DISTRICT OF METCHOSIN
AGENDA

ENVIRONMENTAL ADVISORY SELECT COMMITTEE MEETING

November 22, 2022 at 7:00 p.m.
Council Chambers
Metchosin Municipal Hall

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2. Presentations

3. Public Participation

4. Adoption of Minutes
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5. Review of the Minutes

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6. Business Arising from the Minutes

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DISTRICT OF METCHOSIN
Minutes

ENVIRONMENTAL ADVISORY SELECT COMMITTEE MEETING

Tuesday, October 25, 2022 at 7:00 pm
COUNCIL CHAMBER, MUNICIPAL HALL

Present: Councilor Andy MacKinnon (by phone), Bill Cave (Chair), Ric Perron, Jacqueline Clare, Merrilee Hoen (recorder), Erin Van de Water

Regrets: None

Guests: None

Action Item: That committee members review the Terms of Reference for the Environmental Advisory Select Committee.

The meeting was called to order at 7:05 pm

1. **Agenda, Additions and Approval**
Moved and Seconded by Erin and Bill that the Committee approve the agenda with the addition of an update on the Climate Action Plan Project.

Carried

2. **Presentations: None**

3. **Public Participation: None**

4. **Adoption of Minutes**
Moved and Seconded by Jacqueline and Erin that the minutes of the Environmental Advisory Select Committee meeting held on June 28, 2022 be approved.

Carried

5. **Receipt of Minutes**

Council & Standing Committee Minutes
Moved and Seconded by Bill and Ric that the Committee receive the Council and Standing Committee Minutes for information.

Carried

Advisory Committee Minutes
Moved and Seconded by Bill and Ric that the Committee receive the Advisory Committee Minutes for information.

Carried

6. **Business Arising from the Minutes**

a) **Metchosin Environmental Advisory Committee Membership**
The maximum number of committee members is 9. Currently we have 6 members with one resigning at the end of the year. The plan is to place an advertisement in the Muse and to also personally invite people who meet the profile as set out in the "Membership" section of the Committee's Terms of Reference to apply. The Chair

will follow up with a number of people suggested by current Committee members.

b) Climate Action Plan Project
Members of Pinna Sustainability have been meeting with municipal staff and councillors to gather information for the proposed Climate Action Plan. The next issue of the Muse will contain an article outlining what has been done so far and inviting residents to make their own suggestions and observations about climate action through an online survey which will be available between October 31 and November 13. That feedback will be incorporated into the Plan which will be submitted for Council's review and approval later this fall.

7. New Business: This was Andy MacKinnon's last meeting as Council Liaison for MEASC but he will continue to be a member.

8. Reports: None

9. Correspondence: None

10. Adjournment and Next Meeting Date

Moved and Seconded by Ric and Erin that the Committee adjourn the meeting at 8:10 pm **Carried**

Next meeting date: Tuesday, November 22, 2022 at 7:00pm, Council Chambers

District of Metchosin

Minutes
Inaugural Council Meeting
November 7, 2022 at 7:00 p.m.

Council Chamber
Metchosin Municipal Hall

PLEASE NOTE: The meeting has been recorded

Present: Mayor Little in the Chair, Councillors Donaldson, Epp, Gray, and Shukin. Also present was Sue-Lin Tarnowski, Interim CAO/Corporate Officer and Tina Hansen, Deputy Corporate Officer

1. Agenda, Additions and Approval

Ms. Tarnowski called the meeting to order at 7:00 p.m.

2. Oaths of Office

Ms. Tarnowski administered the Oaths of Office to Marie-Térèse Little, Shelly Donaldson, Sharie Epp, Steve Gray and Jay Shukin.

3. Mayor's Address

Thank you to everyone for joining us tonight to welcome the newly elected Council of 2022 to 2026, at this Inaugural meeting. I would like to welcome the community of Metchosin to your Municipal Chambers and I thank you for joining us tonight.

I would like to welcome the members of the Sc'ianew First Nations Council, Chief Russ Chipps, and Councillor Traci-Lynn Pateman. We would like to acknowledge we are here on the traditional territory of the Sc'ianew people.

I acknowledge and thank the District of Metchosin Staff including Sue-Lin Tarnowski, interim CAO, Tina Hansen, Deputy Corporate Officer, and other staff members who are with us this evening.

Similarly, I acknowledge and extend my continued gratitude to Fire Chief Dunlop and the District of Metchosin's volunteer Fire Department. Thank you to Inspector Stephen Rose and Constable Caelan MacDonald, West Shore RCMP, and former Councillors in the District of Metchosin, our families and community members.

Last, but certainly not least, I would like to welcome the newly elected Council to this table and Chambers; You have my utmost respect. I look forward to a fruitful exchange of ideas and many positive, productive discussions. At our core, we all agree that we need to keep Metchosin rural and protected. We may not agree on some issues, but this is when respect and open, healthy dialogue, will be most important. We are all committed to addressing and focusing on the issues at hand.

We are here tonight because you, the community, have elected us to represent you and tonight we pledge to honour that trust you have placed in us. We also acknowledge that some in our community did not vote for us, but as of now, we represent all residents of Metchosin. You have elected a diverse and intelligent group of committed individuals that reflects our community well.

Local government, at the municipal level and political life is a full-time commitment. You will find this out at your next trip to the local corner store, café, or coffee shop. It is about the fair consideration of decisions that greatly affect our lives and that of the local environment. I believe our collective interests are best served when all available information is transparent for public discussion and review. Collectively, we are responsible for the health and well being of the community and our environment.

Respectful debate and dialogue are healthy foundations for a vibrant democracy and an engaged community. Open and transparent Council meetings foster trust in the Council and helps to build a healthy, engaged community. With good governance, I am confident we will build your trust in time, and I ask for your patience and understanding in the months to come.

With community involvement, we will aim to start strategic planning for the future of rural Metchosin. We will build in timelines and measures to keep us accountable to each other and to you. Strategic Planning, with community involvement and engagement is imperative now and it is critically important for managing the changes we face and those we will encounter over the next 4 years so that we can maintain our rural lifestyle and protect our values and environment; all while remaining fiscally responsible. Critical plans are required for critical communities such as Metchosin.

As required by the provincial government, this newly formed team will abide by the District's Code of Conduct. The code itself requires some updating and we will refine this within the next few months.

I developed my platform for this election on the basis of my own experiences and what I was hearing in the community. As I endeavored to reach as many households as possible during the campaign period, I discovered that there are many perspectives, ideas, and specific neighbourhood issues but most importantly, we have more in common than anything else. Going forward I welcome continued community engagement and healthy communications with our neighbours on all our borders.

Clearly, the challenges before us are complex. We are in the midst of a rapidly changing climate, and we must do everything in our power and jurisdiction to mitigate the effects of these changes. I look forward to our future discussions regarding our Climate Action Plan.

As is outlined in our Official Community Plan (OCP), environmental management in Metchosin will be directed towards the preservation of a sustainable community in harmony with our Pacific Coast ecosystem. The policies of this plan have been developed in order to preserve the Sensitive Environments, including lakes, watercourses, Riparian-wetland Areas, marine shorelands, wildlife habitat, unique and attractive vegetation, lands with erosion and flooding potential, and culturally modified heritage sites.

Protection of our aquifers, greenspaces, buffer zones, parks and trails, watercourses, the coast and ocean, farmland and sensitive ecosystems will be imperative going forward. We also need to focus on respecting and protecting the people in this community, because how we treat the most vulnerable in our community, is a true reflection on our community. Protection of our community includes safe passage within Metchosin, and this will hopefully include traffic calming measures and crosswalks, particularly at our local schools to ensure safety.

As I have promised, I would also like to focus on supporting sustainable agriculture and the many small businesses in our community.

Admittedly, the elements that affect our decision making are challenging given the current and changing financial climate. Representing a population of 5067 individuals, means this council will have to address, head on, the associated policing costs, and solutions to ensure our long-term fiscal viability and sustainability. As is apparent from the recent deluge of water leaking into the firehall, we will need to make some tough financial decisions to address a firehall restructuring and not put it off to the next Council.

I believe the future of rural Metchosin is bright and we can build on our successes and learn from our challenges to build a plan for our future that is practical, green, safe, sustainable, and visionary and provides and encourages community engagement.

4. Mayor's Introduction of Council Members

Mayor Little introduced new Council members Shelly Donaldson, Sharie Epp, Steve Gray and Jay Shukin.

Councillor Donaldson, stated that it is a privilege to be sharing this momentous occasion and she is looking forward to working with Council, staff and Metchosin residents in a fair, collaborative, and positive manner. Councillor Donaldson advised that her commitment to residents is not limited to the Council Chambers or deliberations at the Council table, her commitment is to promote community-based problem solving and increase the transparency of municipal issues. It is valuable for her to understand the needs of the community and to engage with residents on any topic of interest or concern. She will always listen and do her best to seek solutions and promote a safe and active place to live and grow and she is honoured to serve all Metchosin residents.

Councillor Epp noted the June 23rd, 2018, date when a small group of friends first talked her into running for Council. Councillor Epp thanked everyone who supported her and thanked the new Council around the table. She stated that being an elected official is a huge responsibility, as there are difficult decisions to make. Sometimes Council makes mistakes, but they are all there to try to do the right thing for the community. Councillor Epp noted that what is great about Metchosin is the people, it has a small town feel with a lot of volunteers and she hopes everyone can work together, do what is best for the community and Metchosin will continue to be a great place.

Councillor Gray stated that it was with great pleasure he finds himself at the Council table with other Council members. Councillor Gray acknowledged the presence of Chief Chipps and Councillor Traci Pateman, representing Sc'ianew First Nation and congratulated Chief Chipps on his recent election as Trustee for School District No. 62. Councillor Gray advised he will work to keep Metchosin undeveloped and financially secure. As we are facing a global climate emergency Metchosin can do their part to reduce emissions, but protection of the environment will be critical in the years ahead. We need to continue to prepare for severe weather events, working together. He appreciates that Council is working to develop good habits from the start, signing a code of conduct as a commitment to work well together, work respectfully with District staff and with the public and he is pleased to take this first step together on their journey as a new Council.

Councillor Jay Shukin stated that it is an honour to have been elected to represent his community. He is amazed and delighted by his Council colleagues in their commitment to the protection and enhancement of rural Metchosin. They all share a deep commitment to the community and preserving the values Mayor Little spoke of. Councillor Shukin acknowledged the presence of the former Council members, Mayor Ranns, Councillor Kahakauwila and Councillor MacKinnon noting that he has learned so much from all of them. Councillor Shukin also recognized other candidates, his family and friends in attendance and stated that he is very much looking forward to working with his Council colleagues in protecting the wonderful place of Metchosin.

5. Appointment of KPMG as Auditor for 2023

Moved and Seconded by Councillors Donaldson and Shukin that Council appoint KPMG as Auditor for 2023.

Carried

6. Financial Signing Authority

Moved and Seconded by Councillors Epp and Gray that Council appoint Mayor Little, Councillor Donaldson and Councillor Gray as having financial signing authority.

Carried

7. Annual Schedule for Acting Mayor

Moved and Seconded by Councillors Gray and Epp that Council approve the Schedule of Acting Mayors for 2022-2023.

Carried

8. Annual Schedule of Council and Standing Committee Meetings

Moved and Seconded by Councillors Shukin and Donaldson that Council approve the Annual Schedule of Regular Council and Standing Committee Meetings for 2023.

Carried

9. Correspondence

a) Report on Trans Mountain Fate & Behaviour Bitumen Research to Local Coastal Governments, October 2022

Moved and Seconded by Councillors Gray and Donaldson that Council approve the draft letter requesting an extension to the deadline for input on the Report on Trans Mountain Fate & Behaviour Bitumen Research to Trans Mountain;
And direct staff to send the letter to Christine Trefanenko, Manager, Project Emergency Management at Trans Mountain.

Carried

Moved and Seconded by Councillors Shukin and Gray that Council refer the Report on Trans Mountain Fate & Behaviour Bitumen Research to the Metchosin Advisory Select Committee (MEASC) for comment.

Carried

10. Adjournment

Moved and Seconded by Councillors Gray and Epp that Council adjourn the meeting at 7:29 p.m.

Carried

Certified Correct

Chair

Corporate Officer

District of Metchosin

Minutes
Finance and Environment Committee Meeting
September 26, 2022, at 7:00 p.m.

Metchosin Municipal Hall
Council Chambers

PLEASE NOTE: The meeting has been recorded.

