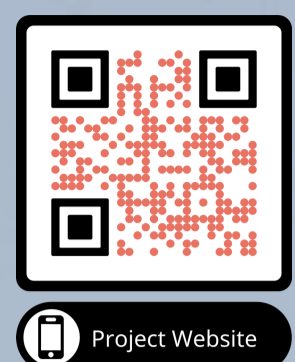


Projecting climate-related shifts in culturally important species within community waters: Opportunities and barriers to adaptation



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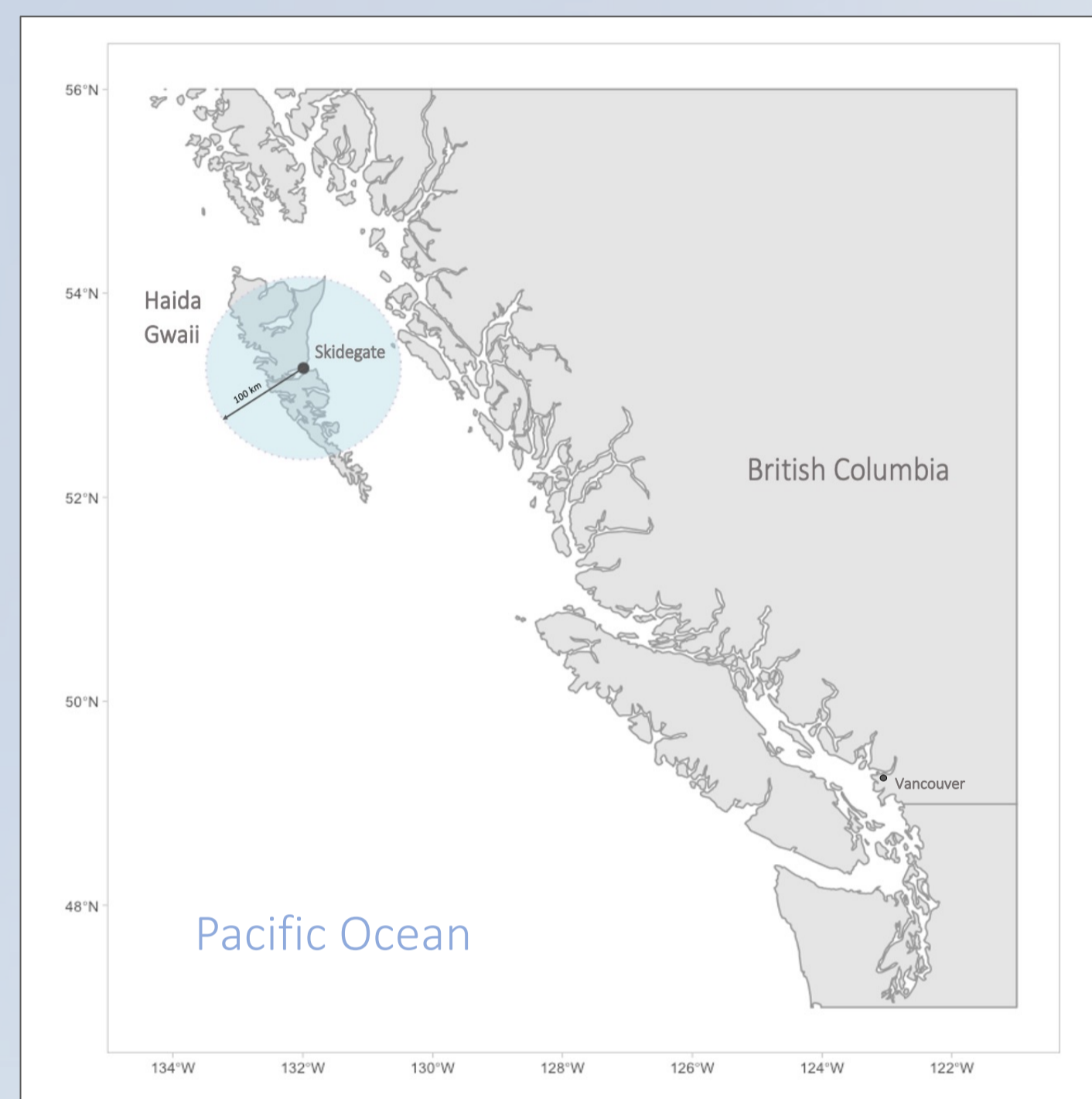
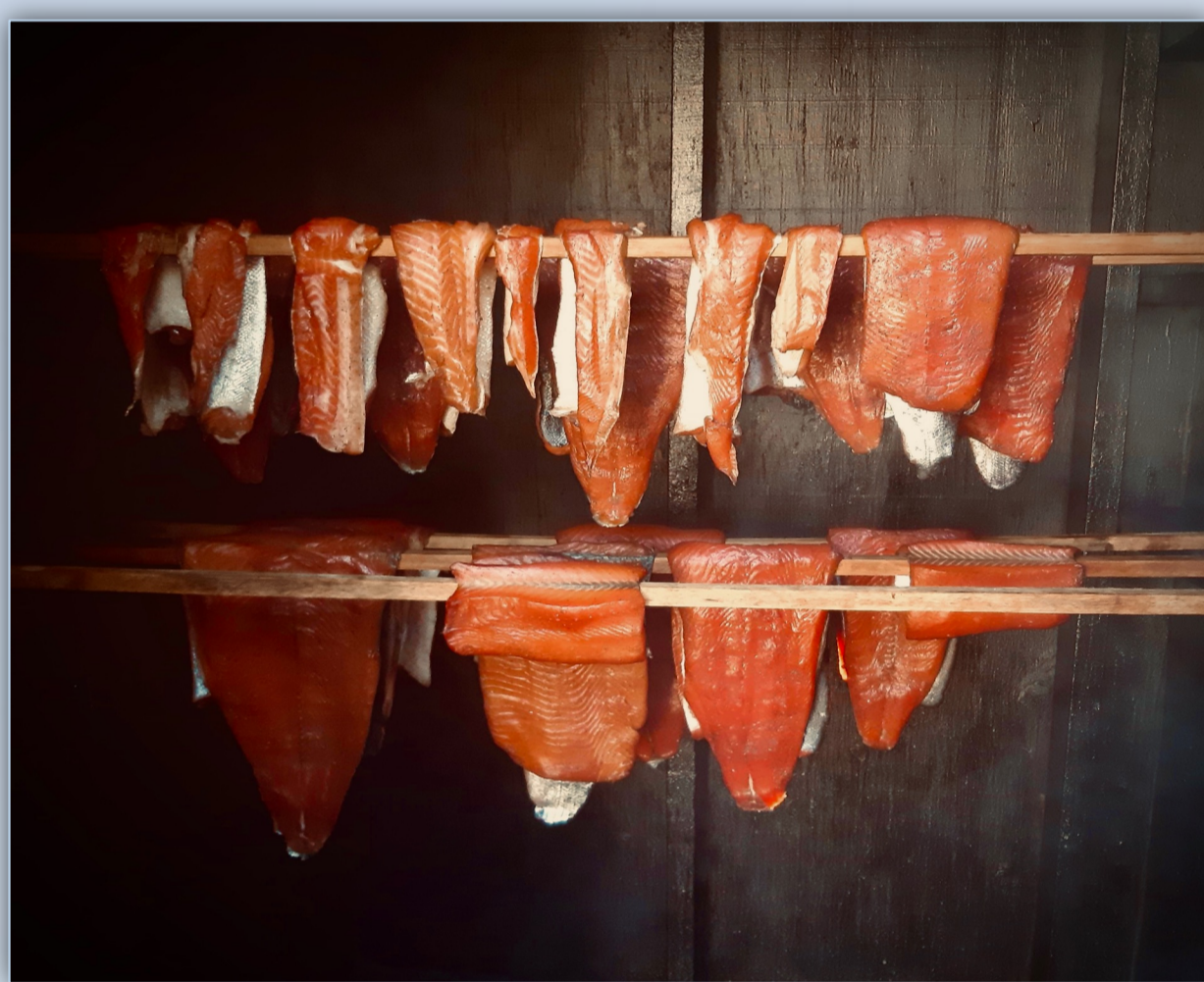
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Key Findings

- 1) Climate change is projected to adversely impact the availability of a majority (94%) of culturally important marine species to the Haida community of Skidegate by 2050
- 2) Identified leverages for climate adaptation within the social-ecological system of Skidegate include focusing on the restoration of traditional food systems and inter-nation trade

