

# Voluntary Snow Crab Closures

The pre-implementation of closure discussions in the Bay  
of Islands

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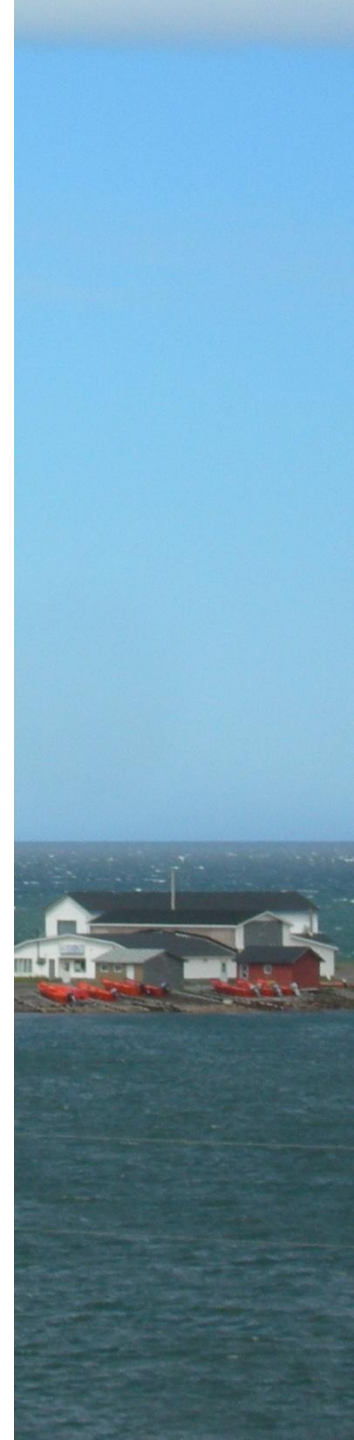
# Conservation Measures

- Conservation Measure
  - Gear, size, boat regulations
  - Seasons
  - Licenses
  - Quotas
  - Trap Limits
  - By-catch exclusion
  - Closures



# Fishery Closures

- Closures can (be)...
  - Place-based
  - Species-based
  - Gear-based
- Vary temporally
- Initiated by management or fish harvesters



# Fisher-initiated Closures

- Implemented by fish harvesters outside of the targeted fishery

- Petty Harbour

} *Gill nets – gear based*

- Implemented by fish harvesters in the targeted fishery (voluntary)

