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Watching a Whale's Tale: The Protection of *Cetaceans* in Canada

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The protection of Cetaceans is becoming recognized as a global ecological issue, with many species of whales, dolphins and porpoises either in decline or in various stages of recovery from decline due to a variety of causes including marine pollution, seismic testing, commercial shipping traffic and commercial whaling. Less well recognized but critically important is the need to ensure that effective legal protections are provided with respect to issues associated with increasing human pressure, including a fast growing Cetacean watching eco-tourism industry and an ever increasing fleet of recreational watercraft. Canada possesses the longest maritime coastline in the world, which is home to a large variety of species of Cetaceans, and as such bears a significant global responsibility to ensure their protection. This paper undertakes a practical evaluation of Canada's regulatory scheme as it applies to protections offered to Cetaceans under the Marine Mammal Regulations and the Species at Risk Act in the context of these increasing human pressures. The paper offers observations with respect to the effectiveness of the current regulatory scheme and make recommendations for its enhancement.

La protection des cétacés est de plus en plus considérée comme une question écologique d'ordre international, compte tenu que plusieurs espèces de baleines, de

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dauphins et de marsouins sont ou bien en déclin ou se trouvent à différentes étapes de rétablissement après avoir été en déclin pour différentes raisons, y compris la pollution marine, des essais sismiques, le trafic maritime commercial et la pêche commerciale à la baleine. On a moins porté attention à un aspect qui est tout aussi important, soit la nécessité de mettre en place des protections légales efficaces pour répondre à la pression croissante découlant de l'activité humaine, y compris l'industrie en plein essor de l'observation écotouristique des baleines et une flotte de plus en plus développée liée à la navigation de plaisance. Le Canada dispose du plus long littoral maritime au monde, au bord de laquelle se trouve une grande variété d'espèces de cétacés et, à ce titre, a l'importante obligation, du point de vue international, d'assurer leur protection. Dans cet article, l'auteur procède à une évaluation d'ordre pratique du régime réglementaire canadien applicable aux protections des cétacés en vertu du Règlement sur les mammifères marins et de la Loi sur les espèces en péril dans le contexte de ces pressions croissantes découlant de l'activité humaine. L'auteur expose ses commentaires sur l'efficacité du régime réglementaire actuel et propose des recommandations en vue de son amélioration.

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- I. INTRODUCTION
 - II. THE STATE OF CETACEAN — HUMAN INTERACTIONS IN CANADA
 - III. MARINE MAMMAL REGULATIONS
 - (a) Introduction
 - (b) Determining the Regulatory Standard Established by the Legislation
 - (i) Normative vs. Quantitative Standard of Regulatory Protection
 - (ii) Defining the Standard "Disturb"
 - (c) Actual vs. Theoretical Disturbance
 - (d) Concluding Observations
 - IV. SPECIES AT RISK ACT
 - (a) Introduction
 - (b) Does the Cetacean Species/Population Fall Within the Jurisdiction of the Act?
 - (c) Determining the Regulatory Standard Established by the Legislation
 - (i) Normative vs. Quantitative Standard of Regulatory Protection
 - (ii) Defining the Standard "Harass"
 - (d) Concluding Observations

I. INTRODUCTION

The protection of *Cetaceans* is becoming recognized as a global ecological issue.¹ With many species of whales, dolphins and porpoises of the Order *Cetacea* either in decline or in various stages of recovery from decline,² scientists,

¹ See for example International Whaling Commission, "The Environment and Whale Populations" UK, 2015.

government regulators and environmentalists around the world are seeking resolution to this multi-faceted problem which includes marine pollution,³ maritime resource exploration activities involving seismic testing,⁴ commercial shipping traffic⁵ and commercial whaling.⁶ While these large global issues tend to

² See for example International Whaling Commission, "Status of Whales" UK, 2015.

³ Marine pollution is not a new issue. The sources of such pollution are well documented, including industrial activity, effluent and tailings from mine sites, untreated sewage which is allowed to flow directly into marine environments from some communities, to name a few. The list is lengthy, as is the list of toxins which have been released. Most notable are Persistent Organic Pollutants, commonly known as POPs, which include PCBs, PBDEs, Dioxins and Furans, which are a major concern for *Cetacean* populations. In a 2010 report, Fisheries and Oceans Canada concluded as follows with respect to the current state of marine pollution and Canada's populations of killer whales:

DFO Science has previously reported that BC's killer whales are among the world's most PCB contaminated marine mammals.

...

While many persistent contaminants have been detected in BC's killer whales, PCBs appear to be the principal health concern. PCBs have been associated with subtle yet important and permanent health effects in humans and wildlife, including reduced reproduction, altered behavior, and increased vulnerability to disease.

In 2014, a report by the US National Oceanic and Atmospheric Administration (NOAA) expressed concern that the effects of pollutants on Southern Resident Killer Whales (which reside in both US and Canadian West Coast waters) may prevent recovery of the population:

High levels of pollutants may be keeping the whale population from increasing at the rate required for recovery of the population. It is hard to study how these pollutants affect wild whales. . . .

⁴ Seismic testing for the purposes of geological mapping and prospecting for deposits of oil and natural gas is currently underway or proposed in whale habitat in each of Canada's 3 oceans. In the Atlantic, seismic testing to identify oil and gas deposits is occurring on the Scotian Shelf off the coast of Nova Scotia—critical habitat for Northern Bottlenose Whales and North Atlantic Right Whales—both of which are listed as endangered under Canada's *Species at Risk Act*. In Canada's Pacific Ocean, despite a 32 year offshore oil and gas moratorium, seismic testing for the purpose of geological mapping began in 2009. The testing area includes the boundaries of the Endeavour Hydrothermal Vents Marine Protected Area. Finally, in the Arctic Ocean, a multi-year oil exploration project which includes seismic testing has been approved for the Baffin Bay and Davis Strait regions of Nunavut, near the community of Clyde River. This area is home to more than 80% of the world's Narwhal population as well as Bowhead Whales. A recent study by an international group of *Cetacean* scientists concluded:

Marine seismic surveys, which use loud, primarily low-frequency sound to penetrate the sea floor, are known to disturb and could harm marine life. The use of these surveys for conventional and alternative offshore energy development as well as research is expanding.

Currently Canada does not have any legislation to regulate levels of noise in its oceans generally (whether it be from seismic testing, shipping or underwater construction) and no laws to specifically address noise in the vicinity of whales.

⁵ See for example a recent 2016 study which has concluded that noise from commercial

dominate the conversation when it comes to protecting the planet's *Cetacean* populations, in Canada, which boasts the world's longest marine coastline (including the Atlantic, Pacific and Arctic oceans), there is a growing need to ensure that effective protections are provided with respect to domestic issues associated with increasing human pressure arising from a fast growing *Cetacean* watching *eco-tourism* industry and an ever increasing fleet of recreational watercraft.

While addressing the United Kingdom's concerns associated with commercial whaling, former British Prime Minister Gordon Brown stated "The UK Government's position is that whale watching is the only interaction with whales that is sustainable."⁷ In his statement the Prime Minister went on to offer an economic incentive for the protection of whales from commercial whaling, stating "Many coastal communities, including those in developing countries, can profit from tourist income generated by a well-regulated whale watching industry."⁸ [Emphasis added].

