

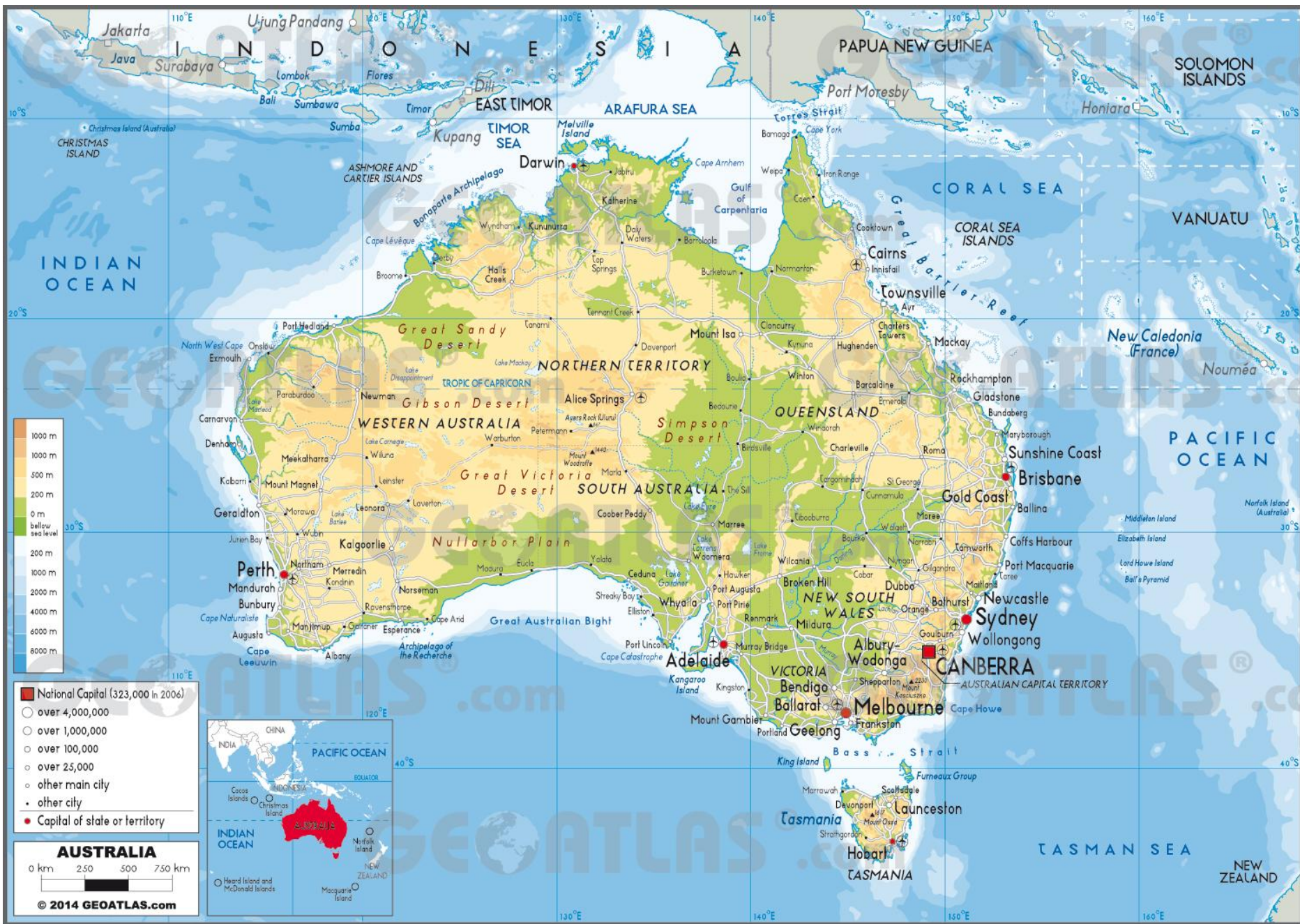
# Case study: Multi-sector fisheries management