Climate risk and adaptation of a coastal Indigenous community

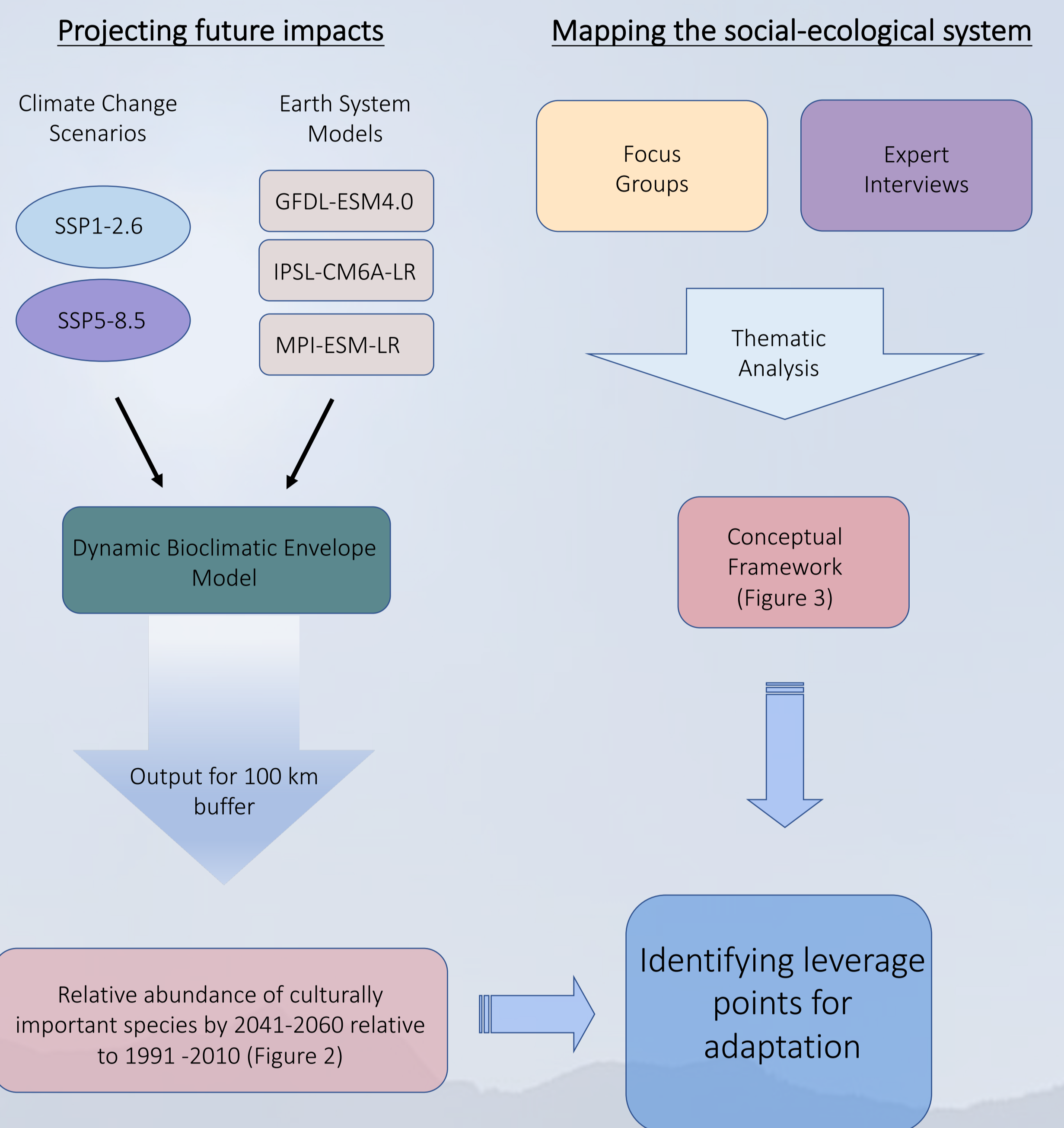


Study site: Community of Skidegate on Haida Gwaii

Figure 1. Sockeye salmon being dried (top) and smoked (bottom) after harvest

- Coastal Indigenous communities are facing declines in abundance of traditional seafood e.g., sockeye salmon.
- Project risks and opportunities of culturally-important seafood availability under climate change and explore potential adaptation strategies.