In order to ensure sustainability of the *Cetacean* resource he might well have added "...and a well-regulated fleet of whale watching private pleasure craft." It is submitted that Canada currently falls short of meeting either of these regulatory thresholds. Currently, the primary legal tools available for the regulation and management of the interactions between humans and *Cetaceans* are limited to s. 7 of the *Marine Mammal Regulations* enacted under the federal *Fisheries Act*⁹ which purports to protect all marine mammals (not specifically *Cetaceans*) inhabiting Canadian waters from the rather vague notion of "disturbance", and by the provisions of s. 32 of the *Species at Risk Act*¹⁰

shipping vessels may cause harm to *Cetaceans* more than previous thought, impairing the ability of the animals to communicate and locate prey. S Veirs, V Veirs & JD Wood, "Ship noise extends to frequencies used for echolocation by endangered killer whales" (2016) *PeerJ* 4:1657.

⁶ In 1982 out of a concern for whale populations, the International Whaling Commission (IWC) created a moratorium on commercial whaling commencing in the 1985/86 season onwards to the present. Despite the moratorium Russia, Japan, Norway and Iceland have all harvested whales under objection or reservation to the moratorium. In 2013 Norway harvested a total of 594 Minke whales while Iceland harvested a total of 169 Minke and Fin whales. See IWC Harvesting Records Since 1985. See also JW Kindt, "A Summary of Issues Involving Marine Mammals and Highly Migratory Species", *Akron Law Review* Vol 18, No 1.

⁷ UK Department for Environment, Food & Rural Affairs, "Protecting Whales: A Global Responsibility". See also Government of New Zealand, "The Conservation of Whales in the 21st Century" wherein (page 26) the Government of New Zealand takes a similar view to that in the U.K., stating "Whale watching is a high profile example of achieving economic returns, sustainably, from live whales."

⁸ UK Department for Environment, Food & Rural Affairs, "Protecting Whales: A Global Responsibility".

⁹ SOR/93-56.

¹⁰ S.C. 2002, c. 29.

which offers protection against the equally vague concern of "harassment" for the limited number of species of *Cetaceans* which fall within that legislation. There is currently no Canadian legislation that sets operating standards for vessels (commercial *Cetacean* watching vessels or private pleasure craft) in the vicinity of *Cetaceans*.

This paper will undertake a practical evaluation of Canada's regulatory scheme as it applies to protections offered to *Cetaceans* under the *Marine Mammal Regulations* and the *Species at Risk Act*. Rather than pursue this examination from a purely theoretical perspective, this evaluation will focus on the subject from the practical context of recent case law, scientific evidence presented in the courts and the anecdotal "boots on the ground" experiences of the author in advancing cases of this nature through Canadian judicial process. In this context the paper will offer observations with respect to the effectiveness of the current regulatory scheme and will make recommendations for its enhancement.

II. THE STATE OF *CETACEAN* — HUMAN INTERACTIONS IN CANADA

Cetacean watching has become an industry of significant economic importance. A leading international study found that in 2008, 13 million people took part in commercial whale watching activities in 119 countries, generating \$2.1 billion dollars (US). The study went on to estimate that more than 3,000 whale watching operations around the world employed 13,200 people.¹¹ With respect to Canada, the same study concluded that in 2008 an estimated 206 commercial whale watching operators provided services to 1,165,684 whale watching clients, directly generating \$48,420,000 (US), with indirect economic benefits of \$101,946,000 (US). The most active *Cetacean* watching region in Canada was Quebec with an estimated 567,161 whale watchers. The Quebec whale watching industry is primarily based in the St. Lawrence River Estuary and Gulf, with the focus species being Harbour Porpoises, Minke, Fin, Humpback and Blue Whales. Other species which are occasionally seen include Sperm Whales, Long-finned Pilot Whales, Atlantic White-sided Dolphins, as well as rare sightings of Orcas, the endangered North Atlantic Right Whale and the threatened St. Lawrence Beluga. British Columbia was the second most active region, with 430,600 whale watchers taking whale watching tours from the Province's 4 primary whale watching locations of Victoria, Long Beach (Tofino), Telegraph Cove and Campbell River.¹² Species

¹¹ S. O'Connor, R. Campbell, H. Cortez & T. Knowles, "Whale Watching Worldwide: Tourism Numbers, Expenditures and Expanding Economic Benefits", *Special Report from the International Fund for Animal Welfare and Economists at Large*, (Yarmouth, Mass., 2009). See also AM Cisneros-Montmayor, UR Sumaila, K. Kaschner & D. Pauly, "The Global Potential for Whale Watching", *Marine Policy*, Vol 34, No 6 at 1273-1278, 2010 which estimates (abstract) that the industry has the global potential "...to over 2.5 billion USD in yearly revenue and about 19,000 jobs around the world."

of interest included Orcas, Dall's and Harbour Porpoises, Pacific White-sided Dolphins and migrating Gray Whales. Newfoundland and Labrador were next, accounting for 138,000 whale watchers, with the focus of the whale watching industry on the Avalon Peninsula. The *Cetaceans* of interest were Humpback, Minke and Fin Whales, with Atlantic White-sided Dolphins also seen. Nova Scotia and New Brunswick accounted for a combined total of 135,000 of whale watchers, primarily in the vicinity of the Bay of Fundy, the Halifax region and Cape Breton. Primary species of interest included Atlantic White-sided Dolphins and Humpback Whales, as well as the endangered North Atlantic Right Whale. Finally, the Arctic regions of Nunavut and northern Manitoba attracted a total of 4,800 visitors with the primary focus on the shores of Hudson Bay, the summer home of a large population of Beluga Whales. Another popular area is northern Ballin Island where Narwhals are frequently observed. Despite these numbers, no legislation in Canada directly regulates the activities of commercial *Cetacean* watching operations.

It should be emphasized that marine based viewing of *Cetaceans* is not limited to commercial, *eco-tourism*, operations. Transport Canada records indicate that as of December 2015, some 2,781,710 pleasure craft were licensed in Canada.¹³ Hypothetically, if only 50% of these vessels are used in a marine environment inhabited by *Cetaceans* over the course of any given year, and making the reasonable assumption that each of these vessels will make multiple voyages into areas where there is the potential to interact with *Cetaceans*, it adds up to a very large number of opportunities for human — *Cetacean* encounters. It is impossible to estimate how many of these encounters are benign versus those which are of an inappropriate variety, where operators of private pleasure craft seeking up-close interactions with whales, porpoises or dolphins each year approach the animals in a manner which interferes with their normal life processes. Again, as with the *eco-tourism* based, commercial, *Cetacean* watching industry, no Canadian legislation currently directly governs the activities of private pleasure craft operators with respect to their interactions with *Cetaceans*.

What is certain is that whale, porpoise and dolphin watching in Canada, whether it be through commercial operators or via private pleasure vessels, is very popular and growing. Advertising campaigns developed by those involved in the *eco-tourism* industry often feature appealing close-up images of *Cetaceans* in an attempt to attract clients. This has led to whales, porpoises and dolphins becoming the glamorous animal stars of the Canadian tourism industry, being tracked down (in many cases on a daily basis) by their adoring paparazzi armed

¹² Consistent with these numbers, in a recent media interview the Pacific Whale Watch Association, which represents 36 commercial West Coast whale watch operators along the Pacific Coast in the Victoria/Seattle region, the Association estimated that in 2015, member whale watching operators carried nearly 400,000 passengers on upwards of 14,000 voyages, earning approximately \$145 million (US). Dirk Meissner, *Canadian Press*, "Whale Watching Industry Braces for Changes" *Global News*, December 27, 2015.

