NORTH PACIFIC MARINE SCIENCE ORGANIZATION (PICES) PROJECT ON "EFFECTS OF MARINE DEBRIS CAUSED BY THE GREAT TSUNAMI OF 2011"

FINANCIAL REPORT FOR YEAR 3 (APRIL 1, 2016 – MARCH 31, 2017)

1. Background

The overall goal of the PICES ADRIFT (<u>Assessing the Debris-Related Impact From Tsunami</u>) project, funded by the Ministry of the Environment of Japan (MoE), was to assess and forecast the effects of debris generated by the tsunami that followed the 2011 Great East Japan Earthquake, especially those related to non-indigenous species (NIS), on ecosystem structure and function, the coastlines and communities of the Pacific coast of North America and in Hawaii, and to suggest research and management actions to mitigate any impacts. This 3-year project began in April 2014, with the ending date set as March 31, 2017.

In accordance with the organizational principles agreed to by MoE and PICES, the project was directed by a Project Science Team (PST), co-chaired by three PICES members, one each from Canada (Dr. Thomas Therriault, Department of Fisheries and Oceans; Thomas.Therriault@dfo-mpo.gc.ca), Japan (Dr. Hideaki Maki, National Institute for Environmental Studies; hidemaki@nies.go.jp) and the USA (Ms. Nancy Wallace, NOAA Office of Response and Restoration; nancy.wallace@noaa.gov). The PST Co-Chairmen are responsible for the scientific implementation of the project and annual reporting to MoE and PICES Science Board. The final report should be submitted to MoE within 90 days after the project completion on March 31, 2017.

2. Financial principles and budget categories

The following financial principles, agreed to by MoE and PICES, apply to the project:

- A separate bank account shall be established to deposit the remitted funds.
- The Project Coordinator (PICES Executive Secretary or a person designated by the Executive Secretary) is
 responsible for the management of the fund and for reporting annually on its disposition to MoE and PICES
 Governing Council, within 90 days after the close of each project year ending March 31. Dr. Alexander
 Bychkov (bychkov@pices.int) was appointed as the Project Coordinator.
- The Project Coordinator may enter into a contract with a responsible organization based on the advice of the PST to implement the project smoothly and effectively. The details of this contract shall be decided by agreement between the Project Coordinator and the responsible organization. In case of transferring part of funds to others, the responsible organization shall establish a separate account to deposit the remitted funds for the execution of the contract. This separate account shall be managed strictly by the responsible organization, and the transaction details shall be periodically reported to the Project Coordinator.
- Transfers of up to 10% of allocations between the budget categories are allowed based solely on the decision by the Project Coordinator. In special cases, transfers up to 20% between the budget categories can be authorized by MoE. All transfers shall be reported at the end of the fiscal year.
- A 13% overhead on the annual budget shall be retained by PICES to offset expenses related to the Secretariat's involvement in the project.
- The interest earned by the fund shall be credited to the project and used in consultation with MoE.
- Any funds remaining after the completion of every fiscal year of the project shall be reported and disposed of in consultation with MoE.

The main elements of the budget are organized into the following categories:

• <u>Travel and meetings</u>

This category covers travel costs associated with project activities such as field studies, organizational trips, project meetings, workshops, scientific sessions and public events.

• Contracts and grants

This category covers grants/fees to be paid to consultants and experts employed to implement the project. Tasks and deliverables for researchers/contractors are to be determined by the PST Co-Chairmen. To support the objectives of the project and to ensure that its activities have minimal impact on the workload of the existing staff of the PICES Secretariat, the Project Coordinator can employ additional staff as required.

Equipment

This category covers purchases and shipment of equipment and supplies for laboratory work, field sampling, data processing and analysis, and computer hardware/software for the development of database(s) and the project website.

<u>Miscellaneous</u>

This category covers minor expenses associated with the project (mail and phone charges, bank charges, *etc.*) and includes contingencies such as fluctuations in currency exchange rates.

