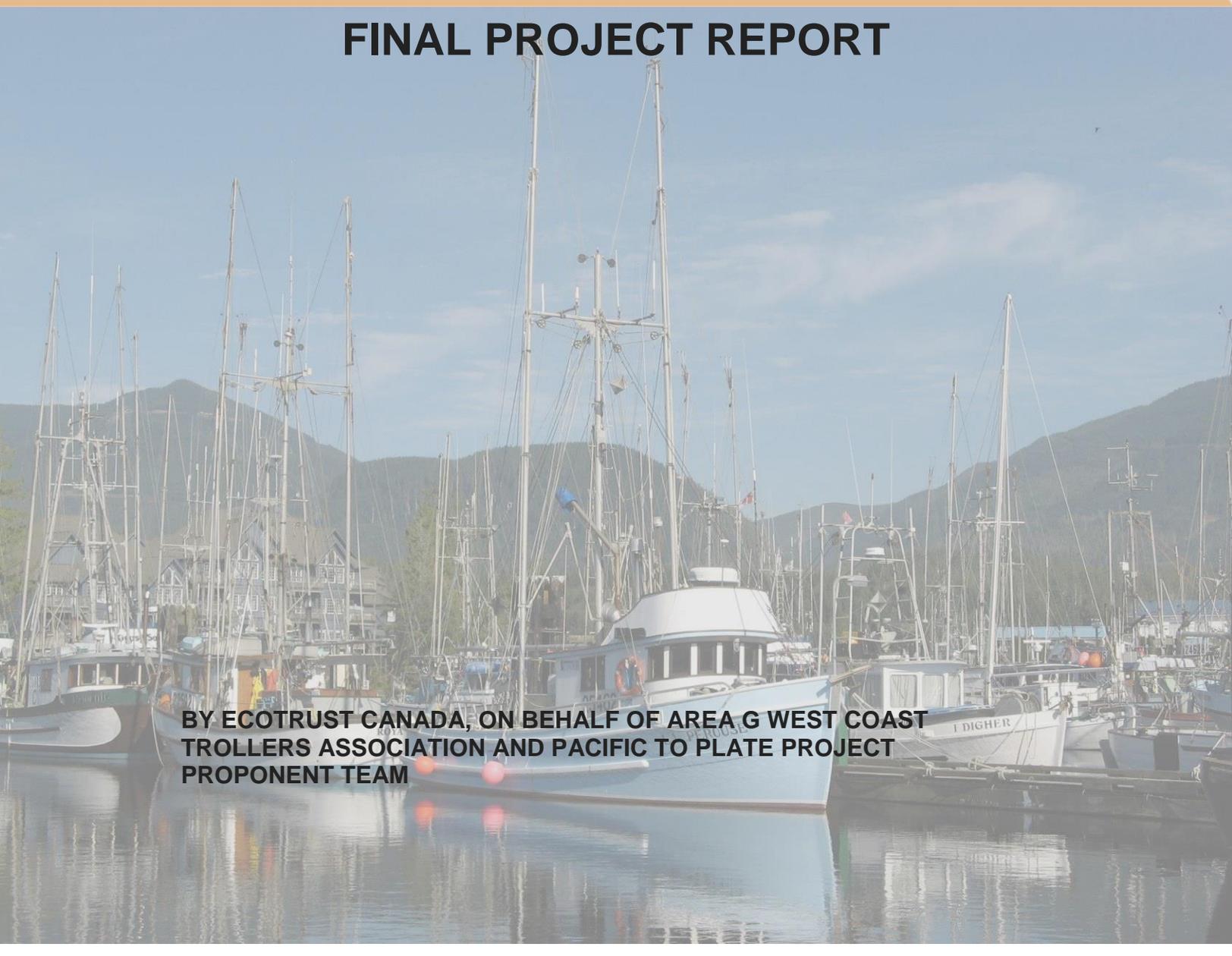


# THIS FISH

## **Pacific to Plate: Marketing Sustainable Seafood from West Coast Vancouver Island Fisheries**

### **FINAL PROJECT REPORT**



**BY ECOTRUST CANADA, ON BEHALF OF AREA G WEST COAST  
TROLLERS ASSOCIATION AND PACIFIC TO PLATE PROJECT  
PROPONENT TEAM**

