# CANADIAN COAST GUARD

Integrated Business and Human Resource Plan



171355

HUDSON

2021-2022 to 2023-2024

.

0

2022-23 Update

# Canada

# **Table of Contents**

COMMISSIONER'S MESSAGE				
OUR ORGANIZATION: WHO WE ARE AND WHAT WE DO				
Mission	4			
People, Services and Mandate	4			
Public Service and Organizational Values 5				
Diversity, Equity and Inclusion	6			
CANADIAN COAST GUARD				
STRATEGIC PILLARS				
Strategic Pillar 1: Our People	11			
	40			
<b>Objective 1: Attraction and Recruitment</b>	13			
Objective 1: Attraction and Recruitment Objective 2: Training	13			
•				
Objective 2: Training	15			

## **Published by:**

Integrated Business Planning Canadian Coast Guard Fisheries and Oceans Canada Ottawa, Ontario K1A 0E6

2021-2022 to 2023-2024 Canadian Coast Guard Integrated Business and Human Resource Plan

Available on the Web: www.ccg-gcc.gc.ca Également disponible en français © His Majesty the King in Right of Canada, as represented by the Minister of the Department of Fisheries and Oceans, 2023

DFO/21-2045 Cat. No. Fs151-21E-PDF ISSN 2816-7120

Strategic Pillar 2: Our Assets	18
Objective 1: Delivering the New Fleet	20
Objective 2: Operating and Maintaining the New Fleet	23
Objective 3: Vessel Life Extension	23
Objective 4: Shore-Based Assets	26
Strategic Pillar 3: Our Services	28
Objective 1: Fulfilling Coast Guard's Contribution to the Oceans Protection Plan	29
Objective 2: Major Resource Projects	32
Objective 3: Reviewing Levels of Service	32
Objective 4: Program Readiness	33
Objective 5: Modernizing Marine Navigation Program and Safety Services	33
<b>Objective 6: Enabling Innovation</b>	37
Strategic Pillar 4: Our Governance	40
Objective 1: Strengthening National Policies, Processes, Procedures and Systems	41
Objective 2: Engaging with Industry and Other Coast Guard Stakeholders	46
Objective 3: Engaging with Indigenous Partners	49
Objective 4: Supporting the Implementation of the Arctic Region	51
BUDGET: DAILY OPERATIONS	
AND LONG-TERM INVESTMENTS	53
STRUCTURE	54

## COAST GUARD SECTORS, DIRECTORATES, PROGRAMS AND REGIONS

Operations Sector	55
<b>Operations Sector Structure</b>	55
<b>Operations Sector Programs and Services</b>	56
Incident Management	57
Fleet Operational Capability	57
Search and Rescue	57
Environmental Response	57
Vessels of Concern	58
Icebreaking Services	58
Aids to Navigation	59
Waterways Management	59
Maritime Security	60
Marine Communications and Traffic Services	60
e-Navigation	61
Innovation, Planning and Engagement	61
Shipbuilding and Materiel Sector	62
Shipbuilding and Materiel Sector Structure	62
Shipbuilding and Materiel Sector Programs	62
Fleet Procurement	63
Fleet Maintenance	63
Shore-Based Asset Readiness	63
Personnel Branch	63
Personnel Branch Structure	64
Personnel Branch Programs	64
Canadian Coast Guard College	65
REGIONAL OVERVIEW	66
Arctic Region	67
Atlantic Region	69
Central Region	70
Western Region	71

ANNEX A – CANADIAN COAST GUARD COMMITMENTS	72
ANNEX B – CANADIAN COAST GUARD PEOPLE STRATEGY	80
ANNEX C – CANADIAN COAST GUARD DEMOGRAPHICS	84
ANNEX D – CANADIAN COAST GUARD FINANCIALS	86
ANNEX E – CANADIAN COAST GUARD RISK PROFILE: ASSESSMENT AND STATEMENTS	89
SHOWCASE ITEMS	
Cultural Awareness Training in the Arctic Region	7
Celebrating the Canadian Coast Guard's 60 <sup>th</sup> Anniversary	10
Adopt a Ship Program	14
The Canadian Coast Guard People Strategy	17
Commemorating the CCGS Hudson	19
Preparing for the Future Fleet	22
New Light Icebreaker	25
Space-Based Technology	27
Increasing Resilience to Climate Change	31
The Evolution of Global Navigation Satellite System Augmentation in Canadian Waters	36
Fleet Decarbonization	39
Implementation of an Autonomous Vehicles Program	45
Inuit Nunangat Policy Implementation	52



# Commissioner's Message

On behalf of the Canadian Coast Guard (Coast Guard), I am pleased to present the 2022-23 update to the 2021-22 to 2023-24 Canadian Coast Guard Integrated Business and Human Resource Plan. In this update, the four strategic pillars of People, Assets, Services and Governance remain unchanged, as do the 19 objectives. The 2022-23 update provides an opportunity for us to take stock and refresh our commitments to keep us on a steady threeyear trajectory, and, equally important, allows us to continue supporting Government of Canada initiatives such as economic recovery, Canada's commitments to reconciliation, the Greening Government Strategy, fleet renewal and the Oceans Protection Plan. The successful implementation of these initiatives will yield benefits to the Coast Guard and all Canadians and contribute to sustaining our partnerships across all levels of government, including Indigenous partners.

The COVID-19 pandemic and climate change have impacted our economy, our marine environment, and the resilience of our supply chain. Budget 2022 confirmed the Government of Canada's commitment to continue to invest in marine safety so that our economy can continue growing while protecting the environment. A total of \$1.1 billion over the next nine years will be allocated to the Department of Fisheries and Oceans and the Coast Guard to renew and expand the Oceans Protection Plan. Building on the ongoing funding received in 2016, the Coast Guard will continue working in partnership with Canadians and Indigenous peoples to ensure continued confidence in our marine safety system. In this 2022-23 update, it is important to showcase how the Coast Guard continues to keep pace with the technological and regulatory environment as well as Government of Canada priorities. Much of this work requires the Coast Guard to innovate and explore new ways of delivering our resources that are increasingly cost effective, safer for our seagoing and shore-based personnel, and better for the environment, including doing our part to reduce the impact of climate change. In this update, you can learn about Coast Guard initiatives that will advance Greening Government and decarbonization, how space-based technology will be leveraged, how the Coast Guard is working to support programming through the use of remotely piloted aircraft systems, further advancing our Coast Guard People Strategy, including introducing tech-savvy elementary school students to a career working on Coast Guard ships, about the new light icebreaker recently acquired to join the Coast Guard fleet, and more.

2022 is an important year for the Coast Guard as we mark the milestone of 60 years as an organization devoted to ensuring the safety of mariners on our waters, protecting the marine environment, and supporting economic growth through the safe and efficient movement of maritime trade in and out of Canada's waters. The theme of the Coast Guard's 60<sup>th</sup> anniversary is "Celebrate the Past, Navigate the Future", and this 2022-23 update is an opportune time for proud and celebratory reflection of our accomplishments over the past six decades. The images on the cover of this 2022-23 update are an acknowledgment of our rich history, with the pairing of our 60<sup>th</sup> anniversary image and a photograph of the CCGS Hudson, an offshore oceanographic science vessel that entered service 59 years ago and proudly served Canadians over the entire ensuing period of the Coast Guard's history. The CCGS Hudson is a historic vessel whose career mirrored and helped shape the Coast Guard's past 60 years, so it is appropriate to highlight this vessel during our anniversary year. The CCGS Hudson and its many crews delivered 59 years of service to Canadians, showing remarkable longevity and resilience through a changing world and marine environment. This offshore oceanographic and hydrographic survey vessel made several significant scientific voyages, and was the first vessel to circumnavigate North and South America in a single trip. This year, our 60<sup>th</sup> anniversary, we are taking the opportunity to recognize the ship's decades of service, its many accomplishments, and celebrate all of its past crews. The CCGS Hudson has done us proud!

This Integrated Business and Human Resource Plan continues to show how we will navigate the future while celebrating our past. I remain proud of the course we are on.

Safety First. Service Always.

Mario Pelletier Commissioner Canadian Coast Guard

# SAFETY FIRST. SERVICE ALWAYS.



# Our Organization: Who we are and what we do

# Mission

Our mission is to ensure the safety of all mariners on our waters, protect the marine environment, and support economic growth through the safe and efficient movement of maritime trade in and out of Canada's waters.

The Coast Guard operates 24 hours a day, 7 days a week, 365 days a year in some of the world's harshest maritime conditions. Its area of operations covers 243,000 km of coastline and 5.3 million km<sup>2</sup> of ocean and inland waterways. The Coast Guard supports Canada's ocean economy by enabling the safe and efficient flow of \$251 billion in maritime trade, the handling of more than 342 million tonnes of critical goods, and supporting tens of thousands of jobs across Canada.

# **People, Services and Mandate**

We are over 6,100 employees strong. We are deckhands, engineers, marine communications and traffic services officers, cooks, community engagement coordinators, captains, pollution response officers, search and rescue specialists, technicians, administrators, program analysts, policy advisors, lighthouse keepers, officer cadets, and more. We fulfill the Coast Guard's role as the owner and operator of Canada's civilian fleet. Our employees support key maritime services that include:

- Aids to navigation
- Channel maintenance
- Marine search and rescue

- Response to wrecks and hazardous or dilapidated ships
- Marine pollution response
- Icebreaking and ice management services
- Marine communications and traffic services
- Procurement of vessels, helicopters and other marine services related to vessel life extension and refit of the current fleet
- Provision of ships and helicopters in support of other federal departments' mandates

The services we provide are mandated under legislation, including:

- Oceans Act
- Canada Shipping Act, 2001
- Marine Liability Act
- Arctic Waters Pollution Prevention Act
- Wrecked, Abandoned or Hazardous Vessels Act

Through innovation and excellence, we are a recognized leader in maritime services and safety. As federal public servants, Coast Guard members have a fundamental role to play in serving Canadians, their communities and the public interest. By committing to our organizational and public service values, Coast Guard members strengthen the ethical culture of the public sector and contribute to public confidence in the integrity of all public institutions.

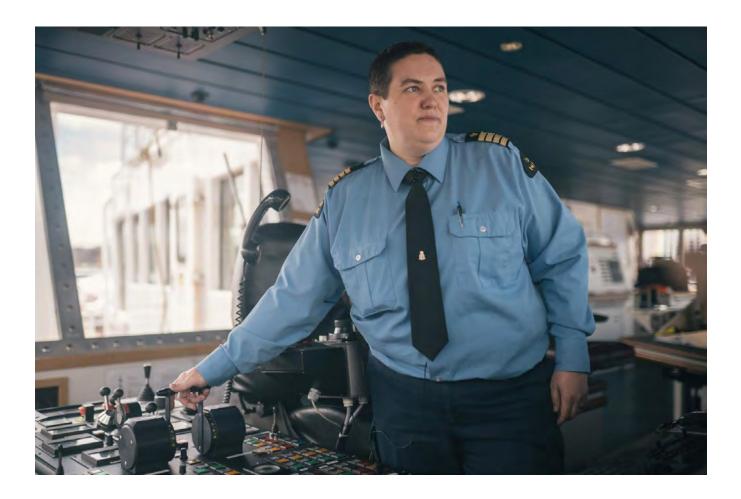
# Public Service and Organizational Values

Respect for Democracy: The system of Canadian parliamentary democracy and its institutions are fundamental to serving the public interest. Public servants recognize that elected officials are accountable to Parliament, and ultimately to all Canadians, and that a non-partisan public sector is essential to our democratic system.

Respect for People: Treating all people with respect, dignity, and fairness is fundamental to our relationship with the Canadian public and contributes to a safe and healthy work environment that promotes engagement, openness, and transparency. The diversity of our people and the ideas they generate are the source of our innovation. Integrity: Integrity is the cornerstone of good governance and democracy. By upholding the highest ethical standards, public servants conserve and enhance public confidence in the honesty, fairness and impartiality of the federal public sector.

Stewardship: Federal public servants are entrusted to use and care for public resources responsibly, for both the short term and long term.

Excellence: Excellence in the design and delivery of public sector policy, programs and services is beneficial to every aspect of Canadian public life. Engagement, collaboration, effective teamwork and professional development are all essential to a high-performing organization.



## **Diversity, Equity and Inclusion**

The Coast Guard is an asset-rich organization, and that includes our people. We are collectively committed to creating and sustaining an equitable and inclusive workplace that strives to mirror the diversity of the Canadian public we serve. We must take care of and support each other, and create a nurturing environment where everyone can thrive. The Coast Guard will support its employees in carrying out these commitments, and those in the Clerk's January 2021 Call to Action on anti-racism, equity, and inclusion in the federal public service.

In response to the Clerk's Call to Action, and to the Truth and Reconciliation Commission's Call to Action #57, which calls for all levels of government to provide education to public servants on the history of Indigenous peoples, the Coast Guard will continue to improve its understanding of cultural contexts and systemic barriers within Canada by actively promoting cultural awareness training sessions and fostering learning to support a healthy, inclusive and diverse workplace.

#### **Commitments:**

- Pilot and deliver a redesigned work uniform developed with a GBA Plus lens.
- Lead the procurement of a marine labour market analysis beginning in fall 2022, which will include among its deliverables an actionable, measurable plan for effective

and respectful outreach, recruitment and retention initiatives specifically targeted at underrepresented employment-designated groups (women, Aboriginal peoples, persons with disabilities, and visible minorities). This plan, coupled with trends and feedback identified through the fall 2022 *All Hands on Deck* recruitment campaign, will not only inform the Seagoing Recruitment Plan under the Fleet Sustainability Initiative, but also other short, medium and long-term recruitment initiatives.

- Continue to work with Women in Governance (WiG), a not-for-profit organization supporting leadership development, career advancement, and access to executive positions for women, to improve gender parity in the workplace. WiG will assign a level of certification for the Coast Guard to assess progress to the different certification levels, to achieve and sustain gender parity in the workplace. WiG will announce the Coast Guard's results for 2022 in the new year. The Coast Guard has committed to repeating this exercise on a yearly basis.
- Lead the *All Hands on Deck* employment equity-driven national recruitment initiative. The objective of this initiative is to create a talent-at-the-ready staffing option for Coast Guard's fleet hiring managers while increasing internal representation that truly reflects the Canadian population.



# Showcase Item



# Cultural Awareness Training in the Arctic Region

As part of efforts to continue to build relationships, and recognizing the unique and distinct interests and relations with Inuit, First Nations and Métis, the Coast Guard's Arctic Region is offering cultural awareness training to fleet and other personnel operating in the Arctic during the 2022 operational season.

Since 2018, we have been working with Inuit, First Nations and Métis organizations, governments and communities to identify and advance program and service priorities to better serve Arctic communities. We recognize and are committed to mitigating potential impacts to Aboriginal and treaty rights, and we are committed to the implementation of the Inuit Nunangat Policy. In collaboration with the Canadian Coast Guard College, fleet, regions, programs and Inuit, First Nation and Métis organizations, we developed a cultural training pilot program for the 2022-23 operational season.

The Cultural Awareness training project was created to address organizational priorities related to the Call to Action on Anti-Racism, Equity, and Inclusion in the Federal Public Service, the recommendations of the *Many Voices One Mind: Pathway to Reconciliation* report, the implementation of the Inuit Nunangat Policy and the DFO-Coast Guard Reconciliation Strategy. The training was piloted in the Arctic Region and with cadets, students and staff at the Canadian Coast Guard College in April 2022. The objective is to deliver the training to vessels operating in the Arctic, as their schedules permit.

The training will be delivered by Indigenous employees in person or by video pre-departure or during a crew change, and will include a package of recommended learning resources such as books, videos, podcasts and music to support Coast Guard employees to develop their cultural competencies.

The Coast Guard is committed to creating a diverse, inclusive and culturally safe workforce. The Arctic Region offered resources to its employees to support cultural awareness, and is modernizing its recruitment model to improve equity, diversity, inclusion and accessibility and increase employment opportunities in the Arctic. We are working in collaboration with Indigenous organizations to adapt our recruitment approach to attract Indigenous and Northern talent and build a team that is representative of the communities we serve in the Arctic.

As part of our approach to advancing priorities in the Arctic Region, we are building the cultural competencies of those operating in the Arctic to enable collaboration at all levels with Inuit, First Nations and Métis people so that program and policy decisions are led by the North for the North. Learning activities focus on the inclusion of Indigenous knowledge in decision-making, removing economic barriers and creating job opportunities in Northern communities.

The Arctic Region aims to have the fleet cultural awareness training completed by October 2022. The Arctic Region will continue to work with the Canadian Coast Guard College to support course development for cultural awareness training.

# **Canadian Coast Guard Strategic Pillars**

Canadians expect the federal government to ensure public safety on the water, protect the marine environment, support economic growth, and support the country's sovereignty and security by maintaining a strong federal presence in Canada's waters.

The Coast Guard has a key role as the marine operating arm of the Government of Canada, ready and able to assist in the realization of Canada's maritime priorities. As Canada's civilian marine organization and the owner operator of the civilian fleet of Canada, the Coast Guard has a critical function as on-water responder and as a visible symbol of Canadian identity from coast to coast to coast.

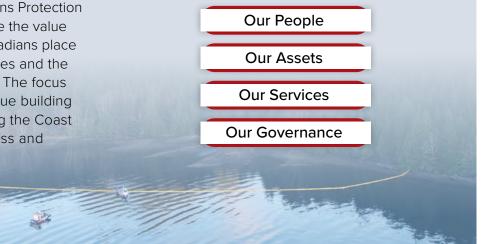
The Coast Guard is uniquely placed to serve this function by providing maritime expertise, Canada's civilian maritime fleet, and a broadly distributed shore infrastructure.

The Coast Guard is one of the few federal agencies that provides direct, front-line services 24 hours a day, 7 days a week. Our programs and services have an impact on the daily lives of every Canadian by protecting and preserving our interests and priorities as a maritime nation.

In recent years, the Government of Canada has invested in the Coast Guard through initiatives such as Fleet Renewal and the Oceans Protection Plan. These investments demonstrate the value the Government of Canada and Canadians place in Coast Guard programs and services and the increasing demand for our services. The focus in the coming years will be to continue building on these investments and enhancing the Coast Guard's program and asset readiness and excellence in service delivery. The introduction of the new fleet will bring significant changes to the Coast Guard. Ensuring the optimal fleet of the future is a priority that links closely to our other enduring priorities of service excellence and recruitment and retention. Ship operations and maintenance are integral elements of fleet renewal in order to ensure optimal operational performance throughout the vessel life cycle, and that includes addressing new requirements to effectively operate and maintain new vessels. Over the planning period, we will continue to focus on developing strategies to address existing and future operating and maintenance gaps for the new fleet, as well as the evolving skill sets associated with the operation of the new vessels.

In order to meet its obligations, the Coast Guard makes every effort to ensure that its organizational structure, processes, and procedures are optimized to support the effective and efficient delivery of services to Canadians, including its mandated programs and services, emerging government priorities, and the Minister's mandate letter commitments.

To this end, we have identified the following four strategic pillars to guide the delivery of our core responsibilities during the period covered by this plan and beyond, and to ensure that we achieve our mandate while maintaining excellence in service:



Each strategic pillar in the Plan identifies objectives that need to be achieved, and each objective has at least one specific action-oriented commitment. Taken together, these strategic pillars, objectives, and commitments will hold the organization on a steady three-year course. Objectives and related commitments are described in each pillar. Further information on the commitments can also be found in Annex A.

The Coast Guard has taken guidance from Government of Canada priorities and the Minister's mandate letter priorities in identifying our strategic pillars.

Government of Canada Priorities	Minister's Mandate Letter Priorities	Departmental Core Responsibilities
Protecting public health; Ensuring a strong economic recovery; Promoting a cleaner environment; Standing up for fairness and equality; A stronger, more inclusive, and more resilient Canada; and Advancing reconciliation.	<ul> <li>Support sustainable, stable and prosperous fisheries;</li> <li>Grow Canada's ocean and freshwater economy and support the long-term sustainable growth of Canada's fish and seafood sector;</li> <li>Implement the Pacific Salmon Strategy and a conservation strategy to restore and rebuild wild Atlantic salmon populations and their habitats;</li> <li>Conserve Canada's Lands and Oceans;</li> <li>Protect and restore Canada's oceans and coasts by renewing and expanding the Coastal Restoration Fund, expanding the Ghost Gear program, supporting community shoreline and oceans plastic cleanup efforts, and launching the next phase of the Oceans Protection Plan;</li> <li>Integrate Indigenous traditional knowledge into planning and policy decisions;</li> <li>Advance consistent, sustainable and collaborative fisheries arrangements;</li> <li>Invest in coastal and ocean areas that have a high potential to absorb and store carbon;</li> <li>Modernize the Oceans Act;</li> <li>Expand climate vulnerability work to better inform marine conservation planning in B.C. waters and work to introduce Canada's first-ever Aquaculture Act;</li> <li>Renew the Coast Guard Fleet;</li> <li>Support improvement in Small Craft Harbours;</li> <li>Respond to emerging incidents and hazards.</li> </ul>	<ul> <li>Fisheries – Managing Canada's fisheries, Indigenous fisheries programs and aquaculture activities, and providing support for commercial fishing harbours while applying relevant legislation;</li> <li>Aquatic Ecosystems – managing, conserving, and protecting Canada's oceans and other aquatic ecosystems and species from human impacts and invasive species;</li> <li>Marine Navigation – providing information and services to facilitate navigation in Canadian waters; and</li> <li>Marine Operations and Response – providing marine response services and operating Canada's civilian maritime fleet.</li> </ul>

# Showcase

# Celebrating the Canadian Coast Guard's 60<sup>th</sup> Anniversary

The Canadian Coast Guard marked 60 years of service to Canadians on January 26, 2022. This milestone is an opportunity to recognize our past contributions to Canada and the important work we do each day from coast to coast to coast. We will be celebrating this milestone and reflecting on our rich history and what we have accomplished throughout 2022. At the same time, we will continue to work in service of all Canadians, and look at where we are headed as an organization. All of this is encapsulated in our 60th anniversary theme: Celebrate the past. Navigate the future.

Various events, activities and communication products have been planned to celebrate our 60<sup>th</sup> anniversary. The signature event was held on January 26 when the Coast Guard family gathered virtually to kick off our 60<sup>th</sup> anniversary celebrations on our official birthday. Twelve hundred employees connected from across the country. Special guests and speakers included Deputy Minister Timothy Sargent, and Commissioner Mario Pelletier, and there were video remarks from Her Excellency Mary May Simon, Governor General of Canada; The Right Honourable Justin Trudeau, Prime Minister of Canada; and the Honourable Joyce Murray, Minister of Fisheries, Oceans and the Canadian Coast Guard.