¹³ Transport Canada communication in response to January 2016 inquiry.

with VHF radios to share sighting locations and high powered marine motors to get to sightings quickly. Unfortunately, in Canada regulatory tools to govern interactions with *Cetaceans* has developed far more slowly than the technology laden vessels used to pursue them. Canada currently has no legislation providing direct regulation of these interactions — either through regulation of the *Cetacean* watching industry or via legislation governing the operation of private small pleasure craft. Currently, Canada only provides commercial whale watching operations and operators of pleasure craft with voluntary guidelines which are legally unenforceable.¹⁴ This inevitably leads to the concern that many species of *Cetaceans* which are already under pressure from global issues, outlined above, and whose populations are in decline may well be harmed further by domestic pressures from an ever increasing number of interactions with the *Cetacean* watching public.

III. MARINE MAMMAL REGULATIONS

(a) Introduction

The *Marine Mammal Regulations*¹⁵ were created in 1993 when various regulations including the *Cetacean Protection Regulations*,¹⁶ *Beluga Protection Regulations*,¹⁷ *Narwhal Protection Regulations*,¹⁸ *Seal Protection Regulations*¹⁹ and the *Walrus Protection Regulations*²⁰ were combined into the *Marine Mammal Regulations* as they are known today. While these Regulations were enacted under the authority of the *Fisheries Act*, neither the Regulations nor the Act provide any form of comprehensive ecosystem-based management plan for *Cetaceans*. The primary protection offered by the Regulations — to all marine mammals, including *Cetaceans* — is found in s. 7 of the Regulations which states:

7. No person shall disturb a marine mammal except when fishing for marine mammals under the authority of these Regulations.

Penalties for a violation of s. 7 of the Regulations are set out in the general penalties section found in s. 78 of the *Fisheries Act*,²¹ which provides:

78. Except as otherwise provided in this Act, every person who contravenes this Act or the regulations is guilty of

(a) an offence punishable on summary conviction and liable, for a first offence, to a fine not exceeding one hundred thousand dollars

¹⁴ Government of Canada, Department of Fisheries and Oceans, et al, *Be Whale Wise — Marine Wildlife Guidelines for Boaters, Paddlers and Viewers*.

¹⁵ SOR / 93-56.

¹⁶ SOR / 82-614.

¹⁷ SOR / 80-376.

¹⁸ CRC, c. 820.

¹⁹ CRC, c. 833.

²⁰ SOR / 80-338.

²¹ R.S.C. 1985, c. F-14.

- and, for any subsequent offence, to a fine not exceeding one hundred thousand dollars or to imprisonment for a term not exceeding one year, or to both; or
- (b) an indictable offence and liable, for a first offence, to a fine not exceeding five hundred thousand dollars and, for any subsequent offence, to a fine not exceeding five hundred thousand dollars or to imprisonment for a term not exceeding two years, or to both.

The key legal issue in utilizing s. 7 of the *Marine Mammal Regulations* to protect *Cetaceans* is to determine whether a *Cetacean* has been "disturbed" by the activities of an accused, irrespective of whether the "activity" be marine pollution caused by a tanker ship hydrocarbon spill, the release of effluent from an industrial activity into water inhabited by *Cetaceans*, seismic testing activity in the vicinity of *Cetaceans* or a commercial whale watching vessel or pleasure craft inappropriately approaching the animals to "get a better look" or to take "that perfect photograph". The Regulations do not define the term "disturb" nor do they provide examples of activities which may constitute a disturbance. Rather, the legislation leaves it in the hands of the courts to address two important issues on a case-by-case basis:

- 1) determining the regulatory standard established by the legislation; and
- 2) differentiating "actual" versus "theoretical" disturbance.

Each of these issues are addressed below.

(b) Determining the Regulatory Standard Established by the Legislation

(i) Normative vs. Quantitative Standard of Regulatory Protection

When setting standards in environmental/natural resource protection legislation, legislators generally have two approaches available to them. A standard may be either "quantitative" or "normative" in nature:

The first application of scientific information within legal environmental decision-making institutions and processes is the establishment of environmental standards. In setting environmental standards the legislator reviews the available scientific information, including any scientific uncertainties which it may contain, and integrates this information into a decision-making process which considers a variety of factors prior to making what is essentially a political decision as to the appropriate "standard". Such standards may be "quantitative" in that they take the form of precisely described measurable levels set out within regulations enacted under the authority of parent environmental legislation. Alternatively, these standards may be "normative" whereby the standard is broadly described in terms of prohibited outcomes such as "harm to the environment". In the former case the difficult decisions are those made by legislators setting the quantitative standards, with the trier of fact left with the less controversial task of applying the facts of a case to those standards. The opposite holds true for normative

standards, where the easy decisions are made in creating the standard, which often creates considerable difficulty in its application by the trier of fact.²²

In s. 7 of the *Marine Mammal Regulations* the legislators have chosen the second option—a normative prohibition against “disturbance” of a marine mammal—the parameters of which are to be determined on a case-by-case basis by a court. This approach is common in Canadian environmental/natural resource protection law,²³ and has four important advantages over quantitative standards:

1. Normative Standards Have Flexibility to Accommodate Real World Situations

First, normative standards provide a degree of flexibility in the enforcement of legislative protections to the environment and natural resources that quantitative standards often cannot. Normative standards which employ protections using terminology such as “harm”, “disturb”, “disrupt”, “interfere” or “harass” allow enforcement mechanisms (initially enforcement personnel and later in the enforcement process the courts) to apply the protections afforded by the legislation to a wide variety of activities — some of which can reasonably be anticipated, and others which cannot. In contrast, quantitative standards are effective at expressly defining and prohibiting only those activities which can be reasonably anticipated, and simplifying enforcement in the event that a prohibited activity occurs. For example, a quantitative standard which prohibits operating motorized vessels within 400 meters of the front of a pod of *Cetaceans*²⁴ would be effective at regulating one human “activity” which it is anticipated may lead to undesirable consequences for *Cetaceans*. In this example the activity — intentionally operating a motorized vessel in close proximity of the path of a pod of *Cetaceans* is not the mischief *per*

²² L.A. Reynolds & S.E. Hrudey, “Managing Uncertainty in Environmental Decision-Making: The Risky Business of Establishing a Relationship Between Science and Law”, Switzerland: *Int. J. Risk Assessment and Management*, Vol 6, Nos 1-3, 2006.

²³ Perhaps the most noteworthy “normative” natural resource protection statute in Canada is s. 35(1) of the *Fisheries Act* (R.S.C. 1985, c. F-14) which states:

35(1) No person shall carry on any work, undertaking or activity that results in serious harm to fish. . .

