

COMMERCIAL FISHING AND NOROVIRUS

Background

Current Situation

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- Shellfish have been contaminated with norovirus. One of the possible sources is sewage discharge from the herring fleet.

When

- TC informed of the issue of a norovirus outbreak on April 6, 2018

Stakeholders

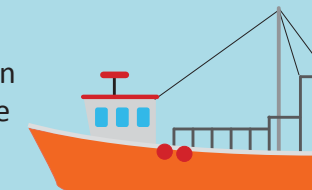
- Non-Government Organizations (BCCDC)
- Federal Government (DFO, ECCC, PHA, CFIA, TC)
- Industry (BCGSA, HIAB, individual farms)

Impact

- 4 shellfish farms have been closed in Baynes Sound

Request

- For TC to step up prevention and enforcement of sewage discharge



Shellfish Aquaculture Industry

- In British Columbia: 300 producers.
- In the Baynes Sound, employs 100 people.
- Valued at \$11.7 million in the last five years (2011-2015).
- BC production represents 45% of the oyster production in Canada.



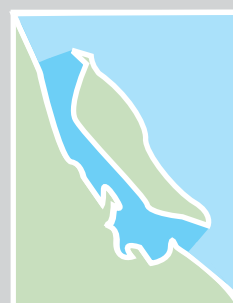
Norovirus

- Can survive in high levels of chlorine, freezing, and heating.
- Infections at low doses.
- Virus can be shed from people days after they are no longer showing symptoms.
- Shellfish susceptible to norovirus contamination when water is polluted.

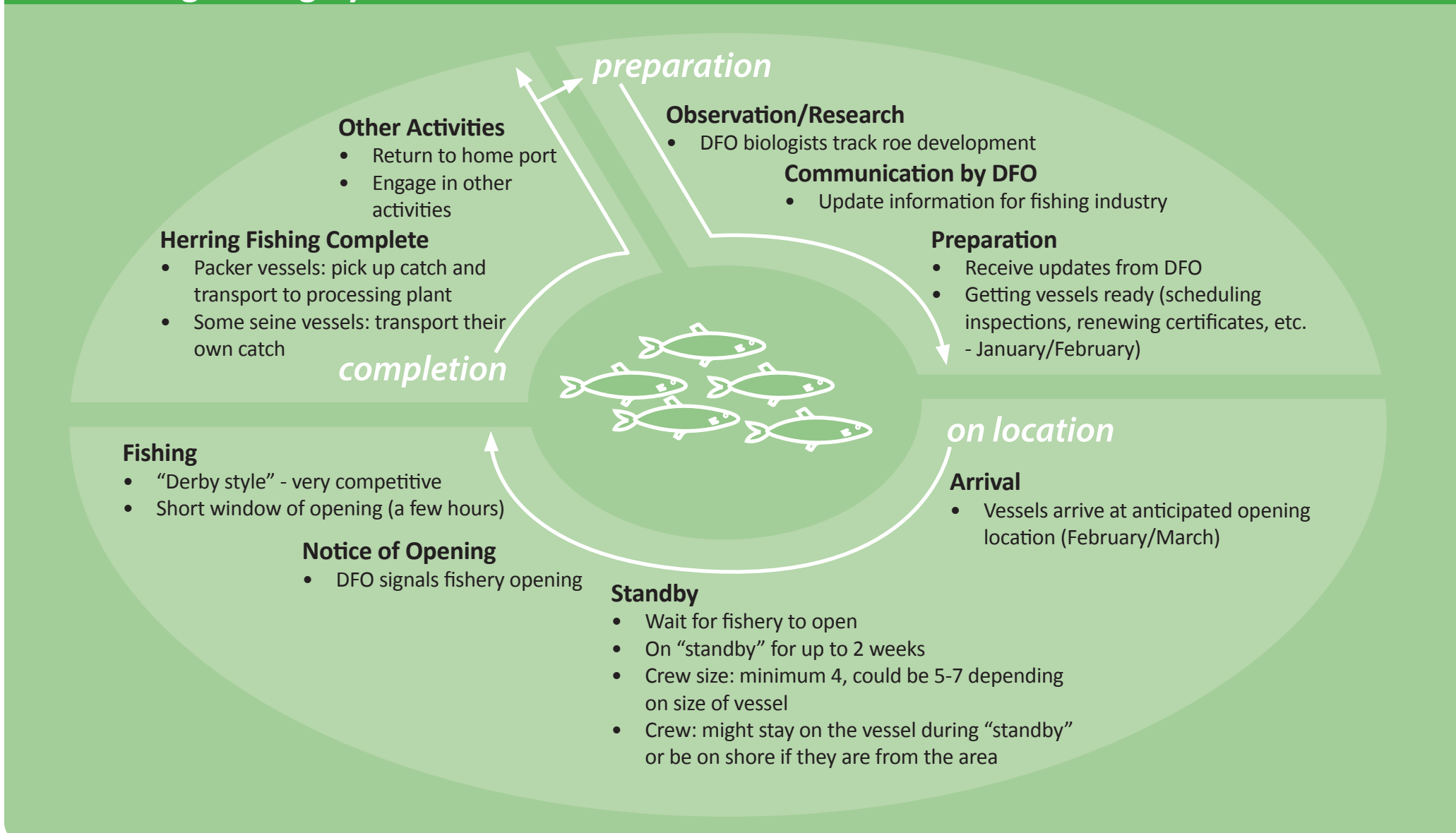


Baynes Sound

- Channel between Denman Island and Vancouver Island.
- 40 km long and 3.5 km wide. Raw sewage from vessels cannot be discharged in Baynes Sound, as the area is within 3nm from shore.
- Area has active aquaculture: 39% of oysters and 55% of manila clams farmed in B.C.
- Low flow and stagnant water.
- One pump-out station in Deep Bay, one in Comox.



