



Capacity Building Report

To the United States-Canada Hydrographic Conference 47

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Developments in US and CA

- US and CHS both at the “mature” level in terms of the IHO Capacity Building Strategy,
- US and CA do not seek IHO CB program support and resources
 - IHO CB Fund is very limited with considerable application for support against limited resources
- We continue to require attention to build our workforces of the future which is fostering new programs and efforts
- Active and frequent personnel and technical exchanges will enhance hydrographic services
- Establishment of Center of Excellence (UNH)
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Recognizing centrality of workforce development

STRATEGIC GOAL 3

Enhance and sustain a highly skilled, diverse, and thriving workforce

Our mission is only as strong as the people and teams we have to execute it. Investing in generating, recruiting, developing, and retaining a highly skilled and passionate workforce that reflects the diversity of our nation will ensure Coast Survey's ability to meet the current and future needs of our stakeholders as our ports and waterways are under increasing pressures.

Strategic Objective 3.1

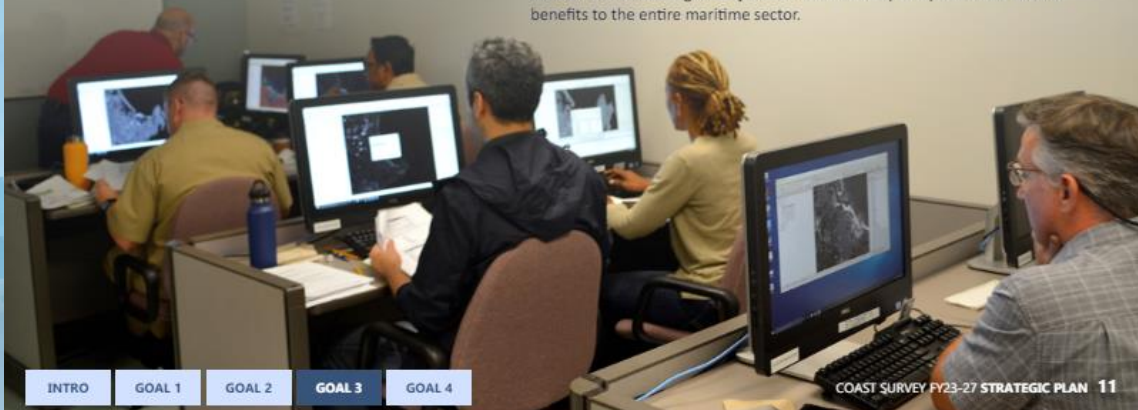
Fill priority staffing gaps and recruit a diverse workforce that reflects the population we serve in order to meet current and future mission needs

Coast Survey's success depends on the recruitment and retention of a strong, capable workforce. While vacancies create immediate mission execution challenges, they also provide an opportunity to build a stronger, more capable, and more diverse workforce in order to better meet the needs of our customers.

Strategic Objective 3.2

Design and implement onboarding, training, and career development programs to sustain core functions and supporting activities

As the organization evolves to fully implement its vision and execute its mission, we must also adapt our workforce to meet changing operational needs. Coast Survey will review the training and career development needs of the office, examine existing training programs to determine applicability and identify gaps, and develop a comprehensive training plan to ensure the workforce is ready and able to fully support Coast Survey into the future. With the development of the Center of Excellence for Operational Ocean and Great Lakes Mapping, internships and workforce training in conjunction with industry will yield a new level of benefits to the entire maritime sector.



CHS Workforce of the Future Report (May 2023)

- I. The Future Role of Hydrography;
- II. The Changing Technological Context; and
- III. People, Skills, and Organizational Culture

3.0 People & Service Culture /

Culture axée sur les gens et le service

3.1 Align CHS service delivery with client expectations /

Axer la prestation des services du SHC sur les attentes de la clientèle

3.2 Effectively use performance agreements to set realistic work objectives,

timelines, training goals, and accountabilities /

Utiliser judicieusement les ententes de rendement afin de fixer des objectifs de travail, des échéances, des buts de formation et des responsabilités réalistes

