Meeting #1
February 25, 2014

(NOTE: contains preliminary information – may be subject to future revisions)
WELCOME AND INTRODUCTIONS
AGENDA

9:00-9:15  Introductions
9:15-9:30  Working Group Overview
9:30-9:50  Port Metro Vancouver Overview
9:50-10:30  RBT2 Project Description
10:30-10:45  BREAK
10:45-11:15  Environmental Assessment Process Overview
11:15-11:30  Consultation to Date
11:30-12:00  TAG Process
12:00-1:00  LUNCH
1:00-1:30  Next Steps
2:00-4:00  Site Tour
HOUSEKEEPING

• Breaks and food
• Washrooms and exits
• Speaking protocol
• Meeting notes
GOALS AND OBJECTIVES

• Goal of the Working Group (WG)
  • Increase awareness and understanding of the work being undertaken by PMV for the Roberts Bank Terminal 2 Project environmental assessment
  • Solicit input to be considered in the development of the EIS

• Objectives
  • Share approaches and methodologies
  • Inventory key interests of regulators and government agencies
  • Consider regulator and government agency feedback in advance of the EIS submission
TERMS OF REFERENCE

• Representative membership
  • Federal agencies
  • Provincial agencies
  • Local governments
  • Aboriginal groups identified in the EIS Guidelines

• Independently facilitated
Roles and Responsibilities:

• Participation in the WG is voluntary
• Participation will in no way limit WG members’ ability to participate in the Federal Panel review process
• All WG members are expected to:
  ▪ Attend meetings and actively participate in discussions
  ▪ Act in good faith with respect to the WG process’ ToR
  ▪ Treat all participants in the WG process with courtesy and respect
• Independent Facilitator Responsibilities:
  ▪ Guide the development of meeting agendas
  ▪ Circulate meeting Agenda in advance of meeting
  ▪ Provide impartial facilitation
  ▪ Produce meeting records
  ▪ Circulate meeting records to WG members for review

• Port Metro Vancouver Responsibilities:
  ▪ Provide input into the Agendas
  ▪ Consider WG input in the development of the EIS
  ▪ Ensure the Facilitator delivers on his responsibilities
  ▪ Communicate meeting records to CEAA via project registry
Introduction
Mission

• To lead the growth of Canada’s Pacific Gateway in a manner that enhances the well-being of Canadians and inspires national pride.

Vision

• To be recognized as a world class Gateway by efficiently and sustainably connecting Canada with the global economy, inspiring support from our customers and from communities locally and across the nation.
• Non shareholder, financially self-sufficient corporation established by the Government of Canada
• Accountable to federal Minister of Transport
• Offices in Vancouver and Beijing
• 28 major marine cargo terminals
• 3,081 vessel calls in 2012
• Serviced by 3 major railways
• Management of 16,000 hectares of water and nearly 1,000 hectares of land and assets
• Canada’s largest Gateway to the Asia-Pacific Region
• Connects Canadians with trading partners in more than 160 economies
• Handles more than $200 million of cargo daily
ECONOMIC IMPACT

- 129,500 total jobs across Canada
- 80,000 jobs in B.C.
- $10.5 billion in GDP
- $22 billion in economic output
- $6.1 billion in wages
- Over $75 billion in cargo value

*2012 Figures.* Actual 2008 Figures
NORTH AMERICA’S MOST DIVERSE PORT
• 4 container terminals
• Extensive on-dock rail facilities
• Container handling capacity is approximately 3.7 million TEUs
• Commodities include household goods, produce, machinery, wood pulp, lumber and metals
THE PACIFIC GATEWAY

1,451,309 TEUs (inbound 2012)

1,261,852 TEUs (outbound 2012)
WEST COAST CONTAINER FORECAST

WEST COAST - FORECAST AND PLANNED CAPACITY INCREASES

<table>
<thead>
<tr>
<th>Year</th>
<th>Prince Rupert Phase 2 Stage 1</th>
<th>DTRIP</th>
<th>Prince Rupert Phase 2 Stage 2</th>
<th>Roberts Bank Terminal 2</th>
<th>Inner Harbour</th>
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High Case Throughput
Planned Capacity
Base Case Throughput
85% of Planned Capacity
Low Case Throughput

