Canada

Statistical Report

on incidents involving Derelict and Abandoned Vessels and Wrecks that resulted in claims with the Ship-source Oil Pollution Fund over a 10-year period (Jan-01-2006 to Dec-31-2015)



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¹ Cyr, Tim. Photograph in Darrell Bay, Squamish, BC. April 2016. From *The Administrator's Annual Report 2015-2016, Ship-source Oil Pollution Fund.*

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About the Ship-source Oil Pollution Fund (SOPF)

Mandate:

"The Ship-source Oil Pollution Fund is an independent fund under the Marine Liability Act, which is responsible for the investigation and payment of claims for oil spills from all classes of ships in Canada as well as making Canada's contribution payments to the International Oil Pollution Compensation Funds (IOPC Funds) in London, U.K."

The Administrator:

An Administrator appointed by the Governor in Council is responsible for the proper operation of the Fund and submits an annual report to the Minister of Transport.

² Government of Canada, "Organization Profile- Ship-source Oil Pollution Fund," *Federal Organizations*. https://www.appointments-nominations.gc.ca/prflOrg.asp?OrgID=SSO&lang=eng [Accessed February 22, 2017]

About this Statistical Report

Abstract:

This report presents key information from all the SOPF claims regarding derelict and abandoned vessels or wrecks to compile statistics and trends for incidents occurring from January 1, 2006, to December 31, 2015. This is the most recent 10-year period with complete financial information.

Details:

Claims are categorized by the date when the incident occurred within the calendar year, (not by when the claims were filed, paid or closed since those events are influenced by a variety of external factors). The date of incident is the most consistent marker and it will be used to organize all claim information throughout this presentation.

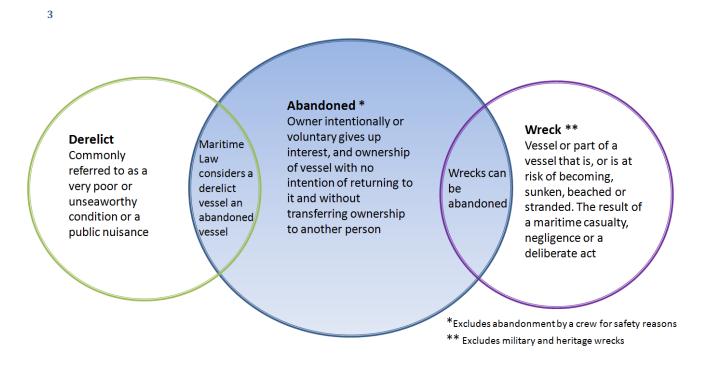
Furthermore, a single incident can generate multiple claims. The number of incidents that occurred and the number of claims that resulted are two different data sets which remain distinct throughout this report.

Also, many incidents occur across Canada that do not result in claims with the SOPF, so it is important to note that the scope of the problem is larger than what are data captures.

Definitions

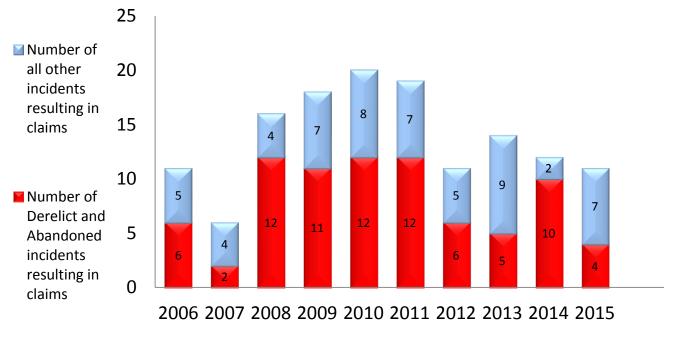
This report is focused on incidents from vessels or wrecks resulting in claims with the SOPF that are considered *derelict or abandoned*. All incidents must fit into one or both of the first two categories to be included, (meaning that only wrecks that were left abandoned or derelict count for the purposes of this study in the 'derelict or abandoned vessel or wreck' category, since a wreck, by definition, does not necessarily denote abandonment or neglect).

