

# ECOSYSTEM & SOCIOECONOMIC PROFILES

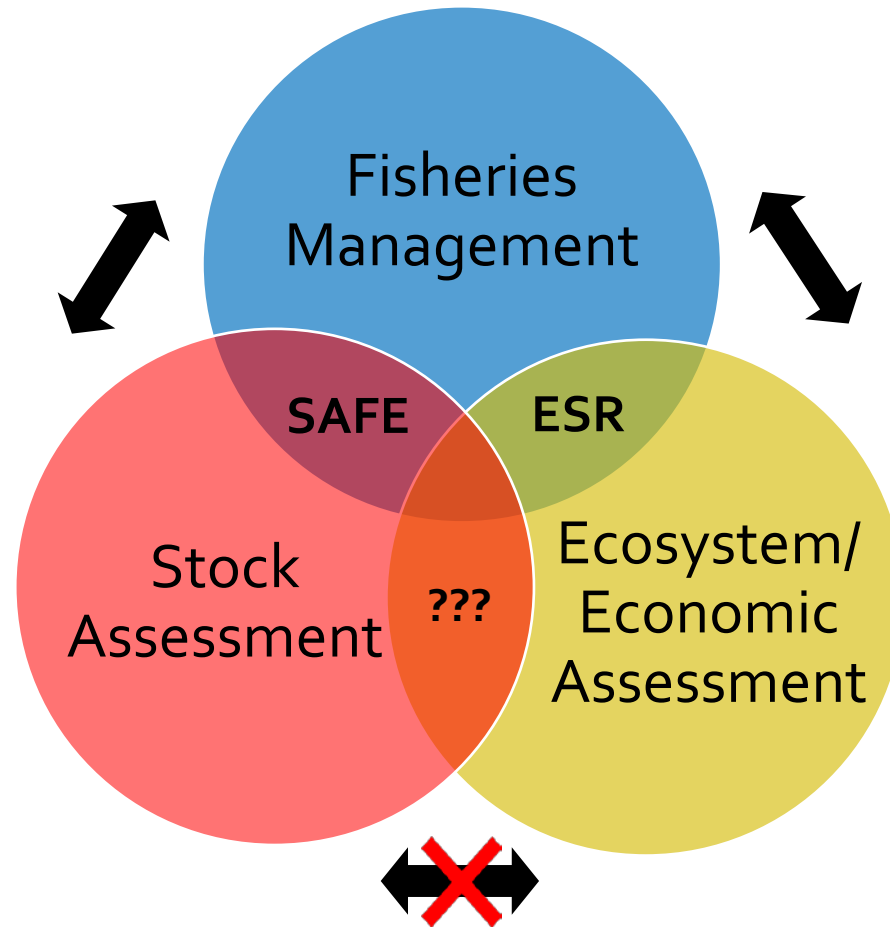
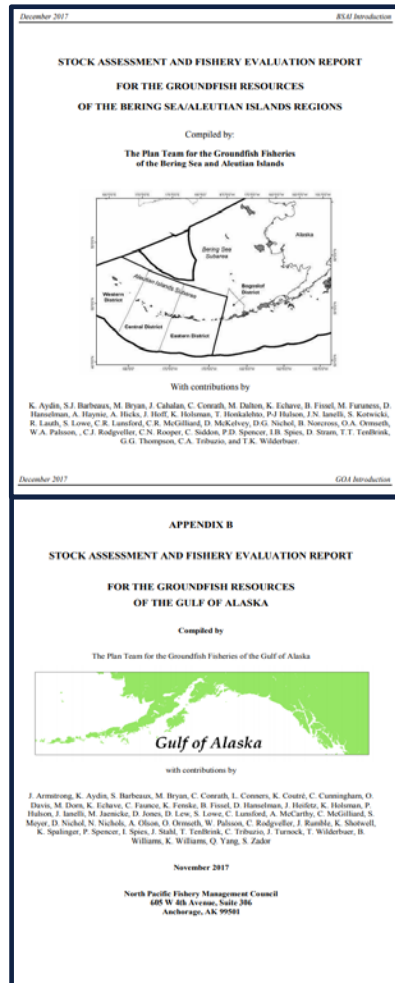
KALEI SHOTWELL, JUNE 1 & 8, 2020