Dr Michael Smith & Dr Athol Whitten

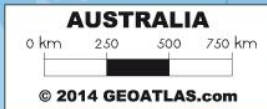


# Case Study: Port Phillip Bay

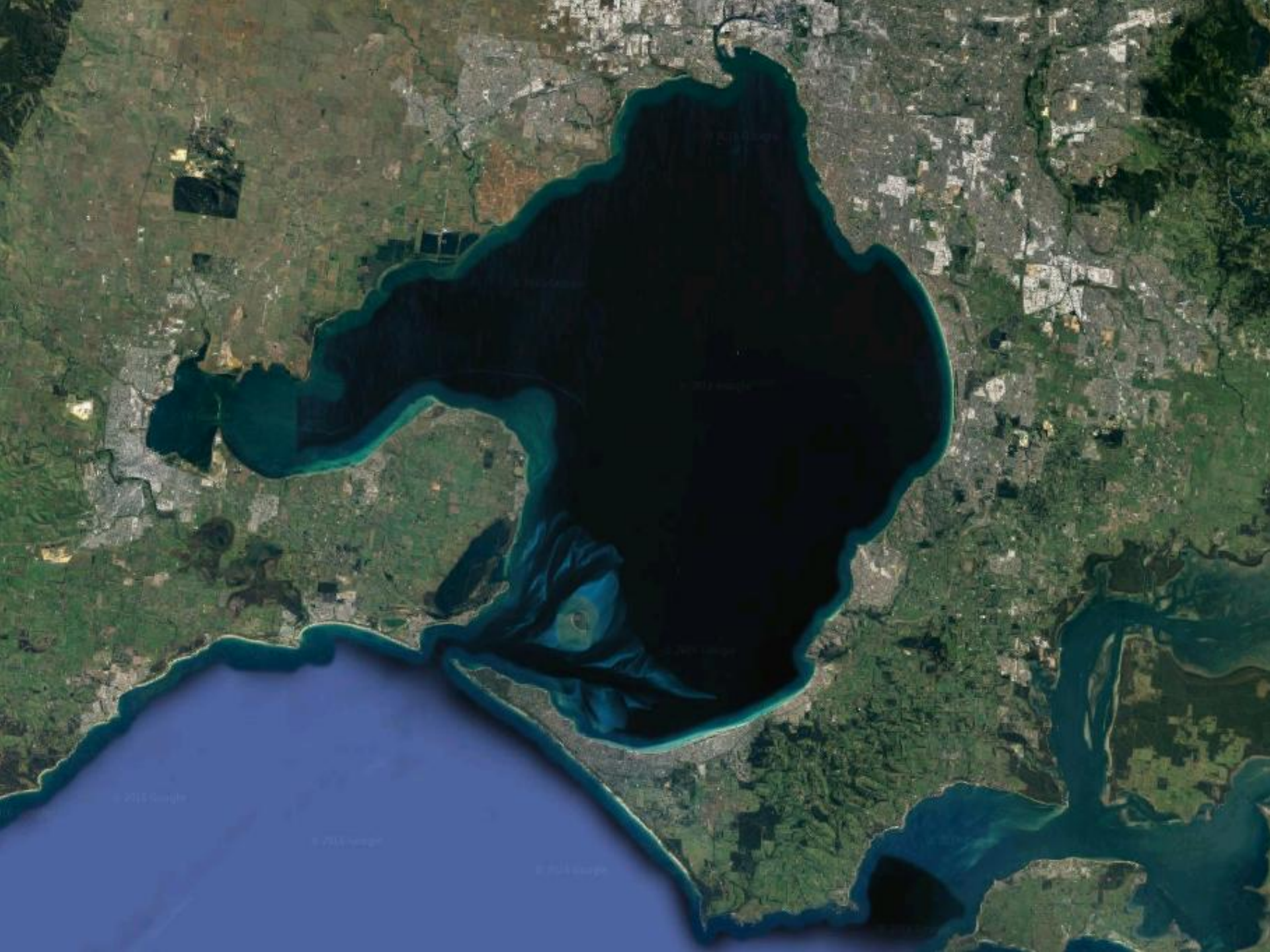
- Purpose: assess and manage fishing activity for commercial and recreational fisheries in PPB



- National Capital (323,000 in 2006)
- over 4,000,000
- over 1,000,000
- over 100,000
- over 25,000
- other main city
- other city
- Capital of state or territory







