PICES-2024 Governing Council Meeting Report and Decisions

Governing Council (hereafter GC or Council) met from 10:00-17:20 on November 2 and 12:00-17:00 on November 3, 2024 at the Hawaii Convention Center, Honolulu, USA, under the Chairmanship of Enrique Curchitser.

Decisions taken by Council are indicated in **bold** text below.

GC Agenda Item 1. Welcome and opening remarks. All member countries were represented at the meeting (GC Endnote 1) and made opening remarks (GC Endnote 2).

GC Agenda Item 2. Adoption of agenda and meeting procedures. An additional item was added under Other Business and the modified agenda (GC Endnote 3) was approved.

<u>GC Agenda Item 3. Reports from strategic partners.</u> Written reports were received from SCOR, NPFC, NPAFC, IPHC, APN, and PSC. The ICES General Secretary, Alan Haynie, gave a presentation on ICES, its structure and emerging priorities including those shared with PICES. Council posed questions to the GS after the presentation.

The Chair of the External Review Committee, Prof. Eileen Hofmann, was also present for the morning and GC were given an opportunity to ask other questions. These included thoughts on the timeliness of ecosystem assessments and support to communities facing extreme events given the frequency of such events in the past few years. Prof. Hofmann also clarified that there was still space for discipline-based science as well as solution-based science and that she felt that, irrespective of the report's reception, it has already started conversations. She felt that the early to mid-career interviewees were more accepting of change in the organization (both structure and direction) and looking for more transdisciplinary opportunities. This may be a way to encourage retention. Prof. Hofmann also provided some examples of her experience with other international organizations that had undergone reviews and made modifications. There was considerable discussion about the nature of actionable science and its meaning to different sectors. While more discussion needs to, and will, occur there was some consensus on the need to speed up the move in this direction, and the need to clarify what member countries are looking for.

GC Agenda Item 4. Consideration of non-payment of annual fees by member countries. The Chair provided an update to GC - that the Russian Federation intended to pay outstanding dues for 2023 in November and it was hoped also for 2024 by the end of the year. Given this intent, the Chair proposed the following, which was accepted by all countries.

GC Decision 2024/A/1. Consensus voting during the period of default. During the period of default as specified in the PICES Convention (two years of non-payment of fees) the Russian Federation may participate in discussions of Council and may vote, however, on items requiring a consensus only the votes of member countries that are not in default will count towards consensus.

GC Agenda Item 5. Executive Secretary's report on Administration for 2023-2024. The Executive Secretary provided a report on administration under categories listed in the Agenda Item (A-G) as background to the F&A report. Decisions were deferred until the F&A report was presented.

China proposed, and others concurred, that a one-page annual report be circulated to PICES partner organizations on key items about the PICES Annual Meeting. This could be done before and/or after the Annual Meeting and would be an example of communication targeted to a particular audience, in this case partner organizations. The Executive Secretary will explore this possibility.

There was a suggestion from the USA of combining the analyses being done by Shion Takemura regarding PICES science (a paper presented in the FUTURE Symposium and which will be published in the near future on a text analysis of all PICES books of abstracts) with the timeline of PICES partnerships to reveal the outcomes of these relationships on PICES science. It is not clear if this would be possible but should be considered when the paper is published.

The BBNJ Agreement was noted by Canada as one example of where PICES would be a place to discuss and provide the science to member countries to support decision making for this Agreement, for conservation areas.

Regarding the UN Observer status activity, it was suggested that the Executive Secretary and next Chair write to member countries inviting them to consider advocating for the organization as an Observer.

<u>GC Agenda Item 6.</u> Report of the Finance and Administration Committee. The F&A Committee Chair presented the recommendations of the Committee for Council to consider. The following Decisions were approved.

a. Budget and financial considerations.

GC Decision 2024/A/2 Annual Contributions.

- i. Council re-iterated the importance for all Contracting Parties to pay the Annual Fee as soon as possible after the January 1 due date, and confirmed that, for planning of their funding requests for annual contributions, Contracting Parties should continue to use the guideline generally accepted at PICES-1999 (Decision 1999/A/2(ii)), which states that the annual contributions will increase at the rate of inflation in Canada.
- ii. Council instructs the Executive Secretary to send letters to all Contracting Parties requesting payments of Annual Fees as soon as practical following the Annual Meeting.

GC Decision 2024/A/3 Fund Transfers.

- i. That a year-end transfer from the Working Capital Fund to the Trust Fund to restore it to the level of \$110,000 is made (the regular practice). This is estimated to be \$20,000.
- ii. That the PICES-2023 USA Fund be closed (the balance is now \$0).
- iii. That the ECCWO5 Fund be closed and the surplus moved to the unencumbered WCF (the balance is \$26,589)
- iv. Canada has requested that the funds held for Canada in the PICES-2019 Fund and the ECS-2022 Fund be combined as a PICES-2026 Fund.

Canada noted that not all member countries regularly contribute to the PICES Trust Fund and urged all to consider doing so.

GC Decision 2024/A/4 Trust Fund.

Council instructs the Executive Secretary to invite Contracting Parties to provide voluntary contributions to the Trust Fund to support the Intern Program and capacity building activities in 2024 and beyond.

Council noted that the FY 2023 financial statements were submitted to the external chartered accountancy firm of *Hughesman, Morris and Liversedge* and the compilation engagement report was completed on June 7, 2024. The electronic copy of the Financial Statements for FY 2023 was circulated to all Contracting Parties on June 17, 2024.

GC Decision 2024/A/5. Financial Statements for 2023.

Council accepted the Compilation Engagement Report and Financial Statements for the financial year 2023.

Council discussed the F&A Committee recommendation regarding the Austerity and the business-as-usual budgets proposed for 2025 noting that it was desirable to make a Decision at PICES-2024 that reflected the current circumstances, but that the business-as-usual budget could be approved contingent on outstanding annual fees being received from Russia before year-end. In this way Council would not need to reconvene to approve the alternative budget.

