



**NOAA**  
**FISHERIES**

# Implementing an Assessment Prioritization Process

NOAA Fisheries  
August, 2015



**NOAA FISHERIES**

# Overview

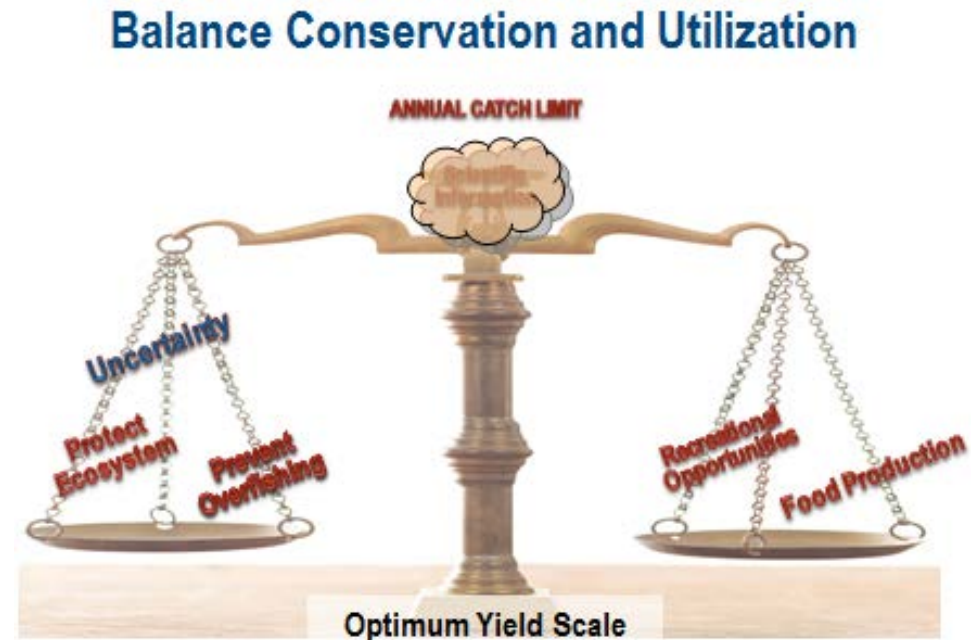
- History of Prioritization
- Prioritization Goals
- Overview of Prioritization
- Role for Regional Partners

