



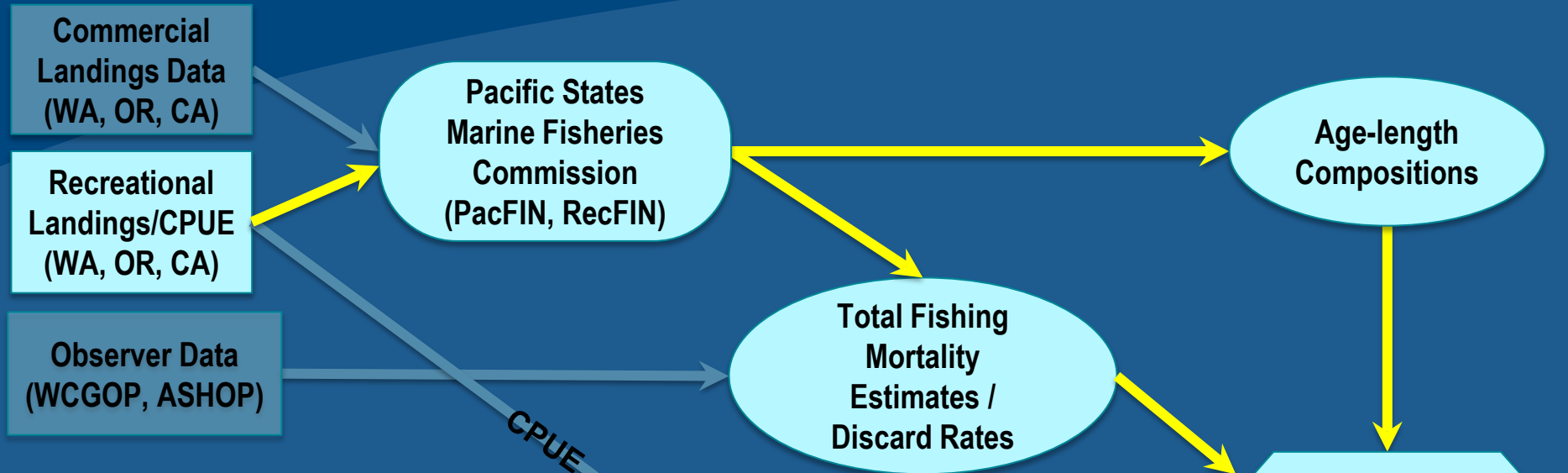
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Recreational Data to Support Stock Assessments