GC Decision 2024/A/6. Budgetary Considerations.

- Council approved the Austerity budget of \$1,053,000. If outstanding annual fees from the Russian Federation for both 2023 and 2024 have been received in the PICES bank account before December 31, 2024 then the alternative budget of \$1,131,000 is approved and will replace the Austerity budget.
- ii. Irrespective of which budget applies in 2025, annual fees are set at \$161,900 per contracting party.
- iii. A transfer from the Working Capital Fund at the beginning of 2025 of \$243,500 or, in the case of the alternative budget, \$159,600 will be required to balance the budget.

Council noted that the Reserve Fund was not sufficient at the end of 2023 and projected to be further reduced by the end of 2024. The proposal from the F&A Committee to address rebuilding the Reserve Fund was discussed. While it is hoped that circumstances may change (if outstanding fees from Russia are received) Council determined that a solution should be put in place now, but which can be revisited at PICES-2025.

GC Decision 2024/A/7. Reserve Fund Rebuilding.

- i. In order to rebuild the Reserve Fund, countries will forego requesting the typical \$40,000 from the General Fund towards the cost of hosting the Annual Meeting. This will begin in 2026 with Canada as host, and will last for one full rotation of host countries.
- ii. Since Japan had already included these funds in their budgeting for PICES-2025 then

- registration fees for the annual meeting will be kept the same as in 2024 (\$100 extra per regular fee over 2023) in order to raise approximately \$40,000 in 2025.
- iii. The F&A Committee will review the status of the Reserve Fund again as part of its agenda at PICES-2025.

Council noted the F&A Committee's recommendation that moving to an alternating annual financial audit/review engagement was an acceptable compromise between cost-saving and fiscal diligence and were reassured that at least one other similar organization has been operating in this way for over a decade (a full audit is estimated to cost about twice the amount of a review engagement).

GC Decision 2024/A/8. Audit Frequency.

- Council instructs the Executive Secretary to solicit quotes from three accountancy firms to undertake an audit for FY2024 and to proceed with a full audit for FY2024 in spring 2025, and alternate years thereafter, with an appropriate firm.
- ii. For 2025, and alternate years thereafter, Council requests that a Review Engagement be conducted, noting that this may be completed by the current PICES accountancy firm.
- iii. Council requests the F&A Committee to discuss and recommend the focus of the review engagement at PICES-2025 (and alternate years thereafter).
- b. Schedule, structure and financing of annual meetings.

Council discussed the upcoming annual meeting schedule with PICES-2025 set to be hosted by Japan in Yokohama from November 7-16. Dates for 2026 are not yet set and members were requested to let the Executive Secretary know of any significant conflicts for October 2026 as soon as possible.

GC Decision 2024/A/9. Schedule, Structure and Financing of Future Annual Meetings.

- i. Council approved the proposal by Canada to hold the PICES-2026 Annual Meeting in Nanaimo with dates to be confirmed.
- ii. Council requested China to explore the possibility of hosting the 2027 Annual Meeting, and to inform the Secretariat on this matter by March 31, 2025.
- iii. Council approved keeping the fee structure for PICES-2025 the same as for PICES-2024, which includes an additional \$100 on Early and Regular Fees only, to help replenish the Reserve Fund. The following fee structure will apply:

Type of registration fee	CDN \$
Regular	450
Early	350
Student	50
Spousal/guest	50
Absentee Presenter	75

GC Agenda Item 7. Discussion on the External Review Report and next steps. There was a free and wideranging discussion on the response to the report and needs of the community. GC recognised that the responsibility was now theirs to plan the response, that change was needed. The time frame needs to balance the urgency of member country needs with a thoughtful approach. Developing a road-map by the time of the next annual meeting in Yokohama was thought to be realistic. Council recognised that the External Review Committee had interviewed a wide diversity of PICES members and that their recommendations synthesized the views heard. Many responses to the report have been received from the

PICES community this week, including the final day Special Panel, which also require some synthesis and digestion. This also includes responses from partner organizations, some of whom have already indicated their needs from PICES. It was considered a priority to explore the needs of the contracting parties through communication with designated officers from countries, but there was recognition that this is complex and there are many stakeholders and that GC members could be tasked with this for their own country. Further discussion to identify a sub-set of priority users may be needed.

The result of the discussions was therefore a decision to form a GC "sub-Committee" and/or small teams to tackle the recommendations and provide a high-level response on how they will be approached. Council may also convene a strategic science-policy or science-decision sub-committee to involve external partners as an additional layer in the organization in future, but this requires further scoping to determine terms of reference and membership. Council came to agreement that there would be several phases needed, it would be an iterative process, with different groups tackling operational and strategic elements. It also needs to be evident to the community that GC is "doing something" so communication will be important. The first phase needed is to "triage" the recommendations.

GC Decision 2024/A/10. External Review Report Response.

- i. Council formed a GC Study Group to review the External Review Report Recommendations and provide a report to Council in December 2024 on which recommendations are operational, strategic, or should be deferred. The SG to also draft a first response to the ERC which captures GC's intent to carry out further operational/strategic planning. The SG to be chaired by Cisco Werner (USA) with members from Canada (Andrew Thomson), China (Fangli Qiao), Korea (Se-Jong Ju), Russia (Aleksei Baitaliuk), PICES Chair/Japan (Tetsuo Fujii), Executive Secretary and the new Past-Chair (Enrique Curchitser).
- ii. Council instructs the Executive Secretary to synthesize the feedback and responses received from the community at PICES-2024 and provide to Council.
- iii. Council instructs the Executive Secretary to draft a letter to contracting parties from GC that will elicit their scientific priorities and emerging needs in the North Pacific to guide PICES in its strategic planning. GC members to share the letter within their countries as appropriate. The letter should include some framing topics to provide guidance and encourage commonalities to emerge.

GC Agenda Item 8. Elections

GC Decision 2024/A/11 - Chair and Vice-Chair.

