

2024 Report of Human Dimensions Committee

The Human Dimensions Committee (HD) meeting took place under the chairmanship of Prof. Mitsutaku Makino (Japan) from 23:30-01:00 UTC, September 23 (online) and from 18:00-20:00 HST, October 26th, at PICES-2024 in Honolulu, USA. Some of the participants attended using Zoom. Each member introduced himself/herself (HD Endnote 1), and Dr. Takemura volunteered to take notes. The agenda was reviewed and adopted unanimously by the committee (HD Endnote 2).

AGENDA ITEM 2

Introduction to the PICES 2024 Annual Meeting

Professor Makino presented an overview of the PICES 2024 Annual Meeting, which will be held at the Hawaii International Convention Center from October 26 to November 1, 2024, including HD-related sessions and workshops, FUTURE symposium and the role of HD in it, and Special Panel.

AGENDA ITEM 3

Reports from the Children Expert Groups and Projects

WG 44: Dr. Sara Wise reported on the activities of the co-production knowledge of knowledge subgroup of WG 44. Vice Chair Karen Hunter commented that WG 51 is also discussing co-production of knowledge and would like to share information between WG 51 and WG 44.

WG 51: Dr. Takemura reported on the PICES 2024 workshop and communication with ICES. Dr. Oleg Katugin commented that he and Ms. Ekaterina Kurilova will participate as members of WG 51.

WG 49: Karen Hunter, Vice Chair, reported on WG 49's ongoing textual analysis of singular phenomena in the North Pacific.

AGENDA ITEM 4

Finalization of the HD Committee's Action Plan 2024-2028 (Makino and Karen, 30 min)

Chair Makino introduced the comments received from each HD member on the draft Action Plan, the revisions made in response to those comments, and the final version of the Action Plan (see HD Endnote 3).

AGENDA ITEM 5

Annual HD Hot Topic Presentations from Each Member Country

Members from each country shared information on hot topics related to the Human Dimensions in their countries, including outlines of new laws or policies in their countries, new research projects involving the human dimension topics, etc.

AGENDA ITEM 6

Plan for 2025 onward (30 min)

One topic session and one workshop were proposed from Ms. Karen Hunter (see HD Endnote 4). HD's support to topic session and workshop were requested from Dr. Sarah Wise (AP-ARC) and Dr. Motomitsu Takahashi (WG53), respectively. Also, Dr. Dan Lew shared his idea for a new working group about the role of social science in PICES.



Day 2 HD Committee in person-meeting at Hawaii Convention Center

HD Endnote 1**HD participation list (both online and in-person meetings)**Members

Mitsutaku Makino (Japan, Chair)
 Karen Hunter (Canada, Vice-Chair)
 Natalie Ban (Canada)
 Shang Sunny Chen (China)
 Jingmei Li (China)
 Shion Takemura (Japan)
 Jongseong Ryu (Korea)
 Oleg Katugin (Russia)
 Ekaterina Kurilova (Russia)
 Sunny Jardine (USA)
 Minling Pan (USA)
 Sarah Pence Wise (USA)

Members unable to attend

China: Yang Han
 Japan: Aoi Sugimoto
 Korea: Dohoon Kim, Tae-Goun Kim
 Russia: Anna Karulina

Observers

Alan Haynie (ICES)
 Pengbin Wang (China)
 Jingzhu Shan (China)
 Meng Su (China)
 Yutaka Hiroe (Japan)
 Atsushi Ishii (Japan)
 Dan Lew (USA)
 Kristy Wallmo (USA)

HD Endnote 2

Agenda for the 2024 HD Meeting

Day 1 Online

1. Self-introduction, adoption of the agenda and appointment of rapporteur (All, 15 min)
2. Introduction to the PICES2024 Annual Meeting (Makino, 10min)
3. Reports from the children expert groups and projects
 - WG 44 (Libby, 5 min)
 - WG 51 (Shion, 5 min)
 - WG 49 (Karen, 5 min)
4. Finalization of the HD Committee's Action Plan 2024-2028 (Makino and Karen, 30 min)

<Day 2 Hybrid>

5. Annual HD Hot Topic presentations from each Member Country (5-10min each Member Country)
6. Plan for 2025 onward (30 min)
 - 1) Topic session/Workshop proposals for the next Annual Meeting 2025 (Karne, Shion, and All)
 - 2) New expert group proposals (All)
 - 3) The next Annual HD Hot Topic for the PICES2025 Yokohama.
7. Others

*HD Endnote 3***PICES Human Dimensions Committee Action Plan 2024-2029****The HD Committee's Key Tasks**

Established in 2016, the PICES Human Dimensions (HD) Committee plays a new and important role in the PICES organization and research community.