The *Fisheries Act* does not quantitatively define the term “serious harm to fish” (beyond the general references to death of fish or permanent alteration or destruction of fish habitat found in s 2(2) of the Act) nor does it prescribe quantitative standards which must be breached in order to offend the statute, leaving definition of the term to the courts to decide on a case-by-case basis. It noteworthy that the use of a normative standard was preserved in this section despite recent (and much criticized) revisions to s 35(1) of the *Fisheries Act* which removed the long established normative standard of “harmful alteration, disruption or destruction of fish habitat” commonly referred to as a “HADD”.

²⁴ As found in the current *Whale Watching Guidelines*, which is not legally enforceable. *Supra* note 14.

se — but the anticipated likely consequences — interference with the life processes and possible injury of the animals — is seen as the mischief to be prevented (in this case through the creation of a quantitatively defined “no-go” zone of 400 meters). From a practical perspective, enforcement is limited to establishing the relative location and distance between the offending vessel and the *Cetaceans*, that the boat was under power, and subsequent identification of the offending vessel and operator. However, as indicated above, the fundamental weakness of this quantitative standard approach is that it is limited to regulating specifically defined activities which are anticipated by the legislator. In the real world, some activities can reasonably be anticipated whereas many others cannot. Unfortunately, with quantitative standards those activities which are not anticipated generally remain at best under-regulated and often remain completely unregulated. Continuing with our example, the aforementioned quantitative distance standard does nothing to address the situation where a boat operator intentionally places a vessel in the path of a pod of *Cetaceans* at a distance of 400 + 1 meters and waits for the pod to pass in very close proximity (and even under) the vessel, exposing the whales to the risk of injury or interruption to normal life processes such as travelling, feeding and resting. To take the example one step further, as soon as the whales have passed by the offending vessel, the boat operator commences to “leapfrog” under power back to a point just outside the 400 meter prohibited zone but once again directly in the path of the whales. The whole process may repeat itself several times.²⁵ At no point in this example has the quantitative arbitrary 400 meter limit been violated by the “activity” of the vessel operator and enforcement action cannot be taken even though the mischief that the quantitative standard attempts to prohibit clearly exists — a situation where *Cetaceans* are placed at risk to harm. Examples of other related human activities that may create mischief for *Cetaceans*, but which cannot adequately be addressed by arbitrary quantitative standards such as “no-go” zones, may include where a vessel operator remains outside a prescribed no-go zone but significantly increases and reduces engine speed (colloquially known as “revving an engine”), creates turbulence in the water by making tight turns at high speed in front of the pod of *Cetaceans*, or follows the *Cetaceans* for a significant time or distance, effectively chasing or herding them.

2. Normative Standards Are Well Suited to Address Degrees of Mischief and Account for the Outcomes of Prohibited Activities

The second important advantage which normative standards have over their quantitative counterparts is that they are better able to account for both “degrees of mischief” than are quantitative standards which are often limited to merely regulating the occurrence of the prohibited activity itself. Hence, when

²⁵ For the purposes of this publication the examples used are hypothetical — but are based to some degree upon facts tendered into evidence in various court proceedings and anecdotal accounts provided by commercial whale watching guides and pleasure boaters.

considering whether a pod of *Cetaceans* has been "disturbed" by a human activity such as an inappropriate encounter with a motorized vessel, in addition to considering quantitative issues such as the distance between the *Cetaceans* and the vessel, normative standards enable a court to take into account considerations such as the nature and degree of mischief associated with the activity. This may include scenarios where a vessel which is in violation of a quantitative no-go zone also closely approaches in close proximity to the animals on repeated occasions, significantly increases engine speed, creates turbulence in front of a pod, follows the animals from behind (chasing or herding) for a significant period of time or distance, or where persons on the vessel attempt to make direct physical contact with individual members of the pod. Each of these activities may warrant harsher penalties than a simple no-go zone violation, but with quantitative regulation rigidly defined in terms such as proximity, the result may be under-regulation.

3. Normative Standards Account for the Outcomes of Prohibited Activities

Third, normative standards are often better able to take account of the actual outcomes of prohibited activities than are quantitative standards. For example, where the presence of a vessel which intentionally locates itself in front of a pod of *Cetaceans* impacts upon the animals' normal life processes — such as causing the pod to split or disperse, results in the group moving in another direction, breaks up a "resting line" of animals, suppresses feeding activity, increases spyhopping, or forces a member of a pod to travel between the vessel and a shallow rocky shoreline, causing injury to the animal — the mischief is clear and should attract a commensurate level of enforcement. However, if the protections afforded to *Cetaceans* are primarily reliant upon arbitrary quantitative standards aimed at prohibiting an activity thought to be a cause of, or otherwise associated with, the mischief rather than the mischief (outcome) itself, the offender may be subject to the same level of enforcement sanction for encroaching within an arbitrary distance barrier as for intentionally striking and injuring or killing an animal with a boat propeller. While arbitrary quantitative standards such as prescribed no-go zones may have a place in the overall *Cetacean* regulatory scheme, it is submitted that the appropriate place for such standards is in marine vessel regulations which govern the operation of boats — not in environmental/natural resource protection legislation which is intended to offer protection to *Cetaceans* and to prevent unfortunate outcomes from inappropriate human — *Cetacean* interactions.

4. Normative Standards Allow for Flexibility in Specific and General Deterrence

Finally, the advantages of normative protections for *Cetaceans* go well beyond the issue of obtaining convictions for violations of legislative standards. As with most public welfare offences common to environmental/natural resources protection law, the principle of deterrence — specific, and often

more importantly, general – is of paramount concern when offering protections to *Cetaceans*. Normative prohibitions, which offer enforcement flexibility in that they generally focus on prohibiting outcomes of an activity rather than the activity itself (which often cannot be reasonably anticipated) not only provide courts with the ability to consider all of the relevant facts of a case when considering the issue of guilt or innocence, they also allow the courts a breadth of latitude with respect to matters of sentencing which quantitative offences are often unable to match.

The value of flexible deterrence options associated with normative protections is well illustrated in the recent British Columbia decision *R. v. Smith*, where upon convicting a commercial whale watching vessel operator of a second offence within 2 years under the *Marine Mammal Regulations*, the court went well beyond the usual financial penalty (in this case \$6,000)²⁶ and sentenced the repeat offender to:

“... a 10 year prohibition from... engaging in the whale watching industry, be it in the water or on land, and with respect to that prohibition... must not be found on board any vessel which is engaged in any commercial whale watching or adventure tours in Canadian waters.” The sentence also provided that the offender “... must not possess or acquire any interest, legal, equitable or otherwise, in any such vessel involved in the Industry.”²⁷

The significant specific deterrence value of this sentence to the individual repeat offender and the even greater general deterrence value to vessel operators in the whale watching industry across Canada was facilitated by the normative character of the offence (and the resulting type of evidence required to establish it) and cannot be overstated. Similar sentencing benefits from normative standards can be seen in *R. v. Peterson*, where a recreational pleasure boat operator who was found to have repeatedly pursued a group of killer whales was levied a \$7,500.00 financial penalty and ordered to publish a *mea culpa* article entitled “This Could Happen to You”, which outlined the essential facts of the offence and penalty in a local newspaper.²⁸

²⁶ Order of His Honour Judge R.J. Sutton dated (January 31, 2014), Court File No. 35578.

