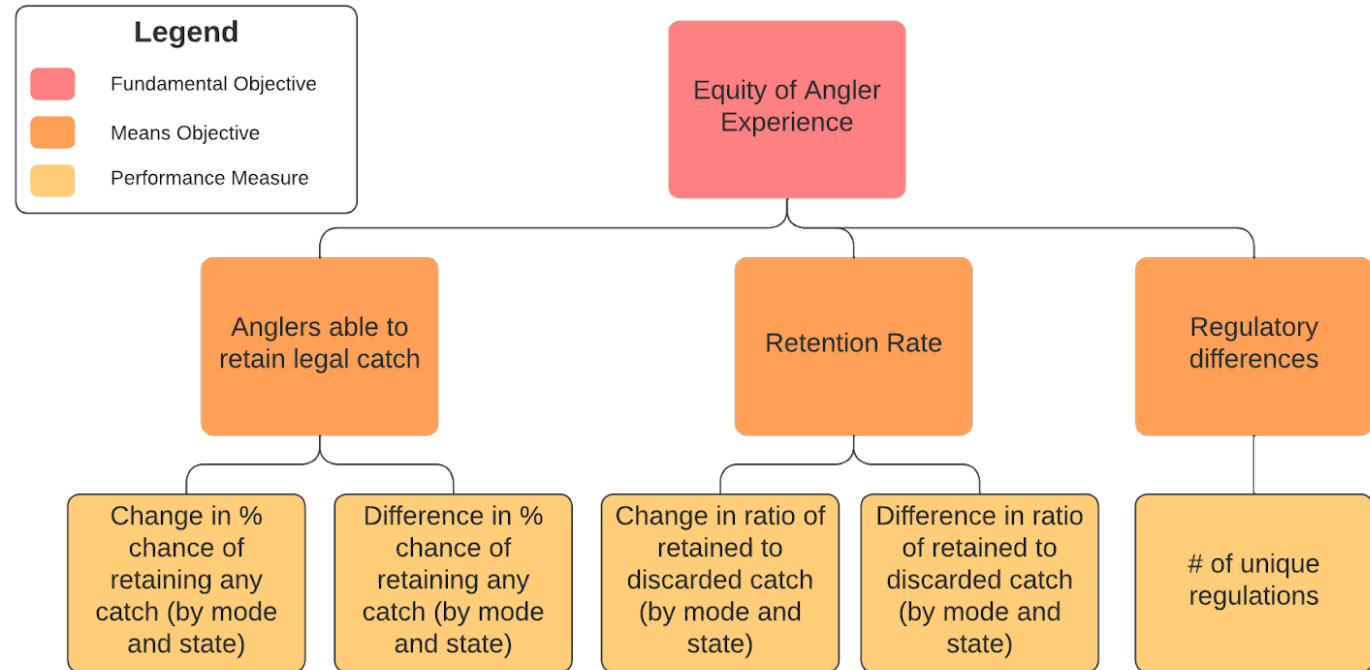
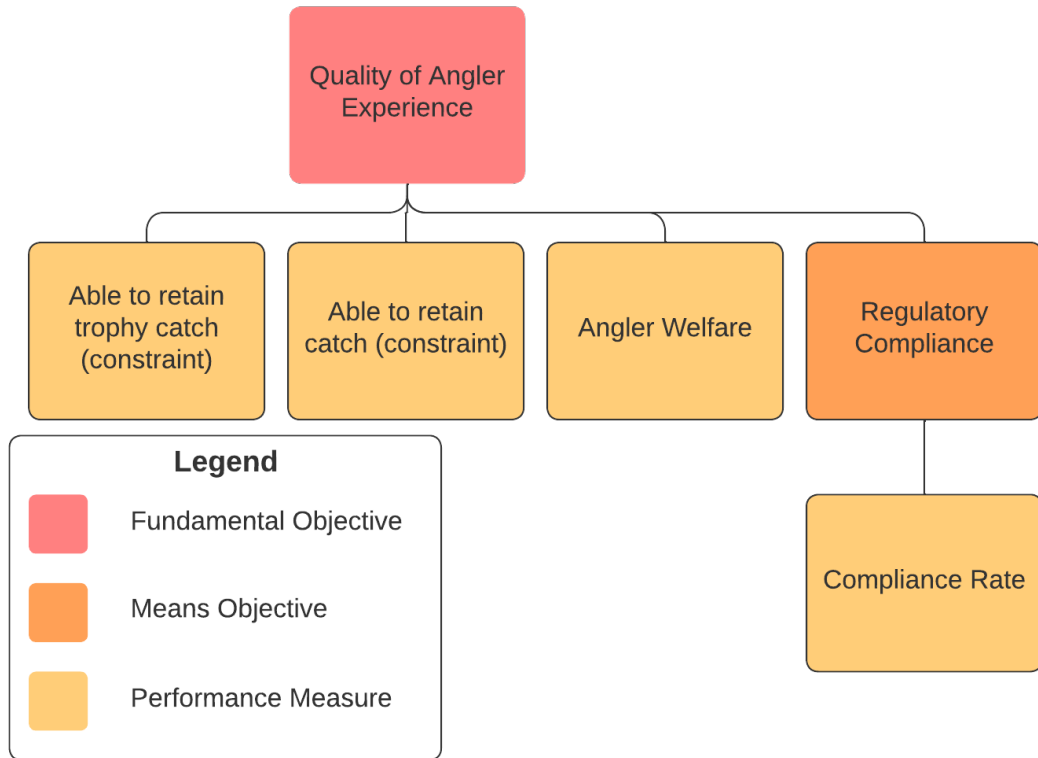
- Council – what is MSE presentation
- Public survey – 800 responses
 - Problem Framing, Objectives and Alternatives
- 3 Regional workshops
 - Survey follow-up
 - Process overview
- Create teams
 - Working Group – process and technical feedback
 - Modeling Team – consequence modeling team
 - Core group – stakeholder input group
- 3 Core Group workshops
 - Problem framing and objectives
 - Objectives and alternatives
 - Metrics, modeling overview – very preliminary results, tradeoffs
- In-person workshop May 2&3 (we're here)
- Digital correspondence
- Webinar June 1st

