# Instructions

* Do not remove any “#” or “{-}” in section titles. They are necessary for the creation of the final document. They will not show up in the final document.
* Make sure to include a space between any header hash marks and the section title.
* All figures and tables should be identified by a **unique** keyword(s) in the “chunk\_name” column of their respective spreadsheet. The keyword(s) should NOT contain any spaces or underscores. Periods and dashes are permissible. **When referencing figures and tables in the text, please use the format: Figure \@ref(fig:keyword) and Table \@ref(tab:keyword)**, NOT “Figure 1” “Table 1” etc. This is necessary for the creation of the final document. The formatting will be normal in the final document.
* References should be documented in the .bib file. **When citing a reference in the text, please use the format: [@keyword]. Use @keyword if you don’t want the authors’ names in parentheses. Use [-@keyword] to suppress the authors’ names. Separate multiple references within brackets with ; for example [@keyword; @keyword]**
* Use Markdown syntax instead of special characters.
  + Use &deg;C instead of the degrees Celsius symbol
  + Make sure "smart quotes" are disabled (the quote marks that are curved)
  + There will probably still be some syntax issues in the knitted document. Please proofread carefully and update!
* Tables should include:
  + List of data sources used in the ESP evaluation
  + Ecological information table by life history stage
  + Key processes table by life history stage
  + Economic performance report tables
  + Ecosystem indicator description table with traffic light of most recent year
  + Socioeconomic indicator description table with traffic light of most recent year
* Figures should include:
  + Baseline metric panel with percentile and data quality shading
  + Life history conceptual model summarizing ecological information and key processes by life history stage
  + Species distribution model of suitable habitat by life history stage [optional]
  + Phenology of mean abundance by life history stage with relevant environmental climatologies [optional]
  + Energy content by life history stage [optional]
  + Predation mortality and diet composition for adult and juvenile stages [optional]
  + Socioeconomic conceptual model [optional]
  + Community dependence graphics [optional]
  + Time series of ecosystem and socioeconomic indicators following ecosystem status report
  + Importance model output where relevant [optional]
  + Simplified one-page summary template of ESP report (when code developed)
* Anything written above the “Executive Summary” heading will be deleted from the final document.

# # Executive Summary {-}

Short description of national initiative and regional recommendations to produce ESP

Short description of ESP process type (e.g., general, stage-based)

## ## Ecosystem Considerations {-}

* Summary conclusions from metric assessment
* Summary conclusions from indicator assessment

## ## Socioeconomic Considerations {-}

* Summary conclusions from metric assessment
* Summary conclusions from indicator assessment

# # Introduction {-}

Summary of regional ecosystem considerations priorities

Description of four-step ESP process and reference, include metric and indicator definition

Example reference: [@Adams1993]. Without parentheses around names: @Adams1993. Year only: [-@Adams1993].

## ## Justification {-}

Scores in relevant national initiatives, stock assessment classification results

Stock-specific regional research priorities (e.g., Plan Team, SSC, Council recommendations, annual guidance memo, strategic plans, etc.)

## ## Data {-}

Brief description of data streams used in the analysis, may reference main SAFE document

Table of data sources with references

# # Metrics Assessment {-}

## ## National Metrics {-}

Description of measures collected in the national initiatives relevant to the stock FMP

Description of ecosystem and socioeconomic stock vulnerabilities

Ecosystem metrics example: high recruitment variability (standard deviation of log recruitment estimates > 0.9), low fecundity, and small hatch size indicate vulnerabilities in early life

Socioeconomic metrics example: high commercial importance, high constituent demand indicate high value to fisheries and communities and vulnerability to fishing pressure

Graph of national initiative metric panel

## ## Ecosystem Processes {-}

Description of ecosystem metrics that identify dominant pressures on the stock, evaluate by life history stage where possible

Graph or Table of life history stage information (e.g., distribution, timing, duration, size)

## ## Socioeconomic Processes {-}

Description of socioeconomic performance metrics that identify dominant pressures on the stock, evaluate by life history stage where possible

Table of socioeconomic performance information (e.g., price, value by fishery, number of vessels)

# # Indicators Assessment {-}

## ## Indicator Suite {-}

Brief literature review on ecosystem or socioeconomic indicators previously explored for stock that are currently available or updatable

Description of indicator suite based on metric assessment and literature review

List of ecosystem indicators ordered by category (physical, zooplankton, larvae and young-of-the-year, juvenile, and adult)

List of socioeconomic indicators ordered by category (fishery performance, economic, community)

Graph of indicator time series panel, follow ecosystem status report card format

Table of indicators including description, source, relationship to stock, recent trend

## ## Indicator Monitoring Analysis {-}

Description of statistical tests for monitoring indicator suite by stage where relevant (Stage 1: scoring test, Stage 2: importance test, Stage 3: modeling test)

Supportive graphs and/or tables of statistical tests where relevant

# # Recommendations {-}

Summary of main considerations separated by ecosystem and socioeconomic categories

## ## Ecosystem Considerations {-}

* Summary conclusions from metric assessment
* Summary conclusions from indicator assessment

## ## Economic Considerations {-}

* Summary conclusions from metric assessment
* Summary conclusions from indicator assessment

## ## Data Gaps and Future Research Priorities {-}

Description of data gaps, future priorities for ecosystem and socioeconomic research that would support future versions of the ESP

# # Acknowledgements {-}

Include contributors, internal reviewers, Groundfish/Crab Plan Teams, SSC, AFSC personnel and divisions, other state, national, international contributing agencies

# # Literature Cited {-}

Include reference numbers at the end of the citations from the life history table

Include DOI or links to papers where possible

**<div** **id**="refs"**></div>**