²⁷ Order of His Honour Judge R.J. Sutton dated (February 3, 2014), Court File No. 35577-1.

²⁸ Order of His Honour Judge B.H. Saunderson dated (January 9, 2013), Court File No. 35577-1. It should be noted that this penalty was globally applied to convictions under s 7 of the *Marine Mammal Regulations* and under s. 32 of the *Species At Risk Act*. That *mea culpa* article which initially appeared in the *Campbell River Mirror* on January 10, 2013 under the banner “Steer Clear of Killer Whales or Face Hefty Fines” was subsequently republished by newspapers across North America, providing a level of general deterrence seldom seen in environmental/natural resource regulation. See for example CBC News British Columbia, January 10, 2013, “Whale Harasser Fined, Ordered to Write Newspaper Article”, CBC Radio, “Whale Harassing Conviction”, *As It Happens* (January 10, 2013), “First Species at Risk Conviction a Warning to Other B.C. Whale Watchers” *The Vancouver Sun* (January 10, 2013).

Quantitative Protections for Cetaceans — The Approach for the Budget Conscious

Reliance upon quantitative rather than normative protections for *Cetaceans* does have supporters. From a practical enforcement perspective, quantitative standards are often simpler in terms of the evidentiary requirements to prove a case and (arguably) less costly to enforce.²⁹ As such, their use is often advocated by those whose priority is to provide a minimal level of enforcement on a limited budget. Some proponents of quantitative standards for *Cetacean* protection go even farther in the interests of minimizing costs—taking the position that sufficient *Cetacean* protection is provided by making a breach of a quantitative regulation such as an arbitrary “no-go” zone a “ticketable” offence (similar to a ticket for a motor vehicle offence such as travelling in excess of a posted speed limit) whereby the offending vessel operator has the option of simply filling in a form on the ticket, pleading guilty to the charge and mailing it in with a predetermined fine — all without ever having to enter a courtroom to acknowledge the offence. The ticket approach is generally characterized by penalties in the nature of relatively low fines, as the issuance of tickets with high financial penalties makes a guilty plea less attractive and increases the chance that an accused will enter a not guilty plea, in which event the matter enters the judicial process and may ultimately conclude in a trial. This is a result which defeats the economic efficiencies of a ticket system which anticipates a high percentage of guilty pleas, eliminating the time and financial costs associated with trials. It is submitted that a regulatory approach to the protection of *Cetaceans* which is based upon minimization of enforcement costs through the questionable use of quantitative standards and ticketing comes with a high price — it sends the message that Canada considers *Cetaceans* within its waters to be of relatively low value — and, as such, worthy only of a low cost protection.

Judicial Approval of Normative Standards

The Supreme Court of Canada has expressly recognized with approval the use of normative standards in environmental/natural resource regulation. In *R. v. Canadian Pacific Ltd.*,³⁰ Gonthier J. provided numerous examples of such legislation,³¹ and went on to conclude:

What is clear from this brief review of Canadian pollution prohibitions is that our legislators have preferred to take a broad and general approach, and have avoided an exhaustive codification of every circumstance in which pollution is prohibited. Such an approach is

²⁹ For example, a trial which only requires evidence that an arbitrary “no-go” zone was breached and the identification of the party alleged to have committed the violation may require significantly less time and expense than a trial which requires evidence of the full details of the activity of the accused plus expert evidence relating to the impacts of this activity upon the *Cetaceans* involved.

³⁰ (1995), 99 C.C.C. (3d) 97 (S.C.C.).

³¹ *Ibid.* at paras 41–42.

hardly surprising in the field of environmental protection, given that the nature of the environment (its complexity, and the wide range of activities which might cause harm to it) is not conducive to precise codification. Environmental protection legislation has, as a result, been framed in a manner capable of responding to a wide variety of environmentally harmful scenarios, including one which might not have been foreseen by the drafters of the legislation.³²

For the reasons outlined above, the most effective environmental/natural resource protection legislation often includes a combination of “quantitative standards” which are easily definable to prohibit activities which can reasonably be anticipated to have negative outcomes, and “normative standards” to address the negative outcomes themselves, even if their causal activities cannot be reasonably anticipated.

(ii) *Defining the Standard “Disturb”*

As discussed above, Parliament has opted to utilize a normative standard to protect marine mammals (including *Cetaceans*), with that standard (found in s. 7 of the *Marine Mammal Regulations*) expressed in the legislation being one of “disturbance”. However, the courts have experienced some difficulty implementing that standard, struggling at times with defining with precision and consistency a legal definition based largely upon scientific evidence where there appears to be a definitional disconnect between the legal definition of the term and the scientific evidence required to establish it.

With respect to defining the term “disturb”, in 2013 the Supreme Court of Canada reaffirmed the principle that a “broad and general approach” is to be taken with respect to the interpretation of environmental/natural resource protection legislation. In *R. v. Castonguay Blasting Ltd.*³³ the Supreme Court of Canada made reference to its earlier (1995) decision in *R. v. Canadian Pacific Ltd.*,³⁴ unanimously ruling that a “wide and deep” approach should be taken to the interpretation of environmental protection legislation:

[9] The EPA is Ontario’s principal environmental protection statute. Its status as remedial legislation entitles it to a generous interpretation (Legislation Act, 2006, S.O. 2006, c 21, Sch. F, s. 64; *Ontario v. Canadian Pacific Ltd.*, [1995] 2 S.C.R. 1031, at para 84). Moreover, as this Court recognized in *Canadian Pacific*, environmental protection is a complex subject matter—the environment itself and the wide range of activities which might harm it are not easily conducive to precise codification (para. 43). As a result, environmental legislation embraces an expansive approach to ensure that it can adequately respond “to a wide variety of environmentally harmful scenarios, including ones

³² *Ibid.*, at para 43.

³³ *R. v. Castonguay Blasting Ltd.*, (*sub nom.* *Castonguay Blasting Ltd. v. Ontario (Environment)*) [2013] 3 S.C.R. 323 (S.C.C.).

³⁴ *R. v. Canadian Pacific Ltd.*, (*sub nom.* *Ontario v. Canadian Pacific Ltd.*) [1995] 2 S.C.R. 1031 (S.C.C.).

which might not have been foreseen by the drafters of the legislation" (para. 43). Because the legislature is pursuing the objective of environmental protection, its intended reach is wide and deep (para. 84).³⁵

In *R. v. Andrews*,³⁶ the British Columbia Supreme Court followed the directive of the Supreme Court of Canada in *Canadian Pacific* in considering the interpretation to be given to the term "disturb" as found in s. 7 of the *Marine Mammal Regulations* in the context of human/vessel interaction with killer whales along the British Columbia coast. In *Andrews*, the Court considered an appeal of a decision of the Provincial Court which found that the term was void for vagueness under s. 7 of the *Canadian Charter of Rights and Freedoms*³⁷ because the word "disturb" was not defined in the Regulations. In overturning the trial decision, the Court relied upon the test set out in *Canadian Pacific* that the term denote an "area of risk":

[23] Section 7 does not define what type of conduct would fall under regulation beyond using the word "disturb". In *R. v. Barnett*, (1997) 120 C.C.C. (3d) 344 at 348 (B.C.C.A.), Braidwood J.A., writing for the court, explains that the test laid down by Gonthier J. in *R. v. Canadian Pacific* requires only "language that denotes an 'area of risk' that is to be condemned, not language that allows definite predictions of what the impugned conduct is to be."³⁸