- i. Tetsuo Fujii (Japan) was elected to a first two-year term as Chair. The term to start immediately following the end of the PICES-2024 annual meeting.
- ii. Andrew Thomson (Canada) was elected to a first two-year term as Vice-Chair. The term to start immediately following the end of the PICES-2024 annual meeting.

GC Agenda Item 9. Executive Secretary Position.

GC Decision 2024/A/12 – Executive Secretary term.

Sonia Batten was granted a second five-year term as Executive Secretary, beginning April 9, 2025.

GC Agenda Item 10. Chair Award.

Council was reminded that nominations for the 2025 Chair Award may now be submitted to the Executive Secretary, and will remain open until July 30, 2025.

GC Agenda Item 11. Other Business - Scheduling of regular virtual GC meetings.

The Chair recommended to Council that they meet quarterly to maintain momentum. One in person meeting at the Annual Meeting and approximately three additional virtual meetings to ensure continued progress, especially while the External Review Report is being considered. There was discussion about whether this could shorten the Annual Meeting which would be a desirable outcome for some. One meeting will be in December to approve the schedule of sessions for the subsequent Annual Meeting, one will be shortly after the Intersessional Science Board meeting in April/May to review recommendations. There was some thought not to schedule the final meeting for a particular time, but to meet when needed to advance the work.

Simultaneously there is a need to examine the structure of the annual meeting and seek feedback from the PICES members, which will be done as part of the response to the External Review Report.

GC Decision 2024/A/13. Quarterly meetings of Council. In order to advance the work of the organization more efficiently, Council will meet in person at each annual meeting and virtually on at least three other occasions through the year. One virtual meeting will occur in December to review the annual meeting schedule for the following year, one virtual meeting will follow the Intersessional Science Board meeting usually in April/May, and the third virtual meeting will occur between May and the annual meeting. GC Decisions may be taken at any of these meetings.

<u>GC Agenda item 12. PICES Special projects.</u> Council reviewed the status of the Ciguatera, SeaTurtle and FishPhyto projects which were completed in 2023 or 2024.

<u>GC Agenda Item 13.</u> The Science Board Chair presented the report and recommendations from the Science Board.

Two MoUs were presented.

GC Decision 2024/S/10. The North Pacific Fisheries Commission-PICES revised Framework for Enhanced Scientific Collaboration in the North Pacific for 2024-2029 was endorsed.

GC Decision 2024/S/11. MOU on the collaboration between PICES and the Ocean Decade International Cooperation Center China (ODCC) was endorsed.

The proposed transfer of PICES Metadata Records from the old PICES TCODE Geonetwork Catalogue to a new Metadata Catalogue (by WG52-DATA and TCODE) was presented. This is a high priority item but is contingent on PICES' budget next year, which is still uncertain.

GC Decision 2024/S/12. Metadata records transfer. Council approves the use of up to \$6,500 for the work to be done, if the PICES Reserve Fund is adequate at the fiscal year end. If the

Reserve Fund is not sufficiently robust then alternative funds should be sought to cover this task.

GC reviewed the election results

GC Decision 2024/S/13. Chair and membership changes for Science Board, Standing Committees and Expert Groups. Council approved the following elections for Standing Committees:

- i. Jennifer Boldt (Canada) was elected as the Science Board Chair-elect and will take up the role of SB Chair at the conclusion of PICES-2025.
- ii. Akash Sastri (Canada) was elected as Science Board Vice-Chair for one year until PICES-2025.
- iii. Fangfang Wan (China) was re-elected as the Vice Chair of TCODE for a second term.
- iv. Jennifer Jackson (Canada) was re-elected as the Vice Chair of POC for a second term.

Council approved the following expert group Chairs:

- v. Jae-Hyong Park (Korea) as co-Chair of AP-NPCOOS, replacing Naoki Yoshie (Japan)
- vi. Seung-Tae Yoon (Korea) as co-Chair of WG52.
- vii. Hannah Lachance (USA) to step down as a co-Chair of AP-ECOP. A new co-Chair TBD.
- viii. Dongwha Sohn (Korea) as a co-Chair of S-CCME, replacing Xiujuan Shan (China)

Council approved the following ex-officio members:

- ix. Toshihide Kitakado as a member of S-MBM representing the IWC
- Kazuhiro Oshima and Toshihide Kitakado as members of WG53 representing the NPFC
- xi. Viv Tulloch as a member of S-CCME representing BECI

Council discussed the requested expert group extensions and changes to Terms of Reference. The decision to revise the ToR for AP-CREAMS is deferred until clarification of the NW Pacific boundary expansion is provided, together with a receiving a request for an extension of this AP from SB (or a recommendation to remove any term end date for this AP to be consistent with other AP) which can come at the December meeting. GC also noted that ECOP from all countries, not just Asia, are encouraged to join.

GC Decision 2024/S/14. Extension of WG term. Council approved the extension of WG50 for one year to PICES-2025

Council reviewed proposals for new expert groups. The proposal for a new Section on Marine Plastic Pollution was considered highly relevant, especially considering the move towards more actionable science.

The revised proposal for the Working Group on Ocean Negative Carbon Emissions for Carbon Neutralization (OCN) was also reviewed. Council noted that the revision was now more PICES focussed, however Council felt that the Terms of Reference were still too ambitious and unlikely to be achieved in three years. For example, ToR 4 says that they will "develop and establish technical standards for carbon

monitoring and sequestration technologies" which is a very ambitious goal that Council could not see being achievable. The workplan, however, does appear to be practical and achievable within three years but the ToR and expected deliverables are not clearly linked to the workplan. It is an important topic for the organization so Council requests the group to modify the ToR to better reflect the workplan, and remove the public education deliverable which is not appropriate for PICES, as written. They could also liaise with the MEQ Committee and Section on Carbon and Climate which may be relevant to this group's activities.

