



2019 Southern Resident Killer Whale Management Measures: Post Season Review

Indigenous and Multi-Stakeholder
Advisory Group

January 8, 2020

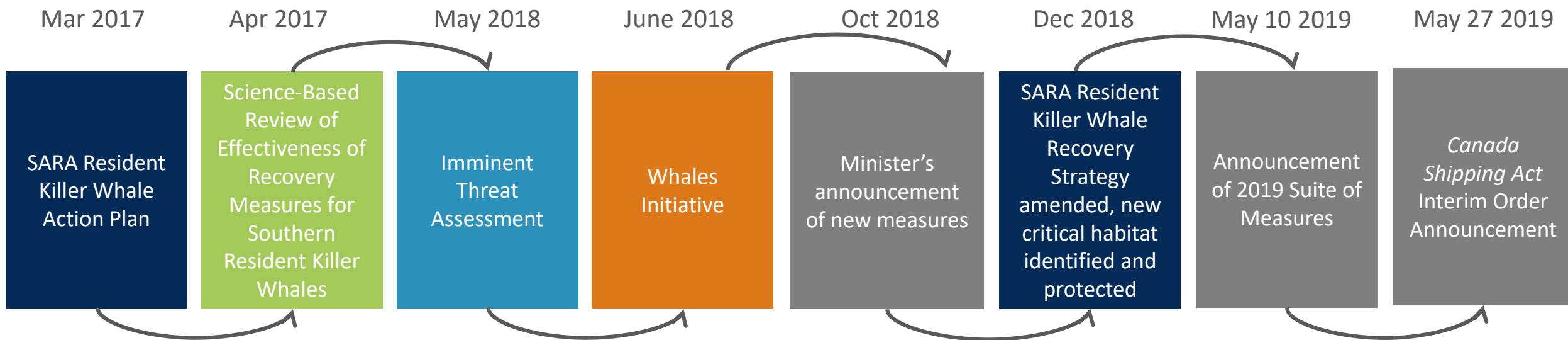


2019 Review



Looking Back: the Path to 2019 Measures

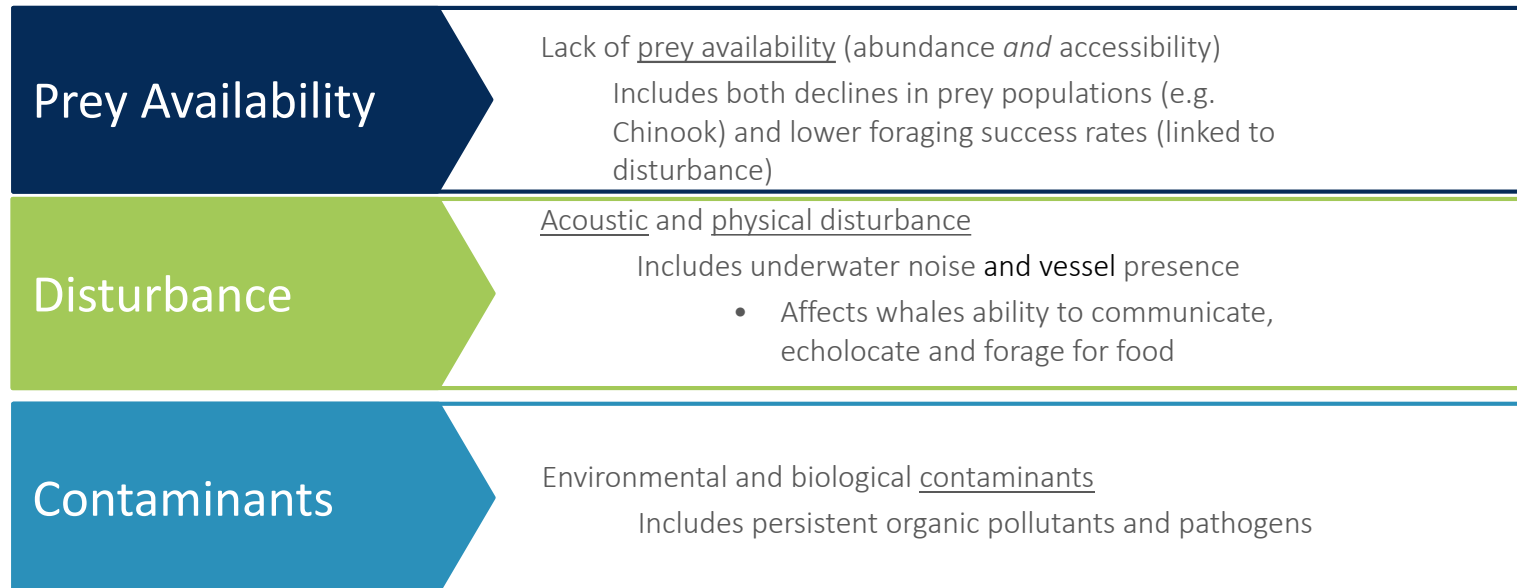
- 2019 management measures are part of a continuum of actions taken to protect Southern Resident Killer Whales
- Some key milestones in recent years include:





Key Threats

- Anthropogenic threats have the potential to prevent recovery or to cause further population declines
- Principal among these threats are:





2019 Management Measures

2019 Management Measures

- Measures in place to address key threats during typical period of increased SRKW presence in inshore waters of the Salish Sea (within Canadian SRKW critical habitat)
 - General vessel measures were in place from Jun 1 – Oct 31
 - Three Interim Sanctuary Zones were in place from Jun 1 – Oct 31
 - Area-based fishery closures were in effect from Aug 1 – Oct 31
 - Large vessel slow down was in place from Jul 6 - Oct 15 and lateral displacement from Jun 17 - Oct 31

