

EVALUATION OF THE OCEANS PROTECTION PLAN (PHASE 1)

ABOUT THE EVALUATION

- The evaluation was conducted April 2018 to February 2019 to document early successes and information management / information technology (IM/IT) challenges of four Oceans Protection Plan (OPP) data-intensive initiatives.
- Evidence was gathered through site visits, four case studies, interviews with 84 individuals, a document review, and data analysis.

Fisheries and Oceans Canada is working to preserve and restore Canada's coasts and waterways through the Oceans Protection Plan. Work to date will help to ensure our oceans are cleaner, healthier and safer for years to come.

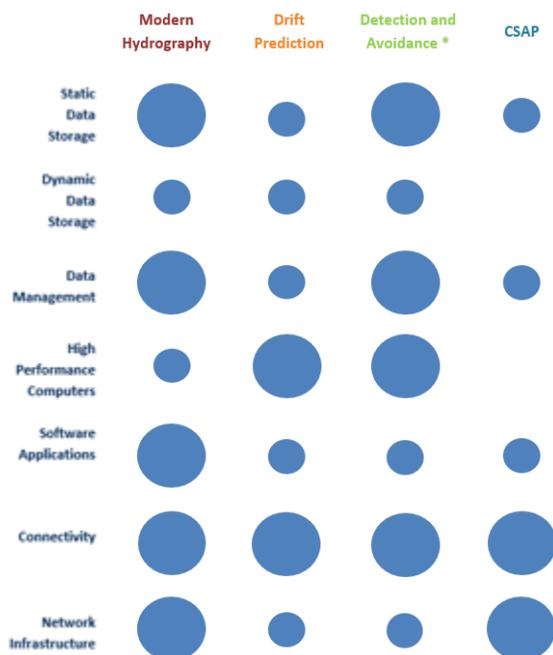
THE EVALUATION COLLECTED EVIDENCE TO:

- Examine the early achievements of the initiatives during the first two years of OPP to improve marine safety, protect Canada's marine environment, and to offer new possibilities for coastal communities.
- Identify:
 - Challenges related to access of IM/IT resources and services; and data management;
 - Good practices that allowed the initiatives to mitigate IM/IT delays; and
 - Alternative solutions used to mitigate IM/IT challenges, but pose significant risks.

FOUR DATA-INTENSIVE INITIATIVES WERE EXAMINED

INITIATIVES	OBJECTIVES	HIGHLIGHTS*
1. Modern Hydrography and Charting in Key Areas	Aims to provide better navigational information in the hands of mariners.	Surveys are on schedule to collect data for 23 high-priority commercial ports. A large volume of LiDAR and multibeam data is collected to update very old near-shore information.
2. Improving Drift Prediction and Near-shore Modelling	Provides key support to areas relying on complex ocean modelling such as responding to environmental and maritime disasters and electronic navigation.	Modelling activities are progressing well. Focus is on improving the accuracy of the information and the efficient operationalization of dynamic hydrographic products and 24/7 service delivery.
3. Reducing the Threat of Vessel Traffic on Whales and Other Marine Mammals through Detection and Avoidance	Develops and tests technologies able to detect the presence of whales in near-real time on both the west and east coasts of Canada.	International experts helped identify existing and emerging real-time whale detection technologies that can be effective within the Canadian context. Testing of several acoustic technologies is in progress.
4. Collaborative Situational Awareness Portal (CSAP)	Will establish a maritime awareness information system to provide coastal partners and stakeholders with a user-friendly picture of maritime activity.	A CSAP prototype has been developed and demonstrated in engagement sessions with Indigenous communities across Canada. More sessions are in progress.

THE SELECTED INITIATIVES RELY ON IM/IT RESOURCES FOR THEIR ACTIVITIES



* Due to the close links with Marine Environmental Quality (MEQ), some of the IM/IT needs identified here apply to both initiatives.



**The size of the circles represents the magnitude of need. It is not to scale and is not an exact measure.

*Select highlights of achievements for the first two years of OPP



KEY FINDINGS

1 OPP planning for IM/IT requirements was limited, which led to challenges in providing IM/IT services during the first two years of OPP.

- Magnitude and costs of IM/IT were underestimated and not well understood in the planning phase of OPP. Regional representatives and IM/IT specialists were not engaged in the early phase of OPP.
- Information Management and Technology Services (IM&TS) received no additional funding for the delivery of OPP IM/IT projects. During the first year of OPP it became evident that IM/IT services were a critical resource for most OPP initiatives to deliver on their expected results.
- Shared Services Canada's high costs and delays in providing requested services had an impact on the ability of some areas to deliver on their activities during the first two years of OPP.

2 Milestones and key outputs for the first two years of OPP were achieved by adjusting planned completion dates for some of the initiatives' activities and by developing alternative IM/IT solutions.

Good practices helped to minimize delays:

- Investing in a dedicated IM/IT resource.
- Working to better define IM/IT needs.
- Developing strong governance within the initiatives.
- Improving communication between program areas and IM/IT providers.

Mitigation efforts increased risks:

- Using unsecured environments to store vast quantities of data.
- Working from home to access quicker networks.
- Sharing data by courier or through university networks.

3 Information Management and Technology Services is developing approaches to move OPP forward, which could generate efficiencies within OPP and benefit the department as a whole.

- A coordinated approach could be an effective solution to IM/IT challenges. In particular:
 - It groups IM/IT needs into **bundles** which could generate efficiencies by avoiding costly delays.
 - Transitioning from on-premise data centres to **cloud solutions** for archiving data could facilitate access to scarce storage resources.

At the time of the evaluation, there was no decision on the feasibility of the approach proposed by IM&TS.

4 Department-wide efforts regarding data management and funding are in progress.

- Actions led by Strategic Policy:
 - A departmental data governance strategy is being developed.
 - A number of recommended actions for improving data governance within the department are underway.
- Actions guided by the Chief Financial Officer:
 - A team has been created to provide guidance for the development of planning documents.
 - The costing capacity within DFO's financial sector is being enhanced.
 - A new finance committee has been developed to promote sound stewardship and support financial decision-making.

RECOMMENDATIONS

1. ADDRESS DATA MANAGEMENT RISKS

The Assistant Deputy Minister, Human Resources and Corporate Services, the Deputy Commissioner of Operations, and the Senior Assistant Deputy Minister, Strategic Policy, should find short-term solutions to address immediate risks related to OPP data management to ensure that data are effectively stored, accessed, and shared within and among DFO/CCG sectors, regions, and with Canadians, in addition to and consistent with ongoing department-wide efforts to improve data management, where appropriate.

2. REVIEW CRITICAL STEPS WITH A FOCUS ON RESULTS

The Deputy Commissioner of Operations, with support from the Chief Financial Officer, should coordinate with Assistant Deputy Ministers, where relevant, to review and refine the outstanding critical steps that are necessary to achieve OPP's expected results, taking into consideration existing resources, timelines, and the alignment of initiatives' milestones and key outputs.

3. IMPROVE PLANNING PROCESSES

The Senior Assistant Deputy Minister, Strategic Policy, with support from the Chief Financial Officer and the Assistant Deputy Minister, Human Resources and Corporate Services, should improve the scoping, costing, and planning processes to encompass support for new programs, initiatives, and plans. This should include consultations with subject matter experts.