Preliminary Subject to Revision

portmetrovancouver.com
Working Group #1 – February 25, 2014.
West Coast Container Traffic: Forecast (2001) vs. Actual

![Graph showing West Coast Container Traffic: Forecast (2001) vs. Actual](image-url)
CONTAINER CAPACITY IMPROVEMENT PROGRAM

Looks at improvements in the following order:

• Increasing efficiencies at existing container terminals
• Expanding capacity at existing container facilities
• Building a new container terminal
Increase capacity to 2.4 million TEU at Deltaport
Mostly within existing terminal, road and rail footprint
Estimated completion: 2016
RBT2 PROJECT DESCRIPTION
PROPOSED ROBERTS BANK TERMINAL 2 PROJECT
2002 – 2006

- 2002: RBT2 (with four potential terminal locations) is proposed together with the Deltaport 3rd Berth Project (DP3)
- 2003: RBT2 and DP3 submitted for pre application review
- Regulator concerns about the potential environmental impacts of several of the proposed RBT2 locations
- 2004: RBT2 project is pulled out of pre application review in order to provide more time to complete environmental and engineering studies
- 2006: DP3 project approved
2007 – 2008

- PMV obtains expressions of interest from industry to take responsibility for:
  - Design (based on pre application input)
  - First Nation Consultation
  - Environmental Permitting
  - Financing, construction and operation of RBT2
2008 – 2010

- Concessionaire selected to deliver RBT2
- The 2008 economic downturn challenges the viability of the project and concession process as proposed
- 2010: Concession process terminated
- 2010: PMV led process commenced
2010 - present

- Geotechnical and Environmental investigations informed conceptual designs
- Trade off studies selected preferred option
  - Terminal location avoids sensitive habitat of interest as previously identified by Regulators
- Field Studies & Technical Advisory Groups commenced
- First Nations & Public Consultations commenced
- Entered into an Environmental Assessment by Review Panel
PROJECT LOCATION

Legend
- BOUNDARY OF PROJECT AREA
- TRANSFER PIT
- US-CANADA BORDER
- FIRST NATIONS RESERVE
- INTERTIDAL ZONE: HIGH WATER MARK to 0m
- SUBTIDAL ZONE: 0m to -3m
- DELTA FORESLOPE: -3m to -90m

Notes:
Location of 0m based on Lidar and CHS Chart 3492
Delta Foreslope shown to approx -80m
Locations approx.

Working Group #1 – February 25, 2014
ECONOMIC BENEFITS OF RBT2

Preliminary
Subject to Revision

1Construction period of approximately six years

<table>
<thead>
<tr>
<th></th>
<th>Construction Period¹</th>
<th>Operations Benefits (Annual)</th>
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<tbody>
<tr>
<td>Total Employment</td>
<td>4,500 jobs $1.14 billion in wages</td>
<td>18,200 jobs $620 million in wages</td>
</tr>
<tr>
<td>Gross Domestic Product</td>
<td>$1.63 billion</td>
<td>$1.66 billion</td>
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<tr>
<td>Total Economic Output</td>
<td>$4.1 billion</td>
<td>$3.1 billion</td>
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PROJECT COMPONENTS

Robert's Bank
Strait of Georgia

Tsawwassen
First Nation

Legend

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<th>PROJECT COMPONENTS</th>
<th>LANDMARKS</th>
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<tr>
<td>EXISTING WESTSHORE TERMINALS</td>
<td>BC FERRIES TERMINAL</td>
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<tr>
<td>3 BERTH WHARF STRUCTURE</td>
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</tr>
<tr>
<td>CONTAINER STORAGE YARD</td>
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<tr>
<td>RAIL INTERMODAL YARD</td>
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<tr>
<td>THE TERMINAL</td>
<td></td>
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<tr>
<td>ROBERTS BANK CAUSEWAY EXPANSION</td>
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<tr>
<td>CAUSEWAY RAIL IMPROVEMENTS</td>
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<tr>
<td>ROBERTS BANK TUG BASIN EXPANSION</td>
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<td>CAUSEWAY ROAD IMPROVEMENTS</td>
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<td>TRANSFER PIT (TEMPORARY SAND STORAGE)</td>
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Preliminary
Subject to Revision

