

# Using field experiments to assess alternative mechanisms for distributing fish to the recreational sector

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# Motivation

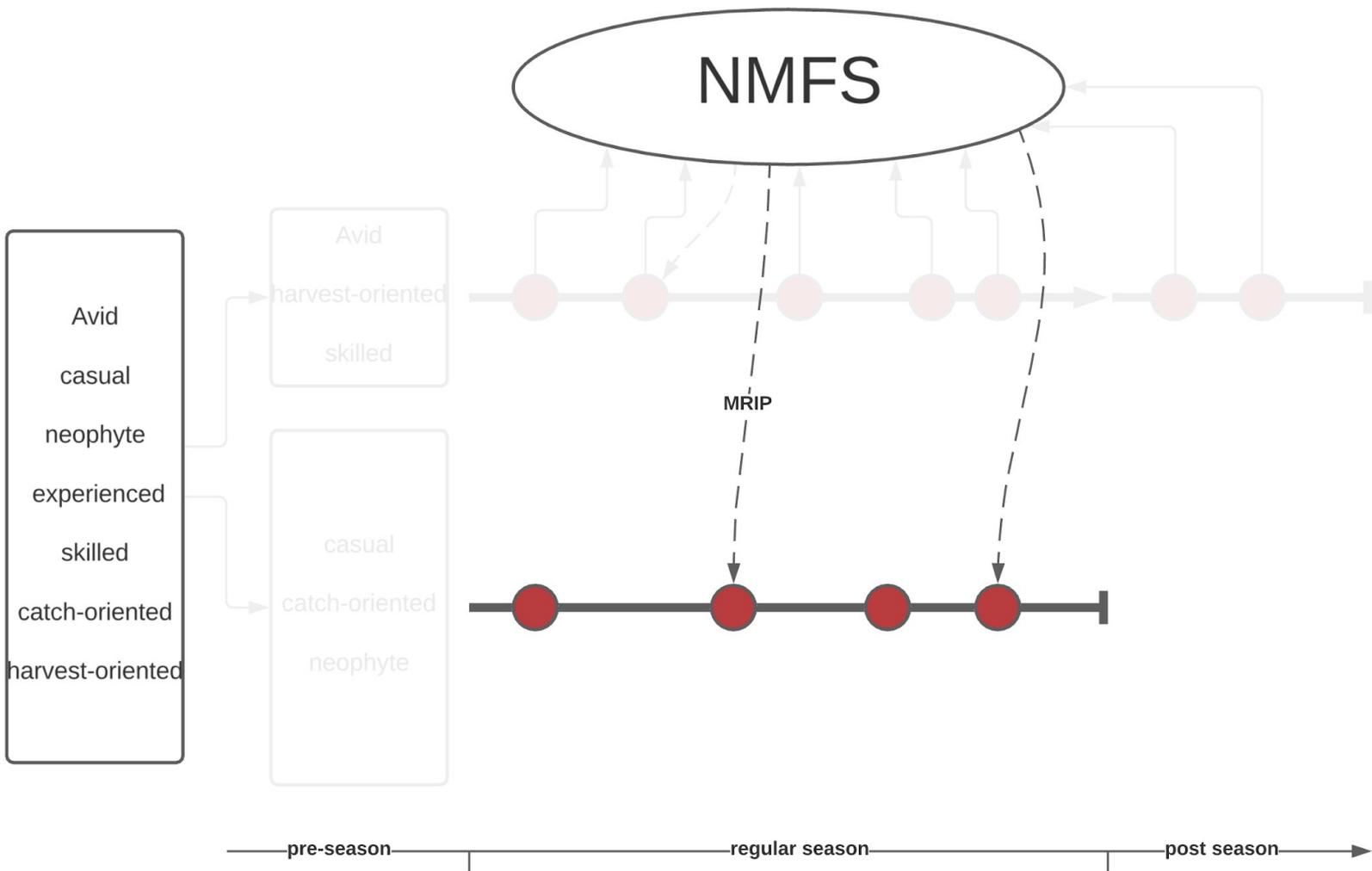
- S-G rec fishery sees high discards - welfare reducing
- This is caused in part by differential timing of existing regs
  - eg. Grouper opens in May/June, while Red Snapper is opened in July, and other co-occurring species are open year-round
- So, what options can address this?
  - Restricted, aligned seasons for co-caught species
  - Area closures
  - Multi-species day pass program

