



Study of the extent of abandoned and derelict vessels in Canada

A TRANSPORT CANADA report based on research carried out by:

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1.0 Definitions

For the purpose of this report, the following definitions of various terms have been used:

Abandoned and derelict vessel – there was no definition provided for the survey participants, but rather, the participants were asked what definition they used. No agreement was reached on the definition and therefore, specific difference between these two terms. Both are used in this report.

Register - means the Canadian Register of Vessels established under section 43 of the *Canada Shipping Act*, 2001 (CSA, 2001).

Large Vessel Register (LVR) – A register for all vessels regardless of whether they are commercial or pleasure craft or of their size. Unique marking has to be engraved on an internal part of the hull structure. Registration in the LVR allows for name approval, mortgage registration and proof of ownership. Every vessel other than pleasure craft must be registered – either in the LVR or the SVR (see definition below).

Small Vessel Register (SVR) – A register for all commercial vessels under 15 tons. Commercial is defined as all vessels that are not a pleasure craft. The official number of the vessel must be clearly displayed on each side of the bow of the vessel or on a board permanently attached to the vessel as close to the bow as practicable. Registration in the SVR does not allow for mortgage registration.

Pleasure craft means a vessel that is used for pleasure and does not carry passengers, and includes a vessel of a prescribed class (CSA, 2001).

Pleasure craft licensing system – a system that has been setup under Part 10 of the CSA, 2001 to issue a license for the operation of a pleasure craft.

Removal of an abandoned and derelict vessel – for the purpose of this report, the process of removal of abandoned and derelict vessels includes assessing, removing and disposing of these vessels. These various steps may involve, among other things, taking an inventory of the abandoned and derelict vessel, carrying out a search to identify the owner of the vessel, carrying out a cost estimate and the various options available for carrying out the physical removal of the vessel such as recycling the vessel or taking it to a landfill or a scrap yard for final disposal.

Shoreline property owners— in this report, it has the same meaning as riparian owner which is defined as "one who owns land bounding upon a lake, river, or other body of water" (Barron's Real Estate Dictionary, Dictionary of Real Estate Terms. Copyright @2008 by Barron's Educational Series, Inc. All rights reserved).



Survey participants – Federal, Provincial and Municipal Governments along with non-governmental organizations. All survey participants are listed in Appendix 1, and are referred to in this study as "survey participants".



2.0 INTRODUCTION

Abandoned and derelict vessels can be a concern for communities and shoreline property owners. Some of these vessels may create obstructions for mariners; impact the environment and commercial and recreational activities. The removal of abandoned and derelict vessels entails financial and technical resources and often it is not possible to identify the vessel owners in order to seek compensation. As a result, the costs become a burden on shoreline property owners and public entities.

To understand the scope of the issue in Canada, Transport Canada carried out a survey of various federal departments, provincial and municipal governments and nongovernmental organizations that have experience in the removal of abandoned and derelict vessels.

3.0 DESCRIPTION OF THE INFORMATION AND DATA GATHERING SURVEY AND INVENTORY OF KNOWN EXISTING ABANDONED AND DERELICT VESSELS IN CANADA

The objective of the survey, carried out by a contractor on behalf of Transport Canada, was to gather information and data to understand the nature and magnitude of the challenges as it relates to abandoned and derelict vessels in Canada. A survey covering a wide range of topics associated with the issue of abandoned and derelict vessels was distributed to all the survey participants. Along with the questionnaire, all survey participants were asked to provide, on a standardized template, information regarding existing abandoned and derelict vessels in their region or area under their jurisdiction. The inventory provided an estimate of the current quantity and state of abandoned and derelict vessels in Canada.

In order to determine the potential for registered vessels becoming abandoned and derelict in the future, an in-house analysis of the Large Vessel Registry (LVR) and Small Vessel Registry (SVR) was carried out. The pleasure craft licensing program was put in place for the purpose of search and rescue and identification of owners of pleasure craft and does not contain age of craft related information. Therefore, it was not possible to obtain any age distribution information for the approximately 2.6 million pleasure crafts that are licensed in Canada. It should be pointed out, that there was not sufficient data and information obtained from the various survey and inventory participants to make the link between the age of a vessel and its potential for becoming abandoned and derelict. This in-house analysis was rather carried out to investigate the need for finding solutions for disposing of these vessels such as finding recycling or landfill space for vessels that will be retired from their normal use in the near future.



4.0 RESULTS

4.1 Issues identified by the survey

One of the most frequent comments from the survey participants was that many parties have roles in addressing issues arising from abandoned and derelict vessels, including all of the study participants as well as vessel and pleasure craft owners and operators.

