

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminals: Proposed Deltaport Expansion Berth Four Project discussion with Parks Canada
Date:	October 5, 2021
Time:	9:30 - 11:00 AM (Pacific)
Location:	Teams Call
Attendees:	IAAC – Stefan Crampton, Tracy Utting Parks Canada (PC) – Mark Baldwin, Barbara Leskovec, Aaron Osicki, Jonathan Moore, Meghan Kate Humble Hatfield – Rebecca Kordas, Martin Gebauer, Jeff Rempel, Lyle Thompson, Victoria Hanna
Purpose:	An introductory meeting between Parks Canada (PC) and Hatfield who provided a general overview of DP4 in an effort to support early engagement, create awareness around the proposed Project, solicit early feedback on assessment boundaries and plans for future field programs, and discuss opportunities for information sharing.
Summary:	<p>Hatfield provided an overview of Global Container Terminals (GCT), their North American operations and the proposed DP4 Project, including the Project rationale, location, project components and construction, scope, and capacity. Hatfield provided an overview of the DP4 Impact Assessment (IA) process and schedule.</p> <p>PC asked about potential locations where Short Sea Shipping (SSS) was viable. Hatfield responded noting the movement of SSS vessels is currently uncertain.</p> <p>Hatfield outlined the Archaeological valued component (VC) regarding the potential effects of erosion to sites in the Gulf Islands National Park Reserve (GINPR). Hatfield asked PC to provide information on work in the area that should be included in the IA. PC noted the DP4 site falls outside of PC jurisdiction but there is a federal water lot that surrounds the Project area.</p> <p>PC noted the benefit of reviewing the RBT2 Archaeological Overview Assessment (AOA) in consideration of intertidal archaeological potential and highlighted that no major new sites have been identified in the proposed Project area.</p> <p>PC and Hatfield discussed the complexities of discerning vessel wake vs. natural wave action derived shoreline erosion, as well as the challenges of archeological site conditions being location specific with localized conditions. PC raised concerns regarding the impacts of vessel wake outside of coastal erosion, such as the effects on marine vegetation and Indigenous interests. PC outlined ship size and location as variables in determining wave characteristics and impacts, particularly how available studies are not in site-specific locations.</p>

	<p>Hatfield requested advice on determining and addressing wake effects on rocky shores as part of the IA. PC noted many archaeological sites were deliberately selected in storm-protected areas therefore vessel wake within a range similar to that of a natural storm may affect archaeological resources at those sites and in areas with existing issues of coastal erosion may compound the potential for erosion. PC noted waves propagating to the shoreline have the potential to affect intertidal archaeological sites.</p> <p>Hatfield provided the proposed LAA and RAA descriptions and reasoning to achieve an ecosystem-based approach and asked PC for further comment. PC noted benefit in reviewing the RBT2 and Transmountain Expansion projects for comparison. PC advised Hatfield should follow up with a PC expert in subtidal archaeological sites.</p> <p>Hatfield requested PC advise of research that would influence GCT’s marine assessment, as well as considerations regarding the recommendation (43) from the RBT2 panel regarding an erosion monitoring and protection program for coastal archaeological sites. PC noted plans for a multi-year program, but that data is not available to share, though engagement with GINPR will be key in addressing issues.</p> <p>Hatfield provided an overview of the Socio-Economic VCs including employment and economy, land and resource use, infrastructure and services, social determinants of health, and marine use. Hatfield provided the LAA and RAA for Marine Use and asked if PC had interests or concerns regarding the scope of the assessment. PC noted heavy recreational use in these areas noting Project-related changes to the local environment would require consideration.</p> <p>IAAC noted GCT operates the terminal not the marine shipping vessels, noting complimentary measures (mitigation led by government) to reduce effects may be identified though the assessment of incidental activities outside the control of the proponent, and included in the report to the Minister.</p> <p>Hatfield provided an overview of the marine waterbirds VC highlighting an overview of key considerations for the assessment requesting PC identify key concerns regarding waterbird aggregations. PC noted national parks are evaluated based on ecological integrity recommending a focusing on ecological indicators and cumulative effects. PC recommended further discussions with a park ecologist requesting Hatfield provide a copy of the presentation. Hatfield requested PC provide a list of ecological indicators.</p> <p>PC noted collaboration with several groups, committees and organizations recommending GCT engage with ECCC on marine waterbirds and requesting Hatfield provide a list of species of interest. Hatfield requested further discussions with PC/GINPR staff for focused discussions on birds.</p> <p>Hatfield provided an overview of the Marine Resources VC including marine mammals, marine fish and habitat, marine vegetation, biofilm, and benthic fauna and infauna, as well as the LAA and RAA. Hatfield noted potential project impacts and asked PC for other indicators relevant to the Marine Resource VC and for the Gulf Islands. PC noted indicators related to eelgrass, coastal processes, and bivalves, and suggested discussions with a PC ecologist.</p>
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	<p>PC asked Hatfield on work with Fisheries and Oceans Canada (DFO) regarding marine mammals. Hatfield noted preliminary engagements with DFO regarding the DP4 proposal, SARA permits, SRKW, and an overview of future meeting plans.</p> <p>Hatfield acknowledged the importance of Accidents and Malfunctions (A&M) as a consideration for the DP4 assessment and how A&M can effect both intertidal and subtidal archaeological sites.</p> <p>Hatfield requested clarification on “field unit”. PC explained, in the context of GINPR, it includes key personnel who will provide comments and concerns regarding the Project.</p> <p>Hatfield provided an overview of their next steps including filing the Detailed Project Description (DPD) to IAAC and EAO, the comment period for the Joint Guidelines (JGs), IAAC and EAO’s review of comments and issuing of the final JGs, along with the organization of Technical Advisory Committee.</p> <p>The following actions and key considerations were a result of the above conversations.</p>	
Key Decisions:	No key decisions were made at this time.	
Actions:	Hatfield	Hatfield to send the PC subtidal archaeology expert, a follow-up note regarding the subtidal areas proposed to be excluded from the LAA/RAA. Action complete.
	Hatfield	Hatfield to provide a list of bird species of interest. Action complete.
	Hatfield	Hatfield to provide a copy of the presentation for discussion with the PC Ecologists.
	Hatfield /IAAC	Hatfield and IAAC to organize a call with ECCC, PC, and Birds Canada to discuss bird-related VCs and potential LAA/RAA boundaries.
	Hatfield /IAAC	Hatfield and IAAC to organize a call with PC ecologists/GINPR staff and the PC subtidal archaeological expert to discuss bird and marine ecological indicators, and subtidal archaeological concerns. Action complete.
	PC	PC to provide bird-related ecological indicators. Action complete.

