

NATURE LIKE NOWHERE ELSE

Activating Nature-based Tourism in South Australia

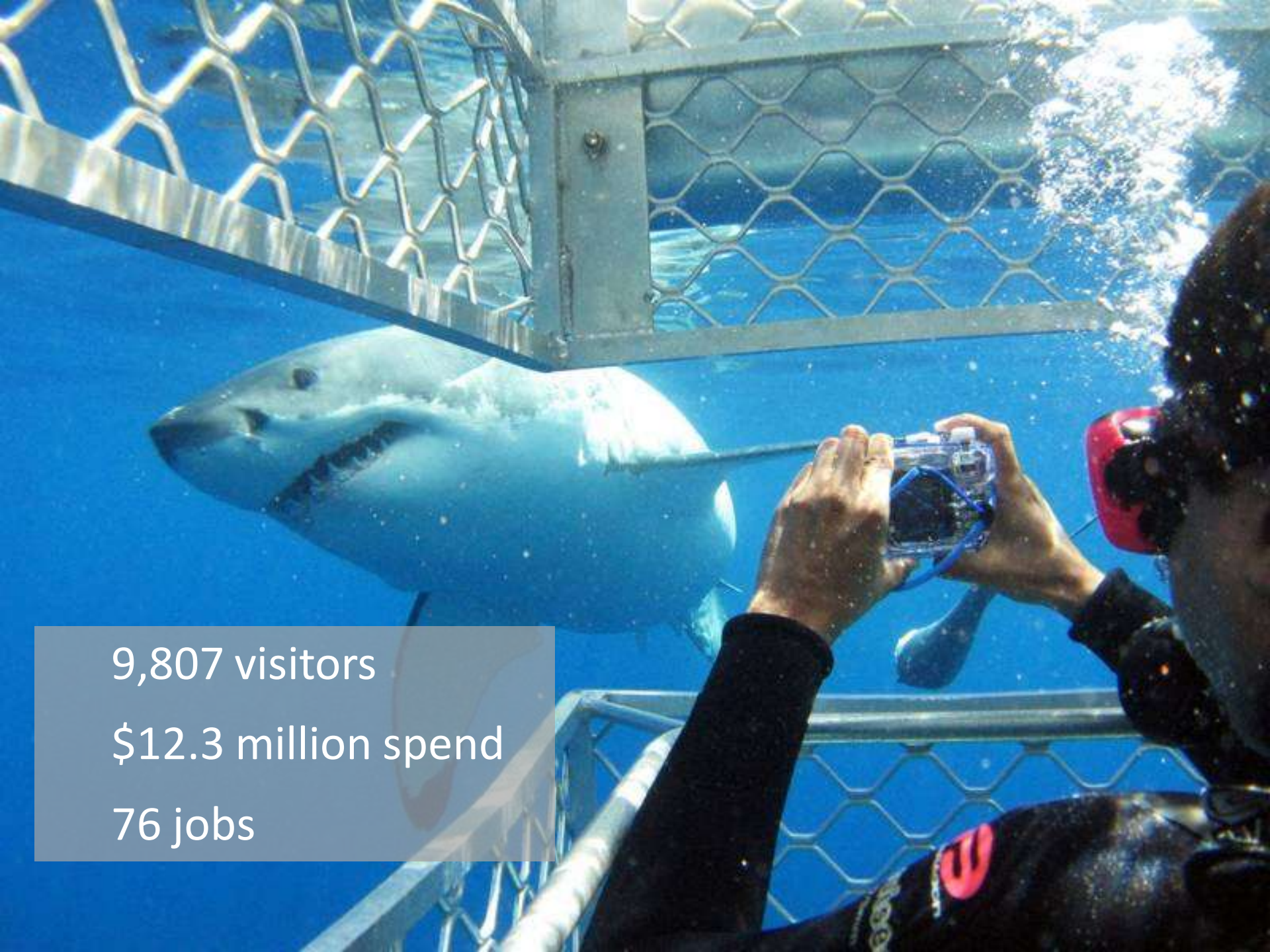
Science Supporting Tourism: an adaptive management framework for great white shark tours

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9,807 visitors

\$12.3 million spend

76 jobs

South Australian MARINE PARKS

- 1 Far West Coast Marine Park
- 2 Nuyts Archipelago Marine Park
- 3 West Coast Bays Marine Park
- 4 Investigator Marine Park
- 5 Thorny Passage Marine Park
- 6 Sir Joseph Banks Group Marine Park
- 7 Neptune Islands Group (Ron and Valerie Taylor) Marine Park
- 8 Gambier Islands Group Marine Park
- 9 Franklin Harbor Marine Park
- 10 Upper Spencer Gulf Marine Park
- 11 Eastern Spencer Gulf Marine Park
- 12 Southern Spencer Gulf Marine Park
- 13 Lower Yorke Peninsula Marine Park
- 14 Upper Gulf St Vincent Marine Park
- 15 Encounter Marine Park
- 16 Western Kangaroo Island Marine Park
- 17 Southern Kangaroo Island Marine Park
- 18 Upper South East Marine Park
- 19 Lower South East Marine Park