- St. Brendan's

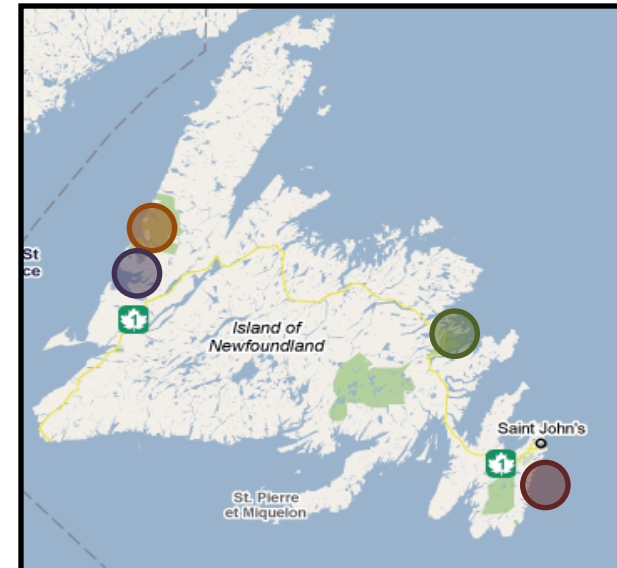
- East Port

- Bonne Bay

- Bay of Islands\*

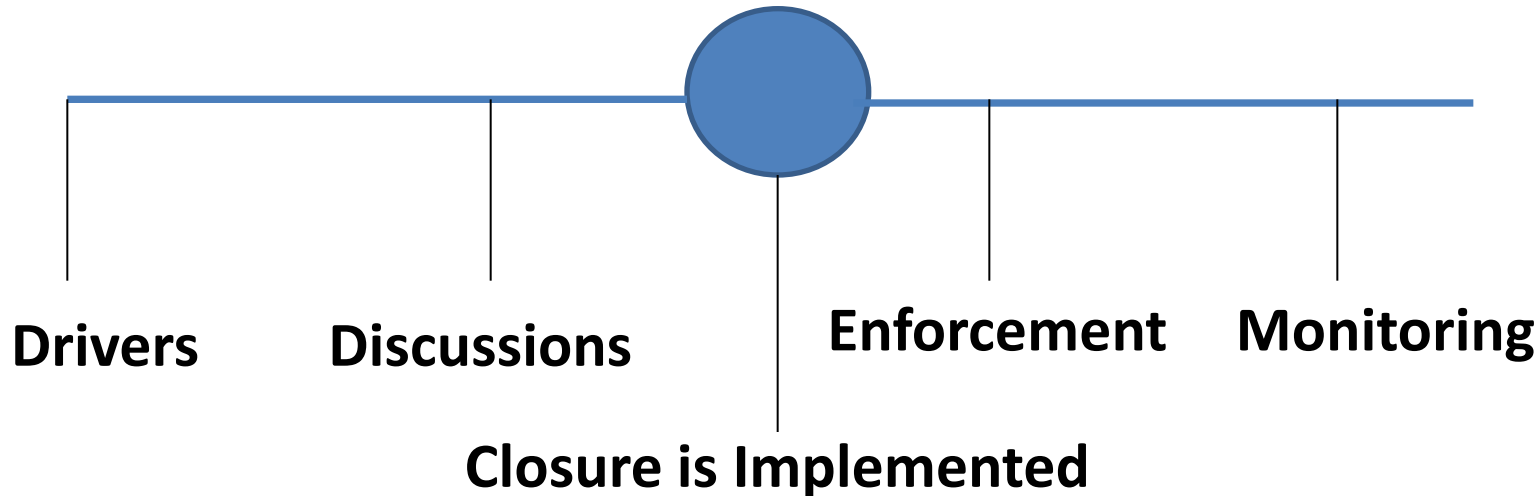
} *Lobster:  
place based*

} *Snow Crab:  
species based*



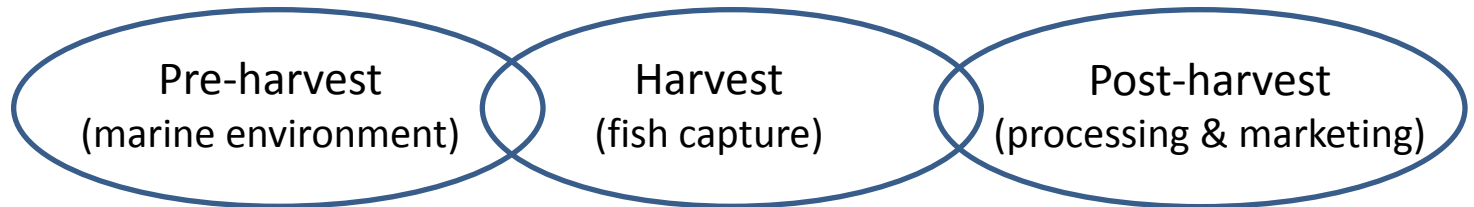
# Objective

- Pre-implementation (Step Zero) of voluntary closures
  - Path dependency
  - Systems approach
  - Stakeholder interactions