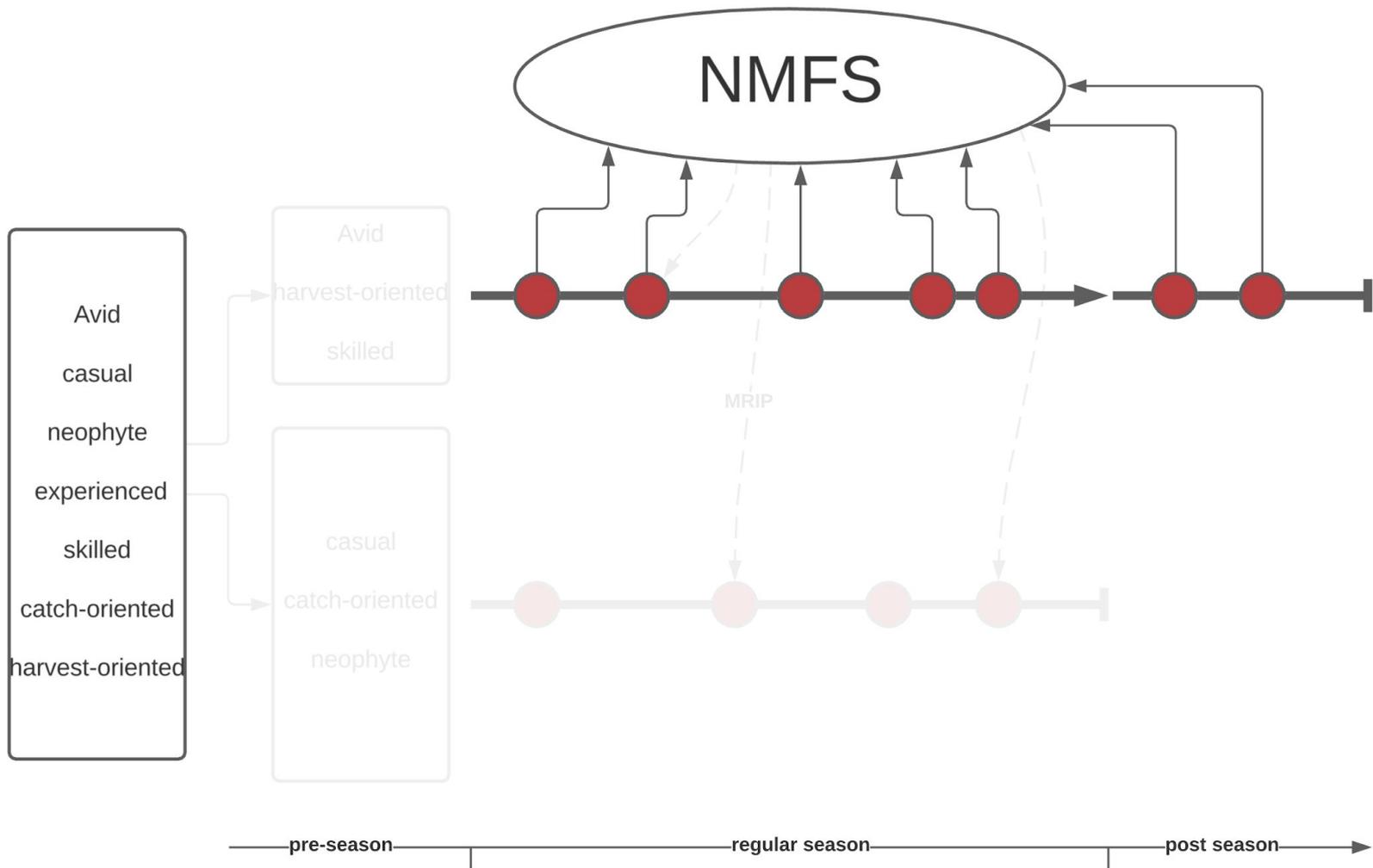
# Proposed Pilot Program

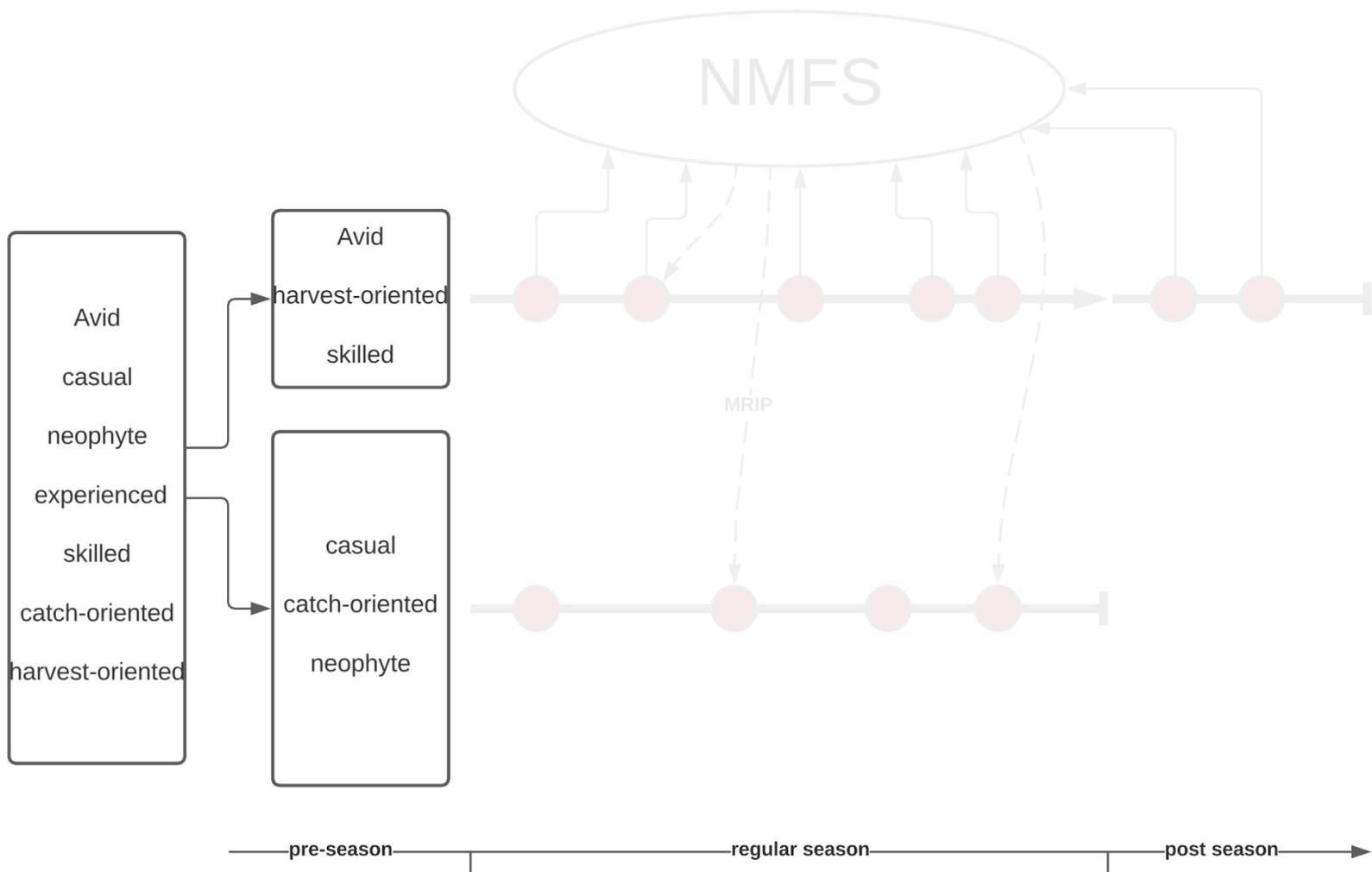
- Allow anglers to fish outside the regular season in exchange for data provision
  - Use lotteries to allocate out-of-season day passes, with the usual bag limit
  - Day pass usage conditional on logbook-style, app-based data collection