Present: Councillor MacKinnon in the Chair, Mayor Ranns, Councillor Kahakauwila, and Little. Also present was L. Urlacher, CAO, Sue-Lin Tarnowski, Chief Financial Officer, and Tina Hansen, Recording Secretary.

Regrets: Councillor Epp

The meeting was called to order at 7:03 p.m.

1. Agenda, Additions and Approval

Moved and Seconded by Councillors Little and Kahakauwila that the Committee approve the agenda with the addition of correspondence from Bev Bacon and Gary Smirfitt.

Carried

2. Public Participation

Barb Sawatsky, resident stated her support for the permissive tax exemption for the Victoria Motorcycle Club, who own and maintain their property and provide a positive function in the CRD by providing much needed greenspace and promoting physical activity by hosting family events with no expectation of assistance from the District barring the tax exemption.

Brent Donaldson, Director, Victoria Motorcycle Club, provided an overview of the club's history including that the club is the oldest club in Western Canada, formed in 1903, with the purchase of the property in 1964. Mr. Donaldson advised that last year when they were looking at their current tax situation, they had the choice of operating under a managed forest or pursuing a tax exemption. The executive met with District staff, and it was suggested that they follow through with a permissive tax exemption through the municipality.

Herald Perepalkin, resident, Victoria Motorcycle Club member for 54 years stated that he was a member when the club purchased the property in 1964 and subsequently purchased the 12-acre parcel in 1969 giving access from Happy Valley Road. At that time, the founding members decided the property was to be kept as greenspace for recreation. They encourage safe recreation of motorcycles, and he hopes Council will maintain the status quo with the tax exemption.

3. Adoption of Minutes

Moved and Seconded by Mayor Ranns and Councillor Kahakauwila that the Committee adopt the minutes of the Finance and Environment Committee Meeting held on August 22, 2022.

Carried

4. Bylaws

a) Staff Report, Permissive Tax Exemption Bylaws

Heritage Tax Exemption Bylaw 2022, No. 680

Moved and Seconded by Councillors Little and Kahakauwila that the Committee recommend Council give 1st, 2nd and 3rd reading to *Heritage Tax Exemption Bylaw 2022, No. 680.*

Carried

General Tax Exemption Bylaw 2022, No. 681

Moved and Seconded by Councillors Kahakauwila and Little that the Committee recommend Council give 1st, 2nd and 3rd reading to *General Tax Exemption Bylaw 2022, No. 681.*

Carried

5. Correspondence

The correspondence from Bev Bacon and Gary Smirfitt was received for information.

6. Adjournment

Moved and Seconded by Mayor Ranns and Councillor Kahakauwila that the Committee adjourn the meeting at 7:17 p.m.

Carried

Certified Correct

_____ _____

Chair **Corporate Officer**

District of Metchosin

Minutes
Special Finance and Environment Committee Meeting
September 27, 2022 at 9:00 a.m.
Council Chamber
Metchosin Municipal Hall

Present: Mayor Ranns in the Chair; Councillors Kahakauwila, MacKinnon, and Little. Also present was Lisa Urlacher, Chief Administrative Officer, Sue-Lin Tarnowski, Chief Financial Officer and Katherine Lesyshen, Planner

Via Teleconference: Councillor Epp

Guests: Steve Roddick, Sustainability Consultant, Pinna Sustainability Inc.

The meeting was called to order at 9:01a.m.

1. Agenda, Additions and Approval

Moved and Seconded by Councillors Little and Kahakauwila that Council approve the agenda as presented.

Carried

2. Council Workshop, Metchosin Climate Action Planning

Council engaged in a Climate Action Planning workshop facilitated by Steve Roddick, Pinna Sustainability Inc. for the Metchosin Climate Action Plan. The purpose of the workshop was to allow the current Council to be part of setting the context for Metchosin. It was noted that Steve would provide a summary of the discussions so that Council would have the opportunity to rate high/low impact and effect and that a follow up meeting would take place with the newly elected Council.

3. Adjournment

Moved and Seconded by Councillors Little and Kahakauwila that Council adjourn the meeting at 11:01 a.m.

Carried

Certified Correct

_____
Mayor

_____
Corporate Officer

District of Metchosin

Minutes
Planning Committee Meeting
September 26, 2022 at 7:00 p.m.

Council Chamber
Metchosin Municipal Hall

PLEASE NOTE: The meeting has been recorded

Present: Councillor Kahakauwila in the Chair, Mayor Ranns, Councillors MacKinnon, and Little. Also present was Lis Urlacher, CAO, Sue-Lin Tarnowski, Chief Financial Officer and Tina Hansen, Recording Secretary

Regrets: Councillor Epp

The meeting was called to order at 7:24 p.m.

1. Agenda, Additions and Approval

Moved and Seconded by Councillors MacKinnon and Little that the Committee approve the agenda as presented.

Carried

2. Public Participation

Pattie Whitehouse, resident commented on the previous Planning Committee meeting and presentation on Tiny Homes and RV's where there had been a mostly respectful discussion on the issue however, she found that there had been some derogatory/stereotypical remarks made. Ms. Whitehouse reminded people to be respectful and that one of the ways to build community is to welcome newcomers in all their diversity and help them feel this is a place they want to live and contribute to.

Nicole Shukin, resident commented that the La Bonne Road residents have been inquiring as to an update on bylaw violations on Ash Mountain throughout the Council term. Ms. Shukin asked if Council could provide residents with an update at this time.

Councillor Kahakauwila reported that Council has recently met on the issue however is not able to provide an update as it is still in legal proceedings.

3. Adoption of the Minutes

Moved and Seconded by Councillors MacKinnon and Little that the Committee adopt the minutes of the Planning Committee meeting August 22, 2022 as amended.

Carried

4. Reports

a) Councillor's Update

Councillor Kahakauwila reported on her Councillor's Update adding that West Shore Parks and Recreation was a key component to the 55+ B.C. Games hosting several of the events and that it was a success in large part due to the staff and facilities in the West Shore.

5. Adjourn

Moved and Seconded by Mayor Ranns and Councillor MacKinnon that the Committee adjourn the meeting at 7:31 p.m.

Carried

Certified Correct

_____ _____

Chair **Corporate Officer**

District of Metchosin

Minutes
Parks Committee Meeting
September 26, 2022 at 7:00 p.m.

Council Chamber
Metchosin Municipal Hall

PLEASE NOTE: The meeting has been recorded

Present: Councillor Little in the Chair, Mayor Ranns, Councillors MacKinnon, and Kahakauwila. Also present was Lisa Urlacher, CAO, Sue-Lin Tarnowski, Chief Financial Officer and Tina Hansen, Recording Secretary

Regrets: Councillor Epp

The meeting was called to order at 7:31 p.m.

1. **Agenda, Additions and Approval**

   Moved and Seconded by Councillors MacKinnon and Kahakauwila that the Committee approve the agenda with the addition of the Parks and Trails Advisory Select Committee minutes, September 20, 2022.

   Carried

2. **Public Participation**

   Pattie Whitehouse, resident, Dogs in Metchosin Working Group member commented on the amendment to the Animal Control Bylaw to limit handlers (commercial or otherwise) in possession of more than 4 dogs in a municipal park. Ms. Whitehouse stated that she is not in support of the amendment due to safety concerns for the dog walker and having four dogs on-leash. Ms. Whitehouse suggested Metchosin initiate a commercial licence/permit or registration system for commercial dog walkers.

   Debra Pile, resident, Dogs in Metchosin Working Group member stated that she was not in support of the suggested amendment related to Commercial Dog Walking. Ms. Pile noted that the Working Group initially recommended there was a need to carry out enforcement on those who have poorly behaved or out of control dogs.

   Jay Shukin, resident, expressed his support for the request for funding from the Agricultural Advisory Select Committee for a Metchosin Agricultural Plan. Mr. Shukin indicated that funds may be able to come from a Business Development fund.

3. **Adoption of Minutes**

   Moved and Seconded by Councillors MacKinnon and Kahakauwila that the Committee adopt the minutes of the Parks Committee meeting held on August 22, 2022 as amended.

   Carried

4. Receipt of Minutes

Moved and Seconded by Councillors Kahakauwila and MacKinnon that the Committee receive the minutes of the Agricultural Advisory Select Committee meeting held on August 31, 2022.

Carried

Moved and Seconded by Councillors Kahakauwila and MacKinnon that the Committee receive the minutes of the Parks and Trails Advisory Select Committee meeting held on September 20, 2022.

Carried

5. Reports

a) Councillors Update

Councillor Little provided an overview of her Councillor's Update including:

- Attendance at the 2022 UBCM Convention
- BCEHS phone call regarding "Bring Back the Calls" initiative
- Metchosin Market continues to meet Sundays
- Volunteers continue to work at Moralea's Meadow

Moved and Seconded by Councillors Kahakauwila and MacKinnon that the Councillor's Update be received for information.

Carried

6. Correspondence

a) Robin Tunnicliffe, Chair, Agricultural Advisory Select Committee, Request for Funding for Metchosin Agricultural Plan

Councillor Little reported that the Agricultural Advisory Committee request for funding is a request from the August 31st Advisory Committee meeting and the Committee's mandate to develop an Agricultural Plan. The Advisory Committee held its Agricultural Forum and received support from farmers to go ahead with an Agricultural Plan. The request is for a minimum of $20,000 from Council. The Committee discussed the following:

- The request should come forward to the next F&E Committee meeting for consideration during the budget process
- Consultant fees would be a minimum of $20,000
- Funding would be allocated through the municipality
- Request for Proposals take place through municipal staff with input received from the Advisory Committee

Moved and Seconded by Councillors MacKinnon and Kahakauwila that the Committee forward the request for funding from the Agricultural Advisory Select Committee for an Agricultural Plan to the next Finance and Environment Committee meeting for consideration during the 2023 budget process.

Carried

b) Weir Beach Stairs/Access Correspondence

The Committee received the correspondence related to the Weir Beach stairs and access and the following was discussed:

- Safety concerns related to the pathway, stairs and parking
- Consideration to temporarily closing the access
- Portions of the trail trespass on private property
- Consideration to a permanent closure; clarification as to the process for closing a road right-of-way
- Referring the matter to the Municipal Insurance Association (MIA); there is a program in place to conduct risk assessments and provide recommendations; eligible grant funding is funded from municipal dividends from MIA
- Options for making a safe trail before considering a permanent closure
- Discussion as to costs to repair the trail, using volunteers and in-kind to reduce costs
- Consideration as to surveying the trail, may be part of the road closure process

Moved and Seconded by Mayor Ranns and Councillor MacKinnon that the Committee refer the matter of the Weir Beach Stairs back to staff.

Carried

ACTION ITEM: Staff to bring forward information to the new Council including:

1. Process for a permanent road closure
2. Recommendations from MIA related to risk assessment/mitigation
3. Options and costs associated with repair of the access/stairs

Moved and Seconded by Councillor Kahakauwila and MacKinnon to recommend that Council temporarily close the Weir Beach access and stairs.

Carried

7. Bylaws

a) Staff Report, Animal Control Amendment Bylaw No. 676

Councillor Little advised that she was not in support the proposed amendment related to commercial dog walkers and would like to see the staff report referred to the Dogs in Metchosin Working Group for their recommendation.

Moved and Seconded by Councillors MacKinnon and Kahakauwila that the Committee refer the *Animal Control Amendment Bylaw No. 676* to the Dogs in Metchosin Working Group.

Carried

b) Staff Report, Municipal Ticket Information (MTI) Authorization Amendment Bylaw No. 679, 2022

Moved and Seconded by Councillors MacKinnon and Kahakauwila that the Committee refer the *Municipal Ticket Information (MTI) Authorization Amendment Bylaw No. 679* to the Dogs in Metchosin Working Group.

Carried

8. Adjourn

Councillor Little reported on the Reconciliation meeting held earlier this week and acknowledged the traditional territory of the Coast Salish in particular the Sc'ianew First Nations.

Moved and Seconded by Councillors Kahakauwila and MacKinnon that the meeting be adjourned at 8:12 p.m.

Carried

Certified Correct:

_____
Chair

_____
Corporate Officer

District of Metchosin

Minutes
Public Works Committee Meeting
September 26, 2022 at 7:00 p.m.