Working Group #1 – February 25, 2014
## Proposed Construction Schedule

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<th>Activity</th>
<th>Years of Construction</th>
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<tr>
<td>[Activity 1]</td>
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<td>[Activity 2]</td>
<td>[Years 1-6]</td>
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<td>[Activity 6]</td>
<td>[Years 1-6]</td>
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*Preliminary Subject to Revision*
RBT2 ENVIRONMENTAL ASSESSMENT PROCESS

EA phase | EIS Development | Deliverable | Public Participation Opportunity

Project Description Review (10 days) COMPLETE

Determination of EA (45 days) COMPLETE

EA Commencement (60 days) COMPLETE

EIS Submission & Analysis (5 months)

Panel Review (14 months)

EA Decision (5 months)

We are here

Project Description

EIS Guidelines

EIS

Panel-led public hearings

Panel ToR

EIS Development

Project Description Review (10 days)

Determination of EA (45 days)

EA Commencement (60 days)

EIS Submission & Analysis (5 months)

Panel Review (14 months)

EA Decision (5 months)

24 months*

EA phase

EIS Development

Deliverable

Public Participation Opportunity

Completed Deliberable
## POTENTIAL FEDERAL PERMITS

<table>
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<tr>
<th>Act</th>
<th>Permit/Approval</th>
<th>Permitted/Approved Activity</th>
<th>Roberts Bank RBT2 Effect</th>
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<tr>
<td><strong>Federal</strong></td>
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<tr>
<td>Fisheries Act Subsection 35 (2)(b)</td>
<td>Harmful Alteration, Disruption, or Destruction (HADD) Authorisation</td>
<td>Alteration, destruction or disturbance of fish habitat in accordance with terms and conditions in the authorisation, issued by Fisheries and Oceans Canada (DFO).</td>
<td>Potential loss of fish and fish habitat – terminal/causeway footprint and indirect effects (coastal processes).</td>
</tr>
<tr>
<td>Fisheries Act Subsection 32</td>
<td>Authorisation</td>
<td>No person shall kill fish by any means other than fishing, in accordance with terms and conditions in the authorisation, issued by DFO.</td>
<td>Potential mortality of fish.</td>
</tr>
<tr>
<td>Canadian Environmental Protection Act, 1999 Part 7, Division 3</td>
<td>Disposal at Sea Permit</td>
<td>Loading of dredge material from site, and disposal of material at an approved site, in accordance with permit requirements and conditions.</td>
<td>Disposal at sea (DAS) of dredged materials.</td>
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<tr>
<td>Species at Risk Act (SARA), Section 73(1)</td>
<td>Permit</td>
<td>Authorises activities affecting listed wildlife species, or species’ critical habitat or residences.</td>
<td>Construction and operation within southern resident killer whale (SRKW) critical habitat. A SARA permit may be required.</td>
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[39]
## LAND AREA REQUIREMENTS

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Area Footprint</th>
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</thead>
<tbody>
<tr>
<td><strong>1</strong> Berth Pocket</td>
<td>17.4 ha</td>
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<tr>
<td><strong>2</strong> The Terminal including marine slope and three berth wharf</td>
<td>117 ha</td>
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<tr>
<td><strong>3</strong> Causeway widening including marine slope and rail tie-in area</td>
<td>43.1 ha</td>
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<td><strong>4</strong> Tug basin improvements</td>
<td>2.5 ha</td>
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<td><strong>Total Project Area</strong></td>
<td>180 ha</td>
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Preliminary Subject to Revision
PROTECTED AREAS

Legend
- BOUNDARY OF PROJECT AREA
- TRANSFER PIT
- US-CANADA BORDER
- FIRST NATIONS RESERVE
- WILDLIFE MANAGEMENT AREA (WMA)
- GEORGE REIFEL BIRD SANCTUARY
- SOUTHERN RESIDENT KILLER WHALE CRITICAL HABITAT
- DEAS ISLAND REGIONAL PARK
- BURNS BOG ECOLOGICAL CONSERVANCY AREA