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminals: Proposed Deltaport Expansion Berth Four Project discussion with Environment and Climate Change Canada (ECCC)
Date:	November 17, 2021
Time:	9:00 - 10:30 am
Location:	Teams Call
Attendees:	IAAC – Tracy Utting, Celine Monfils ECCC – Robyn McLean, Taylor Groenewoud, Jayme Brooks, Rachel Canham, Sean Boyd, Scott Flemming, Kristina Hick, Tasha Gallagher Hatfield – Lyle Thompson, Martin Gebauer, Greg Ferguson, Rebecca Kordas, Victoria Hanna, Robert Drummond.
Purpose:	An introductory meeting between ECCC and Hatfield who provided a general overview of DP4 in an effort to support early engagement, create awareness around the proposed Project, solicit early feedback on assessment boundaries and plans for future field programs, discuss opportunities for information sharing, and receive clarification on information requirements described in the draft Joint Guidelines.
Summary:	<p>Hatfield provided an overview of Global Container Terminals (GCT), their North American operations, environmental performance, and the proposed DP4 Project, including the Project rationale, location, project components and construction, valued components (VCs), scope, capacity, potential effects, and general schedule. Hatfield provided an overview of the anticipated DP4 Impact Assessment (IA) process and schedule.</p> <p>ECCC asked if GCT has reviewed existing data for other projects and if GCT is considering data-sharing options specifically between the RBT2 and DP4 projects. Hatfield noted a literature review was conducted for DP4 using publicly available information, including RBT2 data. Hatfield confirmed data requests have been made to the Vancouver Fraser Port Authority (VFPA) but no data has been received to date. Hatfield noted their interest in data sharing and collaboration with ECCC.</p> <p>Hatfield provided an overview of the proposed intertidal field studies. Hatfield noted habitat mapping surveys (drone and ground truthing) were conducted in 2021 to map eelgrass beds and intertidal habitats. Hatfield noted more detailed studies are planned for 2022 to assess eelgrass, biofilm, invertebrates, and vertebrates etc. Hatfield provided an overview of the intertidal Local Assessment Area (LAA) and Regional Assessment Area (RAA) and the proposed study boundaries.</p> <p>Hatfield provided an overview of the proposed shorebird studies which will include point counts, diet assessments, fecal counts, and biofilm and infauna sampling in association with shorebird migration. Hatfield noted efforts to replicate prior RBT2 studies as well as others.</p>

Hatfield requested clarification on the draft JG requirement for two years of shorebird studies. ECCC advised they would confirm the origin of the requirement. ECCC referenced previous studies conducted at Roberts Bank noting ECCC conducts daily surveys in the spring at Roberts Bank.

Hatfield requested clarification on the approach for bird surveys. ECCC noted they do not have specific survey locations but noted surveys must encompass the entire site and avoid double-counting.

Hatfield noted point counts are planned as part of shorebird surveys and asked ECCC for feedback on protocols. ECCC noted 10 surveys is sufficient so long as double-counting can be avoided. Hatfield noted alternative options such as an absolute survey or point counts. ECCC provided Hatfield with a contact for further inquiries.

ECCC asked if the DP4 Project was expected to have effects on birds north of the Roberts Bank causeway. Hatfield noted the greatest effects were expected in the inter-causeway area, but other areas would be surveyed for comparative purposes.

ECCC asked if the DP4 Project was expected to influence saltmarsh in the inter-causeway area. Hatfield noted potential effects on saltmarsh from dredging, coastal geomorphological changes, sedimentation, etc. are not known which is the reason for such surveys. ECCC noted an expanded study area. IAAC noted they would like a list of studies/areas to be defined before the end of the comment period, noting Indigenous Nations may have views regarding what should and should not be studied.

Hatfield noted the requirements for three years of biofilm studies in the draft JGs conflicts with the required timeline for the IA and requested IAAC/ECCC provide clarity along with noting an interest to leverage any existing data that ECCC has. ECCC noted data-sharing and availability are being discussed and will be followed up with Hatfield.

Hatfield provided an overview of the federally threatened Audouin's night-stalking tiger beetle that has been sighted in Boundary Bay saltmarsh habitats similar to Roberts Bank inter-causeway area saltmarsh and outlined plans to review existing information to inform if field surveys would be beneficial to inform the assessment.

Hatfield outlined the goal of adding to the database of information on coastal waterbirds in the inter-causeway area and discussed plans for coastal waterbird and great blue heron field studies. ECCC noted the consideration of tide heights, as well as brant and grebe populations.

Hatfield noted prior restoration work in the area. ECCC noted a compensation area was created as part of the BC Ferries parking lot expansion. ECCC provided a document on shorebird distribution which included shorebird counts.

Hatfield provided an overview of a potential marine waterbird survey schedule and scope. Hatfield noted national parks located within the area and ongoing engagement with Parks Canada.