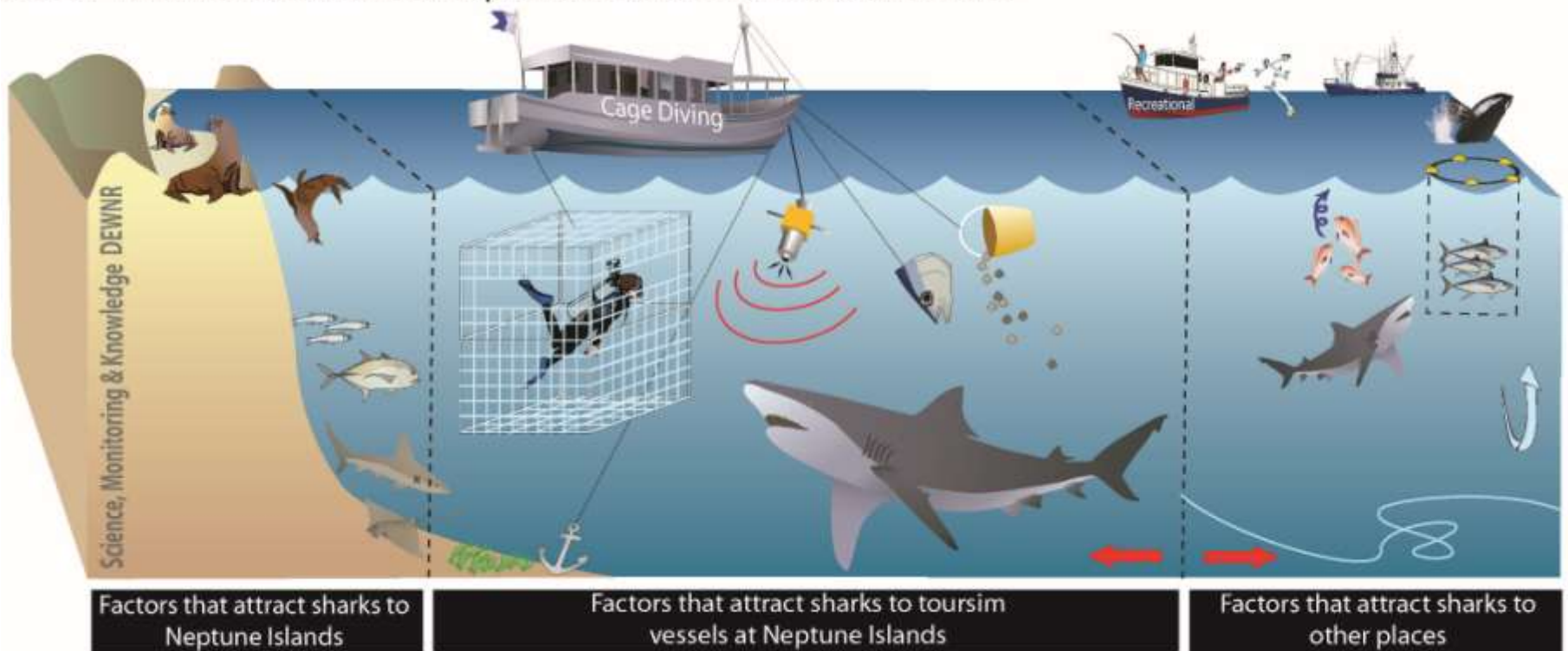


Mean shark residency 21 days

Days of tourism per annum (2000-2010)



Great White Sharks at the Neptune Islands Conservation Park



Drivers of change in shark behaviour, health & population

- 1) Berley attractants
- 2) Tethered bait attractants
- 3) Vessel presence
- 4) Sound attractants
- 5) Seal population
- 6) Fishing (Indicators unresolved)

Indicators

- 1) Vessel presence: number, duration & times
- 2) Berley: volume used, duration & times
- 3) Bait: type, duration & times, quantity taken (per day & shark)
- 4) Sound: duration & times, volume
- 5) Shark population: # observations, # different sharks
- 6) Shark behaviour: residency period, habituation
- 7) Shark health: visual condition
- 8) Seals: pup counts