Decision Statement

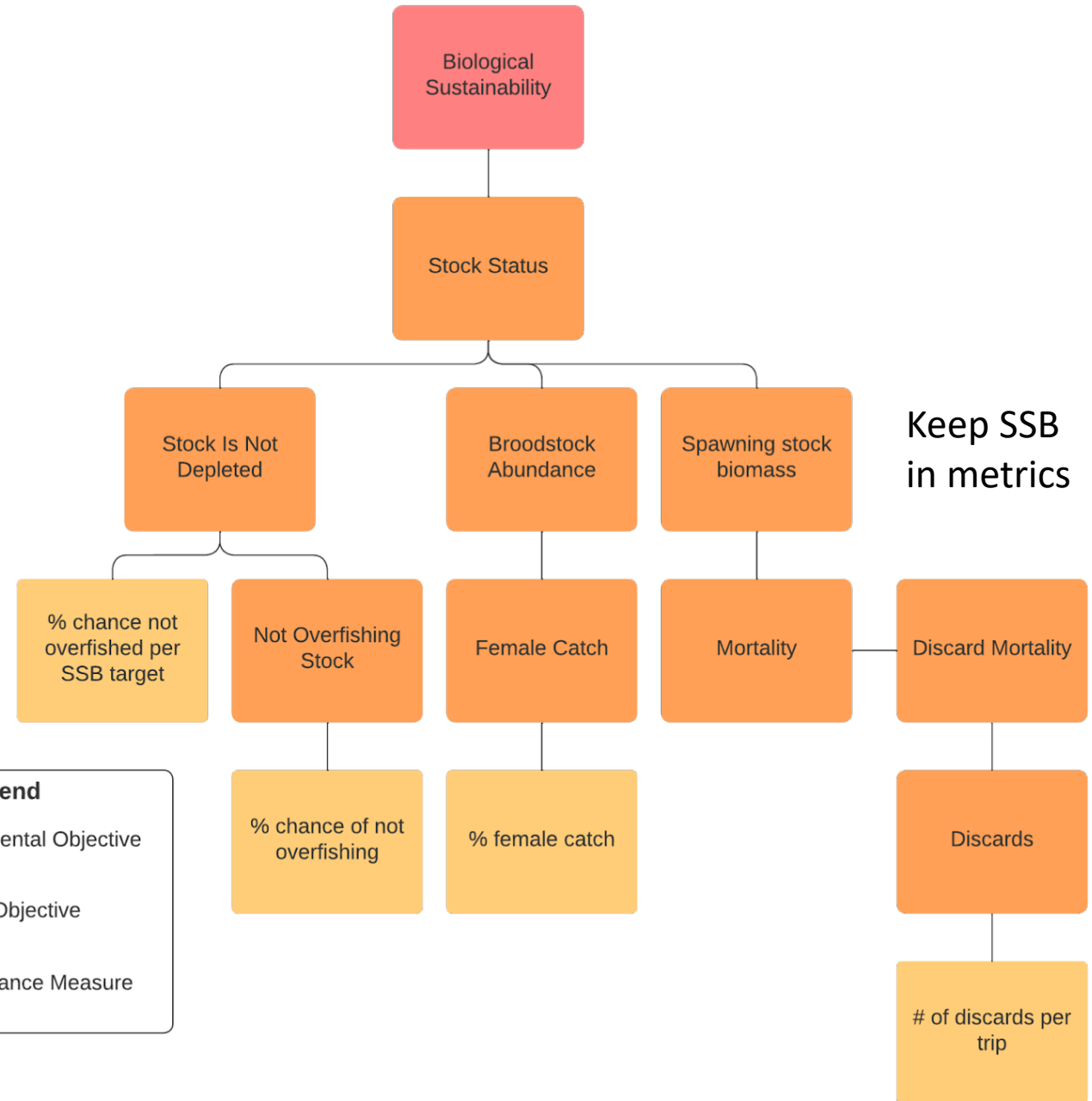
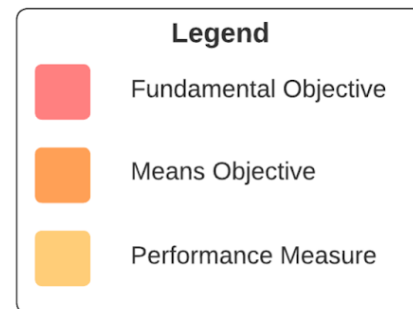
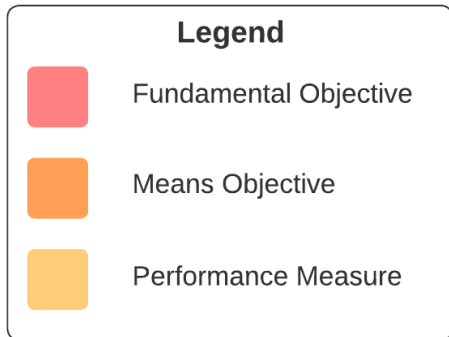
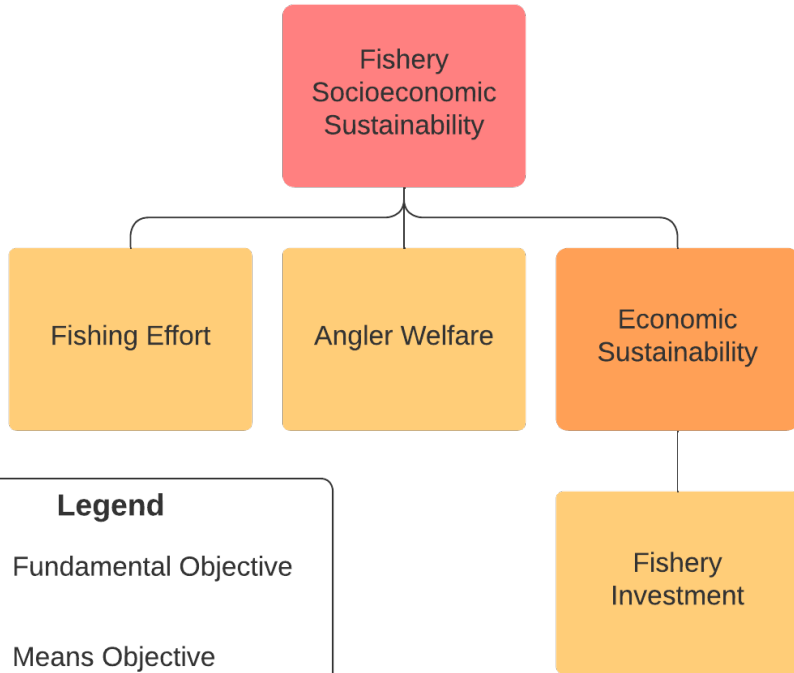
Decide how to meet the challenges of satisfying the diverse groups of anglers engaged in the recreational fluke fishery by addressing discarding, discard mortality, and data quality, while allowing for meaningful access to the fishery, accounting for temporal and spatial differences in recreational mode availability, considering the impacts of size and male to female take ratios, and achieving equity in recreational modes given the bounds of what is viable within the regulatory framework.