The following recreation of an illustration from Transport Canada defines these terms:



³ Transport Canada in partnership with Fisheries and Oceans Canada (Canadian Coast Guard and Small Craft Harbours), "What do we mean by abandoned, derelict, and wrecked vessels?" *Strategy to address abandoned, derelict and wrecked vessels*, August 2016, slide 4. Permission to use definitions granted verbally by Rebecca Smalley to Meagan Engh on behalf of Nicole Legault, Director of Sustainable Transportation System Policy, Transport Canada, Environmental Policy, on February 16, 2017.

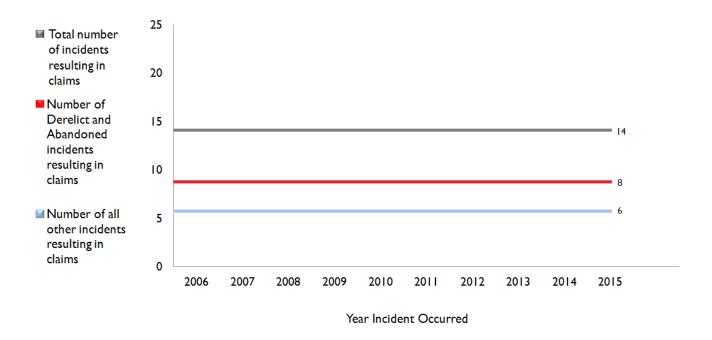
Number of incidents that resulted in claims with the SOPF over 10-year period



Year Incident Occured

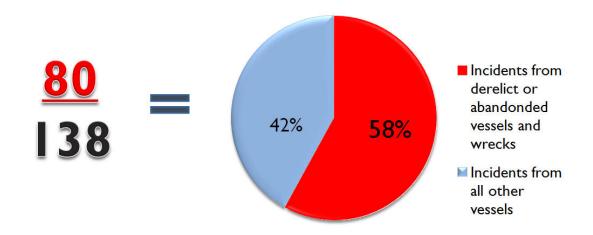
This graph displays the number of incidents involving derelict and abandoned vessels and wrecks that occurred each year over the period and resulted in claims with the SOPF. It is clear that this red-coloured category comprises a significant amount of the SOPF's claims.

Average number of incidents that resulted in claims with the SOPF over 10-year period



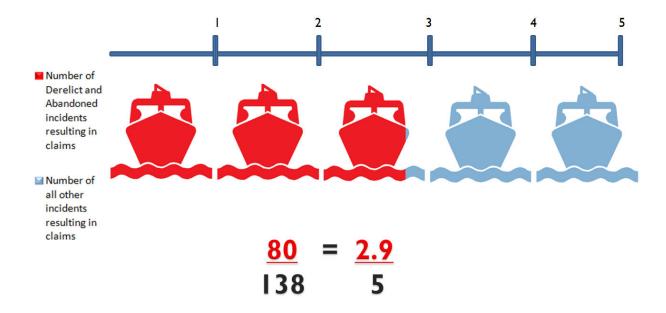
While an average of 14 incidents occurred in total each year over the period, an average of 8 were derelict or abandoned while all other types of incidents resulting in claims only amounted to an average of 6 each year.

Cumulative number of incidents that resulted in claims with the SOPF over the 10-year period (2006-2015)



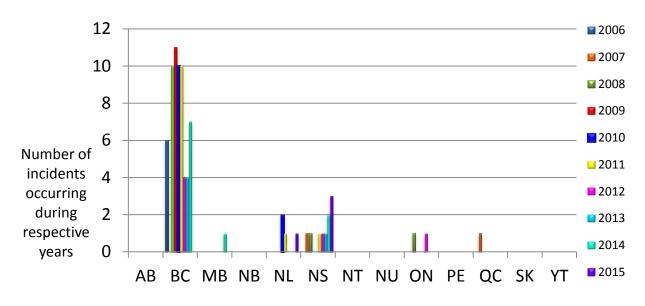
Over the decade from 2005 to 2016, the cumulative number of incidents from derelict and abandoned vessels resulting in claims totaled 80 of the 138 incidents the fund was involved in. This means that 58% of all the incidents creating claims for the SOPF were from derelict or abandoned vessels and wrecks.