Knowledge Gaps

- 1) Extent of habituation of GWS visiting Neptune Is.
- 2) Understanding the implication of behavioural change on the viability of GWS
- 3) Population size of GWS visiting Neptune Is.
- 4) Importance of seals at Neptune Is. as prey for GWS
- 5) Effects of various forms of attractants used in tourism activities on behaviour change
- 6) Impacts of external factors attracting GWS away from Neptune Is.
- 7) Levels of fishing & fish stocks on GWS behaviour & population

Upwelling from the shelf

Snapper spawning

Tuna mariculture

Sound attractants

Berley attractants

Recreational fishing

Long-line fishing

Fish cleaning

Anchor damage

to seafloor

Other shark species

Migration patterns

of sharks



South Australian White Shark Tour Licensing Policy

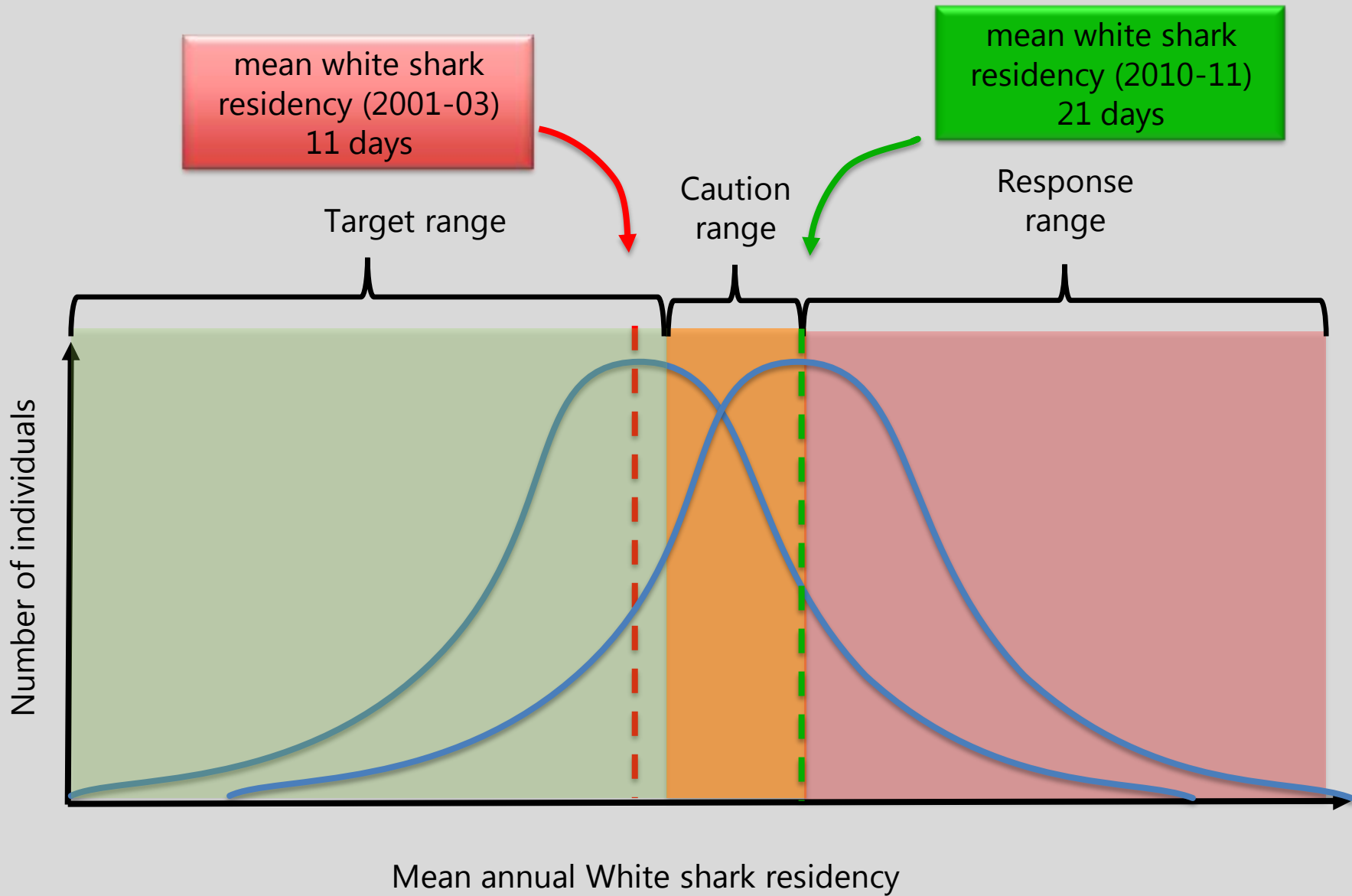
An adaptive policy framework to guide licensing and to support a socially responsible, environmentally sustainable and economically progressive white shark tourism industry in South Australia.

