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

FINANCIAL REPORT FOR YEAR 2 (APRIL 1, 2015 – MARCH 31, 2016)

1. Background

The overall goal of the PICES ADRIFT (Assessing the Debris-Related Impact From Tsunami) 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. These reports should be submitted to MoE within 90 days after the close of each project year ending March 31, and include a summary of the activities carried out in the year, with an evaluation on the progress made, and a workplan for the following year.

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 (see also a note for the Year 3 budget on page 4):

Travel and meetings

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.

Miscellaneous

This category covers 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 15, 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.

4. Budget execution for fiscal Year 2

The project account balance as of March 31, 2015, was \$130,346. Permission was requested, and subsequently granted, to use this funding in Year 2. The MoE contribution for Year 2 of the project was \$1,290,929. Moving the Year 1 account balance to Year 2 brought the total available funding for this year to \$1,421,275.

Initial and final (with the Year 1 bank interest split between the two categories: \$1,437 was credited to "Travel and meetings" and \$2,230 was credited to "Contracts and grants") allocations and actual expenses for each budget category are shown in Table 1. Table 2 provides more details on expenses for specific activities. The project account balance as of March 31, 2016, is \$2,591. Similar to Year 1, permission was requested, and subsequently granted, to move this amount to Year 3.

Table 1	Allocations and	expenses for	Year 2 (April 1	. 2015	 March 31, 2016
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Category	Initial Year 2 Allocations	Year 1 Transfer	Final Year 2 Allocations	Year 2 Expenses	Year 2 Balance
Travel and meetings	167,000	12,096	180,533	98,180	82,353
Contracts and grants	950,000	107,770	1,060,000	1,150,668	(90,668)
Equipment and supplies	5,000	5,895	10,895	2,501	8,394
Miscellaneous	1,108	918	2,026	2,353	(327)
Overhead	167,821	0	167,821	167,821	
Interest earned in Year 1		3,667			
Total	1,290,929	130,346	1,421,275	1,421,523	(248)
Interest earned in Year 2					2,839
Year 2 Balance					2,591

Table 2 Expenses for various budget categories for Year 2 (April 1, 2015 – March 31, 2016)

Category/Activity	Expenses
Travel and meetings	98,180
3rd Project Co-Chairmen meeting (May 11–12, 2015, Silver Spring, USA)	6,643
4th Project Co-Chairmen meeting at PICES-2015 (October 16, 2015, Qingdao, China)	9,086
5th Project Co-Chairs meeting and 3rd PST meeting (February 22–26, 2016, Tokyo, Japan)	28,303
First Risk Assessment Workshop (November 16–18, 2015, Maryland, USA)	19,897
Second Risk Assessment Workshop (January 17, 2016, Sydney, Australia)	3,135
9th Int. Conference on Marine Bioinvasions (January 19–21, 2016, Sydney, Australia)	10,354
ADRIFT NIS and algae survey in British Columbia	6,641
ADRIFT algae survey in Oregon	1,768
Project Coordinator and Project Visiting Scientist travel	11,564
Other travel	789
Contracts and grants	1,150,668
Modeling studies in support of research on impact of alien species transported by marine debris	84,000
from the 2011 Great Tohoku Tsunami in Japan (Year 2) (Maximenko/UH, USA)	84,000
Japanese Tsunami Marine Debris (JTMD) and alien species invasions: PICES Year 2: Continued interception of non-native species on JTMD and detection in North America to understand invasion risk (Carlton/Williams Colleague, USA)	449,000
Hawaiian islands marine debris aerial imagery surveys (Neilson/Hawaii Department of Land and Natural Resources, USA)	98,790
Hawaiian islands marine debris aerial imagery surveys (Resource Mapping Hawaii, USA)	78,290
Mapping patterns of marine debris in the main Hawaiian islands using aerial imagery and spatial analysis – Part 1(Hamnett/SSRI-UH, USA)	20,500
BC aerial survey and ground-truth image analysis (LightspeedDigital, Canada)	9,682
Life history database	144,336
Development of life history database for Japanese Tsunami Marine Debris (JMTD) biota	22,000
(Miller/OSU, USA) Review, compilation and interpretation of global literature on geographic range, invasion	39,000
history, life history and ecology of the species recorded from JTMD (Nelson, Canada)	,
Review, compilation and interpretation of global literature on geographic range, invasion history, life history and ecology of the species recorded from JTMD (Wong, Canada)	19,750
Review, compilation and interpretation of global literature on geographic range, invasion	14,253
history, life history and ecology of the species recorded from JTMD (Gillman, USA)	11,233
Review, compilation and interpretation of Japanese literature on geographic range, invasion	49,153
history, life history and ecology of the species recorded from JTMD (Otani, Japan)	100
Development of life history database format for algae (Lindstrom)	180
Marine Algae arriving on JTMD (Japanese Tsunami Marine Debris) and their invasion threat to the coasts of Oregon and Washington, USA – Year 2 (Hansen/OSU, USA)	61,000
Japanese collaborative projects:	239,080
Webcam monitoring of marine debris at the Northwestern Pacific coast (Isobe/Kyushu	200,000
University, Japan) – 55,000	
Climatological debris dispersion simulations and forcing fields error estimation (Kamachi/MRI,	
Japan; Ishikawa/JAMSTEC, Japan) – 15,000 Marine algae arriving on Japanese Tsunami Marine Debris and their invasion threat to the	
Northwestern Pacific coast (Kawai/Kobe University, Japan) – 18,000	
2015 Tohoku coastal line survey – 60,000	
2016 Tohoku coastal line survey – 60,000	
Project coordination (JANUS, Japan) – 31,080	

Project Visiting Scientist (Murray/PICES)	64,349
Assistance to Project Coordinator (Strandby Tech Services)	431
Equipment and supplies	
Miscellaneous	2,353
Overhead	167,821

5. Account audit

For the period from April 15 to December 31, 2015, the status of the MoE account was assessed during the regular external PICES audit for FY 2015 (January 1 – December 31, 2015). 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, 2015, and the results of its operations and changes in fund balances for the year then ended." The financial statements for the rest of Year 2 (January 1 – March 31, 2016) will be evaluated during the regular PICES audit for FY 2016 (January 1 – December 31, 2016).

6. Budget and proposed allocations for Year 3

The MoE contribution for Year 3 of the project is \$1,290,927. Moving the Year 2 account balance (\$2,591) to Year 3 will bring the total available funding for this year to \$1,293,518. The proposed Year 3 budget breakdown is shown in Table 3 (Year 2 account balance is credited to the "Contracts and grants" category).

The following two budgetary notes were included in the Year 3 workplan:

- O As we intend to host scientific/public events in late spring/early summer 2017, in order to share project results with both the scientific community and the people of Japan, a part of the "travel and meetings" category is expected to be spent after March 31, 2017, but prior to submission of the final project report due to June 30, 2017.
- Since in the final year of the project significant efforts will be made to publish project outcomes, it is recommended adding one more category "publications" to the budget. A part of the "publications" category (purchasing an open access for special issues of a peer-reviewed journal(s)) is expected to be spent after March 31, 2017, but prior to submission of the final project report on June 30, 2017

These requests/recommendations were accepted by MoE.

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

Category	Year 3 Allocation	Year 2 Transfer	Total Allocation
Travel and meetings	110,000		110,000
Contracts/grants	949,000	2,591	951,591
Publications	60,000		60,000
Equipment/materials	2,000		2,000
Miscellaneous	2,106		2,106
Overhead	167,821		167,821
Total	1,290,927	2,591	1,293,518