The Coast Guard launched its new <u>60<sup>th</sup> anniversary</u> <u>e-book</u>, which takes readers on an interactive journey through Coast Guard history. Stories were also published online exploring the roles of several Coast Guard members across the country and their family histories, and more stories will be shared throughout the year.



Over the course of this year, Coast Guard members from all regions will prepare the 60<sup>th</sup> anniversary time capsules, which will be filled with contemporary objects and placed in various locations across the country to be opened on Coast Guard's 75<sup>th</sup> anniversary.

As part of a two-day event called "Canadian Coast Guard Days" held in June, the Western Region combined celebration, recruitment and community engagement by welcoming to their base over a thousand students and members of the community to learn what the Coast Guard does and how to start a career with us. The event included a re-dedication to service for the CCGS *Sir Wilfred Grenfell*, which recently underwent an extensive refit.

The Atlantic Region will also be hosting various events over the course of the year to celebrate the Coast Guard's 60<sup>th</sup> anniversary, including seven dedication to service ceremonies, as well as a commemoration event for the CCGS *Hudson*. A special anniversary edition of the regional newsletter "Coastlines" is also planned to be published in September.

For six decades, the Coast Guard has fulfilled and exceeded its mandate, becoming an internationally recognized special agency synonymous with innovation and excellence. We support government priorities and economic prosperity and contribute to the safety, accessibility and security of Canadian waters, and we will continue to do so for decades to come.

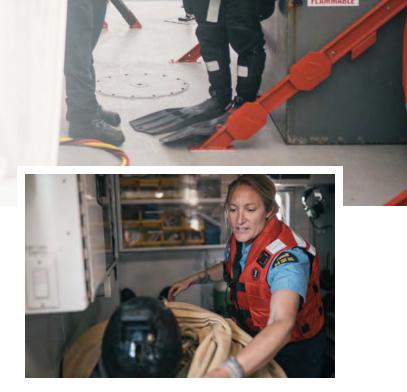
# **Strategic Pillar 1: Our People**

The Coast Guard recognizes and is proud of the strength of its people. The organization attracts people who want to pursue a long-term, fulfilling career. Their commitment is at the core of our organization, and we feel a tremendous source of pride knowing that many of our employees put their lives on the line to deliver essential services to Canadians 24 hours a day, 7 days a week, 365 days a year across the country.

We are fortunate to have knowledgeable, experienced, and well-motivated people across our ranks, and will continue to make our organization an employer of choice, and support all of our current and future members to be the best that they can be. The inherent challenge we face is to preserve this enviable standing by ensuring that the Coast Guard community is viewed as a desirable, rewarding and inclusive place to work for those contemplating pursuing a career with us.

Effective professional development and assessment program activities are essential for helping us foster this environment and ensuring that all employees feel valued and equipped to perform their jobs. We will achieve this through a developmental and collaborative process that actively supports a culture that encourages us to monitor and discuss progress on a regular basis to coach, mentor and train others in a meaningful way, and to recognize the achievement of both personal development goals and organizational objectives.

The Covid-19 pandemic has been an accelerator for one of the greatest workplace transformations of our lifetime, making working from home a viable option for some workers while adding new complexities and challenges to service providers on the front line. It is a testament to the professionalism and dedication of Coast Guard members that program and service delivery has continued unabated, and we will take best practices and lessons learned from the pandemic and apply them to continue to ensure a safe work environment for all employees.



We are also taking steps to improve support to all fleet personnel through the use of technology: first, by rolling out new software, eTimesheets, which enables fleet personnel to submit time and labour information electronically; and second, by launching a process to find a new crewing tool to replace the Coast Guard's ageing MariTime system to better fit the needs of the fleet. In addition to integrating crewing decisions with time and labour-tracking and management functionality, better reporting will help address the current chronic pay issues and enable the development of comprehensive training strategies to ensure we have seagoing employees with the certification and knowledge needed to fill new positions upcoming through the renewal of our fleet. An in-depth requirements analysis for crewing and certification will be completed, in conjunction with a review of functionality currently available in the market, which will provide us with a broad range of solution options to consider.

Due to the specialized nature of our work, it is essential that the Coast Guard has the right mix of people, capabilities and resources to deliver our programs and services nationwide. As a special operating agency with a vast span of responsibilities vital for the safety and security of Canadian waterways, we need highly trained employees with specialized qualifications. This includes, for example, fleet officers and crew, Marine Communications and Traffic Services officers (the eyes and ears of the Coast Guard), and Rescue Coordination Centres personnel.

We have completed a review of key positions and at-risk groups across the Coast Guard, and advanced our capacity to use enhanced data, data analysis, and predictability. The identification of at-risk groups and key positions, combined with better data analysis capacity, will support the development of targeted recruitment strategies, targeted learning strategies to support retention and succession planning, improved processes associated with planning for training, and better informed annual intake at the Canadian Coast Guard College (the College) for its officer training program.

In 2021-22, the proposed at-risk groups and key positions, along with supporting demographic data and recommendations to address problem areas, were presented to the Coast Guard Management Board for approval and subsequent inclusion in recruitment, retention, and training strategies. These strategies will also incorporate updated crewing factors as well as future fleet crewing requirements.

The operational nature of the Coast Guard means that the organization relies on a number of highly specialized trade skills – from ships' officers to certified support roles. Further complicating the need for specific roles, there are several fields of study related to these positions that have a limited qualified labour pool or a small number of graduating students each year. This creates potential supply issues, should the Coast Guard be required to fill a significant number of vacancies in critical areas. Accordingly, an at-risk staffing report is being created to identify the areas of highest risk, and support the development of potential mitigation strategies and longer-term human resources planning solutions.





Given the vast number of functions and positions within the Coast Guard, a methodology was developed to compile positions based on skill sets, competencies, and certifications. To evaluate impact risk, the groups were linked to their impact on operations, i.e. whether this affects a vessel's ability to operate. To evaluate the likelihood risk of vacancy issues, two key factors were examined: potential vacancy levels (from regular attrition, retirement timing, and existing vacancies) and difficulty in recruiting.

Recent attrition rates have necessitated the rapid career advancement of some junior officers within the fleet to more senior positions. This creates potential competency issues associated with the administrative and so-called 'soft skills' required of management and leadership roles. To address this need, the College is modernizing the delivery of Coast Guard command courses to provide the required and appropriate training to these individuals and others seeking to enhance their skills.

More information on this strategic pillar can be found in the Coast Guard People Strategy in Annex B, which also includes a status report on the Strategy. Annex C provides information on Coast Guard demographics.

#### **Objective 1: Attraction and Recruitment**

Given a combination of attrition and organizational expansion, as well as the need for surge capacity for major incidents, attraction and recruitment are critical priorities, and require the implementation of national strategies and tools.

Our specialized workforce requires targeted recruitment and promotional activities to attract new people with the right skills into the organization, as well as a focus on attracting employees from diverse communities. Recognizing the need for many specialized skill sets, the Coast Guard is targeting outreach activities to younger students to ensure awareness of the educational requirements needed to pursue various careers in the Coast Guard. We are also developing internal apprenticeship programs that complement targeted recruitment strategies as well as working with various colleges and universities to attract both co-op students and graduates to the Coast Guard. To facilitate these two approaches, efforts are also being made to finalize a strategic and holistic external communications plan.

The College is the Coast Guard's centre of maritime training excellence and the foundation for our long-standing success in operations. To be able to attract candidates with the necessary entry requirements to its programs, the College will continue to partner with various community colleges, universities, and organizations across the country to promote the Coast Guard as a meaningful career option.

#### **Commitments:**

- Lead the development of a Coast Guardwide operational personnel plan to support emerging and key priorities specific to the fleet of the future.
- Maintain business intelligence capability for regions in anticipation of increased demand from the fleet sustainability project.

# Showcase Item

# Adopt a Ship Program

As part of the efforts to ensure the renewal of its workforce, the Coast Guard wants to increase the awareness of Canada's marine industry among Canadian youth. With this objective in mind, the Personnel Branch, supported by Canadian Geographic Education, launched the "Adopt a Ship" program in 2021.

Adopt a Ship is a program that proactively invests into the Coast Guard's future by introducing elementary school students from all across Canada to the Coast Guard to foster an interest in pursuing a career in the marine industry. By discovering the Coast Guard early, young students will have time to take the necessary steps to acquire the knowledge and skills needed to enroll into the College or to apply for a job at the Coast Guard.

To spark this interest, the program pairs Coast Guard vessels with elementary school classes over a 10-week period to introduce them to the Coast Guard and the College. For 2022-23, students from schools in Nunavut, Quebec, Manitoba and Ontario will be paired with vessels and get the opportunity to discover the fascinating world of the Coast Guard through virtual gatherings with members of our organization and workbook exercises. Students will learn about marine safety, the environment, geography, reconciliation with Indigenous peoples, the economy, and much more. The Commissioner will participate in virtual closing ceremonies with all classes at the end of the school year in June.

One of the key advantages of this long-term recruitment strategy is that it reaches equitydeserving groups and communities that are remote or have little to no exposure to the Coast Guard and its culture.

The Adopt a Ship program is expected to run until June 2025, and following its positive reception, the Coast Guard intends to expand it for the coming years by involving more classes and vessels, and potentially other youth organizations.



While Adopt a Ship's goals are long term given the age of its audience, we are confident it will have a direct and positive impact on students developing an interest in marine-related post-secondary education, especially in the College and careers.



### **Objective 2: Training**

As an operational organization, the Coast Guard is by necessity a training and learning organization. Training builds confidence and success, both personally and organizationally. It is key for some entry-level and many mid-stream positions, as is obtaining, maintaining, and retaining certain certifications. The Coast Guard's many levels of personnel, unique positions, and operational necessities require that the organization provide technical, skills-based, managerial, safety, and team training. This training is continuous and is delivered in many ways, including formal learning, experiential learning, computer-based training, and more. As a fundamental part of the 'life cycle management of our workforce', a continual focus on training products, quality assurance, and methodologies is crucial.

#### **Commitments:**

 Seek final approval of the College training governance to identify the evolving skill sets required for the operations of the fleet and associated training for operational personnel.

- Maintain and evolve the College Training Governance, taking an active approach to the identification, development, design and delivery of training opportunities to meet the current and projected needs of the organization.
- Ensure the identification of critical infrastructure, systems, and tools required at the College to support fleet sustainability, the Oceans Protection Plan and the Blue Economy Strategy as required.
- Strengthen international engagement opportunities with Marine Training Institutions.
- The College will explore opportunities through its relationship with the Canadian Association of Marine Training Institutions, to identify bridging opportunities and associated training in support of rated positions required on vessels.
- Build a national training plan in order to forecast the operational training requirements over a three-year period. The objective is to plan resources accordingly to facilitate training accessibility.

- Create training tools and provide direct training to regional offices on the effective use of Personnel systems.
- Leverage new and innovative platforms for communication and training focused on seagoing personnel and lighthouse keepers.
- Develop and launch a data literacy training program to ensure data stewards, data trustees, data custodians, data and analytics consumers and other employees have the necessary knowledge and expertise to meet the expectations of their roles.

## **Objective 3: Career Management**

The Coast Guard values its employees and seeks to retain them by providing a rewarding and challenging career, and the People Strategy includes innovative ways to enable all employees at all levels to find their best fit and reach peak performance and satisfaction in their jobs. To support the continuous process of career management and development, the Career Competency Tool was launched in 2021-22, containing competency dictionaries covering every job in the organization, which enable any employee at any level to determine the competencies required of them in their current job and to view the competencies of all other jobs to which they may aspire.

The Coast Guard supports the development of all employees as they seek to build their careers. With a focus on proactive leadership development, through the Coast Guard talent development and mobility program, we are seeking to support the middle management community and their transition from technical subject matter experts to expert people managers. Following the launch of the Career Competency Tool in February 2022, employees may now update their learning plans with specific details in support of their short- and long-term aspirations within the Coast Guard. These competencies will also be used to support staffing tools, succession planning, and recruitment activities. The Coast Guard continues to develop professional development and apprenticeship programs for a range of operational programs as internal recruitment and training tools aimed at developing highly skilled and trained candidates who are operationally ready to deliver the Coast Guard's services to Canadians.

#### **Commitment:**

• Support employees through the development of formal training opportunities to promote growth and bolster retention.

### **Objective 4: Health**

As a people-centred organization, the health and safety of our members are the Coast Guard's top priority. Part of ensuring overall health is providing the necessary learning and support to enhance employees' personal resilience. Safety, health, morale, well-being, employee assistance, work-life arrangements, return-to-work processes, and awards and recognition programs are all essential elements of meeting the needs of our employees, our teams, and ultimately our organization. Put another way, readiness and retention of personnel for duty depend on how well employees are supported, and the recently created Personnel Branch is working across the organization to ensure that these measures are strengthened and expanded.

#### **Commitments:**

- Initiate an injury prevention framework.
- Strengthen Coast Guard's organizational health by implementing tools such as Critical Incident Stress Management, Trauma Resilience Training, Wounded Warriors, At-Sea Health Promotion, and a more robust awards and recognition program.

# Showcase Item

# The Canadian Coast Guard People Strategy

At the Coast Guard, "We are our people." The Personnel Branch has the mandate to support our people, and it developed the People Strategy to do so. Its vision? The recruitment and development of a diverse, highly trained, professional workforce at the ready – for today and tomorrow. To match the dynamic nature of our workforce, the People Strategy is constantly evolving to adapt to the Coast Guard's emerging needs.

This year, the College will leverage existing programs to identify the infrastructure and tools required to support the Personnel Branch and optimize all training activities required by the Coast Guard to deliver its challenging and ever-evolving mandate.



The Personnel Branch is also developing and implementing an evergreen national recruitment strategy that leverages technology and social media and addresses diversity and inclusion objectives. To bolster retention, Personnel supports operational and technical employees in understanding the skills and knowledge required for their current roles and their future career aspirations. In addition, focus remains on implementing targeted outreach, recruitment and career management initiatives to support the organization's growth and build personnel capacity.

In 2022-23, a national contract for the delivery of mental health professional services in support of critical incident stress management will be implemented. The Coast Guard is working in partnership with the Department of National Defence to adapt and implement the Road to Mental Readiness (R2MR) program to the specific needs of the Coast Guard. The goal of the R2MR is to support employees in managing occupational and psychological stressors by developing tools and training packages that are tailored to specific occupations within Coast Guard.

Personnel will also initiate work to understand injury trends to support the development of an injury prevention framework specifically for our operational personnel, including injury prevention and comprehensive work on the Coast Guard requirements toward compensation support from the moment of the employee's injury to their return to work.



# **Strategic Pillar 2: Our Assets**

The Coast Guard owns and operates the federal government's civilian fleet. Located across the country, these assets provide a platform supporting a wide range of marine programs and services, and serve as a nationally recognized federal presence and symbol of service and safety. From coast to coast to coast, the fleet of red and white ships and helicopters covers 243,000 km of coastline, the longest in the world, and 5.3 million km<sup>2</sup> of ocean and inland water.

Nowhere is the Coast Guard's approach to effective and efficient service delivery more evident than in the fleet. Most of our vessels are multitasked, and all are crewed with professionally trained mariners capable of delivering on-water programs. On any given day, for example, a vessel and its specialized crew can be optimized to support a science mission while at the same time deploying navigational buoys and serving as both a secondary search and rescue vessel and a visible symbol of Canadian sovereignty.

This multi-mission operating philosophy offers significant economies of scope and provides the Coast Guard with a diverse fleet capable of operating in all marine areas of the country during the navigation season. The multi-tasked nature of Coast Guard operations also ensures that the organization has a coordination capability in place, on a 24-hour basis, to task the resources to the required area/program/priority.

While the fleet is undoubtedly the Coast Guard's most recognizable asset, the Coast Guard also makes use of varied and complex physical shore-based assets to deliver services to Canadians. The Coast Guard ensures their operation, maintenance, repair, and their eventual recapitalization to replace aging systems at the end of their useful service life. Doing so requires asset-management expertise that covers a wide range of functions from acquisition and maintenance to life extensions and replacement and ultimately disposal.

The Coast Guard must safeguard its assets in order to sustain its operational capabilities, fulfill its mandated programs and services, and meet Government of Canada priorities now, and in the future.

As we work to build new ships to replace our aging ones, we will be taking measures to extend the life of the current fleet through interim solutions, while also ensuring that the current fleet and the fleet of the future have the required shore-based infrastructure to support service delivery across Canada.

Renewing our assets means assessing many factors to ensure we get the requirements right, since new equipment and technology create the need or opportunity to develop new competencies and bring in new talent, as well as to look at innovation, including green technology. We need to broadly engage with stakeholders, assess outcomes of levels of service reviews and program readiness profiles, and set flexible futurelooking requirements so that new assets are capable of meeting both current and emerging program and operational requirements. We must also take the opportunity to consider how our assets will be managed, operated and maintained throughout their lifecycle.

# Showcase Item

# Commemorating the CCGS *Hudson*

After 59 years of service to Canada, the CCGS *Hudson* was decommissioned on January 19, 2022. Following its decommissioning, there has been a renewed interest in the history of the vessel and its significant achievements over its long life. The historic vessel's career mirrored and helped shape the Canadian Coast Guard's past 60 years, so it is appropriate to highlight the CCGS *Hudson* during our anniversary year.

Built in 1963 by Saint John Shipbuilding and Drydock Ltd. of Saint John, the CCGS *Hudson* was the oldest vessel in the Coast Guard's fleet and one of Canada's foremost deep-sea, multidisciplinary science ships. The vessel was named after the explorer Henry Hudson, who led four expeditions in the Arctic in his search for a short route to East Asia during the early 17<sup>th</sup> century.

The vessel made several significant scientific voyages. In 1970, the CCGS *Hudson* became the first vessel to completely circumnavigate the Americas. Carrying over 120 scientists, the ship departed from Halifax in November 1969 and travelled south, spending two months off the coast of Chile and south of Cape Horn performing oceanographic research. The CCGS *Hudson* then sailed north through the Pacific Ocean and became only the sixth vessel to transit the Northwest Passage before returning to Halifax in November 1970.

The CCGS *Hudson* was also one of the first Canadian vessels to employ a helicopter during Arctic operations, demonstrating the utility of ship-based helicopters for arctic operations and ensuring that they became a regular feature on Coast Guard vessels in the Arctic. While science was the *Hudson*'s primary mission, and the vessel was a vital platform for the ongoing Atlantic Zone Monitoring Program, the vessel was also involved in many search and rescue operations over the years. It led successful rescues of the crews of the Fishery Patrol vessel *Cape Freels* and MV *Skipper 1* in 1976 and 1987, respectively.

These events make up a small part of the CCGS *Hudson*'s service to Canadians over the past 59 years, but provide a shining example of the ship and its past crews exemplifying the Coast Guard's motto: Safety First, Service Always.

The vessel's permanent replacement is expected to be delivered in 2025. In the meantime, the Coast Guard is working with Fisheries and Oceans Canada to determine ways to continue carrying out the important science activities and missions previously led by the *Hudson*.

The CCGS *Hudson* and its many crews showed remarkable longevity and resilience through a changing world and marine environment. This year, as we celebrate our 60<sup>th</sup> anniversary, there is no better time to recognize the ship's decades of service, to remember its many accomplishments, and to honor all of its past crews. An official ceremony to commemorate the CCGS *Hudson* was held in Halifax on July 7, 2022.



### **Objective 1: Delivering the New Fleet**

Renewing the aging Coast Guard fleet has been a Government of Canada priority for more than a decade, and this priority will ensure the Coast Guard has the assets to deliver mandated programs and services to Canadians. With an average age of 39 years for the large fleet, Coast Guard's vessels are in need of replacement in order to meet increasing operational pressures and perform required statutory missions. With increasing shipping trade and the impacts of climate change already upon us, the demands on the Coast Guard will continue to grow. A renewed Coast Guard fleet will maintain the confidence of Canadians – and the confidence of industries that rely on Coast Guard services to remain competitive. To make sure we have a flexible fleet capable of meeting future demands, we are setting flexible forward-looking requirements with a key principle of ensuring that, where feasible, ships can do a wide range of different missions.

Following the significant investments made by the Government of Canada, the Coast Guard now has fully funded plans in place for the entire large vessel fleet. Work is already well underway to support full fleet renewal; funding announced in 2019 is being used to support procurement of up to 16 multi-purpose vessels, up to six program icebreakers, and two modified Arctic and offshore patrol vessels. This is in addition to advancing existing large and small shipbuilding projects that were already part of the National Shipbuilding Strategy (NSS), as well as work underway with Public Services and Procurement Canada to advance the process to add a third Canadian shipyard as a strategic partner under the NSS.

In addition, on May 6, 2021, Canada announced that it would move forward with the construction of two polar icebreakers under the NSS. Both will have capacity and ability beyond that of our current largest icebreaker, the CCGS Louis S. St-Laurent. With their enhanced capabilities, these larger, more powerful ships will enable the Coast Guard to conduct year-round operations in Canada's Arctic. These enhanced capabilities will be supported by polar icebreaker helicopters optimized for operation in the harsh arctic environment. The greater endurance of the polar icebreakers will ensure they can operate at higher latitudes for longer periods, and will allow the fleet to better support Indigenous peoples and Northerners, strengthen Arctic sovereignty, advance high Arctic science, and better respond to maritime emergencies. Canada's investment in the polar icebreakers will have a lasting impact on the Canadian marine industry, its workers, and their suppliers. Through their construction and service, the polar icebreakers will contribute to growing Canada's blue economy and create more opportunities in our coastal communities.

As the fleet renewal program advances, the Coast Guard will need to be well prepared to manage this program year-over-year. The multi-decade timeline associated with fleet renewal increases the complexity while also providing the Coast Guard with the opportunity to adjust goals and processes to ensure that we have the ships we need to carry out our work in the years to come. The objective is to continue to deliver new vessels currently under construction on schedule, while continuing to advance plans, design, and construction engineering on other vessels in the renewal pipeline.

#### **Commitments:**

- Continue to deliver new search and rescue lifeboats under contract.
- Advance design, construction engineering, and construction of a near-shore fisheries research vessel.

- Advance construction and prepare for delivery of the offshore oceanographic science vessel that will replace the CCGS *Hudson*.
- Finalize construction engineering efforts and start construction of both Coast Guard Arctic and offshore patrol vessels.
- Advance design and construction engineering for the multi-purpose vessels and the program icebreakers.
- Advance plans for a new class of mid-shore multi-mission vessels.
- Begin design engineering for the polar icebreakers.
- Begin construction engineering and acquisition of long-lead items to prepare for the construction of the polar icebreakers.



