

The Global Ocean Observing System



#### GOOS Regional Alliance Council Meeting 16 April 2025, online

#### Canadian Integrated Ocean Observing System (CIOOS) Regional and National Updates

Brad de Young, CIOOS Pacific Anne-Sophie Ste-Marie, St. Lawrence Global Observatory Shayla Fitzsimmons, CIOOS Atlantic

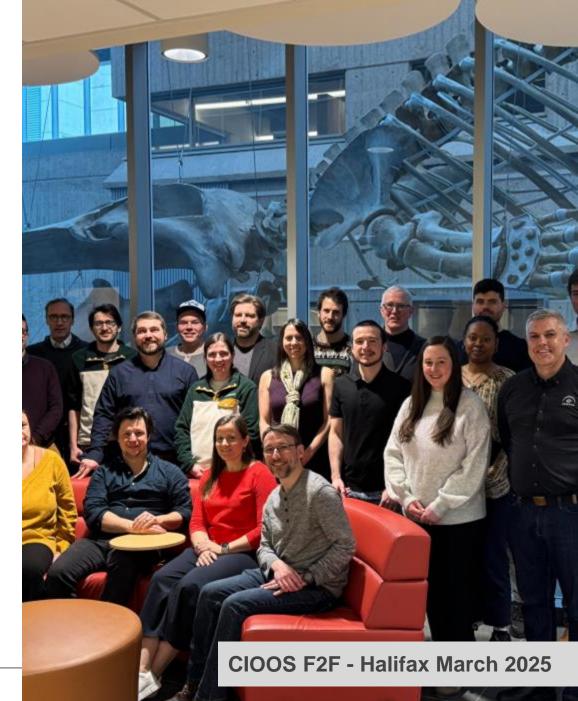
CIOOS

# Progress and Achievement in 2024/2025

- Navigating uncertainty
  - Tula Foundation had offered funding for a national office
  - This unlocked additional funding from DFO
  - Tula withdrew, had to renegotiate with DFO
  - Stuck for most of the year, shifting infrastructure from Tula and rebuilding what was lost
- Coordinating Office
  - MEOPAR forward and provided some funding for Coordinating office
  - DFO provided additional funding
  - Presently recruiting a Director and additional staff
- Regional Associations
  - DFO funding for three years (previously two years) to March 31, 2027
  - DFO strongly supports CIOOS
  - MEOPAR provides key funding to CIOOS Regions
- Present activities
  - CIOOS F2F Halifax March 2025
  - Building Bridges : AI tools for CIOOS
  - Supporting acoustic data and QA/QC
  - Discussing a public API





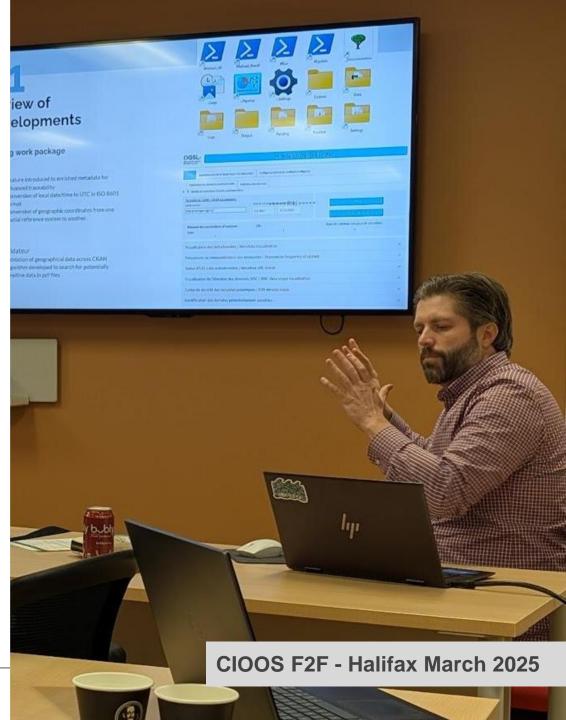


## Work plan 2025 and onward

- Developing New Strategic Plan 2026-2031
- Setting up the Coordinating Office
  - New national resources to increase efficiency, effectiveness
- Interregional collaboration opportunities
  - Transforming Climate Action program
  - AI in CIOOS tools: metadata generation including EOVs, refined data research,
  - Common documentation (training, DMP, resources)
- Communities of practice (Modelling, OA, ...)
- Sustainability : increase and diversify funding
- Extension (Arctic, Great Lakes)