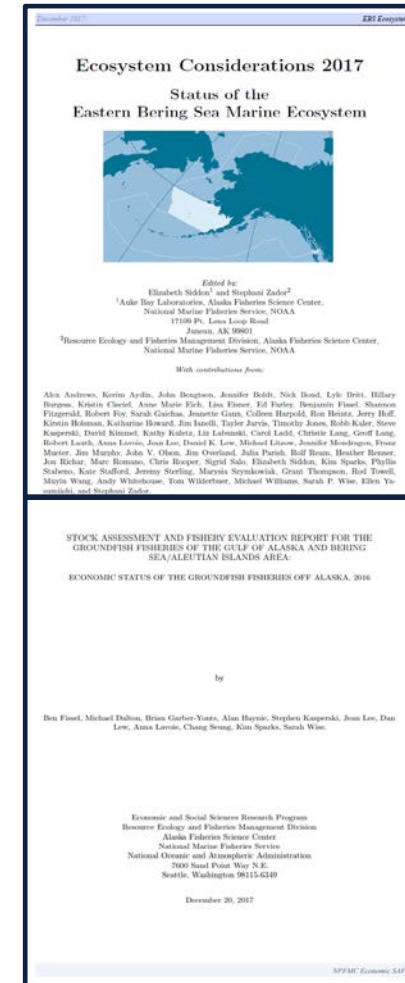
ESP Definition: A standardized framework that facilitates the integration of ecosystem and socioeconomic factors within the stock assessment process and acts as a proving ground for use in management advice.