# **Preparing for the Future Fleet**

The fleet renewal program has presented the Coast Guard with a unique opportunity to build a fleet of ships that will stand ready to serve Canadians into the future. Plans for the new fleet were informed by operational requirements, priorities of clients and partners, and trends in the marine industry. In addition, the commitments made to reduce carbon emissions, to minimize impacts on the marine environment and to grow a diverse and inclusive workforce were also considered.

In January 2022, the Fleet Sustainability Initiative (FSI) was created to lead long-term planning across the organization in preparation for the new fleet. Over the planning period, all Coast Guard sectors, regions, partners and clients will be engaged in the FSI as work progresses to position the Agency to operate and support the new fleet.



Further to building ships, the Coast Guard is establishing how the new fleet can be used to drive forward the organization. The new fleet has been designed to help the Coast Guard address the challenges faced today, while delivering the capabilities and flexibility needed for the future. A larger fleet with more multi-mission and icebreaking capabilities, as well as two polar icebreakers fully dedicated to Arctic missions, will provide more support and flexibility for program delivery. Likewise, increased operational capabilities will benefit Coast Guard partners and clients as mission modularity allows for easier equipment changes and operational efficiencies. Additionally, having more ships will provide some "surge capacity" for new or unexpected priorities.

While the new fleet has been designed to provide the Coast Guard with these opportunities for the future, realizing its full potential goes beyond building the new ships. The organization is preparing so that it is best positioned to accept the new ships, transition them into service to support program delivery, and support them through their operational lives.

The FSI will focus on a wide range of considerations, such as attracting and retaining the right people with the skill sets needed to crew and operate more modern and multi-taskable ships, as well as plans for providing ongoing training and development activities to support crew diversity, and inclusion and wellness. Another key consideration is operational support for program delivery including crewing, fuel requirements, supplies, spares, operational planning and program support, a life-cycle management plan that includes maintenance, shore-based infrastructure, and many other areas.

Finally, developing a comprehensive understanding of how new ship platforms will impact the Coast Guard's programs and services, and those of the Coast Guard's clients and partners, will be beneficial to the organization. Program requirements will inform future operational plans with a special focus on how increased multi-mission capabilities can offer opportunities for greater collaboration.



# **Objective 2: Operating and Maintaining the New Fleet**

While building a ship can take several years, a ship will remain in service for several decades. Ship operations and maintenance are therefore integral elements of fleet renewal in order to ensure operational performance throughout the vessel life cycle. Over the planning period, we will continue to focus on developing strategies to address existing and future operating and maintenance gaps for the new fleet.

The Coast Guard is also developing a Fleet Infrastructure Availability Verification program in order to establish infrastructure requirements, verify and track the condition of shore infrastructure assets, and assess the availability of current assets against future requirements. Some of this work is not related to operating and maintaining the new fleet, as many of the current wharves and shore infrastructure sites are classified as critical and requiring attention before they can be safely used by Coast Guard ships operating today. However, this program will clarify necessary changes needed to meet future requirements.

In addition, a joint Department of Fisheries and Oceans Real Property/Canadian Coast Guard working group has been created to address requirements for future projects in support of shore-based infrastructure. Considering the shared responsibilities between Real Property as the custodian and the Coast Guard as the tenant, this working group will play a key role in guiding this program. Phase one of the assessment of wharf infrastructure to support a range of Coast Guard missions is currently underway.

### **Commitments:**

- Undertake fleet renewal with a key principle of ensuring mission modularity.
- Update the Coast Guard's multi-year maintenance plan to address any fleet maintenance gaps.

#### **Objective 3: Vessel Life Extension**

Older Coast Guard vessels are becoming more costly to maintain and are prone to be more frequently taken out of operation for unscheduled repairs, placing further strain on the existing fleet. To combat this growing operational risk, the Coast Guard is implementing interim measures, such as vessel life extension (VLE) work and acquiring used ships to sustain operational capabilities while VLEs are being performed to ensure the existing fleet remains operational until the new fleet is procured. In 2019, the Government of Canada approved over \$2 billion dollars in funding for VLEs to extend the operational life of more than 70 vessels over a 20-year period. The VLE program is working closely with fleet personnel to forecast VLE project timelines and ensure that the required scheduled work does not result in interruptions to operational programs and services. Other required non-VLE related vessel work packages are being incorporated into the VLE scheduled work periods in an effort to further reduce the time that vessels are out of service.

During this business plan cycle, the VLE program will continue to initiate new scheduled VLE projects using existing resources in order to meet the forecasted VLE timelines.

#### **Commitments:**

- Continue work on the conversion of the new light icebreaker.
- Complete the conversion of the CCGS *Vincent Massey.*

- Continue to implement the comprehensive VLE program to increase both the reliability and availability of Coast Guard vessels.
   Planned work includes:
  - Complete the VLE of the CCGS Kopit Hopson 1752
  - Complete the bundled VLE of the CCGS Cape Roger and CCGS Cygnus
  - Continue work on the VLE of the CCGS George R. Pearkes
  - Complete the VLE of the CCGS Amundsen phase 2
  - Complete the VLE of the CCGS Sir Wilfred Grenfell
  - Continue work on the VLE of the CCGS Griffon
  - Continue work on the VLE of the CCGS *Sir Wilfrid Laurier*
  - Continue work on the VLE of the CCGS Louis S. St-Laurent (4 phases)
  - Continue work on the VLE of the 47' MLB class

# Showcase Item



A new light icebreaker has joined the Coast Guard's fleet. The CCGS Judy LaMarsh was acquired as part of the Fleet Recapitalization Plan and was delivered to Sorel, Quebec, on January 3, 2022.

Judy LaMarsh was a remarkable woman in Canada's history. She was one of the first women to serve as a federal Cabinet Minister and helped to establish innovative federal programs such as Medicare and the Canada Pension Plan. She is recognized as a trailblazer for women's rights in Canada and is also a recipient of the Order of Canada.

The ship will be modified into a light icebreaker expected to be used mainly in the Great Lakes and St. Lawrence Seaway where it will break ice in more shallow areas, keep corridors open, escort ships and conduct flood control operations, and be capable of carrying cargo and handling buoys. Due to the economic importance of the zone and our responsibility to work cooperatively with the United States Coast Guard, it will be essential to provide interim icebreaking capabilities while other ships undergo vessel life extension work, and while awaiting for the delivery of new dedicated vessels. The project team is working closely with Bureau Veritas and Transport Canada to address major regulatory gaps and ensure the light icebreaker is compliant with Canadian regulations.

THE PARTY OF

Focused vessel condition surveys and inspections were completed, and high-level mandatory requirements were approved for the vessel conversion.

Procurement of essential spares and tools is underway, as well as feasibility studies for major engineering work. A project team is addressing the vessel defects that were identified and developing a work package for vessel modifications. The new light icebreaker will be modernized to incorporate newer technologies as they mature and become available in order to remain operationally relevant and achieves emission reduction targets in the future.

Modification specifications will be drafted for public tendering in winter 2022-23, and major modification work is expected to occur in summer 2023.

The vessel will see some limited operations in winter 2022-23, and the project will have the majority of the vessel modifications in place for the winter 2023-24 icebreaking season.

### **Objective 4: Shore-Based Assets**

The Coast Guard's non-fleet shore-based asset base may be less publicly visible, but these assets are no less important to realizing the Coast Guard's motto "Safety first—Service always". Such assets include fixed and floating aids to navigation, visual and aural aids, radar, radio, and terrestrial Automatic Identification System networks, which are delivered through more than 300 remote installations. In addition, there are primary search and rescue stations and environmental response physical assets used for spill containment, collection, and storage.

#### **Commitments:**

- Determine the shore infrastructure requirements needed to support the future fleet's ship modularity concept.
- Implement the Coast Guard's asset and inventory protocols and procedures.

- Complete the implementation of the Oceans Protection Plan search and rescue stations.
- Assess the condition of the Coast Guard's shore-based facilities required to support the future fleet.
- Complete the Oceans Protection Plan environmental response equipment procurement.
- Complete the Oceans Protection Plan radar and OpNet projects.
- Initiate the full implementation of the lifecycle management program for environmental response assets.
- Complete the manufacturing of the four-season buoys (52 buoys) in the St. Lawrence sector.
- Renew the College's IT infrastructure to benefit students, increase bandwidth, and offer remote training over the internet.

# **Space-Based Technology**

The Coast Guard's Integrated Technical Services (ITS) are closely monitoring the rapidly evolving satellite communications space and participating in technology trials for emerging low Earth orbit (LEO) constellations. In parallel, the Coast Guard is providing operational feedback on the design of key communication components such as ruggedized ship antennas.

The implementation of this new technology will increase program readiness and create new opportunities ranging from improved real-time communication and situational awareness to the remote monitoring and troubleshooting of systems supporting operations.

In order to be fully leveraged, these new systems will require additional training as well as increased engineering capacities and technical expertise from technical staff. As part of the Oceans Protection Plan OpNet project, this technology is targeted to be installed at over 100 remote sites across the country to provide backup communication services. More specifically, ITS expects space-based technology to improve the reliability of the Coast Guard's shore-based network to carry distress communications and situational awareness back to the Marine Communications and Traffic Services and other programs, to allow programs to leverage a much greater and faster information exchange with ships operating in remote areas, and to provide e-navigation capacity to support secure digital product distribution to all users of the Vessel Traffic Services in Canada.

Space-based technology will fill a long-standing communication gap for remote coastal areas for both terrestrial sites and vessel assets, and it will improve information exchange with domestic and foreign vessels in Canadian waters. Beyond the initial cost of modernizing equipment to support LEO satellite communications, this initiative is expected to be largely cost neutral.

# **Strategic Pillar 3: Our Services**

As the marine operating arm of the Government of Canada, the Coast Guard delivers a broad range of mandated maritime services to Canadians and those using our waters that are aimed at saving lives, enhancing maritime safety, supporting maritime commerce, and protecting the marine environment.

By virtue of being a horizontal, multi-mission, multi-tasking organization, the Coast Guard is able to leverage the people, fleet, and shorebased assets that enable the delivery of our programs to provide a valuable contribution to other government departments and to new and emerging Government of Canada initiatives. We remain committed to implementing the Oceans Protection Plan, supporting the Blue Economy and Greening Government Strategies, assisting partners in the science, environment, enforcement and security communities, and sustaining our partnerships with provincial, territorial, and municipal governments, and Indigenous partners, communities, and governments.

A blue economy is about harnessing the potential of our oceans, seas, lakes, and rivers — resources that Canada is privileged to have in abundance — to make life better for all. As the federal government works with valued partners and stakeholders to develop a comprehensive Blue Economy Strategy for Canada, the Coast Guard will develop a strategy to advance the modernization of marine navigation programs and safety services, including e-navigation/digital waterways initiatives, and guide investments in aids to navigation and marine communications and traffic services.

Under the updated Greening Government Strategy, the Government of Canada has committed to reducing its own operational greenhouse gas emissions to net zero by 2050. This means taking action to lower these emissions from its buildings, conventional fleet, national safety and security operations, procurement activities, as well as ensuring its operations and assets are resilient to a changing climate. The new strategy includes, for the first time, Canada's national safety and security fleet, which directly implicates the Coast Guard.

The implementation of the Coast Guard's Arctic Region demonstrates our commitment to advancing reconciliation and working in collaboration with Inuit, First Nations, and Métis governments and organizations in the North. We are working collaboratively to identify the future of Coast Guard services in the Canadian Arctic as we continue to see important changes to the marine environment due to climate change, an associated increase in vessel traffic and international interest, and a longer Arctic navigation season.

Demands for our services continue to grow, and we are ever mindful of the need to listen to the various stakeholders we serve and assess how we respond to changing requirements and expectations within the context of our mandated programs and services, including the provision of ships and helicopters in support of other federal departments' mandates. This requires exploring new ways of doing business with technological innovations such as e-Navigation and digitalization, and enhancing partnerships for program and service delivery.





## **Objective 1: Fulfilling Coast Guard's Contribution to the Oceans Protection Plan**

Under the Oceans Protection Plan (OPP), the Coast Guard received funding to advance a plan centering on four main priorities:

- Creating a world-leading marine safety system that improves responsible shipping and protects Canada's waters, including new preventative and response measures;
- Taking measures to address abandoned boats and wrecks;
- Strengthening partnerships and launching co-management practices with Indigenous partners, including building local emergency response capacity; and
- Investing in oil spill cleanup research and methods to ensure that decisions taken in emergencies are evidence-based.

Over this business planning cycle we will continue to fulfill our contributions to the OPP, including strengthening Canada's Marine Communications and Traffic Services centres by enhancing radar capacity and capability to monitor maritime traffic, which provides more complete and accurate maritime situational awareness and contributes to a stronger marine safety system.

With the aim of improving prevention of and response to marine pollution incidents, we will also continue implementing Alternative Response Measures (ARMs) in collaboration with key federal partners. This initiative — which is about expanding the Coast Guard's response toolbox — would authorize the use of specific ARMs in Canada to respond to certain types of pollution events when there is likely to be a net environmental benefit. The legislative amendment process is underway, as is the development of a framework that will underpin science support for evidence-based decision-making on the appropriate use of ARMs. The interdepartmental ARMs team has launched public engagement on the initiative to raise public awareness on the science of ARMs and to address public questions on the appropriate use of ARMs in Canada.

The Hazardous and Noxious Substances (HNS) initiative has significant operational relevance and impact for the Coast Guard. In collaboration with federal partners, we will continue to work

to strengthen Canada's marine safety system by establishing a national framework with key programming elements to improve preparedness and response for ship-source/mystery spill HNS releases. In parallel, we will begin training responders on HNS releases from a health and safety perspective.

We are also seeking to support increased participation of Coastal Nations and communities across the country in the marine response regime through development and implementation of a Communications Portal for Integrated Incident Response (CPIIR) to enhance collaboration during on-water emergencies, events and exercises, and provide a platform for standardized usage of the Incident Command System. As the Coast Guard continues implementing the regional response planning process developed through the OPP, CPIIR is intended to become the primary communication tool that will link the Coast Guard to its Indigenous and community partners, as well as other responsible authorities, through all stages of a marine incident. The Coast Guard will be engaging with regional Response Organizations to identify opportunities to support interoperability with systems that may be in place and consult with Indigenous partners on requirements.

Many of the projects under the OPP were conceived as a means of supplementing, enhancing or expanding existing services and functions, while others were developed as pilots and prototypes. As the first phase of the OPP came to an end in March 2022, a major focus of this business planning cycle will be to assess the results of the projects to help inform next steps, including transitioning of some projects into ongoing, "in service" programs. In other words, OPP projects will be integrated into the regular activities of the Coast Guard. This process will ensure that benefits accrued from this historic investment continue as ongoing service beyond the sunset of the OPP's first lifecycle.

The mandate letter for the Minister of Fisheries. Oceans and the Canadian Coast Guard indicated the Government's commitment to launch the next phase of the OPP, in partnership with Indigenous Peoples, to continue efforts to deliver world-leading marine safety systems and create stronger partnerships with Indigenous and other coastal communities. Budget 2022 confirmed a total of \$1.1 billion over the next nine years and \$67.9 million in ongoing funding allocated to the Department of Fisheries and Oceans and the Coast Guard to renew and expand the OPP. The next phase of the OPP will build on the results and lessons learned over the past five years and add additional areas of focus, including expanding emergency prevention and response for all types of goods, ensuring healthy and resilient supply chains, safe navigation of large and small vessels, and increasing protections on remote routes.

#### Commitment:

 Collaborate with partners to implement the new Oceans Protection Plan portfolio of projects guided by a strong governance and reporting structure.



# Showcase Item

# Increasing Resilience to Climate Change

The Coast Guard is developing a roadmap to climate resilience to ensure the organization is well positioned in the years to come to prioritize and advance climate adaptation and mitigation strategies.

Adaptation is about understanding vulnerabilities and taking action to increase preparedness and adjust to the impacts of climate change. This can include investments in resilient infrastructure, enhanced response plans, and the modernization of marine navigation to reduce the risk of climate change events affecting the critical on-water programs, services and operations that Coast Guard provides to Canadians.

Mitigation is about reducing Coast Guard's impacts on the environment. This includes minimizing greenhouse gas emissions by greening our operations, working to meet commitments in Canada's Greening Government Strategy, and evaluating potential decarbonization pathways for the fleet. The combination of both adaptation and mitigation strategies will enhance resilience and enable Coast Guard to continue to ensure the safety of mariners in Canadian waters and the protection of Canada's marine environment.

Climate change is a meta-driver for long-term strategic planning due to the horizontal and crosscutting implications for all Coast Guard activities. It will also impact the entire marine sector as well as coastal and Indigenous communities who are disproportionately affected by the impacts of climate change. We anticipate further changes to ocean chemistry, sea-level rise, extreme weather events, changes to the cryosphere, impact to fisheries, and shifting ecosystem dynamics that can affect shipping routes.

The need to be prepared for the known challenges, combined with full fleet renewal and the associated infrastructure and personnel investments, presents an unprecedented transformational opportunity for the Coast Guard with respect to how the organization responds and adapts to a changing climate.

## **Objective 2: Major Resource Projects**

The *Impact Assessment Act* and the *Canadian Energy Regulator Act* have established better rules for major resource projects aimed at protecting the environment and communities, advancing reconciliation with Indigenous peoples, and ensuring that sustainable projects can proceed. As a result of this strengthened federal governance, the Coast Guard now has an important role to play in the process of assessing major resource project proposals when there is a marine shipping component.

We are currently monitoring or supporting the impact assessments and related processes for a number of proposed major resource and related infrastructure projects spread across each of the organization's four regions, such as the Tilbury Marine Jetty Project, the Roberts Bank Terminal 2 Project and the Ksi Lisims LNG Project. We continue to implement and support federal coordination and governance of the Trans Mountain Expansion (TMX) project, which remains a federal priority.

A signature initiative under the TMX is the Co-Developing Community Response accommodation measure that seeks to address Indigenous groups' concerns about the risks of increased project-related tanker traffic to marine activities, the environment, and culturally important and sacred sites in their traditional territories. As part of this initiative, the Coast Guard identifies information, tools, and services with the objective to improve information sharing with coastal Indigenous groups and response partners and help facilitate preparedness and response capabilities and safety for eligible coastal Indigenous groups.

The Coast Guard will continue to actively participate in a number of impact and environmental assessment processes involving marine shipping associated with proposed projects and their potential environmental effects. This involves a range of work, such as assessing information requested from proponents about project impacts and proposed mitigation measures, providing expertise and examining the impacts to Coast Guard programs and levels of service, contributing to whole-of-government responses, supporting Indigenous consultation processes, and identifying timely programmatic responses to mitigate project impacts and address impacts on treaty and non-treaty rights.

#### **Commitment:**

 Continue to work with Indigenous groups to implement the Trans Mountain Expansion Co-Developing Community Response accommodation measure.

#### **Objective 3: Reviewing Levels of Service**

The Coast Guard is committed to providing its many clients with the best services possible within its available resources.

Established levels of service (LoS) are a cornerstone of Coast Guard service delivery and provide our clients with a clear understanding of the services to be expected. The published LoS contribute to ensuring that services are delivered in a nationally consistent, integrated, predictable, measurable, and equitable fashion over time and under normal operating circumstances.

A multi-year initiative is currently underway to update LoS for the Icebreaking, Aids to Navigation, Waterways Management, Marine Communications and Traffic Services, Search and Rescue, and Environmental Response programs. These reviews will enable us to update each program's LoS to better reflect changes in marine navigation technology and practices and provide an opportunity to understand current user/client needs. The review process will take place within the framework of internationally and nationally mandated commitments and include input from internal and external stakeholders, including the Department of Fisheries and Oceans and other federal departments and agencies who partner with the Coast Guard, United States Coast Guard service partners, industry, Indigenous partners, and the general public.

#### **Commitment:**

• Update and publish the levels of service to accurately reflect the Coast Guard's current operating environment and service standards.

#### **Objective 4: Program Readiness**

Key to successfully meeting established levels of service (LoS) is maximizing Coast Guard program readiness, which is the organizational ability to meet program and service demands. As part of its LoS review, the Coast Guard is undertaking a readiness assessment to evaluate the potential gaps between current and anticipated future mission requirements and current resources, authority, capacity, and capability, and establish a readiness profile. This assessment will include people, assets, and governance.

- People readiness means having the right people, with the right competencies and experience, in the right place, at the right time and is a key component of our People Pillar.
- Asset readiness enables operational reach with operational sustainability and is a key component of both our Asset and Services pillars.
- Separate from the people and assets, there are many intangible contributing factors to readiness, which govern both the relationships between, and the manner in which the other elements are used to drive program readiness. Strengthening national policies, processes, procedures, and other governance mechanisms to effectively support program readiness is a key component of our Governance Pillar.

#### **Commitments:**

 Develop a readiness profile for each response program (Environmental Response, Search and Rescue and Vessels of Concern) focusing on an assessment of the three principal elements of readiness (people, assets, and capacity demand) in order to identify gaps between current needs and anticipated future mission requirements.

 Develop a readiness profile for all marine navigation programs.

### **Objective 5: Modernizing Marine Navigation Program and Safety Services**

In support of our program readiness objective, the Coast Guard will develop a modernization strategy for marine navigation programs and safety services. Following international trends to digitalize marine navigation tools and services, the Coast Guard will transform its service mechanisms to provide timely and standardized information to mariners such as safety, environmental data, ice and weather conditions, vessel traffic, channel depths, speed restrictions, and marine protected areas.

The modernization strategy will examine how to better deliver Coast Guard's core navigation programs — Aids to Navigation, Waterways Management, Icebreaking, Marine Communications and Traffic Services, and e-Navigation — including leveraging new technologies, using more sensor data, and advancing our ability to collect, process, synthesize and analyze data, and readily exchange it with our partners in an integrated and streamlined way. This will require integration of existing programs, systems, and tools to deliver seamless, efficient, and real-time services to maritime clients and federal, provincial, territorial, and Indigenous partners.

Part of this initiative will look at enhancing maritime domain awareness to ensure we are equipped to continue monitoring, detecting, identifying, and responding to incidents and events in Canadian waters and internationally, as well as to support the security and enforcement community's maritime domain awareness requirements.