# Prioritization History

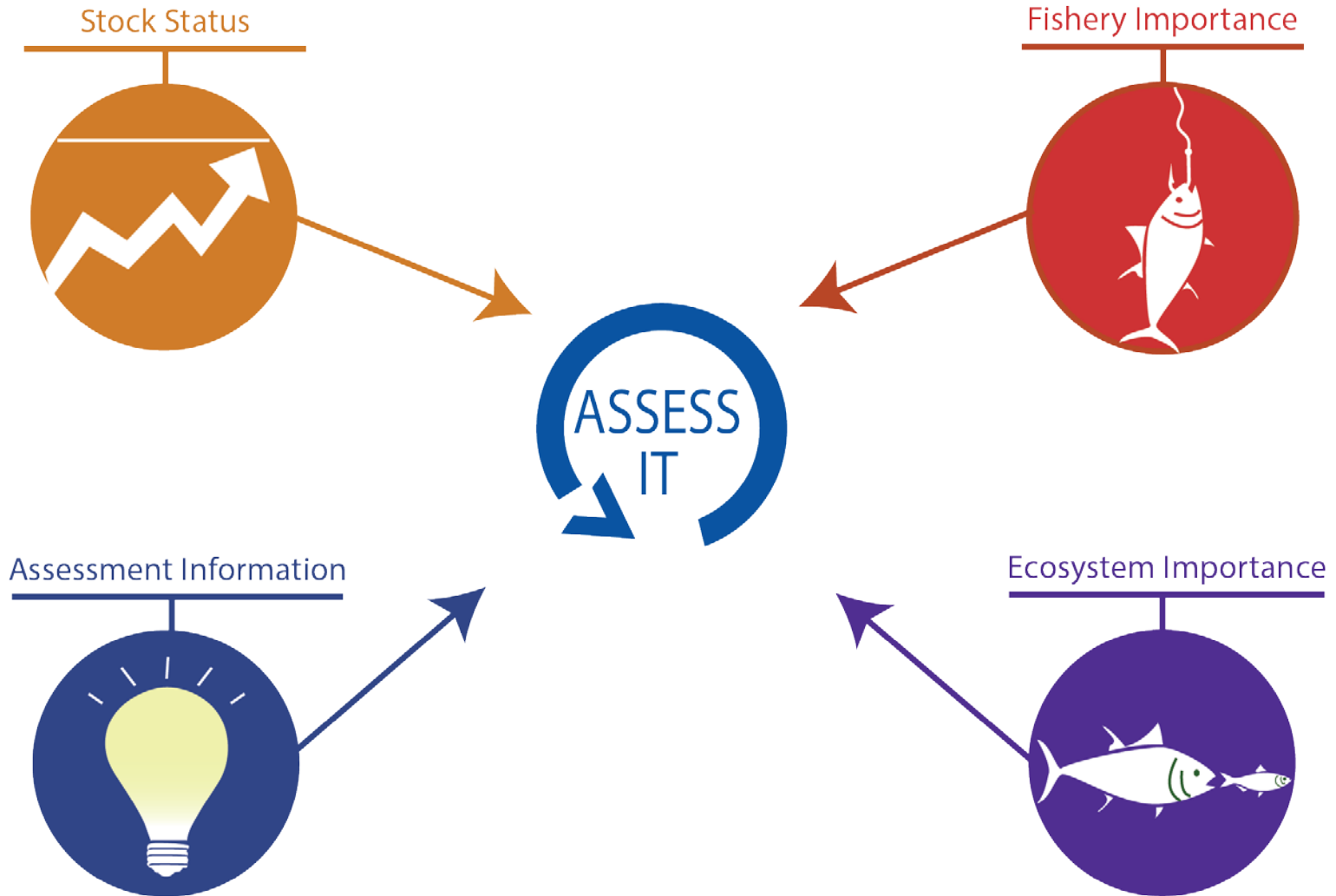
- 2011: Initiate development to respond to budget inquiries
- 2013: Prioritization need discussed in proposed Magnuson-Stevens Act reauthorization
- Feb 2014: Draft process presented to Council Coordination Committee (CCC) and available for public comment
- June 2014: Public comments summarized for CCC
- Sept 2014: Government Accountability Office report endorses draft plan
- June 2015: Process revised based on comments and presented to CCC
- August 2015: Prioritization document released