Problem Definition Component	Status
Trigger	Ecosystem Approach to Fishery Management Process Concerns expressed by the recreational fishing community
Decision Makers	Mid-Atlantic Fishery Management Council Atlantic States Fisheries Management Council
Stakeholders	Different fishing practice communities (modes) Others impacted by the summer flounder fishery
Classify Problem	Multiple objective trade-off (biological vs fishing vs equity vs socio-economic objectives) Portfolio (regulation combinations) Prediction/risk (discard impact)
Scope	Summer flounder management unit (NC to MA) Decision in summer of 2022 Consequence timeline?
Linked Decisions	Allocation amendment Commercial fishery regulations Recreational reform initiative (link)
Objectives	Stock sustainability Quality of angler experience Equity of angler experience Socioeconomic fishery sustainability
Alternatives	Regulate fishing practices <i>Encourage better fishing practices</i> <i>Manage ecosystem</i>
Key Constraints	No changes to commercial allocation No commercial regulation changes Modeling resource availability Project time-line

Angler Objectives



Fishery Objectives



Alternatives - Strategy Elements



Also discussed: Discarding regulations, Enforcement, Education, Gear regulations, Fishing incentives, Habitat management, Data collection, Dynamic regulations, and Mode regulations

Alternatives

Options with Current Regional Breakdown

1. Status quo – using 2019 regs as baseline
 1. Most states regs have remained relatively similar, exception is N.C. whose season in 2020 and 2021 was reduced
2. Keep existing regulations (possession and season) for each state, but drop the minimum size by 1 inch (not going lower than 16 inches) within each state

Options with Different Regional Breakdown

3. 3 region option (MA-NY, NJ, DE-NC – same as regions used in black sea bass) – trying to minimize regulatory complexity, increase equity, and allow for some modifications from current regs
 1. MA-NY: 4 fish @ 18" May 1-Sept 30
 2. NJ: 3 fish @ 17" May 15-Sept 15
 3. DE-NC: 4 fish @16" All year

Coastwide Options

4. 1 fish @ 14" and season from May 15-Sept 15
 1. Lower bounds on possession limit and size limit, align with commercial minimum, increase potential to take home a fish
5. 3 fish @ 17" and season May 1-Sept 30
 1. Somewhat in the middle of all state regulations now (components in some states more liberal, some more restrictive) and within range of non-preferred coastwide measures
6. 2 fish @ 16"-19" (ie., up to 18.99 inches) and 1 @ 19" and greater and season from May 15-Sept 15
 1. Interest from stakeholders and states, allows for greater opportunities for small fish to help increase opportunities across modes, larger slot size to address some TC comments, allow for any size above 19" to provide for trophy fish but lower possession limit

Slot Limit Option

7. 3 fish at 16"-20" with season of May 15-Sept 15
 1. This could also be considered under the Coastwide options since applied to all states, but kept separate to highlight difference. Interest in slot limits, done in other fisheries. Lower size limit to increase opportunities. Would not include a trophy fish, although interest from stakeholders

Other Considerations (lower priority, if time/feasible)