Canada faces a complex and dynamic security environment in its maritime domain, which poses challenges to our security and economic prosperity. As such, we require a new mindset - one that takes a comprehensive view of all risks, vulnerabilities, threats, consequences and opportunities, and enables response through an active, multi-departmental, integrated approach. Coast Guard's development of a maritime domain awareness framework will provide a high-level outline and better understanding of the data collection and distribution of information internal and external to Coast Guard. Maritime domain awareness empowers our partner nations to detect, monitor, and ultimately respond to activity in their waters, and effective information sharing allows for a multinational response, ultimately securing the maritime domain. Achieving actionable maritime domain awareness will continue to be reliant on collaborative efforts and a coordinated focus between federal and global security partners. The Maritime Domain Awareness Strategy is key to the effective understanding of maritime-related activities and identifying threats as early and as far from our shores as possible.

The modernization initiative is comprised of four elements to effectively scope, plan and implement it:

- 1. Establish technical requirements and innovative solutions;
- 2. Engage and mobilize Coast Guard employees to develop, shape, and implement this initiative;
- Develop and maintain strong and meaningful collaborations to ensure access to robust tools, data, and systems; and
- 4. Provide the necessary framework to shift to digitalization of services.

Digitalizing the Coast Guard's and other federal partners' services will make marine navigation information more readily accessible to those who need it — for marine safety and navigation, environmental and marine mammal protection, increased maritime domain awareness, and in support of local, regional, and national economies.



A roadmap has been created to lay out the path forward for all e-Navigation related sub-projects, a number of which have already yielded deliverables, including the e-Navigation portal now being fully operational. The Waterways Information System and Automatic Identification System Application Specific Messages are also in operation, with improvements planned and required to achieve full operational capability. The Collaboration Voyage Management System is funded and scheduled for delivery in spring 2023. Other initiatives on the roadmap are either in design, in the planning stage, or in the implementation stage.

The Coast Guard is also undertaking efforts to update its "Système d'information du Programme des aides à la navigation" (SIPA) system, which was originally implemented 30 years ago and which supports the tracking and management of information related to more than 17,000 aids to navigation, design requirements, design and review methodology, production of the List of Lights, Buoys and Fog Signals publication, and Notices to Mariners publication. The system software and interface have been modified over the years to maintain operability but are no longer compatible with current technologies and environments. The new system should have an architecture and design that would allow for exchange of information with other areas and systems specifications for aids to navigation, adhere to the International

Hydrographic Organization's (IHO) requirements, and meet international shipping requirements in Canadian waters.

Considerable progress has been made to date with the next steps being to continue the efforts required to finalize the business requirements and work with other areas to establish a solution design that aligns with IHO standards, Canadian Hydrographic Services, and e-Navigation from a holistic marine navigation programs perspective.

#### **Commitments:**

- Develop a strategy to advance the modernization of marine navigation programs and safety systems including e-Navigation/digital waterways initiatives and guide investments in aids to navigation and Marine Communications and Traffic Services.
- Develop a maritime domain awareness framework with the objective of understanding maritime-related activities and identifying threats as early as possible and facilitating information sharing with multinational partners. The framework will outline Coast Guard's responsibilities, obligations, use and maintenance of Canada's maritime domain awareness capabilities.

# Showcase Item

# The Evolution of Global Navigation Satellite System Augmentation in Canadian Waters

The augmentation of a Global Navigation Satellite System (GNSS) is a process by which the satellitebased navigation system's integrity and accuracy are improved by external sources of information.

For almost three decades, the GNSS augmentation system provided to mariners in Canadian waters has been the Coast Guard Differential Global Positioning System (DGPS). The Canadian DGPS service was implemented in 1994 to augment the Global Positioning System (GPS). It does so by broadcasting corrections to positioning data to mariners over a network of strategically located medium frequency marine radio beacons. To obtain these corrections, the Coast Guard maintains a network of fixed, ground-based reference stations that identify the difference between the positions indicated by the GPS satellite system and known fixed positions.

The Coast Guard has monitored and studied the ongoing modernization of GPS, and improvements to the GPS system are now at a point where marine navigation requirements are met with un-augmented GPS. Additionally, in its studies, the Coast Guard has confirmed that GPS augmented by the Wide Area Augmentation System (WAAS) is a viable option for marine navigation in Canadian waters and can provide accurate high-integrity positioning that meets International Maritime Organization requirements. The service is maintained by the Federal Aviation Administration, is free to use, and does not need additional ground infrastructure nor are there any WAAS-related carriage requirements.

As a result, the Coast Guard intends to discontinue the provision of its DGPS service and shut down all 19 DGPS stations across Canada by December 15, 2022. This decision reflects the Coast Guard's efforts to modernize marine navigation services and find alternatives to aging DGPS services and infrastructure.

Coast Guard service users and stakeholders were informed of the decision to phase out the DGPS at various venues, including the Canadian Marine Advisory Council meeting in spring 2021. Internal messaging was circulated in fall 2021 informing Coast Guard's employees of the transition, and communications with service users and stakeholders will continue as we approach the discontinuation date.

#### **Objective 6: Enabling Innovation**

It is critical to ensure that the Coast Guard can successfully adapt to a shifting operational landscape, meet future operational requirements, and ensure continuity of service. The Coast Guard is establishing a robust innovation and experimentation approach that will accelerate the adoption of effective technological advances within the organization, designed to address future capability and needs. The goal is to support the Coast Guard's long-term sustainable development and modernization aspirations and goals and ensure targeted investments toward tested technologies, systems, and processes, resulting in value for money for Canadians. The focus is on developing data and intelligence to support decision-making, drive strategic planning, and promote collaboration and coordination for innovation efforts across the Coast Guard and the whole of government, with investments in smallscale testing and experimentation guiding where larger investments can be made with greater confidence of success.

Innovating our program and service delivery where it makes sense to do so will increase our flexibility and capacity and provide stronger services to Canadians over the near and long term. We are deepening our efforts to foster innovation that provides practical solutions for a variety of known or emerging operational requirements that improve service delivery, reliability, efficiency, climate resiliency and emission reduction.

The Coast Guard is committed to reducing emissions and environmental impacts in the areas of: fuel procurement (including low-carbon fuels); fleet procurement (including energy-efficient platforms); operational efficiency; and net-zero research and innovation. The overarching goal driving these environmental considerations is Canada's target of net-zero emissions by 2050. The Coast Guard will work hard to contribute to the target. Our contribution will come in various forms, including through a variety of innovative projects, research groups and task forces, and assessment of alternate power, which may contribute to the implementation of several key Government of Canada initiatives, particularly the United Nations Paris Agreement, the Federal Sustainable Development Strategy, and the Greening Government Strategy. Studies on the operational impacts of liquefied natural gas, a techno-economic feasibility assessment and a zero-emission fuel roadmap have been completed. A fulsome study on low-emission fuels for Coast Guard fleet is in the planning stages. A fulsome study on lowemission fuels for Coast Guard Fleet is in the planning stages.

Implementation of autonomous vehicles (including air, surface, and sub-surface) technology is a logical operational progression for the Coast Guard due to the ability of these systems to perform long-endurance missions in challenging environmental conditions. Their use increases personnel safety, reduces our carbon footprint, and allows for mission performance in conditions that may not otherwise be possible. The Coast Guard has several autonomous vehicles projects underway, including near-shore and off-shore operations supporting search and rescue (SAR), conservation and protection, maritime security, and icebreaking. In each case, coordination with the regulatory bodies is underway to ensure mission completion, and to better inform regulators of Coast Guard requirements. Trials of a multi-sensor, rapidly deployable vertical takeoff and landing drone surveillance system to test surveillance ranges for SAR and iceberg tracking missions have been completed.

#### **Commitments:**

 Develop a Coast Guard roadmap to climate resilience that is aligned with the targets set out in the Greening Government Strategy and includes collaborative work to advance Greening Government Fund projects.

- Ensure the development and sustainability of a Coast Guard operational fleet decarbonization plan.
- Continue to build capacity for internal experimentation through improved governance for the Transformation and Innovation unit by implementing a three-year planning horizon to identify, vet, and sequence innovation initiatives in alignment with organization priorities and strategic goals.
- Advance the development of two novel kinetic energy harvesting technologies with the potential to support Coast Guard: offset the on-board energy requirements of its vessels; enable future asset capability through use of distributed sensors systems aboard vessels or aids to navigation; reduce stress/fatigue of ship materials, and enhance vessel crew/ operator comfort.
- Provide high quality, timely intelligence on marine contamination, ice condition and coastal ecosystems by developing, demonstrating and testing a prototype Earth Observation and Monitoring System.



# **Fleet Decarbonization**

Following Treasury Board approval of the updated Greening Government Strategy in fall 2020, Canada committed to reducing greenhouse gas (GHG) emissions between 40 and 45% by 2030 and aims to achieve net-zero emissions by 2050. Although the Coast Guard's fleet is exempt from the absolute emission reduction targets, the organization is working to reach net-zero emissions by 2050 via a combination of measures such as direct reductions and alternative fuels.

In order to achieve this, the Greening Government Strategy has required all National Safety and Security fleets to develop and maintain an Operational Fleet Decarbonization Plan (OFDP). The first iteration of the OFDP is due in 2023 and will subsequently be updated every five years. It will outline how the Coast Guard will reduce GHG emissions from operations and provide a credible, costed pathway to net-zero emissions by 2050 with key milestones. It will identify opportunities to improve operational capacity and resilience while reducing lifecycle costs and environmental impacts, and it will integrate decarbonization considerations into all aspects of fleet planning, governance and decision-making.

To improve the efficiency of the new fleet and help achieve these targets, the Coast Guard is evaluating and analyzing various alternative marine fuel options and vessel optimization measures to support decarbonizing future fleet operations and proceed with proof of concept emission reduction configurations across the fleet. While there will continue to be a reliance on marine diesel oil, Coast Guard has identified opportunities to immediately impact emission reduction through the use of drop-in fuels, such as biodiesel and renewable diesel. Upon further assessment, future findings will assist in determining technological and operational feasibility for new ship designs, including margins to accommodate the adoption of new technologies and fuels at the midlife modernization stage.

The Canadian Coast Guard has been engaging with Canadian Nuclear Laboratories (CNL) since fall 2020 on a series of studies relating to marine decarbonization. The initial phase focused on a preliminary literature review of liquefied natural gas as marine fuel, assisting Coast Guard in determining that liquefied natural gas was unfeasible for the fleet." Concurrently, in support of Canada's GHG reduction targets set for 2030 and 2050, the Coast Guard is seeking to trial biodiesel at various blend rates to experiment using low-carbon fuels to decarbonize fleet operations. A federal fleet asset operating using a 100% biodiesel fuel would represent a first among the National Safety and Security fleet partners, as well as the Government of Canada.

Through Budget 2021, funding was secured to support the purchase of low-carbon fuels from 2023-24 to 2030.

The Coast Guard is now adopting best practices to improve efficiency and reduce emissions and environmental impacts, and is also closely monitoring global advancements and innovative demonstrations in the low and zero-carbon fuel industry.

Furthermore, the Coast Guard is actively engaging with industry, such as with other vessel operators, consultants, engineering firms and engine manufacturers to gain a deeper understanding of potential low and zero-emission propulsion sources, and is engaged in bilateral discussions with international counterparts focused on information-sharing and lessons learned from early stage fleet decarbonization efforts.

## Strategic Pillar 4: Our Governance

The international standard on social responsibility, ISO 26000, defines organizational governance as "a system by which an organization makes and implements decisions in pursuit of its objectives." Governance systems include the management processes designed to deliver on performance objectives while considering stakeholder interests. The Coast Guard believes that good governance is participatory, consensus-oriented, accountable, transparent, responsive, effective and efficient, equitable, and inclusive. The organizational changes announced for national headquarters in 2019 have made the Coast Guard a more unified and stronger national institution, as did the creation of the Arctic Region. During this business planning cycle, we will continue to strengthen national policies, processes, procedures, and systems to enhance decisionmaking, preparedness, delivery, and accountability, and enable our headquarters and four regions to function smoothly and seamlessly as one united Coast Guard.

Stakeholder interests are at the forefront of our decision-making, and strengthening stakeholder engagement both internally and externally will continue to be a priority in all our governance undertakings.



#### **Objective 1: Strengthening National Policies, Processes, Procedures and Systems**

The Coast Guard is a response organization and as such our fleet and regional front-line personnel often need to take quick action in the field. Having nationally consistent policies, standards, methods, procedures, and systems provides clarity around decision-making, enhances the effectiveness of program and service delivery across the country, and provides a framework that fosters futurelooking strategic thinking. This national consistency facilitates the development of internal planning capabilities that in turn ensures we remain well positioned for current and future implementation.

Consistent with the Treasury Board of Canada Secretariat's Policy on Results, the Coast Guard has established a governance structure to promote results-based decision-making and clear accountability. Internal executive board committees and sub-committees have been established across all Coast Guard directorates and regions, all of which report to the Canadian Coast Guard Management Board, which is the senior advisory body to the Commissioner.

The need for a solid governance framework extends to external partnerships as well. As an example, the Response Directorate is engaged in the development of a Canadian Coast Guard Mass Rescue Operations — Maritime framework document, which is based on information collected over years of consultation with internal programs and external partners, including the Canadian Armed Forces (CAF), and which defines the roles and responsibilities in the event of a mass rescue operation. The framework also seeks to further delineate the communication intervals and pathways required between the regions, national headquarters, and other stakeholders, to allow Coast Guard senior management and staff to carry out the swift and decisive actions needed in an incident of this scope. There is a need for common language and a mutual understanding of roles, responsibilities, intent, and reporting lines internally for the Coast Guard, and between the

Coast Guard and other search and rescue (SAR) partners and stakeholders during a mass rescue operation, and to align the plan with existing largescale incident plans within CAF, other federal SAR partners, regional plans within Coast Guard, and provincial consequence management plans. The first draft of the framework document has been completed and is currently being reviewed by other Coast Guard programs including SAR and a team of disaster and emergency response subject matter experts prior to being exercised and finalized. This will provide Coast Guard staff at the regional and headquarters levels with a better understanding of the reporting requirements and intervals for effective actions during a mass rescue operation in the maritime domain and align Coast Guard and CAF operations and expectations when responding to large-scale SAR incidents.

As a maritime security partner within the broader Government of Canada community, the Maritime Security Branch supports Canada's national security efforts through proactive leadership to initiate, manage and maintain interdepartmental and interagency relationships. As the current chair of the broader Marine Security Operations Centres (MSOCs) governance structure, Coast Guard is leading the effort to renew the program elements with a view to integrating the work of the centres as part of the broader national security infrastructure. Canada's MSOCs support maritime security in Canada and are an integral component for detecting and monitoring maritime activity in addition to collating, analyzing and coordinating information and intelligence from its monitoring systems. As security threats on land, in the air and at sea continue to evolve, there is a need to analyze the current MSOC functions and outputs with the aim of identifying existing and potential gaps that impact the MSOCs ability to provide Maritime Domain Awareness. The results will thus orient the renewal of the MSOC program by suggesting improvements to policies and procedures that are forward-looking and aligned with whole-of-government best practices.

The Coast Guard is a data-heavy organization, and the successful two-year Business Intelligence/ Business Analytics (BI/BA) pilot project showcased the value of optimizing the use of that data to guide decision-making. The emergence of low-cost self-service tools make business analytics possible without significant infrastructure investments, and while the pilot focused exclusively on using integrated business management services data, it clearly demonstrated that services to Canadians could benefit immensely from automation, predictive analysis, and artificial intelligence applications to Coast Guard programs.

A further BI/BA project was recently launched that focuses on seagoing personnel data. As a result, the Coast Guard is now equipped with internal, on-demand dashboards showcasing demographics that are automatically updated daily to help inform decision-making. These dashboards have provided insight into questions regarding crewing the fleet of the future, such as employee retention, costs of leave banks, training strategies, and retirement projections.

Given the advantages of enhanced BI/BA, during the cycle of this business plan, the Coast Guard will be furthering its BI/BA strategy with a view to:

- Digitize business processes: streamlining, digitizing, and automating business processes to meet the expectations and reap the benefits of new data policies;
- Data enablement: making data that Coast Guard generates or uses accessible, understandable, actionable, and secure;
- Solutions enablement: transforming the data into valuable business intelligence or predictive analytics to support program decision-making;
- Training and support: providing training and support to employees on general data literacy as well as more technical training on BI and analytics; and

• Data strategy and governance: Creating and leading the implementation of a Coast Guard data and analysis strategy to complement the departmental strategy.

#### Integrating Risk Monitoring and Risk Management

Integrated risk management is recognized as a core element of effective public administration. In a dynamic and complex environment, organizations require the capacity to recognize, understand, accommodate, and capitalize on new challenges and opportunities. The effective management of risk contributes to improved decision-making, better allocation of resources and, ultimately, better results for Canadians.

Risk management is a crucial component of all areas of the Coast Guard's daily business. Identifying risks and responding to these risks allows an organization to make informed decisions related to planning, allocating resources, managing programs, reporting on performance, and setting priorities. While it is impossible to avoid all the problems of the future, it is possible to choose which risks can be tolerated and which risks should be mitigated. An organization can then decide how to best equip itself to face an uncertain future.

The Treasury Board Secretariat's Framework for the Management of Risk comprises the following elements: identifying, assessing, responding, communicating and monitoring. When risks are identified and understood, organizations are able to make informed decisions and set the best course of action under uncertainty. According to this framework, risk represents the effect of uncertainty on an organization's objectives. In a Canadian Coast Guard context, this is the likelihood of an event happening and determining the impact of this event on the Coast Guard's operations and service delivery. Risk management does not necessarily mean risk avoidance in the case of potential threats; it means responding proactively in tolerating or mitigating the threats, and taking advantage of any opportunities to reduce risk threat measures.

One of the key activities of risk management is the development of an organizational risk profile which describes an organization's key risks. Following the guidance of the Treasury Board Framework for the Management of Risk, the Coast Guard developed a risk profile in collaboration with subject matter experts and regions. There are risk statements, risk drivers, and risk controls for each of the 19 objectives identified in the Coast Guard's 2021-22 to 2023-24 Integrated Business and Human Resource Plan (IBHRP). The organizational commitments under each of the IBHRP objectives are informed by the risk statements, and form part, but not all, of the mitigation strategies in place for each of the identified risks.

The Coast Guard risk profile is included as Annex E to this IBHRP. In the Annex, the organization's risk statements have been assessed and ranked numerically across several risk criteria according to Treasury Board Secretariat Framework guidance. Each of these risk criteria has been measured both for their impact, and the likelihood of their occurrence.

Effective risk management is a continuous, proactive and systematic process to understand, manage, and communicate risk across an organization. The risk profile has been incorporated into the annual Coast Guard budget and business planning process as it will allow the Coast Guard to make informed decisions on response strategies and IBHRP commitments. The risk statements and risk assessments from the risk profile support a more accurate prediction of the likelihood and impact of issues with the potential to affect the achievement of the Coast Guard's strategic objectives. Monitoring of risks requires ongoing attention and will be reviewed on an annual basis.

#### **Departmental Initiatives**

As part of a departmental initiative, the Coast Guard has replaced its financial system with the Government of Canada standard SAP which went live in April 2021. This will enhance many of the processes the Coast Guard uses daily, including procurement, payments, managing assets and inventories, and developing budgets, and will provide valuable support to our strategic decisionmaking, as well as enable statutory reporting.

We are also moving ahead with GCdocs, the official electronic document and records management solution used to create, collect, and preserve information classified up to the level of "Protected B". As an enterprise-wide platform, GCdocs facilitates the digital approach to the way the Coast Guard works, replacing the vast network of shared drives with a single repository. Accessed via both desktops and mobile platforms, GCdocs fully integrates with the Government of Canada Correspondence Management System, MS Office (including email), SAP, and GCCase, and enables the digital Access to Information and Privacy process.

#### **Commitments:**

- Develop a long-term strategic plan to articulate the Coast Guard's vision and mission into 2050 and beyond. The plan will map out the organization's future operations, programs and services, taking into consideration factors such as climate change, digitization of services, evolving geopolitical realities, fleet renewal and new workforce requirements to ensure the Coast Guard remains relevant to Canadians and able to adapt to new dynamic operating environment in the future.
- Review and update key documents including interdepartmental Memoranda of Understanding (MOU) on response collaboration with key partners and the National Marine Spills Contingency Plan:
  - Transport Canada/Coast Guard MOU Environmental Response Annex.
  - Environment and Climate Change Canada/ Coast Guard MOU.
  - DFO Science/Coast Guard Environmental Response MOU.

- Complete the development of the Vessels of Concern program as identified under the Oceans Protection Plan and initiate the transition into service starting April 2022.
- Define the Coast Guard incident response and incident management strategy by updating the Incident Command System Plan for Incident Management (now referred to as the Coast Guard Plan for Incident Management), including among other aspects, greater clarity for command and control structures to effectively respond to maritime incidents.
- Develop an Incident Command System/ Incident Management training strategy, building on the successes of the Incident Command System (ICS) training approach during ICS implementation to ensure enhancements are made to ICS/Incident Management training in both official languages.
- Develop a strategy to enhance continuous improvement/lessons learned processes and procedures to inform future exercises and training activities, thereby improving program readiness.
- Optimize the helicopter program and concept of operation for the inclusion of remotely piloted aircraft systems in Coast Guard operations.
- Launch an aircraft services review in cooperation with Transport Canada to identify the ideal organizational construct for the delivery of Transport Canada Aircraft Services Directorate's business lines in order to maximize financial and operational efficiencies to the benefit of Canadians.

- Implement a more predictable costing model that incorporates a fixed salary cost for each vessel, contingent on an appropriate relief factor rate being approved by senior management.
- In alignment with the Coast Guard budget and business planning cycle, update the Coast Guard's risk statements and risk assessments to help inform and guide the Agency's Integrated Business and Human Resource Plan strategic objectives and respective commitments.
- Implement a new process for allocating the Coast Guard operating budgets in order to enable better decision-making around Agency level over-programming and cash management strategies.
- Implement and operationalize a new Coast Guard data management and analytics program and centre for excellence.
- In alignment with the creation of an interim Uniform Management Team, implement a centralized cost centre and processes to provide continuous monitoring of uniform purchase expenditures.
- Continue as project authority for the Marine Security Operations Centres third-party renewal and oversee the development of the evaluation plan and the conduct of the evaluation.

# Showcase Item

# Implementation of an Autonomous Vehicles Program

The Autonomous Vehicles Project office under Fleet and Maritime Services is committed to implementing an autonomous vehicle program to support intelligence, surveillance and reconnaissance modernization during the current business planning cycle.

Autonomous vehicles, including remotely piloted aircraft systems (RPAS), will be used not only to support and enhance helicopter operations, but to support all of the Coast Guard's programs and partners, in line with the corporate objective to strengthen national policies, processes, procedures and systems.