# Goal: Support Management of Sustainable Fisheries

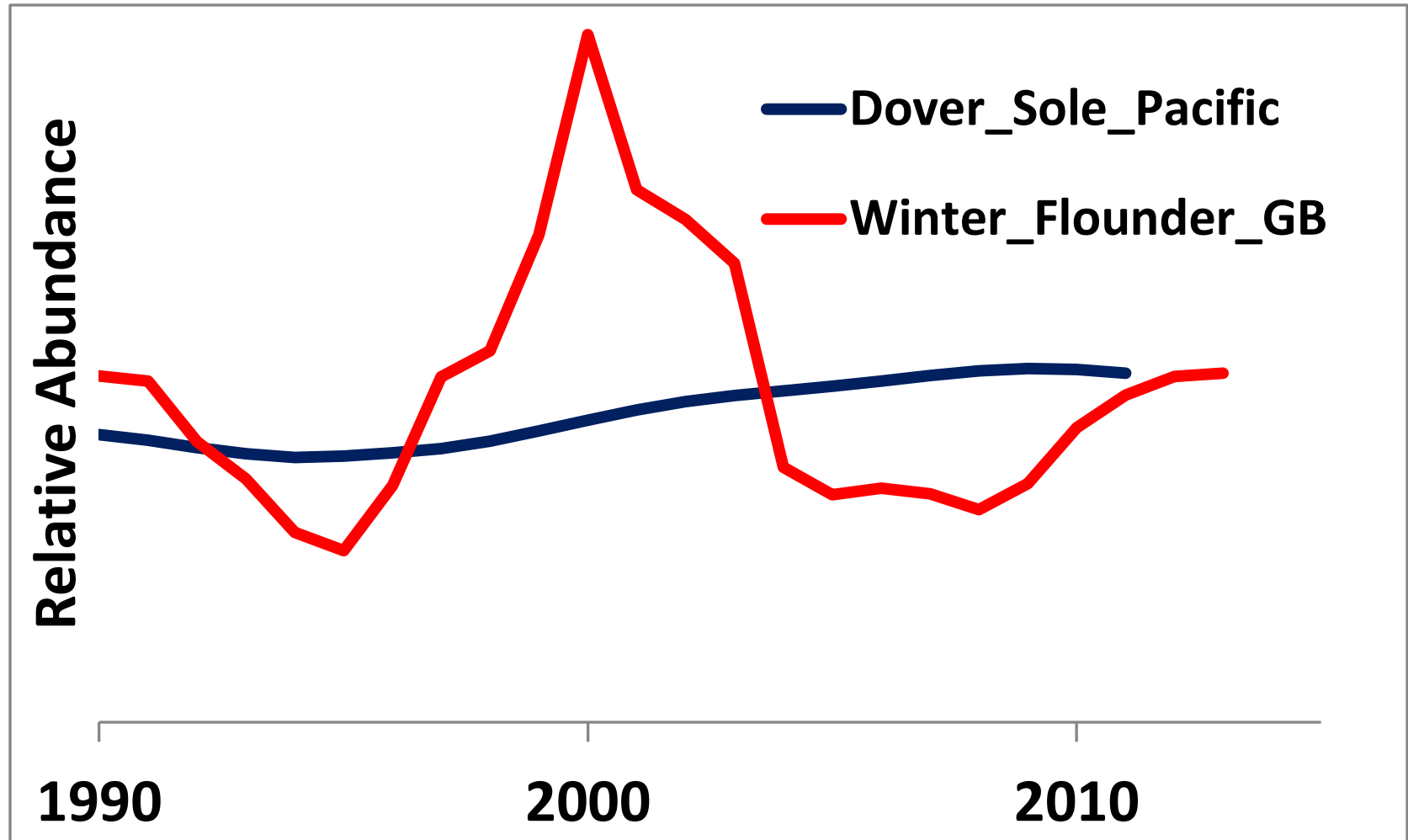
- Capacity limits the number and complexity of assessments that can be completed each year