GC Decision 2024/S/15. New Expert Groups. Council approved the establishment of a Section on Marine Plastic Pollution with Terms of Reference as provided and which should be reviewed after five years.

Council noted the requests for travel support and the prioritization that SB provided. Council also noted that while the Trust Fund has typical funds available for 2025 to support ECOP travel, the General Fund budget is uncertain at this time. Council therefore instructs the Secretariat to use the prioritization from SB to support travel as much as possible, once budget constraints are more certain.

Requests From PICES Expert Groups					
S-HAB (MEQ)					
Conference title / Date / Location	Recipient name (if identified)	Amount and rationale of fund request	SB Rating		
Seventeenth Session of the IOC-FAO	1 S-HAB member, likely	CA\$ 2500 (airfare + accommodation)	1.3		
Intergovernmental Panel on Harmful Algal Blooms (IPHAB-XVII) No information on the 17 th meeting on IPHAB website yet 18–20 March 2025, Paris, France	Mark Wells (TBD)	The IOC-FAO Intergovernmental Panel on HABs is the global meeting on HABs. PICES is a member and has been represented for over a decade to convey North Pacific HAB issues and to assist in preparation of key reports on HAB issues. PICES has representation (M Wells) on two IPHAB Task Teams: the Task Team on Harmful Algae and Desalination of Seawater, and the Task Team on Fish Killing Microalgae and	(Low- Middle)		
Ecosystem Effects. AP-NIS (MEQ)					
Conference title / Date / Location	Recipient name (if identified)	Amount and rationale of fund request	SB Rating		

12th International Conference on Marine Bioinvasions (ICMB XII) 6-10 October 2025, Madeira, Portugal	1 AP-NIS member, likely Thomas Therriault (TBD)	CA\$ 2500 (airfare) This conference series takes place about every two years and PICES has been represented on the Scientific Steering Committee since the 7th iteration ensuring topics are relevant to PICES	0.8 (Low)
		member countries and ensuring active participation of ECS from PICES.	
	2 ECS from PICES country	CA\$ 7000	1.9 (Middle)
S-CCME (HD) / AP-UNDOS (SB)/AP-ECOP (FUT	TURE)	
Conference title / Date / Location	Recipient name (if identified)	Amount and rationale of fund request	SB Rating
ICES ASC	A few ECOP members	CA\$ (leave it for GC/F&A decision)	
15-18 September 2025 Klaipeda, Lithuania		Sent S-CCME ECOP members to attend S-CCME convening Sessions Sent AP-UNDOS ECOP members to attend SmartNet convening Workshop	2.4 (Middle- High)

Requests From Partner Organizations etc.				
Conference title / Date / Location	Recipient name / contact	Amount and rational of fund request	SB Rating	
One Ocean Science	A few ECOPs from	EUR 6000 (CA\$ 9000)		
Congress (OOSC): Science for Action	PICES countries (full x 3 or partial support for 6-7 ECOPs)	OOSC requests PICES to be a congress sponsor, and support ECOP travels. OOSC was held in conjunction with 3 rd UN Ocean Conference to be held in Nice.	2.3 (Middle- High)	
4-6 June 2025, Nice				
France				
		AP-UNDOS and AP-ECOP support the request.		
ESSAS OSM 2025	A few ECOPs from	CA\$ 15000		
24-26 June 2025, Tokyo, Japan	PICES countries	AP-ARC supports the request PICES supported 2017 ESSAS OSM (Norway) with CA\$ 15569.	2.3 (Middle- High)	

GOOD-OARS Summer School 2025	A few ECOPs from PICES countries	CA\$ (leave it for GC/F&A decision)	
4-11 Nov, 2025	rices countries	Relevant to S-CC	1.9 (Middle)
Penang, Malaysia		PICES supported travel of 3 ECOPs for	
Venue: Centre for Marine and Coastal Studies (<u>CEMACS</u>)		2023 Summer School (approved 4) with CA\$ 4229	
*Application portal to be opened soon		Sponsor: OARS (Global Acidification Research for Sustainability) GOOD (Global Ocean Oxygen Decade), Organizer: (IOC-UNESCO)	

GC Decision 2024/S/16. Intersessional symposia/sessions/workshops and meetings. Council approved an intersessional in-person meeting for WG53 in February 2025, in Lisbon noting no financial support is required.

The tentative schedule for PICES-2025 was reviewed and discussed, including hybrid business meetings which present some challenges for Chairs, and feedback that an earlier (or multiple) poster session would be appreciated by some ECOP. Feedback from the community may help inform Annual Meeting structure modifications. The Executive Secretary plans to solicit feedback.

Publications were reviewed:

GC Decision 2024/S/17. Publications. Council approved the following publications:

i. Journal publications

EG (Rept. CMT)	Citation
AP-UNDOS (SB)	Bograd et al, Advancing the climate-biodiversity-fisheries nexus in the UN Decade of Ocean Science for Sustainable Development, ICES Journal of Marine Science, 2024;, fsae111, https://doi.org/10.1093/icesjms/fsae111
AP-UNDOS AP-ECOP (SB/FUTURE)	Chiba et al. 2024. Knowledge sharing and capacity development to promote early career ocean professionals in small island developing states: The SmartNet Approach. Oceanography, https://doi.org/10.5670/oceanog.2025.108
AP-ECOP (SB/FUTURE)	Roman et al. 2024, Building Bridges for Ocean Sustainability: The Evolution and Impact of the Early Career Ocean Professional (ECOP) Programme. Marine Technology Society Journal, 58(1-2) 8-14(7). DOI: https://doi.org/10.4031/MTSJ.58.1.4
WG48	Bi et al. 2022. Temporal characteristics of plankton indicators in coastal waters: High frequency