RPAS tests and evaluations have been underway since 2015 and consisted of technology demonstrations in operational environments, primarily using small short-range RPAS along with larger vertical take-off and landing systems. Since 2019, various programs from Maritime and Civil Infrastructure as well as Electronics and Informatics have been using RPAS for infrastructure inspections and site surveys.



While autonomous vehicle technology has shown great promise for decades, it's only in the past few years that these systems became capable enough for real-world maritime operations, especially in regions such as the Arctic. We now reached a point of convergence between the systems abilities to provide routine performance in challenging environments, the ability to analyze data using artificial intelligence, and a clear understanding of the Coast Guard's aerial data collection requirements.

Thanks to these advancements, the Coast Guard is now highly confident in the value added by the implementation of autonomous vehicles to support routine intelligence, surveillance and reconnaissance operations, including the processing, exploitation and dissemination of the data collected in support of operational requirements.

In 2022, what began as an autonomous vehicle project will transition into a program, and work will begin on a capabilities roadmap to identify deficiencies and guide the acquisition, staffing and training measures required to address them.

The roadmap will detail logical and realistic steps toward the implementation of autonomous technology to provide the Coast Guard and its partners with robust intelligence, surveillance and reconnaissance capabilities from the tactical to the strategic level.



#### **Objective 2: Engaging with Industry and Other Coast Guard Stakeholders**

The Coast Guard serves many different stakeholders, with varied, and sometimes competing, interests. Key stakeholders include:

- Fisheries and Oceans Canada;
- Other government departments;
- Other levels of government;
- International organizations;
- Indigenous partners;
- Coastal communities;
- Industry;
- The international shipping community;
- Academic institutions such as Cape Breton University, which grants degrees to Canadian Coast Guard College graduates;
- Non-Governmental Organizations;
- The Canadian Coast Guard Auxiliary;
- The United States Coast Guard; and
- The general public.

The Coast Guard collaborates internally as well as externally with stakeholders through several engagement mechanisms in order to advance the Coast Guard's mandate and Government of Canada and international priorities.

To strengthen the Coast Guard's internal capacity to manage and benefit from engagement with industry, the Coast Guard will implement the Industry Engagement Strategy over the duration of the business plan. The strategy outlines a series of objectives to increase the Coast Guard's collective knowledge of the marine industry, improve prioritization of partnerships and activities, enhance information flow within the Coast Guard, and more effectively engage partners and networks. The establishment of an industry engagement working group and an annual process to set and review priorities will facilitate a more coherent, coordinated approach to our relationships with industry.

One of the main mechanisms for industry engagement is the National Marine Advisory Board (NMAB), which serves as a permanent forum for discussion between the Commissioner of the Canadian Coast Guard and Canada's shipping industry. Discussion is focused on the needs of marine transportation, the strategic plans and priorities of the Coast Guard, and the services the Coast Guard provides to its clients. NMAB meetings are held biannually in the spring and fall and are co-chaired by the Commissioner and an elected industry representative. The NMAB created a subcommittee on policy and planning to foster more relevant and mutually beneficial dialogue and explore areas of potential collaboration. Subcommittees on marine navigation and e-navigation focus on operational issues and service delivery.

The Regional Marine Advisory Boards bring together Coast Guard and industry to discuss issues of mutual concern related to operations, planning, and Coast Guard services. The boards meet in the spring and fall and are co-chaired by the regional Assistant Commissioners and an industry representative.

The regional boards are the Western Marine Advisory Board, Arctic Marine Advisory Board, Great Lakes Marine Advisory Board, Maritime Seacoast Advisory Board, and the Newfoundland and Labrador Advisory Board. The Coast Guard also attends meetings of the Groupe conseil maritime as observer.

The Coast Guard also actively engages with industry through the national and regional Canadian Marine Advisory Council (CMAC), a consultative body coordinated by Transport Canada (TC) that represents parties with an interest in shipping, navigation, and marine pollution matters. Through its standing committees and working groups, CMAC advises TC on matters related to its mandate, including regulatory and legislative issues, operations, and services. National-level CMAC meetings are held biannually, with the Coast Guard hosting a session each spring. Five regional CMAC meetings are organized with varying levels of engagement with the Coast Guard.

The regulatory framework that supports Canada's marine safety regime is built on domestic and international agreements and commitments — all focused first and foremost on preventing accidents from occurring. From this framework bore subsequent domestic interdepartmental working groups intended to support marine safety and security, such as the Interdepartmental

Marine Security Working Group, and the Northern Interdepartmental Intelligence Working Group, for which Coast Guard is an active and contributing member. In addition to supporting Transport Canada in the work of CMAC and the International Maritime Organization (IMO), the Coast Guard takes a lead role at the International Association of Marine Aids to Navigation and Lighthouse Authorities by contributing to the development of international standards for marine aids to navigation and related services through active participation at its four technical committees and supporting sub-groups.

The Coast Guard participates internationally in three regional coast guard fora and one global forum, namely the Arctic Coast Guard Forum, the North Atlantic Coast Guard Forum, and the North Pacific Coast Guard Forum, as well as the Coast Guard Global Summit. These multilateral fora bring together coast guard and maritime organizations from relevant regions to share expertise and best practices in support of a safer and more secure marine environment.

The Coast Guard is currently advancing three bilateral cooperation plans — the Danish Joint Arctic Command, the Norwegian Coastal Administration, and the Norwegian Coast Guard. These cooperation plans, which are national in scope, are the result of previously agreed-upon initiatives and commitments made by the Commissioner to international partners and were developed based on extensive and comprehensive consultations throughout the organization.

The Canada-United States Coast Guard Summit is an annual meeting between the Coast Guard and the USCG that brings together representatives from across both organizations to discuss issues of mutual importance. A cornerstone engagement for the Coast Guard, the summit is a unique opportunity to strengthen communication and cooperation at the senior, operational, and regional levels. Nationally, the two coast guards work closely throughout our shared waterways, including shared icebreaking duties on the Great Lakes; collaboration in marine environmental emergencies (guided by the Canada-US Joint Contingency Plan); search and rescue (SAR) operations; vessel traffic management; and aids to navigation management.

On behalf of Canada, the Coast Guard is chairing the Arctic Council's Emergency Prevention, Preparedness and Response (EPPR) Working Group from 2021 to 2023 and coordinates the participation of Canadian technical experts from eight federal departments and agencies. This is one of six working groups of the Arctic Council, which is the leading intergovernmental forum promoting cooperation, coordination, and interaction among the Arctic States, Arctic Indigenous peoples, and other Arctic inhabitants on common issues related to sustainable development and environmental protection. The EPPR Working Group's work to address gaps, prepare strategies, share information, and enable exercises for large-scale oil spill and SAR operations will be advanced via three expert groups — Marine Environmental Response, Radiation, and SAR.

In support of the Government of Canada's priority to keep Canadians and Canadian interests secure at home and abroad, the Coast Guard is strengthening its delivery of maritime security capacity-building assistance to developing countries. Coast Guard provides expertise in maritime domain awareness, empowering partner nations to detect, monitor, and respond to activities in their waters. Canada's comprehensive whole-of-government approach to national security, such as information and resources sharing, is provided to international participants, creating improved regional capacity, and reducing the spread of illicit maritime activities. Complementary assistance in SAR and small boat operations further enables partner nations to improve safety of life at sea, and to mitigate heightened threats to human life stemming from illicit activity.

Multinational capacity building includes participation in strategic international fora. The value of our international presence and expertise through capacity building and working groups is recognized by Global Affairs Canada, who have added Coast Guard as Canadian Delegates to G7++ Friends of Gulf of Guinea, G7 Roma-Lyon Group, and IMO working groups. These fora provide an opportunity to influence regional maritime codes of conduct in East and West Africa and advance Coast Guard's reputation as a credible, reliable security partner.

With almost all Coast Guard sectors engaging in international activities, the International Engagement Strategy (IES) is intended to identify coherent priorities and deliverables to guide and coordinate the organization's engagement with international partners toward activities that provide the most value to the Coast Guard. The IES represents the first organization-wide international priority-setting exercise and will enable us to pursue a more strategic and integrated departmental approach to international engagement. The IES will also support situational awareness of international activities across sectors, articulate specific opportunities to pursue international engagements that support our mandate and priorities, and highlight tools available to support international engagement.

Consultation, engagement, and co-management are at the heart of the Government of Canada's agenda and the Coast Guard's governance framework. It is therefore vital that we have the capability to provide an accurate account of stakeholder encounters and relationships with various stakeholders. The partners database is a client relationship management tool created to record stakeholder engagements and enable us to move from planning to managing stakeholder relationships in an informed and efficient manner, ensuring continuity and relevance in its approach. It will also enable us to monitor and track progress against the International and Industry Engagement Strategies.

#### **Commitments:**

• Continue to engage Coast Guard stakeholders to inform Coast Guard's priorities so we continue to better serve our clients, and adjust requirements and needs through regular reporting of the international and industry engagement strategies.

- Coast Guard will honour its commitment to serve as Emergency Prevention, Preparedness and Response Working Group Chair and Canada's Head of Delegation to contribute to the advancement of Canadian objectives to the extent possible given geopolitical events impacting the Arctic Council.
- Continue to serve as co-chair for the CANUS Maritime Domain Awareness Cyber Assessment Working Group and chair of the newly established Five Eyes Maritime Domain Awareness Cyber Assessment Working Group. Coast Guard will continue its leadership efforts by advancing maritime cybersecurity within these partnerships and by sponsoring an annual cybersecurity industry day.
- Continue to chair the Marine Security Operations Centre Governance Committees during fiscal year 2022-23, followed by a one-year term as deputy chair during fiscal year 2023-24.

#### **Objective 3: Engaging with Indigenous Partners**

Meaningful relationships and dialogue with Indigenous partners are part of the foundation of various Coast Guard fora, particularly regional governance structures that promote ongoing collaboration to exchange information and discuss shared objectives.

The Coast Guard has made progress in supporting self-determination, improving service delivery, and advancing reconciliation. To accelerate and build on the progress we have made, we will continue to engage with Inuit, Métis, and First Nations partners to advance Canada's reconciliation agenda through practical partnerships with Indigenous peoples, and by enhancing capacity to support safety and security in Canadian waters. The Coast Guard is committed to implementing the Inuit Nunangat Policy that recognizes the unique priorities and interests of Inuit in Inuit Nunangat.

Collaboration with Indigenous and coastal communities is key to strengthening marine safety and protection of the marine environment, including addressing concerns raised in relation to proposed major resource and infrastructure projects. Our delivery of the Indigenous Community Boat Volunteer Pilot program, a program initially launched under the first phase of the Oceans Protection Plan (OPP), funds Indigenous communities to purchase a boat or equipment required to participate in the marine safety response system as active members of the Coast Guard Auxiliary. To date, 40 Indigenous coastal communities or organizations on all three coasts received funding to buy or retrofit boats and related safety equipment. This project will continue under the OPP Renewal. The Indigenous Community Response Training program delivers training to coastal Indigenous communities in British Columbia on maritime search and rescue, environmental response, and the application of the Incident Command System. The initiative resulted in the Coast Guard training more than 500 participants from more than 50 nations between 2017-2021. The nationalization of this project was funded under the OPP Renewal and reframed to focus primarily on search and rescue training and exercising activities. Funding for Indigenous search and rescue will allow all regions to deliver search and rescue and marine safety training and exercises to local Indigenous Peoples interested in building marine emergency response knowledge and capacity to improve marine safety awareness in their communities. Also funded under the OPP. the Coast Guard supported the implementation of Canada's first Indigenous-led Canadian Coast Guard Auxiliary. The Coastal Nations Coast Guard Auxiliary contributes to demonstrate our commitment to increased participation of Indigenous communities and other partners across the country in marine incident response.

The Coast Guard Reconciliation Action Plan (RAP) is the result of engagements with our Indigenous partners. It highlights commitments made by all directorates and regions to both build our internal capacity to strengthen relationships with Indigenous partners as well as to support the relationships themselves. Priority commitments will be chosen annually based upon review of any mandate updates and alignment with



Coast Guard's Strategic Framework and the Management Board-approved sequencing view, which identifies all Indigenous-focused priorities for the year. For fiscal year 2022-2023, the Coast Guard's three priority commitments under the RAP feature increasing procurement of Indigenous products and services, prioritized recruitment of Indigenous staff, and cultural awareness training for staff.

#### **Commitments:**

- Engage with Indigenous and coastal communities to address their marine safety and environmental response concerns, including those associated with proposed major resource and infrastructure projects (e.g., implementation of Trans Mountain Expansion accommodation measures).
- Support negotiations of reconciliation agreements, arrangements, and frameworks which build meaningful and long-term relationships with Indigenous partners to

empower communities with knowledge, personnel, training and equipment to protect culturally important and sacred sites on their traditional territories as well as to develop roles for Indigenous communities in the broader marine safety regime.

- Implement a strategic framework to guide how the Coast Guard will continue to provide ongoing collaboration with Indigenous partners.
- Continue to provide marine pollution report notifications to the Heiltsuk Marine Emergency Response Team (MERT), located in Bella Bella, British Columbia, and continue working toward collaborative response activities between the Coast Guard and the MERT.
- Work with the National Indigenous Fisheries Institute to develop a best practice and guidance document to establish a process to meaningfully include Indigenous perspectives, knowledge and voices into the Canadian Coast Guard National Indigenous Relations Strategic

Framework and other national-level policies and priorities.Through relevant Coast Guard governance structures, ensure that Indigenous concerns and interests are widely understood across the agency and increasingly embedded in policies, programs, and activities.

#### **Objective 4: Supporting the Implementation** of the Arctic Region

In a move to put Inuit, First Nations, and Métis in the North at the heart of decision-making in the Canadian Arctic, the Department of Fisheries and Oceans and the Coast Guard created a new region focused specifically on the Arctic in 2018. This region is inclusive of all Inuit Nunangat regions in Canada, as well as the remainder of the Northwest Territories, Hudson Bay, James Bay and the communities that reside along their shores.

One of the priorities of the Arctic Region is to advance reconciliation with Inuit, First Nations, and Métis partners. To implement this mandate the Coast Guard is working with its partners to identify priorities, and take a distinctions-based approach to better align and enhance program and service delivery in the North.

The Canadian Arctic constitutes nearly half of Canada's landmass and a large portion of Canada's coastline, and is home to more than 120,000 inhabitants, the majority of whom are Inuit, with a smaller number of First Nations and Métis peoples. In support of Arctic community safety and protection of the Arctic marine environment, the Coast Guard works closely with partners to lead and support response in a variety of emergency situations. Demand for Coast Guard services in the Arctic and risk in the marine environment are increasing significantly due to melting ice, increased vessel traffic, increased population and local boating activity, and growing international interest in the Arctic. As part of the priorities of the Inuit-Crown Partnership Committee, the Coast Guard is establishing a governance framework in collaboration with Inuit organizations and governments to support program and service delivery priorities in Inuit Nunangat. The Coast Guard is also working in collaboration with Inuit, First Nations, and Métis organizations and government to advance the priorities under the Arctic and Northern Policy Framework, including safety and security in the Arctic.

#### **Commitments:**

- Develop a Coast Guard Arctic Strategy and an interdepartmental Arctic Maritime Security Strategy as part of Coast Guard's commitment within the Interdepartmental Marine Security Working Group.
- Collaborate with Inuit organizations and government to support the implementation of service delivery priorities in Inuit Nunangat in alignment with the Inuit Nunangat Policy, under the Inuit-Crown Partnership Committee.



# Showcase Item

# Inuit Nunangat Policy Implementation

The boundaries of the Canadian Coast Guard's Arctic Region are inclusive of the four land claims organizations in Inuit Nunangat, and the Region has been working with the Inuit-Crown Partnership Committee in the development of the Inuit Nunangat Policy (INP). The recently endorsed INP seeks to improve the delivery of federal programs, policies and initiatives to benefit Inuit. It advances Inuit self-determination, recognizing Inuit Nunangat as a distinct area, and links research, policy and investments with the development of the region.

Implementation of the INP will impact fiscal and program delivery by advancing a distinctionsbased approach to the allocation of departmental resources in Inuit Nunangat. Alignment with the policy is required across all lines of Coast Guard program delivery and departmental corporate services in Inuit Nunangat in the Arctic Region.

The Arctic Region will work with Coast Guard programs and corporate services to support and provide guidance on the implementation of the INP in the region. "The Coast Guard, DFO, Inuit Tapiriit Kanatami and land claim organizations established a governance framework to advance the interests and priorities of program and service delivery in Inuit Nunangat. The Arctic Region will support the INP implementation by identifying alignment opportunities within the Department, and will continue to participate on the Inuit-Crown Partnership Committee and coordinate with other government departments on a whole-ofgovernment approach to implementation.

Medium-term activities include delivering cultural awareness training for Coast Guard staff operating in the Arctic, and ongoing efforts to work with programs and corporate services operating in the Arctic to align with the INP. In the long term, we will operationalize the policy and contribute to the Crown-Indigenous Relations and Northern Affairs Canada evaluation of the INP implementation and long-term implementation plan."

# Budget: Daily Operations and Long-Term Investments

The Coast Guard's budget is determined annually. The Agency's budget of \$1.686 billion (for 2022-23) includes \$760.21 million for day-to-day operations. These funds are primarily allocated to regions to deliver front line services to mariners in lakes, rivers, and ocean areas, as well as to grants and contributions to eligible parties to build capacity and support service delivery.

The remaining amount includes a capital budget of \$904.4 million, which supports the Coast Guard's five-year integrated investment plan. This includes investments in:

- New ships
- Vessel life extensions
- Refurbishing and replacing infrastructure, equipment, and systems
- Implementing initiatives under the Oceans Protection Plan
- Supporting major projects such as the Trans Mountain Expansion project

See Annex D, for additional information on Coast Guard financials.



# Structure

The Coast Guard is a Special Operating Agency – the largest in the Government of Canada – within Fisheries and Oceans Canada.

The Coast Guard is led by the Commissioner of the Canadian Coast Guard who is supported by two Deputy Commissioners within headquarters (Shipbuilding and Materiel, and Operations), the Director General of Personnel, as well as Assistant Commissioners for each region (Atlantic, Arctic, Central and Western).





# Coast Guard Sectors, Directorates, Programs and Regions

The Coast Guard organization includes its headquarters in Ottawa, Ontario, and four regions.

Headquarters is responsible to provide functional leadership to the regions in support of program delivery to ensure consistency in the design and delivery of programs nationally.

Regions are responsible for regional program delivery, in support of national program objectives, including the building and management of relationships with partners and other stakeholders, and the provision of regional expertise in the design and delivery of national programs. While all four regions deliver core Coast Guard programs, the focus in each region is different, depending on climate, geography, and client needs.

## **Operations Sector**

#### **Operations Sector Structure**

The Operations Sector, headquartered in Ottawa, includes three directorates: Fleet and Maritime Services; Response; and Innovation, Planning and Engagement.

The Fleet and Maritime Services Directorate has national functional authority for the fleet, operational planning, maritime security — including maritime domain awareness, support to security partners, maritime cybersecurity, and international capacity building — and marine navigational programs, which includes management of aids to navigation, Marine Communications and Traffic Services (MCTS), and icebreaking.

The Directorate focuses on developing operational requirements for the new classes of ships identified in Coast Guard's fleet renewal plan; ensuring operational capability and readiness of Coast Guard's fleet of ships and helicopters; ab initio training, a national program that benefits all regions in recruitment for MCTS centres; stabilizing the work on e-Navigation within the Coast Guard; initiating a comprehensive MCTS workload analysis following the program's modernization and consolidation projects; progressing the levels of service review for Coast Guard's Icebreaking program; and the modernization of marine navigation and safety services, and implementing the Coast Guard's involvement in national maritime security efforts.

The Response Directorate has national functional authority for the response programs: Environmental Response, Maritime Search and Rescue as well as Vessels of Concern, and is the organizational lead on Incident Management. The Directorate is responsible for the development of operational policies, standards, approaches and mechanisms required to optimize program delivery; ensures outcomes, outputs are aligned with allocated resources in support of Coast Guard's strategic direction and operational requirements; oversees the development and integration of coastal communities, Indigenous and non-Indigenous, into Canada through effective and strategic management of a substantive grants and contributions program; and advances an emergency management within the Coast Guard.

While the Coast Guard regions deliver the Response and Fleet and Maritime Services programs, the headquarters Response, and Fleet and Maritime Services teams support them by providing national strategic planning and oversight to allow effective and efficient delivery.

The Innovation, Planning and Engagement Directorate provides national leadership for the consistent integration, management, and coordination of the Canadian Coast Guard's strategic and horizontal planning, which encompasses budget planning, corporate and performance reporting, and risk management. It also leads internal communications and public events, external engagement with domestic and international partners and service users and Indigenous partners, and innovation initiatives, both technological and process oriented. It's also responsible for the implementation and oversight of horizontal initiatives such as the Oceans Protection Plan and implementation of federal commitments related to the Trans Mountain Expansion project.

#### **Operations Sector Programs and Services**

The delivery of Coast Guard operational programs and services involves seamless collaboration between the individual program centres of expertise and the Fleet Operational Capability program. The result of this collaboration is the optimal delivery of programs and services on the water using Coast Guard vessels, air cushion vehicles and small craft, and in the air and on land using Coast Guard helicopters. It falls to the individual program areas to determine the service user needs, the required geographic coverage, and the appropriate prioritization of the service delivery. The front-line delivery of services on the water or in the air is the responsibility of the fleet.

To accomplish this, a key priority of the sector is to ensure that Coast Guard has the right people, equipment and training to meet growing expectations and respond effectively.

To build on that commitment, the Coast Guard must continue to strengthen the strong relationships we have developed with our partners to ensure interoperability and a common, consistent approach, both domestically and internationally. Domestically, this is accomplished through a variety of partnerships, including DFO Science and Conservation and Protection, Transport Canada, National Defence, the Royal Canadian Mounted Police, the Canada Border Services Agency, and Environment and Climate Change Canada. Our Marine Security Operations Centres are representative of our collaborations with other departments and agencies, where we work together to share information and intelligence in support of a whole-of-government response to potential marine threats and incidents. Internationally, the Coast Guard is enhancing its leadership at both the Arctic Council via the Emergency Prevention, Preparedness and Response Working Group and at the various Coast Guard fora.

The emergence of the global COVID-19 pandemic has illustrated the importance of preparing our organization for a dynamic, unpredictable future. This includes developing scenarios for fleet needs in 10, 20, 30 years and beyond. To do that, Coast Guard Operations will continue to evolve as an agile, innovative sector aligned with operational requirements and practical applications.

These complex, uncertain times require an unprecedented level of leadership, cooperation, and forethought. Now, and in the coming years, Coast Guard Operations will take proactive, decisive action to address whatever challenges lay ahead.