## **INTRODUCTION**

The Pacific to Plate project proponent team Area G Troll Association, BC Dogfish Hook and Line Industry Association, and the Vancouver Island Seafood buyers Association and Ecotrust Canada collaborated to develop a “Pacific to plate” seafood traceability and marketing initiative in concert with Ecotrust Canada’s seafood traceability program now branded Thisfish. The initiative involved building a mechanism for targeted fisheries in the West Coast of Vancouver Island fishing region (WCVI) that allows the accurate tracing of seafood products from harvest to consumer. The traceability system includes communications materials that tell consumers how, where, when, and by whom their fish was harvested, processed, handled and distributed.

Ecotrust Canada worked with fishermen, processors, and retailers to create a system that works for salmon, groundfish and shellfish – all fisheries that are important to the economy of the WCVI region. The partnership began with West Coast Vancouver Island salmon trollers, local lingcod fishermen, and respective fish processors. This partnership has since expanded to include distributors and regional and national retailers.

## **PROJECT OBJECTIVES**

The specific objectives of the project are to:

- Implement a traceability system for WCVI region seafood;
- Build economic viability of WCVI seafood businesses and fishermen by increasing the efficiency of the value chain and by increasing market size and the retail value of locally caught products.
- Create an incentive for improved fishing practices by linking the traceability program to value-added market opportunities;
- Educate consumers through innovative marketing that uses the results of the traceability program with the development of a WCVI-caught information and marketing strategy.

## **PART I: SUMMARY OF WORK & METHODOLOGY**

### **STEP 1. PLANNING & DESIGN PRINCIPLES**

From the very beginning, Ecotrust Canada established a participatory design process whereby the users of the seafood traceability system would also be involved in the design. Several meetings were held with ICE-T project proponents to layout the core principles behind the design of the system. The meetings were held at Hub City Seafoods in the spring and summer of 2009.

In designing the traceability system, the project proponent group committed to ensure the following:

- Be a voluntary system that seeks the participation of like-minded fishermen and businesses wanting to provide the best quality products to consumers
- Ensure products are traceable back to the fish harvesters
- Be cost effective and financially self-sustaining

- Provide tangible benefits to independent, small-scale producers, both fishermen and processors/distributors
- Meet minimum regulatory requirements for seafood traceability
- Share both the costs and benefits of seafood traceability fairly throughout the supply chain, avoiding the downloading of costs strictly onto fish harvesters
- Promote collaboration and transparency through partnerships and the use of open-source software
- Satisfy consumer demand and curiosity for knowledge about the provenance of their food
- Promote sustainable seafood by publishing information about how seafood is caught and its various eco-ratings.

## **STEP 2. DATABASE DESIGN**

As a result of work being done in the broader traceability program of Ecotrust Canada with participating industry groups, it became clear that it was necessary to build a very comprehensive, flexible, and functional database system to enable the level of consumer facing traceability we had envisioned. The first step in designing the database to support the traceability objectives was to assess the technological platforms that would host and power the database. Ecotrust Canada's software engineers researched various options and put together a recommendation. To be prudent, Ecotrust Canada also hired a third-party consultancy, Toronto-based Tiny Planet, which had built a traceability system to provide independent advice.

Based on the independent advice and our in-house assessment, Ecotrust Canada built the Thisfish traceability platform using an open source technology stack including Linux, Apache web server, Django and PostgreSQL.

Once the technology platform was established, Ecotrust Canada worked with partners to establish what data would be collected at what points in the supply chain. This information formed the basis for the structure and content of the seafood traceability database. The first data was uploaded to the database in October 2010.

## **STEP 3. TAGGING METHODOLOGY**

In order for seafood to be traced, a fish needs to be identified with a unique traceability code. Attaching codes to fresh fish is problematic, since they are in wet and cold environments and are often moved from vessel, to totes to wholesale cases in the supply chain. In order to solve this challenge, Ecotrust Canada worked closely with fishermen and processors to design a tagging system for fresh fish. The system involved consecutively and uniquely coded tags that are applied to either the tail or head of fresh salmon, halibut and other groundfish.