(BIO)	data from PlanktonScope, Journal of Sea Research, 189:102283. https://doi.org/10.1016/j.seares.2022.102283
S-MBM (BIO)	Shimabukuro et al. (2023) Across the North Pacific, dietary-induced stress of breeding rhinoceros auklets increases with high summer Pacific Decadal Oscillation index. Mar Ecol Prog Ser 708:177-189, https://doi.org/10.3354/meps14276
	Okado & Watanuki (2023) Small interannual variability in the body mass of a seabird with high flight costs. Mar Biol 170:122, https://doi.org/10.1007/s00227-023-04271-8
	Kumagai et al. (2023) Black-tailed gulls alter their flight height and airspeed according to wind conditions during their coastal commuting trips. Mar Ecol Prog Ser 723: 201–212, doi.org/10.3354/meps14431
	Tomita et al. (2024) Incomplete isolation in the nonbreeding areas of two genetically separated but sympatric short-tailed albatross populations. Endang Species Res 53:213-225 doi.org/10.3354/esr01302
	lida et al (2024) Foraging area, diving and prey chase behaviour of a wing-propelled diver under contrasted prey regimes. Mar Biol 171:1-19. doi.org/10.1007/s00227-024-04411-8
	Sakai et al (2024) Foraging areas and trip duration vary with the main prey captured, in a day-foraging/night-provisioning seabird. J Ornithol doi:10.1007/s10336-024-02218-4
	Dodson et al. 2024. Long-distance communication can enable collective migration in a dynamic seascape. Scientific Reports. 14: 14857 DOI: 10.1038/s41598-024-65827-2. PDF
	Clark-Wolf et al. 2024. The capacity of sentinel species to detect changes in environmental conditions and ecosystem structure. Journal of Applied Ecology. DOI: 10.1111/1365-2664.14669. PDF
	Cimino et al. 2024. Tracked gulls help identify potential zones of interaction between whales and shipping traffic. Marine Ornithology. 52: 61–72. PDF
	Calambokidis et al. 2024. Biologically Important Areas II for cetaceans within U.S. and adjacent waters – West Coast Region. Frontiers in Marine Science. 11:1283231. DOI: 10.3389/fmars.2024.1283231. PDF
	Fahlbusch et al. 2024. Submesoscale coupling of krill and whales revealed by aggregative Lagrangian coherent structures. Proceedings of the Royal Society B. 291: 20232461. DOI: 10.1098/rspb.2023.2461. PDF
	Welch et al. 2024. Selection of planning unit size in dynamic management strategies to reduce human—wildlife conflict. Conservation Biology. e14201. DOI: 10.1111/cobi.14201. PDF
EG	Citation/link
WG43 (FIS)	ICES (2024). Joint ICES-PICES Working Group on Small Pelagic Fish (WGSPF- outputs from 2023 meeting). ICES Scientific Reports. Report. https://doi.org/10.17895/ices.pub.26520394.v2

ii. The following final reports were reviewed and accepted, and these expert groups

are to be disbanded:

EG	Type of publication & Title	Stages
WG44 to be disbanded	PICES Scientific Report	Endorsed by FIS and HD Submitted to Secretariat
WG45 to be disbanded	ICES Scientific Reports Joint ICES-PICES Working Group on Impacts of Warming on Growth Rates and Fisheries Yields (WGGRAFY; outputs from 2023 meeting). ICES Scientific Reports. 6:70. 48 pp. https://doi.org/10.17895/ices.pub.26356351	Endorsed by FIS
WG42 to be disbanded	PICES Scientific Report	To be endorsed by MEQ, submitted to Secretariat

The report of WG46 (Ocean Negative Carbon Emissions) was not approved at this time. Council felt that the Executive Summary and Conclusions did not adequately reflect the achievements of the WG and requested the WG to revise their report so that the scientific accomplishments are described in these sections which will allow the report to be more useful.

Council discussed the planning of NPESR IV. Science Board had considered that this would be part of the response to the External Review Committee report, however, GC felt that there was a more urgent need for progress and that it could run in parallel. There was discussion on possible formats of the report, potentially smaller and more frequent, or a live document, but it was recognized that a Study Group needs to be formed to consider the format and mechanism.

GC Decision 2024/S/18. GC requests Science Board to prepare a proposal for a Study Group on NPESR IV.

GC Agenda Item 14. SB Feedback on the External Review Committee report. SB presented their comments as a series of individual points, sometimes contradictory, as there was not sufficient time during the SB meeting to synthesize the points raised by the individual Committees. SB found it challenging to understand the definition of actionable science and had spent some time debating this. SB expressed uncertainty of the priorities of member countries for actionable science. The Chair suggested that SB review the opening remarks of member countries which do provide such priorities. Prior years are available on the website and 2024 will be available shortly and the Executive Secretary will provide the material. GC acknowledged that it will take time to digest the Review recommendations and consider the implications and that the SB meeting did not provide sufficient time. GC also acknowledged that there should be increased communication between GC and SB.

GC Decision 2024/S/19. Council requests Science Board to revisit and discuss their response to the External Review Committee recommendations, focusing on science perspectives for each recommendation, and to provide a report to GC as soon as practicable in the new year.

GC Endnote 1

Delegation list of participants for the November 2024 Governing Council meeting

Canada Bernard Vigneault (R) Andrew Thomson	Russian Federation Vladimir Radchenko (Advisor/Alternate)
Japan Fumie Maruyama Tetsuo Fujii Yutaka Hiroe (Advisor, F&A member) Tatsuki Oshima (Advisor, F&A member) (R) Natsumi Okawa (Advisor) (R) Takashi Kamaishi (Advisor) (R)	USA Cisco Werner Jack Barth Amanda Williams (Advisor, F&A member) (R) Hannah Lachance (Advisor)
People's Republic of China Fangli Qiao Wei Zheng (Alternate)	Other Enrique Curchitser (PICES Chair) Chul Park (PICES Past Chair) Krister Keek (FS A Chair) Pay 1
Republic of Korea Se-Jong Ju Min-Kyeong Kim (Alternate) Jun Hyung Kim (Advisor, F&A member) Joongho Moon (Advisor) Tei Lee (Advisor)	Kristen Koch (F&A Chair) Day 1 Sukyung Kang (Science Board Chair) Day 2 Sonia Batten (Executive Secretary) Sanae Chiba (Deputy Executive Secretary) Day 2

⁽R) Attending Remotely

GC Endnote 2

Opening Remarks from Contracting Parties

Andrew Thomson, GC member for Canada

Mr. Chair, Executive Secretary and Fellow Governing Council Members,

Canada would like to thank and commend the PICES Secretariat for hosting this very successful 2024 Annual General Meeting, and we would also like to acknowledge the support provided by the United States of America to the Secretariat to ensure the success of a meeting. The city of Honolulu has been a welcoming and beautiful location for the meeting.

