## 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	by correspondance	Interim report by 1 June to IEASG, ACOM and SCICOM	Incoming Canadian Chair Jamie Tam from January 2020
Year 2021	TBD	Halifax, Canada	Interim report by TBD to IEASG	
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 extreme events, or can be			spatial indicators	
	used as early warning signs of a pending change (leading indicators)				
e	Improve management advice by developing 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)	2.7, 6.1, 6.4	1 year (2022)	Worked example of a decision support tool	
f	Develop best practices for increasing efficiency in product development that can lead to improved responsiveness to management requests	4.1, 4.2, 4.3	1 year (2020)	<ul> <li>Workshop on best practices for improving efficiency, transparency, and workflow</li> <li>Timely provision of information to managers (e. annual SOEs, Risk assessment)</li> <li>Improved data accessibility</li> <li>Manuscript on best practices</li> </ul>	
g	Develop best practices for communicating with a diverse group of stakeholders (i.e., managers, scientists, public), recognizing that effective communication tools may differ across audiences	1.1, 4.2, 6.4	1 year (2021)	Examples of effective communication tools for various audiences	

## Summary of the Work Plan

Year 1 To	a, b, c, d and f		
Year 2 To	ToRs a, b, c, d, and g		
Year 3 To	ToRs a, b, c, d and e		
Supporting informa	tion		
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 requiremen	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 as groups under ACOM	g .		
Linkages to other com or groups	nmittee: 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.		