Hatfield noted the draft JGs indicated that some proponents want the study area boundary to extend to the 200 nm limit. Hatfield requested ECCC provide feedback on the proposed LAA/RAA. ECCC responded with no comments but provided contacts to note from ECCC, CWS, and Washington State. ECCC agreed to confirm a list of names to provide as contacts for Hatfield.

		<p>ECCC asked Hatfield if the work plans would be shared across departments, with Indigenous groups, and posted to the Registry. Hatfield noted the current focus on engaging federal/provincial experts, Indigenous groups and key stakeholders with technical expertise (i.e. Birds Canada). IAAC noted further discussion on publicly sharing work plans should take place.</p> <p>ECCC asked if further meetings regarding eelgrass and marine life were planned. Hatfield highlighted they had an eelgrass-specific work plan and various others focused on marine life that would be shared in the future.</p> <p>Hatfield noted no current plans for shorebird studies within agricultural areas and requested feedback on such. ECCC agreed there was not a foreseeable need to do so. ECCC noted potential interaction with upland birds and species at risk and increased road and rail traffic. ECCC added RBT2 determined significant impacts of increased traffic to Barn Owls. Hatfield noted that certain areas and activities are outside of GCT's lease boundary and that the DP4 assessment scope is under consideration as part of the draft JG engagement process lead by IAAC and EAO.</p> <p>The following actions and key considerations were a result of the above conversations.</p>
Key Decisions:		No key decisions were made at this time.
Actions:	ECCC	ECCC to confirm data-sharing opportunities with GCT/Hatfield.
	ECCC	ECCC to confirm the list of contracts provided regarding data-sharing opportunities and further Project related discussions.

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminal: Proposed Deltaport Expansion Berth Four Project discussion with Natural Resources Canada (NRCan)
Date:	December 14, 2021
Time:	8:30 - 10:00 am
Location:	Teams Call
Attendees:	<p>IAAC – Tracy Utting, Celine Monfils</p> <p>NRCan – Kathy McPherson, Aruna Dixit, John Cassidy, Gwyn Lintern, Thomas James, Heather Dettman, Laurence Davidson</p> <p>Hatfield – Lyle Thompson, Jeff Rempel, Benjamin Beall, Robin Sydneysmith, Karisa Petho, Victoria Hanna, Robert Drummond.</p> <p>Ausenco – Moe Jannatpour, Otavio Sayao, Luciano Absalonsen.</p>
Purpose:	An introductory meeting between NRCan and Hatfield who provided a general overview of DP4 in an effort to support early engagement, create awareness around the proposed Project, solicit early feedback on assessment boundaries and plans for future field programs, discuss opportunities for information sharing, and receive clarification on information requirements described in the draft Joint Guidelines. Hatfield also outlined discussions from early engagement initiatives.
Summary:	<p>Hatfield provided an overview of Global Container Terminals (GCT), their North American operations, environmental performance and the proposed DP4 Project, including the Project rationale, location, project components, valued components (VCs), scope, capacity, potential effects, and schedule. Hatfield shared the GCT Deltaport Fourth Berth Expansion – November 2021 Video found here: https://www.youtube.com/watch?v=3nlsvBiWi_4</p> <p>Hatfield provided an overview of the Marine Sediment and Water Quality VC, outlining the Local and Regional Assessment Areas (LAA/RAA), the study components, baseline studies and targeted field approach.</p> <p>Hatfield noted the draft JG requirements regarding existing conditions for Fraser River hydrology, groundwater flow, requesting NRCan provide further information on these requirements. NRCan noted groundwater flow and hydrology requirements were likely an ECCC request, noting prior requests from ECCC for NRCan to conduct related studies.</p> <p>Ausenco provided an overview of the Coastal Geomorphology VC, outlining ongoing literature reviews and objectives for numerical modelling. Ausenco provided an overview of the Coastal Geomorphology LAA and RAA, noting the assessment areas include a 2 km buffer from the Marine Shipping lanes to allow for the consideration of the potential effects of wake on shoreline erosion. Ausenco noted the consideration of potential effects of climate and sea-level rise as well as the influence of episodic events.</p>

		<p>Hatfield provided a high-level overview of the Accidents and Malfunctions VC including GCTs existing controls and A&M measures and adherence to the transportation of dangerous goods regulation.</p> <p>Hatfield requested clarification on the draft Joint Guidelines requirement to assess “any” contaminants spilled or released to aid in developing worst-case scenarios. NRCan brought attention to oil, low sulphur diesel, plastic beads, solvents, pesticides, and other substances that would be of interest.</p> <p>Hatfield noted the JG requirements to provide relative locations of sensitive receptors and modelling for hazardous or noxious substances. Hatfield asked if NRCan had or was aware of any publicly available data or modelling information that could be shared to support the DP4 assessment. NRCan noted that they have collected data in the Roberts Bank area related to sediment transport, they could provide feedback on the creation of a model and that ECCC may have additional information on sensitive receptors.</p> <p>Hatfield asked NRCan about prior work regarding fate and effects studies completed for other projects and if DP4 would require project-specific modelling or if existing information could be used. NRCan noted prior projects focused on diluted bitumen and that additional work tailored specifically to DP4 would be beneficial.</p> <p>NRCan noted the seismic hazard assessment should include all the kinds of earthquakes that can occur in this region and the importance of clarifying causes of induced earthquakes and their secondary effects, highlighting research out of Washington and Strait of Georgia regions.</p> <p>Hatfield asked if NRCan is aware of social and mental health studies conducted in regards to A&M. NRCan suggested referring to Major Projects Inventory (MPI) and that NRCan would follow up.</p> <p>Hatfield asked NRCan if they know of any regional assessment or strategic environmental assessment (SEA) information for the west coast. NRCan suggested asking in a year as the Ocean Protection Program is ending. NRCan provided a link to a prior presentation listing Canada’s initiatives to better understand cumulative effects.</p> <p>Hatfield opened the floor for discussion. NRCan referred IAAC as a contact for data-sharing opportunities and that IAAC will confirm the next steps for engagement between NRCan and the GCT DP4 team.</p> <p>Hatfield noted there are a number of field study work plans that will be shared with NRCan for review in Q1/Q2 2022.</p> <p>The following actions and key considerations were a result of the above conversations.</p>
Key Decisions:		No key decisions were made at this time.
Actions:	NRCan	NRCan to follow up with MPI regarding possible social studies or mental health studies regarding accidents and malfunctions.
	IAAC / NRCan	IAAC to confirm next steps for engagement between NRCan and the GCT DP4 team re: process for continued engagement (smaller meeting) and sharing data.
	Hatfield	Hatfield to follow up with NRCan for a follow-up discussion regarding the Marine Sediment & Water Quality LAA and RAA and a net sediment transport.