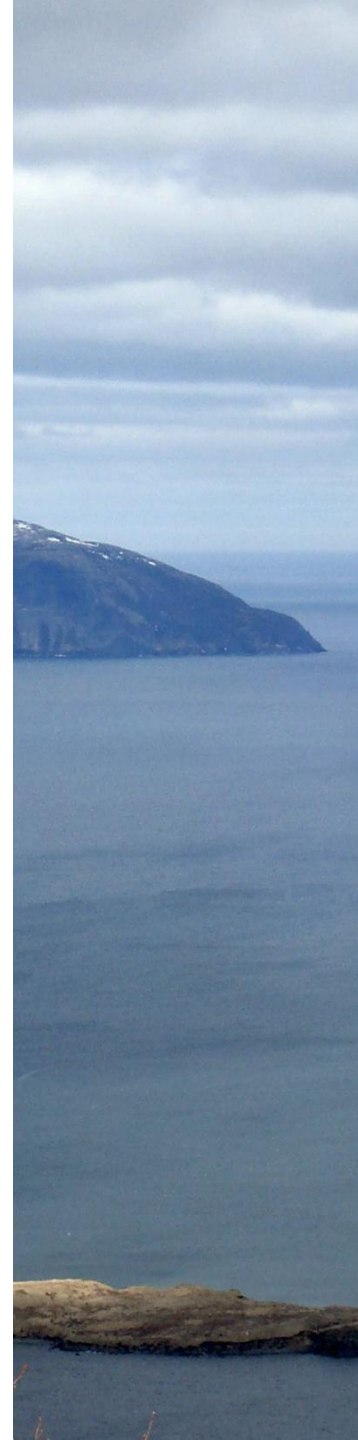
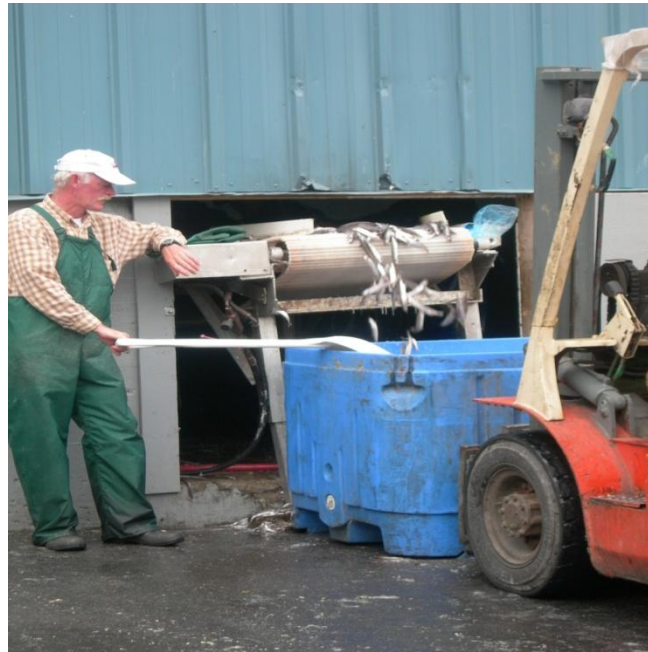
# Research Question

- What are the drivers, factors, and conditions that are conducive to and motivate voluntary closures?
- Objectives:
  - Steps and processes
  - Participation and interaction
  - Community support
  - Fish Chain