Marine Mammal Regulations

- In effect year round
 - 200m approach distance for all Killer Whales in Pacific Canadian waters
 - 100m approach distance for whales, dolphins and porpoise and 200m when in resting position or with a calf
 - Full list: <https://laws-lois.justice.gc.ca/eng/Regulations/SOR-93-56/index.html>



Analyzing 2019: Monitoring and Evaluation Framework

- Drawing causal links between measures and benefits to whales is complex and challenging
- Government of Canada has developed a monitoring and assessment framework to track progress and begin analysis
 - Informed by dialogue with Southern Resident Killer Whale Technical Working Groups (TWGs) in 2019
 - Includes coordination with U.S. partners (e.g., WDFW, NOAA)
 - Includes short and long-term indicators, associated performance measures, and data sources
 - Uses ongoing tracking input of all data sources



Monitoring and Evaluation Indicators

1

Public Education & Awareness

2

Compliance

3

Underwater noise levels

4

Southern Resident Killer Whale presence

5

Southern Resident Killer Whale behaviour

6

Southern Resident Killer Whale health

7

Chinook abundance and fishing mortality

8

Southern Resident Killer Whale prey quality

9

Chinook salmon enhancement/ hatchery

10

Chinook Salmon habitat restoration



Public Education and Awareness

- Education and outreach is complementary to monitoring and enforcement efforts
- Canada worked with educational organizations like Straitwatch & Soundwatch to help raise awareness, and partnered with Be Whale Wise on educational material

KEEP 400 METRES AWAY

When you see any killer whales. It's the law!

(around 4 football fields)

AVOID WHALE SANCTUARY

No fishing or boating around Swiftsure Bank, east coast of Saturna Island and south-west of North Pender Island. It's the law!

turn over for detailed map

REDUCE SPEED & AVOID FISHING

Reduce your speed to less than 7 knots and avoid fishing when you're within 1,000 metres of a killer whale.

REDUCE VESSEL NOISE

Turn off echo sounders when not in use, and engines to neutral idle when within approach distance of a killer whale.



Public Education and Awareness: Early Numbers

- **Products = 12,249** education and outreach products distributed including hardcopy, electronic, and video
- **Public Engagement Activities = 56** outreach activities: presentations, dock walks/ marinas visited, conferences/events attended
- **Public Enquiries = 314** phone calls, emails received
- **Marketing Tools = 168** social media and web posts, magazine and news articles





Compliance

- Compliance promotion & enforcement on the water and in the air (TC, DFO, Parks Canada, RCMP) through a range of tools (verbal warnings, cautionary notifications, Administrative Monetary Penalties, voluntary penalty tickets, summary conviction)
- What we saw on the water
 - High US recreational vessel traffic in Pender Island ISZ
 - Transiting vessels were often found in Swiftsure ISZ
 - Alleged violation rates decreased over time in ISZs
 - Voluntary Penalty Tickets for fishing in a closed time were issued in Pender Bluff and portions of Juan de Fuca Strait (i.e. 20-4)
 - Vessel leap frogging behaviour exhibited around killer whales
 - Recreational boaters mirrored distance of commercial whale watching boaters



Compliance: Early Numbers

Effort
(enforcement on water and in air)
= 709 hours

Warnings = 232 (cautionary notifications, written or verbal warnings)



DFO C&P

750+ marine mammal incident reports

Number of Fishery Officer Hours on Southern Resident Killer Whales: 465.75

Number of aerial surveillance hours: 34+

Number of warnings: 5; tickets: 6; and ongoing investigations: 37 (Fishing closures/Whale harassments)

TC

201+ hrs spent on enforcement incidents related to Southern Resident Killer Whale

Number of aerial surveillance hours: 13.9

Issued 82 cautionary notifications addressing 166 violations

Investigated and closed an additional 587 violations

PCA

93 cumulative days spent on the water focused on Southern Resident Killer Whales

150 vessels contacted, 94 verbal warnings provided

13 fishing incidents inside ISZ, 1 charged & 12 written warnings

32 additional incidents inside CH – 8 charges, 24 warnings



Expected Timing for Data for Other Monitoring and Evaluation Framework Indicators

Indicator	Timing for Preliminary 2019 Information
Underwater noise levels (e.g., in interim sanctuary zones and fishery closure areas)	Late spring/summer 2020
SRKW presence (e.g., # of SRKW hydrophone detections/sightings)	Late spring/summer 2020
SRKW behaviour (e.g., SRKW foraging events, behaviour around boats)	Late spring/summer 2020
SRKW health (e.g., photogrammetry health assessments, population demographics)	Late spring/summer 2020
Chinook salmon abundance and fishing mortality (e.g., Coded Wire Tag exploitation rate, absolute number of mature, large Chinook increase relative to the recent average)	March 2020
Salmon enhancement/ hatchery (e.g., actual vs. planned juvenile Chinook releases from Chilliwack River Hatchery)	Late spring/summer 2020
Habitat restoration	2019 is the baseline year



Putting Measures in Place: Lessons from 2019

Communicate Earlier

Communicate and engage earlier on measures, including education and outreach, to increase compliance: organizing education and outreach strategic planning workshop

Simplify

Implement simpler measures to increase compliance and awareness

Coordinate

Ensure coordinated approach, including products, outreach, and enforcement efforts

Time and Resourcing

Afford adequate time and resourcing for engagement

Leverage Groups

Leverage existing groups, meetings and processes



Next Steps

- Engage with Technical Working Groups, Indigenous Groups, and stakeholders on lessons learned from 2019
- Continue to assess the effectiveness of 2019 measures throughout 2020
- Continue identification of data/information sources
 - Updating when new information becomes available
- Undertake reporting for 2020 and beyond



Reflections from TWG Chairs and ECHO Program