Various federal, provincial and municipal government departments and agencies deal with some aspect of the issue of abandoned and derelict vessels. For example, the Canadian Coast Guard (CCG) responds to incidents where pollution can be a threat to the marine environment, which can include abandoned and derelict vessels as the source of the pollution. The CCG can recover the cost of their expenses to deal with pollution from the Ship Source Oil Pollution Fund – but, once the pollution and the source are dealt with, the CCG does not have the authority to deal with the abandoned and derelict vessel itself.

Transport Canada's Navigable Waters Protection Program can deal with vessels under section 16 of the *Navigable Waters Protection Act* (NWPA) such as wrecks, if the navigation is obstructed, impeded, rendered more difficult or dangerous. In addition, the Minister may authorize, under section 20 of the NWPA, any person to take possession of and remove a vessel if the vessel has been abandoned for 2 years. Lastly, a Navigable Waters Protection Officer designated as a receiver of a wreck under the *Canada Shipping Act*, 2001 (CSA, 2001) may dispose of or destroy a wreck, or authorize its disposition or destruction if requirements under the Act are met.

The majority of the survey participants identified legal, jurisdictional and financial uncertainties as common challenges for successful removal of vessels. The cost of the removal of a single vessel can be significant; it can vary by locality and is based on many factors from owner identification through to removal. The cost elements vary but can include the following:

- 1. Environmental and technical assessments of the abandoned and derelict vessel;
- 2. Investigative work to determine the owner;
- 3. Salvage contracting and support activities for the vessel's removal;
- 4. Bringing equipment to the site where the abandoned and derelict vessel is located, which could be in a rural area, an environmentally sensitive area or a remote area;
- 5. Preparation of the vessel for removal;
- 6. Removing the vessel and associated wastes especially distance that the abandoned and derelict vessel has to be transported to be disposed;
- 7. Managing final disposal; and
- 8. Legal fees.

It is very challenging to summarize the cost of removing abandoned and derelict vessels and therefore, to estimate the removal of the 397 vessels in the current abandoned and



derelict vessel inventory. The information provided by the various survey participants estimated that the removal of an abandoned and derelict vessel can range from as little as \$1,500 to \$3,000 for a small vessel to as much as a few hundreds of thousands of dollars for a large vessel. It should be noted that these cost estimates for removal of abandoned and derelict vessels are based on data provided by the survey participants and many do not track costs associated with removal of abandoned and derelict vessels. In some cases, due to limited available funds, one study participant removed those abandoned and derelict vessels that they deemed would be relatively inexpensive and therefore, this is not really a representative example of the cost of removing any abandoned and derelict vessel. The survey participants stated that between 1 and 20 vessels and pleasure crafts are reported to be abandoned and derelict per year (varied by region). Cost estimates for removal of the abandoned and derelict vessels can only be determined once the various options are assessed.

The survey participants pointed out that in many cases it is the shoreline owner, the local municipal or provincial governments and community organizations that have to be prepared to cover the costs of the removal operation.

All survey participants pointed out that it is challenging, when dealing with vessels that appear to be abandoned and derelict, to find and link the current owner to that abandoned and derelict vessel. One of the reasons for this is that many vessels may be bought and sold without updating Transport Canada's pleasure craft licensing system (PCL system) or the LVR and the SVR registration records, by the new owners.

Finding the owner is the first step in the removal process of an abandoned and derelict vessel. To identify an owner of a pleasure craft, a search of the PCL system, operated by Service New Brunswick is performed. Only officially recognized authorities such as the Royal Canadian Mounted Police, the CCG, or a local police force have access to the PCL system principally for the purpose of search and rescue operation. Therefore, the shoreline owner or the local municipality has to file an access for information request to access the ownership details of an abandoned and derelict pleasure craft which usually has to be accompanied by a fee. The identification of a pleasure craft can be complicated due to the fact that the engraved Hull Identification Numbers (HIN) can be removed and the identification number assigned by the PCL system can also be erased.

The PCL system which holds records for some 2.6 million vessels has not been designed to actually identify the vessel owner based on the properties of the vessel. The PCL system is now fully digital, but searches can be carried out using only two pieces of information – the identification number that has been assigned to the vessel (which, as stated above, can be erased) and the name of the owner (which of course, is not engraved anywhere on the pleasure craft).

The LVR and the SVR are fully searchable databases on a large number of fields, and identification of the owner is much easier. Also, subsections 46 (1) and (2) of the CSA, 2001, states that:



- "46. (1) Unless it is exempted under the regulations, a vessel must be registered under this Part if it:
 - (a) is not a pleasure craft;
 - (b) is wholly owned by qualified persons; and
 - (c) is not registered, listed or otherwise recorded in a foreign state.
- (2) Every owner of a vessel that is required by subsection (1) to be registered under this Part shall ensure that it is so registered.