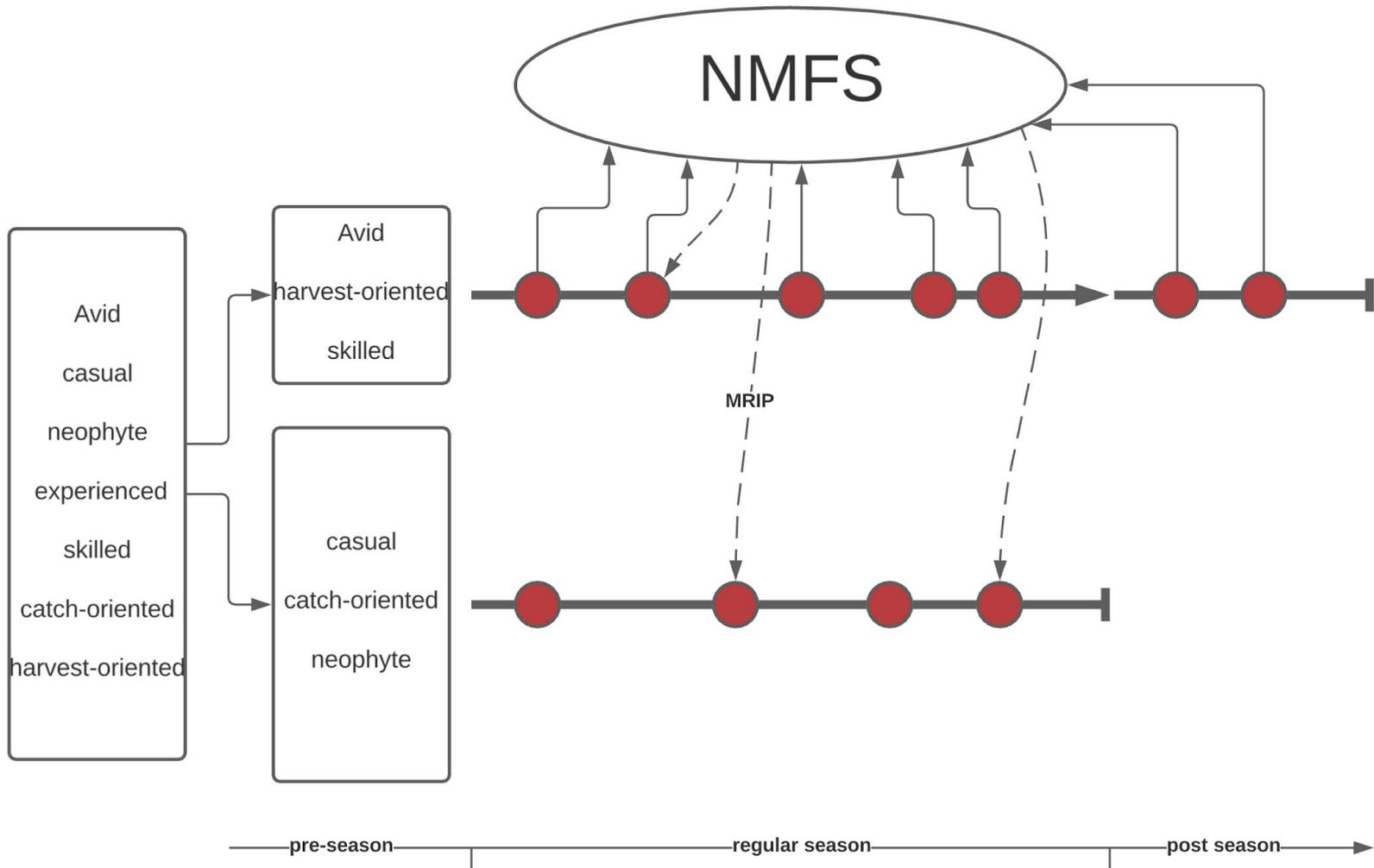
## Important:

- Don't reduce opportunity (shorten season) for non-participants. Possibilities:
  - NMFS-retained quota could be used (quota bank?)
  - Some quota could be set aside when there are increases