The Committee's mission is vast. Formally, the HD area of responsibility is to **promote and coordinate interdisciplinary research** that leads to **increased understanding of the relationship** between North Pacific marine ecosystems and the **people, communities, and economies** that are part of those systems and rely on the resources and services they provide.

Particular emphasis will be given to fostering research on:

- (a) **methodological and empirical challenges involved in integrating human dimensions into ecosystem analyses**; and
- (b) **exploration of development pathways that are sustainable** from social, economic, and ecological perspectives.

The HD committee will **support the work of other PICES expert groups**, including any integrated science program.

Where other PICES expert groups often consider the impact of human activities on ecosystems, the HD committee will **promote both the consideration of these impacts and how biophysical changes impact the well-being of people, communities, and economies** taking into account their characteristics and values.

In addition, the committee will engage with kindred '**human dimension**' initiatives of other organizations (e.g., ICESⁱ and IMBeRⁱⁱ).

Action Planning Essentials

1. We, the members of the PICES HD Committee, recognize the broad range of faculties, disciplines, experts, training, methodologies, and topics included in "HD".
2. The Action Plan must consider the key tasks of HD and align wherever possible.
3. The Action Plan must consider that HD committee members bring a wide variety of skills and career experiences. This will likely be an ongoing benefit as well as a challenge for the Committee's overall mission.

HD Action Plan

1. Key Task: Promoting Transformative Ocean Science

Action: Improve HD Committee Integration

- I. Determine current Human Dimensions ecosystem-related priorities for each member country. Compare and contrast these across member states to identify key focus areas for HD Committee.
- II. Seek more ECOP representation, preferably from each Member Country.
- III. Determine the types of approaches being taken in member states to achieve integrated ecosystem analyses or other HD integration. (Preferably, by establishing an Expert Group.)
- IV. Present outcomes and address new questions by hosting a workshop on "Progress for Social Sciences/HD Integration in our Understanding of and Responses to Ecosystem Change" at the PICES Annual Meeting.

Action: Support Transformative Ocean Science in PICES

- I. Define and determine areas of possibility in PICES to contribute to 'Transformative Ocean Science', the core concept of UNDOSⁱⁱⁱ.
- II. Participate in FUTURE SSC and contribute to the planning of Transformative Ocean Science activities within PICES.
- III. Support existing and new SGs and WGs from the appropriate HD perspective (i.e., which faculty/expertise) by providing Member State representation (e.g., WG49, WG Human Networks, SciComm).

- IV. Examine outputs from previous HD SGs and WGs. Compile new knowledge or next steps identified by WGs.
- V. Link MSEAS2024^{iv} Meeting to Annual PICES meeting (i.e., “Highlight sessions” and Keynote speakers). Have a central place on the 2025 PICES Annual Meeting agenda.

2. Key Task: Coordinating HD Research within PICES

Action: Understand Limitations, Gaps, and Opportunities of HD research in PICES

- I. Determine how HD is already involved within PICES and its impact on PICES research to date (e.g., Takemura et al. in review).
- II. Acknowledge and communicate the broad range of faculties (biology, ecology, oceanography, chemistry, engineering, economy, geography, anthropology, policy, sustainability science, etc.), disciplines (single discipline, interdisciplinary, cross disciplinary, transdisciplinary), experts (academia, business, professionals, etc.), stakeholders (inter-governmental organizations, government, agency, Non-Governmental Organizations, communities, industry sectors, indigenous communities, developing countries, islands countries, etc.), training (summer school, workshop, seminar, dissemination, development and cooperation, etc.), methodologies (DPSIR framework, SES framework, Text analysis, Network analysis, Time series analysis, Geo spatial analysis, Image analysis, smartphone, AI, etc.), and topics (climate change adaptation, transformative ocean science, etc.) included in “HD”.
- III. Work with AP-SciComm to advertise HD opportunities within PICES.

3. Key Task: Explore Development Pathways from an Interdisciplinary Lens

Action: Explore this Key Task at the Committee Level

- I. Committee level discussions on these key tasks to determine opportunities to address it.
- II. Participate in the planning process of ICES-PICES collaboration for UN Decade of Ocean Science for Sustainable Development and contribute to it with Human Dimension lens (AP-UNDOS and SmartNet^v).