3. Project bank account and payment history

The special account for the project was established at the bank used by PICES:

Bank name:	TD Canada Trust
Bank number:	004
Branch number:	00721
Branch address:	2406 Beacon Avenue, Sidney, B.C., Canada V8L 1X4
SWIFT code:	TDOMCATTTOR
Account number:	721 5220355
Account holder:	North Pacific Marine Science Organization (PICES)
Account holder address:	9860 West Saanich Road, Sidney, B.C., Canada V8L 4B2

- The set of documents requesting funding for Year 1 (FY 2014: April 1, 2014 March 31, 2015) was sent to the Consulate General of Japan in Vancouver (Canada) on June 3, 2014, and funds in the amount of \$1,099,691 were transferred to the PICES/MoE bank account on July 14, 2014 (all numbers in the report are in Canadian dollars).
- The set of documents requesting funding for Year 2 (FY 2015: April 1, 2015 March 31, 2016) was sent to the Consulate General of Japan in Vancouver (Canada) on May 5, 2014, and funds in the amount of \$1,290,929 were transferred to the PICES/MoE bank account on May 29, 2015.
- The set of documents requesting funding for Year 3 (FY 2016: April 1, 2016 March 31, 2017) was sent to the Consulate General of Japan in Vancouver on March 17, 2016, and funds in the amount of \$1,290,927 were transferred to the PICES/MoE bank account on May 12, 2016.

4. Budget execution for fiscal Year 3

The project account balance as of March 31, 2016, was \$2,591. Permission was requested, and subsequently granted, to move this amount to Year 3. The MoE contribution for Year 3 of the project was \$1,290,927. Moving the Year 2 account balance to Year 3 brought the total available funding for this year to \$1,293,518.

As it is essential to share project results with both the scientific community and the public through presentations at different venues (conferences, topic sessions, seminars and public events), publications in peer-reviewed journals, reports and newsletters, and various outreach products, it was proposed in the Year 3 workplan, and accepted by MoE, to: (1) add one more category – "publications" – to the budget and (2) allow spending a part of the budget after March 31, 2017, but prior to submission of the final project report on June 30, 2017.

Initial and final (with the Year 2 balance credited to "Contracts and grants") Year 3 allocations and actual expenses for each budget category are shown in Table 1. Table 2 provides more details on expenses for specific activities. Table 3 summarizes income and expenses for the entire 3-year period. The project funding was completely spent by June 30, 2017.

5. Account audit

For the period from April 1 to December 31, 2016, the status of the MoE account was assessed during the regular external PICES audit for FY 2016 (January 1 – December 31, 2016). In the auditor's opinion, *the financial statements present fairly, in all material respects, the financial position of the North Pacific Marine Science Organization as at December 31, 2016, and the results of its operations and changes in fund balances for the year then ended*. The financial statements for the rest of Year 3 (January 1 – March 31, 2017) will be evaluated during the regular PICES audit for FY 2017 (January 1 – December 31, 2016).

Category	Initial Year 3 Allocations	Year 2 Transfer	Final Year 3 Allocations	Year 3 Expenses	Year 3 Balance
Travel and meetings	110,000		110,000	94,105	15,895
Contracts and grants	949,000	2,591	951,591	938,496	13,095
Publications	60,000		60,000	89,965	(29,965)
Equipment/materials	2,000		2,000	598	1,402
Miscellaneous	2,106		2,106	3,320	(1,214)
Overhead	167,821		167,821	167,821	
Total	1,290,927	2,591	1,293,518	1,294,305	(787)
Year 3 Interest					787
Year 3 Balance					0

Table 1Allocations and expenses for Year 3 (April 1, 2016 – March 31, 2017)

 Table 2
 Expenses for various budget categories for Year 3 (April 1, 2016 – March 31, 2017)

Category/Activity	Expenses
Travel and meetings	94,105
6 th Project Co-Chairmen meeting (April 19–21, 2016, Vancouver, Canada)	4,979
3 rd Risk Assessment Workshop (August 10–12, 2016, Montreal, Canada)	19,609
7 th Project Co-Chairmen meeting and ADRIF Topic Session at PICES-2016 (November 4 and November 8–9, 2016, San Diego, USA)	13,157
4 th Risk Assessment Workshop (January 10–12, 2017, Burlington, Canada)	8,698
ADRIFT algae survey in Alaska (June 19–26, 2016)	3,595
Project Coordinator travel	1,745
Other travel	696
ADRIFT symposium, seminar for graduate students and public event to present overall project findings to Japanese scientists and the public, and 8 th Project Co-Chairmen meeting (May 18–21, 2017, Tokyo and Sendai)	26,985
Participation in the PICES/ICES theme session on " <i>Bioinvasion trajectories and impacts in contrasting marine environment</i> " at the 2017 ICES ASC (September 18-21, 2017, Fort Lauderdale, FL, USA) to present ADRIFT findings on potential impacts from JTMD and associated NIS to coastal ecosystems in Pacific North America at the international arena	2,162
Participation in the Sixth International Marine Debris Conference (March 12-16, 2018, San Diego, CA, USA) to present ADRIFT overall findings at the international arena	12,479
Contracts and grants	938,496
Modeling studies in support of research on impact of alien species transported by marine debris from the 2011 Great Tohoku Tsunami in Japan (Year 3) (Maximenko/UH, USA)	122,500
Japanese Tsunami Marine Debris (JTMD) and alien species invasions: PICES Year 3: Interception of non-native species on JTMD and genetic, morphological, and parasitological analyses of JTMD North American and Japanese vouchers (Carlton/Williams Colleague, USA)	308,600
Synthesizing the state of debris in Hawaii from 2015 aerial imagery and spatial analysis data (Hamnett/SSRI-UH, USA)	18,000
Life history analysis of Japanese Tsunami Marine Debris (JMTD) biota (Miller/OSU, USA)	17,600