	Hatfield	Hatfield to follow up with NRCan for data sharing opportunities, particularly in the Roberts Bank/Deltaport area regarding seabed sediment transport and suspended sediment transport.
	Hatfield	Hatfield to follow up with ECCC as per NRCans suggestion regarding data sharing opportunities on environmental sensitivity mapping/coastal sensitivity mapping.

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminal: Proposed Deltaport Expansion Berth Four Project discussion with Fisheries and Oceans Canada (DFO)
Date:	December 15, 2021
Time:	9:00 - 10:30 am
Location:	Teams Call
Attendees:	IAAC – Tracy Utting, Celine Monfils DFO – Stephanie Russo Hatfield – Lyle Thompson, Jeff Rempel, Dr. Rebecca Kordas, Dr. Kerry Marchinko, Stewart Wright, Robert Drummond. Sea View Marine Sciences – Dr. Anna Hall, Mika Ogilvie
Purpose:	An introductory meeting between DFO and Hatfield to provide a general overview of DP4, solicit early feedback on plans for future field programs, present information on key valued components (VCs), receive feedback, discuss opportunities for information sharing, and receive clarification on information requirements described in the draft Joint Guidelines.
Summary:	<p>Hatfield provided an overview of Global Container Terminals (GCT), their North American operations, and the proposed DP4 Project, including the Project location, rationale, scope, timing, and potential effects. Hatfield provided an overview of the DP4 Impact Assessment (IA) approach, an overview of the proposed VCs and their interactions, as well as the timing for baseline studies.</p> <p>Hatfield provided an overview of the Marine Fish and Fish Habitat - Marine Fish VC, outlining the Local and Regional Assessment Areas (LAA and RAA), subsequent studies, and surveys regarding demersal, forage fish, and juvenile salmon, spawning, artificial light, and underwater noise.</p> <p>Hatfield requested DFO provide clarification on regulatory expectations regarding the JG requirement to “describe primary and secondary productivity in affected water bodies with a characterization of trophic levels, biodiversity, key functional interactions and processes (e.g., food web and nutrient cycling), seasonal variability, ranges and sensitive periods”. DFO agreed to follow up to provide further clarification.</p> <p>Hatfield advised that DP4 studies are only intended to conduct baseline contaminant assessments in shellfish and requested DFO provide clarification on the JG requirements to “provide baseline measurements of contaminants in fish”; and “Effects should be predicted or modelled using baseline measurements of contaminants in the complete food web”. DFO noted this was likely only in reference to shellfish but would follow up internally to confirm that the baseline contaminant assessment will only require the consideration of shellfish and not include other fish species.</p>

Hatfield provided an overview of the Marine Fish and Habitat – Marine Invertebrate VC, outlining the LAA and RAA, subsequent studies and surveys regarding Dungeness crabs, benthic infauna, shellfish, and the Human Health Risk Assessment (HHRA).

Hatfield provided an overview of the Marine Fish and Habitat - Marine Vegetation VC, outlining the LAA and RAA and subsequent studies and surveys regarding eelgrass, saltmarsh, biofilm, and substrate types.

Hatfield noted the draft JGs separate Wetlands and Marine Vegetation as independent VCs from Marine Fish and Fish Habitat. Hatfield clarified the DP4 VC structure noting the potential implications for the IA. DFO recommended maintaining the revised structure but including marine vegetation discussions within the Fish and Fish Habitat chapter as it related to supporting the fish assessment with the direct assessment of marine vegetation included in the revised Marine Vegetation and Wetlands IA chapter, and all marine invertebrates as part of the Fish and Fish Habitat chapter.

Hatfield provided an overview of the Marine Sediment and Water Quality VC, outlining the studies, scheduling and RAA boundary. Hatfield noted considerations regarding seasonal and inter-annual variability in marine water quality baseline data and connections to primary and secondary productivity.

Sea View Marine Sciences (SVMS) provided an overview of the Marine Mammal VC, outlining studies regarding vessel strikes, underwater noise, species ecology as related to behaviour, seasonality, and Southern Resident Killer Whales (SRKW). SVMS confirmed existing data will be used where applicable.

SVMS outlined the Marine Mammal VC LAA and RAA noting boundaries were determined based on prior consultation and for consideration of SRKW habitat and other Species at Risk Act (SARA) species. SVMS clarified the restriction of transboundary assessment areas to Canadian waters. DFO noted possible concerns regarding the extent of the SRKW boundary regarding Buoy J and will follow up internally.

The Agency noted the context of the proponent’s care and control, as well as mitigations, will be considered in the Decision Statement phase, more specifically, recognizing the need to consider broader solutions that would benefit shipping in general albeit beyond the care and control of GCT.

The Agency clarified the geographic extent of incidental activities, as to be determined in the finalized JGs will inform future regulatory expectations on this subject particularly if it extends further than the administrative boundary and beyond the care and control of the proponent.