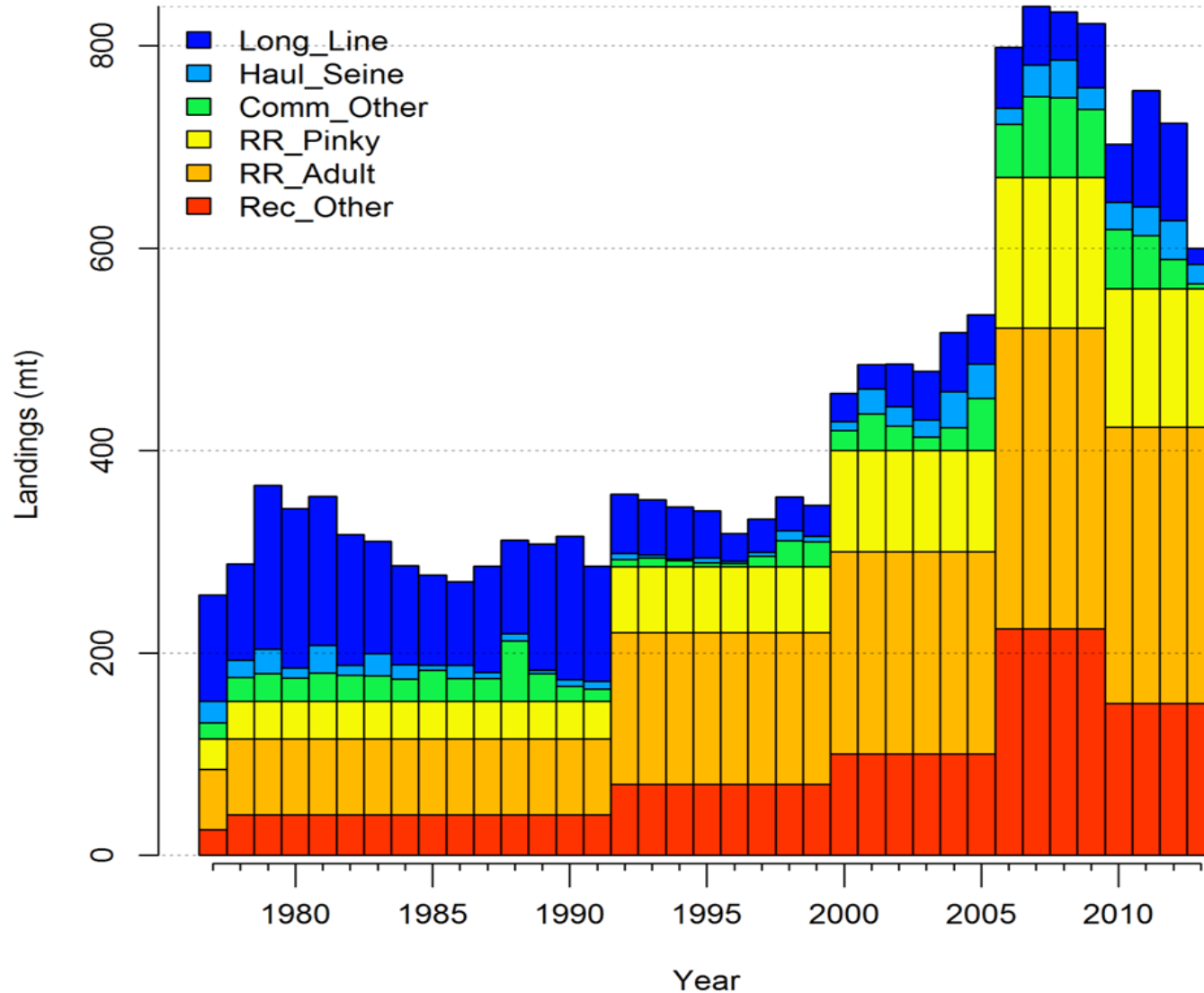


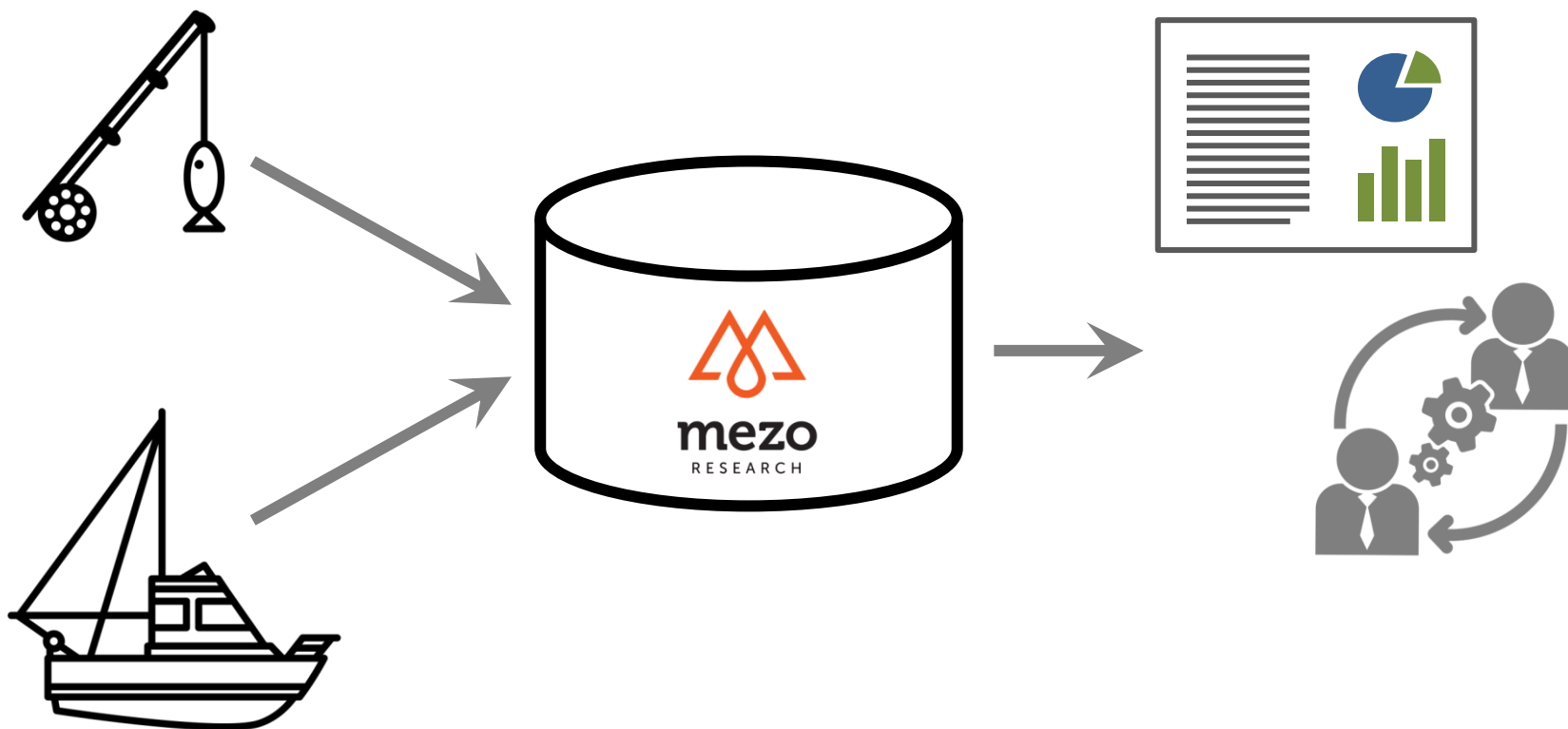


# Case Study: Port Phillip Bay

- Purpose: assess and manage fishing activity for commercial and recreational fisheries in PPB
- Several commercial fleets, but also lots of recreational fishing
- 600,000 rec fishers in Victoria
- Government has a policy to grow participation to 1 million by 2020
- 88% of total catch of snapper, 80% flathead, 50% King George whiting were caught by recreational fishers