8. Season implications – run status quo option but open season for all states of April 1-Oct 31
 1. Interest in modifications to the season to allow for greater overlap with other fisheries where fluke may be discarded, increased opportunities/angler satisfaction

Consequence Modeling

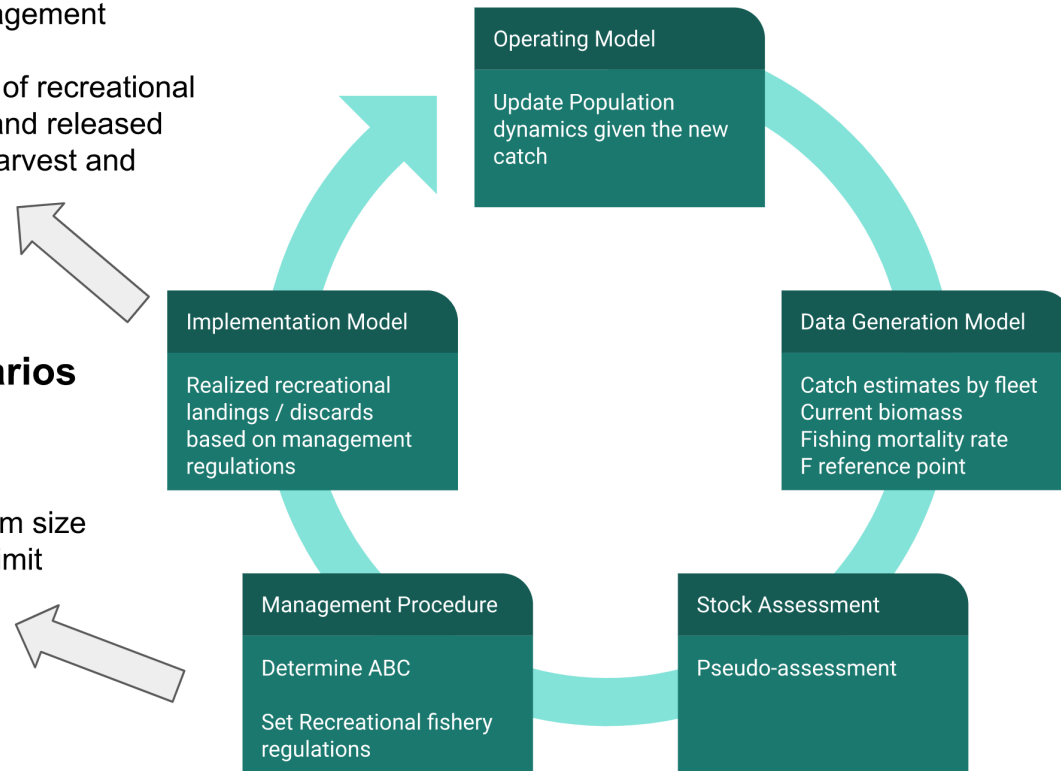
MSE: Compare performance of alternative policy options, quantify tradeoffs among objectives

Angler behavior model

- Use operating model length structure & management regulations
- Predict numbers of recreational trips, #s of kept and released fish, & sizes of harvest and releases

Management scenarios

- Status quo
- Coastwide regs
 - 14" minimum size
 - 2 fish bag limit



Each advice time-step...

Consequence Modeling

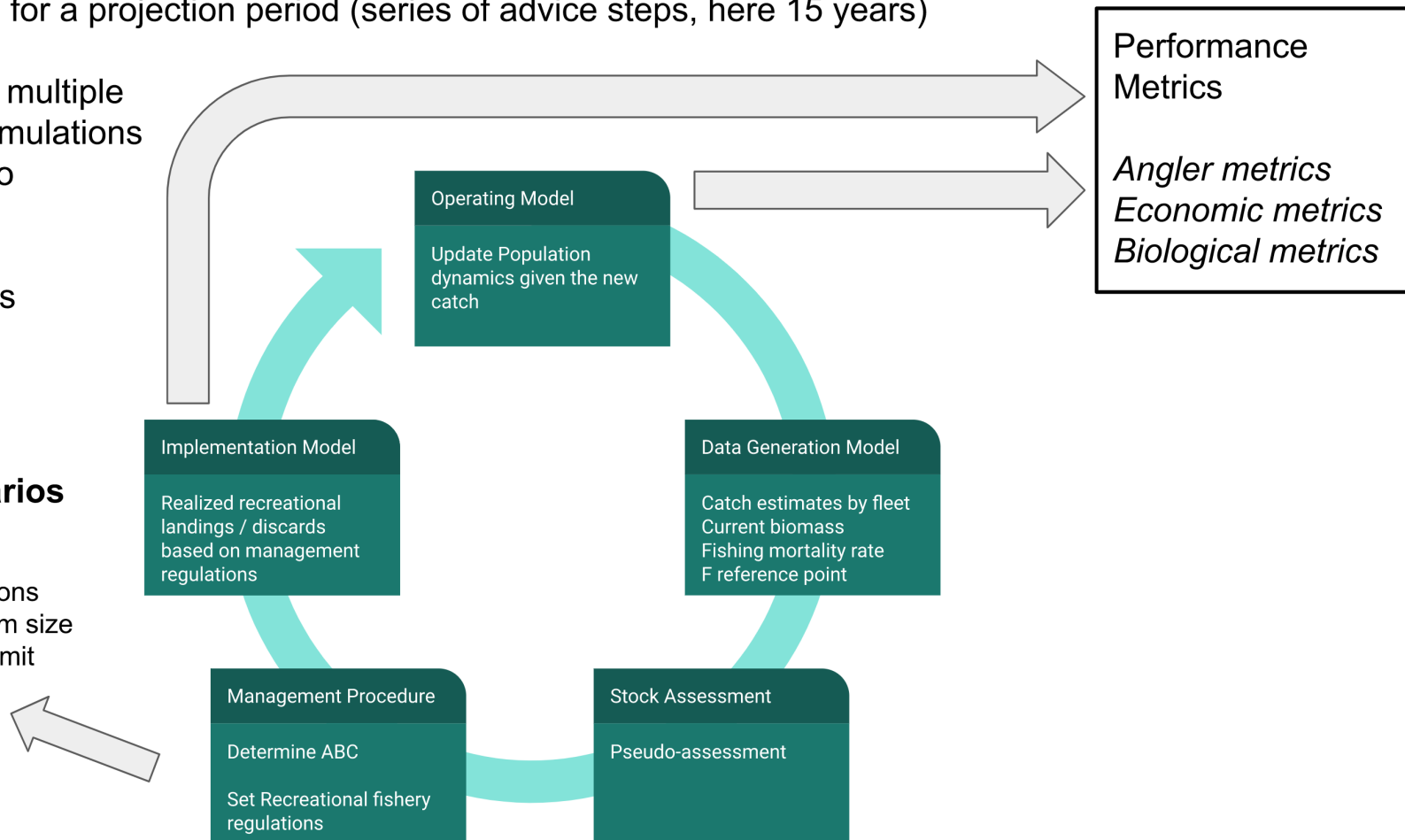
Repeat annual loop for a projection period (series of advice steps, here 15 years)