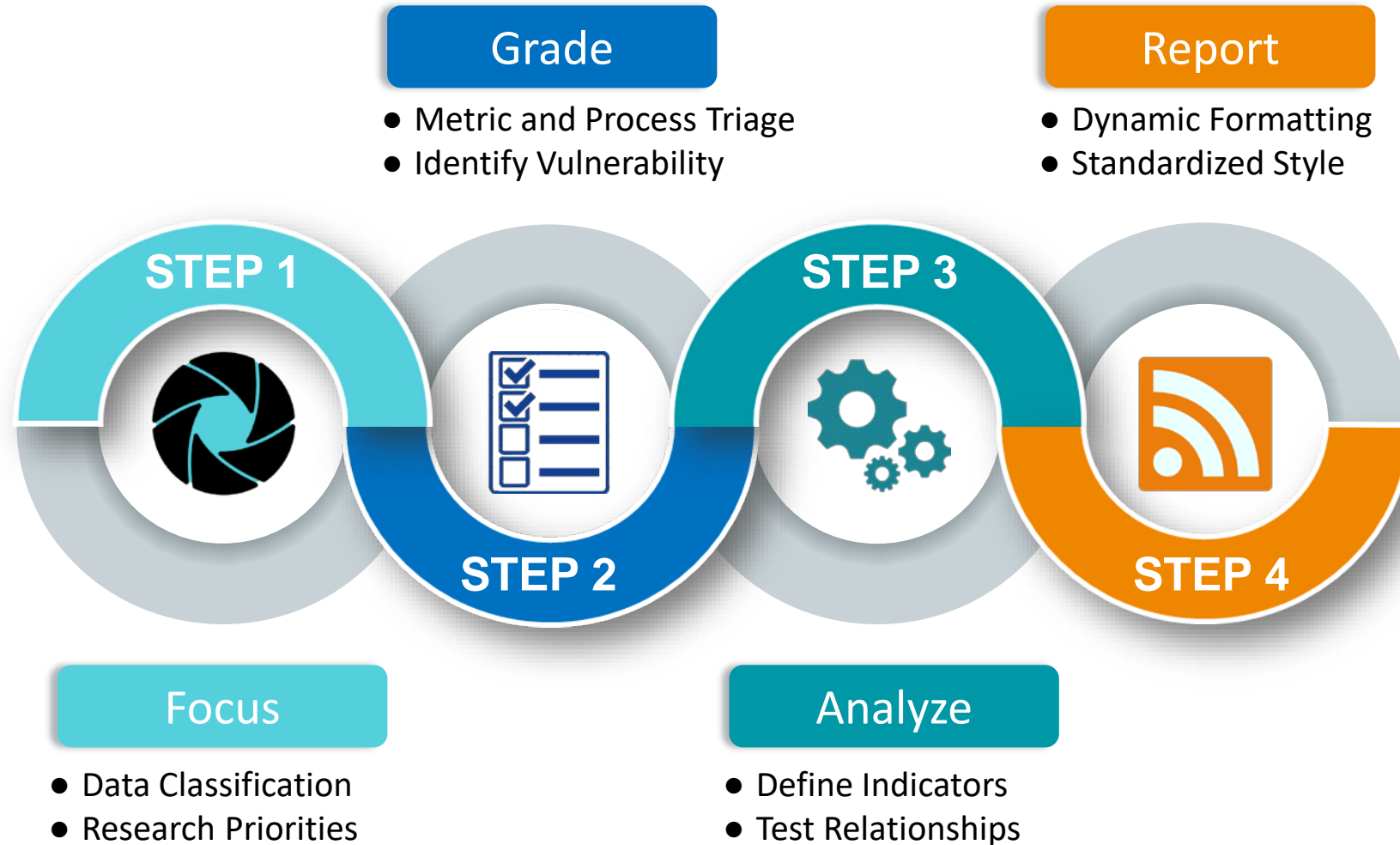
# COMMUNICATION GAP



No Standard Framework



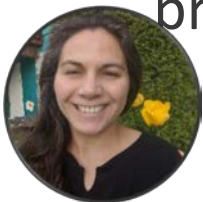
# ESP PROCESS



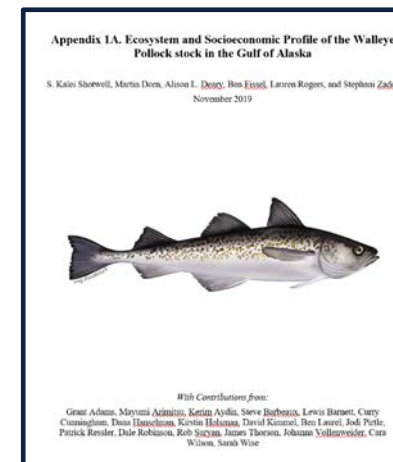
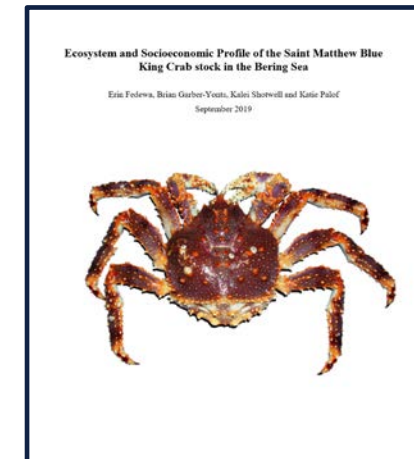
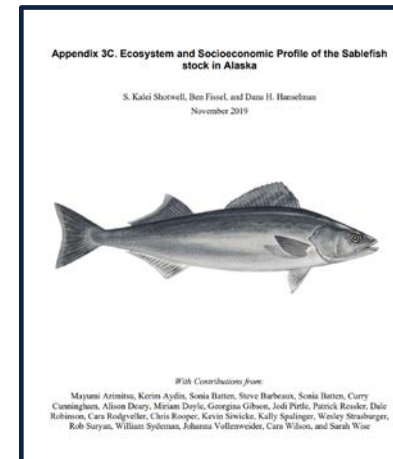
# ESP PRODUCT

## Appendix in SAFE Report\*

- 1) Introduction: justification, data summary
- 2) Metrics Assessment: baseline, ecosystem & socioeconomic processes
- 3) Indicators Assessment: time series suite, three stage analyses
- 4) Considerations: data gaps, research priorities