Council Chamber
Metchosin Municipal Hall

PLEASE NOTE: The meeting has been recorded

Present: Councillor MacKinnon in the Chair, Mayor Ranns, Councillors Kahakauwila and Little. Also present was Lisa Urlacher, CAO, Sue-Lin Tarnowski, Chief Financial Officer and Tina Hansen, Recording Secretary

Regrets: Councillor Epp

The meeting was called to order at 7:18 p.m.

1. Agenda, Additions and Approval

Moved and Seconded by Councillors Kahakauwila and Little that the Committee approve the agenda as presented.

Carried

2. Public Participation (none)

3. Adoption of Minutes

Moved and Seconded by Councillors Kahakauwila and Little that the Committee adopt the minutes of the Public Works Committee meeting held on August 22, 2022 as amended.

Carried

4. Reports

a) Councillors Update

Councillor MacKinnon provided an overview of the Councillors Update and it was received for information as amended.

5. Adjourn

Moved and Seconded by Councillors Little and Kahakauwila that the meeting be adjourned at 7:24 p.m.

Carried

Certified Correct:

_____
Chair

_____
Corporate Officer

Moved and Seconded by Councillors Shukin and Gray that Council refer the Report on Trans Mountain Fate & Behaviour Bitumen Research to the Metchosin Advisory Select Committee (MEASC) for comment.

Carried

Tina Hansen

From: Emergency_Management – Trans Mountain <Emergency_Management@transmountain.com>
Sent: November 9, 2022 2:10 PM
To: Amber Ward
Cc: Tina Hansen; Emergency_Management – Trans Mountain
Subject: RE: Coastal Local Government Comments on the Fate and Behaviour of Bitumen Research Report

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Amber,

We would be happy to provide an extension to December 5, 2022. If you could please provide comment by then, Trans Mountain will provide a written explanation of how your views have been considered and addressed in the report, or why such views have not been addressed, on or before December 12, 2022.

In the meantime, please feel free to reach out with any questions.

Have a great evening.
Christine

From: Amber Ward <award@metchosin.ca>
Sent: Wednesday, November 9, 2022 10:13 AM
To: Emergency_Management – Trans Mountain <Emergency_Management@transmountain.com>
Cc: Tina Hansen <thansen@metchosin.ca>
Subject: Coastal Local Government Comments on the Fate and Behaviour of Bitumen Research Report

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If you are unsure, press the "Report Message > Phishing" button from this email or forward this e-mail to the Report Phish mailbox.

For Christine Trefanenko, Manager, Project Emergency Management, Trans mountain

Hi Christine,

Please find attached a letter from Marie-Térèse Little, Mayor, District of Metchosin.

Thank you.

Amber Ward
Administrative Assistant
District of Metchosin
4450 Happy Valley Rd
Victoria, BC V9C 3Z3

Phone:250-474-3167

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DISTRICT OF METCHOSIN

File No. 0110-02

November 8, 2022

Christine Trefanenko
Manager, Project Emergency Management

Dear Ms. Trefanenko:

RE: Coastal Local Government Comments on the Fate and Behaviour of Bitumen Research Report

On behalf of Metchosin Council I would like to take the opportunity to thank you for the invitation to provide comments on the Trans Mountain Expansion Project Fate and Behaviour of Bitumen Research Report.

The District of Metchosin received your invitation for comment on October 17, 2022, making the opportunity for Council to provide meaningful input by the November 15, 2022, deadline impracticable given the fact that the General Local Election took place on October 15, 2022, and the Council Elect took their Oath of Office November 7, 2022.

Council is therefore requesting an extension to the deadline in order to review the Report and provide appropriate feedback.

Sincerely,

Marie-Térèse Little, Ph. D.
Mayor

4450 Happy Valley Road, Victoria, B.C. V9C 3Z3
Administration Office (250) 474-3167 Fax 474-6298
Building Inspection Department (250) 474-3196 Fax 474-6298

Tina Hansen

From: Mayor and. Council
Subject: FW: Report on Trans Mountain Fate & Behaviour Bitumen Research (BC EAO Condition 35) - Local Coastal Governments
Attachments: BC EAO Condition 35 Report_October 2022.pdf

From: Emergency_Management – Trans Mountain <Emergency_Management@transmountain.com>
Sent: October 17, 2022 12:55 PM
To: Emergency_Management – Trans Mountain <Emergency_Management@transmountain.com>
Subject: Report on Trans Mountain Fate & Behaviour Bitumen Research (BC EAO Condition 35) - Local Coastal Governments

Good afternoon,

Trans Mountain is committed to working with coastal local governments on ongoing enhancements to its Emergency Management Program and is inviting comments on the Fate and Behaviour of Bitumen Research Report (Report).

With this correspondence, Trans Mountain formally invites your community to provide its views on the content of the attached draft Report, as per BC Environmental Assessment Office (EAO) Certificate Condition 35 Fate and Behaviour Bitumen Research.

The Condition 35 requires Trans Mountain to provide a report to Potentially Affected Coastal Local Governments, Indigenous groups, the BC Environment Assessment Office (BC EAO), Environment and Climate Change Canada (ECCC), Canada Energy Regulator (CER), Canadian Coast Guard (CCG), BC Ministry of Environment and Climate Change Strategy (MOE), BC Ministry of Natural Gas Development (MNGD), and the Oil and Gas Commission (OGC) prior to the commencement of TMEP operations.

The Report is in regard to the current and future research programs that Trans Mountain is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. Progress updates will be provided one year and every five years after commencement of TMEP operations.

Please provide comments or questions about the Report by **November 15, 2022,** by email to Emergency_Management@transmountain.com. If comments or questions are provided the community, Trans Mountain will provide a written explanation of how your views or questions have been considered and addressed in the report, or why such views have not been addressed, on or before December 12, 2022.

Additionally, should you have questions or wish to discuss the Emergency Management Program, please do not hesitate to reach out.

Thank you in advance for your participation and we look forward to receiving your feedback.

Sincerely,

Christine

Christine Trefanenko
Manager, Project Emergency Management

TRANS MOUNTAIN EXPANSION PROJECT

EAO Condition 35

Fate and Behaviour of Bitumen Research

October 2022

TRANSMOUNTAIN

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1 INTRODUCTION

Trans Mountain Pipeline ULC ("Trans Mountain") has in place a robust Emergency Management ("EM") Program. The EM Program has been developed and implemented for the existing pipeline and facility network based on a combination of regulatory compliance, operational need, industry practice and lessons learned through regular exercises and actual incidents response. Comprised of a comprehensive set of standards, processes and procedures, the EM Program is designed to support Trans Mountain's commitment to the safety and security of public, workers, company property and the environment. The EM Program is an all-hazards program of mitigation, preparedness and response designed to provide a continual cycle of improvement as mandated by the Canadian Energy Regulator Onshore Pipeline Regulations.

The BC Environmental Assessment Office (EAO) Certificate Condition 35 requires Trans Mountain to provide a report regarding the current and future research programs that Trans Mountain is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, including research programs having the objective of providing spill responders with improved information on how to effectively respond to spills. The report must include the components listed below and must be developed in consultation with the BC Ministry of Environment (MOE), Ministry of Energy, Mines & Low Carbon Innovation (EMLI) (formerly Ministry of Natural Gas and Development [MNGD]), BC Oil and Gas Commission (OGC), Environment and Climate Change Canada (ECCC), Canadian Coast Guard (CCG), Indigenous Groups, and Potentially Affected Local Coastal Governments. The required components are:

- A statement of the funding provided or allocated to ensure the research is undertaken and concluded within a specified period;
- Specifics of the Holder's approach to ongoing engagement with the CER, ECCC, Canadian Coast Guard, MOE, EMLI, OGC, Indigenous Groups, and Potentially Affected Local Coastal Governments in the research programs;
- Research topics, including the different physical and chemical properties of the oil and other products intended to be shipped from the Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup and remediation options for sediments and shoreline;
- The scope, objectives, methods, and timeframe for the research topics;
- How the Holder will incorporate applicable results of the research into its emergency preparedness and response plans;
- How the Holder will work with spill responders to support the incorporation of the results of the research into their emergency preparedness plans and programs; and
- A plan for reporting to the CER, ECCC, Canadian Coast Guard, NRCan, MOE, EMLI, OGC, Indigenous Groups, and Potentially Affected Local Coastal Governments on the progress of the research program.

The purpose of this report is to demonstrate Trans Mountain's fulfillment of the requirement of BC EAO Certificate Condition 35 *Fate and Behaviour of Bitumen Research.*

2 EMERGENCY MANAGEMENT RESEARCH STANDARD

Trans Mountain is committed to the development, implementation, maintenance, and continual improvement of the company's Integrated Safety and Loss Management System ("ISLMS") to address all phases of the pipeline life cycle to protect the safety and security of people and the environment. As part of the ISLMS, Trans Mountain maintains an Emergency Management (EM) Program that anticipates, prevents, manages, and mitigates conditions during an emergency that could adversely affect the safety of workers, the public, the environment, and property.

The EM Program is made up of several functional components including the Emergency Management Research Standard (Research Standard), which forms part of the Trans Mountain Emergency Management Liaison/Continuing Education/Consultation Plan. The Research Standard (Appendix A) describes Trans Mountain's approach to supporting, evaluating, tracking, and incorporating emergency management and/or oil spill related research into its EM Program. The Research Standard also provides direction on the approach to fulfilling regulatory requirements and guides external research engagement and the sharing of research findings with spill responders.

2.1 Funding

Trans Mountain has contributed more than $2 Million for research on the fate and behaviour of bitumen research to date. Since the outset of the pandemic, new opportunities and initiatives have been limited and existing projects that were paused have recently resumed. For future investment into the fate and behaviour of bitumen research, Trans Mountain is allocating funding towards initiatives the company will lead, jointly lead, support or be otherwise involved in.

Funding for initiatives Trans Mountain leads, jointly leads, supports, or is otherwise involved in is approved by the Director, Emergency Management. Once a potential research project is approved, funding is disbursed or allocated on behalf of Trans Mountain to ensure the research is undertaken and concluded within a specific period, per the respective research project agreement. In addition to tracking the total and study specific funding contributed to research, Trans Mountain monitors and maintains records for each project, including topics of research satisfied, status of research initiatives, and how applicable research findings have been incorporated into the EM Program. See Section 5.3 and Section 5.7 of the Research Standard (Appendix A).

3 RESEARCH TOPICS

As described in Section 5.1 of the Research Standard (Appendix A), participation by Trans Mountain focuses on studies associated with the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments, and/or those with the objective of providing spill responders with improved information on how to effectively respond to spills. The studies Trans Mountain leads, jointly leads, supports, or is otherwise involved in must include and/or incorporate one or more of the following topics:

1. Physical and chemical properties of the oil (including blends) and other products intended to be shipped from the Westridge Marine Terminal
2. Product weathering
3. Dispersion and oil/sediment interactions
4. Product submergence
5. Product behaviour and cleanup following in-situ burning
6. Cleanup and remediation options for sediments and shorelines

Many of the research initiatives in which Trans Mountain participates address multiple research topics. For example, the completed Gainford Studies (See Section 3.1.3) evaluated all six of the research topics listed above, while the scope of the ongoing Experimental Lakes Area Program (See Section 3.2.3) includes topics 1, 2, and 6. Apart from topic 5, all required research topics have been included in at least three completed or ongoing studies since 2012. See Appendix B for a list of research topics by past project.

In-situ burning is an alternative countermeasure which requires specific federal regulatory approval. In-situ burning is referenced in Trans Mountain's emergency response plans as a non-traditional and alternative recovery

technique and is considered an option in rare and exceptional circumstances due to its potential human health impacts.

As such, product behaviour and cleanup following in-situ burning has not been a focus of research for Trans Mountain and is limited to the Gainford Studies. However, product behaviour and cleanup has been explored through studies on the various other listed research topics.

3.1 Past Projects

3.1.1 Comparison of Behaviour of Spilled Oils

Trans Mountain supported an independent, science-based multi-million-dollar study commissioned by the Canadian Energy Pipeline Association (CEPA) and the Canadian Association of Petroleum Producers (CAPP). The study, *"Comparison of the Behaviour of Spilled Conventional and Non-Conventional Oils through Laboratory and Meso-scale Testing"* was published in 2020 and evaluated and compared the physical and chemical properties of more than 10 types of crude oil under different environmental conditions to determine how the fresh and weathered oils behave in various marine, estuarine, and freshwater settings. The findings of the study were reviewed by an advisory committee that included Canada Energy Regulator (CER), Environment and Climate Change Canada (ECCC), Fisheries and Oceans Canada (DFO), Natural Resources Canada (NRCan), and Polaris Applied Sciences, Inc. The results of the study concluded that both the conventional and oil sand-derived products tested remain floating in the marine environment for extended periods of time. The results also showed that diluted bitumens do not separate into their original bitumen and diluent after they spill because the hydrocarbons in both are infinitely soluble to each other.