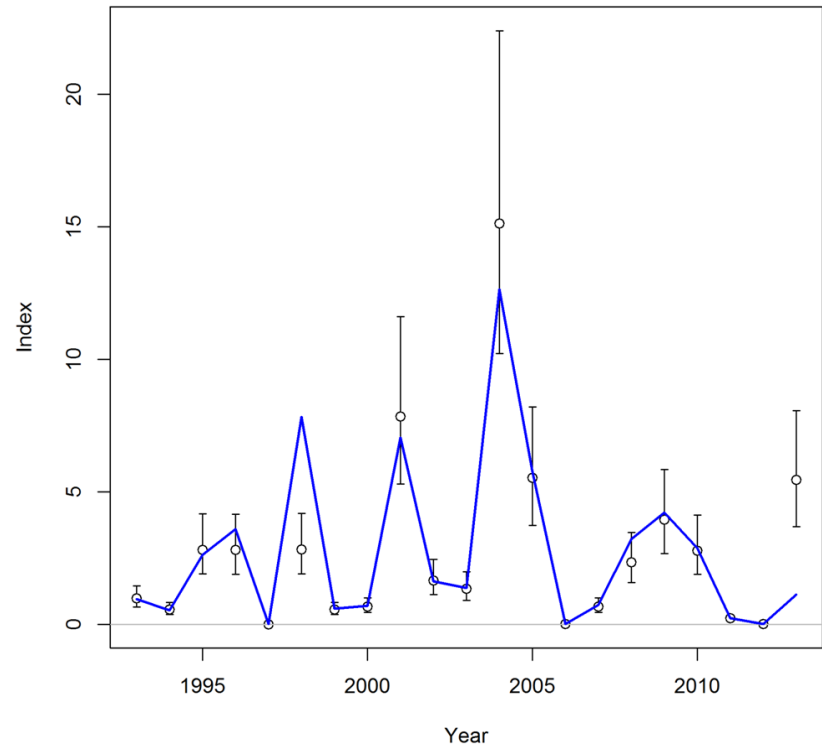
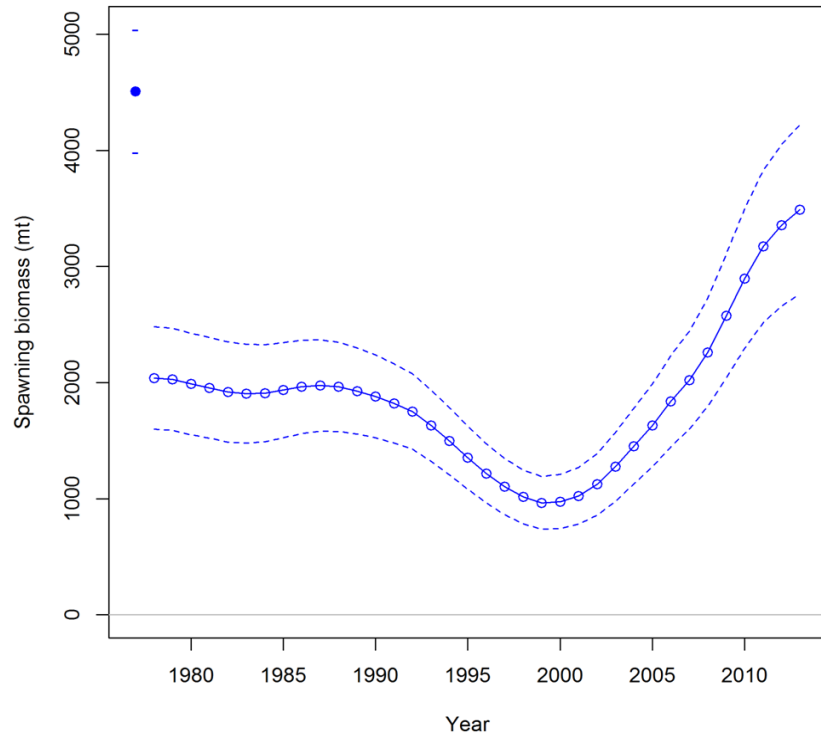
The last thirty years are dominated by recreational fishing



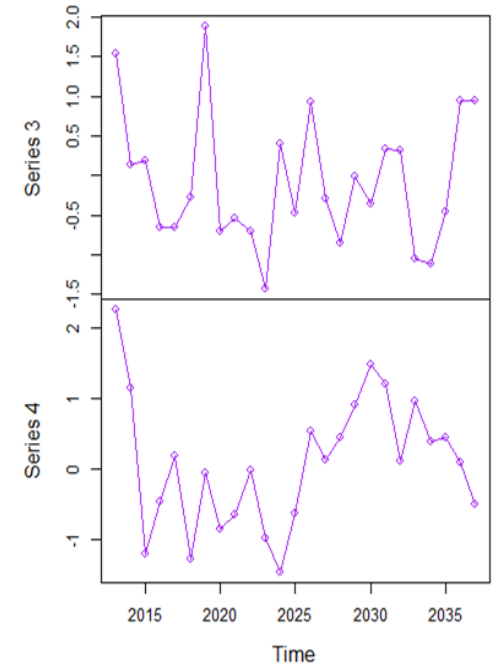
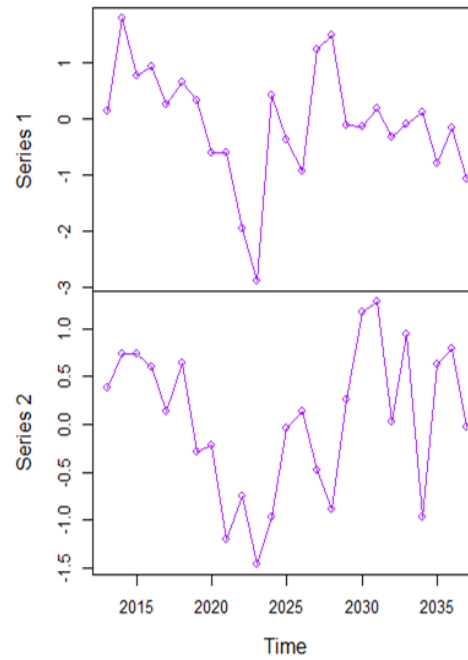
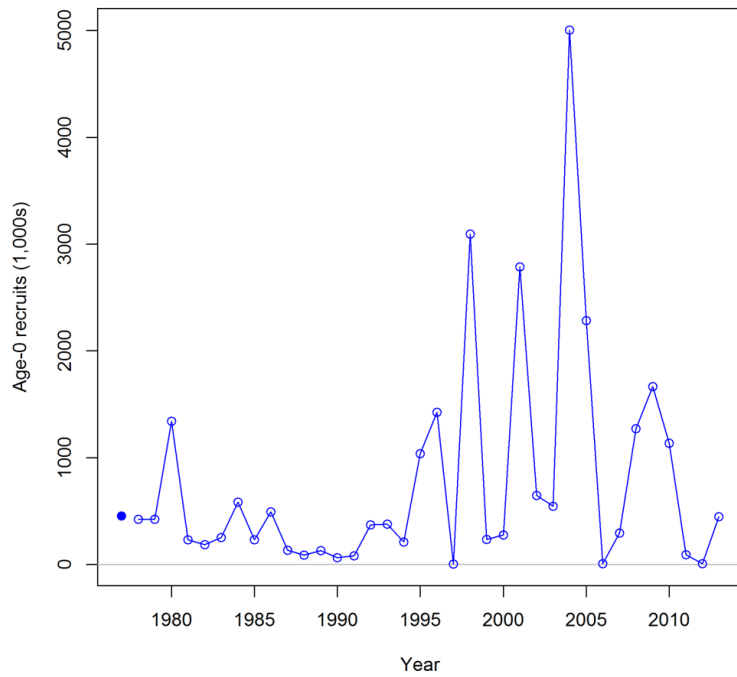