Statistic on cumulative number of incidents that resulted in claims with the SOPF over the 10-year period (2006-2015)



The information on the cumulative number of incidents resulting in claims converts into a potent statistic. With 58% of 5 being 2.9, we find that almost 3 out of every 5 incidents resulting in claims to the SOPF were from derelict or abandoned vessels and wrecks.

Location of incidents involving derelict and abandoned vessels and wrecks resulting in claims with the SOPF over the 10-year period



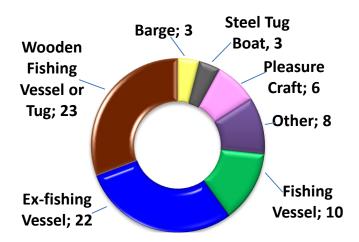
Canadian province where incident occurred

With its long coast and many lakes, British Columbia (BC) bore 76% of this burden. Out of the 80 incidents involving derelict and abandoned vessels and wrecks, 62 of these incidents occurred in BC.

Going from sea to sea, Nova Scotia (NS) came in second place with 10 incidents involving derelict and abandoned vessels that resulted in claims occurring there over the period, accounting for 13% of the burden.

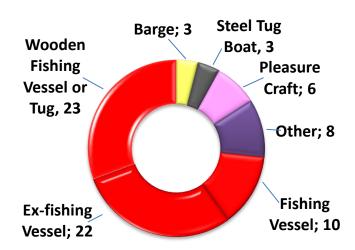
However, prior to the 10-year period of this report, there were incidents which generated claims with the SOPF in other provinces. It should not be assumed that all provinces depicted without incidents here are free from this problem since many incidents also occur without subsequent claims being made with the SOPF.

Types of vessels that became derelict or abandoned and resulted in claims with the SOPF occurring over the 10-year period



Wooden vessels are especially problematic due to their rapid rate of deterioration when not properly maintained. This large category also becomes more costly than others since wooden vessels involved in an incident must be dismantled and removed. The fact that wood absorbs oil products means that simply pumping out the fuel tank does not fully prevent further pollution.

The three largest categories (highlighted in red below) are comprised of vessels involved in fishing at one time or another. In many cases, fishing vessels are sold and converted into pleasure crafts. Due to the fact that regulations differ depending on size and type of vessel, small ex-fishing vessels are no longer subject to strict standards under the title of pleasure craft and are often not maintained.



Age of vessels that became derelict or abandoned and resulted in claims with the SOPF occurring over the 10-year period

Year vessel was built	Number of claims resulting	
1902		2
1911		1
1926		3
1927		2
1938		1
1940		1
1941		2
1943		1
1944		1
1945		2
1949		1
1958		1
1962		2
1968		2
1969		1
1970		1
1971		1
1972		1
1975		1
1976		1

In the annual reports from which this data was retrieved, special note was made on 28 of the claims during the 10-year period in which the derelict or abandoned vessel causing the incident was built in the 1970s or earlier. The table above displays the number of claims occurring during the 10-year period that resulted from ships built in those respective years, the earliest being built in 1902.

⁴ The age of all registered ships can be found through the Transport Canada Vessel Registry Query System (VQRS): http://wwwapps.tc.gc.ca/Saf-Sec-Sur/4/vrqs-srib/eng/vessel-registrations

The Elf (1902-2014)

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The first entry in the table on the previous page records 2 claims from a wooden-hull tug called the *Elf.* Built just after the turn of the 20th century, the Elf remained in operation for 112 years before sinking in an environmentally sensitive area containing "endangered species of redlegged frogs."

Cases like these have both financial and environmental costs. It is understood that Transport Canada, in partnership with Fishers and Oceans Canada, is developing a strategy to address abandoned, derelict and wrecked vessels.⁷

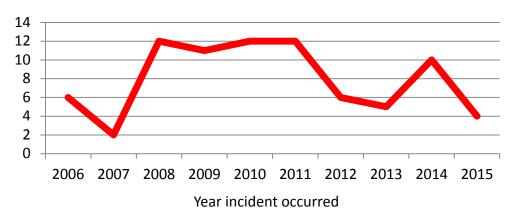
⁵ Meagan Engh, "Grey Vessel Graphic," original image, *Paint*, February 28, 2017.