Repeat whole thing multiple times for multiple simulations under each scenario

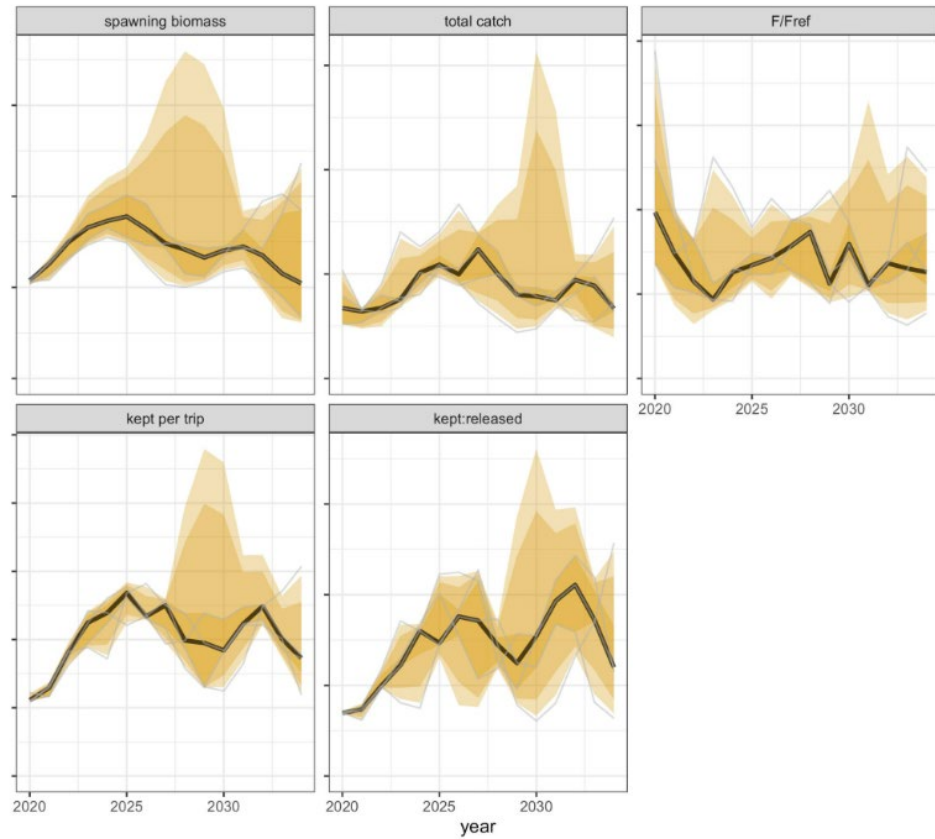
Compute and save performance metrics

Management scenarios

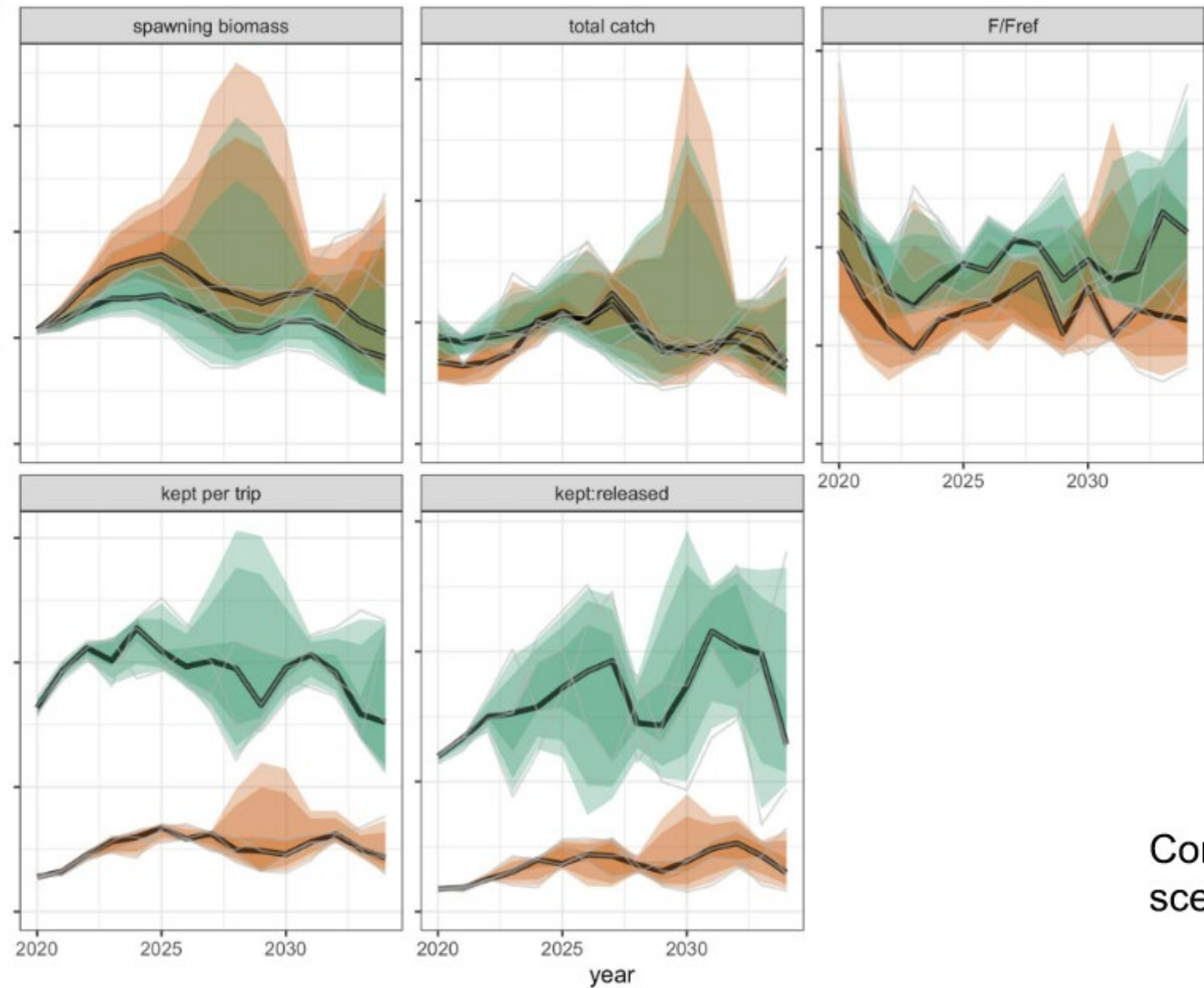