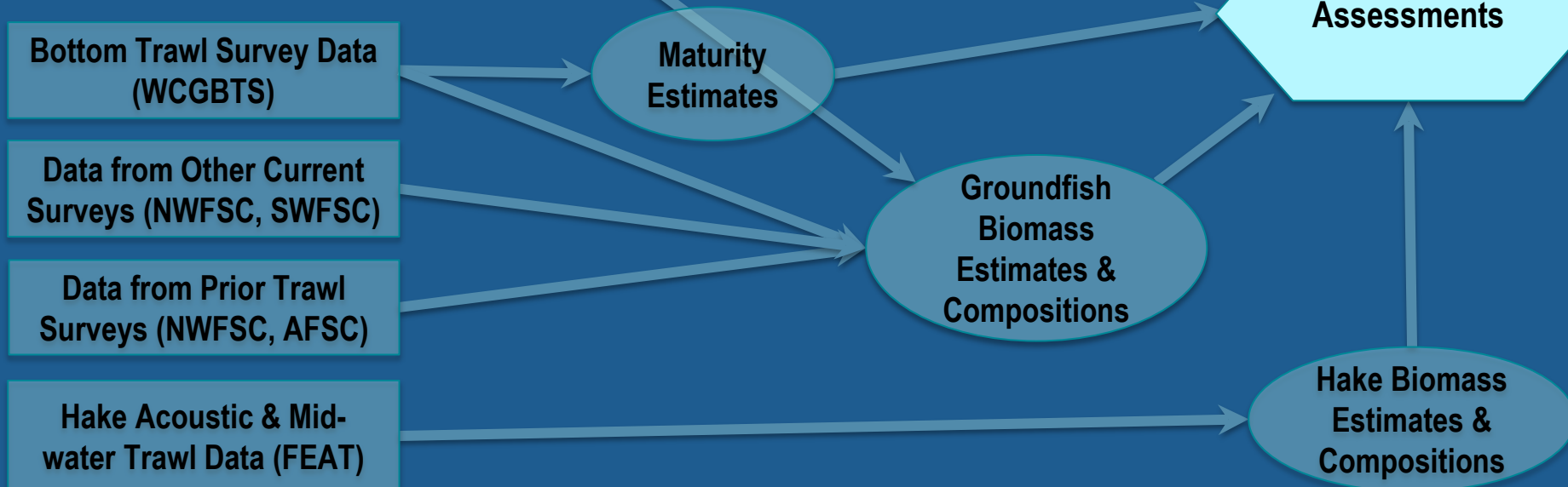


FISH 576 Presentation – January 31, 2025
Brian Langseth (NWFSC)

Fishery Dependent Data



Fishery Independent Data



Fishery Data Flows

Recreational Fisheries Data Challenges

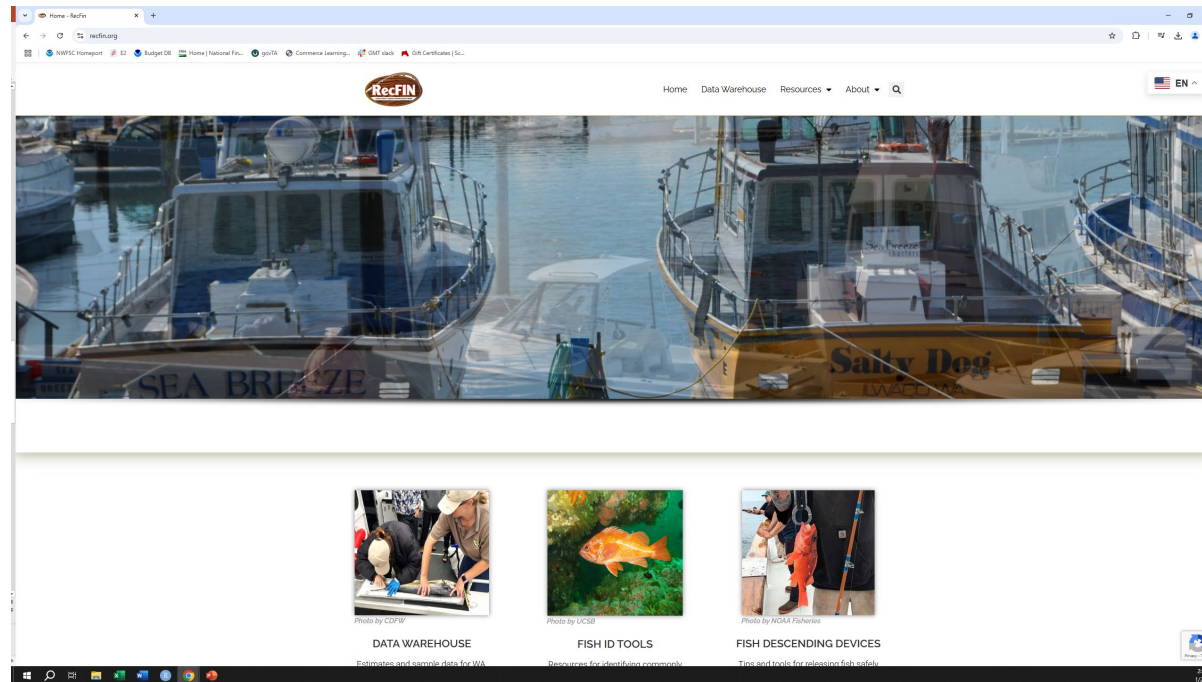
- There is huge effort and broad diversity of recreational fisheries and habitats, particularly in California.
- Several hundred species caught recreationally, with substantial gradients among community structure over depth and latitude.
- Limited automated processing capabilities across states and data sampling programs
- Quantity of data varies by species



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Recreational Data Overview

Most recreational data available from recfin.org



...but work with your state data contact and confirm

A Bit of Terminology on Data Sources

- Recent state sampling programs

OSP: Ocean Sampling Program (**WA**)

RecFIN → ORBS: Ocean Recreational Boat Survey (**OR**)
CRFS: **California** Recreational Fisheries Survey

- Past state sampling programs

MRFSS: Marine Recreational Fisheries Statistical Survey

- Historical Catch Reconstructions*
- Many Historical California length studies*

*Historical California catch reconstructions and historical length studies are not on RecFIN.