- How complete does a stock's assessment need to be to provide management advice?
- How frequently should assessments be updated?



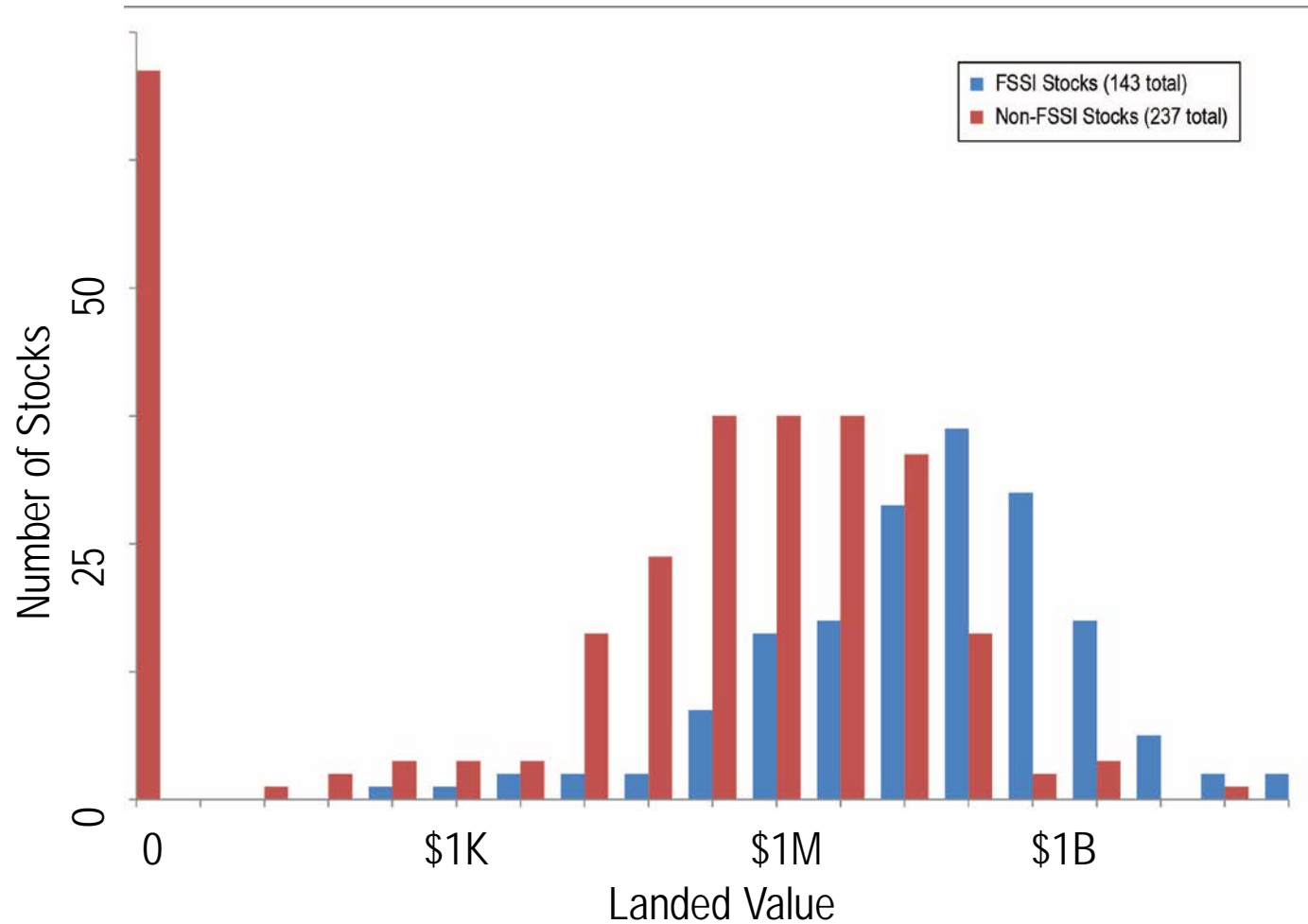
# Which Stocks Need Assessments?