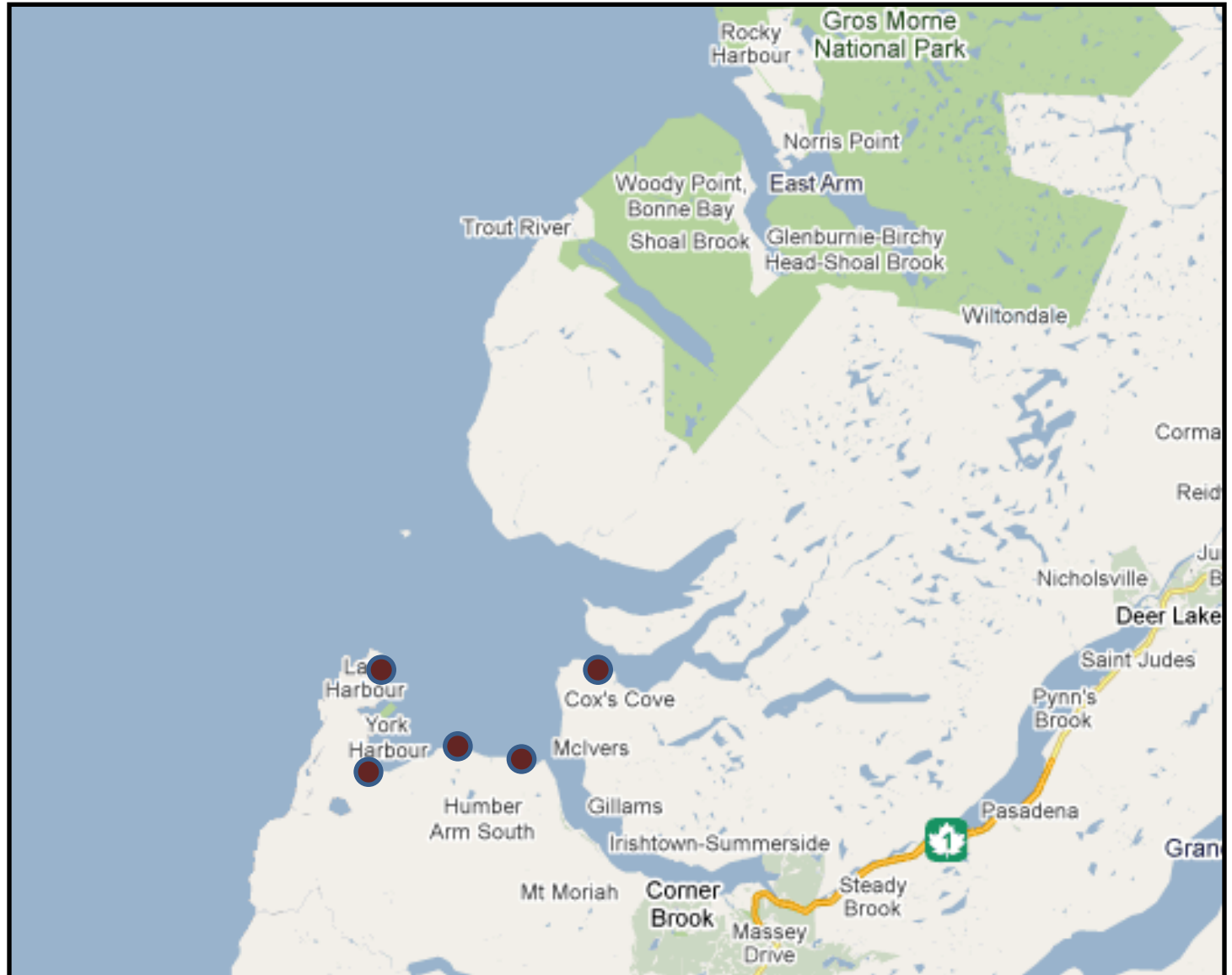


# Methodology

- Semi-structured interviews
- Key informant meetings



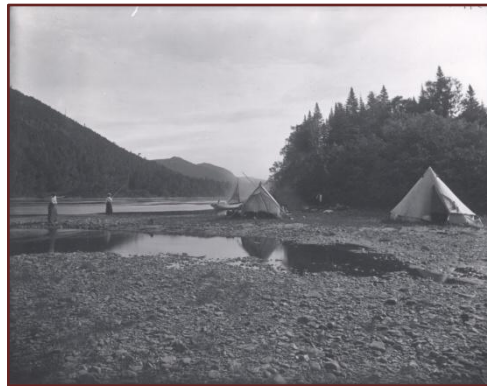
# Bay of Islands Study Site





# Fisheries in the Bay of Islands

- 1780's: salmon, herring, cod
- 1880's: lobster
- 1900's: halibut
- 1950's: capelin, mackerel
- 1988: snow crab