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A Bit of Terminology on Catches

Landings = **mortality** of fish brought to the dock

Discards = fish returned to the water

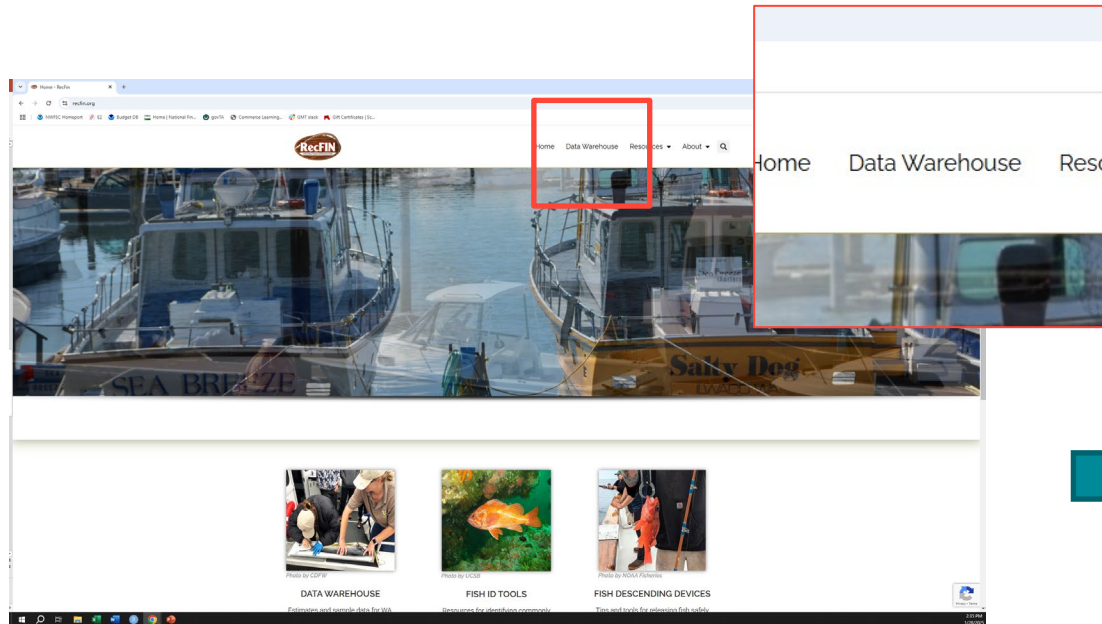
Dead discards = fish returned to the water that die
dead discards < discards

