

# New England Fishery Management Council Scallop Survey Working Group

**December 2021 - Progress Update**

# SSWG Members



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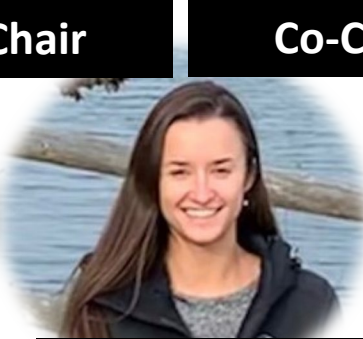
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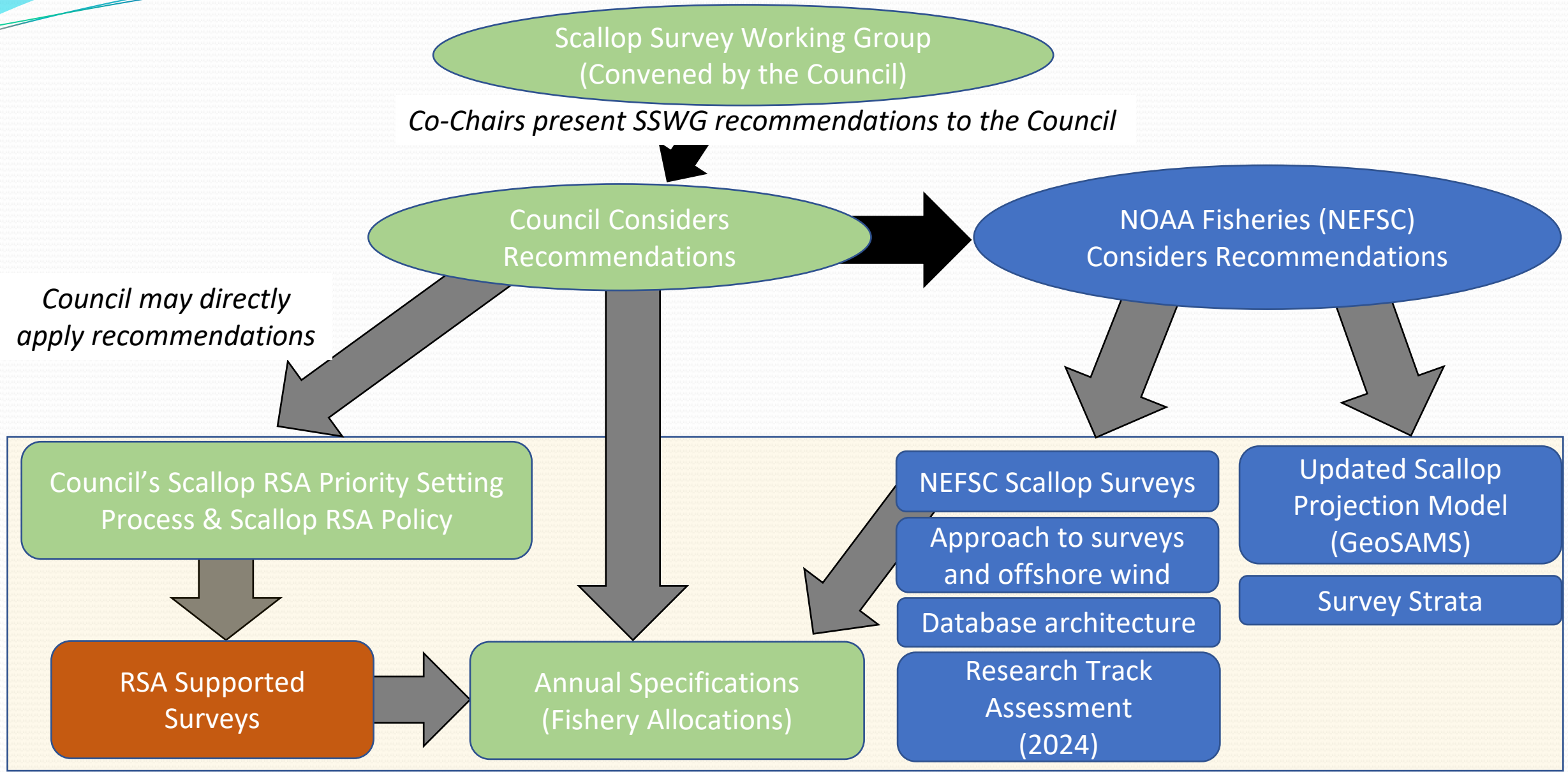
# SSWG Timeline

Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jul
Form SSWG Hire Contractor	1st meeting Approved TORs Sub-Group Work	2nd Meeting Sub-Group Work 2021 Surveys	3rd Meeting Sub-Group Work Guiding Principles	4th Meeting Sub-Group Work Complete TOR 1 & 4	5th Meeting Complete TOR 2 & 3 Final Report

- SSWG will address the Terms of Reference incrementally and report to the Council as work is completed
  - April 30, 2021 Term of Reference Memo from Council Executive Director Tom Nies
- Recommendations will be made to the New England Fishery Management Council and shared with the Northeast Fisheries Science Center



