## WGNARS - Working Group on the Northwest Atlantic Regional Sea

**2019/FT/IEASG06** The **Working Group on the Northwest Atlantic Regional Sea (WGNARS)**, is chaired by Sean Lucey, USA and Jamie Tam, Canada, will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	Venue	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2020	8 May	Online meeting	No reporting	Incoming Canadian Chair Jamie Tam from January 2020
Year 2021	7-10 June	Online meeting	No reporting	
Year 2022	TBD	Woods Hole, USA	Final report by TBD to IEASG	New USA Chair will be appointed

## ToR descriptors

ToR	DESCRIPTION	BACKGROUND	SCIENCE PLAN CODES	Duration	EXPECTED DELIVERABLES
a	Report on recent activities related to Integrated Ecosystem Assessments (IEA) within the United States, Canada, and Regional Fisheries Management Organizations	a) Science Requirements b) Advisory Requirements c) Requirements from other EGs	1.1, 6.5	3 years (2020, 2021, 2022)	Regular reports from US/Canada/NAFO
b	Expand the work already accomplished by WGNARS into other regional ecosystems and/or multiple ocean uses while considering the roles of women and remote, low income, and indigenous communities in the system		1.2, 2.1, 6.5	3 years (2020, 2021, 2022)	<ul> <li>Refined understanding of the system through conceptual models</li> <li>Exploratory application of risk assessment to a Canadian region</li> <li>Analysis of cumulative effects including, for example, offshore energy</li> </ul>
С	Increase the cross disciplinary capacity of IEAs in the region by engaging with scientists and stakeholders from under-represented disciplines and research communities, including those in the social sciences		2.7, 6.6, 7.5	3 years (2020, 2021, 2022)	List of research products developed from reaching out and including members of under-represented disciplines and research communities (e.g. papers, reports, indicators)
d	Continue to evaluate and test indicators which are responsive to a changing environment or other conditions, especially those that indicate shifting resources, changes in human		1.1, 7.1	3 years (2020, 2021, 2022)	<ul> <li>Tested and evaluated new indicators that are responsive to a changing environment or other conditions (e.g. SMART indicators)</li> <li>Completed threshold analysis of existing indicators</li> <li>Framework for developing</li> </ul>

	behavior, habitat, or			spatial indicators
	extreme events, or can be			
	used as early warning			
	signs of a pending change (leading indicators)			
	(leading indicators)	·		
e	Improve management	2.7, 6.1, 6.4	1 year (2022)	<ul> <li>Worked example of a</li> </ul>
	advice by developing			decision support tool
	decision support tools			
	that reconcile multiple			
	ocean uses by explicitly			
	addressing tradeoffs			
	within an ecosystem			
	context (e.g. structured			
	decision making,			
	management strategy			
	evaluation, scenario			
	planning)			
	Develop best practices for	4.1, 4.2, 4.3	1 year (2020)	Workshop on best practices
f	increasing efficiency in			for improving efficiency,
	product development that			transparency, and workflo
	can lead to improved			<ul> <li>Timely provision of</li> </ul>
	responsiveness to			information to managers (e
	management requests			annual SOEs, Risk
				assessment)
				<ul> <li>Improved data accessibility</li> </ul>
			<u> </u>	Manuscript on best practice
g	Develop best practices for	1.1, 4.2, 6.4	1 year (2021)	<ul> <li>Examples of effective</li> </ul>
	communicating with a			communication tools for
	diverse group of			various audiences
	stakeholders (i.e.,			
	managers, scientists,			
	public), recognizing that			
	effective communication			
	tools may differ across			
	audiences			

## Summary of the Work Plan

Year 1	ToRs a, b, c, d and f		
Year 2	ToRs a, b, c, d, and g		
Year 3	ToRs a, b, c, d and e		
Supporting inform	ation		
Priority	The current activities of this Group will lead ICES into issues related to the ecosystem effects of fisheries, especially with regard to the application of the Precautionary Approach. Consequently, these activities are considered to have a very high priority.		
Resource requireme	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.		
Participants	The Group is normally attended by some 20–25 members and guests.		
Secretariat facilities	None.		
Financial	No financial implications.		
Linkages to ACOM groups under ACOM	· · · · · · · · · · · · · · · · · · ·		
Linkages to other co or groups	mmittee: There is a very close working relationship with all the groups in the IEASG.		
Linkages to other organizations	The NAFO Working Group on Ecosystem Science and Assessment has made progress towards similar objectives and will be a resource for collaboration.		