HD Endnote 4

Proposals for Topic Sessions and Workshops at PICES 2025

Topic Session proposal

Submitter	Ms. Karen Hunter
Co-convenors	Shion Takemura, Japan, takemura_shion01@fra.go.jp (corresponding); Karen Hunter, Canada, karen.hunter@dfo-mpo.gc.ca ; Raphael Roman, Canada, rk.roman@unesco.org
Title	The rise of bibliometric analyses to address sustainability solutions through a human dimension lens
Duration	0.5 day
Potential invited speakers	Szymon Smoliński, Poland, ssmolinski@mir.gdynia.pl ; Karen Hunter, Canada, karen.hunter@dfo-mpo.gc.ca TBD (PICES)
Proposal description	This session will build off research conducted by the Human Dimensions Committee which explored research conducted in PICES from 1992-present to understand program and expert group networks and connections to ocean science and management for the UN Ocean Decade (Takemura et al., submitted). This earlier work explored bibliometric and text analyses to innovate and integrate the human dimensions in ocean science in novel ways. This session expands on this work by seeking to identify growth and challenges of bibliometrics methodologies (including text, content, network analysis) and highlight examples of interdisciplinarity and the co-production of knowledge in support of ocean sustainability using these methods. We will engage researchers from various disciplines to share developments and mobilize knowledge across disciplines, particularly related to the ocean sciences and management. Invited speakers and participants from a wide range of fields of study will share novel research that converges on vexing problems in ocean science and management. A structured discussion will be incorporated in the session to allow time for the community of practice to exchange ideas. The session will be conducted in collaboration with ICES' Science Impact and Publications Group to explore opportunities to expand research activities with ICES via PICES' Working Group 51.

Workshop proposal

Submitter	Ms. Karen Hunter
Co-convenors	Karen Hunter, Canada karen.hunter@dfo-mpo.gc.ca (corresponding); Helen Killeen, USA; Hiroki Wakamatsu, Japan; Chan Joo Jang, Korea; Antonietta Capotondi, USA; Dan Lew, USA; Convenors include WG49 co-chairs and co-lead of systematic review
Title	Applying a cumulative effects framework to explore actionable, social-ecological solutions for climate extreme event impacts across the North Pacific
Duration	1.5
Potential invited speakers	Not identified yet
Proposal description	Extreme Climate Events (ECEs) occur with regularity across the North Pacific. Physical ocean and atmospheric events cascade into ecological anomalies such as harmful algal blooms, marine species die offs, and changes in the distribution and abundance of species. These physical and ecological dynamics often have direct consequences for social systems

	<p>requiring management such as fishery closures or expansion, damage to infrastructure and property, and health problems. Currently, many resource management and policy frameworks do not handle the impacts of ECEs. In this workshop, participants will explore ECE case studies in the North Pacific to outline drivers, and their ecological and societal impacts using a cumulative effects framework (DSPIR: drivers, pressures, states, impacts, responses). Case studies will be derived from an ongoing bibliometric review conducted by Working Group 49 to census North Pacific ECEs. The DSPIR framework has been broadly applied to identify management and policy actions related to environmental problems. It draws out interactions between state changes and human impacts to identify where the system experiences shifts in ecosystem services and societal benefits and starts to identify suitable responses to control the adverse effects of the drivers and pressures. Participants will also link knowledge generated in the workshop to the PICES-specific SEES (social-ecological environmental system) framework. The SEES framework can help identify how PICES can streamline ECE science activities and solutions for the North Pacific. The workshop will aim to generate information for researchers and decision-makers to enable actionable solutions and build understanding of the similarities and differences in outcomes across different ECEs. Tentative outcomes of the workshop include publication(s) documenting case studies and contribution to Working Group 49's final report.</p>
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- ⁱ ICES: International Council for the Exploration of the Sea, is the world oldest intergovernmental science organization, which focus on the north Atlantic (<https://www.ices.dk/Pages/default.aspx>)
 - ⁱⁱ IMBeR: Integrated Marine Biosphere Research, is a Large-Scale Ocean Research Project under SCOR (Scientific Committee on Ocean Research of the International Science Council) and a Global Research Network under Future Earth (<https://imber.info/>)
 - ⁱⁱⁱ UNDOS: United Nations Decade of Ocean Science for Sustainable Development, is a 10-year framework initiative to identify, generate and utilise key marine knowledge for sustainable marine management.(<https://oceandecade.org/>)
 - ^{iv} MSEAS2024: the 2nd Marine Socio-Ecological Systems Symposium held in Yokohama in June 2024 focused on management for sustainable use of the Earth's marine and coastal systems. (<https://meetings.pices.int/meetings/international/2024/MSEAS/Background>)
 - ^v SmartNet: Sustainability of marine ecosystems through global knowledge networks, is a global knowledge network (GKN) for ocean science by strengthening and expanding the collaboration of ICES, PICES and their partner organizations. (<https://www.ices.dk/about-ICES/global-cooperation/Pages/Smartnet.aspx>)