\*Shotwell et al., In Review



Sablefish ESP

Pollock ESP

St. Matthew

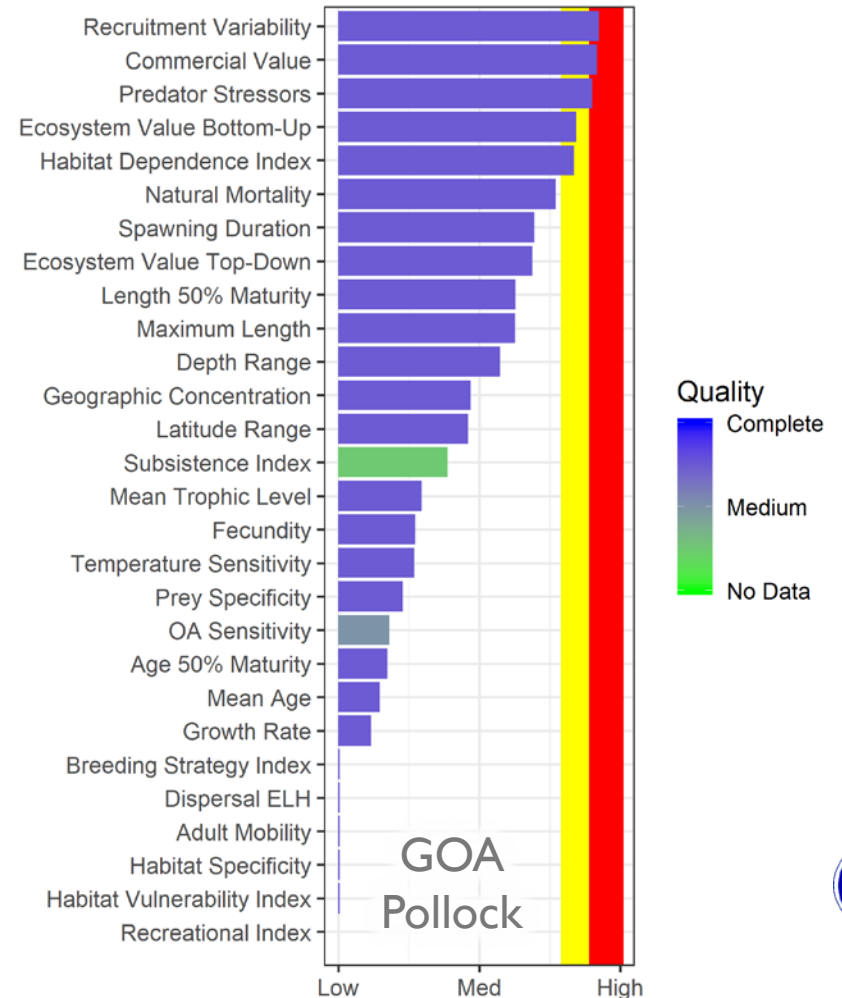
Blue King

Crab ESP

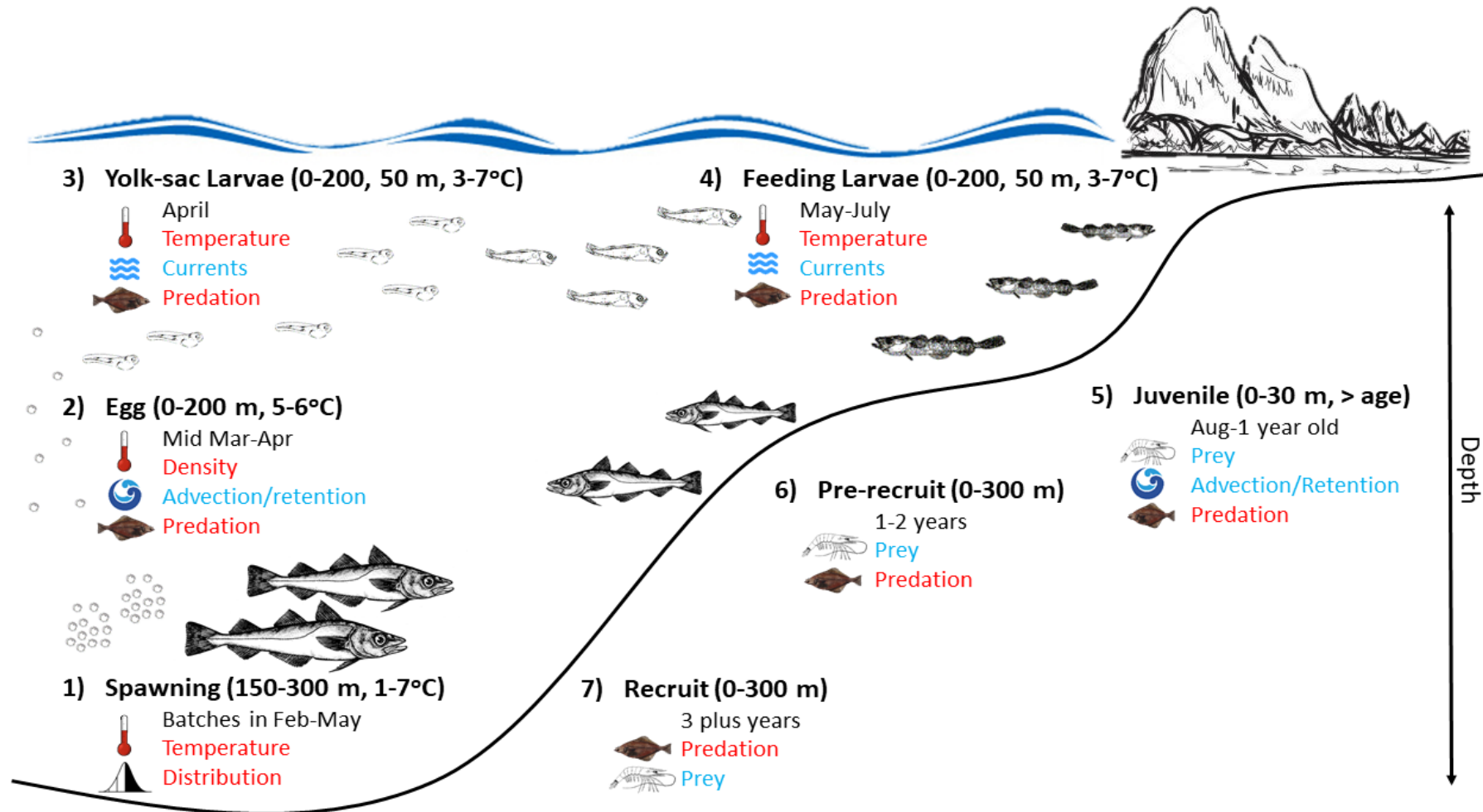


# METRICS ASSESSMENT

- **Baseline Metrics**
  - Standard measures of stock attributes, similar to health screening, identify unique traits
- **Processes and Drivers**
  - Ecosystem section provides info by life history stage to identify bottlenecks and mechanisms
  - Socioeconomic section provides info on fishery performance, community engagement