#### **Incident Management**

The Incident Management Directorate provides horizontal support to the three Response programs: Environmental Response, Search and Rescue, and Vessels of Concern, enabling them to deliver effective responses to marine incidents within Canadian waters. This includes developing tools that will enable integrated response to incidents, enhancing mission readiness through the use of incident management processes during training exercises and response, sustaining the application of the Incident Command System and broader incident management structure for the Coast Guard. The Incident Management Directorate also develops grants and contribution agreements, governance and guidance, and it's responsible for administering and managing the contribution funding, providing national oversight and quality assurance functions for cost recovery activities for the Response programs, and supporting emergency management planning for the Coast Guard by identifying program requirements and developing contingency plans.

#### **Fleet Operational Capability**

The Fleet Operational Capability program includes fleet operations, fleet management, and the staffing of fleet personnel. The program ensures that certified professionals safely operate vessels, air cushion vehicles, helicopters, and small crafts and are ready to respond to on-water and marinerelated needs.

The program is guided by a number of international conventions and domestic marine-related regulations such as the International Safety Management Code, the International Ship and Port Facility Security Code, and the International Labour Code (applicable to seafarers).

#### Search and Rescue

The Coast Guard's maritime Search and Rescue (SAR) program leads, delivers, and maintains preparedness for the maritime component of the federal SAR system. The Coast Guard's international responsibilities include delivering SAR services across a 5.3 million km<sup>2</sup> area including inland waterways, the high Arctic, as well as the mid-Atlantic and Pacific. This is accomplished with the support of stakeholders and partners, including the Canadian Coast Guard Auxiliary and the Canadian Armed Forces (CAF). In addition to dedicated primary Coast Guard SAR vessels and a seasonal inshore rescue boat program, every Coast Guard vessel has a secondary responsibility to support maritime SAR. Through communication, coordination, and the delivery of maritime SAR response and operational awareness, the program increases the chances of rescue for mariners caught in potentially dangerous on-water situations.

The Coast Guard's SAR program:

- Jointly operates with the CAF three Rescue Coordination Centres located in Victoria, British Columbia, Halifax, Nova Scotia, and Trenton, Ontario;
- Operates two Coast Guard Maritime Rescue Sub-Centres located in Quebec City, Quebec, and St. John's, Newfoundland and Labrador. All maintain an around-the-clock watch, poised to coordinate a joint Coast Guard/ CAF response;
- Assists the Department of National Defence and other agencies in response to aeronautical and humanitarian incidents; and
- Maintains contribution agreements with six volunteer Coast Guard Auxiliary not-for-profit corporations, supporting a cadre of over 1,000 vessels and more than 4,000 volunteers.

#### **Environmental Response**

The Coast Guard's Environmental Response program ensures an appropriate response to marine pollution incidents and provides a leadership role to ship-source spills, mysterysource spills, pollution incidents that occur at oil handling facilities as a result of loading or unloading oil to or from ships, and spills from any source originating in foreign waters that impact Canadian waters. Its objective is to minimize the environmental, economic, and public safety impacts of marine pollution incidents. As lead for the federal government responsible for ship-sourced and mystery-source pollution incidents in Canadian waters, the Environmental Response program:

- Acts as Incident Commander for all marine pollution incidents that fall within its mandate and will work with the polluter (if willing and able) and partners including federal/provincial/ territorial agencies, Indigenous and coastal communities, municipalities, Response Organizations, and Industry to coordinate responses to marine pollution incidents in a Single or Unified Command setting for the successful resolution of the marine pollution incident; and
- Manages the response by ensuring there is an appropriate response to ship-source and mystery-source marine pollution incidents in Canadian waters, including oil and other pollutants.

#### Vessels of Concern

The Coast Guard's Vessels of Concern program manages risks posed by various hazards represented by vessels and wrecks in Canadian waters. In so doing, the program contributes to the health and safety and socio-economic interests of the Canadian public, as well as to protecting physical infrastructure and the marine environment. As laid out by the *Wrecked, Abandoned or Hazardous Vessels Act*, the Coast Guard Vessels of Concern program works closely with Transport Canada, which is responsible for abandoned and dilapidated vessels and those that represent obstructions to navigation, and with Small Craft Harbours, which is responsible for vessels of concern within their operational domain.

As part of the Coast Guard's incident response continuum, the Vessels of Concern program operates closely with Search and Rescue and Environmental Response programs, but can also proactively take action to prevent, mitigate or eliminate hazards posed by vessels or wrecks found anywhere in Canadian waters.

#### The program:

- Addresses all hazards associated with problem vessels or wrecks in Canadian waters under the new *Wrecked, Abandoned or Hazardous Vessels Act*;
- Manages an evergreen national Vessels of Concern inventory which tracks problem vessels and wrecks across Canada, and applies a risk-based approach to their remediation; and
- Provides comprehensive Coast Guardspecific training to ensure our officers are appropriately prepared and designated to utilize new Wrecked, Abandoned or Hazardous Vessels Act authorities to hold owners responsible for hazards posed by their vessels.

#### **Icebreaking Services**

Canada is a maritime nation with two icebreaking seasons – the Canadian Arctic in the summer and Southern Canada (Atlantic Ocean, Gulf of St. Lawrence, St. Lawrence River and Great Lakes) in the winter. Given the challenges and extremes of Canadian geography and climate, icebreaking services are essential to facilitate safe and accessible navigation by Canadian and international commercial marine transportation sectors, keep Canadian Southern ports open during the winter, and to support community resupply in the summer, and fishers through and around ice-covered Canadian waters.

The Icebreaking Services program:

 Provides ice-related information, operational awareness, and icebreaking support to vessels transiting through Canadian waters;

- Escorts ships through ice-covered waters and frees vessels beset in ice;
- Monitors, prevents, and breaks up ice jams for flood control;
- Facilitates the transportation of goods/ supplies to northern communities; and
- Advances Arctic scientific research by providing support to government agencies, and industry operating in Canada's Arctic.

#### **Aids to Navigation**

Canada's aids to navigation system is the backbone of marine safety, accessibility of waters and efficiency of vessel movements. The program includes visual aids (such as buoys, lighted beacons, and light stations); aural aids (fog horns); radar aids (reflectors and beacons); and the testing of Automatic Information System aids to navigation. The program is also responsible for the publication of marine safety information for public and industry consumption.

On a day-to-day basis, the Aids to Navigation program helps mariners navigate safely and efficiently by:

- Operating a robust system of floating, fixed, and digital aids to navigation;
- Monitoring and reviewing the reliability and relevance of the Canadian aids to navigation system;
- Designing aids to navigation systems to mitigate risks based on volume and type of traffic;
- Ensuring the application of national standards for aids to navigation;
- Providing marine safety information that pertains to the Aids to Navigation and Waterways Management programs, such as the Notices to Mariners and Canada's List of Lights publications; and
- Engaging regularly with clients to gather data and discuss concerns or potential changes to

any aids to navigation system to ensure that users' input is taken into account.

#### Waterways Management

Canada's waterways and maritime channels are the trade routes that ensure the safe, secure, and efficient movement of goods to Canadian and overseas markets. This program:

- Reduces marine navigation risks;
- Conducts channel maintenance and monitors channel beds;
- Manages water depth of commercial channels;
- Produces guidelines to ensure safe design and use of commercial navigation channels, based on international standards from the Permanent International Association of Navigation Congresses; and
- Strengthens environmental protection for the commercial navigation.

The Waterways Management program supports the Canadian Coast Guard's efforts for channel maintenance, as stated in the *Oceans Act*, by:

- Managing channel bottom surveys and providing information related to bottom channel conditions including depth of channels;
- Maintenance dredging of the St. Lawrence River shipping channel, on a cost-recovery basis, and portions of the Great Lakes connecting channels; and
- Provision of information on channel bottom conditions and available water level and forecasts, to ensure optimal and safe use of the available water depth in the commercial navigation channels.

The Waterways program is also a member of the International Joint Commission's Operations Advisory Group that contributes to the international control of water levels in the St. Lawrence River. Operations of the Waterways Management are working toward addressing industry ambitions to use larger vessels and supporting Canadian industry to remain competitive with global markets.

#### **Maritime Security**

In 2004, the Government of Canada identified the on-water resources and maritime information collection capacity of the Coast Guard as having a key role in the support of national security. Coast Guard involvement in maritime security is derived from its obligation under the National Security Policy, which established the Marine Security Operations Centres, and amended the Oceans Act to provide the Minister of Fisheries, Oceans, and the Canadian Coast Guard with the mandate to support other government departments and agencies by supplying ships, aircraft, and marine services. This includes Coast Guard support to federal security and law enforcement organizations.

As a maritime security partner within government, Coast Guard's Maritime Security program:

- Contributes to national maritime domain awareness by providing and analyzing data from the Coast Guard's long-range identification and tracking system, terrestrial automatic identification system, MCTS radar and radio, and observations made by its vessels and aircrafts;
- Supports law enforcement by providing crews and vessels to the joint Royal Canadian Mounted Police-Coast Guard Marine Security Enforcement Teams and in support of the Department of Fisheries and Oceans' Conservation and Protection program;
- Provides strategic situational awareness and command, control and communications support to Coast Guard leadership through the 24/7 National Command Centre;
- Works collaboratively with other Canadian government maritime stakeholders and international partners to advance maritime cybersecurity in the face of ever-increasing threats;

- Manages the Coast Guard contribution to Canada's three Marine Security Operations Centres; and
- Supports maritime security capacity-building initiatives to develop skills, abilities, and processes to exercise power at sea to assist nations in developing maritime skills ranging from small boat operations and maintenance to SAR and environmental response procedures, while advancing Government of Canada international priorities.

#### **Marine Communications and Traffic Services**

Marine Communications and Traffic Services (MCTS) is a national program that provides communication for ships in distress, reduces the probability of vessel collisions and groundings through the monitoring of vessel traffic movements and is the cornerstone infrastructure for the collection and dissemination of marine information in Canadian waters. The MCTS program ensures a reliable communication system is available 24 hours a day, 7 days a week, 365 days a year to contribute to the safety of life at sea, the protection of the marine environment, the safe and efficient navigation of shipping in Canadian waterways, and maritime domain awareness.

Services include:

- Providing distress and safety communications and coordination to detect distress situations, and ensure timely assistance;
- Managing vessel traffic by providing timely information and assistance to vessels;
- Providing vessel screening to prevent the entry of unsafe vessels into Canadian waters;
- Managing an integrated marine information system that initiates the emergency response network and supports other government departments;
- Providing data on vessel positional information to the Coast Guard Marine Security Operations Centres, where it becomes an

important component of maritime domain awareness used to enhance Canada's maritime security; and

• Monitoring the Canadian NORDREG zone on behalf of Transport Canada.

#### e-Navigation

e-Navigation is defined by the International Maritime Organization as the "harmonized collection, integration, exchange, presentation, and analysis of marine information on board and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea and protection of the marine environment."

The Coast Guard is the lead government agency for the implementation of the Canadian e-Navigation initiative, which includes:

- Leading and collaborating with marine industry and government partners through the National Marine Advisory Board national and regional e-Navigation Subcommittees to ensure Canadian e-Navigation initiatives are in line with international objectives and Canadian e-Navigation priorities;
- Enabling the Coast Guard digitalization of Coast Guard Marine Services;
- Testing e-Navigation solutions and providing guidance and expertise to Coast Guard programs and fleet;
- Coordinating and implementing pilot initiatives at national and regional levels to bring new technology to Full Operational Capability status within existing Coast Guard programs;
- Staying current with emerging maritime technologies and collaborating with other government departments to evaluate how digitalization may enhance and improve government marine services; and

 Maintaining a leadership role in international work related to e-Navigation standards, strategies, implementation, technology, and development, always considering potential impact and usage in Canada.

#### **Innovation, Planning and Engagement**

The Innovation, Planning and Engagement Directorate provides national leadership for the consistent integration, management, and coordination of the Canadian Coast Guard's:

- Strategic and horizontal planning, which encompasses budget planning, corporate and performance reporting, and risk management;
- Internal communications and public events; and
- External engagement with domestic and international partners and service users.
- Implementation and oversight of horizontal initiatives.

#### Services include:

- Innovation and Program Integration: Leading innovation, long-term planning, relationships, and alignment with federal initiatives.
- Indigenous Relations: Developing meaningful and respectful strategic guidance in support of national and regional priorities with Indigenous partners including Agency-wide reconciliation.
- External Relations and Industry Engagement: Advising and supporting senior management on strategic engagement of corporate, international, domestic, and industry partners to strengthen relationships and assist decision-making.
- Integrated Business Planning: Delivering strategic business advice through business and financial planning to support senior management decision-making. Also responsible for corporate planning and reporting.

- Internal Communications, Event Management and Publications: Leading internal communications, internal and public events, multimedia projects, and publications (general and technical) to support our people and fulfill our mandate.
- Special Initiatives Oversight: Supporting departmental and interdepartmental governance, and monitoring the performance and financial health of projects so they fulfill their commitments.
- Data Management and Analytics: Providing functional leadership on the Agency's data management and analytics activities, and helping the Coast Guard achieve its data vision. Data Management and Analytics provides internal data analytics enablement, change management, training, and data governance services to all program areas.

## **Shipbuilding and Materiel Sector**

#### Shipbuilding and Materiel Sector Structure

The Shipbuilding and Materiel Sector, located in headquarters, includes two directorates: Vessel Procurement and Integrated Technical Services.

The Vessel Procurement Directorate is responsible for the acquisition and delivery of large vessels, helicopters and small vessels, as well as the development of new classes of vessels, vessel design, program management, business analysis, and policy support.

The Integrated Technical Services Directorate delivers technology integration solutions in order to ensure that the Coast Guard's complex and varied physical assets — managed at optimal lifecycle costs — are capable, reliable, and available to deliver Coast Guard programs to Canadians.

#### **Shipbuilding and Materiel Sector Programs**

Operational excellence demands technical readiness. The Shipbuilding and Materiel mandate is the "cradle to grave" materiel responsibility for fleet

and shore-based Coast Guard assets to generate operational capability. This important mission spans the spectrum from building new classes of ships to effecting ongoing maintenance for a varied fleet and shore-based asset base to enhancing life-cycle management practices to disposing of surplus materiel in a responsible manner. In the execution of this mandate, the sector works closely with headquarters and regional operational staff to understand the requirement as well as with the support of a wide range of other government departments stakeholders. The sector links naturally with Public Services and Procurement Canada contracting managers and Transport Canada regulatory officials and relies on the expertise of our domestic ship building and ship repair industry, always mindful of the requirement to derive value for money for Canadian taxpayers.

Now more than ever, the Coast Guard has the resources and expertise to recapitalize its fleet assets to support an Agency mandate that continues to grow in terms of scope and demand. Significant investments have been committed for new Coast Guard assets, and the Coast Guard will be building ships for the next 20 to 25 years. This generational opportunity involves not simply replacing aging ships with the same capability and similar technology, but introducing "multitaskable" ships with emerging and environmentally sensitive technologies such that the new ships serve the Coast Guard for the next 40 years.

The Sector is also responsible to manage the resources available to maintain the current fleet until new ships are delivered into service and for lifecycle management of fleet and shore-based assets, which requires understanding their condition, analyzing the risks, and proactively addressing identified risks to promote safe operation and generate technical readiness. In doing so, it has a commitment to working diligently and collaboratively to further institutionalize the concepts of technical risk management, project and program management, life-cycle management, and stewardship of public funds.

#### **Fleet Procurement**

The Fleet Procurement program is responsible for the management of the design and construction of new large and small vessels, air cushion vehicles, and helicopters. It is also responsible for the management of procurement based interim measures to support the operational requirements identified in the Fleet Renewal Plan and the Integrated Investment Plan.

The program provides project management support to ensure effective and efficient project integration, scope, time, cost, quality, human resources, communications, risk, and procurement. Activities associated with fleet procurement are guided by a number of international and national trade agreements; legal instruments such as the *Financial Administration Act* and Government Contract Regulations, as well as policies, directives, and guidelines provided by Treasury Board, Innovation, Science and Economic Development Canada, and Public Services and Procurement Canada.

#### **Fleet Maintenance**

The Fleet Maintenance program ensures that Coast Guard's vessels, air cushion vehicles, helicopters, and small craft are available and reliable for the delivery of Coast Guard programs. The program also ensures the availability and reliability of these assets through life cycle investment planning, engineering, maintenance, and disposal services.

Activities associated with fleet maintenance are guided by a number of international and national trade agreements, legal instruments such as the *Financial Administration Act* and Government Contract Regulations, as well as policies, directives, and guidelines provided by Treasury Board, the Treasury Board of Canada Secretariat, Innovation, Science and Economic Development Canada, and Public Services and Procurement Canada.

#### **Shore-Based Asset Readiness**

The Shore-Based Asset Readiness (SBAR) program ensures that the non-fleet assets are available and reliable to deliver Coast Guard programs. The programs supported by SBAR are Aids to Navigation, Marine Communications and Traffic Services, Icebreaking, and Environmental Response.

These non-fleet assets include fixed and floating aids to navigation, such as visual aids (e.g., buoys and daymarks), aural aids (e.g., fog horns) and radar aids (e.g., reflectors and beacons), and long-range marine aids, such as the Differential Global Positioning System. They also include the electronic communication and navigation systems delivered through a network of radar, microwave dishes, radios, the information technology tools delivered via more than 300 remote installations and environmental response physical assets used for spill containment (e.g., boom), collection (e.g., skimmers), and storage (e.g., barges).

The Shore-Based Asset Readiness program ensures the availability and reliability of these assets through life cycle investment planning, engineering, acquisition, maintenance, and disposal services.

### **Personnel Branch**

Based on the recognition of the dedicated planning and resources that are needed to support our people, the Personnel Branch was created to integrate the College, Operational Personnel and Certification, and Force Generation functions. The Personnel Branch has been hard at work implementing the departmental policies that support the recruitment, retention, career development, and health of employees as well as ensuring operational marine related needs, certification requirements, and tactical training are provided and maintained.

#### **Personnel Branch Structure**

The Personnel Branch includes three sections: the College, Force Generation, and Operational Personnel and Certification.

- The **Canadian Coast Guard College**, located on Cape Breton Island, Nova Scotia, is the national centre of operational marine related training excellence for the Coast Guard and the foundation for our longstanding success in operations.
- Force Generation works to implement departmental policies related to recruitment, retention, career development, and health of employees and ensures that nautical operational and tactical requirements and certification are embedded into the strategies and approaches.
- Operational Personnel and Certification includes operational personnel management, personnel development and marine related certification, MariTime solutions, and uniform management implementation.

#### **Personnel Branch Programs**

The Coast Guard is a people-focused organization comprised of a diverse, highly-trained, professional at-the-ready workforce. People are our greatest asset, and the Personnel Branch is focused on ensuring that our employees are trained, agile and operationally ready to deliver services to Canadians.

Never has the role of the Personnel Branch been more critical than now. The Branch exists to not only to support the Coast Guard's more than 6,100 employees, but also to lead initiatives that respond to the current requirements and future needs of the Coast Guard. There is incredible demand for qualified mariners globally, and the Personnel Branch is committed to working with colleagues, partners and other stakeholders to identify our operational personnel requirements and to establish mechanisms to address the current and long-term needs of the Coast Guard. The Personnel Branch is also embedded into the work of the Fleet Sustainability Initiative (FSI). To ensure organizational readiness to deliver on the Agency's operational mandate, the Personnel Branch is focussing their work on the development of three separate plans:

- Seagoing Recruitment Plan (Force Generation Directorate) – In order for the Coast Guard to be viewed as a desirable, rewarding and inclusive place to work, Force Generation will be intentional about attracting, developing and retaining seagoing talent. A comprehensive Coast Guard-wide agile seagoing recruitment and retention plan with specific targeted, evidence-based strategies will be developed, ensuring that the Coast Guard community is viewed as a desirable, rewarding and inclusive place to work.
- Seagoing Personnel Training and Development (Operational Personnel and Certification Directorate) – With the introduction of the new fleet, additional funding will be required for operational training to ensure our seagoing personnel are fully compliant to meet the new vessels' training requirements as they transition into service.
- College Expansion and Modernization (College) – The College must become an "all-in" learning centre to meet the needs of the future. Emphasis on a national, life-long learning framework will reflect the central role of the College to the Coast Guard.



The Oceans Protection Plan and the National Shipbuilding Strategy investments allow the Canadian Coast Guard to continue its essential work protecting mariners and the coastal environment, and ensuring the safe and efficient movement of ships that are key to a vibrant economy. Securing skilled certified personnel to design, sail, maintain, and support safe marine navigation will be critical.

The Branch will continue to strive to meet the needs of current and future Coast Guard employees across the regions and at national headquarters through the development of a Personnel operation plan and continue to prioritize all the essential components of a supported workforce — marine related training and certification, work-life arrangements, increase safety prevention to mitigate workforce injuries, recognized employees' contribution through departmental and operational awards and recognition programs, and supporting overall health.

#### **Canadian Coast Guard College**

The College has been a centre of maritime training excellence since 1965. It is a national, bilingual, degree-conferring training institution offering a multitude of marine-related training regimes, including the officer training program, a comprehensive four-year training program to develop marine engineers and marine navigation officers for the Coast Guard Fleet. Located on Cape Breton Island, the College was established to ensure a reliable source of professional marine officers and crew for the Coast Guard. The College has been training qualified and professional Coast Guard marine officers and operational personnel for more than 55 years.

In addition to the officer training program, the College trains Marine Communications and Traffic Services officers, who receive 24-week intensive training programs consisting of mixed theory, practical, simulated, and virtual learning. It also offers operational training to personnel in electronics and informatics, environmental response, and search and rescue.

As the national training organization for the Coast Guard, the College is committed to delivering the highest quality training to support our operational personnel. With new modernized learning platforms, such as OnCourse, as well as new regional learning centres, the College is poised to meet the evolving training needs of the organization. This is essential to ensuring that our people receive the operational training they require to better serve Canadians for years to come.

# Regional Overview

While the Coast Guard plans and sets policies at a national level to ensure consistency in the delivery of its services, it is the fleet and shore-based personnel in our regions who deliver Coast Guard services. While all four regions deliver core Coast Guard programs, the focus in each region is different depending on climate, geography, and client needs.



## **Arctic Region**

The Arctic Region boundaries were announced in March 2021 and include the Yukon North Slope, Northwest Territories, Nunavut, Nunavik, Nunatsiavut, and the marine regions of Hudson Bay and James Bay. This boundary includes all of Inuit Nunangat.