3.1.2 Underwater Seabed Cleanup and Assessment Technique Guide

Trans Mountain, together with Western Canada Marine Response Organization (WCMRC), Canadian Coast Guard (CCG), NRCan, and DFO, have supported the development of an Underwater Seabed Cleanup and Assessment Technique (uSCAT) Guide. The uSCAT Guide identifies standardized strategies for the detection and assessment of nearshore non-floating oil in varying environments. In addition, the uSCAT Guide provides methods for recording, storing, and processing response data. The uSCAT is now referenced in Trans Mountain's *Non-Floating Oil Assessment and Response Plan.*

3.1.3 Gainford Studies

In 2012, Trans Mountain, together with WCMRC, completed field-scale research that evaluated the fate and behaviour of representative samples of diluted bitumen discharged into a brackish water environment and subjected to various conditions of weathering. Referred to as the Gainford Studies, the project assessed the performance of various types of oil spill recovery equipment. As part of testing, fresh and weathered diluted bitumen was collected from the surface of the water using traditional mechanical equipment (skimmers). The tests revealed that oleophilic skimmers would be preferred during the early stages of a spill and likely would shift to brush and/or belt skimmers as diluted bitumen weathers. Countermeasures including in-situ burning, chemical dispersant and shoreline cleaners were also assessed. Tests showed that multiple countermeasures can be successfully used for spilled diluted bitumen and that there are preferred options depending on the condition of weathered oil, as with any spill of persistent oil.

3.1.4 Salish Sea Oil Spill Trajectory

In 2016, Trans Mountain also supported an evaluation modelling of spilled hydrocarbon fate and behaviour, and the associated effects. The modelling was based on five representative sites along the shipping route in the Salish Sea. The findings concluded that due to variables, including wind and tides, hydrocarbon does not migrate in a uniform pattern and a single model cannot be predictive of a real outcome at a particular site.

3.1.5 *Review of Oil Mineral Aggregates Formation Mechanisms for the Salish Sea and the Lower Fraser River*

Trans Mountain supported several research initiatives to better understand the potential interaction between oil and sediment in the Lower Fraser River and the Salish Sea. The results were shared during the 2016 Arctic and Marine Oilspill Program (AMOP) seminar and align with previous studies describing the conditions required for oil mineral aggregates to form. The study concluded that the formation of Oil Mineral Aggregate (OMA) in the Salish Sea and Lower Fraser River is highly unlikely. Findings regarding oil behaviour on water, particularly the factors influencing the submergence and sinking of oil, influenced the selection and design of response strategies in Trans Mountain's response plans and were shared with WCMRC for consideration into the enhancement of its response plans.

3.1.6 *Shoreline Treatment Decision Support Tool*

Trans Mountain provided support for a 2019 workshop that explored potential development of a decision-support tool for future oiled shoreline response. As part of the Multi-Partner Research Initiative Studies, the objective of the project was to create the framework for the decision tool to enable strategic planners, decision makers, oil spill response managers, and the public to better understand the effects and consequences of the options that exist to accelerate the weathering of spilled oil, and therefore environmental recovery, following an oil spill that could impact Canada's shorelines. Development of the framework is in progress; the timeline for further development has not yet been determined.

3.2 Ongoing and Future Projects

3.2.1 *Human Health Risk Report*

In support of the Human Health Risk Report to be developed in accordance with BC EAO Condition 38, Trans Mountain will be conducting stochastic and deterministic oil spill modelling of English Bay. The modelling will be based on a scenario of a laden tanker releasing 16,500m^3 of cargo, which represents the equivalent of two tanker cargo holds, in English Bay over 13 hours. The modelling will evaluate unmitigated dispersion of crude oil (Cold Lake Winter Blend) through the air, water column and shorelines. The results will inform an ecological assessment that will determine human health risk based on the potential pathways of effects and demographics involved. Thereafter, Trans Mountain will consult with WCMRC to identify opportunities to enhance the oil spill response plans and response measures. Being that the plans are held by WCMRC, the final decision on revisions lies with WCMRC. As appropriate, the measures may be assessed through additional spill modeling.

3.2.2 *Submerged Oil Detection – Joint Industry Project*

Trans Mountain is currently supporting a joint-industry project being managed by C-FER Technologies. The goal of the project is to minimize the environmental impact of hydrocarbon releases into waterways by understanding the factors that affect the performance of various leak detection technologies. The project is being conducted in five phases: define technology requirements; review technologies; test facility design and setup; technology testing; and analysis and reporting. The first two phases, define technology requirements and the review of technologies are complete. The third phase, test facility design and setup, is underway A Steering Committee represented by C-FER Technologies Inc., Trans Mountain, Enbridge, TC Energy, OGC, and Alberta Ministry of Environment and Parks, has been established to provide input on performance requirements and details on typical application environments in which these technologies may be deployed.

3.2.3 *Experimental Lakes Area Program*

Trans Mountain continues to support the International Institute for Sustainable Development – Experimental Lakes Area Program. This multi-year industry and government collaborative program is examining the fate and behaviour of diluted bitumen and conventional heavy crude oil in a freshwater environment. This program involves three phases: the establishment of microcosms to examine the chemical and physical behaviour of diluted bitumen in freshwater and on adjacent shorelines; the re-creation of a controlled oil spill to determine if degradation is different for diluted bitumen and conventional heavy crude oil, if wave energy has a significant effect on oil degradation rates in shoreline freshwater environments; biological effects from exposure and degradation, and the comparison of cleanup methods.

3.2.4 Shoreline Retention of Sunken and Submerged Oil

Trans Mountain is supporting a three-year study to further explore, utilizing a variety of shoreline oiling scenarios, representative of coastal BC, the ability of very low sulphur fuel oil (VLSFO) and diluted bitumen to form sunken oil mats (SOM) and/or oil-granule particle aggregates (OgPA). The research aims to measure physico-chemical properties throughout the weathering process, refine the current understanding of shoreline sediment sizes that allow for OgPA formation, provide a better understanding of how shoreline conditions in coastal British Columbia influence SOM and OgPA formation, and make operational recommendations to minimize SOM and OgPA formation.

4 INCORPORATING RESULTS

Upon completion of each project, results are reviewed and assessed for applicability and incorporation into Trans Mountain's EM Program. If an opportunity for enhancement exists, the component may be tested during emergency exercises, if practicable and/or appropriate. New components could include a new procedure, equipment type, emergency response document, or technology. Final approval for incorporation into the EM Program is determined by the Director, Emergency Management as noted in Section 3.3.2 of the Research Standard.

In 2018, because of research and input received through consultation with stakeholders and engagement with Indigenous Groups, Trans Mountain developed a specific plan to address the management of non-floating oil. The *Non-Floating Oil Assessment and Response Plan* is designed to provide guidance for the initial assessment and response actions for released oil that is at risk of, or has become, non-floating within an inland water environment. The *Non-Floating Oil Assessment and Response Plan* is used until an incident specific non-floating oil response plan can be developed. It is not intended to limit the discretion of responders to choose appropriate response actions to meet the site-specific circumstances presented at a release. When oil is released into a waterbody, its physical and chemical characteristics can change due to the environmental factors it may interact with. While the likelihood of oil becoming non-floating is low, the *Non-Floating Oil Assessment and Response Plan* is intended to provide response tactics to address this potential. The scope of the plan addresses non-floating oil containment and recovery, focusing on the assessment, plume tracking, containment, and recovery of non-floating oil within several types of waterbodies (rivers, lakes, inlets) with low, medium, and high-water flows. Implementation of the *Non-Floating Oil Assessment and Response Plan* is a function of the Environmental Unit within the Planning Section. Development of an incident specific non-floating oil plan was included as an objective of the Westridge Marine Terminal exercise in April 2021.

A subsequent version of the plan was enhanced with the addition of the Underwater Seabed Cleanup and Assessment Technique (uSCAT) in 2020. Trans Mountain was also involved in the research and development of the *uSCAT Technical Reference Manual,* which is available for download at www.uscat.ca and referenced in Trans Mountain's emergency response documents. The *Non-Floating Oil Assessment and Response Plan* is publicly available on Trans Mountain's website at https://www.transmountain.com/emergency-response-plans.

Findings of the Comparison of Behaviour of Spilled Oils (Section 3.1.1) study have been used to develop fact sheets on oil properties and behaviour under a range of environmental conditions. These were incorporated into the *Non-Floating Oil Assessment and Response Plan* in 2021 to help guide initial response actions and assist responders to determine the most effective countermeasure. Each fact sheet describes what to expect in freshwater and marine environments for the product type, and provides available information on oil properties, evaporation potential, emulsification potential, interaction with suspended sediment and shoreline, oil weathering, submergence potential, and viscosity. As part of the Westridge Marine Terminal full-scale exercise in April 2021, the Access Western Blend (AWB) fact sheet was referenced and attached as an appendix to the (Exercise) Westridge Loading Arm Non-Floating Oil Assessment and Cleanup (uSCAT) Plan. The information within the fact sheet was used to help predict the potential behaviour of the AWB oil in the marine environment, which then informed appropriate assessment and recovery strategies outlined in the plan. The study results were also shared with WCMRC, and the response organization has prepared similar fact sheets as support to their response plans.

Incident specific plans and document templates have also been developed to support the activities of the Environmental Unit during a response. For example, Trans Mountain has in place an incident specific non-floating

oil plan template, as well a Shoreline Treatment Recommendations document, which is issued to the Operations Section to guide initial shoreline assessment and recovery strategies.

Trans Mountain added to its equipment inventory a non-floating oil response trailer in 2018. The trailer contains emergency and spill response equipment specifically selected for the detection of sunken or submerged oil. Equipment such as silt fencing, boom, view boxes, pompoms and other sorbent materials are housed inside the trailer, to be dispatched if there is the possibility of spilled product becoming sunken or submerged.

Results of the Salish Sea Oil Spill Trajectory study (Section 3.1.4) were leveraged by WCMRC when developing the Enhanced Response Regime (as required by CER Condition 133b) to meet WCMRC's new planning standard which identifies its improved response times. This included selecting the location of the new response bases and allocating respective response equipment and staff for each. The implementation of the Enhanced Response Regime is nearing completion, enhancing the capacity and capabilities of WCMRC in the support of response to incidents affecting the lower Fraser River and the Burrard Inlet.

In 2020/21, Trans Mountain replaced its existing drum skimmers in British Columbia and Alberta with the high-capacity RBS TRITON 35 model. The updated technology offers extremely high recovery rates with up to 98% efficiency and is versatile enough for most oil spill needs. Testing of the skimmers was certified by Det Norske Veritas & American Bureau Services and witnessed to ASTM Standard F631-99 for oil recovery volume & efficiency and heavy oil recovery capability[1]. Additionally, the ability for the brush, disc, and drum recovery modules to be easily changed without tools in minutes based on the needs of the response supports the rapid deployment of the equipment.

In September 2019, objectives for the Kamloops District deployment drill included testing the functionality of new and emerging spill response equipment in different water courses. As part of the training and exercise Trans Mountain assessed a lightweight cartridge-based containment boom in both a river system and lake. The results of the exercise indicated the tested boom was not ideal for moving BC rivers, however Trans Mountain has attended testing of the boom in the Burrard Inlet, where its efficacy in certain environments was demonstrated. Considering its overall applicability for Trans Mountain's operational districts, and challenges to train with the product (e.g., single use boom) it was decided not to purchase the boom at that time, although the product is still being considered for the future. Spill responders from industry, response organizations, and government agencies participate regularly in Trans Mountain exercises, as well as in other joint exercises designed to increase response efficiency, interoperability, and coordination between parties.

5 ENGAGEMENT AND REPORTING

Engagement with Indigenous Groups and stakeholders continues to be a priority for Trans Mountain Emergency Management and an important component of the ongoing enhancements to the EM Program. Since 2014, Emergency Management has consulted with Indigenous Groups, local governments, and agencies on EM Program topics including (but not limited to) fate and behaviour of bitumen research, emergency response equipment, Emergency Response Plans (ERP), Geographic Response Plans (GRP), and supplemental plans and documents.