Total mortality = sum of landings and dead discards

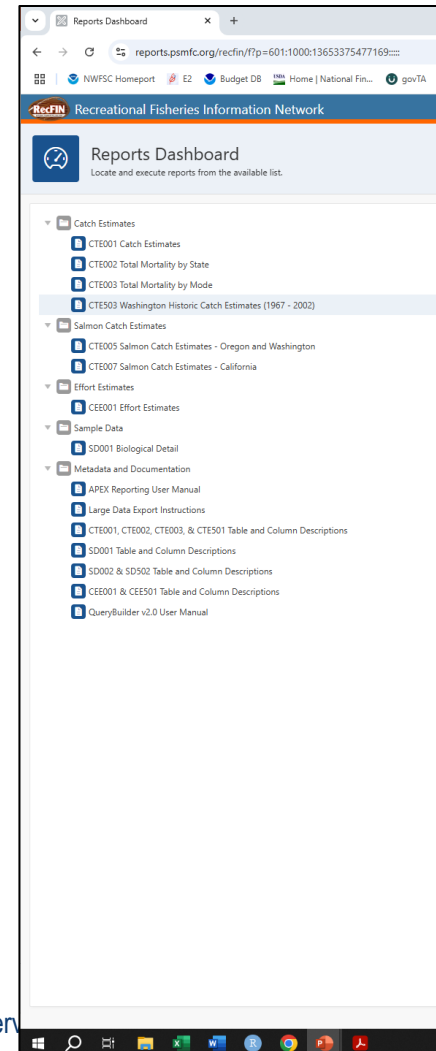


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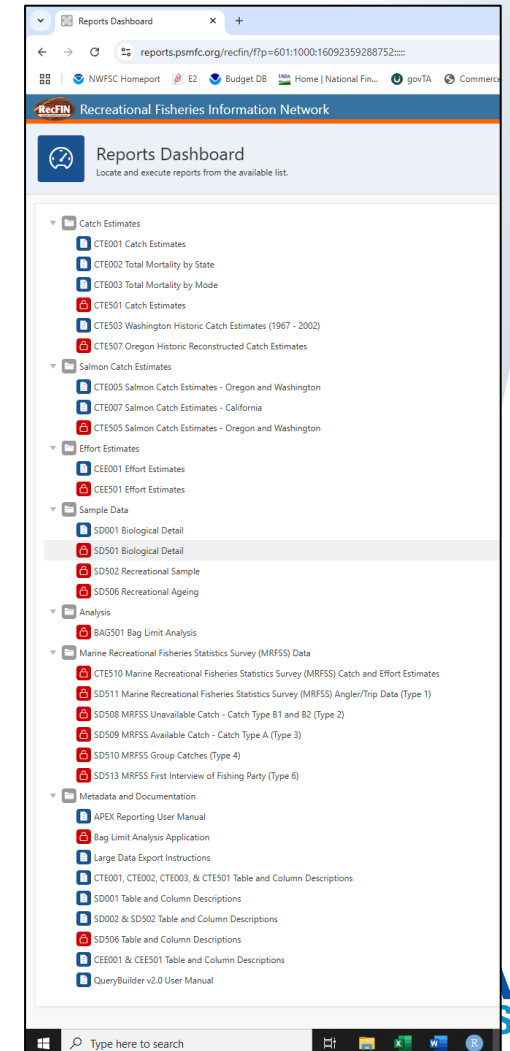
How To Access Recreational Data on RecFIN



Public facing

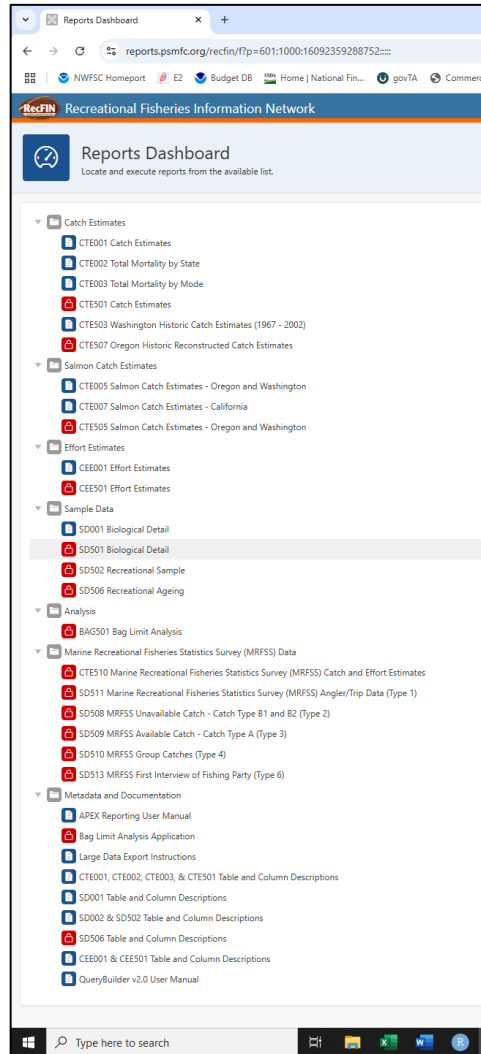


With log in



Pertinent Data Sets in RecFIN

With log in



Catch files

CTE001 Catch Estimates

CTE503 Washington Historic Catch Estimates

CTE507 Oregon Historic Reconstructed Catch Estimates

CTE510 MRFSS Catch and Effort Estimates

Biological files

SD001 Biological Detail

SD501 Biological Detail – Same as above but it has trip information (so I recommend using this file)