The Canadian Arctic environment is vast, with 162,000 km of coastline and a harsh and challenging climate. Interest and activity in the Arctic continue to rise with growing populations in many of the isolated and remote communities, increased ship traffic, and growing international interest. This leads to a challenging operational environment where less than 14 percent of navigable waters have been surveyed to modern standards. The effects of climate change, including extreme weather and melting permafrost, are leading to increased navigation risk, while Canada is seeing more vessels in the Canadian Arctic.

This impacts food security, marine safety, cultural, and harvesting activities of Arctic communities. There are increased demands to improve marine infrastructure and Coast Guard services, and implement climate change adaptation measures to mitigate increased risk and potential impacts.

Coast Guard is working closely with Inuit, First Nations, Métis, and Northern partners in the Arctic Region to develop innovative and alternative approaches to service delivery that best meet the needs of communities.

In addition to contributing to the delivery of national priorities, including reconciliation, the region will focus on continued collaboration with Indigenous organizations and governments, industry, provincial and territorial governments, and other federal departments operating in the Arctic on the development of alternative service delivery models, developing plans for the expansion of Coast Guard services, developing an Indigenous recruitment strategy with Fisheries and Oceans Canada, and reflecting Northern priorities in policy and program design and implementation.

Increases in Arctic vessel traffic, especially from cruise ships and adventure tourism, as well as international attention on the Canadian Arctic, a growing domestic Arctic population, interest in resource development projects, marine conservation targets, and a rapidly changing climate all have a profound impact on the Canadian Arctic and Coast Guard services.

We expect the demand for marine services in the Canadian Arctic to grow significantly in the coming years. The implementation of our Arctic region is meant to help us address these important issues, while advancing reconciliation with our Inuit, First Nations, and Métis peoples in the Arctic through a collaborative approach to increasing the Coast Guard's presence in the Arctic.

The Canadian Arctic is vast and diverse, and meeting shared safety, security, environmental, and economic goals requires cooperation. The Coast Guard has a deep, ongoing commitment to working with Inuit, First Nations, Métis peoples, provincial and territorial governments, mariners, and international partners to support marine safety and the protection of the environment on Arctic waters. In the Arctic, we work with partners on a nation-to-nation basis, and from the lens of how to support implementation of settled land claims, which apply to most of the region.

Arctic communities have expressed their concerns about increasing vessel traffic and its impacts on wildlife, habitat, and traditional activities. Communities also want to be empowered to participate with the Coast Guard in search and rescue and environmental response activities.

In the coming years, the Coast Guard is committed to:

- Implementing the Inuit Nunangat Policy;
- Including Indigenous knowledge such as Inuit Qaujimajatuqangit in decision-making;
- Leading the planning of future services from the North with Northerners;
- Increasing diversity, reducing employment barriers and creating job opportunities for Northerners;
- Co-developing climate change adaptation strategies; and
- Supporting infrastructure development.

The Coast Guard is developing and implementing a human resources plan that seeks to increase employment opportunities for Inuit, First Nations, Métis, and Northerners to join the Coast Guard and guide the Arctic region's operations and future program development. The Arctic Region is increasing diversity through the continuation of the Oceans Council of Indigenous Youth, and by building internal capacity on the applicability and principles of local and Indigenous knowledge in service delivery and corporate culture. The Arctic region is implementing cultural learning into its training and development plans to build an inclusive, dynamic and diverse team, and attract new talent in the Arctic.

Priorities for the next three years include:

- Implementation of a collaborative governance framework that seeks to enhance the delivery of programs and services to better serve Arctic communities;
- Planning for the future of Coast Guard services by geographic area and community;
- Continued implementation of a fully operational Arctic Region; and
- Continued implementation of Oceans Protection Plan initiatives including the Northern Low-Impact Shipping Corridors, the Canadian Coast Guard Auxiliary in the Arctic, and the Inshore Rescue Boat North in Rankin Inlet.



### **Atlantic Region**

The Atlantic region operates in a vast geographical area comprising the four Atlantic provinces, and it encompasses Joint Rescue Coordination Centre Halifax's area of responsibility for search and rescue, which for this program includes the eastern half of Quebec, and the northwest quadrant of the Atlantic Ocean. The region delivers services covering more than 29,000 km of shoreline, 2.5 million km<sup>2</sup> of continental shelf, and 5 million km<sup>2</sup> within the Northwest Atlantic Fisheries Organization Regulatory Zone (2.3 million km<sup>2</sup> inside the 200 nautical mile limit, and 2.7 million km<sup>2</sup> outside the 200 nautical mile limit).

The Atlantic region includes many small coastal communities, and everyone has a connection to the water. The Coast Guard is well known and is embedded in every community — this is one of our strengths in the region. Another is that we have a long history of working organically with community members and leaders, as you do in smaller communities. For example, some of the local leaders with whom we work are also members of the Coast Guard Auxiliary. They have a depth of understanding of what we do, and this is incredibly valuable.

Now and in the future, we will continue to formalize community engagement and to build these relationships. Whereas in the past we engaged primarily on operational concerns — and we continue to do so — we are also focused on strategic priorities that range from reconciliation and building our partnerships with Indigenous peoples to advancing the oceans economy and economic recovery. The demand for our services is increasing and the expectations of what the Coast Guard can and should do are high. There is a strong demand for the Coast Guard to be part of decision-making tables. Whether it is helping to protect marine mammals such as North Atlantic right whales or addressing vessels of concern, we are part of the marine conversation with leaders in each of the Atlantic provinces, whether that is Indigenous leadership, mayors and city councillors or with provincial or federal representatives and groups.

Like other regions, our workforce needs are top of mind. During the planning period, we will focus on recruitment and retention, find ways to build up a qualified workforce pipeline and address issues that are deeply important like the pay system, workload management, classifications and staffing delays.

From an operational perspective, in each of the provinces we operate in marine environments that have their own unique challenges. In Newfoundland and Labrador, this includes Placentia Bay and Strait of Belle Isle; in Nova Scotia, the Strait of Canso; in New Brunswick, the Bay of Fundy; and in Prince Edward Island, the Northumberland Strait. Some of our regional risks are ongoing due to a massive and varied operational area — one that faces extreme weather. We operate in an environment that includes year-round commercial activity and seasonal traditional use. We continue to plan and implement measures that address these risks. CAP DE RABAST

### **Central Region**

The Central region operates in a unique context covering the Great Lakes, the St. Lawrence waterway, and the northern half of the Gulf of St. Lawrence, which includes maritime movements impacting one hundred million people who receive goods by sea. This is a vital transportation network for goods traded between North American and more than 59 overseas markets. More than 100 commercial ports and wharves are operational within the region. These activities represent \$35 billion in economic activity and 238,000 jobs in Canada and the United States.

The Central region encompasses more than 50 coastal Indigenous communities and organizations in Ontario and Quebec, with a wide range of priorities and concerns related to Coast Guard's mandate. The region operates within a context of significant heritage, social and ecological value, and a unique ecosystem of great biological richness.

Some of our biggest risks are related to the increase in the density of vessel traffic, in part driven by major projects, and increasing vessel size. In addition, there are ongoing demands from industry for an extended shipping season, and for more icebreaking, as well as to effectively maintain dredging volumes.

These risks are being mitigated in a number of ways. Operationally, we are maximizing the zonal approach to icebreaking, and supplementing our capacity through icebreaking contracts, as well as supporting increased use of electronic navigation. We are taking a proactive approach to communication and engagement with industry to ensure we work together on these issues. We have also made progress in building relationships with Indigenous partners. There are a wide range of priorities and concerns that will require continued effort and collaboration. We will continue to identify collaboration opportunities, such as training and exercising, ways to better share information, and focus on contribution agreements and procurement opportunities that encourage and facilitate Indigenous participation.

Recruitment and retention will continue to be a challenge. In order to compete, it will be important to demonstrate the value in joining the Coast Guard and to ensure that we provide the support to our employees including providing a more familyfriendly work environment and work-life balance.

The Central region is a bilingual region, which is both a challenge and a strength. Learning a second language requires an ongoing investment of time and a high level of commitment from the employee, both on and off the job. These requirements can create barriers to the internal development of the workforce and adversely affect employees' motivation. Our region will continue to support bilingualism by encouraging language training.

As more than 25 percent of the shore-based workforce is eligible to retire in the next five years, it will be a priority for the region to implement robust knowledge transfer before those employees leave the organization, and to develop remaining and new staff through talent management plans. We are in a period of growth and increasing professionalization. What is already in motion for the Coast Guard of the future is a more robust structure, processes, and governance that build organizational maturity. More than ever, we are strongly focused on regional operations, and on fully supporting our operational posture.

# Western Region

The Western region comprises a large landmass (four provinces and the Yukon Territory) as well as 27,000 km of coastline, and the Coast Guard has international search and rescue obligations out to the mid-Pacific. The Western region does not experience large swings in on-water seasonality like the other regions (sea ice is non-existent) and therefore experiences a consistently high volume of activity on the water. Almost 50 percent of all Marine Communications and Traffic Services national vessel traffic movements take place in the Western region.

The recognition of Coast Guard's efforts, value, and consequently our morale has grown exponentially. In part, this has been part of the national and international spotlight put on Coast Guard in Western region in recent years. This includes emergency situations and major development projects where Coast Guard had a critical role to play, not only in operational aspects such as planning and preparedness, but also in public awareness and confidence in our ability to respond.

Over the next few years, the region will continue working with Indigenous and other coastal communities as partners in the marine safety system. We have an opportunity to continue to build and expand lasting relationships and partnerships with the more than 60 First Nations along the coast, and personnel in the region are committed to building on aspects such as joint training opportunities, the community boats program, and much more. In terms of operational concerns and priorities, the region is focused on the Portland Canal and mining exports, including how that will affect big ship traffic and the concerns and rights of Indigenous partners.

For the inside passage, the region is looking at what assets are needed related to tug traffic. In the Kitimat Corridor, areas of concern include the impacts of liquid natural gas developments and route management. Seymour Narrows is an area where there is substantial cruise ship and tug traffic, thus increasing operational risks. We will continue to assess and respond to these risks, and to integrate an all coast/all hazards review of gaps and mitigation.

One of our greatest advances in Coast Guard is learning and building on how we can work together to expand our delivery of services and meet shared goals. Adopting the Incident Command System is one of those methods, as the Region has experienced firsthand how including Indigenous, provincial partners and others into the shared decision-making of Unified Command makes for a much more effective response.

The coming years will include increasing the diversity and inclusion of the workforce and leveraging the ingenuity of all Coast Guard personnel. These are essential to the region's mission, as is the promotion of innovation. There is a lot of attention paid to how the public service can and should be innovative, willing to take risks, and learn from those endeavors. Our skilled tradespersons in the Coast Guard, and in our mariner community, are and will continue to be masterful in that regard.

# Annex A – Canadian Coast Guard Commitments

# **Diversity, Equity and Inclusion**

Commitment	ΟΡΙ	Due Date
Pilot and deliver a redesigned work uniform developed with a GBA Plus lens.	DG, Personnel	2023
Lead the procurement of a marine labour market analysis beginning in fall 2022, which will include among its deliverables an actionable, measurable plan for effective and respectful outreach, recruitment and retention initiatives specifically targeted at underrepresented employment-designated groups (women, Aboriginal peoples, persons with disabilities, and visible minorities). This plan, coupled with trends and feedback identified through the fall 2022 <i>All Hands on Deck</i> recruitment campaign, will not only inform the Seagoing Recruitment Plan under the Fleet Sustainability Initiative, but also other short, medium and long-term recruitment initiatives.	DG, Personnel	Q4 2023-24
Continue to work with Women in Governance (WiG), a not-for-profit organization supporting leadership development, career advancement, and access to executive positions for women, to improve gender parity in the workplace. WiG will assign a level of certification for the Coast Guard to assess progress to the different certification levels, to achieve and sustain gender parity in the workplace. WiG will announce the Coast Guard's results for 2022 in the new year. The Coast Guard has committed to repeating this exercise on a yearly basis.	DG, Personnel	Q4 2022-23
Lead the <i>All Hands on Deck</i> employment equity-driven national recruitment initiative. The objective of this initiative is to create a talent-at-the-ready staffing option for Coast Guard's fleet hiring managers while increasing internal representation that truly reflects the Canadian population.	DG, Personnel	Q4 2022-23

# **Strategic Pillar 1: Our People**

#### **Objective 1: Attraction and Recruitment**

Commitment	ΟΡΙ	Due Date
Lead the development of a Coast Guard-wide operational personnel plan to support emerging and key priorities specific to the fleet of the future.	DG, Personnel	Q4 2022-23
Maintain business intelligence capability for regions in anticipation of increased demand from the fleet sustainability project.	DG, Personnel	Ongoing

# **Objective 2: Training**

Commitment	ΟΡΙ	Due Date
Seek final approval of the College training governance to identify the evolving skill sets required for the operations of the fleet and associated training for operational personnel.	DG, Personnel	Q1 2022-23
Maintain and evolve the College Training Governance, taking an active approach to the identification, development, design and delivery of training opportunities to meet the current and projected needs of the organization.	DG, Personnel	Ongoing
Ensure the identification of critical infrastructure, systems, and tools required at the College to support fleet sustainability, the Oceans Protection Plan and the Blue Economy Strategy as required.	DG, Personnel	Ongoing
Strengthen international engagement opportunities with Marine Training Institutions.	DG, Personnel	Ongoing
The College will explore opportunities through its relationship with the Canadian Association of Marine Training Institutions, to identify bridging opportunities and associated training in support of rated positions required on vessels.	DG, Personnel	Q4 2022-23
Build a national training plan in order to forecast the operational training requirements over a three year period. The objective is to plan resources accordingly to facilitate training accessibility.	DG, Personnel	Q4 2022-23
Create training tools and provide direct training to regional offices on the effective use of Personnel systems.	DG, Personnel	Q4 2022-23
Leverage new and innovative platforms for communication and training focused on seagoing personnel and lighthouse keepers.	DG, Personnel	Q4 2022-23
Develop and launch a data literacy training program to ensure data stewards, data trustees, data custodians, data and analytics consumers and other employees have the necessary knowledge and expertise to meet the expectations of their roles.	DG, IPE	Q4 2023-24

# **Objective 3: Career Management**

Commitment	ΟΡΙ	Due Date
Support employees through the development of formal training opportunities to promote growth and bolster retention.	DG, Personnel	Ongoing

# **Objective 4: Health**

Commitment	ΟΡΙ	Due Date
Initiate an injury prevention framework.	DG, Personnel	Q4 2022-23
Strengthen Coast Guard's organizational health by implementing tools such as Critical Incident Stress Management, Trauma Resilience Trainig, Wounded Warriors, At-Sea Health Promotion, and a more robust awards and recognition program.	DG, Personnel	Q4 2022-23 and Ongoing

# **Strategic Pillar 2: Our Assets**

## **Objective 1: Delivering the New Fleet**

Commitment	ΟΡΙ	Due Date
Continue to deliver new search and rescue lifeboats under contract.	DG, VP	2024
Advance design, construction engineering, and construction of a near-shore fisheries research vessel.	DG, VP	2024
Advance construction and prepare for delivery of the offshore oceanographic science vessel that will replace the CCGS <i>Hudson</i> .	DG, VP	2025
Finalize construction engineering efforts and start construction of both Coast Guard Arctic and offshore patrol vessels.	DG, VP	2023-24
Advance design and construction engineering for the multi-purpose vessels and the program icebreakers.	DG, VP	2024
Advance plans for a new class of mid-shore multi-mission vessels.	DG, VP	2024
Begin design engineering for the polar icebreakers.	DG, VP	2022-23
Begin construction engineering and acquisition of long-lead items to prepare for the construction of the polar icebreakers.	DG, VP	2022

## **Objective 2: Operating and Maintaining the New Fleet**

Commitment	ΟΡΙ	Due Date
Undertake fleet renewal with a key principle of ensuring mission modularity.	DG, VP	2024
Update the Coast Guard's multi-year maintenance plan to address any fleet maintenance gaps.	DG, ITS	Q3 2022-23

## **Objective 3: Vessel Life Extension**

Commitment	ΟΡΙ	Due Date
Continue work on the conversion of the new light icebreaker.	DG, ITS	Q2 2024-25
Complete the conversion of the CCGS Vincent Massey.	DG, ITS	Q2 2022-23
Continue to implement the comprehensive VLE program to increase both the reliability and availability of Coast Guard vessels. Planned work includes:	DG, ITS	
Complete the VLE of the CCGS Kopit Hopson 1752		Q3 2022-23
Complete the bundled VLE of the CCGS Cape Roger and CCGS Cygnus		Q3 2022-23
Continue work on the VLE of the CCGS George R. Pearkes		Q1 2024-25
Complete the VLE of the CCGS Amundsen phase 2		Q2 2022-23
Complete the VLE of the CCGS Sir Wilfred Grenfell		Q1 2022-23
Continue work on the VLE of the CCGS Griffon		Q2 2025-26
Continue work on the VLE of the CCGS Sir Wilfrid Laurier		Q1 2023-24
Continue work on the VLE of the CCGS Louis S. St-Laurent (4 phases)		Q3 2027-28
Continue work on the VLE of the 47' MLB class		Q1 2028-29

### **Objective 4: Shore-Based Assets**

Commitment	ΟΡΙ	Due Date
Determine the shore infrastructure requirements needed to support the future fleet's ship modularity concept.	DG, VP and DG, ITS	Q4 2024-25
Implement the Coast Guard's asset and inventory protocols and procedures.	DG, ITS	Q1 2022-23
Complete the implementation of the Oceans Protection Plan search and rescue stations.	DG, ITS	Q4 2022-23
Assess the condition of the Coast Guard's shore-based facilities required to support the future fleet.	DG, ITS	Q4 2022-23
Complete the Oceans Protection Plan environmental response equipment procurement.	DG, ITS	Q4 2022-23
Complete the Oceans Protection Plan radar and OpNet projects.	DG, ITS	Q4 2022-23
Initiate the full implementation of the lifecycle management program for environmental response assets.	DG, ITS	Q1 2022-23
Complete the manufacturing of the four-season buoys (52 buoys) in the St. Lawrence sector.	DG, ITS	Q1 2022-23
Renew the College's IT infrastructure to benefit students, increase bandwidth, and offer remote training over the internet.	DG, ITS	Q4 2022-23

# **Strategic Pillar 3: Our Services**

## **Objective 1: Fulfilling Coast Guard's Contribution to the Oceans Protection Plan**

Commitment	ΟΡΙ	Due Date
Collaborate with partners to implement the new Oceans Protection Plan portfolio of projects guided by a strong governance and reporting structure.	DG, IPE	Q4 2023-24

### **Objective 2: Major Resource Projects**

Commitment	ΟΡΙ	Due Date
Continue to work with Indigenous groups to implement the Trans Mountain Expansion	DG,	Q4 2023-24
Co-Developing Community Response accommodation measure.	Response	

## **Objective 3: Reviewing Levels of Service**

Commitment	ΟΡΙ	Due Date
Update and publish the levels of service to accurately reflect the Coast Guard's current operating environment and service standards.	DG, FMS	Q4 2022-23

# **Objective 4: Program Readiness**

Commitment	ΟΡΙ	Due Date
Develop a readiness profile for each response program (Environmental Response, Search and Rescue and Vessels of Concern) focusing on an assessment of the three principal elements of readiness (people, assets, and capacity demand) in order to identify gaps between current needs and anticipated future mission requirements.	DG, Response	Q4 2022-23
Develop a readiness profile for all marine navigation programs.	DG, FMS	Q3, 2022-23

# **Objective 5: Modernizing Marine Navigation Program and Safety Services**

Commitment	ΟΡΙ	Due Date
Develop a strategy to advance the modernization of marine navigation programs and safety systems including e-Navigation/digital waterways initiatives and guide investments in aids to navigation and Marine Communications and Traffic Services.	DG, FMS	Q3 2022-23
Develop a maritime domain awareness framework with the objective of understanding maritime-related activities and identifying threats as early as possible and facilitating information sharing with multinational partners. The framework will outline Coast Guard's responsibilities, obligations, use and maintenance of Canada's maritime domain awareness capabilities.		Q3 2022-23

# **Objective 6: Enabling Innovation**

Commitment	ΟΡΙ	Due Date
Develop a Coast Guard roadmap to climate resilience that is aligned with the targets set out in the Greening Government Strategy and includes collaborative work to advance Greening Government Fund projects.	DG, IPE	Q4 2022-23
Ensure the development and sustainability of a Coast Guard operational fleet decarbonization plan.	DG, IPE	Q4 2022-23
Continue to build capacity for internal experimentation through improved governance for the Transformation and Innovation unit by implementing a three-year planning horizon to identify, vet, and sequence innovation initiatives in alignment with organization priorities and strategic goals.	DG, IPE	Ongoing
Advance the development of two novel kinetic energy harvesting technologies with the potential to support Coast Guard: offset the on-board energy requirements of its vessels; enable future asset capability through use of distributed sensors systems aboard vessels or aids to navigation; reduce stress/fatigue of ship materials, and enhance vessel crew/operator comfort.	DG, IPE	Q4 2023-24
Provide high quality, timely intelligence on marine contamination, ice condition and coastal ecosystems by developing, demonstrating and testing a prototype Earth Observation and Monitoring System.	DG, IPE	Q4 2022-23