The theme of this year's annual meeting, The FUTURE of PICES, Science for Sustainability in 2030 could not be more important to the future path for the PICES organization. Canada is grateful for the work of the External Review committee and the recommendations that they have put forward for our consideration. The Special Panel discussion yesterday was an excellent opportunity to hear from the Committee and from those within and external to PICES on the recommendations. We are proud of the successes of PICES over the years in advancing marine science through the collaborations of member states. Moving forward, the recommendations from the external review report and the inputs from the panel discussion this week are pointing to opportunities to strengthen the leading role of PICES in collaborative science program. We need to translate that science into actionable guidance that our respective countries can consider and utilize in resource management and other decisions. It is not PICES role to direct or influence decisions that countries may take, but PICES can make the science advice more practical and directed to help inform those decisions.

In the past year Canada continues to progress on the implementation on the United Nations Declaration on the Rights of Indigenous Peoples Act Action Plan which outlines a whole of government roadmap for advancing reconciliation with Indigenous peoples through a renewed, nation-to-nation, government-to-government, and Inuit-Crown relationship based on recognition of rights, respect, cooperation, and partnership as the foundation for transformative change. In Canada, including through our participation in PICES, we continue to build on the collaborations we already have with Indigenous governments and groups, and are beginning to plan a collaborative science workshop for 2025 with the BC First Nations Fisheries Council.

This past year the Government of Canada in collaboration with the Council of the Haida Nation, Nuuchah-nulth Tribal Council, Pacheedaht First Nation, and Quatsino First Nation announced the designation of Tang. gwan — haick iqak — Tsigis (Tung — Gwun, huch/khwi/kuk, tsee-geese) as a Marine Protected Area (MPA). This large ecologically unique ocean area located approximately 150 kilometres off the west coast of Vancouver Island, is now Canada's largest Marine Protect Area. Covering 133,017 square kilometers, the Tang. gwan — ḥaick including more than 47 seamounts, and all known confirmed hydrothermal vents in Canada.

Climate change is the defining issue of our times and drives all of our decisions. To understand the impacts and outcomes of climate change, Canada is continuing long term monitoring programs like our Line P program as well as more localized monitoring and modeling in the North Pacific. Programs that can better inform actions to rebuild Pacific salmon and understand the impacts of climate change on the marine ecosystem. In December of 2023, Canada's Minster of Fisheries and Oceans, the Honourable Diane Lebouthillier announced the investment of \$1.15M to PICES for support of the BECI project. It is hoped that this foundational investment will support the development of the BECI science plan and further development of this collaborative project that will help to better integrate environmental data sets and support more informed decisions.

It was encouraging to see the presentations and posters presented here at PICES-2024, as it is each year. The influx of ECOP members into the PICES family and the energy and enthusiasm they bring is evident once again this year.

Canada is pleased to announce that we have agreed to host PICES 2026 in Nanaimo, British Columbia. This will be the 3rd time that Nanaimo has played host to the PICES annual general meeting, and we are grateful to able to host on the traditional territory of the Snuneymuxw First Nation. Canada will confirm the dates for PICES 2026 in the near future.

Canada would like to thank Prof. Curchitser for his leadership and steady hand for the past four years as PICES chair. He has led through a challenging time with the return to in-person meetings, the adjustment to hybrid meetings and of course the initiation and management of the External Review which will set the course for PICES for the next decade or more. These are impressive accomplishments and Canada looks forward to having him continue to offer wise advice to the Governing Council as he assumes the past chair role.

Once again Canada would like to acknowledge that all parties and the marine science community are very well supported by the PICES Executive Secretary and Secretariat staff. The organization and management of this event, without the full support of a host country, is a greater challenge than usual and once again they have exceeded expectations. Canada wants to express its sincere appreciation to the Secretariat for their hard work in the organization of PICES 2024 and on behalf of all Canadian members of PICES, I extend our thanks and sincere appreciation to all those who participated and collaborated over the past week to make this meeting a success and we look forward to the next annual meeting, being hosted by the Japan in Yokohama.

Thank-you			

Opening Remarks by Ms. MARUYAMA Fumie,

the Delegation of Japan to the Governing Council Meeting,

PICES Annual Meeting 2024,

November 2-3, 2024, at Hawaii Convention Center, Honolulu, Hawaii, USA

Dear Mr. Chairman,

Distinguished Governing Council members,

It is my great pleasure to attend the PICES Governing Council Meeting here in Honolulu. On behalf of the Japanese delegation, I would like to express my sincere gratitude to the Secretariat and the US delegation for their efforts in preparing this annual meeting. I am certain that, with the chairman's leadership and active discussions among all parties involved, this meeting will be successful and fruitful.

Japan highly values PICES's role in promoting international scientific cooperation and its efforts in the field of marine science.

We recognize that marine science is becoming increasingly crucial in addressing resource management and climate change monitoring and mitigation, especially in the context of global population growth.

Next year, the UN Ocean Conference 2025 will be held in Nice, France, from June 9 to 13, aligning with PICES's mission and supporting SDG 14 "Life Below Water" on ocean sustainability.

The UN has also designated 2021-2030 as the Decade of Ocean Science for Sustainable Development.