5.1 Emergency Management Workshops & Meetings

Trans Mountain Emergency Management has hosted a series of regional workshops in each of Trans Mountain's four operational districts (Alberta, North Thompson, Kamloops & Sumas), to which Indigenous Groups, local governments, and agencies were invited. During the initial sessions (EM2) in 2014, Emergency Management was included as an agenda topic as part of consultation activities related to the TMEP Environmental Protection Plan (EPP). The objective of EM2 was to obtain feedback from Indigenous Groups and stakeholders on the EM Program, by having scenario-based discussions to explore possible sequence of events and local resource requirements in the event of a pipeline emergency in the various communities. In collaboration with attendees, Trans Mountain personnel reviewed in detail ERPs, response times, equipment type and placement, response personnel, control

[1] Source: https://aquaguard.com/products/skimmers/rbs-triton-35-skimmer

point manuals, and other response plans. Additional workshops (EM3) were held in 2016 to provide an overview of Trans Mountain's EM Program, collect inputs for consideration on the EM Program elements including (but not limited to) equipment type and placement, the Planning Standard, ERPs, and research initiatives.

Subsequent workshops (EM4) were conducted in the Alberta, North Thompson & Kamloops Districts in 2018, with the Sumas District workshop held in March 2020 following the pause in consultation during the CER Reconsideration Period. Objectives for these sessions were to share the enhancements made to the EM Program, demonstrate how input from ongoing consultation and engagement has been incorporated into the Program, and to gain additional feedback from invited emergency management stakeholders and Indigenous communities on various elements of the enhanced program. Attendees were invited to review the enhanced EM Program and supporting materials, including research initiatives, ERPs, GRPs, supplemental plans, equipment maps, and the Exercise and Training Program. Throughout the workshops Trans Mountain representatives were available to discuss the research Trans Mountain was leading, jointly leading, supporting, or was otherwise involved in, in support of improved spill response.

In the May and June 2022, Trans Mountain hosted a series of Marine Engagement Workshops for Indigenous Groups and coastal local governments, respectively. The 2022 Research Newsletter (See Section 5.2) was provided to participants in advance of the workshop and the fate and behaviour of bitumen research was included as an agenda item.

Meetings with Indigenous Groups and stakeholders were another important forum where attendees were encouraged to provide input for consideration into the enhancement of the EM Program. The scope of consultation covered all components of the EM Program and Trans Mountain's goal was to gather unique and varying input from Indigenous Groups and Stakeholders on respective topics of interest, including feedback on Trans Mountain's research program and potential research initiatives.

5.2 Communications

In 2018, Trans Mountain distributed to applicable Indigenous communities and agencies a Research Newsletter which highlighted ongoing research, new initiatives, and results and findings of projects Trans Mountain was conducting and funding related to the fate and behaviour of bitumen. The communication was distributed electronically and via registered mail and invited recipients to contact Emergency Management to discuss current research programs, answer questions, and explore options for future collaboration.

Following consultation pauses due to the CER Reconsideration Period and the subsequent pandemic, Trans Mountain provided an updated Research Newsletter to Indigenous Groups and agencies in June 2022 via email. The communication included a progress report for ongoing studies, highlighted recently completed projects, and introduced new research initiatives Trans Mountain is supporting (See Section 3.1; Section 3.2). Correspondence also noted Trans Mountain values and encourages input for consideration into its EM Program and invited parties to contact the Director of Emergency Management to provide feedback or discuss potential research initiatives. As required by the BC EAO amended scope of consultation for Condition 35, the list of stakeholders to receive the newsletter was broadened to include the potentially affected coastal local governments listed in Appendix E.

Please see Appendix F for the 2018 and 2022 newsletters.

5.3 Work Groups, Committees, and Conferences

Inter-agency work groups and committees provide a means for sharing results of applicable research projects that have enhanced the EM Program, and to identify potential new opportunities for participation by Trans Mountain. Similarly, Trans Mountain regularly attends conferences like Clean Pacific, the International Oil Spill Conference, the International Oil Spill Science Conference, and the BC Emergency Preparedness and Business Continuity Conference, as both delegates and/or presenters to report on and seek out research initiatives.

5.4 Progress Updates

Per the requirements of Condition 35, Trans Mountain will provide progress updates to EAO, MOE, EMLI, OGC, ECCC, Canadian Coast Guard, Indigenous Groups, and Potentially Affected Local Coastal Governments at one

year following the commencement of TMEP Operations and at every five years thereafter during the period of Operations. With the commencement of TMEP Operations, Trans Mountain's research newsletter will transition into a research update and feature content highlighting the ongoing research, new initiatives, and results and findings of projects Trans Mountain is leading, jointly leading, supporting, or is otherwise involved in. The update will provide the opportunity for ongoing engagement with those entities interested in Trans Mountain's research activities, and for the parties to bring forth considerations for research initiatives. Information regarding diluted bitumen is and will continue to be updated and made available on the Trans Mountain website: https://www.transmountain.com/diluted-bitumen-information.

APPENDIX A RESEARCH STANDARD

EMERGENCY MANAGEMENT RESEARCH STANDARD

Revision 0

September 12, 2022

REVISION LOG

REV	DESCRIPTION	DATE	BY
0	Emergency Management Research Standard issued CMR approval (Approved 22156)	10/12/2022	K. Malinoski

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1.0 INTRODUCTION

1.1 Purpose

1.1.1 The purpose of the Emergency Management Research Standard ("Research Standard") is to describe the approach to support, evaluate, track, and incorporate emergency management and/or oil spill related research into the Emergency Management Program.

1.1.2 Provide direction on the approach to fulfill regulatory requirements.

1.1.3 Provide guidance on the approach to conduct external research engagement.

1.1.4 Provide guidance on the approach to share research findings with spill responders.

1.2 Scope

This Standard describes and identifies the following:

a) Topics of study.

b) Research study funding.

c) Approach to evaluate and incorporate research findings into the Emergency Management Program, where appropriate.

d) Engagement audiences and approaches.

e) Information and investment tracking requirements.

1.3 Definitions

1.3.1 **Drills –** A planned activity that tests a single or specific operation or function. Drills are commonly used to provide training on new equipment or test new procedures; to practice and maintain skills; or to prepare for more complex exercises.

1.3.2 **Potentially Affected Coastal Local Governments** - As per the definitions in Schedule B of the BC Environment Assessment Office (amended) Certificate, the entities listed in Appendix B, and the local governments within them that border the ocean.

1.3.3 **Research Participation** – Research studies that Trans Mountain leads, supports, or is otherwise involved in.

1.3.4 **Research Initiative** – An evaluation that involves the use of scientific methods to analyze and collect information on a topic of interest.

1.3.5 **Research Study** – Is used interchangeably with the term research initiative and carries the same meaning.

2.0 RELEVANT STANDARDS AND DOCUMENTS

The following Trans Mountain documents are relevant to the administration and operation of the Emergency Management Research Standard:

- *Liaison/Continuing Education/Consultation Plan*
- *Technology Review Process*

3.0 RESPONSIBILITY FOR COMPLIANCE

3.1 Emergency Management Program Personnel

Emergency Management Program Personnel (as assigned) are responsible for:

3.1.1 Reviewing research findings and presenting enhancement opportunities to the Manager, Emergency Management for incorporation to the Emergency Management Program.

3.1.2 Identifying opportunities for research initiative participation by Trans Mountain.

3.1.3 Preparing research engagement material.

3.1.4 Preparing research regulatory reports.

3.1.5 Maintaining the Research Information Tracking Document.

3.2 Manager, Emergency Management

The Manager, Emergency Management is responsible for:

3.2.1 Reviewing proposed research initiatives and recommending participation by Trans Mountain.

3.2.2 Assessing the incorporation of applicable research findings into the Emergency Management Program.

3.2.3 Approving engagement material developed by Emergency Management Program Personnel.

3.2.4 Attending Emergency Management Advisory Committee meetings to discuss the status of current research initiatives.

3.2.5 Providing oversight to Emergency Management Program Personnel in the development of research regulatory reports.

3.2.6 The annual review of this document and ensuring compliance with regulatory requirements.

3.3 Director, Emergency Management

The Director, Emergency Management is responsible for:

3.3.1 Approving Trans Mountain participation in research initiatives, including research funding and/or allocation.

3.3.2 Approving incorporation of identified research findings into the Emergency Management Program.

3.3.3 Leading Emergency Management Advisory Committee discussions on the status of current research initiatives.

3.3.4 Maintaining the Research Investment Tracking Document.

3.3.5 Providing oversight and direction to the Manager, Emergency Management in the development, implementation, and maintenance of this Standard.

3.3.6 Reviewing and approving suggested changes to this Standard prior to implementation and Change Management Request (CMR).

4.0 REGULATORY BACKGROUND

This Standard complies with the requirements of the following regulations:

4.1 BC Environment Assessment Office (EAO)

4.1.1 The EAO Environmental Assessment Certificate for the Trans Mountain Expansion Project -amended (2022), Schedule B, Condition 35 requires the Holder to provide a report regarding the current and future research programs that it is leading, jointly leading, supporting, or otherwise involved in regarding the behaviour and recovery of heavy oils spills in freshwater and marine aquatic environments, including research programs with the objective of providing spill responders with improved information on how to effectively respond to spills; the report must contain the information contained in (a) to (g).

4.1.2 The EAO Environmental Assessment Certificate for the Trans Mountain Expansion Project – amended (2022), Schedule B, Condition 35 requires the Holder to develop the report in consultation with the B.C. Ministry of Environment and Climate Change Strategy (MOE), B.C. Ministry of Energy, Mines, and Low Carbon Innovation (EMLI), B.C. Oil and Gas Commission (OGC), Environment and Climate Change Canada (ECCC), Canadian Coast Guard (CCG), Indigenous Groups, and Potentially Affected Coastal Local Governments.

4.1.2.1 The EAO Environmental Assessment Certificate for the Trans Mountain Expansion Project (2022), Schedule B, Condition 3 requires the Holder to consult a particular party or parties regarding the content of a plan, program, or other document, where a condition of the Certificate requires the Holder to consult a particular party or parties and must comply with the information in (a) to (e).

4.1.3 The EAO Environmental Assessment Certificate for the Trans Mountain Expansion Project (2022), Schedule B, Condition 35 requires the Holder to provide the report to the BC EAO, MOE, EMLI, OGC, ECCC, CCG, Indigenous Groups, and Potentially Affected Coastal Local Governments every five years following the commencement of Operations of Line 2, during the period of Operations, or as otherwise authorized by the EAO.

5.0 RESEARCH OVERVIEW

5.1 Topics of Study

Research participation by Trans Mountain focuses on studies associated with the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments and/or those with the objective of providing spill responders with improved information on how to effectively respond to spills. Current ad future research studies must include and/or incorporate one or more of the following topics:

- Physical and chemical properties of the oil (including blends) and other products intended to be shipped from the Westridge Marine Terminal.
- Product weathering.
- Dispersion and oil/sediment interactions.
- Product submergence.
- Product behaviour and cleanup following in-situ burning.
- Cleanup and remediation options for sediments and shorelines.

5.2 Funding of Research Studies

The Director, Emergency Management holds the authority to determine which potential research initiatives Trans Mountain will lead, jointly lead, or support. If a potential research initiative is approved, funding shall be provided, or allocated, on behalf of Trans Mountain to ensure the research is undertaken and concluded within a specific period per the research project agreement.

5.3 Incorporating Findings into the Emergency Management Program

The following process is utilized to continually improve the Emergency Management Program through the incorporation of research findings and outputs:

5.3.1 Review of Research Findings

5.3.1.1 Emergency Management Program Personnel review research findings and/or outputs for applicability to the continual enhancement of the Emergency Management Program.

5.3.1.2 Emergency Management Program Personnel present the findings to the Manager, Emergency Management for assessment.

5.3.2 Assessment and Approval of New Procedures, Equipment, and/or Technology

5.3.2.1 All potential enhancement opportunities, including procedures, equipment, and/or technology will be assessed, and approved if applicable, in accordance with the *Emergency Management Technology Review Process*.

5.4 Research Engagement – External Audiences

Trans Mountain utilizes the following approaches to share research findings with select Government entities, Indigenous Groups, and Local Coastal Governments and to request input on existing and/or new research initiatives. See Section 5.6. Research Engagement - Audiences for list of entities.