4.2 Summary of information regarding known existing abandoned and derelict vessels in Canada

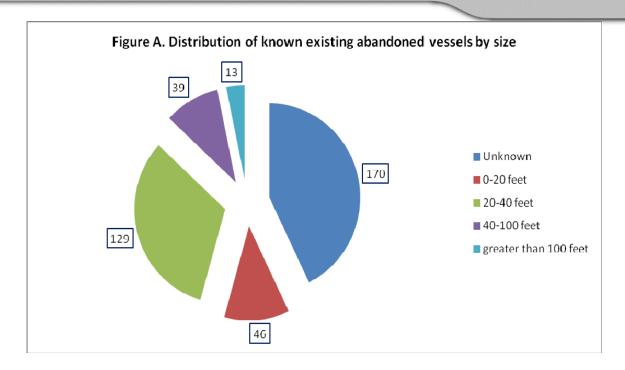
Information and data describing known existing abandoned and derelict vessels was only obtained from two survey participants. The first was Transport Canada's Navigable Waters Protection Program (data for Pacific and Quebec Regions only and the other was Department of Fisheries and Oceans – Small Craft Harbours (all regions). The location of the known existing abandoned and derelict vessels in Canada is shown in Figures 1 to 3.

The following paragraphs describe the information and data that has been obtained from above-noted survey participants. It should be pointed out, that the total number of abandoned and derelict vessels in the various summary tables and graphs do not coincide, since some of the data for that specific analysis was not supplied by the survey participants.

The inventory of the abandoned and derelict vessels was analyzed using arbitrarily selected vessel size classes (unknown, 0 to 20 feet, 20 to 40 feet, 40 to 100 feet and greater than 100 feet). The following summary has been obtained (Figure A):

- 1. There are forty six (46) abandoned and derelict vessels in the 0 to 20 feet size class.
- 2. There are one hundred and twenty nine (129) abandoned and derelict vessels in the 20 to 40 feet size class.
- 3. There are thirty nine (39) abandoned and derelict vessels in the 40 to 100 feet size class.
- 4. There are thirteen (13) abandoned and derelict vessels in the greater than 100 feet size class.
- 5. There are one hundred and seventy (170) abandoned and derelict vessels for which there was not length data provided.





Abandoned and derelict vessels are constructed from various materials including steel, wood and fibreglass (Table 1 and Figure B). There is no obvious pattern with respect to construction material of these vessels, indicating that removal of the vessels from the location that they are presently will require different salvage and removal techniques.

Table 1. Summary of the distribution of abandoned and derelict vessels by type of construction material.

Construction Material	Q-NWPP	Q-SCH	PAC - SCH	ATL - NL - EASTERN	ATL - NL	ATL SCH	Totals
Unknown	0	0	2	6	0	0	8
Steel	0	2	4	5	11	0	22
Wood	9	0	21	5	0	5	40
Fibreglass	8	0	12	3	0	0	23
Fibreglass over wood	0	0	0	14	0	14	28
Aluminum	0	0	3	0	0	0	3
TOTALS	17	2	42	33	11	19	240

Q-NWPP - Quebec Region - Navigable Waters Protection Program

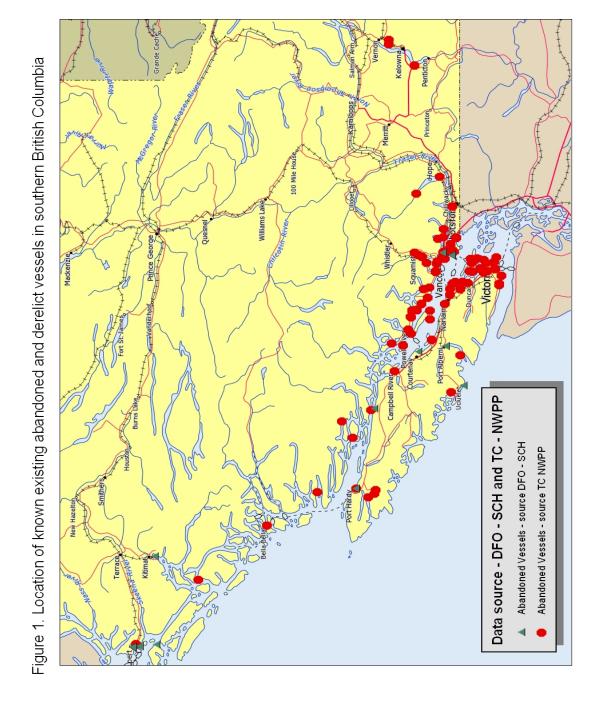
Q-SCH - Quebec Region - Department of Fisheries and Oceans - Small Craft Harbours,

