

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

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# Motivation

- We currently distribute quota to the rec sector w/ season lengths, bag limits, size limits.
- The above are one-size-fits-all policies, while anglers are very heterogeneous
- May tailored policies be preferable, and feasible today due to advances in technology (ie. monitoring, catch reporting, etc.)?

# NAS report on LAPPs in mixed use fisheries

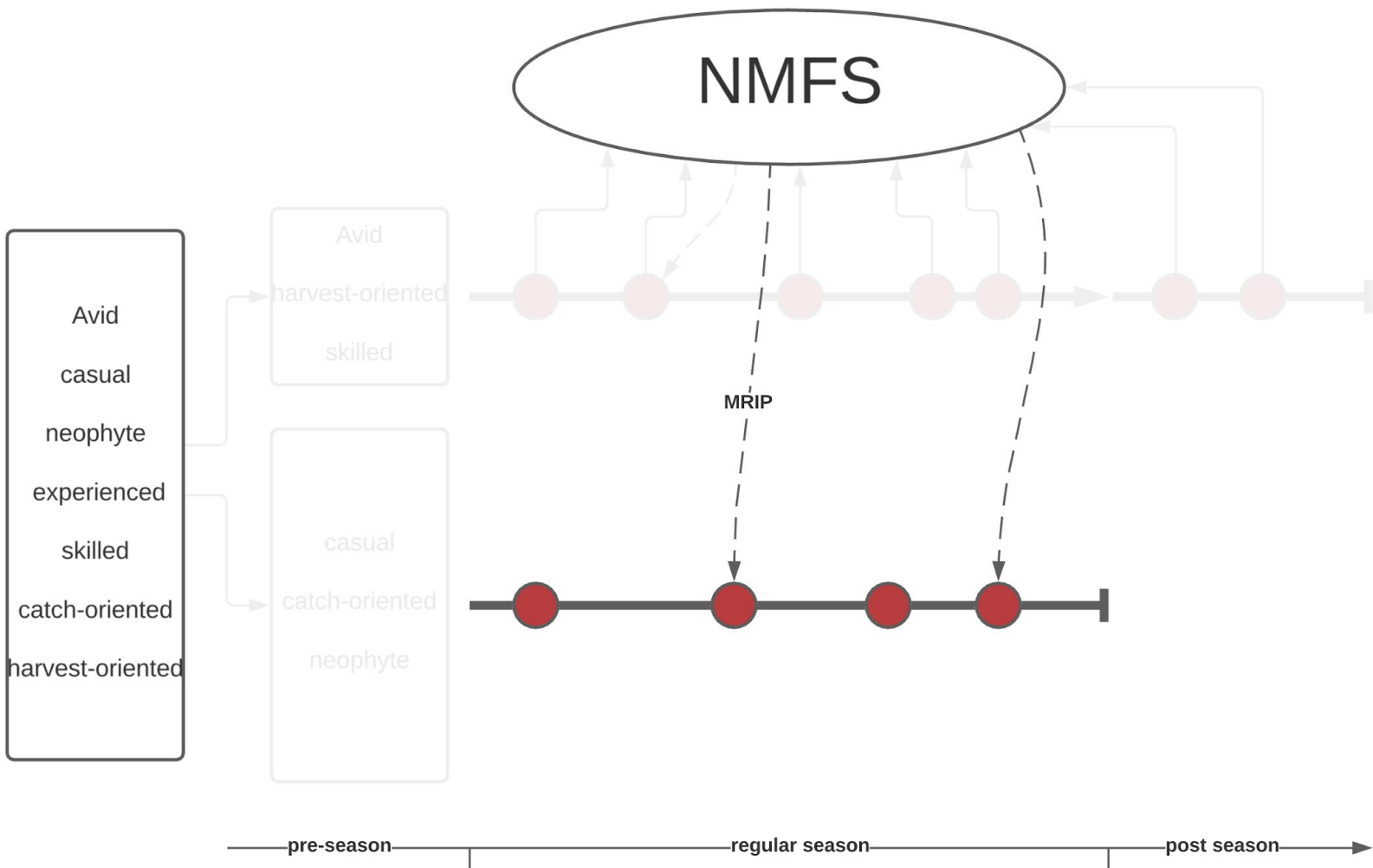
- Recommendation: “...propose and implement reforms (including ... harvest tags or day passes for private anglers) that foster accountability while enhancing fishing experiences and opportunities to heterogeneous groups of anglers.”