Roberts Bank WMA
Sturgeon Bank WMA
EXISTING ROBERTS BANK TERMINALS
South Arm Marshes WMA
Tsawwassen First Nation
Boundary Bay WMA

ROBERTS BANK TERMINAL 2

PROTECTED AREAS AT ROBERTS BANK

DATE: SEPTEMBER 2013

PRO No. 43
**POTENTIAL PROJECT EFFECTS**

- Temporary construction activities in the marine environment resulting in changes in sediment and water quality, habitats, behaviors, and mortality
- The increased marine traffic resulting in ship wake, propeller currents and noise
- Increased road and rail traffic including noise and emissions
- Visual impacts and increased volumes of discharges and wastes
- Impacts to undiscovered archaeological sites
- Creation of employment and government revenues
CONSULTATION TO DATE
Port Metro Vancouver is undertaking a comprehensive multi-phase consultation process regarding the proposed Roberts Bank Terminal 2 Project.
• Local Communities and Residents
• Local and Regional Governments
• Tenants and Terminals
• Railways
• Community Organizations
• Industry Groups
• Agricultural Groups
• Business Organizations
• Environmental Non-Governmental Organizations

A separate but parallel First Nations consultation process is underway
• Port Community Liaison Committee - Delta
• Local Government Liaison Program
  ▪ Staff level Technical Liaison Committees
    • Corporation of Delta
    • City of Langley
    • Township of Langley
    • City of Surrey
    • City of Richmond
  ▪ Elected Level Roundtable
    • Mayors of Delta, City of Langley, Township of Langley, Surrey, Richmond, Metro Vancouver and Tsawwassen First Nation
ENGAGEMENT RESOURCES

- Project Website
  - www.portmetrovancouver.com/RBT2
- PortTalk
  - www.PortTalk.ca
- Enquiry Response
  - container.improvement@portmetrovancouver.com
  - 604.665.9337
- Project Updates/Field Studies Notification
- Presentations
Consultation Period

- Discussion Guide and Feedback Form
- Small Group Meetings
- Open Houses
- Feedback includes:
  - Meeting Notes
  - Feedback Forms (hardcopy and online)
  - Written Submissions

Consultation Summary Report

- Independent third party (Kirk & Co.) report
- Summary of consultation process, participation and input received during consultation period

Consideration Memo

- Summary of input received, and responses detailing how this feedback has been considered
June 6 - 30, 2011

- 7 multi-stakeholder meetings in Delta, Richmond, Surrey, Langley, and Vancouver
- 4 meetings with local government

Consultation Topics

- “How communities want to be consulted?”
- “What topics do the communities want to be consulted on?”

Participation

- 73 attendees at multi-stakeholder meetings
- 55 feedback forms received and 1 written submission
October 22 – November 30, 2012

- 7 multi-stakeholder meetings in Delta, Richmond, Surrey, Langley, and Vancouver
- 5 open houses in Delta, Richmond, Surrey, and Langley
- 4 meetings with local government
- 2 community information booths at the Ladner Leisure Centre and the South Delta Recreation Centre

Consultation Topics

- Berth Structure
- Location of Intermodal Yard
- Agricultural Mitigation Options
- Environmental Study
- Community Legacy Benefits
Participation

- 86 attendees at multi-stakeholder meetings
- 72 attendees at open houses
- 47 feedback forms received
- 27 written submission received

Key Themes Raised in Consultation

- Impacts to the environment
- Road and rail traffic and truck operations
- Access to technical information
- Economic forecasts and project need
- Environmental assessment process
October 8 – November 12, 2013

- 6 multi-stakeholder meetings in Delta, Richmond, Surrey, Langley, and Vancouver
- 5 open houses in Delta, Richmond, Surrey and Langley
- 1 meetings with the Local Government Elected Roundtable
- 1 meeting with the Port Community Liaison Committee - Delta

Consultation Topics

- Habitat Mitigation
- Port-related Truck Traffic Improvement
- Community Legacy Benefits
Participation

- 100 attendees at small group meetings
- 96 attendees at open houses
- 84 feedback forms received
- 44 written submission received

