

## **ECHO Program Summary**

### **Marine Mammals in British Columbia**

British Columbia has a dynamic and growing international trade gateway. It also has a productive coastal ecosystem that sustains populations of whales, porpoises and dolphins (cetaceans). Fisheries and Oceans Canada has published Species at Risk Act Recovery Strategies and Action Plans for a number of at-risk whale species in the region designating critical habitat. Some of the key threats to whales in this region include: acoustic disturbance (underwater noise), physical disturbance (ship collisions), environmental contaminants, and the availability of prey.

Much of the commercial vessel activity in the southern coast of British Columbia transits designated critical habitat of endangered southern resident killer whale as well as areas known to be of importance to other at-risk whales. With commercial vessel activity predicted to grow, Port of Vancouver is committed to conducting operations in a responsible and sustainable manner that safeguards and promotes continual protection of the environment. For these reasons, the ECHO Program has been developed.

### **ECHO (Enhancing Cetacean Habitat and Observation) Program Overview**

The Enhancing Cetacean Habitat and Observation (ECHO) Program is a Vancouver Fraser Port Authority-led initiative aimed at better understanding and managing the impact of shipping activities on at-risk whales throughout the southern coast of British Columbia. The long term goal of the ECHO Program is to develop mitigation measures that will lead to a quantifiable reduction in potential threats to whales as a result of shipping activities. The ECHO Program is one of the port authority's environmental programs which works to protect and minimize impacts to the environment.

### **Partners**

The ECHO Program has benefited from early input and advice from scientists, shipping industries, conservation and environmental groups, First Nations individuals and government agencies to help the program focus efforts and set goals and objectives.

### **Projects**

The ECHO Program supports a series of individual short-term projects, scientific studies and education initiatives. These projects will provide a better understanding of vessel-related cumulative regional threats, informing the development of mitigation solutions. Projects focus on three threat categories: acoustic disturbance (underwater noise), physical disturbance (vessel collision) and environmental contaminants. Working collaboratively with several partners, the ECHO Program has installed an underwater listening station in the Strait of Georgia, is working to monitor regional ambient underwater noise, has supported a large whale vessel strike-risk assessment and has developed a Mariner's Guide to Whales for the North West Pacific.

### **For Further Information**

For further information about the ECHO Program, please visit [portvancouver.com/echo](http://portvancouver.com/echo) or if you have specific questions, please email Environmental Programs at [ECHO@portvancouver.com](mailto:ECHO@portvancouver.com).

## **ECHO Program Collaborators**

### **Advisory Working Group**

BC Coast Pilots  
BC Ferries  
Chamber of Shipping of BC  
Cruise Lines International Association  
(North West & Canada)  
Fisheries and Oceans Canada  
First Nations individuals  
Hemmera Envirochem Inc.  
National Oceanic and Atmospheric  
Administration (NOAA)  
Pacific Pilotage Authority  
Shipping Federation of Canada  
Transport Canada  
Vancouver Aquarium  
Vancouver Fraser Port Authority  
Washington State Ferries  
WWF-Canada

### **Federal Government Advisory Committee**

Environment Canada  
Fisheries and Oceans Canada  
Transport Canada  
Vancouver Fraser Port Authority

### **Project Collaborators**

All-Sea Enterprises  
BC Coast Pilots  
BC Ferries  
Chamber of Shipping of BC  
NOAA  
Prince Rupert Port Authority  
Seaspan  
Vancouver Aquarium

### **Funding Contributors**

Fraser River Pile and Dredge  
Trans Mountain  
Transport Canada  
Vancouver Fraser Port Authority

### **Independent facilitation**

Fraser Basin Council

### **Acoustic Technical Committee**

Fisheries and Oceans Canada  
JASCO Applied Sciences  
NOAA  
Oceans Networks Canada  
Robert Allan Naval Architects  
SMRU Consulting  
Transport Canada  
University of British Columbia  
University of St. Andrews  
Vancouver Aquarium  
Washington State Ferries

### **Vessel Operators Committee**

BC Coast Pilots  
BC Ferries  
Chamber of Shipping of BC  
Cruise Lines International Association (North  
West & Canada)  
Hapag-Lloyd (Canada) Inc.  
Holland America Group  
Pacific Pilotage Authority  
Shipping Federation of Canada  
Transport Canada  
Vancouver Fraser Port Authority  
Washington State Ferries

### **Other Engagement**

Achieve Quieter Oceans (AQUO)  
Green Marine  
Marine Environmental Observation Prediction  
and Response Network (MEOPAR)  
Nanaimo Port Authority  
Ports of Seattle and Tacoma  
Scripps Institution of Oceanography

### **Significant In-kind Contributors**

Fisheries and Oceans Canada  
JASCO Applied Sciences  
Oceans Networks Canada  
Vancouver Aquarium