SVMS requested DFO provide clarification on the JG requirement regarding describing “primary and secondary productivity in affected water bodies with a characterization of” various parameters and “the rationale for the selection of biodiversity metrics and indicators”. DFO agreed to follow up internally to confirm the expectation as relates to the study requirements specifically novel data collection across trophic levels.

SVMS noted the JG requirement regarding describing “baseline contaminants in marine mammals” and outlined the complications associated with sampling and analyzing marine mammal tissue, particularly towards SRKW. DFO clarified the collection of data for contaminants in marine mammals was not expected. DFO agreed to follow up internally to confirm requirements for assessing baseline levels of contaminants within marine mammals and whether new field-collected data is expected.

	<p>Hatfield requested that DFO advise of any regional assessment or strategic environmental assessment information for the west coast either planned or existing. DFO agreed to follow up internally and keep GCT informed.</p> <p>SVMS noted challenges regarding the JG requirement to “describe the potential effects of marine traffic and underwater noise on marine mammals individuals and populations” in terms of quantifying effects. SVMS requested DFO clarify the expectation. IAAC clarified the expectation is to provide an understanding of the effects to an individual at a qualitative level, noting flexibility and acceptability of reasonableness in the JGs when preparing the IA. IAAC noted GCT could provide a rationale for excluding certain requirements but should be discussed with regulators in advance. DFO agreed to follow up internally to confirm requirements for assessing underwater noise on individuals vs. populations.</p> <p>SVMS asked for regulatory guidance regarding data collaboration with DFO and other regulatory authorities with respect to reducing the acoustic impact for SRKW. DFO confirmed an available and agreed to follow up internally to confirm a DFO data contact.</p> <p>Hatfield noted that DP4 work plans will be shared for review and requested a future meeting to discuss these documents in more detail.</p> <p>The following actions and key considerations were a result of the above conversations.</p>	
Key Decisions:	No key decisions were made at this time.	
Actions:	DFO	DFO to follow up internally to provide further clarification on the expectation to describe primary and secondary productivity, specifically the opportunity to use qualitative data.
	DFO	DFO to follow up internally to confirm the baseline contaminant assessment will only require the consideration of shellfish and not include other fish species.
	DFO	DFO to follow up internally to confirm the expectation as relates to the proposed assessment boundary to Buoy J.
	DFO	DFO to follow up internally to confirm the expectation as relates to the study requirements, specifically novel data collection across trophic levels.
	DFO	DFO to follow up internally to confirm the requirement for assessing baseline levels of contaminants within Marine Mammals and whether new field-collected data is expected.
	DFO	DFO to follow up internally and keep GCT informed.
	DFO	DFO to follow up internally to confirm the requirement for assessing underwater noise on individuals vs populations.
	DFO	DFO to follow up internally to confirm the DFO data contact along with other guidance.

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminals: Proposed Deltaport Expansion Berth Four Project (DP4 or Project) discussion with Transport Canada
Date:	February 11, 2022
Time:	11:00 - 12:30 am
Location:	Teams Call
Attendees:	<p>Impact Assessment Agency of Canada (IAAC) – Tracy Utting, Celine Monfils, Kate Witherly, Analise Saely</p> <p>Transport Canada (TC) – Suzanne L’Heureux (co-ordinator), Ronald Hall, Sumandeep Atwal, Sinead Deery, Nadine Einarson, Paula Doucette, Jeff Pelton, Sydney Jordan, Kelly Larkin, Michael Kim, Michael Sylvester, Adam Mcleod</p> <p>Global Container Terminals (GCT) – Marko Dekovic</p> <p>Hatfield Consultants – Lyle Thompson, Jeff Rempel, Stewart Wright, Karisa Petho, Robin Sydneysmith, Anna Hall, Victoria Hanna.</p>
Purpose:	An introductory meeting between GCT, their technical advisors (Hatfield) and TC to provide a general overview of DP4, solicit early feedback on plans for future field programs, present information on key valued components (VCs), receive feedback, discuss opportunities for information sharing, and receive clarification on information requirements described in the draft Joint Guidelines.
Summary:	<p>GCT provided an overview of their North American operations and the proposed DP4 Project, including the Project location, rationale, scope, timing and potential effects.</p> <p>Hatfield provided an overview of the impact assessment approach and an overview of the proposed VCs and their interactions, as well as the timing for baseline studies relevant to TC including Marine Use and Accidents and Malfunctions.</p> <p>Hatfield provided a high-level overview of the Marine Use VC including a description of the subcomponents (Navigation, Tenured Marine Use, and Public Marine Use) and a brief description of the proposed Marine Use local and regional assessment areas. Hatfield noted GBA+ considerations will inform the assessment.</p> <p>Hatfield requested TC advise of any existing studies, data or reports that would help inform the Marine Use studies.</p> <p>Hatfield provided a high-level overview of the Accidents and Malfunctions VC including GCTs existing preventative measures and the jurisdictional responsibilities for reporting spills both at berth and in the marine shipping lanes. Hatfield noted GCT manages activities within the terminal lease boundaries and the activities for which GCT has care and control.</p> <p>Hatfield asked if TC is aware of any key contaminants of concern as mentioned in the JGs to help narrow down the assessment. Hatfield asked if TC is aware of what</p>

sensitive receptors might be in any studies already conducted. Hatfield noted recent studies conducted regarding environmental sensitivity mapping asking if TC is aware of this study, if it is publicly available and/or if GCT would be able to access the data. Hatfield noted an overall request for TC support and the confirmation of data sharing opportunities.

TC requested Hatfield provide a follow-up email with the list of specific questions noting TC can ensure they are considered within the JGs and provide details within TCs mandate. IAAC noted they are happy to help support the coordination of these requests.