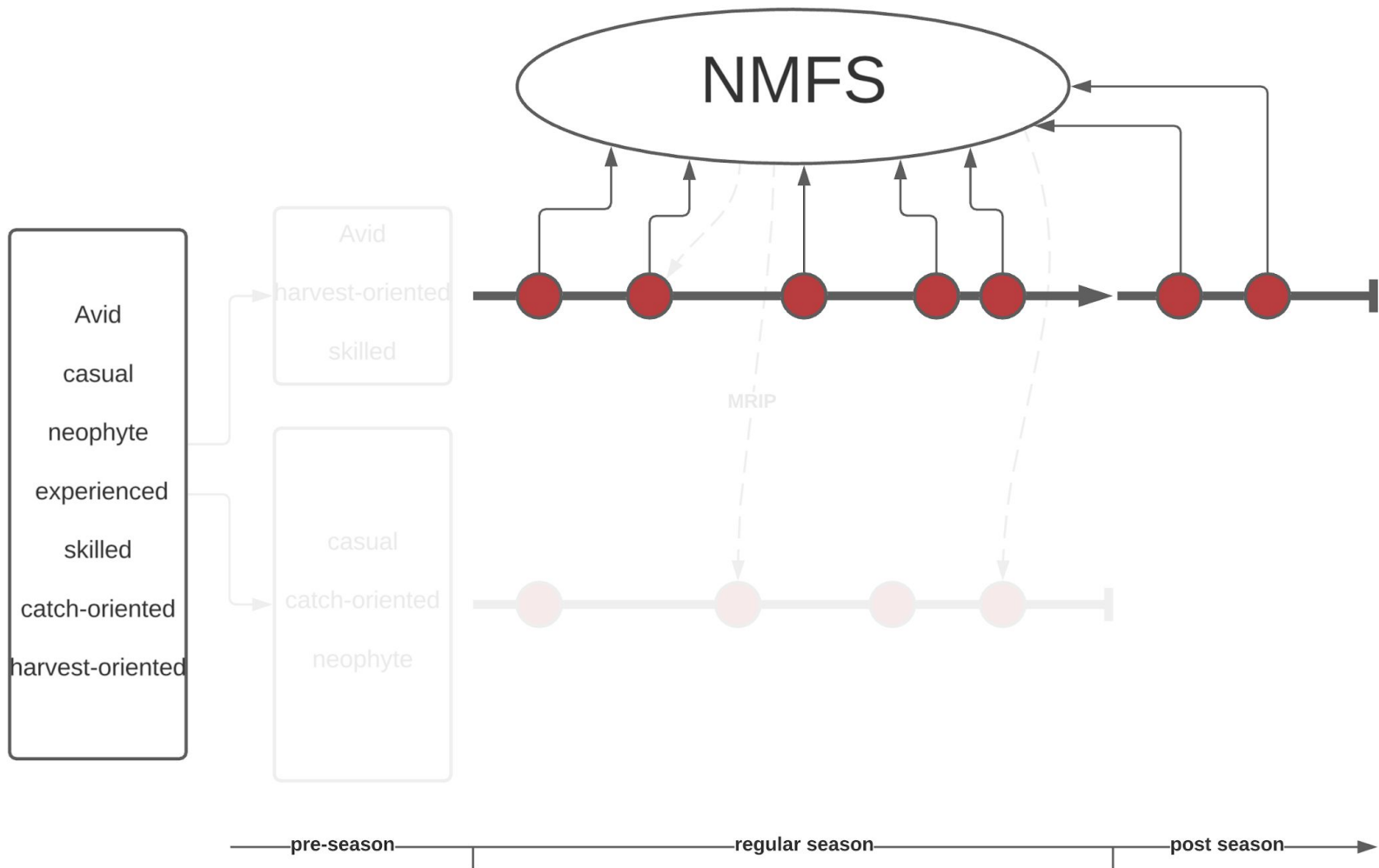
# Proposed Pilot Program

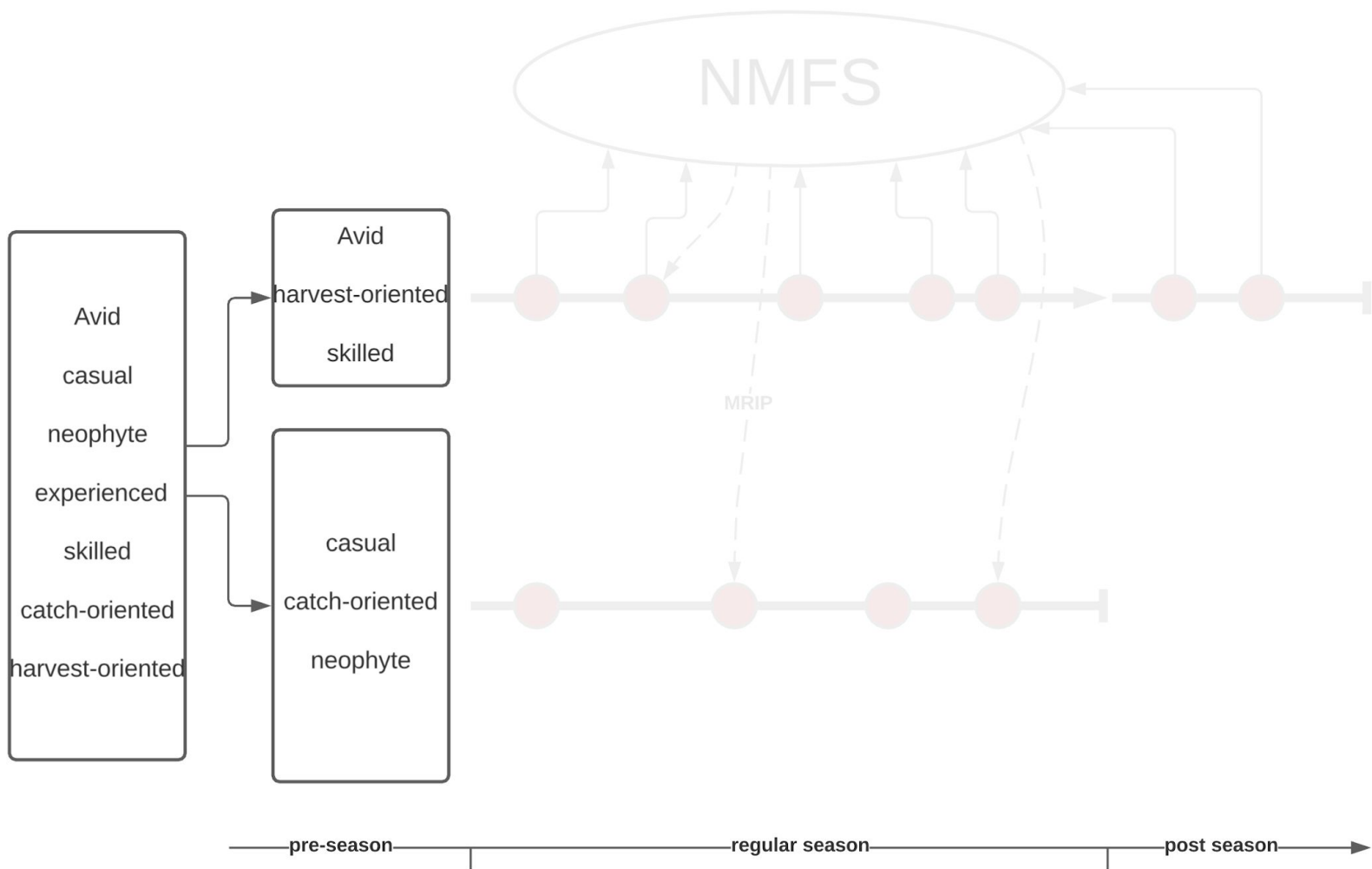
- Allow anglers to fish outside the regular season in exchange for data provision
  - Use lotteries to allocate post-season day passes, with the usual bag limit
  - Day pass usage conditional on logbook-style, app-based data collection