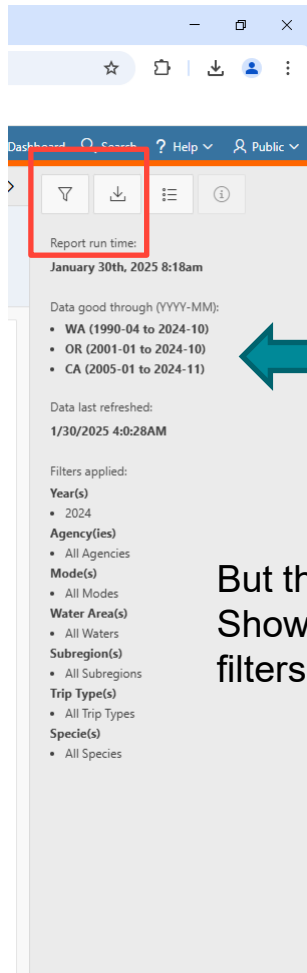
SD509 MRFSS Available Catch – yes this is oddly named for bio data

Respective metadata files (but also ask instructors)



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How to Filter and Download (e.g. with CTE001)



Note
different
years
available

But this section
Shows the default
filters

Filtering

Filters

State

- ☐ California
- ☐ Oregon
- ☐ Washington

Year Range

Between 1980 and 2003

Fishing Mode

- ☐ Beach/Bank
- ☐ Party/Charter Boat
- ☐ Man Made Structure
- ☐ Private/Rental Boat

Subregion

Southern California
Northern California
Oregon
Washington
Unknown

Species

Species Name contains...

ABALONE GENUS
ALBACORE
ALEUTIAN SKATE
AMERICAN SHAD
ANCHOVY FAMILY
ANCHOVY GENUS
ANTLERED SCULPIN
ARCTIC FLOUNDER
ARROW GOBY
ARROWTOOTH FLOUNDER

Cancel Apply

Downloading

Download Options

CSV

Comma-delimited file

ONLY includes column headings. NO header, footer, or run-time details.

Excel

Excel file saved in a XML format

Includes column headings, header, footer, and run-time details

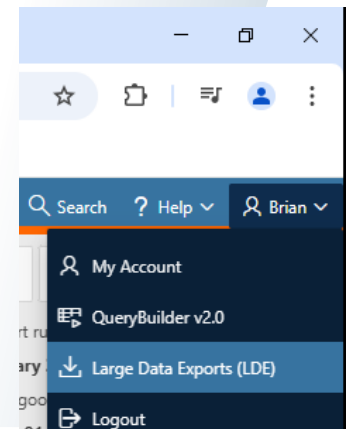
LDE

Large Data Export

ONLY includes column headings. NO header, footer, or run-time details.

Cancel

Only if
data < 10000
rows



Processing data and preparing for SS3 input

- No formal structure in place for processing rec data
 - Previous assessment repositories can be looked at on github
 - Lingcod 2021
 - Quillback rockfish 2021
 - Copper rockfish 2021
 - Canary 2023
 - Plot data for explorations
 - Catches will likely be straightforward but biological data will need more looking at and filtering
- Many others as directed by instructors



Processing data and preparing for SS3 input

- Recreational biological samples are often not expanded
 - Can create SS3 ready comps using nwfscSurvey package
 - UnexpandedLFs.fn
 - There are catch-weighted expansions for WA/OR and perhaps CA (EJ Dick)
 - These may or may not differ from unweighted comps
- Need to output number of samples and numbers of 'trips' for biological data
 - What makes a 'trip' varies by state and data source



Things to Keep in Mind

- What was the data/fleet structure in the last benchmark?
- Is my catch data in number or weight?
- Does my catch data include discard mortality?
- Does my length data include discarded fish?
- What are the units?
 - LBS or KG or **MT? CM** or MM?
 - Fork length or total length?
- What column name do I use?!??!



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