# Fisheries in the Bay of Islands

- Multiple Licenses

- Keystone species



*Mackerel*



*Herring*



*Lobster*

- Secondary species



*Halibut*



*Cod*



*Capelin*

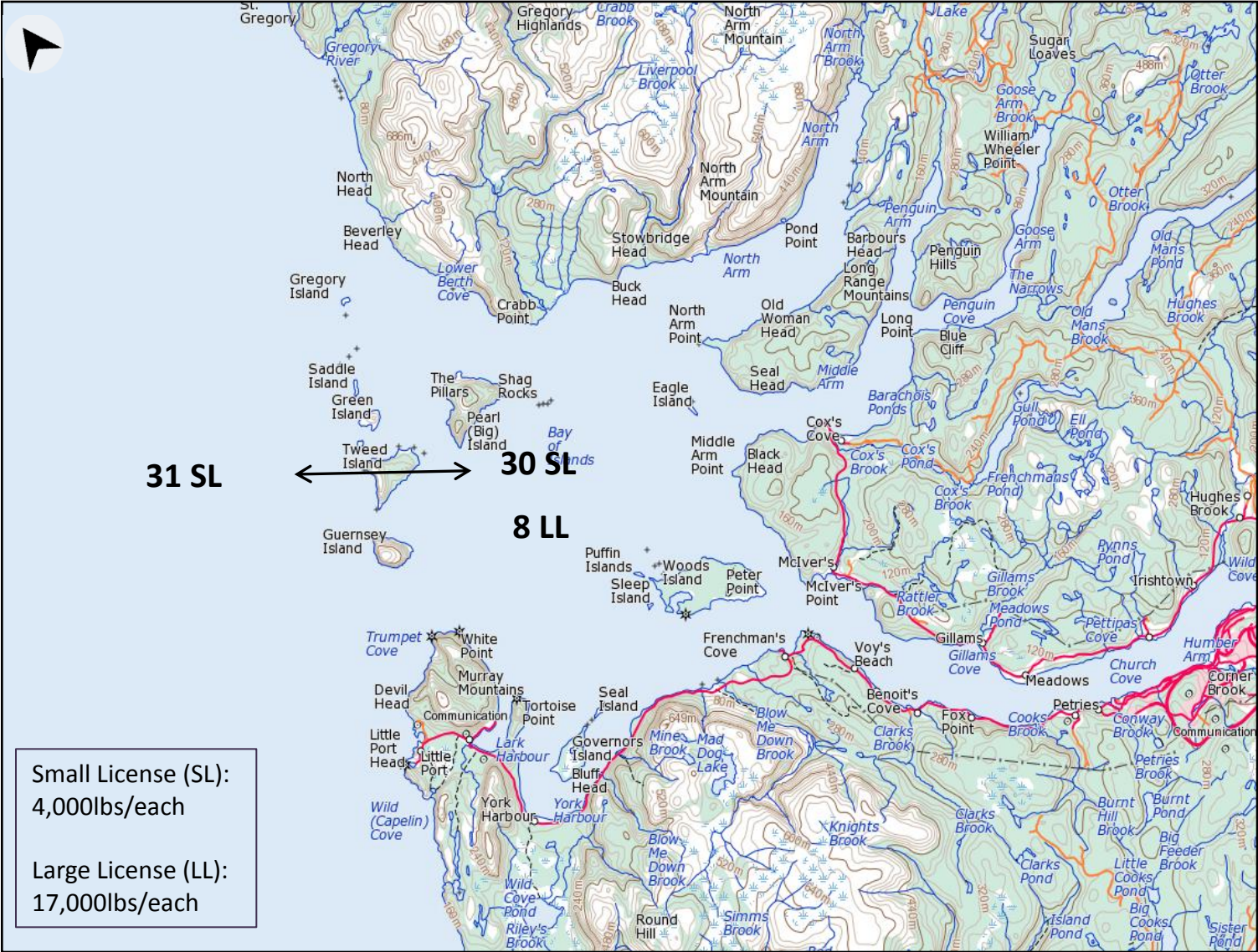


*Snow crab*

- Markets in North America, Asia, Europe



# Bay of Islands Crab Fishery



# Closure Discussions Process



# Closure Discussions

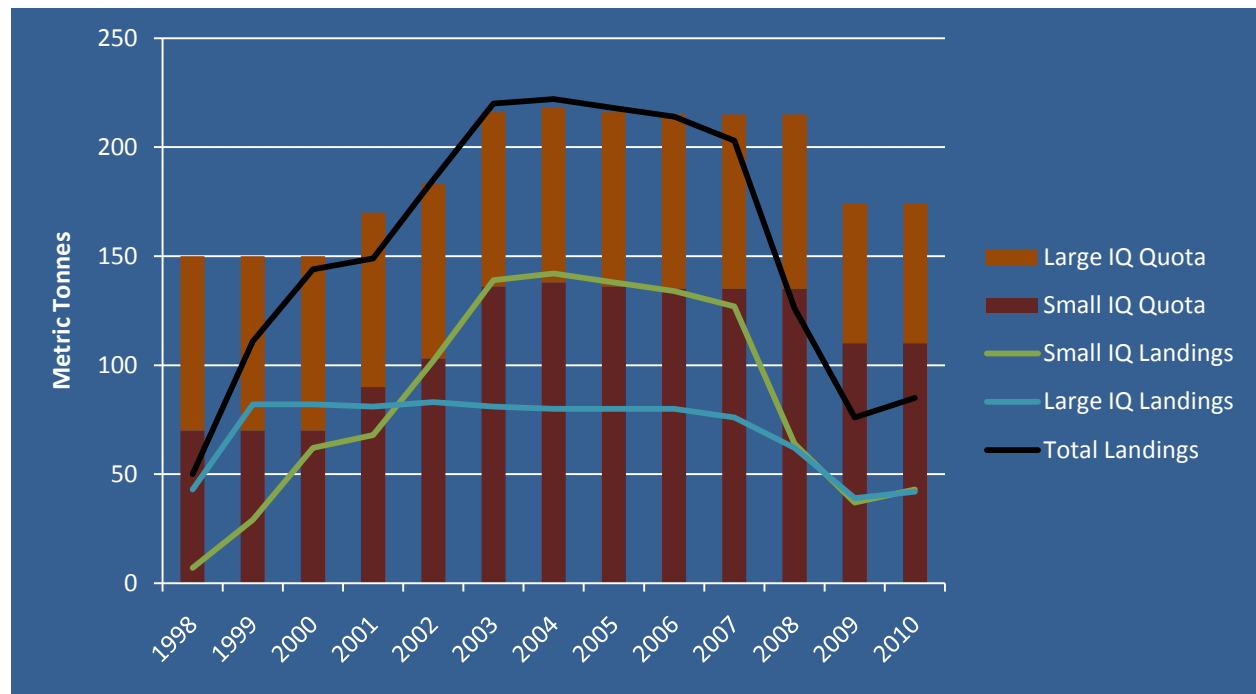
- Spring 2009 (mid-season)
  - Beginning of discussions
- Spring 2010 (pre-season)
  - Discussions continued
- April 1<sup>st</sup>, 2010
  - Fishery Opened



# How and why was the idea conceived?

- Declining Stocks
- Bonne Bay Closure
- Declining Prices

“There was no crab. We seemed to think they were depleted pretty good”  
- Fish Harvester



# How was it perceived?

- Small quota vs. large quota harvesters
- North shore vs. south shore
- Non-crab harvesters
- Processors
- Community members

*Varying views*

*Indifferent*

*No strong opinion*

“Yes I am aware of snow crab closure discussions. It should have closed. There was scarcity... I appreciate the extra few dollars, but next year I think the stocks would have increased. Last year they were depleted pretty bad” – *Fish Harvester*

“We (large licenses holders) didn't want to have it closed. They were saying that you are going to keep damaging the stocks if you keep on going” - *Fish Harvester*

“If you were in support of it, you would be supporting half the crowd, and seeing the other crowd starving to death. So rather than seeing people go hungry, no I wouldn't” – *Fish Harvester*