At Hatfield's request, TC provided an overview of various TC lead initiatives including the Oceans Protection Plan (OPP), Cumulative Effects of Marine Shipping (CEMS) Initiative, the Enhanced Maritime Situational Awareness (EMSA) Initiative, the Whales Initiative, and the Quiet Vessels Initiative.

TC advised they could provide the presentation/latest update from last week's OPP Dialogue Forum. **Action Complete.**

GCT asked if the EMSA system is accessible for companies such as GCT. TC noted you need to be an EMSA user and they have reached their capacity. TC noted he will discuss opportunities for GCT to access EMSA during future discussions with Partners and the Working Group.

Hatfield requested the IAAC and TC provide more information behind the TERMPOL type requirements in the JGs and how IAAC and TC see these requirements evolving as the JGs are finalized. TC confirmed they would revisit this with their team and discuss it with the IAAC.

TC referenced a recent science advisory report from DFO (2021/025) noting it is based on multiple years of local habitat use research and provides information on where and when the whales are using the habitat and existing impacts.

GCT requested an update from TC on the DP4 Short Sea Shipping (SSS) letter. TC confirmed they had received the letter and were working on a response. TC noted they are working closely with IAAC on this issue. GCT noted it would be helpful for TC to advise the Agency in finalizing the SSS component of the JGs.

GCT requested clarification on the TC submission to RBT2 regarding marine shipping and the TC statement regarding marine shipping-related impacts on Indigenous rights. IAAC noted the assessment of impacts on rights from RBT2 remains a whole of government approach and no conclusions have been made from a whole of government perspective. If requested, TC/IAAC can facilitate a follow-up discussion with the appropriate people from the TC team regarding impacts to Indigenous rights.

Following this meeting TC provided the following clarification on the above-noted conversation regarding the TC submission to RBT2 regarding marine shipping and the CEA and the subsequent action item:

Within the confines of the DP4 assessment process, and in keeping with TC's federal authority role, TC can support the proponent's understanding and consideration of any project-relevant departmentally-prepared documentation.

The following actions and key considerations were a result of the above conversations.

Key Decisions:	No key decisions were made at this time.	
Actions:	Hatfield	Hatfield to follow up with TC regarding available information on any existing studies, data or reports that would help inform the Marine Use studies.
	Hatfield/TC/IAAC	Hatfield to provide TC with a follow-up email with specific Accidents and Malfunctions questions. TC to ensure these questions are considered within the JGs and provide details that are within TC's mandate. IAAC to support in the coordination of these requests.
	Hatfield	Hatfield to follow up with TC regarding the possibility of joining the EMSA database or any data sharing opportunities from this initiative.
	Hatfield	Hatfield to follow up with TC regarding the Whales Initiative and the Quiet Vessel Initiative and opportunities for data sharing/referencing of these initiatives.
	Hatfield	Hatfield to follow up with TC to facilitate a follow-up discussion regarding TC's submission on the additional RBT2 information regarding impacts to Indigenous rights.
	IAAC/TC	IAAC/TC to revisit the relevant sections of the draft JGs regarding TERMPOL type requirements.
	TC	TC to provide the presentation/latest update from last week's OPP Dialogue forum. Action Complete.
	TC	TC to respond to GCT's SSS letter. Action Complete – CIAR 181 on Registry.

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminal: Proposed Deltaport Expansion Berth Four Project discussion with Parks Canada
Date:	February 16, 2021
Time:	9:30 - 11:00 AM (Pacific)
Location:	Teams Call
Attendees:	<p>IAAC – Tracy Utting, Celine Monfils, Kate Witherly</p> <p>Parks Canada – Mark Baldwin, Laura Peterson, Molly Clarkson, Jacob Salmen-Hartley, Barbara Leskovec, Kate Humble, Jonathan Moore, Ian Cruickshank</p> <p>Hatfield – Lyle Thompson, Rebecca Kordas, Martin Gebauer, Roger Eldridge, Jeff Rempel, Victoria Hanna</p>
Purpose:	A follow up meeting between Parks Canada Ecologists and Hatfield to provide a general overview of DP4, solicit early feedback on plans for future field programs, present information on key valued components (VCs), receive feedback, discuss opportunities for information sharing, and follow up on action items from the previous meeting.
Summary:	<p>Hatfield provided an overview of Global Container Terminals (GCT) North American operations and the proposed DP4 Project, including the Project location, rationale, scope, timing, and potential effects. Hatfield provided an overview of the DP4 Impact Assessment (IA) approach and an overview of the proposed VCs and their interactions as well as the timing for baseline studies relevant to Parks Canada (PC) including: Archaeology, Birds, and Marine Resources.</p> <p>Hatfield shared the GCT Deltaport Fourth Berth Expansion – November 2021 Video found here: https://www.youtube.com/watch?v=3nlsvBiWi_4</p> <p>PC asked what the projected timelines are and how long it is expected for the Project to be in the planning phase of the IA process. Hatfield advised they are obliged to work through regulated timelines established by the IAAC and EAO which includes two years of field work to meet the three-year deadline for submission of the draft Impact Statement/Application, after EA commencement.</p> <p>Hatfield provided an overview of the archaeology discussion at the previous PC meeting. Hatfield provided an overview outlined the Archaeological Valued Component (VC) regarding the potential effects of erosion to sites in the Gulf Islands National Park Reserve (GINPR), and susceptibility of other nearby locations. Hatfield reviewed actions from the previous PC meeting relevant to the Local Assessment Area (LAA) and Regional Assessment Area (RAA).</p>

Hatfield provided an overview of their consideration for excluding subtidal areas noting a prior RBT2 assessment which found negligible effects of wake to shorelines and that the intertidal zone captures expected site types in the zone of influence. PC asked about the RBT2 findings of wake and wave effects on shorelines and if climate change had been considered. Hatfield could not confirm if RBT2 considered climate change but assured that Hatfield was considering rising sea levels. PC noted the impacts of sea-level rise are already seen in GINPR, noting recent mitigation measures at some sites.