Key Themes Raised in Meetings

- Road & rail traffic
- Scope and nature of the environmental assessment
- Alternatives to the project
- Habitat Banking Program
- Project justification and rationale
- Environmental impacts
ENVIRONMENTAL ASSESSMENT PROCESS

Pre-Environmental Assessment Phase (2011 – Ongoing)
Baseline studies
ONGOING

Submission of the RBT2 Project Description to CEAA and BCEAO (September 12, 2013)

Public Comment Period on the Project Description (September 25 – October 15, 2013)
CEAA invited public comments on the project and its potential impact on the environment.

CEAA commences the Environmental Assessment (November 8, 2013)

Public Comment Period on the draft Environmental Impact Statement (EIS) Guidelines (November 9 – December 12, 2013)
CEAA invited public comments regarding the draft EIS Guidelines.

EA referred to an Independent Review Panel (January 7, 2014)

Environmental Impact Statement (EIS) Development (Underway)
• Port Metro Vancouver will continue to undertake public consultation and engagement throughout the environmental assessment process.

Environmental Assessment

<table>
<thead>
<tr>
<th>Pre-Consultation (June 2011)</th>
<th>Project Definition Consultation (October 22 to November 30, 2012)</th>
<th>Pre-Design Consultation (October 7 to November 12, 2013)</th>
<th>Preliminary Design Consultation (TBC)</th>
<th>Detailed Design Consultation (TBC)</th>
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<tr>
<td>Provide opportunities for local communities, stakeholders and public to provide input into the design of the consultation program.</td>
<td>Identify potential issues and impacts for the environmental assessment, and consultation on features of the proposed Roberts Bank Terminal 2 Project.</td>
<td>Present information regarding the conceptual project design, and seek input regarding elements of the project and the development of environmental mitigation plans.</td>
<td>Consultation on elements of preliminary project design.</td>
<td>Consultation on fewer but more specific details of project design and construction management as project design is finalized.</td>
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BACKGROUND

• Planning and project development at Roberts Bank identified 4 areas with information challenges

  • Biofilm and Shorebirds
  • Southern Resident Killer Whales
  • Coastal Geomorphology
  • Productive Capacity

• Best practice: Collaboration with technical experts and input into studies supporting EA
TAG PURPOSE

PMV EA work

TAG guidance

better EA

Increased confidence in prediction of effects

Increased confidence in mitigation effectiveness

Decreased scientific debate during review

Timely and efficient EA review
TAG PARTICIPANTS

• Representation from thought leaders in key technical areas

• Balance of regional, national, and international expertise
TAG OBJECTIVES

- Review PMV studies/workplans
- Provide technical direction on data gaps or important assumptions
- Identify & assist with information needs
Biofilm, Infauna, and Shorebirds
BIOFILM, INFAUNA, AND SHOREBIRDS

Pre-TAG:

• Biofilm new scientific topic: DP3
• Many data gaps & uncertainty
• Shorebirds use of Roberts Bank of high interest to regulators
• Premise:
  ▪ Biofilm vital to shorebird survival
  ▪ RBT2 could affect biofilm & hence populations
BIOFILM, INFAUNA, AND SHOREBIRDS

TAG outcomes:

• Proposed PMV studies robust/defensible
• Biofilm important, but so are other food sources
• Increased confidence in biofilm science & ability to avoid or mitigate RBT2 effects
• Role of shorebird predators important
• Winter use study identified
## TAG MEMBERSHIP

