Project Objective

* Create a tool to provide easy online access to information used by the Pacific Fishery Management Council (PFMC) and advisory bodies to identify West Coast groundfish stocks to be assessed in upcoming assessment cycles.

Project Background

* The PFMC Groundfish Fishery Management Plan includes a large number of stocks (i.e., 80+ stocks). This large number of stocks exceeds available resources and capacity that would be required to formally assess all stocks within each assessment cycle. In order to balance the need for new science and available resources, a formal Assessment Prioritization process was developed to guide decision making around stocks to be assessed each cycle.
* Assessment Prioritization weighs multiple factors (e.g., fishery importance, fishing mortality, species constraining fisheries, current stock status, time since last assessment) to create a ranked list of top stocks that should be considered for assessment within the next assessment cycle.
* Currently, the Assessment Prioritization details are presented within an Excel spreadsheet with numerous pages reflecting each of the factors considered. This current presentation makes it challenging for users to understand species specific information.
* Within the current Assessment Prioritization Excel workbook supplement information on available data to support species specific assessment is provide. This is a key source of information that need to be considered when selecting stock for assessment, specifically stocks that have only been evaluated using data limited methods.

Project Details

* Develop a shiny application that will be accessible publically online (i.e., via onnect.fisheries.noaa.gov resources) that will contain all information provided in the current Assessment Prioritization: factors and the overall factor summary along with detailed summaries of fishery and survey data available to support species specific assessments.
* Create functionality in the tool for users to easily navigate select single or multiple species information to understand factors driving ranking within the prioritization process.
* Provide the ability to easily navigate between the Assessment Prioritization and the available data summaries as a whole or for specific species.
* The data summaries will include the number of lengths, ages, and collected otoliths (that could be read for ages in the future) by species and year from commercial (PacFIN), recreational (RecFIN), and NWFSC surveys (West Coast Groundfish Bottom Trawl and the Hook & Line Survey).
* Additionally, this project would create a platform to present processed index of abundance estimates, patterns in length composition, and age compositions from survey data. These types of data summaries are of key interest to managers, advisory bodies, and stakeholders. Creating an online platform where processed survey data would be available and maintained to reflect the most recent survey year would be a valuable tool for those involved in West Coast groundfish sciences. As example, in 2020 a [survey summary](https://www.pcouncil.org/documents/2020/05/f-2-attachment-1-summary-of-the-nwfsc-west-coast-groundfish-bottom-trawl-survey-data-for-select-species-from-2003-2019.pdf/) of species commonly observed by the West Coast Groundfish Bottom Trawl Survey was provided to the Council, a first of its kind to provide processed data across multiple species. The Council expressed appreciation of this document to the Science Center to assist in their management decision. In 2022 and beyond, there are plans to extend this survey summary to include the NWFSC Hook & Line survey data. Creating an easy to access and use platform to disseminate these key data summaries would provide great benefit for everyone involved in West Coast groundfish management and science.