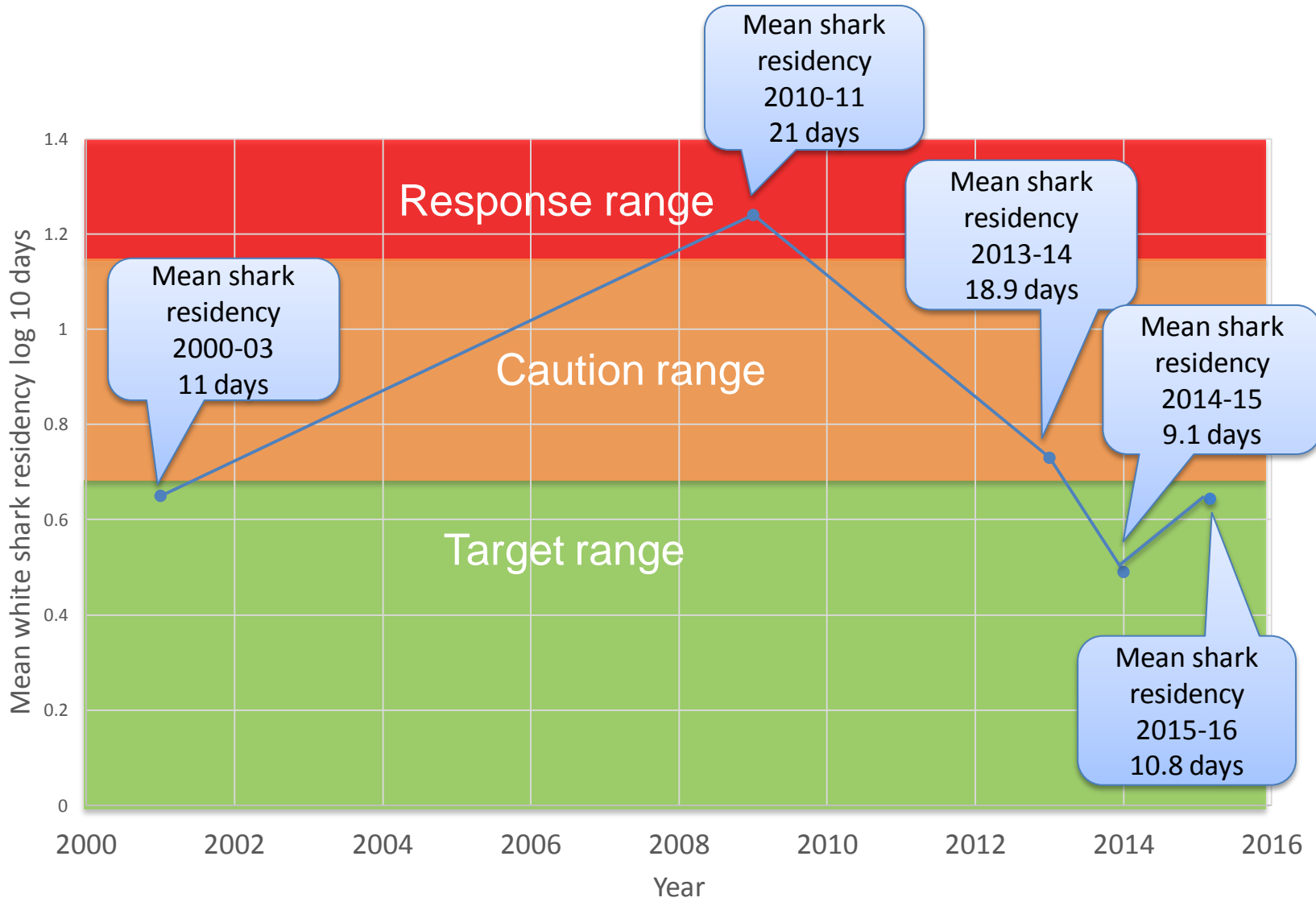


An adaptive policy framework to guide the licensing and to support a socially responsible, environmentally sustainable and economically progressive white shark tourism industry in South Australia

1. Location
2. Number of Licences
3. Transfer of licences
4. Licence term
5. Number of vessels in operation
6. Number of activity days
7. The use of fish based attractants
8. The use of acoustic attractants
9. Adaptive Management











Developing policy in a sea of uncertainty

- Unfortunately, some managers are cautious to a fault – taking costly steps to defend against unlikely outcomes.
- Others are overconfident – underestimating the range of potential outcomes.
- And still others are highly impressionable – allowing memorable events in the past to dictate their view of what might be possible now.