- Status quo
- Coastwide regulations
 - 14" minimum size
 - 2 fish bag limit



Consequence Prediction Outputs



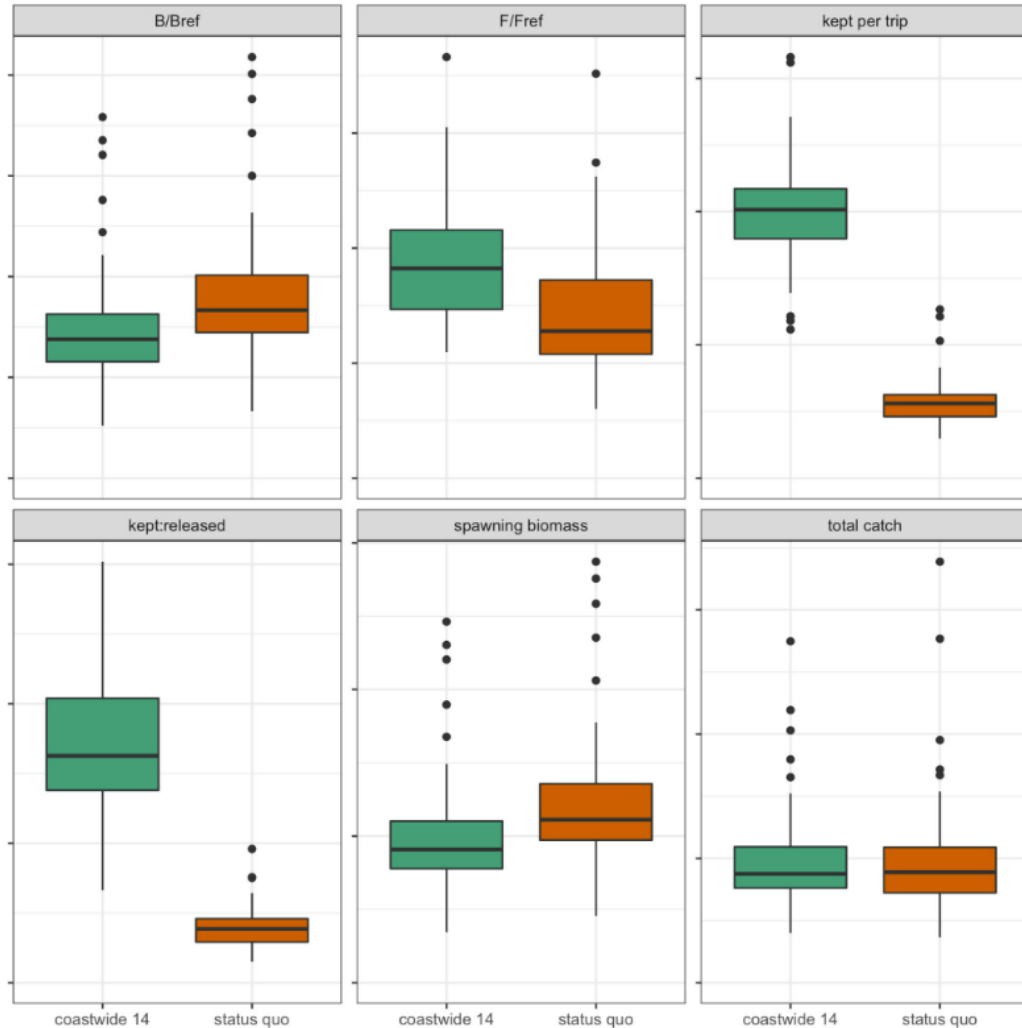
Summary distribution of the set of simulations for the status quo scenario