# Fast Changing Stocks Need More Frequent Assessments

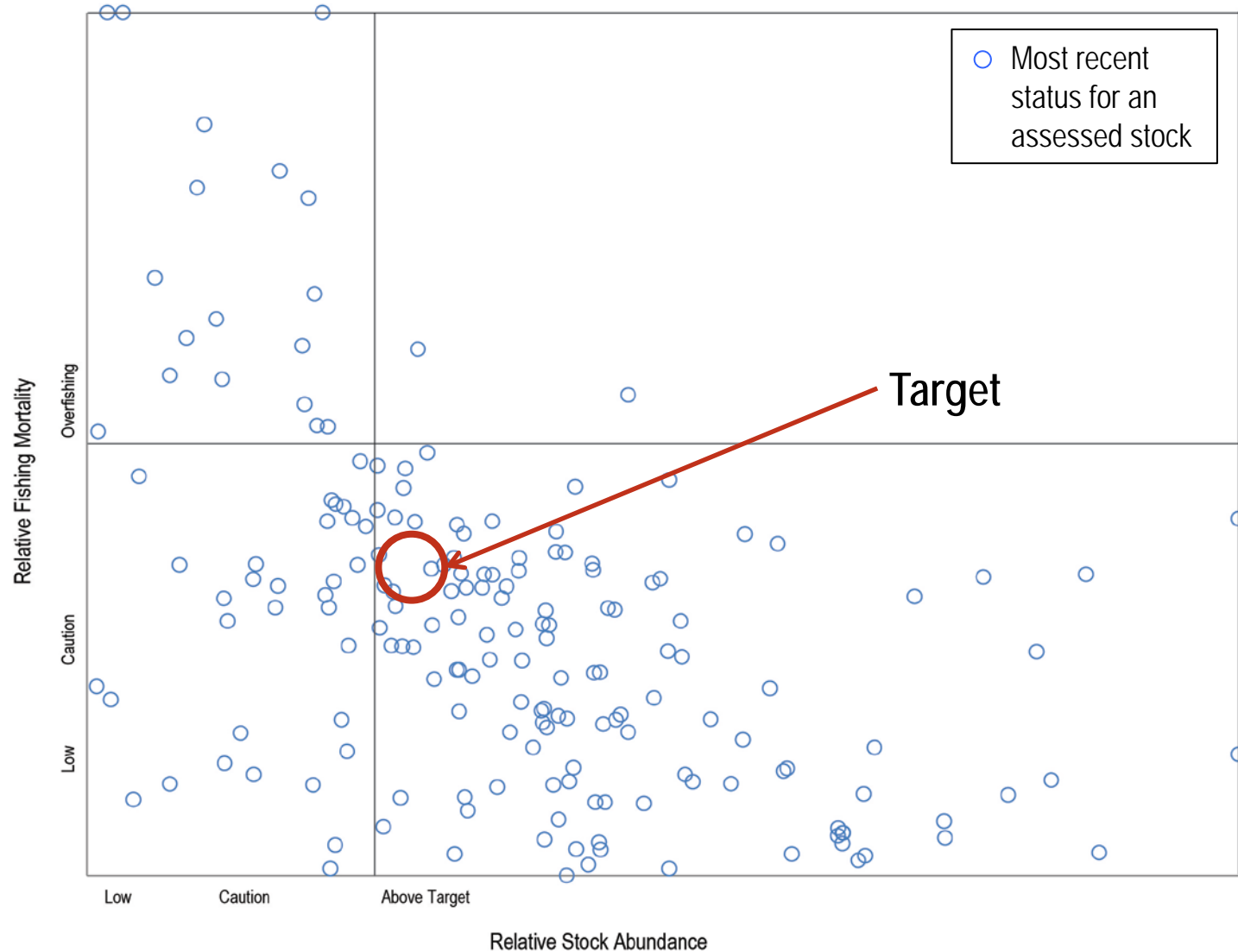


# Importance: Large Range of Commercial Values



*FSSI – Fish Stock Sustainability Index. Data are for stocks with Annual Catch Limits*