Japan recognizes that science-based decision-making by ocean observation and data sharing is essential to achieving sustainable development for our oceans. As such, Japan's national committee for the UN Ocean Decade has regularly held liaison meetings since its establishment, facilitating information sharing and exchange of opinions on relevant global trends related to the UN Ocean Decade.

Accelerating global climate action is indispensable to improve marine environments. The latest IPCC report states for the first time that it is "unequivocal" that human influence has warmed the atmosphere, ocean, and land. In addition, the report points out that climate change is increasingly exerting severe impacts on a wide range of spheres including ecosystems.

I would also like to take this opportunity to briefly explain the recent situation surrounding Japan's fisheries sector. Sea surface temperatures around Japan have reached record highs for three consecutive seasons. Poor catches of key species like salmon and frequent aquaculture damage from large-scale red tides are increasingly evident, likely due to changes in the North Pacific marine environment. Such changes are becoming pressing concerns for the public as well.

In this context, we believe that promoting research under the PICES framework and exchanging information among member countries is more vital than ever. We have high expectations for the enhancement of PICES functions, following the results of the recent external review.

The Government of Japan, as a maritime nation, remains committed to actively contributing to and cooperating with PICES activities. Japan is scheduled to host PICES 2025 annual meeting in Yokohama from November 7 to 16 next year, under the theme, "Innovative Approaches and Applications to Foster Resilience in North Pacific Ecosystems." We will make further efforts to be able to provide a meaningful discussion opportunity for all future participants.

Last but not least, I hope today and tomorrow's discussions will strengthen various processes necessary for the successful implementation of PICES activities and deepen mutual understanding, further promoting future cooperation among member countries.

Thank you very much.

Fangli Qiao, Governing Council member for China

Good morning, everyone,

Thank you.

I am Fangli QIAO, from the First Institute of Oceanography, MNR of China. I would like to introduce my colleague, Ms. Wei ZHENG, who represents Ms. Rui ZHENG of MNR of China.

China would like to take this opportunity to mention three points. Firstly, China fully agrees and supports the External Review Committee Report. This will be a great opportunity for PICES to refine itself and enter a new era. So, we would suggest that the PICES community considers and discusses this report seriously. More importantly perhaps, to really do something according to the external review report recommendations. Secondly, China would like to congratulate the Secretariat on the success of the 2024 annual meeting. And, lastly, we would like to express our high appreciation to Prof. Enrique Curchitser, Chair of PICES, for his strong leadership. During the past four years, it has been not easy, PICES has been facing serious problems including the COVID-19 pandemic. Enrique has led PICES very smoothly and successfully.

Se-Jong Ju

Republic of Korea Governing Council Member

Mr. Chairman, Executive Secretary, and Governing Council Members,

On behalf of the Government of the Republic of Korea, I am Se-Jong Ju from the Korea Institute of Ocean Science and Technology (KIOST). It is an honor to participate in the 2024 PICES Annual Meeting in Hawaii.

First, I would like to extend my deepest gratitude to the outgoing Chair, Prof. Enrique Curchitser, for his exceptional dedication and hard work over the past four years. Despite the significant challenges posed by the COVID-19 pandemic, his leadership and commitment have enabled PICES to achieve considerable progress.

His dedication and contributions have inspired all member states, and I am confident that the impact of his leadership will continue to shape our work in the years ahead.

As we welcome the new Chair today, I'm excited to work with him or her and help make PICES successful over the next four years. Korea is fully committed to being an active partner and supporting this journey all the way.

This year, we have witnessed unprecedented weather anomalies around the globe, resulting in severe loss of life and property. Korea, in particular, has endured one of the hottest summers on record, underscoring the urgent reality of climate change.

The rapid rise in sea temperatures has caused significant damage to our aquaculture industry and a steep decline in fish production, severely impacting the livelihoods of our fishermen.

These events serve as a strong reminder that the effects of climate change on marine ecosystems pose an escalating threat. In this context, the role of marine science is more critical than ever. The scientific insights provided by PICES are essential in informing policy decisions and shaping our on-the-ground responses.

I would also like to express my support for the discussions held during yesterday's special panel, which outlined the scientific directions for the next decade. It's really important that PICES continues to provide precise, actionable scientific information to its member states, enabling us

to develop concrete solutions that can guide our actions.

These discussions are pivotal in enhancing PICES' capacity to forecast and address the rapidly evolving marine and ecological changes driven by climate change. Korea will be actively involved in this effort, making sure that PICES stays a leader in marine science in the North Pacific.

Lastly, I want to sincerely thank the PICES Secretariat staff for their hard work in making this year's meeting a success, even without a host country. Your dedication has made this event possible, and we are truly grateful for everything you have done.

Thank you.			

Vladimir Radchenko, Alternate member for Russia

Dear Mr. Chairman, Ms. Executive Secretary, PICES Governing Council members, colleagues, and guests:

I am Vladimir Radchenko, Head of Department on International Scientific and Practical Cooperation and Prospective Projects at the Pacific Branch of the All-Russian Institute on Fisheries and Oceanography, which is well known under the abbreviated name TINRO. I am happy to represent the Russian fishery science at the 33rd PICES Annual Meeting in the beautiful City of Honolulu in the hospitable State of Hawaii.

Currently, fisheries and aquaculture require more efforts in field observations, monitoring, and research in conditions of changing climate, related environmental extremes, and technical challenges. Fortunately, Russian fishery science continues conducting research in the far-eastern seas and northwestern Pacific Ocean in due course. Annual cycle of research cruises was successfully completed in the last year and is still ongoing in 2024. Far-eastern sardine boom is a new event in the northwestern Pacific Ocean that determines development of Russian fishery in the last years. Our fishermen need recommendations on how to utilise growing sardine stock in a full degree and how long this boom period will last.

Regional cooperation of the Russian fishery science with scientists from the neighbouring Asian countries is developing. This cooperation provides with a great support to our efforts in marine aquaculture development, and formation of understanding on oceanographic processes driven by atmospheric and ocean variability in subtropical latitudes.