5.4.1 Electronic Communications

5.4.1.1 Electronic forms of communications, including the Trans Mountain website, emails, and blog posts, are used to provide external entities with updates on research initiatives supported by Trans Mountain and to share research specific resources.

5.4.2 Formal Correspondence

5.4.2.1 Letters addressed to emergency spill response equipment vendors are used to request research studies and findings that support new emergency spill response equipment.

5.4.3 Electronic Mail

5.4.3.1 Electronic newsletters are used to communicate past and current research initiatives, enhancements of the Emergency Management Program, and request feedback and input on existing and/or new initiatives.

5.4.4 Work Groups and Committees

5.4.4.1 Inter-agency work groups and committees are used to share results that have been used to enhance the Emergency Management Program and identify opportunities for participation by Trans Mountain.

5.4.5 Conferences

5.4.5.1 Conferences are used to communicate research initiatives being supported by Trans Mountain, share research findings that have enhanced the Emergency Management Program, and identify research opportunities for participation by Trans Mountain.

5.5 Research Engagement – Spill Responders

Trans Mountain utilizes the following approaches to share research findings with spill responders to provide updated information on how to effectively respond to spills and to support the incorporation of the results of research into their emergency preparedness plans and programs, as appropriate. See Section 5.6. Research Engagement - Audiences for list of entities.

5.5.1 Formal Correspondence

5.5.1.1 Formal letters are used to share research findings that have enhanced the Emergency Management Program and to support the incorporation of the results into their emergency preparedness plans and programs.

5.5.2 Work Groups and Committees

5.5.2.1 Inter-agency work groups and committees, including the Industry Association Committee, are used to share results that have been used to enhance the Emergency Management Program and identify opportunities for participation by Trans Mountain.

5.5.3 Conferences

5.5.3.1 Conferences are used to communicate research initiatives being supported by Trans Mountain and to share research findings that have enhanced the Emergency Management Program and to support the incorporation of the results into their emergency preparedness plans and programs.

5.6 Research Engagement – Audiences

Trans Mountain engages with the following external audiences on the topic of research:

5.6.1 Indigenous Groups, including:

- See Appendix A for the list of BC Indigenous Groups.

5.6.2 Government Entities, including:

- Alberta Agencies
- Canada Energy Regulator (CER)
- Environment and Climate Change Canada (ECCC)
- B.C. Ministry of Environment (MOE)
- B.C. Ministry of Energy, Mines, and Low Carbon Innovation (EMLI) *(formerly B.C. Ministry of Natural Gas Development; MNGD)*
- B.C. Oil and Gas Commission (OGC)
- U.S. State and Federal Agencies

5.6.3 Potentially Affected Coastal Local Governments, including:

- See Appendix B for the list of potentially affected BC coastal local governments.

5.6.4 Spill Responders, including:

- Canadian Coast Guard (CCG)
- United States Coast Guard (USCG)
- Western Canada Marine Response Corporation (WCMRC)
- Western Canadian Spill Services (WCSS)

5.7 Investment and Information Tracking

5.7.1 The Director, Emergency Management maintains the *Research Investment Tracking Document* to track the total and study specific funding that Trans Mountain has contributed/allocated to research.

For details on funding provided on behalf of Trans Mountain, refer to Research Investment Tracking Document.

5.7.2 The Emergency Management Program Personnel maintain the *Research Information Tracking Document* to record and maintain the following information:

- Topics of research satisfied.
- Status of research initiatives.
- Research findings incorporated into the Emergency Management Program.

For details on research specific information, refer to Research Information Tracking Document.

5.8 Regulatory Reporting

5.8.1 Trans Mountain develops regulatory reports to be submitted to the CER, BC EAO, MOE, EMLI, OGC, ECCC, CCG, BC Indigenous Groups, and BC Potentially Affected Coastal Local Governments at the following intervals:

- Prior to the commencement of Operations of Line 2
- 1 year after commencement of Operations of the Line 2.
- Every 5 years following during the period of Operations of the Line 2.

5.8.2 Emergency Management Program Personnel will utilize the *Research Information Tracking Document* as a reference during development of each regulatory report.

5.8.3 Regulatory reports detail the following:

- Research topics currently being supported by Trans Mountain and the scope, objectives, methods, and timeframes for each topic.
- A statement of the research funding provided.
- Research findings incorporated into the Emergency Management Program.
- Activities and outputs shared with spill responders for consideration for incorporation into their emergency preparedness plans and programs.

6.0 IMPLEMENTATION

6.1 General

6.1.1 The implementation of this Standard is demonstrated by the application of research funding, and the engagement, incorporation, reporting, and tracking process.

6.2 Ownership of Documentation and Materials

6.2.1 The Emergency Management Department owns all documentation associated with research. Emergency Management Program Personnel are responsible for conducting the annual review of these documents and associated materials.

7.0 REVIEW AND REVISIONS TO THIS STANDARD

7.1 Review of this Standard

7.1.1 The document is owned by the Manager, Emergency Management.

7.1.2 The Manager, Emergency Management will assess the effectiveness of this Standard on an annual basis and will maintain a record of the assessment. Trans Mountain recognizes that Standard evaluation will help ensure the goals and objectives for emergency equipment operations and maintenance are being met and seeks opportunities for improvement.

7.1.3 The review is done annually and whenever these documents and materials are affected by changing requirements or regulations. The review is done to ensure accuracy and compliance with current regulations.

7.1.4 Following any major evaluation, program changes or modifications to the Emergency Management Program, a determination will be made as to what additional resources or what activities are needed or what resources and activities should be ceased. Changes to this Standard may include resources, frequency, method, or other enhancements.

7.1.5 Any substantial changes will be communicated to Senior Management using the Management of Change procedure.

7.2 Management of Change

7.2.1 This Standard is a Controlled Document subject to the requirements of the *5.1 Controlled Document Standard.*

7.2.2 Substantial changes to procedures must be managed and approved through the Operational Management of Change Request (CMR) process.

7.2.3 For details, refer to Document Administration and Management Standard *5.1 Controlled Document Standard* and the Operations and Maintenance Standard *4.1 Management of Change Standard.*

APPENDIX A: ENGAGEMENT AUDIENCES – BC INDIGENOUS GROUPS

Trans Mountain engages with the following BC Indigenous Groups on the topic of research:

- Adams Lake Indian Band
- Aitchelitz First Nation
- Ashcroft Indian Band
- Boothroyd Indian Band
- Boston Bar First Nation
- Canim Lake Band
- Chawathil First Nation
- Cheam First Nation
- Coldwater Indian Band
- Cook's Ferry Indian Band
- Cowichan Tribes
- Ditidaht First Nation
- Esquimalt Nation
- Halalt First Nation
- Hwlitsum First Nation
- Katzie First Nation
- Kwantlen First Nation
- Kwaw-kwaw-Apilt First Nation
- Kwikwetlem First Nation
- Lake Cowichan First Nation
- Leq'á:mel First Nation
- Lheidli-T'enneh First Nation
- Lhtako Dene Nation
- Little Shuswap Lake Band
- Lower Nicola Indian Band
- Lower Similkameen Indian Band
- Lyackson First Nation
- Lytton First Nation
- Maa Nulth First Nations
- Malahat First Nation
- Matsqui First Nation
- Musqueam Indian Band
- Neskonlith Indian Band
- Nlaka'pamux Nation Tribal Council
- Nooaitch Indian Band
- Okanagan Indian Band
- Oregon Jack Creek Band
- Pacheedaht First Nation
- Pauquachin First Nation
- Penelakut Tribe
- Penticton Indian Band
- Peters First Nation
- Popkum First Nation
- Scia'new First Nation
- Scowlitz First Nation
- Seabird Island Band
- Semiahmoo First Nation
- Shackan Indian Band
- Shxw'ow'hamel First Nation
- Shxwha:y Village
- Simpcw First Nation
- Siska Indian Band
- Skawahlook First Nation
- Skeetchestn Indian Band
- Skowkale First Nation
- Skuppah Indian Band
- Skwah First Nation
- Snaw-Naw-As/Nanoose First Nation
- Snuneymuxw First Nation
- Songhees Nation
- Soowahlie Indian Band
- Spuzzum First Nation
- Squamish Nation
- Squiala First Nation
- Stz'uminus First Nation
- Semá:th First Nation
- Tk'emlups te Secwepemc
- Tsartlip First Nation

- Tsawout First Nation
- Tsawwassen First Nation
- Tseycum First Nation
- Tsleil-Waututh Nation
- Tzeachten First Nation
- Union Bar First Nation
- Upper Nicola Band
- Upper Similkameen Indian Band
- Westbank First Nation
- Whispering Pines
- Yakweakwioose First Nation
- Yale First Nation

APPENDIX B: ENGAGEMENT AUDIENCES – POTENTIALLY AFFECTED BC COASTAL LOCAL GOVERNMENTS

Trans Mountain engages with potentially affected BC Coastal Local Governments on the topic of research. This includes the following entities and the local governments within them that border the ocean:

- Alberni-Clayoquot Regional District
- Capital Regional District
- Cowichan Valley Regional District
- Islands Trust
- Metro Vancouver Regional District
- Nanaimo Regional District
- Squamish-Lillooet Regional District
- Sunshine Coast Regional District

APPENDIX B RESEARCH TOPICS BY PAST PROJECTS[2]

	Comparison of Behaviour of Spilled Oils	Seabed Cleanup & Assessment (uSCAT)	Gainford Studies	Salish Sea Oil Spill Trajectory	Oil Mineral Aggregate Formation
Physical and Chemical Properties of Oil and other Products shipped from Westridge Marine Terminal	Yes	Yes	Yes	Yes	Yes
Product Weathering	Yes	No	Yes	Yes	Yes
Dispersion and oil/sediment interactions	Yes	No	Yes	Yes	Yes
Product Submergence	Yes	Yes	Yes	No	Yes
Product behaviour and cleanup following in-situ burning	No	No	Yes	No	No
Cleanup and remediation options for sediments and shorelines	No	Yes	Yes	Yes	No

[2] Note: The Shoreline Treatment Decision Support Tool has not been included in table, as it does not specifically study the above topics.

APPENDIX C AGENCIES[3]

BC Ministry of Environment (BC MOE)

BC Oil & Gas Commission (BC OGC)

Canada Energy Regulator (CER)

Canadian Coast Guard (CCG)

Environment & Climate Change Canada (ECCC)

Ministry of Energy, Mines & Low Carbon Innovation (EMLI) *(formerly Ministry of Natural Gas and Development [MNGD])*

Natural Resources Canada (NRCan)

[3] List of agencies per BC EAO Condition 35.

APPENDIX D INDIGENOUS GROUPS[4]

Adams Lake Indian Band
Aitchelitz First Nation
Ashcroft Indian Band
Boothroyd Indian Band
Boston Bar First Nation
Canim Lake Band
Chawathil First Nation
Cheam First Nation
Coldwater Indian Band
Cook's Ferry Indian Band
Cowichan Tribes
Ditidaht First Nation
Esquimalt Nation
Halalt First Nation
Hwlitsum First Nation
Katzie First Nation
Kwantlen First Nation
Kwaw-kwaw-Apilt First Nation
Kwikwetlem First Nation
Lake Cowichan First Nation
Leq'á:mel First Nation
Lheidli-T'enneh First Nation
Lhtako Dene Nation
Little Shuswap Lake Band
Lower Nicola Indian Band
Lower Similkameen Indian Band
Lytton First Nation
Maa Nulth First Nations
Malahat First Nation
Matsqui First Nation
Musqueam Indian Band
Neskonlith Indian Band
Nlaka'pamux Nation Tribal Council
Nooaitch Indian Band
Okanagan Indian Band
Oregon Jack Creek Band
Pacheedaht First Nation
Pauquachin First Nation
Penelakut Tribe
Penticton Indian Band
Peters First Nation
Popkum First Nation
Scia'new First Nation
Scowlitz First Nation
Seabird Island Band
Semiahmoo First Nation
Shackan Indian Band
Shxw'ow'hamel First Nation
Shxwha:y Village
Simpcw First Nation
Siska Indian Band
Skawahlook First Nation
Skeetchestn Indian Band
Skowkale First Nation
Skuppah Indian Band
Skwah First Nation
Snaw-Naw-As/Nanoose First Nation
Snuneymuxw First Nation
Songhees Nation
Soowahlie Indian Band
Spuzzum First Nation
Squamish Nation
Squiala First Nation
Stz'uminus First Nation
Semá:th First Nation
Tk'emlups te Secwepemc
Tsartlip First Nation
Tsawout First Nation
Tsawwassen First Nation
Tseycum First Nation
Tsleil-Waututh Nation
Tzeachten First Nation
Union Bar First Nation
Upper Nicola Band
Upper Similkameen Indian Band
Westbank First Nation
Whispering Pines
Yakweakwioose First Nation
Yale First Nation

[4] List of Indigenous groups per Schedule B Table of Conditions for an Environmental Assessment Certificate.