⁶ "2.28 Elf (2014), Case number: 120-646," *The Administrator's Annual Report 2014-2015, Ship-source Oil Pollution Fund*, page 37.

⁷ Transport Canada in partnership with Fisheries and Oceans Canada (Canadian Coast Guard and Small Craft Harbours), "What do we mean by abandoned, derelict, and wrecked vessels?" *Strategy to address abandoned, derelict and wrecked vessels*, August 2016.

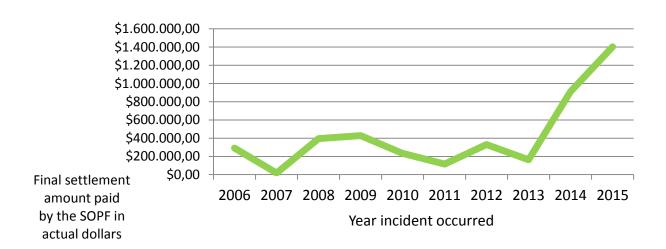
Trend of number of incidents involving derelict and abandoned vessels or wrecks resulting in claims with the SOPF over the 10-year period



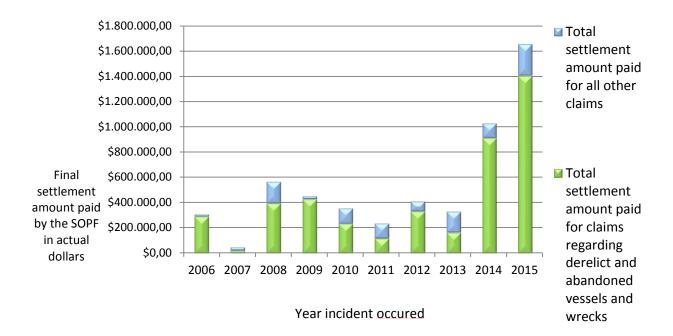


The number of incidents regarding derelict and abandoned vessels is placed on this red trend line above to compare it to the costs of these incidents on the graph below in green. While the *number* of incidents peaks throughout the middle of the 10-year period, the *cost* of claims resulting from them peaks at the end, with the four claims in 2015 costing \$1,402,644.44. This proves that the number of occurrences is not predictive of the cost and that every derelict or abandoned vessel poses a unique and unpredictable threat within its individual circumstances.

Trend of final settlement amounts paid by the SOPF for claims regarding incidents involving derelict and abandoned vessels or wrecks over the 10-year period

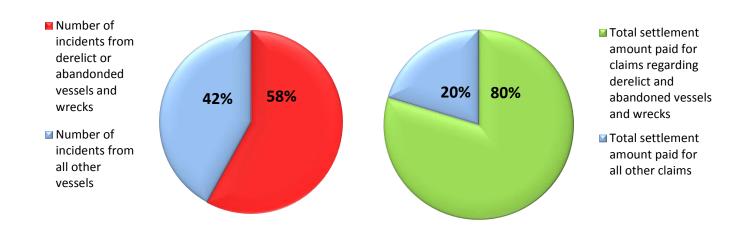


Total final settlement amounts paid by the SOPF for all claims from incidents occurring over the 10-year period



The total costs of final settlement amounts per year of claims from derelict or abandoned vessels, represented in green, make up the majority of the SOPF's costs.

Total number of incidents resulting in claims with the SOPF verses total final settlement cost of these claims over the 10-year period



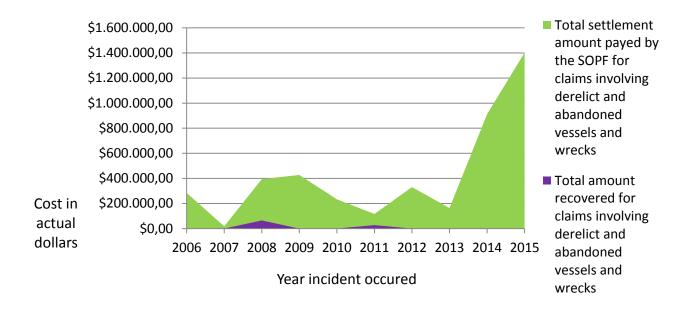
Thus, while the number incidents regarding derelict and abandoned vessels accounted for 58% of all incidents creating claims over the 10-year period, the cost of this category accounted for 80% of the SOPF's total settlement costs over the 10-year period.