Roe Herring Fishing Cycle



COMMERCIAL FISHING AND NOROVIRUS

Transport Canada-related

Challenges

- No direct AMP for sewage discharge or contravention tickets because sewage is not a prescribed pollutant defined in CSA, 2001.
- Summary conviction requires direct evidence (collecting, testing, and DNA samples).
- Difficult to prove.
- Having holding tank/MSD onboard vessel does not equate to usage.
- TC inspectors cannot check whether or not the tank/MSD was used after-the-fact.
- Once roe herring fishing is over, vessels are scattered in different areas for other activities.
- Difficult to track these vessels as they are not required to have AIS installed.
- Sewage discharge log not part of TC inspections, as small fishing vessels are not required to maintain a log.
- Difficult in scheduling outside of mandatory inspection in short notice as vessels are engaged in other activities.

Applicable Regulations and Enforcement Options

Applicable Regulations (CSA, 2001):

- Fishing Vessel Safety Regulations:** Came into force July 13, 2017 replacing the Small Fishing Vessel Inspection Regulations
 - Applicable to fishing vessels under 150 GT or under 24.4 metres.
 - It sets out requirements for the minimum level of safety for vessels, its crew and operations, such as safety equipment, safe operating procedures and vessel stability.
 - Vessels more than 15GT would be inspected for Certification by TC.
 - Vessels less than 15GT can enroll in the new Small Vessel Compliance Program.
- Large Fishing Vessel Inspection Regulations:** Applicable to fishing vessels over 150 gross tonnage or 24.4 metres in length.
 - It sets out requirements for plan approval, inspections of vessels during construction, minimum level of safety for vessels, and schedule of on-going inspections.
- Vessel Pollution and Dangerous Chemicals Regulations:** It sets out environmental standards that prevent deliberate, negligent and accidental discharge of vessel-source pollutants into Canadian waters.
 - Part 2, Division 4 deals specifically with sewage, outlining sewage management equipment, prohibitions and conditions to discharge. e.g., Vessels can only discharge raw sewage when they are 3 nm away from shore.



Enforcement Options: Verbal written warning, deficiency notice, summary conviction

Note: As vessel certificates are issued when a vessel meets the FVSR or LFMVIR, TC cannot withhold a vessel certificate if a vessel fails to meet requirement in VPDCR. An inspector can issued a deficiency notice instead.

DYK: The Vessel Pollution and Dangerous Chemicals Regulations came into effect 2007 with a five year grace period?

Commercial Fishing Vessel Inspections

- Program:** Annual and dry docking
- Cycle:** _____
- Time Required:** 3 days minimum (requires 2 separate visits) (dry dock/on water)
Just holding tank: 1 day

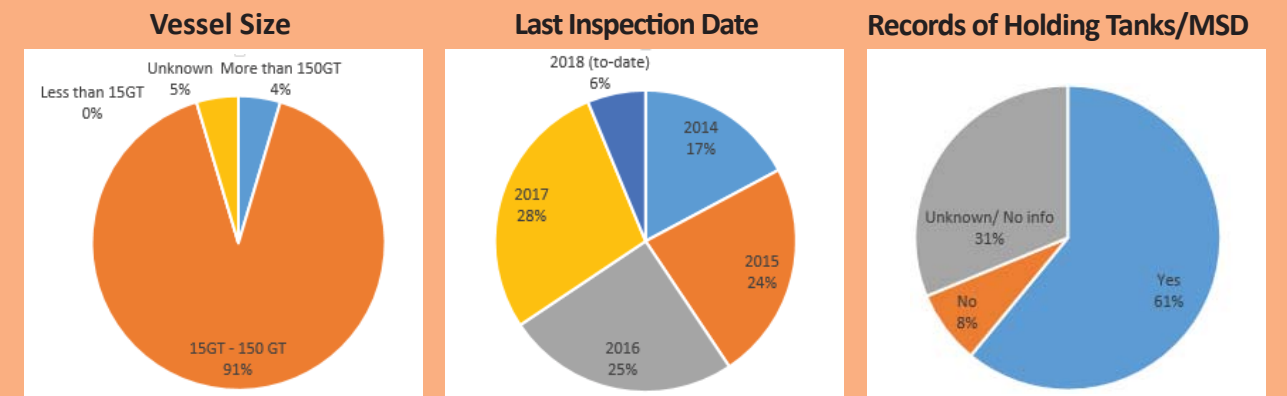
Vessel Size	Inspection Cycle
> 150 GT (or > 24.4 m)	Annual Inspection, dry docking every two years
15 GT - 150 GT (or < 24.4 m)	Inspection every four years

DYK: In 2017-2018, Pacific MSS conducted 124 planned inspections, 40 concentrated and risk-based inspections on small domestic vessels including fishing and passenger vessels.



Transport Canada's Actions-to-Date

- Education:** Infographic sent to marinas, fishery officers, RCMP detachments, and marine inspectors are educating operators when conducting inspections.
- Spot Checks:** TC will continue to do spot checks and follow-up with vessels.
- Analysis:** Review SIR and inspector's records of the 64 seine and packer vessels identified by DFO, with attention on the presence of holding tanks or MSD, and whether or not deficiency notices were issued due to lack of holding tanks/MSD.



- Range from 45GT - 265GT
- 92% are inspected every 4 years
- 100% of vessels were inspected within 5 years
- 11 are due to renew this year
- 5 deficiency notices were issued as violation of VPDCR for lack of holding tank/MSD installed

MYTHBUSTER

Myth: Fishing vessels don't have proper sewage arrangements.

Fact: Industry is retrofitting their vessels since VPDCR grace period is over in 2012, and bringing vessels into compliance.