# Status: Which Stocks are Pushing Limits?

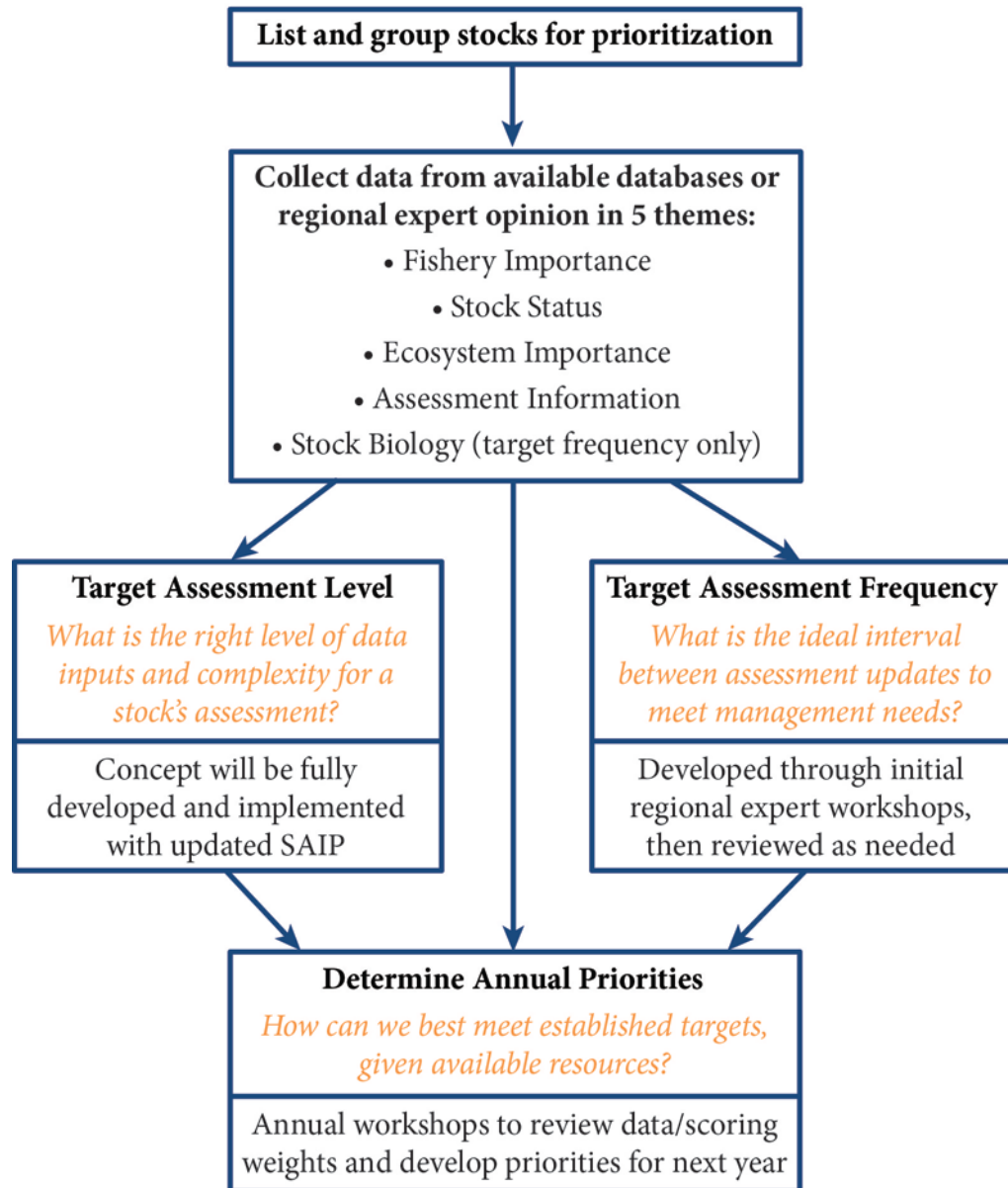




# Why Prioritize?

- All managed stocks need some level of assessment
- Some stocks need higher level or more frequent assessments
- Costs may exceed benefits for some low-valued stocks
- Goal is a prioritized portfolio of right-sized assessments for each stock
- Achieved through facilitation and standardization of each regional prioritization process
- Nationally, gaps in capability will be more apparent and can be considered for future investments

# Regional Assessment Prioritization



# Prioritization Scoring

	FACTOR	Source	Raw Scores
<b>FISHERY</b>	Commercial Fishery Importance from landed value	SIS_ACL	0 - 5
	Recreational Fishery Importance from regional input	experts	0 - 5
	On rebuilding plan	SIS	0 - 1
	Importance to Subsistence	experts	0 - 5
	Constituent Demand/choke stock	experts	0 - 5
	Non-Catch Value	experts	0 - 5
<b>STOCK</b>	Relative Stock Abundance	SIS	1 - 5
	Relative Fishing Mortality	SIS	1 - 5
<b>ECO</b>	Key role in food web	experts	1 - 5
<b>ASMT</b>	Unexpected Changes in Stock Indicators	experts	0 - 5
	Relevant New Data Type or Other Information Becomes Available	experts	0 - 5
	Assessment Years Overdue Relative to Target Frequency	SIS	0, 1 - 10

*NOTE: Commercial Fishery Importance score is calculated by starting with the log(ex-vessel value) and then rescaling to have a maximum regional score of 5*