### Biofilm and Shorebirds

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Juergen Baumann</td>
<td>Baumann Environmental Services (former PMV)</td>
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<tr>
<td>Dr. Mark Drever</td>
<td>Environment Canada</td>
</tr>
<tr>
<td>Dr. Terri Sutherland</td>
<td>Fisheries and Oceans Canada</td>
</tr>
<tr>
<td>Dr. Matthew Fields</td>
<td>Montana State University</td>
</tr>
<tr>
<td>Dr. Rob Butler</td>
<td>Independent (former CWS)</td>
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<tr>
<td>Dr. Tomohiro Kuwae</td>
<td>Port and Airport Research Institute (PARI)</td>
</tr>
<tr>
<td>Dr. David Lank</td>
<td>Simon Fraser University</td>
</tr>
<tr>
<td>Dr. Ron Ydenberg</td>
<td>Simon Fraser University</td>
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<tr>
<td>Dr. Maycira Costa</td>
<td>University of Victoria</td>
</tr>
<tr>
<td>Dr. John Takekawa</td>
<td>USGS Western Ecological Research Center</td>
</tr>
<tr>
<td>Dr. Mary-Lou Lauria</td>
<td>WorleyParsons</td>
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<tr>
<td>Dr. Carson Keever</td>
<td>Hemmera</td>
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<tr>
<td>Jay Rourke</td>
<td>Hemmera</td>
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Southern Resident Killer Whales
Pre-TAG:

- New, un-tested, population-level study approach
- New technical studies proposed (e.g., suction tags)
- Large variety of applicable acoustic thresholds
- Large variety of methods to assess ‘significance’
- Limited input from key technical specialists
SOUTHERN RESIDENT KILLER WHALES

TAG outcomes:

- Refined population-level study approach
- Data from TAG members reducing need for additional studies
- Direction on optimal acoustic thresholds to use in EA
- Direction on how to assess ‘significance’
- High collaboration/input from key technical specialists
# TAG MEMBERSHIP

## SRKW

<table>
<thead>
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<th>Institution</th>
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<tbody>
<tr>
<td>Dr. John Ford</td>
<td>Fisheries and Oceans Canada</td>
</tr>
<tr>
<td>Dr. Harald Yurk</td>
<td>SMRU Ltd.</td>
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<tr>
<td>Dr. Dominic Tollit</td>
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<tr>
<td>Dr. Rob Williams</td>
<td>University of St. Andrews</td>
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<tr>
<td>Dr. Lance Barrett-Lennard</td>
<td>Vancouver Aquarium</td>
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<tr>
<td>Hussein Alidina</td>
<td>World Wildlife Fund Canada (Observer)</td>
</tr>
<tr>
<td>Marianne Gilbert</td>
<td>Hemmera</td>
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</tbody>
</table>
Coastal Geomorphology
Pre-TAG:

- Proposed PMV study and modeling approach
- Mixed confidence in ability to predict changes in sediment/water (from RBT2)
- Variety of methodologies for addressing ‘dendritic channel formation’
- Uncertainty on how long to run models
- Uncertainty on how to address ‘sea level rise’ in EA
TAG outcomes:

- Agreement on study & model approach
- Unpublished data from TAG members which strengthens studies/confidence
- Direction on optimal tools for predicting ‘dendritic channel formation’
- Direction on timeframe for model duration
- Direction on approach to addressing sea-level rise
# TAG MEMBERSHIP

## Coastal Geomorphology

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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</thead>
<tbody>
<tr>
<td>Juergen Baumann</td>
<td>Baumann Environmental Services (former PMV)</td>
</tr>
<tr>
<td>Dr. Diane Masson</td>
<td>Fisheries and Oceans Canada</td>
</tr>
<tr>
<td>Dr. Terri Sutherland</td>
<td>Fisheries and Oceans Canada</td>
</tr>
<tr>
<td>Dr. David McLean</td>
<td>Northwest Hydraulic Consultants</td>
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<tr>
<td>Derek Ray</td>
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<tr>
<td>Dr. André Zimmerman</td>
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<tr>
<td>Dr. José (Pepe) Vasquez</td>
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<tr>
<td>Edwin Wang</td>
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<tr>
<td>Dr. Philip Hill</td>
<td>Natural Resources Canada</td>
</tr>
<tr>
<td>Dr. John Clague</td>
<td>Simon Fraser University</td>
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<tr>
<td>Dr. Jeremy Venditti</td>
<td>Simon Fraser University</td>
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<tr>
<td>Dr. Michael Church</td>
<td>University of British Columbia</td>
</tr>
<tr>
<td>Dr. William McDougal</td>
<td>University of Florida</td>
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<tr>
<td>Dr. Doug Bright</td>
<td>Hemmera</td>
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</table>
Productive Capacity
PRODUCTIVE CAPACITY

