# Variability in connectivity and importance of nursery habitats for flounder species in Otago, New Zealand



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## **Research aims:**

#### Juvenile flounder stock structure

 Use morphology and DNA to differentiate species and stocks

#### Metapopulation connectivity

 Examine importance of nursery habitats in supporting adult population using flounder otoliths (ear bones)

#### Food-web dynamics in different localities

 Use stable isotope analysis to see how estuarine health impacts flounders feeding ecology



δ<sup>13</sup>C δ<sup>15</sup>N δ34S

### Importance:

Estuaries becoming degraded



Flounder are important:

- Ecologically
- Culturally
- Commercially
- Recreationally

Flounder populations are declining