In applying this principle, the Court in *Andrews* relied heavily upon the context of the legislation to give meaning to the term "disturb" and concluded that the standard should be interpreted to include human activities which "... pose a threat to the regular behaviour of marine mammals":

[22] I find that the purpose of s. 7 of the *Marine Mammal Regulations*, contained within legislation designed to provide protection to whales from unauthorized injury, capture or harassment, is to regulate the conduct of a person who may pose a threat to the regular behaviour of marine mammals.³⁹

The Court went on to apply the test in *Canadian Pacific*, concluding that the term "disturb" was capable of definition:

[35] The question then, is whether the wording of the regulation gives sufficient guidance for legal debate. I am of the view that viewed in context, the word "disturb" and the regulation as a whole are sufficiently clear to give guidance to judicial interpretation, to limit law enforcement discretion and sanction only inappropriate behaviour, and to provide the notice required to persons subject to the law. Based

³⁵ *Ibid.* at para 9, per Abella J.

³⁶ *R. v. Andrews*, 2000 CarswellBC 3032 (S.C.).

³⁷ *Canadian Charter of Rights and Freedoms*, Part I of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982 (UK)*, 1982, c. 11.

³⁸ *Supra* note 36, at para. 12, per Dorgan J.

³⁹ *Ibid.* at para. 11, per Dorgan J.

on the foregoing analysis, I am of the view that the trial judge was in error in concluding that s. 7 of the Marine Mammal Regulations was too vague and overly broad.⁴⁰

Recent judicial interpretation of the term "disturb" in the context of *Cetaceans* has been relatively limited due to the surprisingly small number of cases which have been prosecuted under the *Marine Mammal Regulations* in Canada. Those that do exist are almost exclusively in the context of marine based *Cetacean* watching activities taking place along the British Columbia coast. Those cases that do exist indicate a definitional disconnect between the resolution of the jurisprudential requirement of legally defining and applying the normative standard of "disturbance" to a fact situation and the scientific evidence required to establish it. Recently, in *R. v. Peterson*, the British Columbia Provincial Court recognized the absence of guidance in the Regulations with respect to the definition of the term "disturb" in the context of a charge under s. 7 of the *Marine Mammal Regulations*:

3. The legislation does not define the words "disturb" or "harass". Nor does it specify minimum distances that boaters must maintain between their vessels and orcas. All that exist in this regard are guidelines in a leaflet entitled "Be Whale Wise" bearing the imprimatur of DFO, among others. It describes, and illustrates, a "no-go zone" within 100 m laterally and 400 m ahead of and behind a pod of travelling killer whales. These guidelines do not have the force of law, but were available to boaters.⁴¹

In reaching a finding that "disturbance" had occurred in the context of a recreational powerboat repeatedly approaching and following a pod of *Orcas* near Campbell River, British Columbia, the Court relied upon a scientific definition of the term disturbance provided by an internationally recognized *Cetacean* expert who gave evidence on behalf of the Crown which focused on interference with life processes of the animal:

"Disturbance" to me . . . implies more than simple behavioural response. It could include certainly behavioural response but more importantly the outcome of that behavioural response where it would affect – it would disturb life processes. This can be communication in the form of masking by boat noise when a boat is accelerating in close proximity to a group of whales, the sound can interrupt communication, for example, and this would be an interference with the life process potentially of co-ordination of feeding – co-operative feeding kinds of activities, for example. Food sharing, which takes place just under the surface. When animals catch a salmon, they break it apart and sometimes as many as five or six whales in the small kin group will share that prey. So that is very vulnerable to disturbance, that activity.

⁴⁰ *Ibid.*, at para. 17–18, per Dorgan J.

⁴¹ *R. v. Peterson* at para. 3 per Saunderson, J.

So it's not just simply that they—they're turning away, for example, and carrying on as normal. It would be disturbance of life processes.⁴²

This definition of "disturbance" which includes both observable behavioural responses and often non-observable disturbances to life processes was subsequently accepted by the British Columbia Provincial Court in its recent decision in *R. v. Smith*.⁴³ In that case the Court considered the issue of definition of the term "disturb" in the context of a commercial whale watching vessel that the court found repeatedly placed itself ahead of a travelling pod of killer whales so that it interrupted a resting state (known as a "resting line") of the pod. The Crown expert witness expanded upon the scientific definition of "disturbance" in the context of killer whales which he provided earlier in *Peterson*, once again emphasizing disruption or alteration to life processes of the whale:

...Disturbance to killer whales has been identified as one of four key factors that may be threatening this population and were instrumental in it being listed under the *Species at Risk Act* along with prey availability, oil spill risk, contaminants as well. So a disturbance as—as defined within this context disturbance involves disruption or alteration of life processes associated with this particular species. So those life processes including—include all typical activities and behaviour states that the animals require to survive and function in their environment and this includes foraging, socializing, resting, mating, all aspects of the animal's behaviour and—-and activities and so disturbance involves any—any factor that would cause a disruption to those processes.⁴⁴

As discussed above, Parliament has opted to establish a normative standard to protect marine mammals (including *Cetaceans*), with the standard being one of "disturbance". What appears open to debate is the question of whether the term "disturb" is the optimal or even a reasonably good choice for this normative standard. Expert scientific evidence given during recent *Cetacean* protection proceedings such as *Peterson* and *Smith* indicates that the scientific community may be significantly more comfortable providing expert scientific evidence with respect to a standard with a more direct nexus to science, such as "interference with a *Cetacean's* life processes", or to increase the moral culpability of the standard, perhaps "intentional or reckless interference with a *Cetacean's* normal life processes", either or which are preferable to the vague notion of "disturbance". The point is that in addition to being flexible in their application, normative regulatory standards must also be clearly aimed at the mischief that they are intended to address while being capable of consistent and predictable interpretation by the courts. The best way to achieve these objectives, while at the same time allowing normative standards to maintain their hallmark of legal flexibility, is to closely tie the terminology of the normative legal standard into the terminology understood and thus utilized in evidence by the

⁴² *R. v. Peterson Trial Transcript* Vol 2 pages 36-37, per Dr. John Ford.

⁴³ *R. v. Smith* (January 31, 2014), Campbell River Court File No. 35578 (B.C. Prov. Ct.).

⁴⁴ *R. v. Smith, Trial Transcript*, Vol 3, page 19, per Dr. John Ford.

scientific community, which evidence the courts will inevitably rely in making their decisions. Put another way, if the courts are going to rely upon scientific information in order to make a jurisprudential decision, the legal system must make reasonable efforts to describe legal standards in a manner which are clear and easily susceptible to the scientific evidence required to determine whether these standards have been met.⁴⁵ Thus, in attempting to resolve the larger jurisprudential issue of legally defining the term "disturb" and determining whether the actions of an accused fit within that definition, the legal system has failed to recognize that in many fact situations "disturbance" is not the real issue, despite the efforts of the Court in *Andrews*, which strained to provide a workable definition of the term that fit within the context of the Regulations. If the object of the regulatory scheme is to protect *Cetaceans* from the mischief of harm, and if the scientific community is being depended upon to advise the legal system if and in what situations that harm occurs — which the scientific evidence to date suggests is when the normal life processes of the *Cetacean* are interfered with — then the prohibition should be redefined as one of "interference with the normal life processes" of *Cetaceans* and not the rather vague and scientifically disconnected notion of "disturbance".