Hatfield asked PC for feedback regarding their consideration to exclude subtidal sites. PC inquired about the implications of RBT2s assessment of wake and wave effects being deemed negligible. Hatfield noted plans to review and verify the RBT2 assessment and rationale, noting that the conclusions of RBT2 do not set conclusions for DP4, and Hatfield will be completing a DP4 specific assessment including modelling.

PC asked if effects evaluated as ‘negligible’ means no mitigation measures or residual assessment will be required. Hatfield noted “negligible” effects generally don’t require mitigation, but the Panel may recommend follow-up programs where there is uncertainty. Hatfield noted marine shipping is considered an incidental activity as GCT has no care and control once the ships leave the berth noting there are still requirements for assessment and potential requirements for follow-up programs from GCT or entities such as Transport Canada. IAAC provided an overview of the panel process, noting that the government (federal and provincial) makes the final decision on this project.

PC noted concern from Indigenous partners in the GINPR regarding increased vessel activity, sea-level rise, and variability in weather noting such matters were not viewed as negligible. PC asked how Indigenous Knowledge is included in the assessment, and if PC could support this part of the assessment. Hatfield confirmed Nation-specific concerns are captured as part of the assessment. Hatfield later noted engagement has taken place with 52 Indigenous Nations, represented by 33 Indigenous groups. Hatfield noted interest in working with PC to set up the initial modelling. PC and Hatfield discussed the importance of western science and Indigenous traditional knowledge to inform the DP4 assessment.

PC asked if an underwater archaeology expert is involved and noted archaeologists should be involved early on. PC inquired further regarding the exclusion zone, LAA, and RAA, and whether such boundaries are specific to elements of those zones. PC noted intertidal and underwater sites, such as clam gardens, are being examined in the context of sea-level rise, noting the challenges of detecting underwater sites has led to a lack of information. PC asked about considerations of impacts of other projects occurring in parallel with respect to the erosion of archaeological sites. Hatfield noted it may be beneficial to provide written responses and a follow-up call to discuss PC’s questions and archaeological considerations in greater detail.

Hatfield provided an overview of the Marine Waterbirds VC noting diversity, seasonal considerations, overwintering, breeding, important species, and an overview of the LAA and RAA. Hatfield described a desktop assessment for marine waterbirds given the availability of existing data and potential project effects (one additional ship per week). Hatfield asked what PC’s concerns are in regard to marine waterbirds in the shipping lanes and in relation to the GINPR.

		<p>PC noted a data deficiency in some of these areas for Marine Waterbirds and SARA listed species. PC noted key concerns are focused on increased vessel traffic, pollution risk, and wake effects, along with cumulative effects of vessel noise to Southern Resident Killer Whales (SRKW) foraging. Hatfield asked what the most important area for fieldwork along the shipping route would be. PC noted boundary passage, Saturna Island, and channels between inlets. PC agreed to provide data on Black Oyster Catchers. Hatfield agreed to schedule a follow-up meeting with PC on marine waterbirds.</p> <p>Hatfield provided an overview of the Marine Resources VC including potential impacts of vessel wake on intertidal and shallow subtidal biota, and the LAA and RAA. Hatfield discussed Marine Vegetation and Habitat programs including intertidal and subtidal mapping, biofilm, shorebird, eelgrass, and saltmarsh surveys. Hatfield also discussed the Fish and Invertebrates programs, including seasonal captures, spawning, sediment, benthic infauna, and dungeness crab surveys, as well as effects of lights studies on predator-prey interactions. Hatfield provided an overview of the Marine Mammals program, including noise studies, behavioural studies and risk assessment of vessel strikes.</p> <p>Hatfield asked PC for advice on further consideration of marine resources plans and programs, and initiatives in the SRKW critical habitat. PC noted the current SRKW program and outlined concerns regarding increases in noise and asked about the mitigation measures being considered by Hatfield. Hatfield noted the discussion of mitigation measures has not started at the current stage in the pre-assessment process.</p> <p>Hatfield asked PC if any areas are of particular concern in terms of wake effects on shorelines, marine vegetation, and invertebrates. PC agreed to follow up to provide information on areas of concern in GINPR regarding wake effects on shorelines. PC and IAAC provided Hatfield with various contacts.</p> <p>Hatfield requested PC to provide a list of species of concern or ecological indicator species around the GINPR. PC confirmed they would provide such information in an email. PC noted the national marine conservation area and asked if Hatfield/GCT had contacted them. Hatfield agreed to contact the project manager.</p> <p>Hatfield asked if PC is planning surveys that may be relevant to GCT’s proposed studies, and if collaboration would be possible. PC noted their ongoing schedule and potential for collaborations. PC provided a contact for further data-sharing and collaboration inquiries. Hatfield agreed to follow up.</p> <p>The following actions and key considerations were a result of the above conversations.</p>
Key Decisions:		No key decisions were made at this time.
Actions:	Hatfield	Hatfield to provide a written response to PC regarding their questions on archaeological considerations.
	Hatfield	Hatfield to set up a follow-up call with PC to discuss archaeological considerations in more detail.
	Hatfield	Hatfield to schedule a follow-up conversation with Parks Canada regarding marine waterbirds.