## **Challenges & Opportunities**

- Changing Political landscape
  - Canadian Federal Government Election on April 28th
- Changing landscape in US-based partner organisations
- New CIOOS Coordinating Office as opportunity to launch CIOOS into a new momentum
- Need for Information Services to serve wider audience demonstrate value







## **Supports needed from GOOS**

- International standardization
  - Standards from GOOS and international coordination to converge on standards, methodologies and software/data tools
- International interoperability
  - Ocean InfoHub as an example
  - Help coordinate increased interoperability of CIOOS regions with OBIS, GTS, other international systems
  - Would benefit from study cases to show value of international data interoperability past the data integration step ?

Biogeochemical						
Dissolved Organic Carbon	CO <sub>2</sub> Inorganic Carbon	N <sub>2</sub> O Nitrous axide	N P. Si Nutrients	O <sub>2</sub> Cxygen	Particulate mat- ter	
12 13 Stable carbon isotopes	CFC-11 • CFC-12 Transient trac- ers •					
Cross-disciplinary						
Marine debris	Ocean colour 3	)))) Ocean sound ©				
Physical						
Ocean Boltom Pressure	Ocean surface heat flux	Ocean surface stress	Sea Ice	Sea State	Sea Surface Height	
	Ω					
CIOOS Data Catalogue organized by GOOS EOV						
Sea Surface Salinity	Sea Surface Temperature	Subsurface Currents	Subsurface Salinity	Subsurface Temperature	Surface Currents	
m	<b>m</b>	3		<b>617</b>	0	



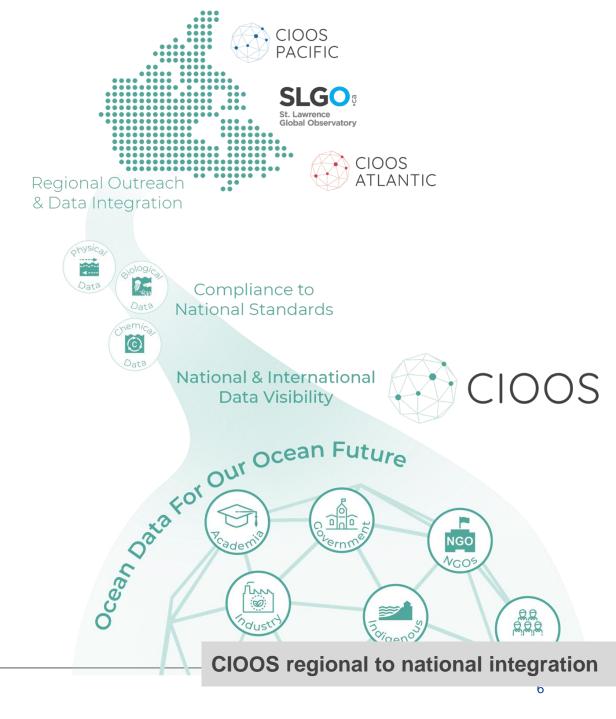


#### **Best Practices/Lessons** Learned

- Data is important, but information services / tools help broaden reach
- Delicate but necessary to maintaining a balance between back-end (development and optimization of cyberinfrastructure and security) versus improving front-end enduser tools and features
- Resilience capacity needed to face uncertainty and funding delays
  - Have knowledge in multiple places
  - Interregional collaboration accelerated









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## Thank you









International Science Council