PAC-SCH – Pacific Region – Department of Fisheries and Oceans - Small Craft Harbours

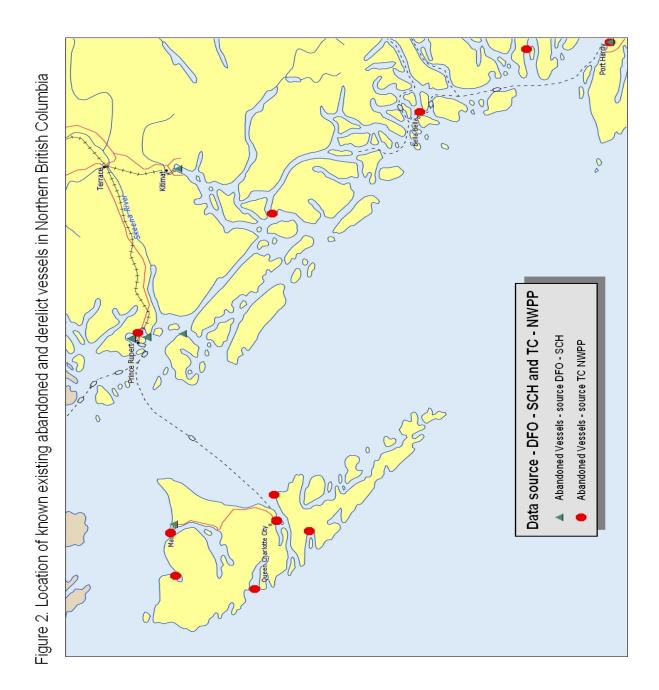
Atl-NL-Eastern Newfoundland – Department of Fisheries and Oceans - Small Craft Harbours

Atl-NL- Western Newfoundland – Department of Fisheries and Oceans - Small Craft Harbours

Atl-SCH – Atlantic – Department of Fisheries and Oceans - Small Craft Harbour (all other locations beside Newfoundland)









Data source - DFO - SCH and TC - NWPP Figure 3. Location of known existing abandoned and derelict vessels in Atlantic and Quebec regions Abandoned Vessels - source DFO - SCH Abandoned Vessels - source TC NWPP



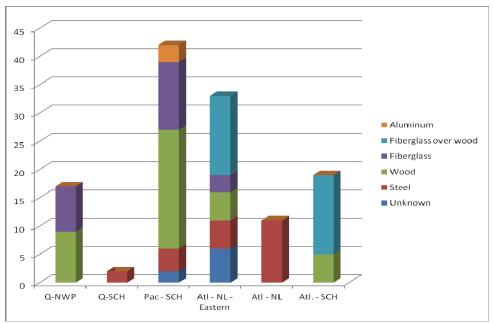


Figure B. Summary of distribution of abandoned and derelict vessels by type of construction material.

Each survey participant reported abandoned and derelict vessels that have been at the present location for one to several decades (several up to 70 years) (Table 2 and Figure C). Some survey participants that reported abandoned and derelict vessels indicated that these vessels could have navigation, safety and environmental hazards associated with them, in addition to aesthetics issues.

Table 2. Distribution of the length of time vessels were abandoned and derelict

Table 2. Distribution of the length of time vessels were abandoned and defenct							
	Region and Program providing data						
Time (yrs.)	Q - NWP	Q-SCH	PAC - SCH	Atl-Nl-Eastern	Atl-NL	Atl - SCH	TOTALS
Unknown	0	10	2	5	2	0	19
0-2 yrs.	0	0	13	5	0	0	18
2-5 yrs.	0	1	10	9	1	9	30
5-10 yrs.	0	3	13	8	0	9	33
10-20 yrs.	1	3	4	4	0	1	13
>20 yrs.	1	0	0	2	8	0	11
TOTALS	2	17	42	33	11	19	124

Q-NWP – Quebec Region – Navigable Waters Protection Program

Q-SCH - Quebec Region - Department of Fisheries and Oceans - Small Craft Harbours,

PAC-SCH - Pacific Region - Department of Fisheries and Oceans - Small Craft Harbours

Atl-NL- Eastern Newfoundland - Department of Fisheries and Oceans - Small Craft Harbours

Atl-NL- Western Newfoundland - Department of Fisheries and Oceans - Small Craft Harbours

Atl-SCH – Atlantic – Department of Fisheries and Oceans - Small Craft Harbour (all other locations beside Newfoundland)



The information and data quality provided by the survey participants varied across the country and across the various organizations. For example, data and information from the Pacific Region's Navigable Waters Protection Program did not include information on the construction material or how long the vessels have been abandoned and derelict at the present location.