Below is an image of the first tag designed used by Ecotrust Canada to test its traceability system and photos of a WCVI fish harvester applying it.

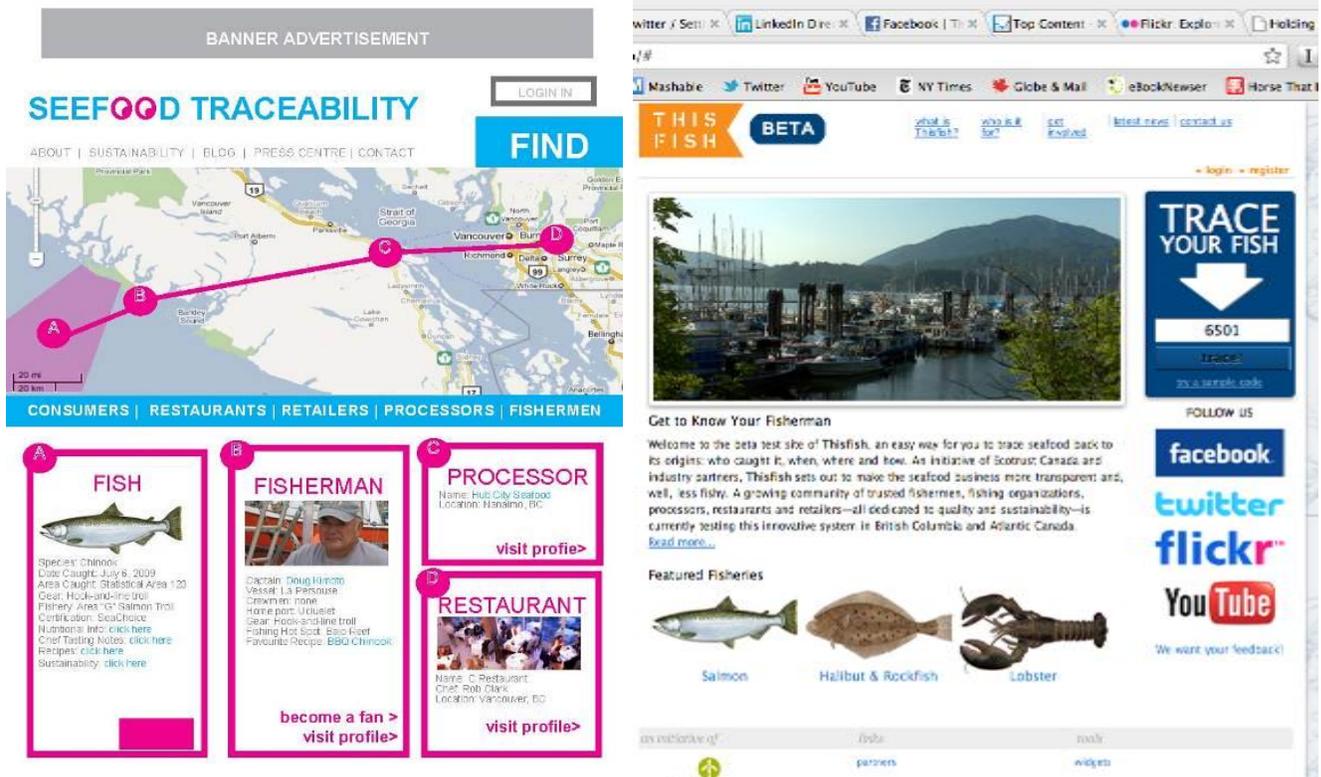


## STEP 4. WEBSITE DESIGN & TESTING

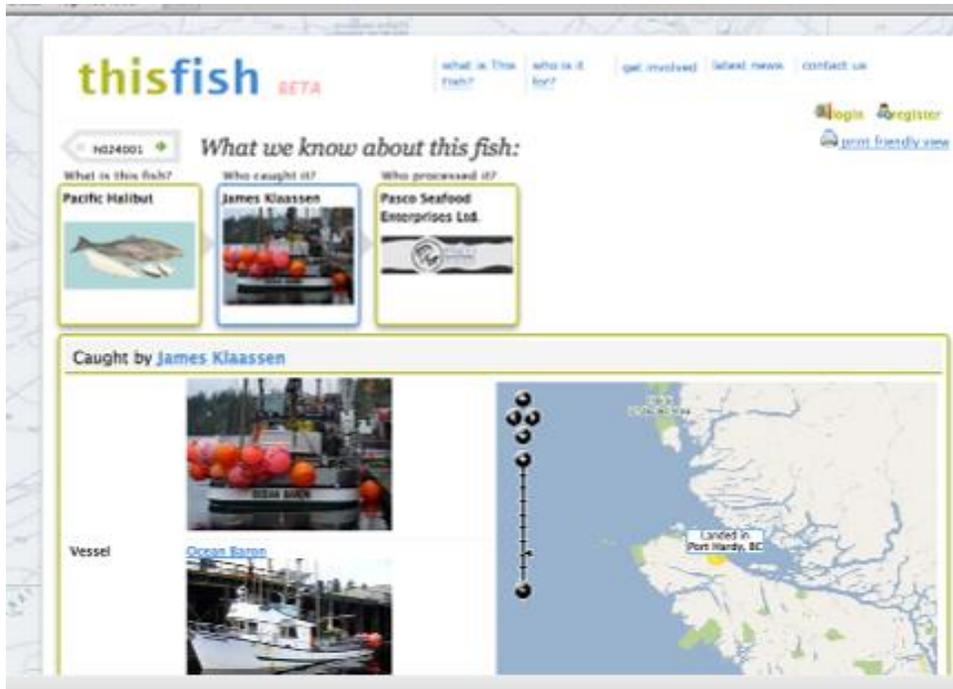
Once the traceability tags and database were designed and tested, Ecotrust Canada built a public-facing website at Thisfish.info that would allow consumers to trace their fish and retrieve information, maps and photos about the harvesting and processing of their seafood.

The beta website was set up and tested for several months before it went live to the public on May 1, 2010. The initial design proved very successful at communicating the origins and other details about seafood products. Fishermen and fish processors become more actively involved in tagging fish with traceability codes and using the system to market their catch to distributors, retailers and consumers.

Below is an initial conceptual mock-up of the website (left) and a beta version of the website that was live (right)



Below is a screen shot of the results of tracing a halibut on the beta version of Thisfish.info.



## STEP 5. MARKETING & COMMUNICATIONS

The competitive advantage of Thisfish is that it marries seafood traceability with social marketing. It meets both government requirements for food traceability while providing consumers with compelling information about their food. In order to provide that compelling information, Ecotrust Canada produced both printed and digital communications materials to provide consumers with a rich user experience online.



Communications materials produced included:

**SPECIES & FISHERY PROFILES:** Profiles including species descriptions, life histories, images and maps were created to describe the species and fisheries online including lingcod, halibut, Chinook salmon, coho salmon, pink salmon, chum salmon, sablefish. Fisheries profiles included the longline groundfish fishery and salmon troll fishery.

**TRACEABILITY POSTER:** A poster was created for retail stores and restaurants that describes the supply chain of seafood and how seafood traceability works. An image of the poster is provided below.

# from the Pacific to your Plate

**60 Kilometres Fishing grounds to Tofino**

- ◀ Doug Kinross, of Ucluelet, fishes for salmon from his mother's La Pêche. Trollers are among the smallest commercial fish boats, and use a series of hooks and lines to target a specific fish, such as Chinook salmon. Fish are brought on board by hand, one at a time. This allows for live capture and release of any incidental catch.
- ▶ Salmon are iced on sea and off-loaded at a fish camp in Ucluelet, BC.
- ▶ The fish are individually sorted by size, quality and colour, weighed and iced in preparation for shipping.
- ▶ At the local buying station, "King" Fish in Tofino, the fish is prepared for sale.