APPENDIX E COASTAL LOCAL GOVERNMENTS[5]

Alberni-Clayoquot Regional District
Bamfield - Area A
City of Port Alberni
District of Tofino
District of Ucluelet
Long Beach – Area C

Capital Regional District
City of Colwood
City of Langford
City of Victoria
District of Central Saanich
District of Highlands
District of Metchosin
District of North Saanich
District of Oak Bay
District of Saanich
District of Sooke
Juan de Fuca Electoral Area
Salt Spring Island Electoral Area
Southern Gulf Islands Electoral Area
Town of Sidney
Town of View Royal
Township of Esquimalt

Cowichan Valley Regional District
City of Duncan
Cobble Hill - Electoral Area C
Cowichan Bay Village - Electoral Area D
District of North Cowichan
Gulf Islands and Saltair - Electoral Area G
Malahat and Mill Bay - Electoral Area A
North Oyster and Yellow Point - Electoral Area H
Town of Ladysmith

Islands Trust Area
Ballenas - Winchelsea Local Trust Area
Bowen Island Municipality
Denman Island Local Trust Area
Gabriola Island Local Trust Area
Galiano Island Local Trust Area
Gambier Island Local Trust Area
Hornby Island Local Trust Area
Islands Trust
Lasqueti Island Local Trust Area
Mayne Island Local Trust Area
North Pender Island Local Trust Area
Salt Spring Island Local Trust Area
Saturna Island Local Trust Area
South Pender Island Local Trust Area
Thetis Island Local Trust Area

Metro Vancouver Regional District
Bowen Island Municipality
City of Burnaby
City of Port Moody
City of Richmond
City of Surrey
City of Vancouver
City of White Rock
Corporation of Delta
District of North Vancouver
District of West Vancouver
Tsawwassen First Nation
University Endowment Lands\Metro Vancouver Electoral Area "A"
Village of Anmore
Village of Belcarra
Village of Lions Bay

[5] List of Coastal Local Governments per Reconsideration of Environmental Assessment Certificate.

Nanaimo Regional District

Bowser, Qualicum Bay and Deep Bay - Electoral Area H
Cedar, South Wellington, Yellowpoint & Cassidy - Electoral Area A
City of Nanaimo
City of Parksville
District of Lantzville
French Creek, Pareil and Little Qualicum - Electoral Area G
Gabriola, DeCourcy and Mudge Islands - Electoral Area B
Nanoose Bay - Electoral Area E
Town of Qualicum Beach

Squamish-Lillooet Regional District

District of Squamish
Porteau Cove, Furry Creek & Britannia Beach/SCRD Electoral Area D

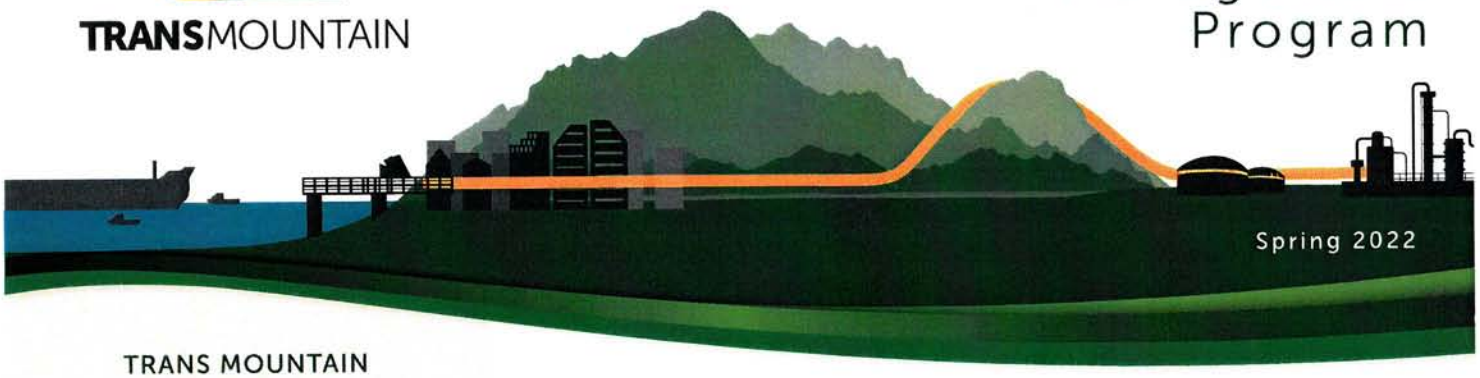
Sunshine Coast Regional District

District of Sechelt
Egmont / Pender Harbour - Electoral Area A
Elphinstone - Electoral Area E
Halfmoon Bay - Electoral Area B
Roberts Creek - Electoral Area D
Sechelt Indian Government District
Town of Gibsons
West Howe Sound - Electoral Area F

APPENDIX F 2018 AND 2022 NEWSLETTERS

TRANSMOUNTAIN

EMERGENCY Management Program



TRANS MOUNTAIN
VALUES and ENCOURAGES INPUT for CONSIDERATION
ON ITS EMERGENCY MANAGEMENT PROGRAM.



Our emergency response plans are available online at transmountain.com/emergency-response-plans.

If you would like to provide feedback or discuss potential research initiatives, please contact: Emergency_Management@transmountain.com

TRANS MOUNTAIN
FINANCIAL CONTRIBUTIONS

More than **$2 MILLION** has been allocated thus far **for research** on the fate and behaviour of bitumen.

RESEARCH INITIATIVES

Trans Mountain's Emergency Management (EM) Program comprises a comprehensive set of standards and procedures based on a system of continual improvement.

AVENUES TO IDENTIFY IMPROVEMENTS INCLUDE, but are not limited to:

- Inputs for consideration from Indigenous groups and stakeholders
- Canada Energy Regulator (CER) and British Columbia Environmental Assessment Office (BC EAO) condition requirements
- New technologies and research findings

The Certificate granted by the BC EAO for the Trans Mountain Expansion Project (TMEP) was accompanied by several Conditions. As part of the recent provincial reconsideration process, BC EAO amended the scope of consultation for Condition 35 - Fate and Behaviour of Bitumen Research, by broadening the list of stakeholders to include potentially affected coastal local governments.

Trans Mountain will work with **spill responders** to support the incorporation of the **research results** into its **emergency preparedness plans.**

BC EAO Condition 35 requires Trans Mountain to provide a report regarding the current and future research programs it is leading, jointly leading, supporting or otherwise involved in, concerning the behaviour and recovery of heavy oils spilled in freshwater and marine aquatic environments.

The Condition requires Trans Mountain to report how it is incorporating any applicable research results into its emergency preparedness and response plans; and that Trans Mountain will work with spill responders to support the incorporation of the research results into its emergency preparedness plans and programs.

The Condition includes research topics on the different physical and chemical properties of the oil (including blends) and other products intended to be shipped from Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup remediation options for sediments and shorelines.





In case of a pipeline emergency or to report odours, call 24 hours: 1.888.876.6711

TRANS MOUNTAIN IS SUPPORTING A

NEW RESEARCH PROGRAM

to complement the **BC EAO Condition 35** and to **IMPROVE incident response.**

SUBMERGED OIL DETECTION
Joint Industry Project

Trans Mountain is supporting a new, joint-industry project being managed by C-FER Technologies. The goal of the project is to minimize the environmental impact of hydrocarbon releases into waterways by understanding the factors that affect the performance of various leak detection technologies.

The project is being conducted in five phases with the first two already underway:

- Define technology requirements
- Review technologies
- Test facility design and setup
- Technology testing
- Analysis and reporting

A Steering Committee has been established to provide input on performance requirements and details on typical application environments in which these technologies may be deployed.

The results of this project have the potential to enhance non-floating oil monitoring and emergency response plans.



TRANSMOUNTAIN

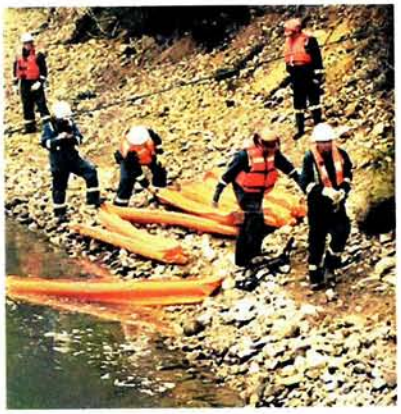
ONGOING Research

Sustainable Development – Experimental Lakes Area

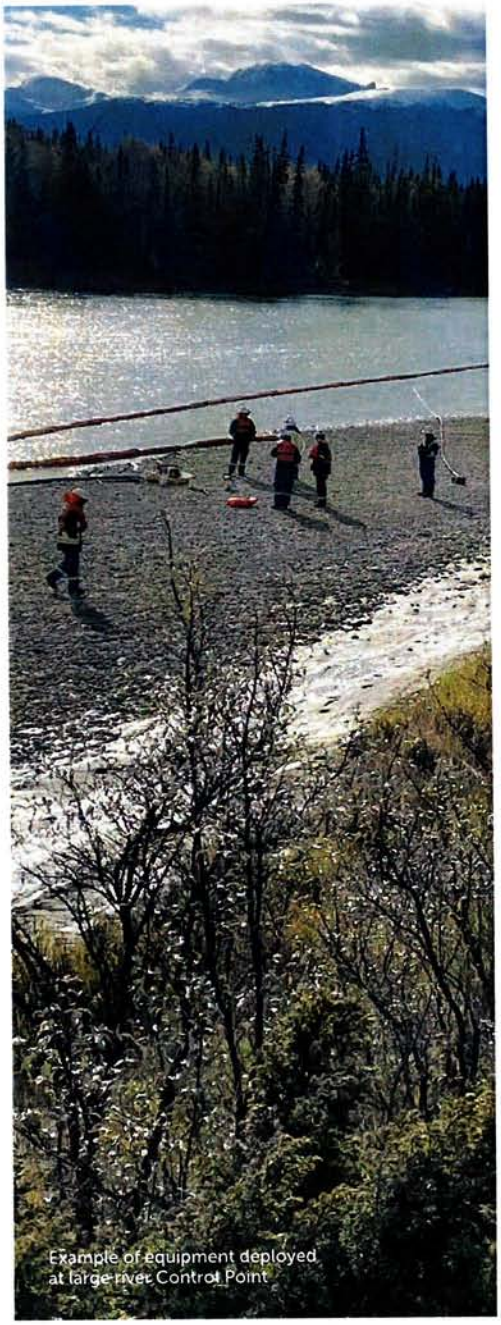
Trans Mountain is supporting the International Institute for Sustainable Development – Experimental Lakes Area Program. This multi-year industry and government collaborative program is examining the fate and behaviour of diluted bitumen and conventional heavy crude oil in a freshwater environment.

This program is being conducted in three stages, with two already completed:

1. Establishment of land-based microcosms to examine the chemical and physical behaviour of diluted bitumen in freshwater
2. Re-creation of a controlled oil spill to determine if degradation is different for diluted bitumen and conventional heavy crude oil, and if wave energy has a significant effect on oil degradation rates in shoreline freshwater environments
3. Comparison of cleanup methods



Emergency and spill response booms specifically selected for water-based spill containment and recovery



Example of equipment deployed at large river Control Point

RECENTLY COMPLETED Research

Product Acceptance Standard

Trans Mountain supported an independent, science-based multimillion-dollar study commissioned by the Canadian Energy Pipeline Association (CEPA) and the Canadian Association of Petroleum Producers (CAPP). The study evaluated and compared the physical and chemical properties of various types of crude oil under different environmental conditions.

The findings of the study concluded that both conventional and oilsand-derived products tested remain floating in the marine environment for extended periods of time and diluted bitumens do not separate into their original bitumen and diluent after they spill because the hydrocarbons in both are infinitely soluble to each other.

The findings of the study led to the development of fact sheets on oil properties and behaviour under a range of environmental conditions. Trans Mountain has enhanced its Non-Floating Oil Assessment and Response Plan (Plan) by incorporating these fact sheets to help guide initial response actions and assist responders to determine the most effective countermeasure.