Compare among scenarios

coastwide 14 status quo

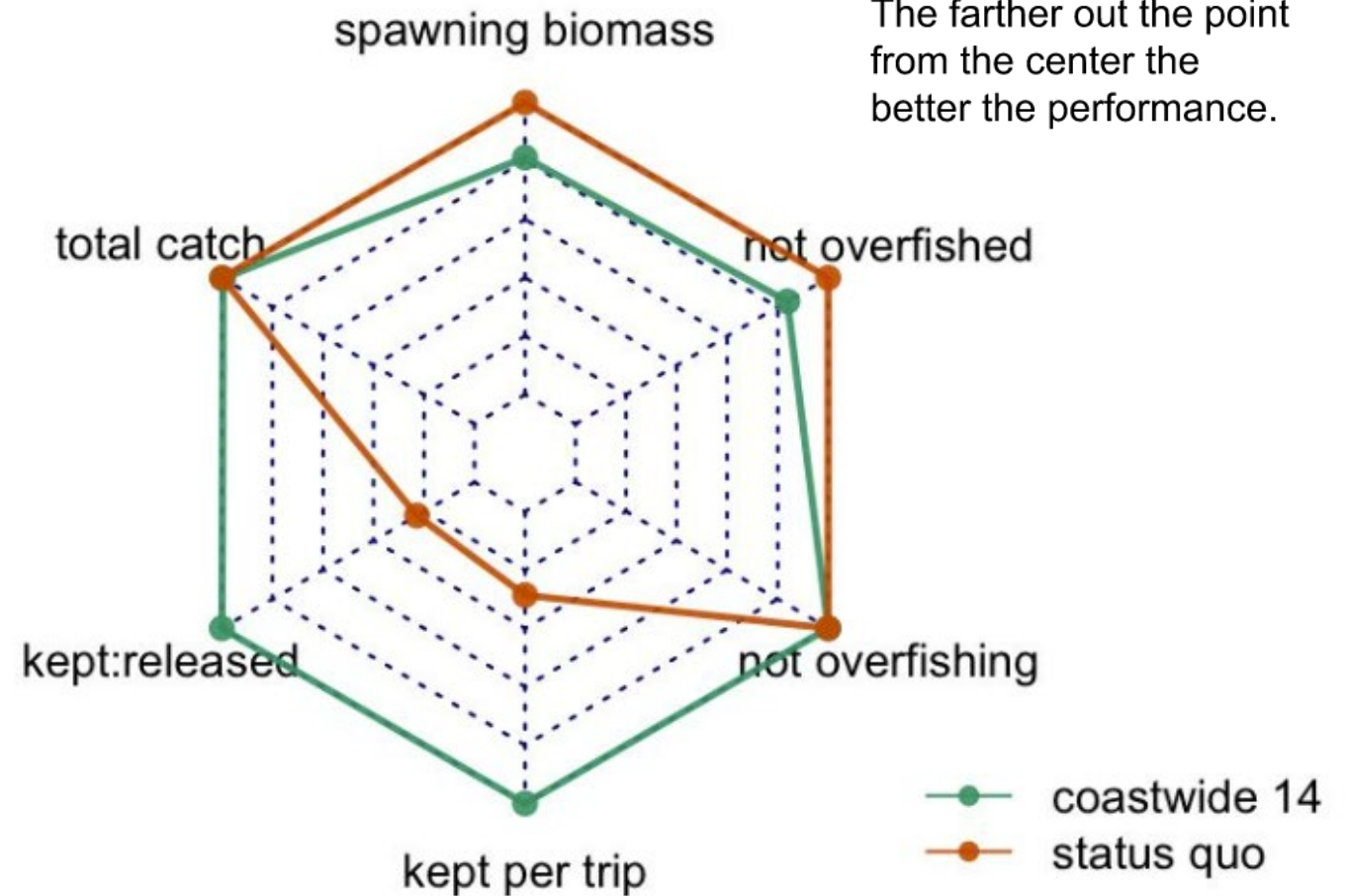
Consequence Outputs



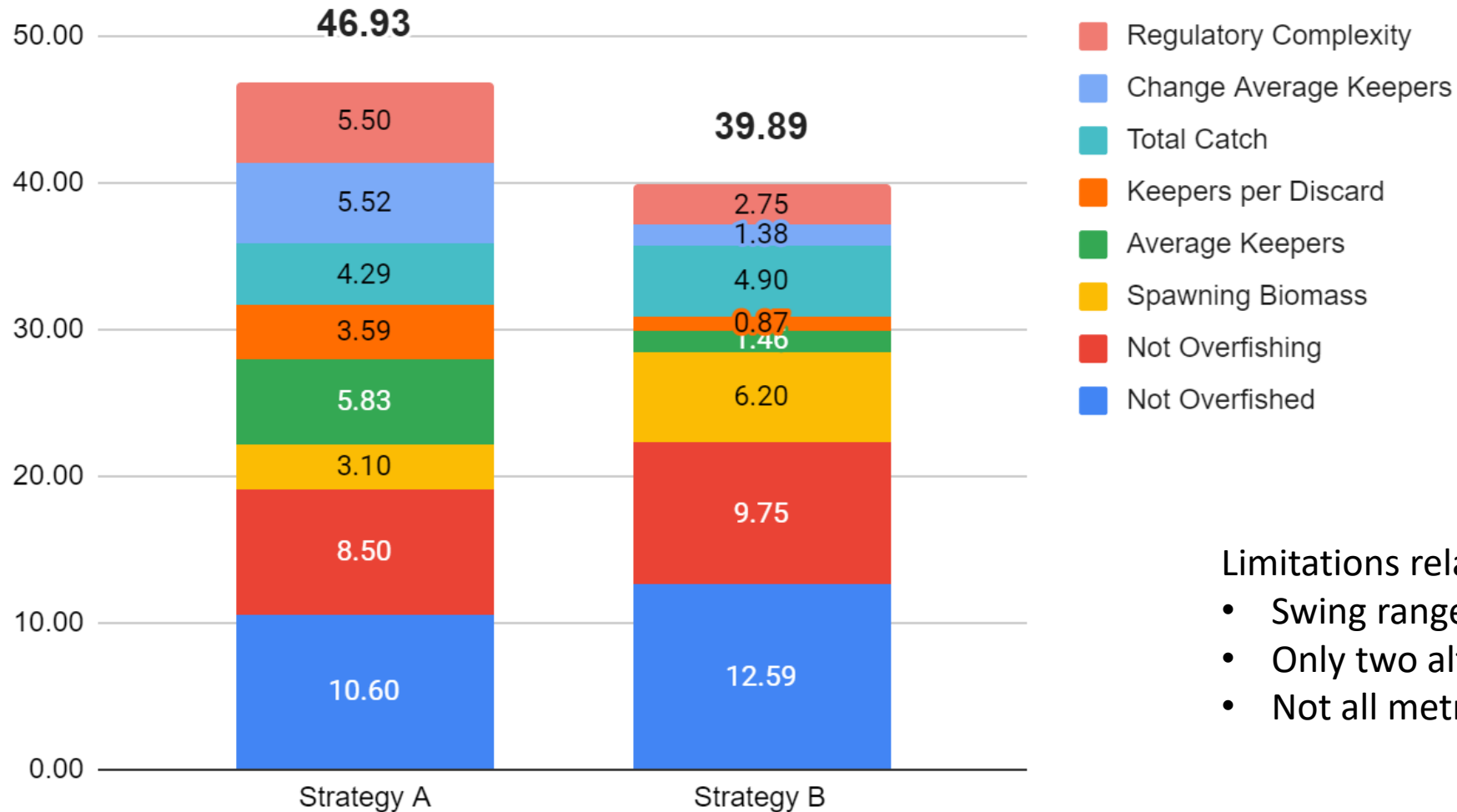
Visualizing multiple measures together to view tradeoffs

Here a single value for each performance metric is plotted for both scenarios.

The farther out the point from the center the better the performance.



Tradeoff Analysis



Limitations relative to full analysis:

- Swing ranges likely to change
- Only two alternatives
- Not all metrics produced

Re-introductions and check-in

- Tell us something new about yourself
- Remind us why you said yes to participating in this process
 - What do you hope to get out of the process
- How are you feeling about our process?
 - Thoughts on process to date
 - Anything you'd like to focus on
 - Opportunity to share what's on your mind

Reactions to Lou's Model Presentation

- Form a group of three & share your comments and questions regarding the model (10 min)
- Elect a group speaker
- Report your comments and questions for the full group
- Full group discussion

Day 2 Check-In

- Did you find anything interesting in Philly, or anything you hope to do before leaving town?
- Day 1 reflections:
 - Insights or highlights
 - Anything weighing on your mind

Gradient of Agreement Scale

1 - Full endorsement

- I really like it

2 – Not perfect, proceed

- It's good enough
- I have a minor point of contention, changes aren't needed
- Carry on

3 - Support w/ reservations

- Not my preference, but I can live with it

4 - Abstain

- I'm ambivalent
- This doesn't affect me

5 - Needs more discussion

- I don't understand the issue
- I'm not convinced

6 – Grudging acceptance

- It's not great, but I don't want to hold up the group
- I disagree, but won't get in the way

7 - Serious disagreement

- I'm not on board with this
- Don't count on my assistance

8 - Veto

- I block this proposal

Final hour and ½ agenda

- Weighting exercise
 - Provide weights and update
- Objectives & Metrics – modeling team interest
 - Revision to model outputs
 - Anything not captured in model outputs
- Communication to Council
 - What do you want the Council to know about this process?
- Scenarios – modeling team interest
 - Have we settled on a full list
- Next Steps - Facilitation Team
 - Plan remainder of the process

Two other metrics that came up

- Catch relative to RHL?
- Kept + released*discard mortality rate?