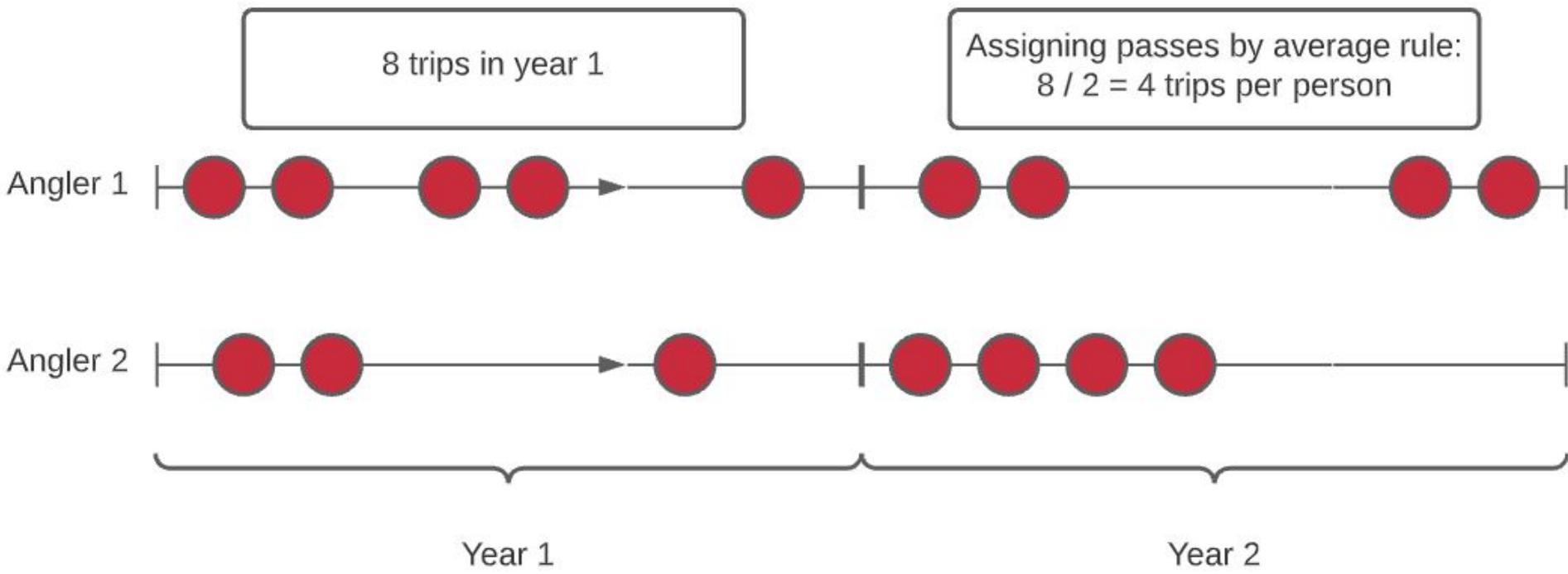






# Expanding program across years: Scaling Up

- Treat pilot year data as catch histories
- Then award day passes in year 2 based on those catch histories
- Then award day passes in year 3 based on catch histories in years 1 and 2
- ...



# What are some benefits/costs of this approach?

|                    | Benefits   | Costs   |
|--------------------|--|---|
| For an angler-trip | (1) increased flexibility in when to go fishing, (2) greater retention of catch            | Reporting costs                                 |
| For whole system   | More precise measurement of catch/removals (ie. reducing uncertainty of discard mortality) | Monitoring costs (law enforcement / intercepts) |

# How can we *measure* benefits/costs?

|                         | Benefits                                     | Costs   |
|-------------------------|--|---|
| For a particular angler | % of passes used outside conventional season | Time spent using app<br>Help requests / IT complaints |
| For whole system        | Reporting accuracy rate                      | Misreporting rate                                     |

# Outstanding Issues

- Which species to include on a multi-species pass
- Bottleneck problems
  - I.e., if you hit the low bag limit of a species like Red Snapper or Greater Amberjack, what then?
  - Can we create stronger incentives to discover more specific targeting strategies?
- Enforceability
  - Trip tickets and reporting of observable harvest: relatively easy, see eg. MS Tails'n'Scales
  - Discard prohibition / reporting B1, B2 catch: may require more creative/expensive solutions
- Pilot considerations:
  - Avoiding program attrition, starting with focus groups
  - Ideal area/state/population to start with