Revisiting the normative standard of "disturbance" and replacing it with terminology more closely connected with the mischief to which the standard is aimed, and which has direct ties with the scientific evidence upon which interpretation depends, would also significantly improve the value of this regulatory scheme for most, if not all, fact situations involving harm to *Cetaceans* (beyond those of *Cetacean* watching being considered here), including tanker oil spills, land-based releases of toxic industrial effluent, underwater seismic testing and commercial shipping traffic in water inhabited by *Cetaceans*. No longer will it be necessary for the courts to depend upon legal devices such as the "wide and deep" principle enunciated in *Canadian Pacific* or strain to apply a contextual definition to provide some useful meaning to the term as in *Andrews*.

(c) Actual vs. Theoretical Disturbance

The second part of the analysis when considering protections offered under s. 7 of the *Marine Mammal Regulations* is whether the activities of potential offenders fall within the definition of the term "disturb" as defined by the courts in each case. In the limited number of cases involving *Cetaceans* to date, this analysis has focused on whether the evidence must demonstrate "actual" disturbance of a *Cetacean* by an accused or whether it is sufficient for the Crown to establish on the evidence that the activities of an accused was of such nature that "in theory" there was a "high probability" that it would have disturbed a member of the species under consideration. The argument in favour of requiring

⁴⁵ For a detailed discussion of the relationship between legal standards and scientific evidence see L.A. Reynolds & S.E. Hrudey, "Managing Uncertainty in Environmental Decision-Making: The Risky Business of Establishing a Relationship Between Science and Law", Switzerland: *Int. J. Risk Assessment and Management*, Vol 6, Nos 1-3, 2006.

actual disturbance is that proof of a regulatory offence generally requires evidence of an actual event having taken place (in this case a "disturbance" of a *Cetacean*). However, environmental/natural resource protection cases such as those involving *Cetaceans* are somewhat unique, in that proof of actual disturbance will in most cases be scientifically impossible, and requiring "actual" proof which is impossible to obtain is not in the public interest — especially if proof of the "degree of probability" that the disturbance actually took place is obtainable.

This issue of "actual" versus "theoretical" disturbance has been considered by the courts in the context of legislation enacted for the purpose of protecting *Cetaceans*. In *R. v. Richards*, the Provincial Court of British Columbia considered what evidence would be required to establish that a vessel had "harassed" a killer whale, and concluded that the issue must be approached "... in a practical and common sense way":

So long as the activity in question is such that it tends to disturb, alarm or molest, it is in my view sufficient to offend the Regulations even if it is only a single act.

I have included actions which "tend to" disturb, alarm or molest as I do not believe that anyone can properly say that an action actually has caused alarm or disturbance to a whale. Surely it is possible to cause such an effect without observing any obvious evidence from the whales. To require evidence that whales were actually disturbed, alarmed or molested would place an unreasonable burden on those who must enforce these laws. I say that because there does not seem to be any firm opinion as to how a whale might demonstrate any such reaction. I expect that this is because no one is quite sure how a whale would indicate that it felt "harassed". We must therefore assess certain types of conduct in a practical and common sense way.⁴⁶

Some years later, this same approach was again adopted by the Provincial Court of British Columbia in *R. v. Fossum* where in considering whether an accused was guilty of "disturbing" a killer whale contrary to s. 7 of the *Marine Mammal Regulations*, the Court characterized the issue as follows:

[6] The next question is what type of evidence is required to constitute proof that a marine mammal was disturbed? Is it necessary for the Crown to show that a particular whale was in fact disturbed, or is it sufficient for the Crown to show that the type of interaction between human and whale alleged in this case will likely, over time, alter the behaviour of the whale in such a manner as to cause risk either to the particular whale, or the species as a whole? This is the first issue raised by defence counsel.⁴⁷

⁴⁶ *R. v. Richards* (August 23, 1991), Doc. Port Hardy 7290 (B.C. Prov. Ct.) at 9, per Bracken J.

⁴⁷ *R. v. Fossum* (2004), Duncan Registry No. 25236 at para. 6, per Higinbotham J.

The Court in *Fossun* adopted the view taken earlier in *Richards*, finding that scientific evidence that activities which form the basis of a regulatory charge (such as bringing a vessel into close proximity to whales) have been found by scientific study to create a high probability of causing a disturbance in a species of *Cetaceans* is sufficient proof of disturbance without the need to establish that the close proximity of an actual vessel actually resulted in observable reaction by the whale indicating actual disturbance:

[10] Some cases will be obvious, such as a case of a vessel running into a whale. These cases will likely result in proof of "disturbance" without additional evidence, based entirely upon a common sense interpretation of statutory intent. Other cases may not be as clear, such as this case, where no physical contact with the whales was made. For such cases, which are likely to be in the majority, it may be necessary for evidence to be presented showing the effect of the impugned action on some essential activity or habit of the killer whales. Such evidence was adduced in this case through experts, and the evidence was convincing. The close proximity of vessels to killer whales not only constitutes a real threat of physical injury, but also disrupts the normal behaviour patterns of the animals, both in the short term, and more importantly, the long term life processes of the whales. The weight of scientific opinion leads me to conclude that repetitive close contact of the type alleged here will likely affect the future viability of this already endangered species.⁴⁸

Most recently, this issue was considered in some detail in the British Columbia case of *R. v. Peterson*⁴⁹ where defense counsel argued on behalf of an accused that s. 7 of the *Marine Mammal Regulations* required the Crown to establish actual rather than theoretical disturbance. In response, the Crown's expert witness described to the court the scientific difficulties which *Cetacean* biologists encounter when attempting to establish actual disturbance:

...the scientific evidence upon which disturbance effects are demonstrated are a range of responses that can be quite subtle and...are difficult to quantify because often when a boat approaches whales on water that's moving, et cetera, being able to measure a response is very difficult for a researcher on a boat, for example. So this is why the studies have been done from shore with precise instruments to measure what responses have actually—and shown significantly that responses have taken place, even if the boat operator is not aware of them.⁵⁰

Recognizing that the real world context of *Cetacean* protection and enforcement does not allow for scientific instruments to be set up in a marine environment in advance of illegal activity to record the actual responses of *Cetaceans* to that activity, in *R. v. Peterson* expert evidence introduced by the

⁴⁸ *Ibid.*, at para. 10, per Higinbotham J.

⁴⁹ *R. v. Peterson* (August 7, 2012), Campbell River Registry File No. 35577 (B.C. Prov. Ct.).

⁵⁰ *R. v. Peterson*, Trial Transcript, Vol 2, page 48.

Crown expressed a high degree of confidence in the results of years of scientific study involving scientific experiments conducted in controlled conditions where the response of *Cetaceans* to human activity (such as approaching power vessels, certain types of water pollution, seismic activity, etc.) have been carefully monitored to determine whether such activities generate responses which indicate interference with a *Cetaceans* life processes. Under cross-examination the Crown's expert witness reiterated that based on established scientific studies it is possible to predict with a high degree of probability whether the activities of the accused vessel operator caused actual disturbance to the killer whales in question irrespective of whether there was identifiable evidence from the whales themselves:

Q And given that there's no evidence from the whales themselves in terms of their behaviour as to whether they were disturbed or harassed, the best that you can say is that they could have been but it's not necessarily true?