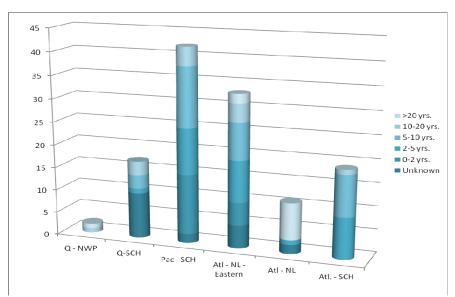


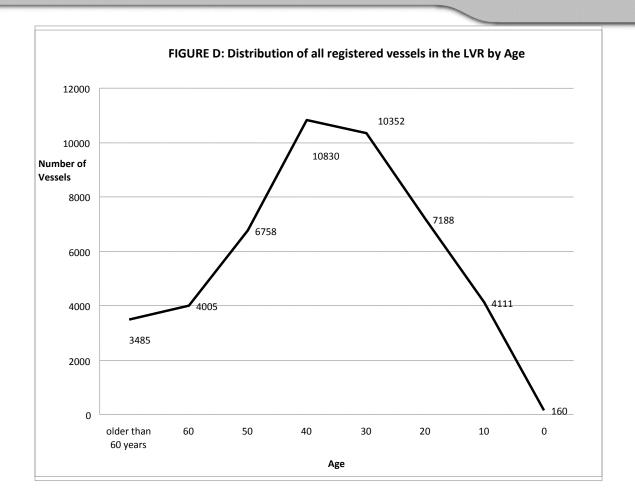
Figure C. Distribution of the time the abandoned and derelict vessels have been at the present location.

4.3 Analysis of age distribution of vessels in the Large Vessel Register (LVR)

Registration (Canadian Register of Vessels) is a title system for ownership of vessels. It is similar in nature to title systems used for land registry. Registration allows for name approval, mortgage registration and proof of ownership except in the case of a vessel registered in the Small Vessel Register. Every vessel other than pleasure craft must be registered. Owners of pleasure craft not required by law to be registered may register them on a voluntary basis. Because vessel age cannot be calculated for vessels registered in the SVR, the age distribution of registered vessels was carried out using LVR data only.

The LVR holds approximately 48,700 vessels that are registered in Canada. An analysis of the age distribution of the registered vessels indicated that over half of the vessels are at least 30 years old (Figure D).



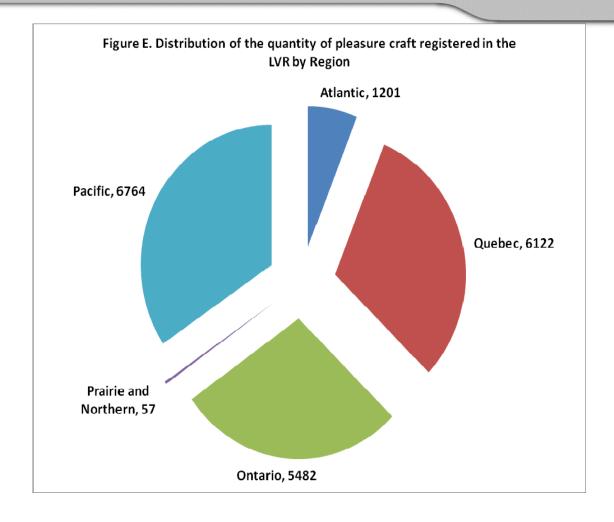


Additional analysis of the LVR data was carried out to provide some information on the location, quantity and age distribution of pleasure craft and fishing vessels that are registered in the LVR.