**250 Kilometres Fishing grounds to Vancouver**

- ▶ The Halibut is longer out of Ucluelet, captured by Ryan Edwards. Ryan holds licenses and quotas that allow him to fish for a variety of species, including halibut, lingcod, sablefish, and dogfish.
- ▶ Halibut are stored separately onboard and are off-loaded in boxes.
- ▶ As a fish pilot in Ucluelet, the "Miss Finn" catch is sorted by species, size and quality prior to being iced and shipped.
- ▶ Many Pacific Halibut are shipped to Vancouver where they are sold to restaurants and individuals.
- ▶ The halibut are tagged to identify them as caught by a commercially licensed vessel.
- ▶ Miss Finn's catch is off-loaded in Ucluelet and sorted by species, size and quality.
- ▶ Dogfish are processed in Vancouver where they are cut and distributed to a variety of markets.
- ▶ Before fish are brought aboard they are measured to confirm that they are of legal size. The coloured bars on the side of the vessel help determine approximate length.

**7500 Kilometres Fishing grounds to Europe and Japan**

- ▶ Bruce Shaw fishes from his boat, Miss Finn. He uses longlines—a series of baited hooks that lie on the ocean bottom—to catch dogfish. By altering the size of hook, the type of bait, and the area in which they fish, longliners can target the size and species of fish they catch.
- ▶ Dogfish are processed in Japan where they are used in traditional Asian medicines and health products. The dorsal (back) fin is used in shark-fin soup.
- ▶ The waste from dogfish processing is used to produce organic fertilizers.

**Examples:**

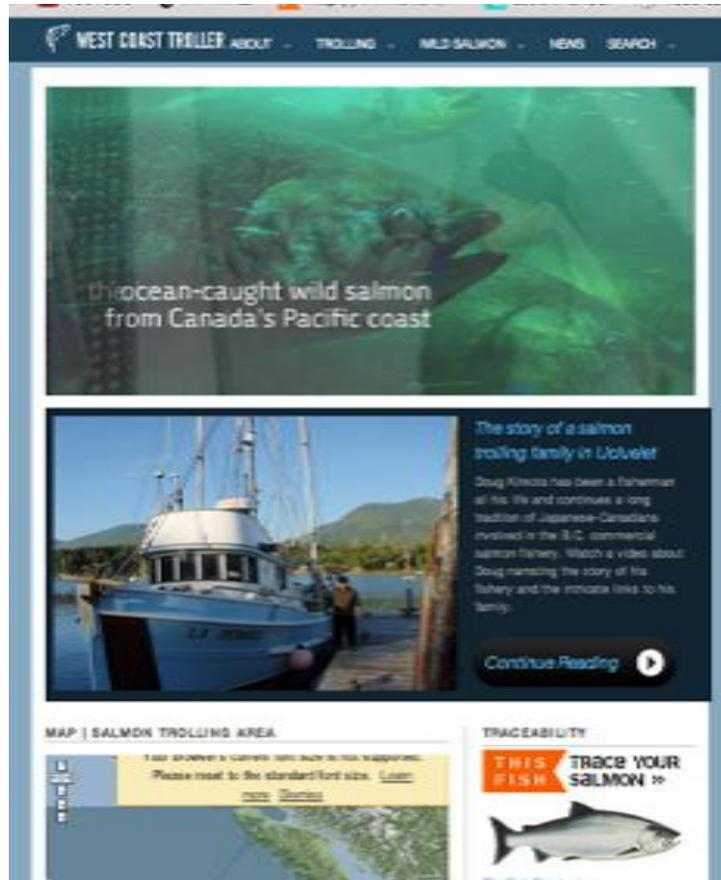
- ▶ Dogfish meat is a popular choice for fish and chips in Europe.
- ▶ Dogfish cartilage is used in traditional Asian medicines and health products. The dorsal (back) fin is used in shark-fin soup.

**South America:**

- ▶ The waste from dogfish processing is used to produce organic fertilizers.