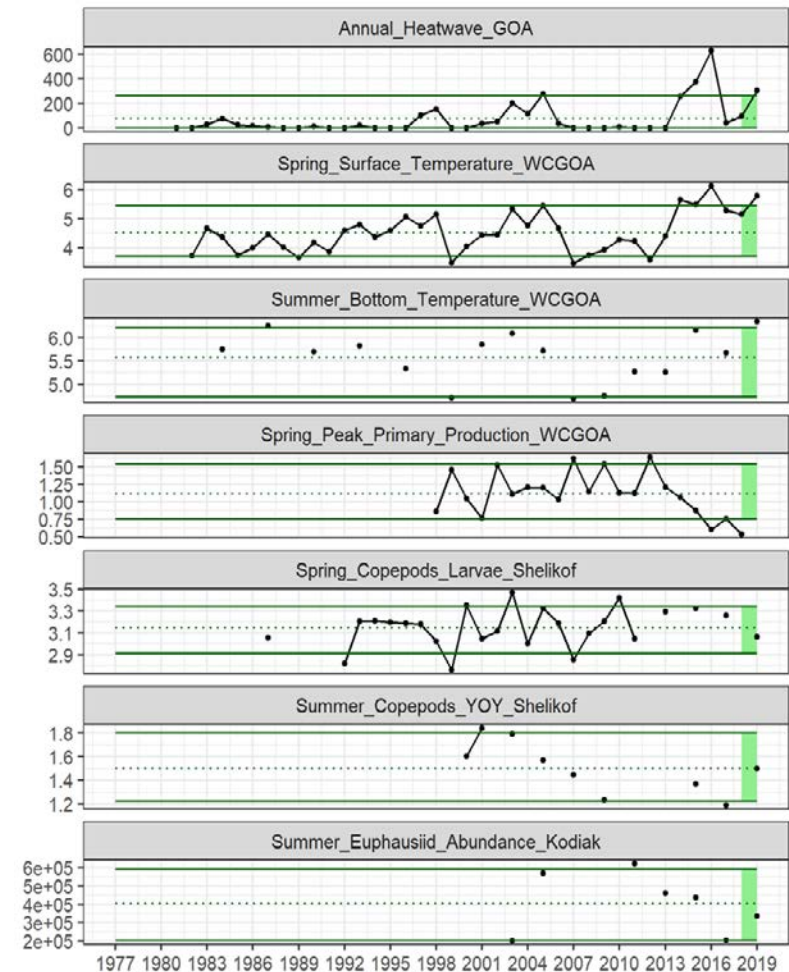


# ECOSYSTEM PROCESSES



# INDICATORS ASSESSMENT

- Indicator Suite
  - Time series proxies for critical processes identified in metrics assessment
  - Long-term, easily accessible, readily updated
- Indicator Analysis
  - 3 stages: traffic light simple scoring, importance methods, research ecosystem model run
  - Use results to give context for fisheries management advice




# CURRENT EVENTS

- Dedicated ESP Workshops, 2019-2021
  - Three workshops to develop and implement ESPs for the AFSC
  - Allows for group consensus, innovation, collaboration
- 2020 ESPs
  - Initiated new ESP teams (Pacific cod, crab, data-limited)
  - Executive summaries for current ESPs (Alaska sablefish, GOA pollock, St. Matthew Blue King Crab)
  - Full ESPs for EBS/GOA Pacific cod and Bristol Bay Red King Crab







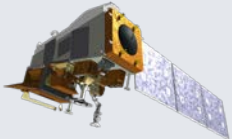











# WORKSHOP OVERVIEW 2019-2021

<h2>Data</h2>	<p>Review ESP Process</p> 	<p>Collect</p> 	<p>Coordinate</p> 	<p>Create</p> 
<h2>Model</h2>	<p>Review ESP</p> 	<p>Discuss</p> 	<p>Perform</p> 	<p>Improve</p> 
<h2>Advice</h2>	<p>Update ESP</p> 	<p>Forecast</p> 	<p>Evaluate</p> 	<p>Provide</p> 



# COORDINATING TIMELINES

	January-March	April	May-August	September-October	November - December
Data gathering	 Winter Surveys & Early Ecosystem Monitoring	 Early Spring Ecosystem Surveys, Tagging	 Late Spring and Summer Surveys	 Fall Ecosystem Surveys	Satellite or Model Alternatives 
Reports		 Econ Full Update of Year-1	 Early Warning (PEEC) Update, New Crab ESPs	 Surveys/ESR Update, Crab SAFEs, Crab ESPs, New Groundfish ESPs	 Econ Update, ESR Full Report, Groundfish SAFEs, Groundfish ESPs
Meetings	 Jan Crab Plan Team, February Council	 April Council	 May Crab Plan Team, PEEC, June Council	 Sept Crab & Groundfish Plan Team, Oct Council	 Nov Groundfish Plan Team, Dec Council



# ESP ADVICE

## Risk

Considerations used in contextual manner to identify additional uncertainties not in model

## Rebuilding

Indicator suite used to inform regime for rebuilding plans

## Readiness

Report provides scientists and managers tools to evaluate and be prepared for potential change