# Model estimate of spawning biomass



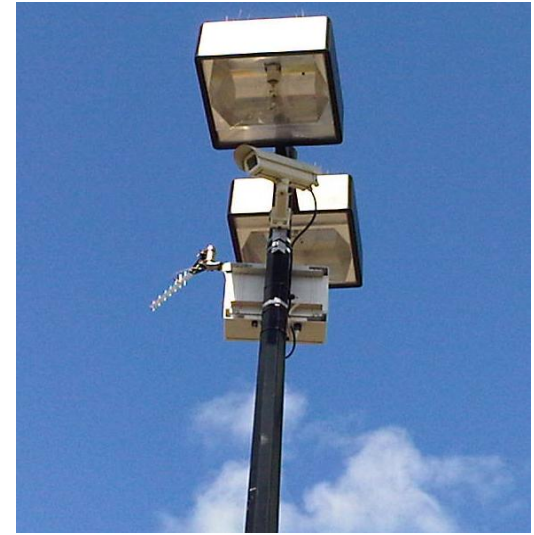
# Model simulations



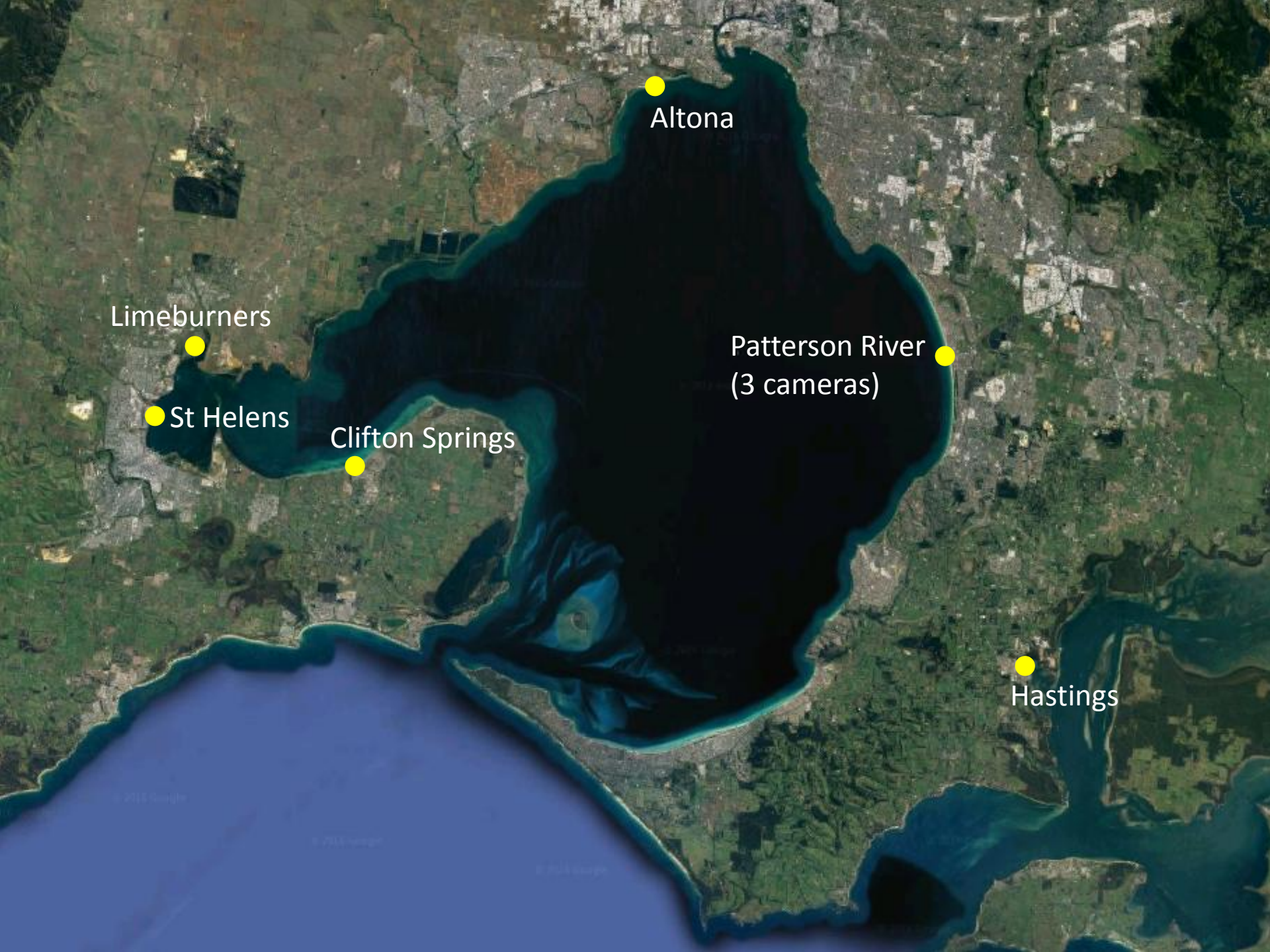
# Estimating recreational fishing

- Total recreational fishing effort
  - Fish composition per trip
  - Number of fishing trips