# How Will It Work?

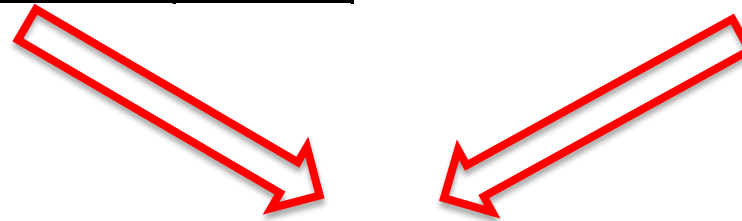
## EXPERTS

	Stock 1	Stock 2	.....	Stock X
Factor 1				
Factor 2				
.....				
Factor 12				

Stock Scores for each Factor

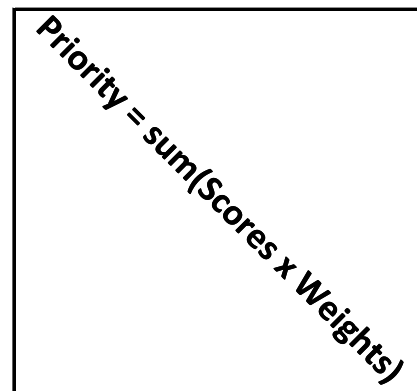
## MANAGERS

Factor 1	weight
Factor 2	weight
.....	weight
Factor 12	weight

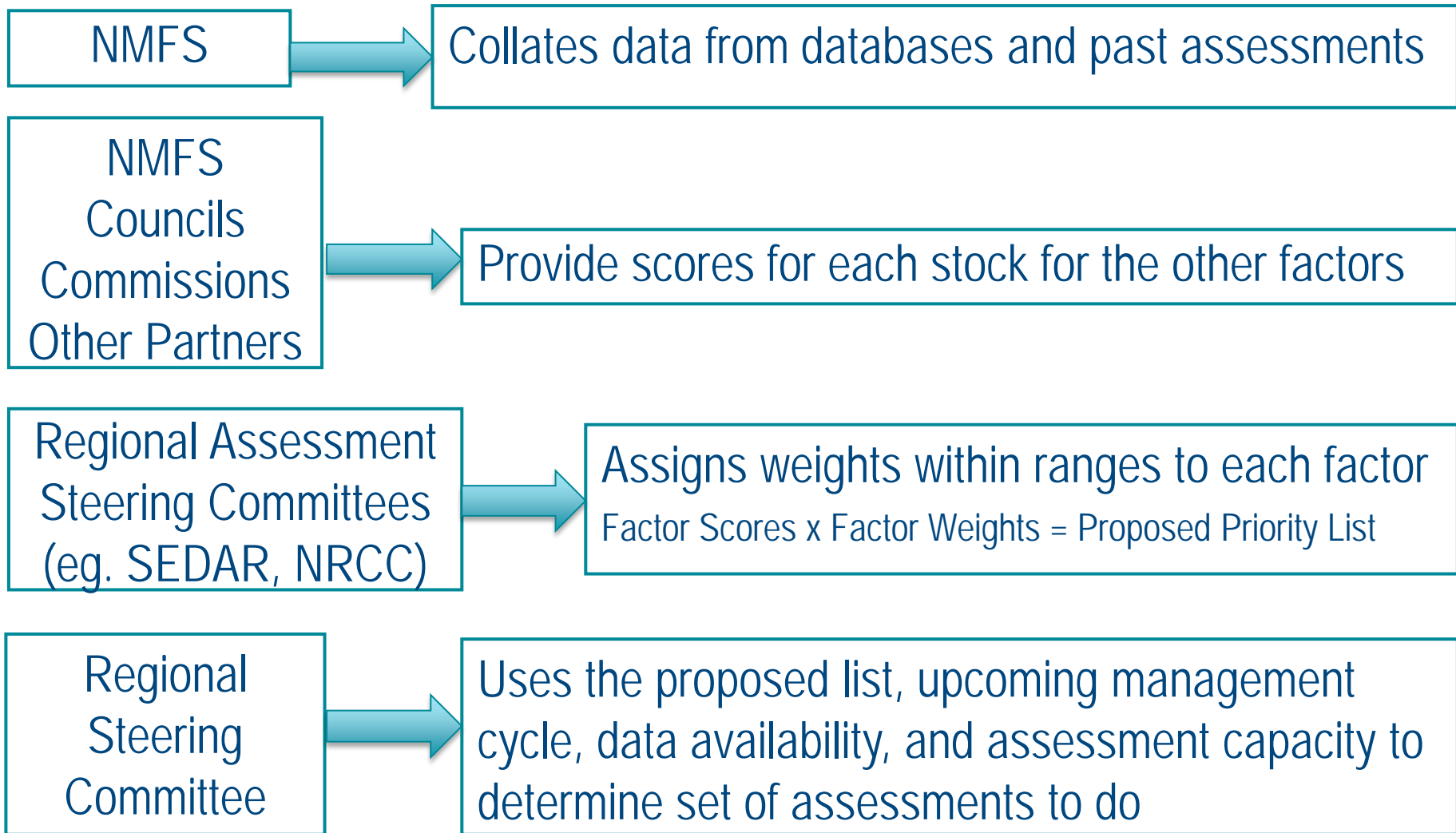


## Sorted List

Stock Hi  
Stock Mid  
.....  
Stock Lo



# Roles in Prioritization Process



# Next Steps for Each Region

1. Define stock list for each prioritization group
2. Develop ecosystem importance scores; piggyback on climate vulnerability?
3. Develop recreational importance scores
4. Develop scores for the additional fishery factors
5. Obtain access to stock indicator data
6. Work with managers to assign factor weights

- *Envisioned as needing several workshops/dialogues, with Center and other regional scientists, potentially the Plan Teams*
- *Bigger effort in first year; lesser annual maintenance*

# Future Directions

- Management Strategy Evaluations for select stocks can better inform setting of target assessment level and frequency
- Gaps between current and target assessment levels, and the number of overdue assessments informs future investments in capacity
- The simple “factor score x weight” approach evolves to calculate a portfolio of assessments that achieve the greatest overall benefits