**Final Text:** Fish & Chips image to come

**TROLLERS WEBSITE:** While a lot of information about fisheries and fishermen can be hosted on Thisfish.info, it is also important that fishing organizations have their own websites which can be customized and include rich information. These websites can then be linked to Thisfish.info and the traceability initiative. Ecotrust Canada worked with the West Coast Trollers Association to create a fully branded website for their fishermen with rich visual information. See: [www.westcoasttrollers.com](http://www.westcoasttrollers.com)



ONLINE VIDEO: The power of online communication is the ability to provide viewers with multimedia. To enrich the traceability website and provide a compelling story about commercial salmon fishing, Ecotrust Canada created a 4 minute 30 second online video about one of the oldest fishing families in Ucluelet, the story of Doug Kimoto and his Japanese-Canadian fishing family.



## PART II: PROJECT RESULTS & IMPACT

The project has been successful at meeting its objectives and Thisfish has taken off in British Columbia and specifically on Vancouver Island. Almost five million pounds of seafood from Pacific and Atlantic fisheries were traceable through Thisfish in 2011. One third of the total, or 1.6 million pounds, was landed in Vancouver Island communities. Fisheries with the highest levels of traceability took place on the Island. About 18 percent of all troll-caught Chinook salmon on the West Coast of Vancouver Island was traceable through Thisfish, along with 17 percent of halibut, 10 percent of Barkley Sound Sockeye and nine percent of sablefish. In 2011, 262 fishing vessels landed catch traceable through Thisfish, including 120 vessels in British Columbia. Eleven different Pacific species of fish were traceable through Thisfish.

TABLE 1 | Rank of Vancouver Island ports by volume of catch traceable through Thisfish in 2011

1. Ucluelet 728,000 lbs.
2. Port Hardy 449,000 lbs.
3. Zeballos 173,000 lbs.
4. Coal Harbour 164,000 lbs.
5. Bamfield 73,000 lbs.
6. Port Renfrew 30,000 lbs.
7. Kelsey Bay 13,000 lbs.

Here are some specific marketing impacts:

- 1. Creating New Markets.** When Ecotrust Canada began its traceability program, hook-and-line lingcod was not served in restaurants that are part of the Vancouver Aquariums Ocean Wise program. Lingcod caught in bottom trawls is considered unsustainable by Ocean Wise, and since there was no way to credibly determine if a lingcod was caught in a trawl or on a hook, Ocean Wise did not recommend lingcod to be served. However, once lingcod began to be traced through Thisfish, Ocean Wise lifted its ban and lingcod soon began showing up in Ocean Wise restaurants. The immediate impact was to raise the value of lingcod by one dollar per pound for fish harvesters.
- 2. Diversification.** Sablefish has one of the highest oil contents of Pacific species, which is why it is called “butterfish” and is typically frozen-at-sea because it spoils quickly. Retailers and distributors typically don’t buy fresh sablefish because they are worried about shelf life and when the fish is caught and landed. However, with seafood traceability, confidence increased and Pasco Seafoods was able to begin selling fresh, traceable sablefish in the market. This allowed some fishermen, who don’t have freezers aboard their vessels, to diversify into this fishery.
- 3. Market stabilization.** The launch of traceable halibut in Sobeys stores across Canada allowed fish processors to establish long-term contracts for the retailer which stabilized their market. Since Sobeys was selling only traceable halibut, Sobeys distributors had to source their halibut from B.C. fishermen registered with Thisfish. This allowed fresh B.C. halibut to be sold in Sobeys to the exclusion of

non-traceable Alaskan halibut.