- Good data on catches per trip:
  - Creel surveys
  - Diary anglers
  - Boat ramp surveys
- Need a technique to estimate total number of trips









Altona

Limeburners

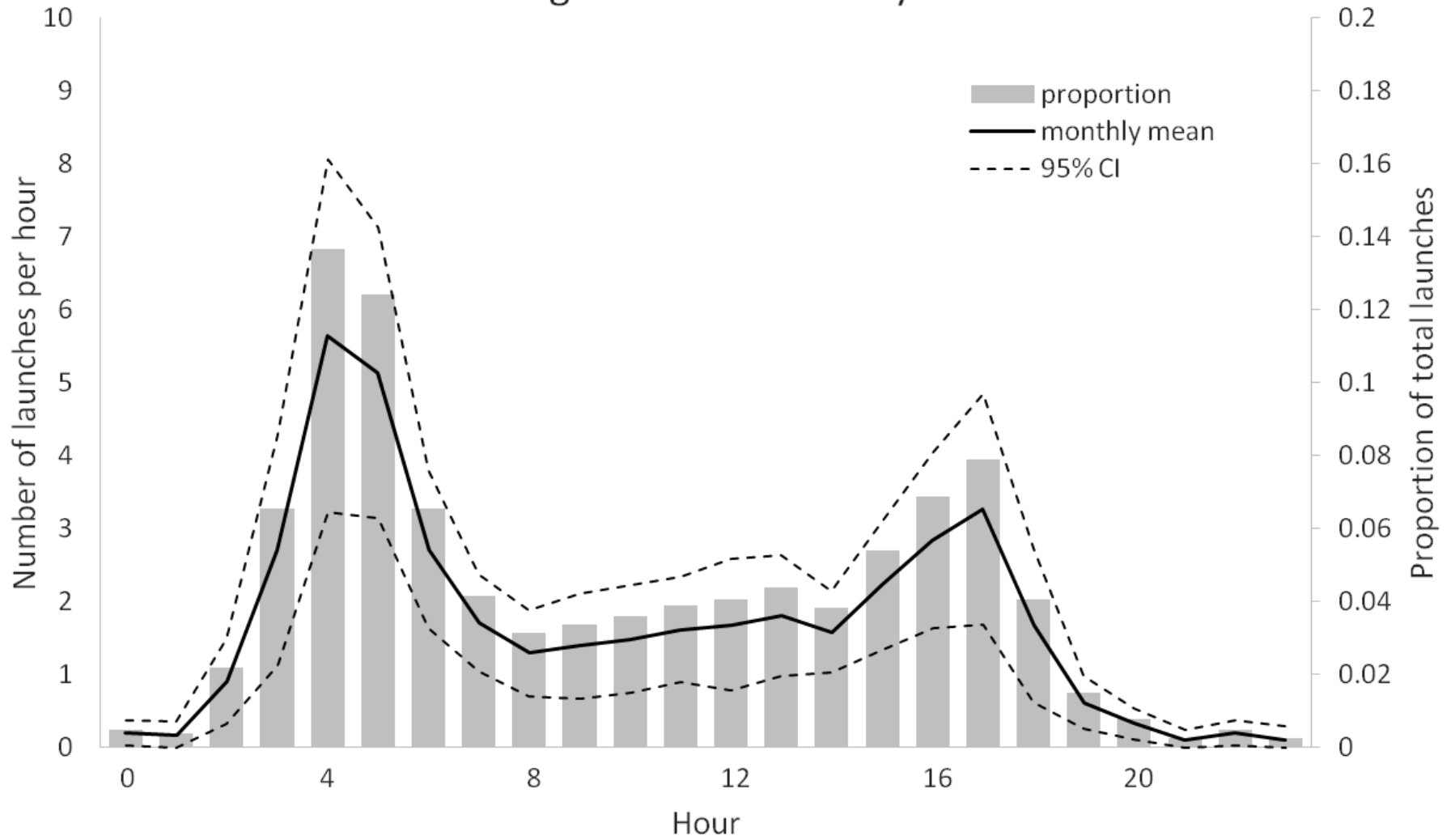
St Helens

Clifton Springs

Patterson River  
(3 cameras)