# SSWG Recommendations Roadmap



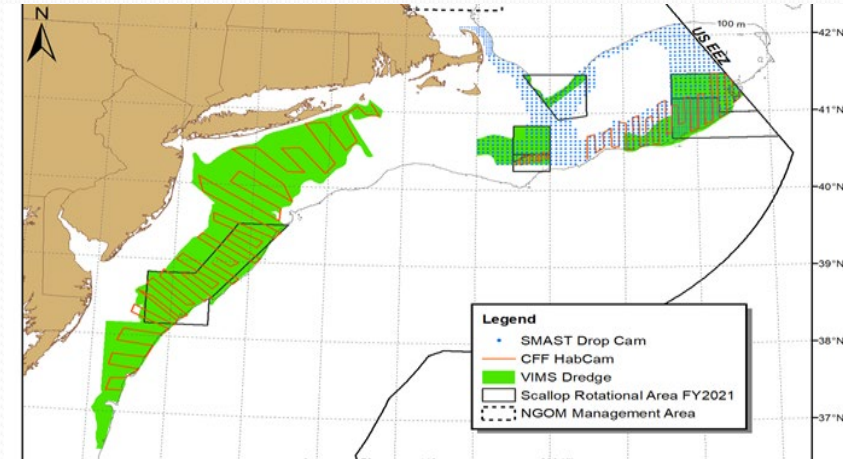
# Term of Reference #1

- Describe current survey system, including survey (dredge and optical) methods, design, and data products, as well as the process for determining annual survey coverage.
- *This TOR will include descriptions of the current survey system, including survey tools and methods, the process used to determine annual spatial coverage by survey type, and the data collected in each survey. This information will serve as a description of the current approach for the scallop survey system and will be referenced in relation to SSWG recommendations for TORs 2, 3, and 4.*
- *TOR #1 will be completed in January 2022*



# Term of Reference #2

- Describe and assess a coordinated strategy for sea scallop resource assessment surveys and investigate opportunities and methods for implementation. Address each of the following areas:
  - Spatial coverage, including the Northern Gulf of Maine;
  - Sampling frequency and intensity within and between surveys;
  - Data standardization, delivery, access, and storage;
  - Automated scallop detection;
  - RSA survey priority setting process and long-term planning.
- *This TOR will include, but not be limited to, the following items for each identified topic:*
  - *Assess the strengths and weaknesses of the current scallop survey system, including uncertainties and gaps in data outputs to meet objectives and needs of science and management.*
  - *Describe new or alternative approaches for optimizing the survey system.*
  - *Investigate opportunities and methods to implement strategies across all survey groups, including the new and alternative approaches.*



# Term of Reference #2 - Progress

- May-June: SSWG completed an assessment of the current system with specific focus on:
  - Spatial coverage, including the Northern Gulf of Maine;
  - Sampling frequency and intensity within and between surveys;
  - Data standardization, delivery, access, and storage.
- July: SSWG recommended developing “Scallop Survey Guiding Principles” to advise:
  - Collection of survey data products needed to support stock assessment and management specifications, specifically:
    - Methods to identify priority survey coverage areas;
    - Methods to determine sampling scale (fine scale and broad scale);
    - Methods to consider suitable survey tools and design for specific areas and purposes.

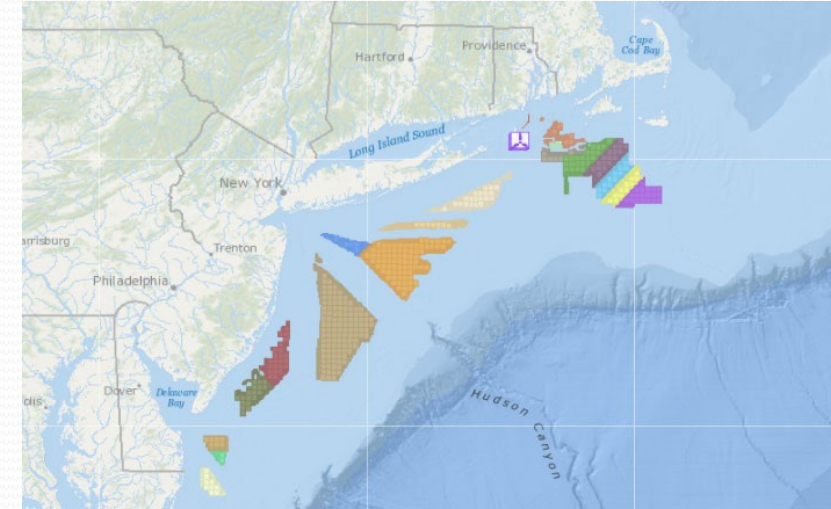
# Term of Reference #2 - Progress

- November: SSWG discussed Guiding Principles and Survey Coordination Strategies to inform:
  - Development of new or alternative approaches for optimizing the survey system;
  - Opportunities and methods to implement strategies across all survey groups, including the new and alternative approaches.
- SSWG identified potential areas to better coordinate surveys and data products
  - Consider alternatives to the current coordination of NEFSC and RSA-funded surveys
  - Consider standardized data collection fields and data storage solutions
  - Consider alternatives to the RSA priority-setting process (timing, coverage needs)
  - Consider longer term RSA awards for surveys
  - Consider survey coverage in terms of SAMS areas (align coverage areas across surveys)
  - Consider effort-based RSA projects rather than area-based