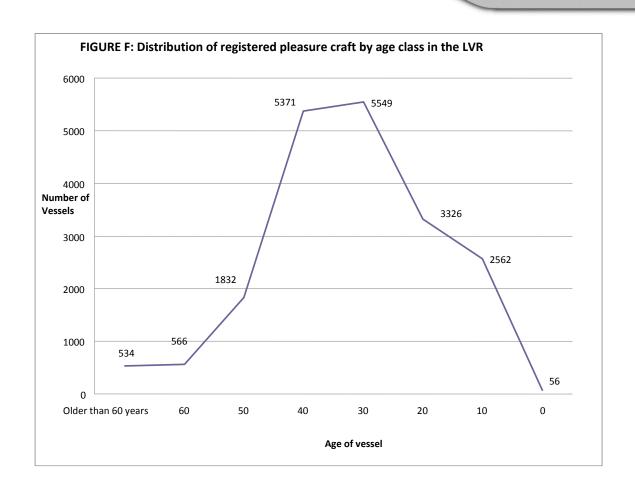
Pleasure Craft Registered in the LVR

The number of pleasure crafts registered in the LVR is greatest in the Pacific, Quebec and Ontario regions with a combined total of 19,569 vessels (Figure E). When an analysis of the age of the pleasure craft registered in the LVR was carried out, it was determined that 8,303 or 42 percent of all of the pleasure crafts registered in the LVR were over 30 years old.









Analysis of the location of the Fishing Vessels Registered in the LVR

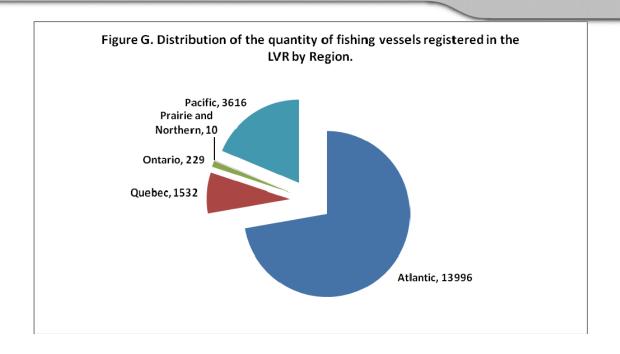
Total of 19,144 vessels are registered in the LVR as fishing vessels. The regional distribution of these vessels is as follows (Figure G):

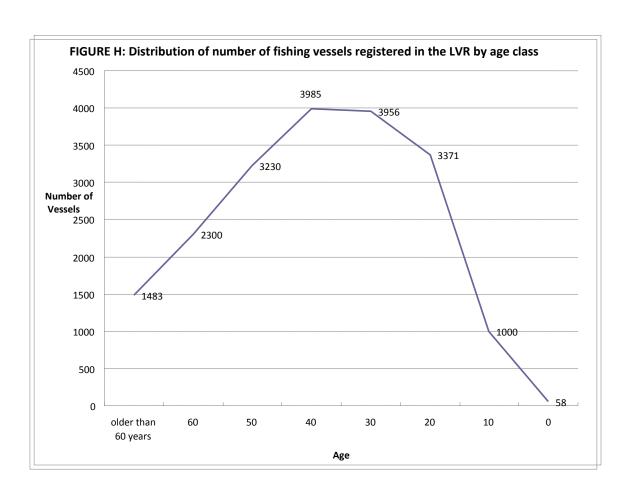
- 1. Atlantic 13,996
- 2. Pacific 3,616
- 3. Quebec 1,532
- 4. Ontario 229
- 5. Prairie and Northern 10

Distribution of Fishing Vessels Registered in the LVR by Age Class

The number of fishing vessels registered in the LVR that are 30 years old or more (across Canada) is 14, 954 or roughly 77%; Figure H).









Number of vessels registered in the SVR

In the SVR there are 16,200 entries. Of those, 4,171 are registered as fishing vessels, 3,219 are registered as passenger vessels and the rest are registered as other types of vessels.

Summary of Aging Vessels in Canada

More than half of the vessels (59%) found on the LVR are more than 30 years old. Based on the analysis carried out above, most of the older than 30 year old vessels registered as pleasure crafts are registered in the Pacific, Quebec and Ontario regions and the largest number of vessels that are registered as fishing vessels and that are older than 30 year are in the Atlantic region, followed by those that are registered in the Pacific region.

At some point in the near future, these aging vessels will have to be disposed of or recycled. Most important, given the difficulties and gaps in tracking vessel owners in Canada, the incidences of abandoned and derelict and derelict vessels could be expected to increase and could become unmanageable.

4.4 Current legislative tools available to Transport Canada to deal with abandoned and derelict vessels

From the legislative viewpoint, the following legislative provisions administered by Transport Canada could be used to facilitate the removal of abandoned and derelict vessels by other parties. It should be noted, that the removal of an abandoned or derelict vessel may also be subject to other legislation.