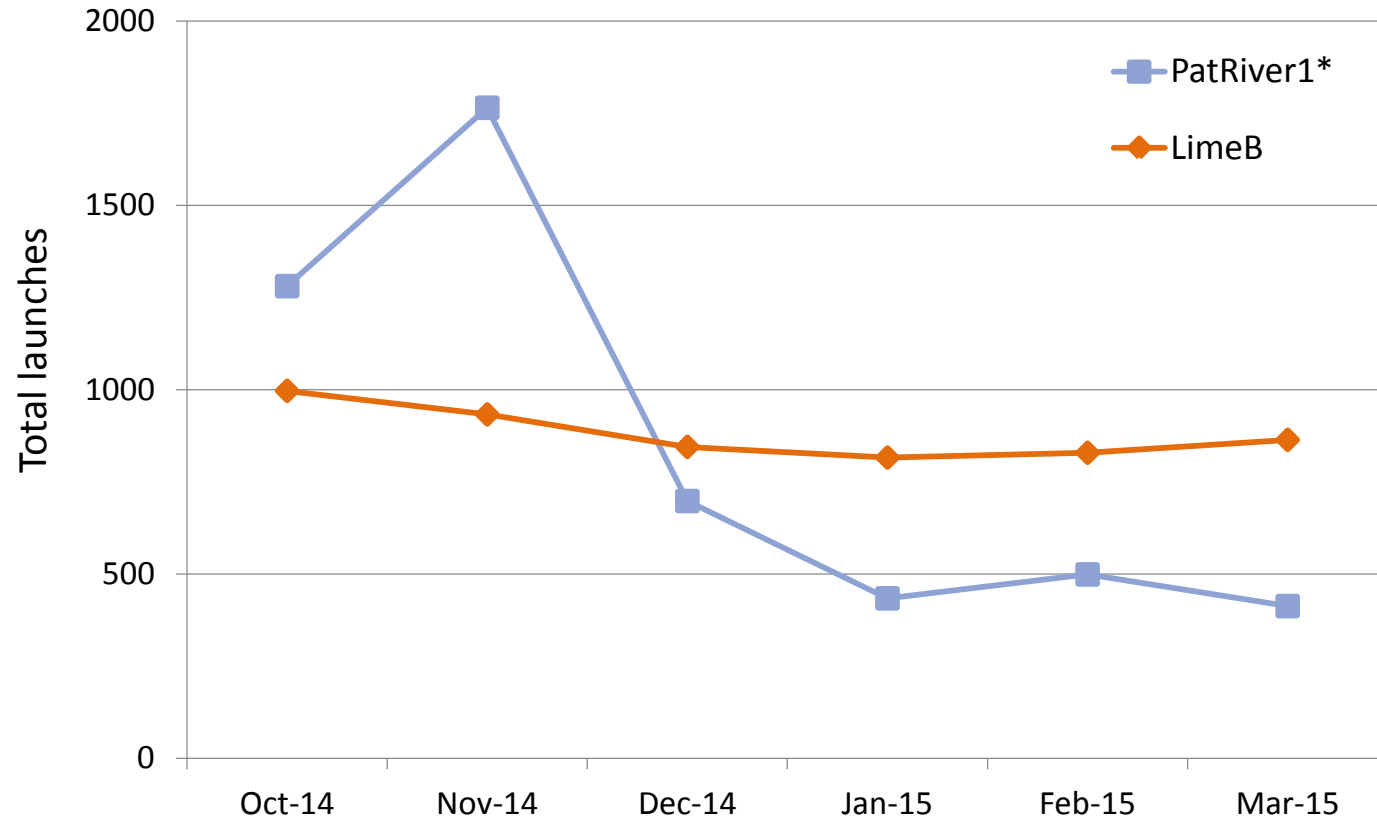
Hastings

# Fishing vessel launches by hour

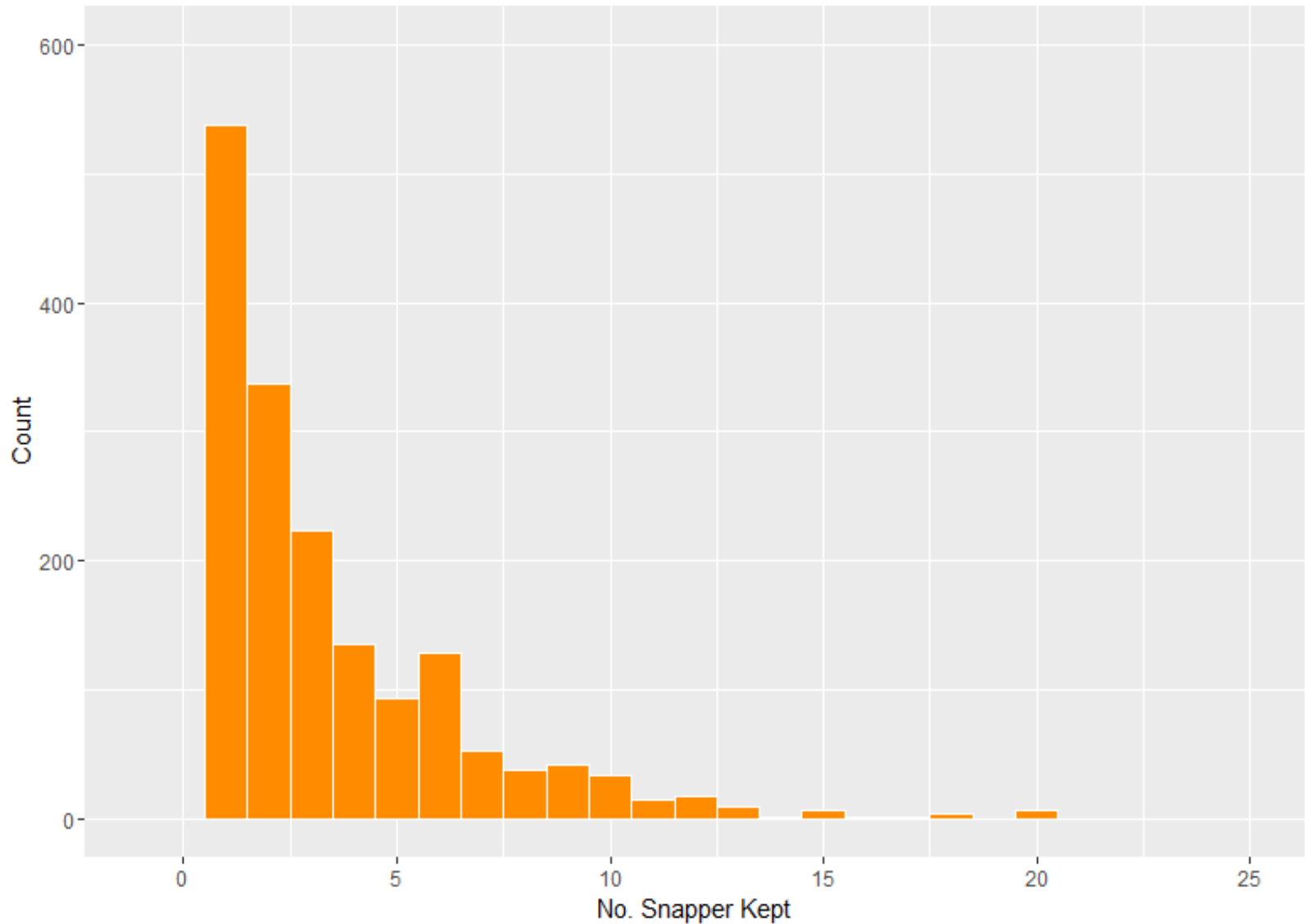




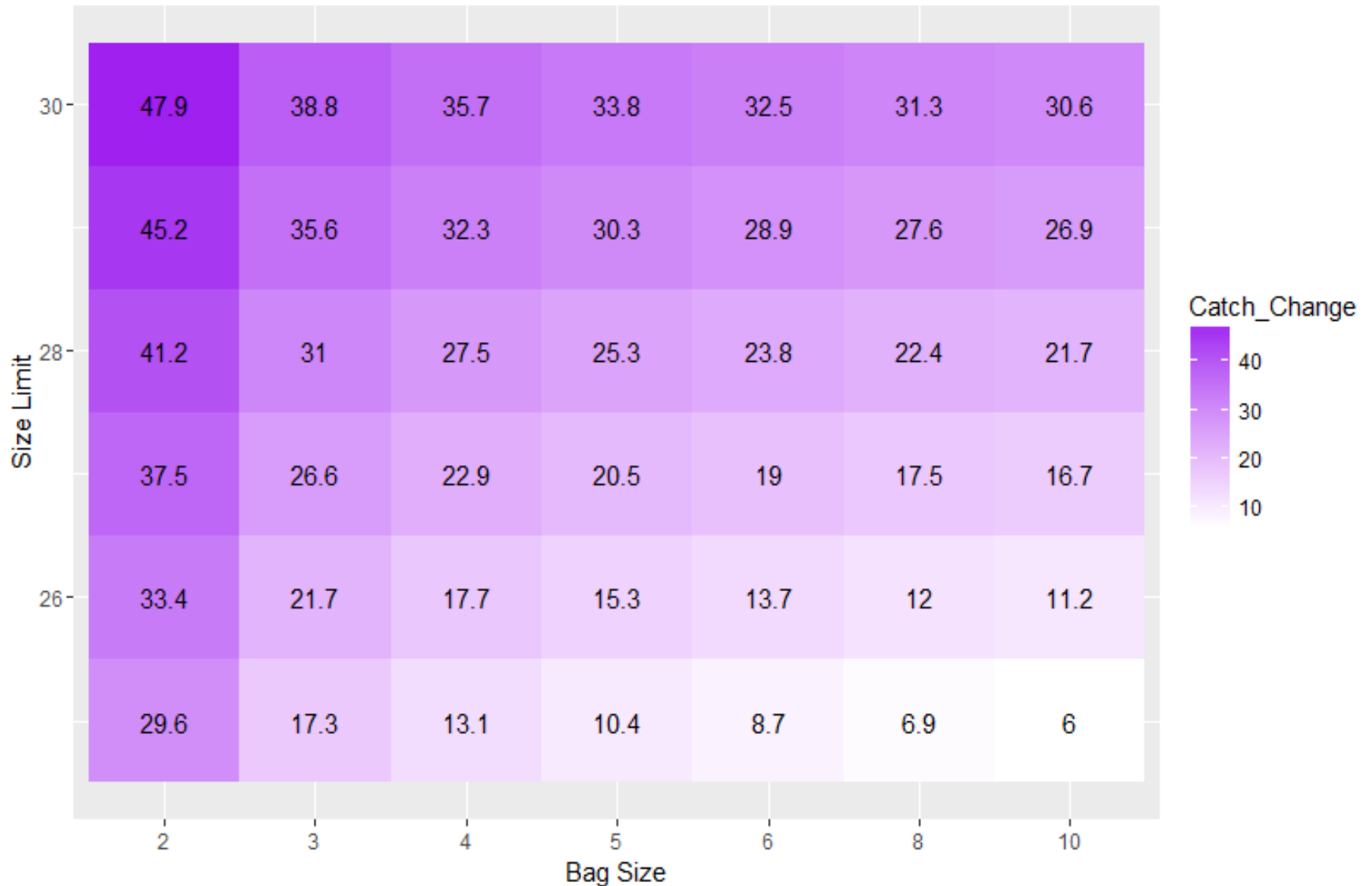
## Total Launches by Month



## Recreational fishing trips are dominated by catches of <5 fish



## Simple outputs for management decisions aid engagement







# Group activity

- Consider a recreational fishery that you are familiar with.
- How is the fishery managed at present?
- Identify what data are currently collected, and how the fishery is being assessed (if at all).
- What are some other ways that the fishery could be managed?



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