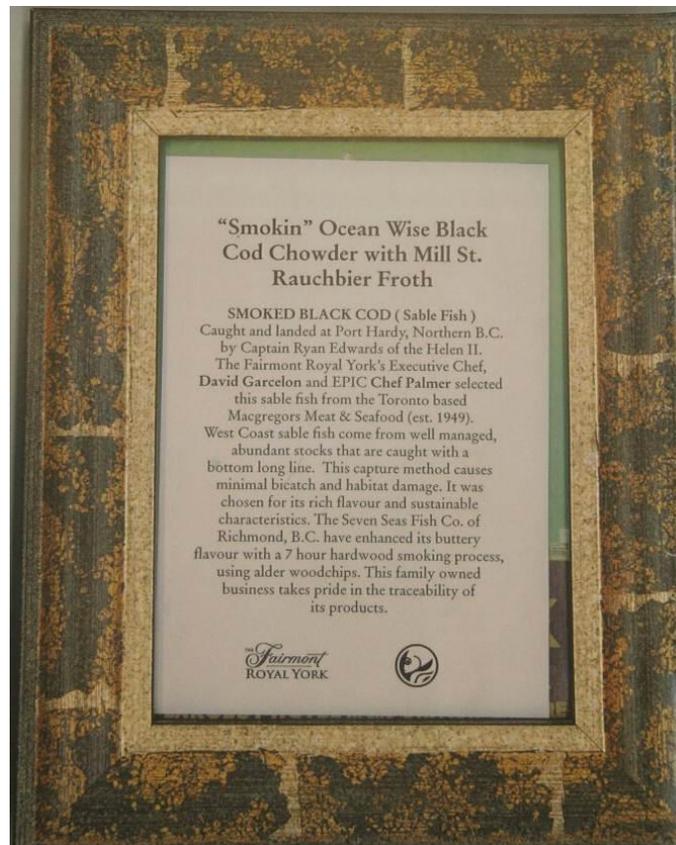
- 4. Building brand.** Every day, more than 2,500 consumers trace their seafood on Thisfish.info and learn about the B.C. fishermen who caught their fish. The system is building a B.C. fishermen brand for seafood and in March 2012 Thrifty Foods launched a first-of-the-season halibut campaign featuring traceable, BC halibut. Thrifty also produced a video featuring B.C. halibut fishermen and the seafood traceability system.



Line up at Thrifty's for Traceable Halibut



Below is a photo of a display in the Royal York Hotel Restaurant in Toronto, communicating the information about the fish used gathered through this traceability system.



In Conclusion, consumers are becoming increasingly in their food purchase decisions. There is a heightened demand for authenticity and transparency in world food systems to address issues such as sustainability, health, and safety, local sourcing, and quality. In response, Ecotrust Canada and industry partners have developed the traceability system, Thisfish that tracks seafood products from ocean to plate, supports resource use accountability, and has the ability to reward seafood products that meet consumer values.

Thisfish is a disruptive technology which not only facilitates accurate tracking of commercial seafood products from the harvest to consumer, but supports the possibility for dramatic change through consumer facing technology, peer to peer collaboration, positive reinforcement for fishermen and market incentives while attracting consumers interested in supporting better seafood choices with their dollars.

PROJECT FINANCIAL STATEMENT

Pacific to Plate: Marketing Sustainable Seafood

Period: February 18, 2010 to February 17, 2011

**Project Expenditures**

Contract expertise	\$ 90,196
Marketing and publication	\$ 48,433
Supplies and software development	\$ 57,308
Project Management	\$ 2,365
<b>Total Expenditures</b>	<b>\$198,302</b>

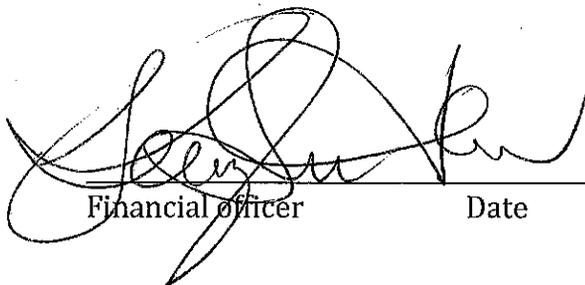
**Project Income (Sources of Funding)**

Area G Troll Association	\$ 148,634
ICET	\$ 49,668
<b>Total Income (Sources of Funding)</b>	<b>\$198,302</b>

Balance \$0\*

*\*If balance is positive ICET contribution may be reduced proportionately*

I hereby certify that this statement accurately represents all project expenditures and all sources of project funding

 30.7.12  
Financial officer Date