# Strategic Pillar 4: Our Governance

## **Objective 1: Strengthening National Policies, Processes, Procedures and Systems**

Commitment	ΟΡΙ	Due Date
Develop a long-term strategic plan to articulate the Coast Guard's vision and mission into 2050 and beyond. The plan will map out the organization's future operations, programs and services, taking into consideration factors such as climate change, digitization of services, evolving geopolitical realities, fleet renewal and new workforce requirements to ensure the Coast Guard remains relevant to Canadians and able to adapt to new dynamic operating environment in the future.	DG, IPE	Q3 2022-23
Review and update key documents including interdepartmental Memoranda of Understanding (MOU) on response collaboration with key partners and the National Marine Spills Contingency Plan:	DG, Response	
Transport Canada/Coast Guard MOU – Environmental Response Annex		Q3 2022-23
Environment and Climate Change Canada/Coast Guard MOU		Q4 2022-23
DFO Science/Coast Guard Environmental Response MOU		Q1 2022-23
Complete the development of the Vessels of Concern program as identified under the Oceans Protection Plan and initiate the transition into service starting April 2022.	DG, Response	Q4 2022-23
Define the Coast Guard incident response and incident management strategy by updating the Incident Command System Plan for Incident Management (now referred to as the Coast Guard Plan for Incident Management), including among other aspects, greater clarity for command and control structures to effectively respond to maritime incidents.	DG, Response	Q3 2022-23
Develop an Incident Command System/Incident Management training strategy, building on the successes of the Incident Command System (ICS) training approach during ICS implementation to ensure enhancements are made to ICS/Incident Management training in both official languages.	DG, Response	Q3 2022-23
Develop a strategy to enhance continuous improvement/lessons learned processes and procedures to inform future exercises and training activities, thereby improving program readiness.	DG, Response	Q4 2022-23
Optimize the helicopter program and concept of operation for the inclusion of remotely piloted aircraft systems in Coast Guard operations.	DG, FMS	Q2 2022-23
Launch an aircraft services review in cooperation with Transport Canada to identify the ideal organizational construct for the delivery of Transport Canada Aircraft Services Directorate's business lines in order to maximize financial and operational efficiencies to the benefit of Canadians.	DG, FMS	Q4 2022-23
Implement a more predictable costing model that incorporates a fixed salary cost for each vessel, contingent on an appropriate relief factor rate being approved by senior management.	DG, FMS	Q4 2022-23
In alignment with the Coast Guard budget and business planning cycle, update the Coast Guard's risk statements and risk assessments to help inform and guide the Agency's Integrated Business and Human Resource Plan strategic objectives and respective commitments.	DG, IPE	Q4 2022-23
Implement a new process for allocating the Coast Guard operating budgets in order to enable better decision-making around Agency level over-programming and cash management strategies.	DG, IPE	Q4 2022-23
Implement and operationalize a new Coast Guard data management and analytics program and centre for excellence.	DG, IPE	Q4 2024-25

Commitment	ΟΡΙ	Due Date
In alignment with the creation of an interim Uniform Management Team, implement a centralized cost centre and processes to provide continuous monitoring of uniform purchase expenditures.	DG, Personnel	Q3 2022-23
Continue as project authority for the Marine Security Operations Centres third-party renewal and oversee the development of the evaluation plan and the conduct of the evaluation.	DG, FMS	Q2 2022-23

# **Objective 2: Engaging with Industry and Other Coast Guard Stakeholders**

Commitment	ΟΡΙ	Due Date
Continue to engage Coast Guard stakeholders to inform Coast Guard's priorities so we continue to better serve our clients, and adjust requirements and needs through regular reporting of the International and Industry Engagement strategies.	DG, IPE	Q4 2022-23
Coast Guard will honour its commitment to serve as Emergency Prevention, Preparedness and Response Working Group Chair and Canada's Head of Delegation to contribute to the advancement of Canadian objectives to the extent possible given geopolitical events impacting the Arctic Council.	Kathy Nghiem	Q4 2023-24
Continue to serve as co-chair for the CANUS Maritime Domain Awareness Cyber Assessment Working Group and chair of the newly established Five Eyes Maritime Domain Awareness Cyber Assessment Working Group. Coast Guard will continue its leadership efforts by advancing maritime cybersecurity within these partnerships and by sponsoring an annual cybersecurity industry day.	DG, FMS	Ongoing
Continue to chair the Marine Security Operations Centre Governance Committees during fiscal year 2022-23, followed by a one-year term as deputy chair during fiscal year 2023-24.	DG, FMS	Q1 2023-24

# **Objective 3: Engaging with Indigenous Partners**

Commitment	ΟΡΙ	Due Date
Engage with Indigenous and coastal communities to address their marine safety and environmental response concerns, including those associated with proposed major resource and infrastructure projects (e.g., implementation of Trans Mountain Expansion accommodation measures).	DG, Response	Q4 2022-23
Support negotiations of reconciliation agreements, arrangements, and frameworks which build meaningful and long-term relationships with Indigenous partners to empower communities with knowledge, personnel, training and equipment to protect culturally important and sacred sites on their traditional territories as well as to develop roles for Indigenous communities in the broader marine safety regime.	DG, IPE DG, Response	Q4 2022-23
Implement a strategic framework to guide how the Coast Guard will continue to provide ongoing collaboration with Indigenous partners.	DG, IPE	Q3 2022-23
Continue to provide marine pollution report notifications to the Heiltsuk Marine Emergency Response Team (MERT), located in Bella Bella, British Columbia, and continue working toward collaborative response activities between the Coast Guard and the MERT.	DG, Response	Q4 2022-23
Work with the National Indigenous Fisheries Institute to develop a best practice and guidance document to establish a process to meaningfully include Indigenous perspectives, knowledge and voices into the Canadian Coast Guard National Indigenous Relations Strategic Framework and other national-level policies and priorities.	DG, IPE	Q4 2022-23
Through relevant Coast Guard governance structures, ensure that Indigenous concerns and interests are widely understood across the agency and increasingly embedded in policies, programs, and activities.	DG, IPE	Q4 2022-23

# **Objective 4: Supporting the Implementation of the Arctic Region**

Commitment	ΟΡΙ	Due Date
Develop a Coast Guard Arctic Strategy and an interdepartmental Arctic Maritime	AC, Arctic	Q4 2022-23
Security Strategy as part of Coast Guard's commitment within the Interdepartmental Marine Security Working Group.	DG, IPE	
Manne Security Working Group.	DG, FMS	
Collaborate with Inuit organizations and government to support the implementation of service delivery priorities in Inuit Nunangat in alignment with the Inuit Nunangat	AC, Arctic	Q4 2022-23
Policy, under the Inuit-Crown Partnership Committee.		

# Annex B – Canadian Coast Guard People Strategy

#### Link to the Canadian Coast Guard People Strategy

#### **Canadian Coast Guard People Strategy – Status Report on Commitments**

#### Recruitment – Pillar I

Commitment	Expected Deliverable Date per the IBHRP	Q1 – Q4 Achievements	Status (Complete, On Track, Delayed)
Develop a national recruitment strategy that includes plans to leverage	Spring 2021-22	Completed an evergreen national recruitment strategy.	Completed
technology as well as social media, and addresses diversity and inclusion objectives.		Formed national recruitment working group. Developed a Recruitment Toolbox with standardized resources and promotional materials to be used by regional recruitment teams.	
		The Canadian Coast Guard College (CCGC) actively carried out recruitment activities at schools and events throughout Canada.	
		The CCGC has initiated social media post boosting on both the Canadian Coast Guard and CCGC social media platforms and ad placements on social media platforms to reach Canadian youth, students and adults, specifically targeting women, Indigenous peoples, visible minorities, 2SLGBTQ+, and persons with disabilities.	
Finalize the at-risk groups and key positions report and related demographic trends data, for inclusion in targeted recruitment, retention, and training strategies.	Fall 2021-22	The At-risk Groups report is completed. Regional consultation regions on the at- risk groups and key positions have been completed.	On Track

# Training – Pillar II

Commitment	Expected Deliverable Date per the IBHRP	Q1 – Q4 Achievements	Status (Complete, On Track, Delayed)
Develop a strategy to address evolving skill sets associated with the operations of the new vessels and associated training requirements.	Winter 2021-22	The CCGC is an active participant in the Fleet Sustainability Initiative to help identify seagoing personnel training and development as well as, associated infrastructure and technological requirements.	On track and carry over to summer 2022-23
		Final stages of Wartsila implementation and commissioning is underway.	
		Dynamic Positioning Simulators are in place and curriculum is under development with pilot course scheduled for summer 2022.	
		Icebreaking simulator Phase 2 is near completion.	
Implement a national learning governance framework, reflecting the central role of the College.	Spring 2022-23	The CCGC has developed a training governance structure that allows for the identification of future training and learning needs to support our employees in delivering services to Canadians.	On track and carry over to summer 2022-23
		Status of course prioritization and development is updated monthly and carried out in collaboration with newly structured Training Development and Academic Support group and Operational Training group at the Canadian Coast Guard College.	
		An established part of the Training Governance that incorporates all Canadian Coast Guard executive boards.	
Create a library of training resources for employees to increase awareness around corporate commitments, including mental health, diversity, and inclusion.	Fall 2021-22	The Career Development Learning Library was made available on the Canadian Coast Guard Personnel intranet site providing internal and external learning opportunities.	Complete

Commitment	Expected Deliverable Date per the IBHRP	Q1 – Q4 Achievements	Status (Complete, On Track, Delayed)
Support employees in understanding the skills and knowledge required for their current roles and career aspirations through	Summer 2022-23	CCGC implementation of professional development weeks that ensure the offering of both professional technical training, HR training and wellness training to all staff in both official languages.	Ongoing
the use of tools such as on- the-job training programs, leadership development programs, and specialized training.		The OnCourse Learning Management System (Moodle) implemented which supports the delivery of online, asynchronous training. MS Teams is being used to support synchronous delivery and to incorporate synchronous elements to online courses.	
		Professional Development and Apprenticeship Programs (PDAP):	
		<ul> <li>Environmental Response (ER) PDAP completed and approved by ER program management.</li> </ul>	
		<ul> <li>Operations Centres PDAP: A Training Advisory Group has been established and is working on the Operations Centres PDAP.</li> </ul>	
Pilot a leadership training initiative to support employees in their	Spring 2022-23	Two command courses began development in 2021-22 for junior and senior Commanding Officers.	On track
development of key		Courses include:	
leadership competencies early in careers.		<ul> <li>Module 1: Legal and Business Requirements</li> </ul>	
		Module 2: Management of Finances	
		Module 3: Management of Personnel	
		Module 4: Management of Materiel	
		Module 5: Ship Handling	
		Launched the Canadian Coast Guard Talent Management and Mobility Program for 2022-23 which will offer Key Leadership Competencies and leadership & management development training.	
Develop an integrated national training platform for all employees.	Winter 2022-23	This commitment was cancelled as it will be addressed through other efforts.	Cancelled
Develop a concept of operations for a new Centre for simulated learning.	Fall 2021-22	Funding requests submitted.	On track

# Career Management – Pillar III

Commitment	Expected Deliverable Date per the IBHRP	Q1 – Q4 Achievements	Status (Complete, On Track, Delayed)
Build an online competency-based career management tool for all seagoing and shore-based employees.	Fall 2021-22	Launched the Career Competency Tool.	Complete
Host career management learning events for employees.	Summer 2021-22	Administrative Professionals Network (APN) has hosted 'Ask me Anything' learning sessions on the following topics:	Complete
		• SAP	
		Staffing	
		Access to information and privacy	
		<ul> <li>Youth Professional Network; and</li> </ul>	
		• How to use MS Teams Space.	
		APN launched a "Take Me With You" observer membership.	

## Health – Pillar IV

Commitment	Expected Deliverable Date per the IBHRP	Q1 – Q4 Achievements	Status (Complete, On Track, Delayed)
Develop a holistic wellness strategy, including the future of remote work/ telework.	Fall 2021-22	Q3: Completed guidance on how to work in a virtual / hybrid environment published on the intranet is complete.	On track / Complete
		<ul> <li>Onboarding resources now include support in a virtual environment.</li> </ul>	
		Q4: A draft National Holistic Wellness Strategy has been developed.	
Provide national access to mental health professionals and training to support Critical Incident Stress Management (CISM).	Summer 2021-22	Awarded a national contract for a mental health professional to support CISM, November 2021.	Complete

# Annex C – Canadian Coast Guard Demographics

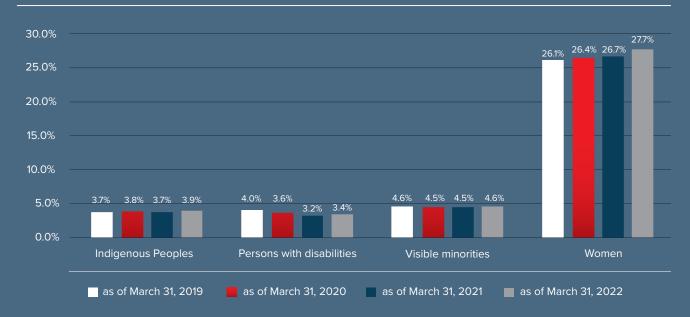
**Distribution of Employees as of** March 31, 2022 2,500 2,090 2,000 1,545 1,500 1,282 1,269 1,000 784 649 500 192 74 2 ACCG ARC CEN NCR WCCG CCG CCG CCG Total Sea-going Only

**Canadian Coast Guard Regional** 

400 395 390 385 380 375 370 365 360 365 360 355 350 2018-19
2019-20
2020-21
2021-22

**Student Hires** 

#### **Employment Equity Representation**



84 Integrated Business and Human Resource Plan



### Distribution of Employees by Region

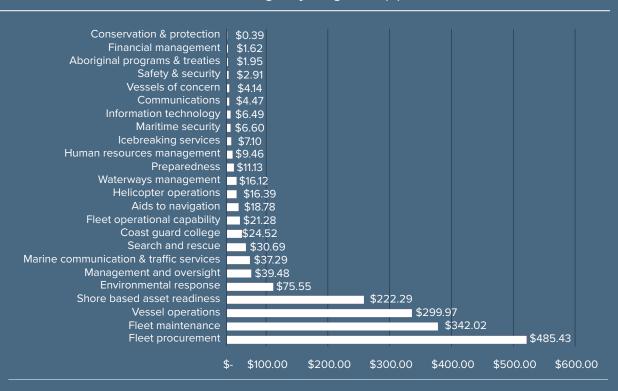


#### Distribution of Sea-Going Employees by Region

# Annex D – Canadian Coast Guard Financials

#### **Current Year:**

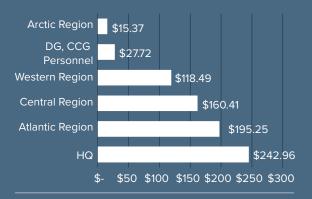
Canadian Coast Guard Total Budget by Program M(\$) for Fiscal Year 2022-23

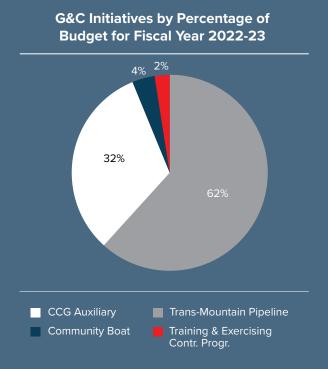


#### Capital Budget by Project Type M(\$) for Fiscal Year 2022-23



#### Operating Budget by Region M(\$) for Fiscal Year 2022-23





#### Notes

#### All Votes:

- Total Canadian Coast Guard references levels of \$1,686M excludes vote-netted revenue budget of \$40M. The exclusion of revenue allows the reader to see the funding used by the Canadian Coast Guard to cover operating, capital and contribution expenditures.
- 2. New in this year's reporting is the breakout of direct internal services budgets. In previous reports, these budgets were within the Fleet Operational Capability program as they represent the direct overhead costs to maintain Canadian Coast Guard's programs.

**Vote 1:** Operating budget is based on fiscal year 2021-22 initial allocations.

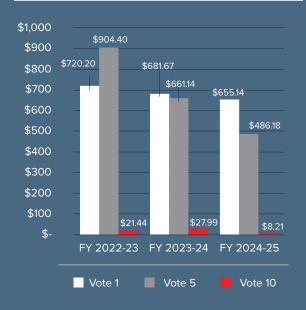
#### Vote 5:

- Capital budget is based on fiscal year 2021-22 initial allocations.
- Procurement of new ships is for all major vessel projects, including the National Shipbuilding Strategy.
- 3. Funding for the Oceans Protection Plan (OPP) and the Trans Mountain Expansion (TMX) project are related to specific Treasury Board submissions, as per fiscal year 2021-22 Annual Reference Level Update (including any prior year reprofiles).
- Vessel life extension budget includes all funding for life extension projects planned for the Coast Guard's existing fleet.
- Refurbishment and replacement include funding for all shore-based assets and other assets outside the Coast Guard fleet (example: floating aid, towers, sites, etc.)

#### Vote 10:

- 1. The Canadian Coast Guard's contribution funding fluctuation is larger than previous years due to the TMX funding.
- 2. Funding for the OPP and TMX project are related to specific Treasury Board submissions, as per fiscal year 2021-22 Annual Reference Level Update and has fluctuating contributions over fiscal year periods.
- 3. The Canadian Coast Guard's auxiliary funding is ongoing (permanent).

#### **Three Year Outlook**



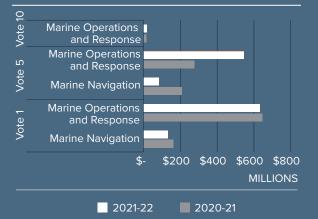
#### Canadian Coast Guard Future Reference Levels by Vote M(\$)

#### Notes

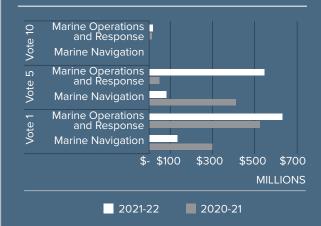
- Vote 1 budget drops by \$68M from fiscal year 2021-22 to fiscal year 2022-23. This is due to sunsetting portions of programs like OPP (\$30M), OFSV (\$21M), TMX (\$6M), and PIER (\$2M).
- Vote 5 and 10 budgets are subject to change in future years depending on future Treasury Board submissions and reprofiles that may be requested.

#### **Historical Overview:**

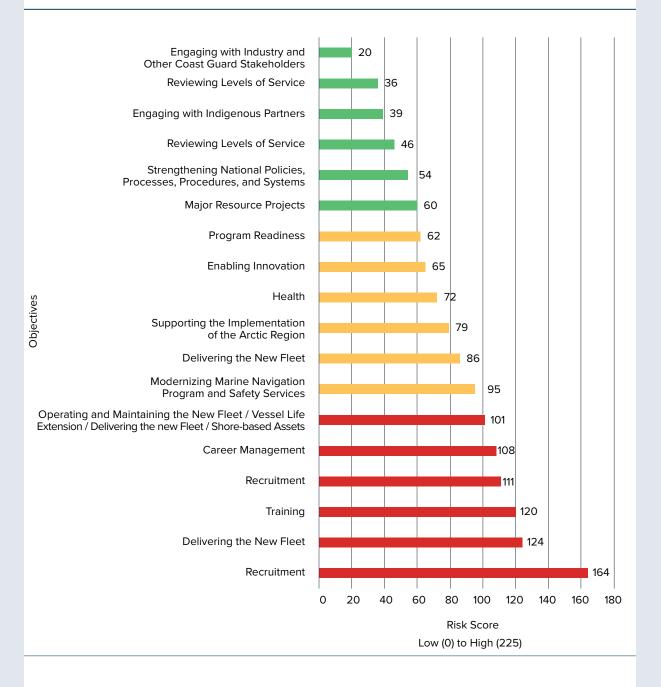
#### Historical Spending by Vote and Core Responsibility M(\$)



Historical Spending by Core Responsibility and Vote M(\$)



# Annex E – Canadian Coast Guard Risk Profile: Assessment and Statements



#### **Coast Guard Risk Assessment**

Pillar	Key Objective to Mitigate Risk	Risk Statement	Score
People	Attraction and Recruitment	Not addressing key at-risk positions of front-line operational personnel could reduce the capacity to deliver programs and services to Canadians.	164
Assets	Delivering the New Fleet	Not meeting the required timelines for the delivery of the new fleet could result in operational capacity gaps and impact the levels of service.	124
People	Training	Not keeping pace with changing technology, demographics and career development needs could reduce the status of the College as a leading marine-focused training centre of choice.	120
People	Attraction and Recruitment	Not utilizing and leveraging social media and technology could impact the Agency's recruitment strategies, recruitment levels and meeting of the Federal Public Service goals to improve diversity, equity and inclusion.	111
People	Career Management	Not ensuring appropriate developmental opportunities could impact recruitment and retention of employees.	108
Assets	Operating and Maintaining the New Fleet / Vessel Life Extension / Delivering the new Fleet / Shore-based Assets	Not having an ongoing focus on project management, technical and planning excellence could impact the operations and maintenance of Coast Guard assets.	101
Services	Modernizing Marine Navigation Program and Safety Services	Not updating its technological tools and regulatory and policy oversight will not allow Coast Guard to continue optimizing its service delivery or meet the Canadian Coast Guard information needs or the information needs of other federal service delivery partners and service users.	95
Assets	Delivering the New Fleet	Not delivering new ships in a timely manner could result in program capability misalignment given limited flexibility within the fleet renewal plan and interim measures to maintain operational capacity.	86
Governance	Supporting the Implementation of the Arctic Region	Not continuing the implementation of the Arctic Region in a collaborative manner with Inuit and Indigenous partners, and guided by the five pillars from the "What we Heard" report, then the Canadian Coast Guard will not benefit from the trust developed with its Inuit and Indigenous partners to enhance service delivery.	79
People	Health	Not communicating the Canadian Coast Guard vision for holistic health, and subsequently train and support its personnel it will impact the Agency's ability to foster a healthy, resourced and agile workforce.	72

Pillar	Key Objective to Mitigate Risk	Risk Statement	Score
Services	Enabling Innovation	Not continuing innovation through the use of evolving technology, the Canadian Coast Guard may not be able to meet the targets set out in the Greening Government Strategy and the Federal Sustainable Development Strategy.	65
Services	Program Readiness	Not having a readiness profile will lead to programs not being able to optimize the resourcing of people, assets, and fully understand and assess capacity demand in order to identify gaps between current needs and anticipated future program requirements.	62
Services	Major Resource Projects	Not continuing the collaboration with partners to implement the multiple ongoing initiatives and investments, Government of Canada priorities related to the protection of the marine environment will not be adequately supported.	60
Governance	Strengthening National Policies, Processes, Procedures, and Systems	By not having clear roles and responsibilities among multiple federal partners, Coast Guard will not demonstrate the culture of continuous improvement and optimized service delivery may be a challenge.	54
Services	Reviewing Levels of Service	If service users do not see their recommendations are adequately assessed and considered for implementation, then there is risk to the established partnership and service delivery model that requires cooperation between the Canadian Coast Guard and service users.	46
Governance	Engaging with Indigenous Partners	If the Canadian Coast Guard does not continue to engage with its Indigenous partners, there is a risk of not adhering to the United Nations Declaration on the Rights of Indigenous Peoples Act, and losing a key knowledge holder and key service delivery partner.	39
Services	Reviewing Levels of Service	If the levels of service are not reviewed on a regular basis, then there is a risk that the services may not reflect the current marine environment or the current needs of service users.	36
Governance	Engaging with Industry and Other Coast Guard Stakeholders	Not engaging industry and other Coast Guard stakeholders in an effective and coordinated manner then the Agency will be unable to deliver on its mandate, advance strategic and Government of Canada priorities.	20
Governance	Strengthening National Policies, Processes, Procedures, and Systems	Not having knowledge transfer and flexibility of the key Canadian Coast Guard enablers to adapt to our business requirements will impact the capability for Coast Guard to deliver programs and services to Canadians.	To be determined