	Hatfield	Hatfield to follow-up with Parks Canada regarding a contact for the National Marine Conservation Area/Reserve.
	Hatfield	Hatfield to follow-up with Parks Canada regarding potential for data sharing, data collection, and/or study collaboration.
	Parks Canada	Parks Canada to provide the Parks Canada data on Black Oyster Catchers and the 2007 Marine Birds' Study. (Action Complete).
	Parks Canada	Parks Canada to provide information on areas of concern in GINPR regarding wake effects on shorelines.
	Parks Canada	Parks Canada to provide a list of species of concern and/or ecological indicator species around the GINPR.

Meeting Minute Summary

Project No.:	GCT10314-NV
Topic/Subject:	Global Container Terminals: Proposed Deltaport Expansion Berth Four Project discussion with Environment and Climate Change Canada (ECCC)
Date:	March 11, 2022
Time:	11:00 - 12:30 am
Location:	Teams Call
Attendees:	IAAC – Kate Witherly, Celine Monfils ECCC – Robyn McLean, Taylor Groenewoud, Jayme Brooks, Rachel Canham, Caroline Fox, Ken Morgan, Mark Drever, Scott Flemming Hatfield – Lyle Thompson, Greg Ferguson, Rebecca Kordas, Victoria Hanna Gebauer & Associates Ltd. – Martin Gebauer
Purpose:	A follow-up meeting between ECCC and Hatfield to discuss the Global Container Terminals (GCT) proposed Deltaport Expansion Berth Fourth Project (DP4 or Project), solicit early feedback on plans for future field programs, assessment boundaries, and discuss opportunities for information sharing.
Summary:	<p>Hatfield shared details of the Project – including the November 2021 Project Update video found here: https://www.youtube.com/watch?v=3nIsvBiWi_4. Following the video, Hatfield provided an overview of the Project, including the Project rationale, location, project components and construction, valued components (VCs), and proposed field schedule. Hatfield provided an overview of the anticipated DP4 Impact Assessment (IA) process and schedule.</p> <p>ECCC asked what the spatial scope of Short Sea Shipping (SSS) is within the context of the Project and transboundary movements. Hatfield advised that SSS involves the local (not international) movement of containers via barge pulled by tugs. Hatfield noted there is currently a SSS pilot project operated by DP World between Nanaimo and Vancouver, but the movement of SSS vessels associated with DP4 is currently unknown. A new berth to accommodate SSS is being proposed as a more environmentally friendly option for the local movement on containers (compared to trucks) in anticipation that the option may become financially viable in the future.</p> <p>Gebauer & Associates provided an overview of the Marine Waterbird study, including the Local Assessment Area (LAA) and RAA (Regional Assessment Area) noting that a comprehensive desktop assessment would include nesting shorebirds, and wintering and migratory aggregations of all marine waterbirds, with a focus on sensitive and at-risk species occurring along the marine shipping route.</p> <p>At Gebauer & Associates' request, ECCC provided an overview of the Salish Sea Marine Bird Monitoring and Conservation Program. ECCC noted data from the program covers portions of the proposed LAA but that the data is likely too coarse for the proposed desktop assessment. Gebauer & Associates requested access to the</p>

	<p>ECCC data. ECCC also advised of at-sea survey data from Sydney to Victoria, BC noting it indicates seasonal variability and species richness hotspots in the Strait of Juan de Fuca and Swiftsure Bank.</p> <p>Gebauer & Associates provided an overview of the proposed shorebird studies noting recent changes to the proposed approach based on ECCC comments on the draft Joint Guidelines (JGs) including frequency of surveys and survey locations. ECCC provided suggestions on methods.</p> <p>Gebauer & Associates asked if there would be any opportunities to collaborate while conducting surveys in the same area. ECCC noted the opportunity could be explored further noting GCT/Hatfield can reach out to ECCC via email but that collaboration does not equate to endorsement of the Project.</p> <p>Hatfield noted data has been requested from Vancouver Fraser Port Authority (VFPA) but no data has been received to date.</p> <p>Hatfield provided an overview of the proposed Marine Vegetation and Invertebrates (shorebird diet) surveys including an overview of the intertidal LAA and RAA. Hatfield noted they will be working with researchers from UBC using drone-mounted multispectral cameras to identify biofilm in the Roberts Bank and inter-causeway area with concurrent ground sampling to verify imagery. Hatfield noted they will also be conducting fecal and biofilm surveys to determine shorebird diet, and biofilm taxonomy and quality.</p> <p>ECCC shared their knowledge on different ground-truthing, biofilm and fecal survey locations and methods. ECCC noted they would be interested in seeing a spring vs summer biofilm distribution map to document how diatom taxonomy differs between the seasons.</p> <p>Hatfield provided an overview of the proposed shorebird fecal collection program noting the plan is to collect biofilm, infauna and feces at all sampling locations during the five proposed shorebird sampling programs to get a comprehensive picture of shorebird diet. Hatfield noted infauna cores would be collected in triplicate throughout the inter-causeway area to determine composition.</p> <p>Hatfield provided an overview of the outstanding actions from the previous meeting. ECCC advised they are working to determine what data/information can be shared and the appropriate mechanism for sharing it.</p>				
Key Decisions:	No key decisions were made at this time.				
Actions:	<table border="1"> <tr> <td data-bbox="326 1518 451 1602">ECCC</td> <td data-bbox="451 1518 1421 1602">ECCC to follow up internally to provide further clarification on the expectation to describe primary and secondary productivity, specifically the opportunity to use qualitative data.</td> </tr> <tr> <td data-bbox="326 1602 451 1684">ECCC</td> <td data-bbox="451 1602 1421 1684">ECCC to follow up internally to confirm the baseline contaminant assessment will only require the consideration of shellfish and not include other fish species.</td> </tr> </table>	ECCC	ECCC to follow up internally to provide further clarification on the expectation to describe primary and secondary productivity, specifically the opportunity to use qualitative data.	ECCC	ECCC to follow up internally to confirm the baseline contaminant assessment will only require the consideration of shellfish and not include other fish species.
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