3.3 Promote inclusivity throughout the organization /

Promouvoir l'inclusion dans toute l'organisation

3.4 Acknowledge, empower, engage and support leadership at all levels /

Reconnaître, promouvoir, mobiliser et soutenir l'esprit de leadership à tous les échelons

3.5 Engage staff by improving internal communications /

Mobiliser le personnel par de meilleures communications internes

3.6 Address concerns raised by employees in various forms, including the Public Service Employee Survey /

Aborder les préoccupations des employés exprimées par différents moyens, dont le Sondage auprès des fonctionnaires fédéraux

3.7 Advance Reconciliation by engaging with Indigenous Peoples on our field survey and production initiative /

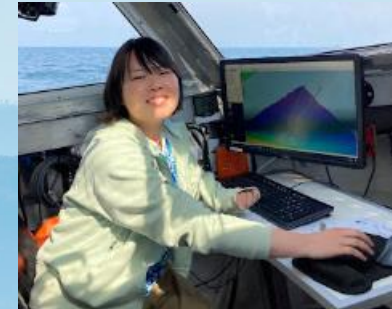
Promouvoir la réconciliation en invitant les peuples autochtones à participer à notre initiative d'études sur le terrain et de production

NOAA support to EWH

- Participants spend two to three weeks aboard to:
 - Gain familiarity with NOAA ships and hydrographic operations
 - Operate NOAA commercial hydrographic equipment and software (Kongsberg EM2040s, EM710s, Klein 5000s, CARIS, QPS, Hypack, ESRI) and inhouse tools such as PydroExplorer, QCTools, etc
 - Become familiar with with NOAA's Hydrographic Survey Specifications and Deliverables and survey execution thereof, including quality control and assurance procedures
 - Become familiar with NOAA's data management processes and procedures
 - Potentially start or earn some NOAA hydrographic shipboard qualifications such as small boat crewmember, shipboard hydrographer in charge, etc)
 - Gain general understanding of NOAA's mission and programs and the importance of hydrography beyond producing nautical charts.

NOAA support to EWH with At-Sea Experiences

- 2022 Participants
 - [Sub-Lieutenant Mercy Ogunbamila \(Nigeria\)](#)
 - [Chiaki Okada \(Japan\)](#)
 - [Firosa Tomohamat \(Suriname\)](#)
- 2023 Participants
 - [LTjg Liezel Bastez \(Philippines\)](#)
 - [Victoria Obura \(Kenya\)](#)
 - [Lieutenant Lucia Cattana \(Argentina\)](#)
- 2024 Participants
 - LT Camila Beltrán Martínez (Colombia)
 - Ms. Naomi Naituivau (Fiji)
 - Ms. Chrysanthi Kleanthous (Cyprus)
- 2025...
- 2026...



Community Hydrography & E-learning

- Community Hydrography POCs:
 - Anthony.Klemm@noaa.gov (NOAA)
 - Jeffrey.Marshall@noaa.gov (NOAA)
 - Professor Brian Calder brc@ccom.unh.edu (University of New Hampshire Joint Hydrographic Center)
 - _____ (University of South Florida Center for Ocean Mapping and Innovative Technology ([COMIT](#)))
- E-learning POCs:
 - marc.delisle@dfo-mpo.gc.ca
 - Julia.Wallace@noaa.gov

A home for USCHC input to IHR?

- IHR plays a strong role in the future of hydrography and the IHO
- US and CA have among the strongest communities from which to pool contributions to the IHR
- see [USCHC47-23](#) INFO “Update on International Hydrographic Review Report)
- USCHC IHR contribution planning has been somewhat ad hoc and an orphan
- A consideration:
 - house the IHR effort within the USCHC CB function to provide accountability within an USCHC engagement structure?

Awareness — Calendar

- UNH review week of **July 15**
- **Fall** UNH shore based opportunity to observe/ participate in the DriX project
- technical exchanges anytime
 - Example- Kray Robichaud technical visit to US in February 2024
- **March 2025** US Hydro Wilmington North Carolina
- **Summer 2025** NOAA Ship Thomas Jefferson in the Great Lakes, DriX field work
- Other...

Thank you