Integrating quantitative modelling with traditional knowledge



Results

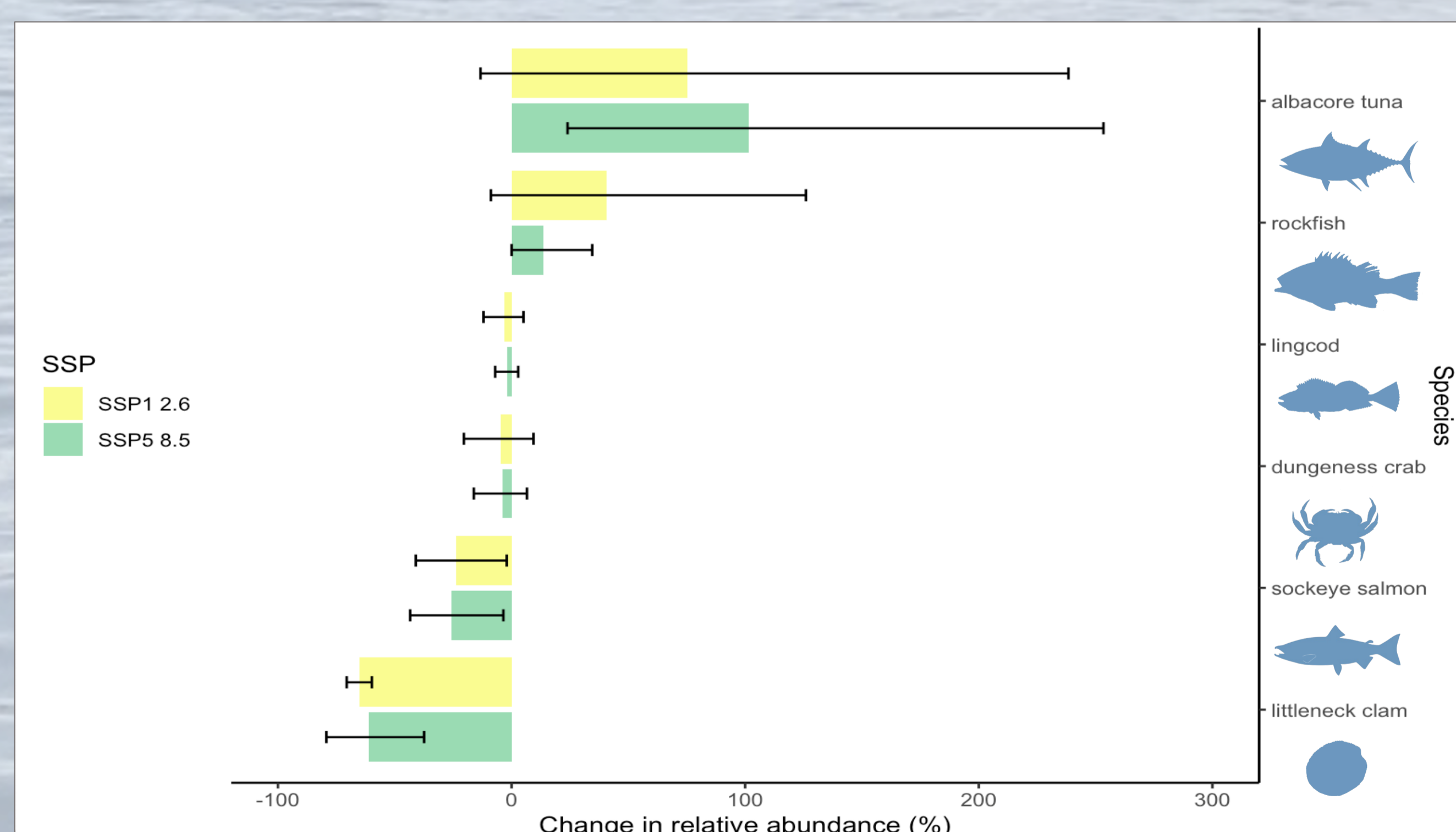


Figure 2. Projected relative abundance of culturally important marine species (CIS) to the year 2050. Albacore was not identified as a CIS but was included as it has been identified by the community for adaptation planning.