# Term of Reference #3

- Identify survey methods, tools, and designs to monitor and assess the scallop resource in a changing ocean environment that includes offshore wind installations and changes in resource and fishery distributions.
- *This TOR will include, but not be limited to, the following items:*
  - *Description of the likely impacts of offshore wind installations on the current survey domain and methods on a present and multi-year timescale.*
  - *Identification of existing and new scallop survey strategies for populations assessments under changing conditions in stock and habitat parameters, and changes in stock distribution as a result of natural or anthropogenic factors.*

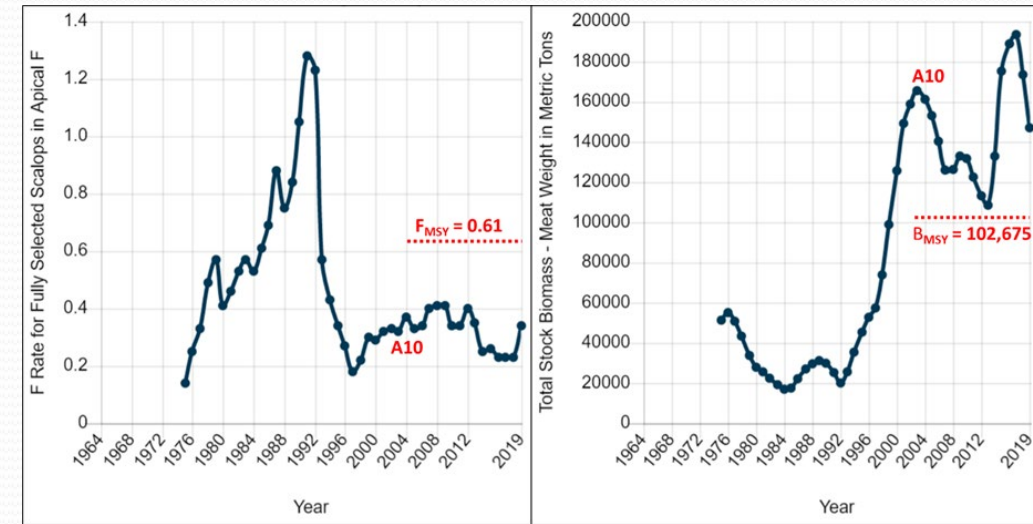


# Term of Reference #3 - Progress

- SSWG is expected to provide recommendations for mitigating the impacts from offshore wind on the scallop survey system
- Need to consider short-term and long-term recommendations
- SSWG identified topics for additional work (Jan-June 2022)
  - Identify tools and methods that may be more adaptable to survey in and around wind farms
  - Consider coordination with other resource monitoring efforts
    - Wind developer impact monitoring surveys
    - ROSA regional monitoring recommendations
    - BOEM/DOE efforts and funded projects
    - Research and development of new/alternative survey tools (AUV, remote sensing, etc.)
- SSWG sub-group focused on this topic

# Term of Reference #4

- Identify and catalogue the survey data products needed to support stock assessment approaches in the future and outline a process for modifying the scallop survey system to collect identified data products.



- *This TOR will include, but not be limited to, the following items:*
  - *Description of survey data outputs needed to support potential changes to stock assessment models, including age samples and ageing methods, growth information and density-dependent effects, scallop meat weight sampling, and estimates of fecundity.*
  - *Consider survey data products and survey spatial scale needed to support a spatially explicit methodology for forecasting the abundance and distribution of sea scallops by incorporating spatial data from surveys, landings, and fleet effort.*

# Term of Reference #4 - Progress

- SSWG initial discussions in November
- Consider parallel projects in coordination with TOR #4
  - NEFSC shellfish re-stratification
  - Development of new scallop projection model – GeoSAMS
  - Investigation of alternative assessment methods
- SSWG identified potential survey data products needed for future assessments
  - Continued collection of samples for ageing
  - Continued data collection from Gulf of Maine region
- SSWG sub-group focused on this topic



# SSWVG Work Plan

- **Incremental approach to TORs**
  - Developing new/alternative methods
  - Consider strategies for implementation
- **December – February**
  - Begin drafting recommendations
  - Work through correspondence
  - SSWG review materials to discuss in Feb
- **Meeting schedule**
  - Winter/Spring 2022 – Advance recommendations and implementation strategies
  - Spring/Summer 2022 – Final report

Jan-Mar	Apr-Jul
4th Meeting Sub-Group Work Complete TOR 1 & 4	5th Meeting Complete TOR 2 & 3 Final Report



# Questions