1. Navigable Waters Protection Act

Section 16 of the NWPA

http://laws-lois.justice.gc.ca/eng/acts/N-22/page-9.html#docCont

"Minister's powers

- **16.** The Minister may cause any wreck, vessel or part of a vessel resulting from the wrecking, sinking, partial sinking, lying ashore or grounding of a vessel, or may cause any other thing, to be secured, removed or destroyed in the manner that the Minister considers appropriate if, in the Minister's opinion,
- (a) the navigation of any navigable water over which Parliament has jurisdiction is obstructed, impeded or rendered more difficult or dangerous for more than 24 hours by the wreck, vessel, part of a vessel or thing;
- (b) the wreck, vessel, part of a vessel or thing has been in a position for more than 24 hours that is likely to obstruct, impede or render more difficult or dangerous the navigation of any such navigable water; or



(c) the wreck, vessel, part of a vessel or thing is cast ashore, stranded or left on any property belonging to Her Majesty in right of Canada and has been an obstruction or obstacle, for more than 24 hours, to the use of that property as may be required for the public purposes of Canada."

Explanation

This allows the Minister of Transport, Infrastructure and Communities to secure, remove or dispose of any wreck, vessel or part of a vessel resulting from the wrecking, sinking, partial sinking, lying ashore or grounding of a vessel or any other thing, in the manner that the Minister considers appropriate only in specific situations referred to in paragraphs 16(a), (b) or (c) of the NWPA.

Section 20 of the NWPA

http://laws-lois.justice.gc.ca/eng/acts/N-22/page-9.html#docCont

"20. If any vessel or other thing is wrecked, sunk, partially sunk, lying ashore or grounded in any navigable water in Canada, the vessel, part of the vessel, its cargo or thing is deemed to be abandoned on the day that is two years from the day of the casualty. On or after that later day the Minister may, under the restrictions that the Minister considers appropriate, authorize any person to take possession of and remove the vessel, part of the vessel or thing for that person's own benefit, on giving to the owner, if known, one month's notice, or if the owner is unknown, public notice for the same period in a local newspaper published in or near to the location of the vessel or thing."

Explanation

This allows the Minister of Transport Minister of Transport, Infrastructure and Communities to authorize a person to remove an abandoned or derelict vessel provided certain conditions are met, namely that a notice be sent as per section 20 of the NWPA.

Note: Amendments to the Act were tabled in Parliament on October 18, 2012.

2. Canada Shipping Act, 2001

Section 160 of the CSA, 2001

http://laws-lois.justice.gc.ca/eng/acts/C-10.15/page-46.html#h-95

When wreck may be disposed of

- **"160.** (1) A receiver of wreck may dispose of or destroy wreck, or authorize its disposition or destruction,
 - (a) after 90 days following the date that the wreck was reported under paragraph 155(1)(a); or
 - (b) at any time if, in the receiver's opinion, the value of the wreck is less than \$5,000, the storage costs would likely exceed the value of the wreck or the wreck is perishable or poses a threat to public health or safety.
 - (2) The proceeds, if any, of a disposition under paragraph (1)(b) must be held by the receiver of wreck for not less than 90 days after the date that the wreck was reported under paragraph 155(1)(a).



- (3) The proceeds of a disposition under subsection (1) must be paid, less the salvage award, fees and expenses, to the Receiver General, to form part of the Consolidated Revenue Fund
- (a) if no claim has been submitted in accordance with paragraph 158(a); or
- (b) if a claim has not been established within the period that the receiver of wreck considers appropriate."

Explanation

This allows a receiver of wreck to dispose of or destroy a wreck, or authorize its disposition or destruction if requirements under the CSA, 2001 are met.

3. Note

Some survey participants identified cases of homeless people living onboard abandoned or derelict vessels. This issue is beyond Transport Canada's mandate and expertise. In the event that vessels with homeless people living on board are found, involved parties should consult either local authorities or the Human Resources and Skills Development Canada's Homelessness Partnering Strategy.

5.0 CONCLUSIONS

The following set of conclusions are based on the answers provided by the participants of the survey (general information and inventory of known existing abandoned and derelict vessels), and from the analysis of the inventory of known existing abandoned and derelict vessel data/information and from the in-house analysis of the data obtained from the LVR and the SVR:

- 1. The presence of abandoned and derelict vessels is an issue that is being addressed by a growing number of municipalities and private shoreline property owners.
- 2. The removal of abandoned and derelict vessels is costly and there are a number of factors that affect the cost of the removal.
- 3. The removal of abandoned and derelict vessels requires significant technical resources.
- 4. It can be very challenging or impossible to identify the owner of abandoned and derelict vessels.
- 5. If no owner is found, municipal governments and shoreline property owners may have to deal with the issue and may have no choice but to pay for the removal of an abandoned or derelict vessel.
- 6. It is necessary to address the prevention of vessels becoming abandoned and derelict.
- 7. The CCG and/or the Navigable Waters Protection Program may be able deal with some portion of the challenge related to abandoned or derelict vessels. The CCG can deal with any contamination that may be present on an abandoned or derelict vessel, but does not have the authority to remove the vessel itself. The Navigable



Waters Protection Program can deal with an abandoned or derelict vessel under section 16 of the NWPA when it is a hazard to navigation or under section 20 of the NWPA when a vessel has been abandoned for two years.