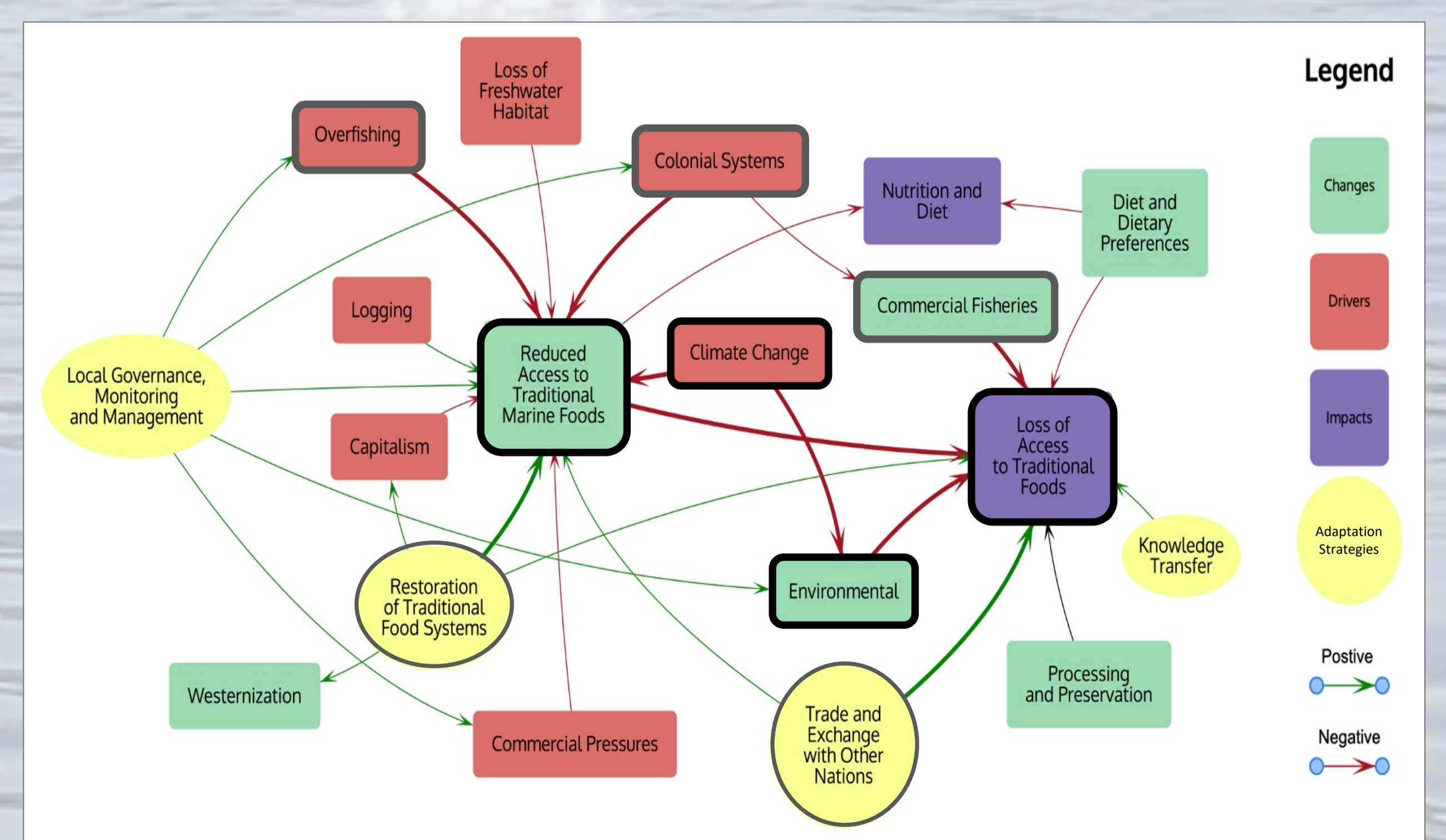


Figure 3. Conceptual framework representing significant themes relating to access to traditional marine foods for Skidegate community members. Nodes represent changes, drivers, impacts and adaptation strategies within the social-ecological context and linkages indicate the relationships between them.

Further Research

Align adaptation strategies with marine species relative abundance projections to determine how these strategies can assist in compensating for losses in culturally important species.

References

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Acknowledgements

Thanks to the community of Skidegate and those who participated in the research to make this study possible. Project funding provided by the Canadian Institutes of Health Research and Natural Sciences and Engineering Research Council of Canada.