Total final settlement cost of claims with the SOPF from incidents occurring over the 10-year period



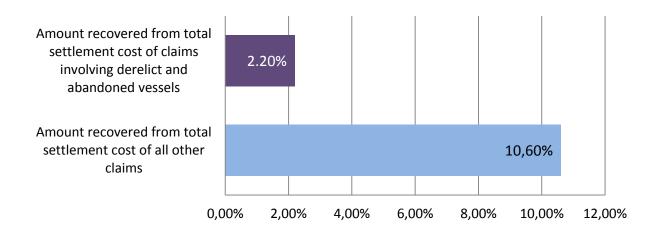
This figure above reiterates the data in actual Canadian dollar totals, rather than percentages.

Success of recovery action in claims with the SOPF regarding incidents with derelict and abandoned vessels that occurred over the 10-year period



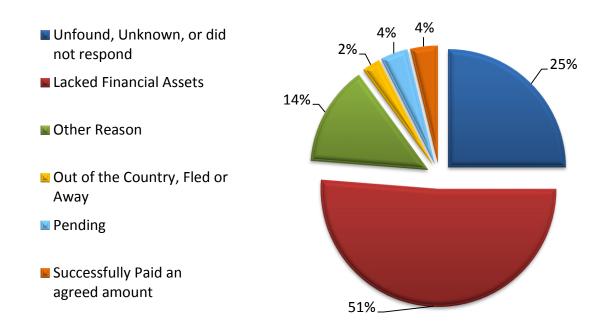
Of the \$4,389,345.63 that the SOPF paid out for claims over the 10-year period resulting from incidents with derelict and abandoned vessels and wrecks, only \$92,715.52 was recovered from the polluters. The purple portion accounts for the 2 cases in 2008 and one case in 2011 where a portion of the costs were recovered from the polluter. The other 77 incidents causing claims with the SOPF remained at 0% recovered.

Comparison of percentage of costs recovered in two categories of claims with the SOPF over the 10-year period



In comparison to other types of cases, in those with claims generated by incidents with derelict and abandoned vessels only 2.2% of funds were recovered from the polluter, while 12.6% of the costs were gained back in other types of claims. This disparity is largely due to the circumstances surrounding the ownership of derelict and abandoned vessels.

Status of owners of the derelict and abandoned vessels that generated claims with the SOPF over the 10-year period



The circumstances of owners who do not maintain their vessels make it challenging to recover costs for the ensuing damages their vessels cause. Another factor present in almost all cases was a lack of insurance for these relatively unregulated vessels.

Challenges

The liability and compensation regime set out in the MLA is based on a series of international conventions aimed at spills from laden tankers and spills caused by ships' bunkers, arising within a short timeframe after a given incident.

It becomes a challenge to apply this regime to wrecks and abandoned vessels. The following questions arise:

- 1. When do derelict and abandoned vessels and wrecks become a threat justifying intervention of those charged with the responsibility to deal with the threat?
- 2. What is the occurrence which triggers the running of limitation periods for bringing claims or mounting a recourse action?
- 3. Once the pollution has been addressed, who takes charge of the ship (since the SOPF is not available for wreck removal)? 8

⁸ Popp, Alfred H., "3. Challenges and Opportunities," *The Administrator's Annual Report 2015-2016, Ship-source Oil* Pollution Fund, page 49-50.

Opportunities

The data gathered from this statistical report serves as a benchmark to comparatively evaluate the outcomes of future policy changes and a resource for other organizations to reference in the collaborative effort to address the issue of derelict, abandoned and wrecked vessels.

The End

For more information visit http://sopf-cidphn.gc.ca

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Thank you,

Meagan Engh

Research and Communications Ship-source Oil Pollution Fund

⁹ Zapisov, Andrei. "Pacific Challenge" photograph. From *The Administrator's Annual Report 2013-2014, Ship-source Oil Pollution Fund.*