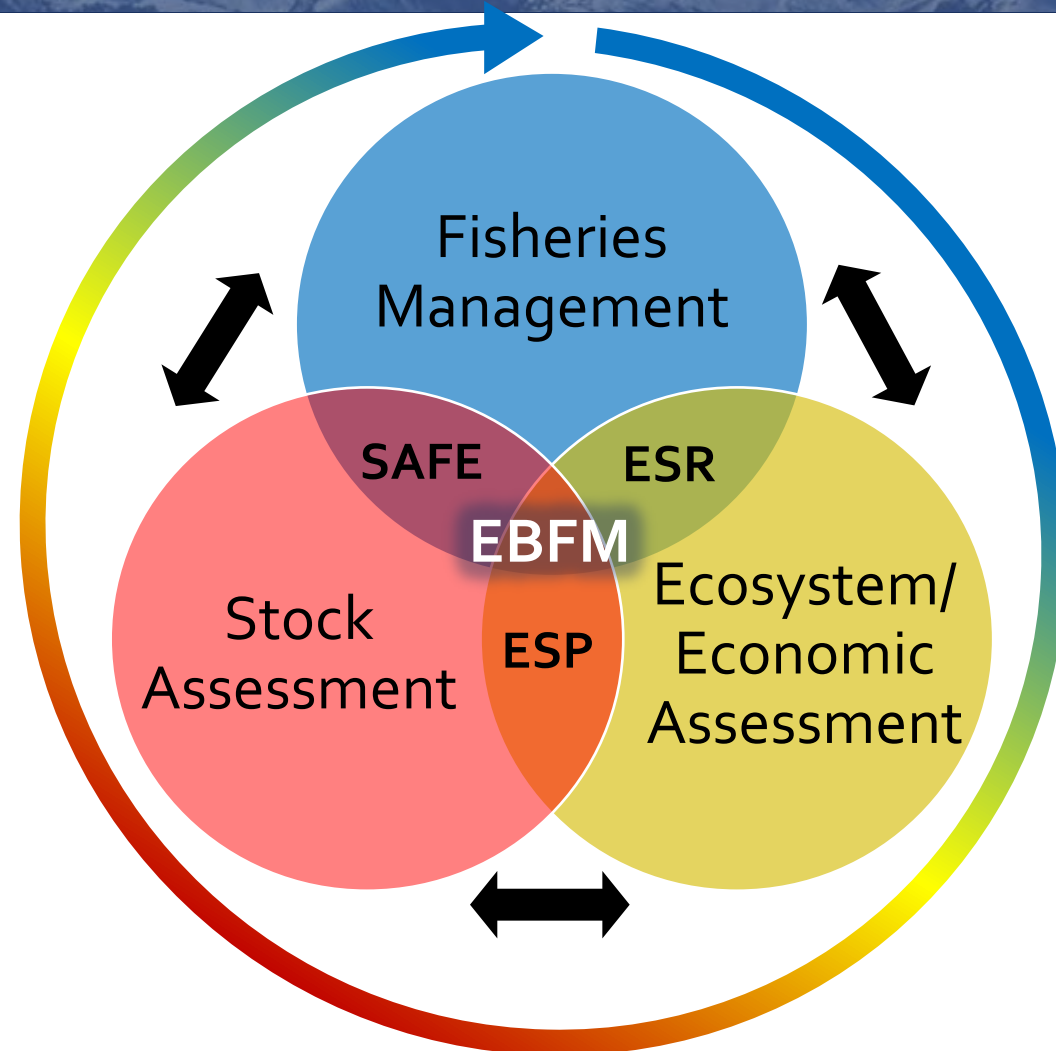


# NEXT STEPS

- Summarize Workshops
  - Create technical memorandums and manuscript of ESP workshop process
  - Useful for other regions that may want to implement the ESP process
- Data Accessibility and ESP Improvement
  - Coordinate contributions between ESPs, ESRs, and Econ SAFE and increase data access by streamlining data repositories (e.g., AKFIN and ERDDAPs)
  - Improve ESP per PT/SSC/Council recommendations, maintain templates



# COMMUNICATION LOOP



# QUESTIONS?



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