- 8. A receiver of wreck may dispose of or destroy a wreck, or authorize its disposition or destruction under the CSA, 2001 if certain conditions are met.
- 9. Some legislative tools have been identified by the participants of the survey, but no one has completed a full analysis of the various legislative tools and identified how they can be applied to addressing the issue of abandoned and derelict vessels nor communicated this knowledge to all of the active parties who deal with the issue of abandoned and derelict vessels.
- 10. The analysis of the inventory of known existing abandoned and derelict vessels indicated a lack of co-ordination of the type of information that has been collected for each abandoned and derelict vessel and therefore, it is not possible to carry out a cost estimate for the removal of all of the known existing abandoned and derelict vessels.
- 11. The analysis of the LVR and SVR indicated that the age of a large portion of the fleet of the various registered vessels is 30 years or more. This fact could result in an increase in the number of vessels that will be abandoned, as well, as the need to have access to an infrastructure that will be able to dispose of this increasing number of older vessels.

6.0 RECOMMENDATIONS

Based on the analysis and conclusions of this study, it is recommended that an interjurisdictional working group-be formed to address this subject-matter. The role of this working group would be to address and provide recommendations regarding the following issues related to abandoned and derelict vessels which could include but not be limited to:

- a. definitions of the terms "abandoned vessel" and "derelict vessel";
- b. relevant legislative and regulatory tools and gap analysis to identify all responsible federal, provincial, and municipal authorities;
- c. Methods used to identify owners;
- d. potential sources of funding to remove abandoned and derelict vessels, including short-term and long-term options;
- e. creation of a central inventory;
- f. training, communication and awareness material; and
- g. facilitate the sharing of information in relation to the removal of abandoned and derelict vessels.



Appendix 1. List of participants in the survey of abandoned and derelict vessels in Canada



PACIFIC REGION

The following organizations were represented in the questionnaire responses for the region:

- 1. Union of British Columbia Municipalities (see complete list of participating municipalities below)
- 2. Harbour Authority Association of British Columbia (HAABC)
- 3. Department of Fisheries and Oceans Small Craft Harbours (DFO-SCH)
- 4. Transport Canada Navigable Waters Protection Program (TC-NWPP)
- 5. Canadian Coast Guard-Emergency Response (CCG-ER)
- 6. Ministry of Forests, Lands and Natural Resource Operations (MNRO)
- 7. Crown Lands & Resources, Integrated Land Management Bureau, Ministry of Agriculture and Lands (combined with MNRO)
- 8. Non-government organization (NGO)

REST OF CANADA

REGION/PROVINCE

PRAIRIES	
Prairies and North (Prairies + N)	TC-NWPP
ONTARIO	
Ontario	TC-NWPP
Central and Arctic (C&A)	DFO-SCH
Central and Arctic	CCG-ER
QUEBEC	
	DFO-SCH
	TC-NWPP
	CCG-ER
ATLANTIC	
Maritimes	TC-NWPP
Maritimes	CCG-ER
Newfoundland and Labrador (N&L)	CCG-ER
Newfoundland and Labrador	DFO-SCH
Maritimes and Gulf	DFO-SCH

The following survey participants provided inventory information:

TC-NWPP (Pacific), DFO-SCH (Pacific), DFO-SCH (Maritimes and Gulf), DFO-SCH (Newfoundland and Labrador), DFO-SCH (Quebec), TC-NWPP (Quebec).



The following local governments provided responses to the UBCM survey:

Village of Salmo

District of Coldstream

Town of Ladysmith

District of Lake Country

Municipality of North Cowichan

Village of Valemount

City of New Westminster

City of North Vancouver

City of Vernon

District of Mission

Village of New Denver

District of Sechelt

City of Pitt Meadows

Sunshine Coast Regional District

Village of Belcarra

Corp District of North Vancouver

Village of Kaslo

Town of Gibsons

Municipality of Saanich

Village of Harrison Hot Springs

District of Port Hardy

Gold River

District of West Kelowna

Bowen Island Municipality

Nanaimo Port Authority on behalf of City of Nanaimo

Comox Valley Regional District

The Corporation of Delta

District of Central Saanich

District of Oak Bay

Regional District of Nanaimo

District of Squamish

Islands Trust