# What were the expectations of harvesters?

- Stocks time to re-build
- More control over fishery
  - Reduce the possibility of quota cuts
  - Control over lifting of closure

“I would say it would revive the stocks” – *Fish Harvester*

“If we closed it ourselves we could control when it would open again” – *Fish Harvester*





# Potential Impacts

- Crab harvesters
  - Those with greater economic reliance
- Non-crab harvesters
  - Spin-off effects of increased pressure on other species
- Community
  - Less money spent
  - Very small local market for crab
- Processors
  - Less than 4% crab processed from BOI



# Benefits

- Marine environment
  - Allow time for stocks to recover
- Crab harvesters
  - Increased control in fisheries management
  - Improve sustainability of the crab fishery
- Fisheries management
  - Cost effective
  - Increased compliance
  - Decreased implementation period



# Conclusion

- No consensus on proposed closure
  - Varying impacts
  - No consensus
    - Closure was not implemented
    - April 1<sup>st</sup>, 2010, crab fishery opened
- Continued discussion on closures
  - Declining stocks
  - Strong support





# Conclusions

- Important to understand the process
  - Why they succeed and fail
  - Role in management
- Varying impacts across the fish chain
  - Environmental, social, economic
- Not a quick-fix
  - Perceived differently
  - Varying support and expectations
  - Outcomes are uncertain

# Thank You

Many thanks to:

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## Questions/Comments

