# Snow Crab Rebuilding

Sarah Rheinsmith



### Council Snow Crab Rebuilding Timeline

- October 19, 2021: Snow Crab was declared overfished
  - Rebuilding of overfished stocks is required by the MSA section 304 within 2 years (October 2023)
    - MSA section 304 and the NS 1 guidelines for rebuilding overfished stocks
- June 2022: Select snow crab rebuilding alternatives for analysis
  - Summer 2022 Staff will analyze the impacts of each of the alternatives
- October 2022: SSC reviews model projections to select Tmin
- December 2022: initial review of the snow crab rebuilding plan and potentially selected a preliminary preferred alternative
- February 2023: Council will take final action and select a preferred alternative to recommend to the Secretary of Commerce
  - Following selection of preferred alternative, NMFS prepares proposed FMP amendment text, draft notice of availability, draft Environmental Assessment, and, if required, a draft regulatory package



#### **CPT Guidance**

- Establishing the most realistic framework to allow for a rebuilding plan to take place
- Select preferred model projections provided by Cody to aid in establishing rebuilding parameters for initial review in December



## Overfishing and Rebuilding Plans

- ▶ Rebuilding of overfished stocks is required by the MSA section 304
  - MSA section 304 and the NS 1 guidelines for rebuilding overfished stocks
- Council must specify a time period for rebuilding the stock ( $T_{target}$ ) based on being as short as possible taking into account:
  - Status and biology of the stock
  - Needs of fishing communities
  - ▶ Recommendation by international organizations in which the U.S. participates, and
  - Interaction of the overfished stock within the marine ecosystem
- Time period shall not exceed 10 year, except where biology of the stock, other environmental conditions, or management measures under an international agreement dictate otherwise





## Overfishing and Rebuilding Plans

- The shortest rebuilding time  $(T_{min})$  is calculated based on time frame to rebuild the stock to its MSY biomass  $(B_{MSY})$  in the absence of no fishing mortality (F=0)
  - If  $T_{min}$  is  $\leq 10$  years, then the maximum rebuilding time  $(T_{max})$  is 10 years for rebuilding a stock to its  $B_{MSY}$
  - If  $T_{min}$  for the stock exceeds 10 years, then one of the following methods can be used to determine  $T_{max}$ :
    - ightharpoonup T<sub>min</sub> plus the length of time associated with one generation time for the stock
    - ▶ Amount of time the stock is expected to take to rebuild to B<sub>msy</sub> if fished at 75% of maximum fishing mortality threshold, or
    - ightharpoonup T<sub>min</sub> multiplied by 2