Overhead	167,821
Miscellaneous	3,320
Equipment and supplies	
Executive Summary translation (Strategic Communications, Canada)	
Final Scientific Report editing and formatting (Stranby Technical Services, Canada)	1,302
Final Scientific Report compilation (Nelson, Canada)	10,485
ADRIFT videoscribe (Strategic Communications/Eggbeater Creative, Canada)	9,371
ADRIFT factsheets (Strategic Communications/Drive Design, Canada)	8,356
Posters and abstracts for May 2017 events in Japan (HARIU Communications, Japan)	5,788
Special issue of Marine Pollution Bulletin	38,828
Special issue of Aquatic Invasions	15,452
Publications and outreach	89,965
Project Visiting Scientist (Murray/PICES)	74,336
Japanese collaborative projects: Webcam monitoring of marine debris at the Northwestern Pacific coast (Isobe/Kyushu University, Japan) – 38,000 Climatological debris dispersion simulations and forcing fields error estimation (Kamachi/MRI, Japan; Ishikawa/JAMSTEC, Japan) – 16,500 Marine algae arriving on Japanese Tsunami Marine Debris and their invasion threat to the Northwestern Pacific coast (Kawai/Kobe University, Japan) – 67,000 2016 Tohoku coastal line survey – 17,241 Project coordination (JANUS, Japan) – 18,156	156,897
ADRIFT risk assessment project Development of a 3-stage risk assessment model of the JTMD vector (Drake, Canada) Review and interpret the provided JTMD database and generate risk scores for each JMTD species using the CMIST Screening Risk Assessment Tool (Scriven, Canada) Review and interpret the provided JTMD database and generate risk scores for each JMTD species using the CMIST Screening Risk Assessment Tool (Abele, Canada)	38,212 2,500 20,341 15,371
Japanese Tsunami Marine Debris (JTMD): Preservation and Custodianship of an Extraordinary Archive of Biological Samples (Choong/RBCM, Canada)	15,000
Marine Algae arriving on JTMD (Japanese Tsunami Marine Debris) and their invasion threat to the coasts of Oregon and Washington, USA – Year 3 (Hansen/OSU, USA)	47,000
Seaweed surveys in Alaska and BC (Lindstrom/UBC, Canada)	20,596
Review, compilation and interpretation of global literature on geographic range, invasion history, life history and ecology of the species recorded from JTMD (Liggan, Canada) Review, compilation and interpretation of Japanese literature on geographic range, invasion history, life history and ecology of the species recorded from JTMD (Otani, Japan)	30,734 30,766
Review, compilation and interpretation of global literature on geographic range, invasion history, life history and ecology of the species recorded from JTMD (Nelson, Canada)	119,755 58,255

	Year 1 2014-2015	Year 2 2015-2016	Year 3 2016-2017
Revenue			
Contribution	1,099,691	1,290,929	1,290,927
Interest	3,667	2,839	787
Total	1,103,358	1,293,768	1,291,714
Expenses			
Travel and meetings	77,904	98,180	94,105
Contracts and grants	742,230	1,150,668	938,496
Equipment and supplies	9,105	2,501	598
Publications			89,965
Miscellaneous	813	2,353	3,320
Overhead	142,960	167,821	167,821
Total	973,012	1,421,523	1,294,305
Remainder from previous year		130,346	2,591
Revenue less Expenses	130,3460	-127,755	-2,591
Balance forward	130,346	2,591	0

Table 3Income and expenses for the project from April 1, 2014 – March 31, 2017