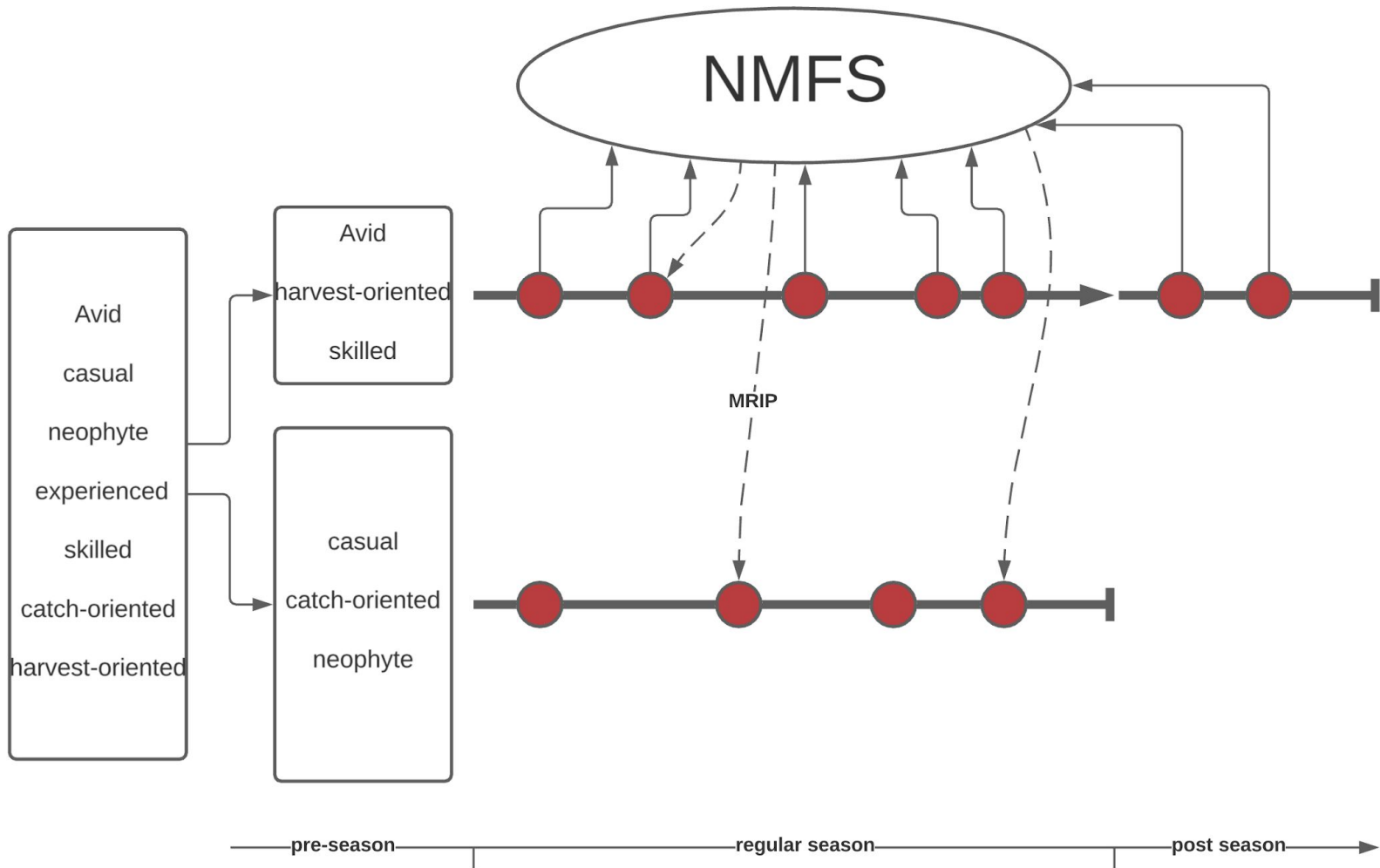
## Important:

- 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





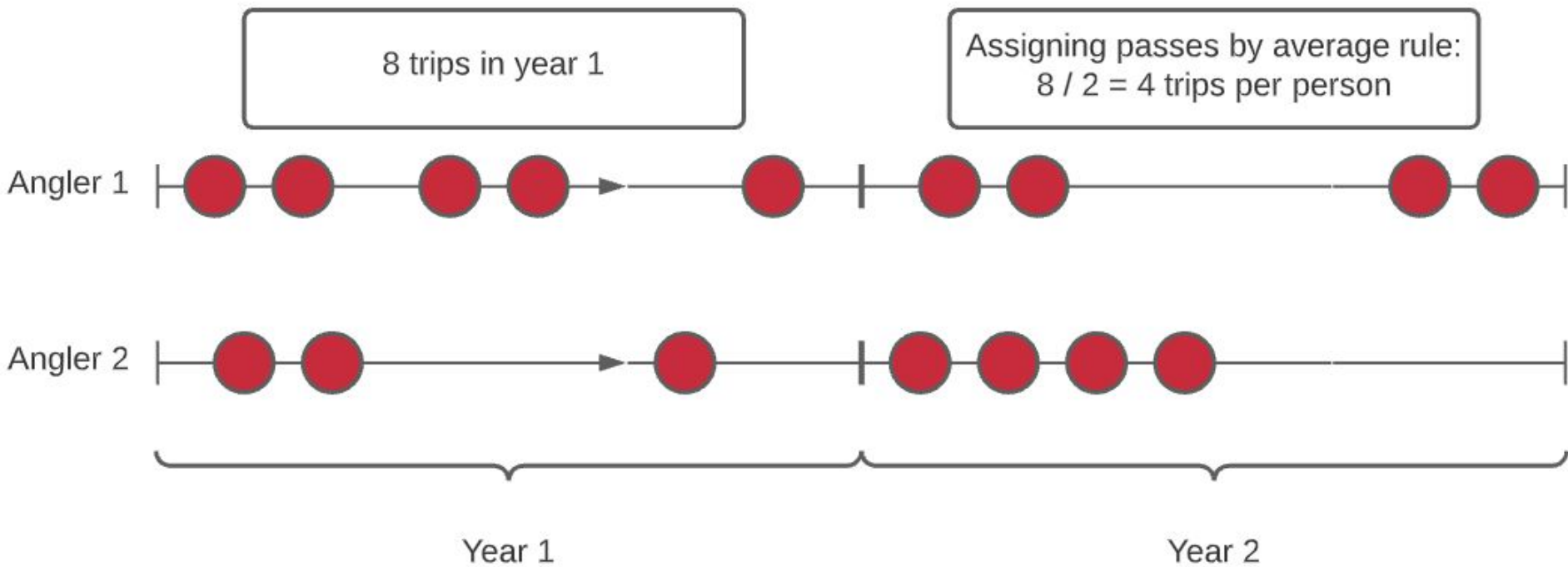






# Expanding program across years: Scaling Up

- 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:**
  - For a particular angler: increased flexibility in when to go fishing
  - Across anglers: more efficient distribution of fish mortality
  - To the system as a whole: reduced error in measurement of catch
- **Costs:**
  - For a particular angler: reporting costs
  - Across anglers: bargaining costs
  - To the system as a whole: monitoring costs

# What are some benefits/costs of this approach?

	Benefits	Costs
For a particular angler	increased flexibility in when to go fishing	Reporting costs
For whole system	More precise measurement of catch/removals	Monitoring costs

# How can we *measure* benefits/costs?

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

# Outstanding issues

- Initial allocation
- Race for catch history
- Program drop-out

# Current Status

- An EFP application is currently drafted, the preceding design being just 1 archetypal example of the options outlined in that application
- In the near future, need to gather feedback from anglers and other stakeholders