A No, that's not quite correct. I think that it's highly probable based on the fact that disturbance responses that have been demonstrated through experimental studies are not, in all cases, particularly obvious. And certainly wouldn't be, to me, from Photographs of the animals.⁵¹

The science based conclusion reached by the Crown's expert witness in *R. v. Peterson* that disturbance of the whales was "highly probable" based upon the current state of scientific knowledge was ultimately accepted by the Court as sufficient to meet the burden of proof to the requisite standard of proof:

... defence counsel argued that the crown must prove beyond a reasonable doubt that the defendant disturbed the whales. ... In *R. v. Andrews* [2000] BCSC 1246 at para. 22 it was held that the purpose of s. 7 of the *Marine Mammal Regulations* "is to regulate the conduct of persons who may pose a threat to the regular behavior of marine mammals". Proof of an actual disturbance is not required. Here, the Crown has proved more than the law requires. It has shown that there was a "very high probability" that the whales were disturbed.⁵²

(d) Concluding Observations

While not specifically designed to protect *Cetaceans*, the *Marine Mammal Regulations* pursuant to the *Fisheries Act* does provide some degree of protection for *Cetaceans* in Canadian waters. The obvious strength of this regulatory scheme is its application to all members of the Order *Cetacea*, irrespective of location or species.

⁵¹ *R. v. Peterson*, Trial Transcript, Vol 2, page 52.

⁵² *R. v. Peterson*, at para. 8, per Saunderson J. This approach was also most recently accepted by His Honour Judge Sutton of the British Columbia Provincial Court in *R. v. Smith*.

The second strength of this legislative scheme is its reliance upon normative standards, a legal tool which offers a significant degree of flexibility when protecting *Cetaceans* through enforcement of the Regulations. By: 1) offering protections to *Cetaceans* in terms of prohibiting undesirable outcomes rather than via prohibiting activities which may or may not prevent these outcomes; and 2) by facilitating flexibility in sentencing, with important implications for both specific and general deterrence, enforcement personnel and the courts are able to address the unique factual nuances of each case. Where those facts include *Cetaceans* coming into close proximity with a flotilla of commercial whale watching vessels and pleasure craft, water borne pollution from a variety of sources, seismic testing and commercial shipping — all in the context of waves, wind, current, irregular rocky shorelines, tidal patterns and the natural human desire to see whales as close as possible, it is likely that unanticipated factual nuances will abound.

Unfortunately, the regulatory scheme provided by the *Marine Mammal Regulations* is far from an ideal vehicle by which to ensure the future of *Cetaceans* in Canada. Three significant problems stand out.

First, the inherent strength which the regulatory scheme derives from its reliance upon a normative rather than quantitative standards is significantly weakened by the apparent disconnect which exists between the current standard of “disturbance” upon which the regulatory scheme is founded and the scientific standard of “interference with normal life processes of *Cetaceans*” which the scientific community has indicated that it understands and relies upon. As a result, the normative regulatory protections currently embodied within s. 7 of the *Marine Mammal Regulations* suffer from a lack of consistency and predictability. Put another way, in attempting to resolve the larger jurisprudential issue of legally defining the term “disturb” and determining whether the actions of an accused offender fit within that definition, the legal system has failed to recognize that in many fact situations “disturbance” is not the real issue. If the object of the regulatory scheme is to protect *Cetaceans* from harm, and if the scientific community is being depended upon to advise the legal system if, and in what situations, that harm occurs — when the normal life processes of the Cetacean are harmfully interfered with — then the prohibition must be redefined as one of “interference with the normal life processes” of *Cetaceans* and not the rather vague notion of “disturbance”.

Second, the relative effectiveness of the protections provided to *Cetaceans* under the *Marine Mammal Regulations* have been significantly reduced as a result of being under-resourced in recent years. Lack of enforcement activity is evidenced by the very low number of cases which have received consideration by the courts in the past 23 years which the Regulations have been in existence. Some try to shift the blame for lack of enforcement from lack of resources to suggestions that the Regulations are difficult to enforce.⁵³ That conclusion is

open to challenge. It might be more accurate to state that the *Marine Mammal Regulations* are difficult to enforce if they are significantly under-resourced. Modern investigation techniques — from observations of motorized vessel/whale interactions using video and still cameras with modern long-range telephoto lenses, accurate distance measuring tools such as laser range finders and undercover “sting” operations — to aerial monitoring of hydrocarbon spills and hydrocarbon “fingerprinting” to identify release sources in locations where whales are observed — to recording of seismic testing levels in the vicinity of *Cetaceans* — combined with the availability and expertise of scientific experts, make it very possible for enforcement personnel to gather the evidence required to bring a matter to trial. However, it must also be recognized that effective protection of *Cetaceans* does have an economic cost. There have been a number of federal government initiatives in the past decade to amend the *Marine Mammal Regulations*, some of which have focused on providing enforcement on a less costly basis.⁵⁴ This “one size fits some” or “bargain basement” approach to regulatory enforcement may not be such a bargain after all. As a society we must determine whether we place enough value on our *Cetacean* resource to pay the economic cost required to ensure that the resource is properly protected.

Finally, and perhaps most concerning, the regulatory scheme found within the current *Marine Mammal Regulations* fails to provide any form of true ecosystem-based management for *Cetaceans*. As set out in the introduction to this paper, *Cetaceans* face a variety of challenges — all of which are associated with the fact that they share the planet with humans — marine pollution, marine resource exploration seismic activity, commercial shipping traffic, commercial whaling activities, and (the focus of this paper) *eco*-tourism and private pleasure vessel *Cetacean* watching. It is unlikely that these challenges are going to disappear any time soon. As human populations grow and expand, the pressures which they place upon *Cetaceans* will also increase. While the limited regulatory protections currently offered to *Cetaceans* under the *Marine Mammal Regulations* are helpful to a limited extent, they generally only offer a temporary fix that attempts to address some unfortunate event or another.

⁵³ See for example a report by R. Keates & C. Sandborn “Recommendations to Reform the Laws Protecting Orca from Boat Traffic”, (Vancouver: Liferorce Foundation, 2011) which concludes *inter alia* (pages 9-10), that Prosecution has been expensive and difficult. It cites another source as stating “. . . there have been cases he believed warranted prosecution, but because of the complexities in proving ‘disturbance’ DFO did not proceed”

⁵⁴ For example, an initiative to revise the *Species at Risk Act* to make it more economical to operate was proposed in September, 2012 by then federal Environment Minister Peter Kent who is reported to have stated that the federal government intended to overhaul the Act to make it more “efficient”. This drew sharp criticism from many science policy pundits and the environmental community. See for example, H Scofield, “Environment Minister Eyes Overhaul of Law Protecting At-Risk Wildlife” *The Globe and Mail*, September 15, 2012. Editorial, “Do We Want a More ‘Efficient’ Species at Risk Act?” *thestar.com*, October 8, 2012.