The government of the Russian Federation highly supports the marine science development. This year, the All-Russian Institute on Fisheries and Oceanography obtained a status of the State Scientific Center that promises expanding of funding and research opportunities. In 2025, we

will celebrate the 100-year anniversary of the TINRO. We are looking forward to celebrating it with the new scientific achievements and also with the wide participation in the PICES Annual Meeting in Yokohama, Japan.

Thank you for your attention

United States' Opening Remarks to the PICES Governing Council November 2, 2024

Good morning, PICES Chair, Madam Executive Secretary and fellow Governing Council members.

We begin by expressing our sincere appreciation to PICES' Chair, Prof. Enrique Curchitser, Dr. Sonia Batten (PICES Executive Secretary), Dr. Sanae Chiba (PICES Deputy Executive Secretary) and everyone at the PICES Secretariat for their leadership in yet another successful PICES Annual Meeting. This year, we would like to particularly underscore our thank you for the PICES Secretariat's efforts in hosting this year's Annual Meeting.

We also would like to take the opportunity to thank Prof. Curchitser for serving as PICES Chairman for the 2020-2024 period, and Dr. Chul Park for serving as past-Chair. While these were challenging years for PICES they were also very rich and rewarding. We thank PICES Leadership and the Secretariat for deftly adapting to a worldwide pandemic and ensuring PICES' objectives stayed on course despite limited in-person interactions. This year's Annual Meeting, the 2nd in-person post-COVID, was filled with seminal science presentations on topics in physical, biogeochemical and social sciences, as well as a large – and always energizing – participation and contributions by Early Career Ocean Professionals (ECOPs).

Other significant changes should be noted as taking place this year:

- 1. This year marks the beginning of the final phase of PICES' decade-long Integrative Science Program: FUTURE ("Forecasting and Understanding Trends, Uncertainty and Responses of North Pacific Marine Ecosystems"). While FUTURE is expected to be completed in the next year or two, we wish to recognize and congratulate all those who have contributed to the Program's successes:
 - The efforts in the FUTURE Program resulted in many science contributions that captured and defined PICES' priorities from observations, to understanding, to working toward generating management advice.
 - FUTURE also created transdisciplinary frameworks such as the *SEES* (Social-Ecological-Environmental Systems) effort that effectively encapsulate a forward way of thinking as we the science and management communities take steps toward a more integrated and fully participatory loop of science-to-management-to-communities-to science.

- FUTURE's successes laid a solid foundation for PICES' next Integrative Science Program. Congratulations once more!
- 2. This year also turns the page to a new chapter in PICES with the opportunity for introspection and open and candid discussions resulting from the External Review Committee's "PICES at 32" Report. We thank the External Review Team, chaired by Prof. Eileen E. Hofmann, and its members: Prof. David Checkley, Prof. Fangli Qiao, Dr. Jörn Schmidt, and Dr. Sinjae Yoo for their insights and advice.

Among its four main recommendations, the "PICES at 32" Report invites us to enhance and expand the role of PICES to provide transformative and actionable science-based information relevant to the Contracting Parties. This recommendation speaks directly to us, the Governing Council, and requires that we be clear in stating our needs and to assist and engage more directly in PICES' evolution. The US delegation commits to respond to this challenge working alongside our partner member countries and the PICES Secretariat.

Addressing climate change impacts on society remains among the top priorities of the United States. Over US\$1.2Billion have been made available (under the Inflation Reduction Act) to address priorities including Climate-Ready Fisheries, Habitat Restoration, and Arctic Research, among others. The United States is committed to the development of operational ocean modeling and decision support systems needed to reduce impacts, increase resilience, and help adapt to changing ocean conditions.

The United States reiterates its commitment to furtherance of open exchange of ideas within the international science and technology community. In coordination with our partners, we will endeavor to uphold our commitments to ensuring the sustainment of international scientific and technical fora dedicated to fostering international collaboration. PICES is a critical partner in advancing the climate change charge and we are committed to investing and partnering with PICES to achieve our shared goals.

On behalf of the United States delegation, we again thank the Secretariat for their dedication to our shared vision for PICES. We look forward to a productive 2025 and to the next Annual Meeting in Yokohama, Japan!

Thank you,

Cisco Werner, U.S. Government Delegate to the PICES Governing Council

Jack Barth, U.S. Academic Delegate to the PICES Governing Council

Amanda Williams, U.S. Department of State and Advisor to the U.S. GC Delegation

Kristen C. Koch, Chair of the PICES F&A Committee and Advisor to the U.S. GC Delegation

GC Endnote 3

Adopted Agenda

PICES Thirty-third Annual Meeting (PICES-2024) Governing Council Honolulu, USA

Day 1 (November 2nd)

- 1. Welcome and opening remarks by representatives of Contracting Parties and the Chair of PICES
- 2. Adoption of agenda and meeting procedures
- 3. Reports from strategic partners
- 4. Consideration of non-payment of Annual Fees by member countries
- 5. Executive Secretary's report on administration for 2023–2024
 - a. Managing the budget of the Organization
 - b. Implementation of GC Decisions
 - c. Administering the Secretariat office and personnel
 - d. Planning and organizing meetings of the Organization
 - e. Coordinating the publication program of the Organization
 - f. Relationships with key organizations
- 6. Report and recommendations of the Finance and Administration Committee
 - a. Budget and financial considerations
 - b. Schedule, structure and financing of future Annual Meetings
- 7. Discussion on External Review Panel report and next steps
- 8. Elections
 - a. Chair and Vice Chair of PICES
- 9. Executive Secretary Position
- 10. PICES Chair Award
- 11. Other business
 - a. Scheduling regular intersessional GC meetings

Day 2 (November 3rd)

- 12. Report on PICES Special Projects
 - a. SEATurtle
 - b. FishPhytO
- 13. Report and recommendations of the Science Board
- 14. Continuation of discussion of External Review Panel report and next steps.