Pre-TAG:

- Traditional approach to offsetting
- Subjectivity in determining offsetting needs
- Wide range of available methods for calculating PC
- Low confidence in available methods specific to Roberts Bank
- A value imbalance between ‘fish’ (DFO) and ‘birds’ (CWS)
- No mechanism for addressing ecosystem as a whole
- Changing regulatory framework
PRODUCTIVE CAPACITY

TAG outcomes:
• ‘Roberts Bank specific’ approach to meeting offsetting requirements
• General agreement on preferred methodology
• Less subjective approach to assessing productive capacity
• Direction on ‘key species’ to base studies on (24 focal species)
• An ecosystem approach (including birds & fish)
• PMV approach in-line with evolving regulatory framework
# TAG MEMBERSHIP

## Productive Capacity

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<tr>
<td>Dr. Sean Boyd</td>
<td>Environment Canada</td>
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<tr>
<td>Dr. Steve Macdonald</td>
<td>Fisheries and Oceans Canada</td>
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<tr>
<td>Brian Naito</td>
<td>Fisheries and Oceans Canada</td>
</tr>
<tr>
<td>Dr. Terri Sutherland</td>
<td>Fisheries and Oceans Canada</td>
</tr>
<tr>
<td>Dr. Rob Butler</td>
<td>Independent (former CWS)</td>
</tr>
<tr>
<td>Patrice LeBlanc</td>
<td>SENES (former DFO)</td>
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<tr>
<td>Dr. Carson Keever</td>
<td>Hemmera</td>
</tr>
<tr>
<td>Scott Northrup</td>
<td>Hemmera</td>
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</tbody>
</table>
SUMMARY

EA Study Rigour

EA Study Relevance

EA Study Quality
THANK YOU

Questions?
NEXT STEPS

Overview
NEXT STEPS

• Field and desktop studies underway:
  • Physical
  • Biophysical
  • Economic
  • Social
• Building on previous studies in the Project area
• Foundation for Project effects assessments
PHYSICAL STUDIES

- Coastal Geomorphology
- Water & Sediment Quality
- Geology and Geotechnical
- Weather and Climate
- Air Quality
- Light
- Noise
- Underwater Noise
BIOPHYSICAL STUDIES

- Coastal Birds
- Biofilm and Marine Vegetation
- Marine Mammals
- Marine Fish
- Marine Invertebrates
- Terrestrial Environment
ECONOMIC STUDIES

• Labour Market
• Economic Development
• Marine Commercial Use
• Local Government Finances
SOCIAL STUDIES

- Demographics
- Services & Infrastructure
- Outdoor Recreation
- Visual Resources
- Land & Water Use
- Heritage
- Human Health
- Traffic
• Potential Working Group Topics:
  • Socio-Economic Components
    • Container Traffic and Gateway Growth
    • Human Health (Air Quality and Noise)
  • Marine Ecosystem Components
    • Marine Vegetation and Invertebrates (e.g. crabs, shellfish)
    • Coastal Birds and Biofilm
    • Marine Fish
    • Marine Mammals and Underwater Noise
    • Ecosystem Productivity
    • Offsetting Projects
THANK YOU

Questions ?
SITE TOUR
SITE TOUR INFORMATION

• Meeting Time: 1:45pm
• Meeting Place: Lobby
• Departure Time: 2:00pm
• Duration: ~1 hour
• Port Facilities Guides:
  • (Bus 1): Peter Geldreich
  • (Bus 2): Mike Zachary
• Roberts Bank biophysical guide(s)
  • Ben Wheeler
  • Marina Winterbottom
• Return to Coast Tsawwassen Inn
SITE TOUR HIGHLIGHTS

- Deltaport
- New DTRRIP Overpass
- Proposed RBT2 Location
- Deltaport Containers Yard
- Roberts Bank Intertidal Zone
HOUSEKEEPING

- Meeting room to be vacated
- Take all personal belongings
- Site visit health & safety protocol:
  - stay on the dikes
  - do not walk away from the bus or the main group
  - stay well clear of the rail lines at all times
  - stay well away from drainage ditches