The Plan can be found on the Trans Mountain website at transmountain.com/emergency-response-plans.

Underwater Seabed Cleanup and Assessment Technique Guide

Trans Mountain, together with Western Canada Marine Response Organization (WCMRC), Canadian Coast Guard (CCG), Natural Resources Canada (NRCan) and Fisheries and Oceans Canada (DFO), supported the development of an Underwater Seabed Cleanup and Assessment Technique (uSCAT) Guide.

The uSCAT Guide identifies standardized strategies for the detection and assessment of nearshore non-floating oil in varying environments. In addition, the uSCAT Guide provides methods for recording, storing and processing response data.

Trans Mountain has enhanced its Non-Floating Oil Assessment and Response Plan by referencing the uSCAT Guide to support planning, decision-making and operational response to nearshore non-floating oil. The uSCAT Guide is accessible via Trans Mountain's Non-Floating Oil Assessment and Response Plan at transmountain.com/emergency-response-plans. Alternatively, it can be found online at uscat.ca.

Trans Mountain **has enhanced** it's Non-Floating Oil Assessment and **Response Plan** by incorporating **fact sheets** to help guide initial response.



Responders testing water-based spill containment and recovery techniques



Responders testing water-based spill containment and recovery techniques for oil at risk of becoming non-floating



Responders verifying the contents of Trans Mountain's emergency response trailers

Other COMPLETED Research

As a proponent of advancing spill response and recovery technology, Trans Mountain has supported a number of research studies to better understand the behaviour of oil and the performance of oil recovery technology.

In 2012, Trans Mountain, together with WCMRC, completed field-scale research that evaluated the fate and behaviour of representative samples of diluted bitumen discharged into a water environment and subjected to various conditions of weathering. Referred to as the Gainford Studies, the project also assessed the performance of various types of oil spill recovery equipment and found that spilled diluted bitumen can be successfully removed from the surface of the water using traditional mechanical equipment.

Trans Mountain supported an investigation in 2016 to better understand the potential interaction between oil and sediment in the Lower Fraser River and the Salish Sea. The conclusions demonstrated a low potential for oil and sediment particles to interact and then aggregate together as oil mineral aggregate (OMA) due to the natural conditions in the Lower Fraser River and Salish Sea. This aligns with recent work conducted by other researchers, indicating the unlikeliness for OMAs to form in coastal BC waters.

In 2016, Trans Mountain also supported an evaluation that performed modelling of spilled hydrocarbon fate and behaviour, and the associated effects at five representatives sites along the shipping route in the Salish Sea. The findings concluded that due to variables, including wind and tides, at modelled sites, hydrocarbon does not migrate in a uniform pattern and a single model cannot be predictive of a real outcome at a particular site.

> Trans Mountain **added** a **non-floating** oil trailer to its inventory of **spill response equipment.**

The results of these studies were considered during the development of the Trans Mountain Non-Floating Oil Assessment and Response Plan, which is designed to provide guidance for the initial spill assessment and response actions to spilled oil that is at risk of or has become non-floating in an inland water environment. The Plan is available online at transmountain.com/emergency-response-plans.

In addition, Trans Mountain added a non-floating oil trailer to its inventory of spill response equipment. The trailer contains emergency and spill response equipment specifically selected for water-based spill containment and recovery, including dewatering bags, underwater viewing boxes, silt fencing and an aqua dam.

TRANS MOUNTAIN VALUES and ENCOURAGES INPUT for CONSIDERATION ON ITS EMERGENCY MANAGEMENT PROGRAM.

If you would like to provide feedback or discuss research initiatives, please email:

Emergency_Management@transmountain.com

We welcome and encourage your feedback about our Emergency Management newsletter:

TRANSMOUNTAIN

COMMITTED TO SAFETY SINCE 1953.

emergency_management@transmountain.com | 1.866.268.3001

transmountain.com

KINDER MORGAN CANADA EMERGENCY MANAGEMENT PROGRAM:

Research Initiatives

The Kinder Morgan Canada Inc. (KMC) Emergency Management (EM) Program is based on a system of continual improvement. Avenues to identify improvements include:

- Natural evolution of industry Emergency Management practices
- Feedback from Operations staff and emergency exercises
- Input for consideration from Aboriginal communities and stakeholders
- Regulatory changes
- National Energy Board (NEB) and British Columbia Environmental Assessment Office (BC EAO) condition requirements
- New technologies and research findings

Trans Mountain emergency response plans and strategies currently meet, and often exceed Regulatory requirements. Research findings are directed towards further improvements.



BC EAO Condition 35 – Fate and Behaviour of Bitumen Research

Trans Mountain must provide a report regarding the current and future research programs it is leading, jointly-leading, supporting or otherwise involved in regarding the behaviour and recovery of heavy oils spilled in fresh water and the marine aquatic environment.

The condition includes potential research topics on the different physical and chemical properties of the oil and other products intended to be shipped from the Westridge Marine Terminal, product weathering, dispersion and oil/sediment interactions, product submergence, product behaviour and cleanup following in-situ burning, and cleanup and remediation options for sediments and shoreline. Additionally, the condition requires Trans Mountain to report how it is incorporating any applicable research results into its emergency preparedness and response plans; and that Trans Mountain will work with spill responders to support the incorporation of the results of the research into its emergency preparedness plans and programs.

Trans Mountain must provide the report to Aboriginal groups and to the BC Environment Assessment Office (BC EAO), Ministry of Environment (MoE), Ministry of Natural Gas Development (MNGD) and Oil and Gas Commission (OGC); and federally, the Environment and Climate Change Canada (ECCC), National Energy Board (NEB) and the Canadian Coast Guard (CCG), prior to the commencement of Project operations and must provide progress updates one year and five years, after commencement of operations.

Trans Mountain is currently conducting and funding research in support of BC EAO Condition 35 and to improve spill response. This includes:

National study to compare the Fate and Behaviour of Crude Oils on Water

An independent, science-based multi-million-dollar study was commissioned by the Canadian Energy Pipeline Association (CEPA) and the Canadian Association of Petroleum Producers (CAPP). The study is designed to evaluate and compare the physical and chemical properties of various types of crude oil that move in North America. More than 10 types of crude oil, including several diluted bitumen products are undergoing a number of tests to determine how the fresh and weathered oils behave in various marine, estuarine and freshwater settings, under different environmental conditions.

A scientific advisory committee was established to provide the technical knowledge and guidance necessary to facilitate the study. The committee members are from Environment and Climate Change Canada, Fisheries and Oceans Canada, the National Energy Board, Natural Resources Canada and include a world-renowned independent spill response expert.

The study is in progress and results will be publicly available at the end of 2018.

Examining the potential effects of controlled spills of diluted bitumen and conventional heavy crude oil

Trans Mountain is supporting the International Institute for Sustainable Development-Experimental Lakes Area Program. This unique multi-year industry and government collaborative program is examining the fate and behavior of diluted bitumen and conventional heavy crude oil in a freshwater shoreline environment. Baseline chemical and biological information was collected in 2017 for a natural lake study site using an actual Canadian lake.

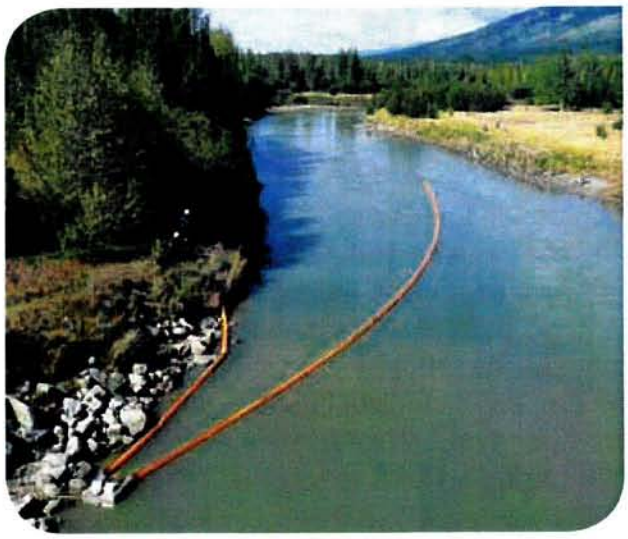
In 2018, the International Institute for Sustainable Development will be conducting a controlled spill of oil to quantify the efficiency of immediate product recovery and further analysis of residual oil constituents. Potential impacts will be evaluated for 16 weeks. The information from this portion of the project will be used to determine if degradation is significantly different for diluted bitumen and conventional heavy crude oil, and if wave energy has a significant effect on oil degradation rates in the freshwater shoreline environment. The program will also compare cleanup methods for the oil spilled.

A scientific advisory committee is expected to be established for this project in 2018; invitations to participate will be extended to ECCC, DFO and the NEB among others.

ENHANCEMENT OF THE EMERGENCY MANAGEMENT PROGRAM

Trans Mountain will assess the findings from all the stated studies to identify opportunities to improve spill response strategies.

Findings from the Spill Response Technology Review Study has already led to improvements in the KMC Emergency Management Program and response strategies, including, however not limited to, the purchase of specialized equipment and the development of a Sunken and Submerged Oil Plan.



Underwater Seabed Cleanup and Assessment Technique Guide

Support was provided by Trans Mountain for the development of an Underwater Seabed Cleanup and Assessment Technique Guide (uSCAT), together with Western Canada Marine Response Corporation (WCMRC), CCG, NRCan and DFO.

The guide will specify common language, identify strategies for searching for sunken oil and describe techniques for documenting and communicating its distribution.

As part of this research, an uSCAT science advisory committee was established including representatives from ECCC, DFO, CCG, NRCan and independent spill experts to provide guidance and feedback on the direction of this initiative.

Trans Mountain Financial Contributions

Trans Mountain has allocated more than $2 million dollars thus far to research into the fate and behaviour of bitumen.

Spill Response Technology Review Study

Trans Mountain participated in a joint industry project including the governments of British Columbia (BC Oil and Gas Commission) and Alberta to independently evaluate and review current inland spill response technologies focusing on diluted bitumen. The purpose of the Inland Spill Response Joint Industry Program was to conduct a comprehensive review of the current technology that exists for inland spill response oil recovery; apply the existing technology to four scenarios; identify suitable technologies; and identify gaps in the existing current technology. The review focused on diluted bitumen.

The study was completed in 2017.

The intent of further research is to add to the pool of knowledge about oil fate and behaviour that can be used to support decision-making during a response and to improve oil spill response overall.



Other Completed Research

Salish Sea Oil Spill Trajectory

Trans Mountain supported the evaluation of spilled hydrocarbon fate and behavior, and the associated effects at five representative sites along the shipping route in the Salish Sea. Modelling at these sites predicted spill trajectories, probability of shoreline oiling and a number of additional variables, based on measured crude oil properties and more than 360 simulations. The modelling considered season-specific behaviour (wind direction and speed, temperature, etc.), trajectories and oil fate.

The modelling demonstrated that a single spill scenario evaluation should not be assumed, nor be expected, to predict actual outcomes at a particular site, or for particular resources of interest. From a practical perspective, the models indicated where spilled oil could go in the event of an accident. WCMRC used the findings to decide on the planning standards for selecting the location of new response bases and for equipment with improved response times.

Oil Mineral Aggregates Formation Mechanisms for the Salish Sea and the Lower Fraser River

Building upon the research and observations characterizing the behavior of diluted bitumen in aquatic environments, Trans Mountain supported an investigation to better understand the potential interaction between oil and sediment, in the Lower Fraser River and the Salish Sea. The research findings were presented at the Arctic and Marine Oilspill Program (AMOP) Technical Seminar, Environment and Climate Change Canada in Ottawa, Ontario in 2016.

The research outcomes showed the results were aligned with previous studies, describing the conditions required for oil mineral aggregates to form. Findings regarding oil behaviour on water, particularly the factors influencing the submergence and sinking of oil, influenced the selection and design of response strategies in Trans Mountain's response plans. The findings were shared with WCMRC for consideration in its enhancement of response plans and in the development of its Geographic Response Strategies (GRS).

Gainford Studies

Trans Mountain, together with WCMRC, completed field scale research in 2012. The team evaluated the fate and behavior of representative samples of dilbit discharged into a water environment similar to that of Burrard Inlet, BC and subjected it to various conditions of weathering. The study also assessed the performance of the equipment currently stockpiled by North American oil spill recovery organizations, including WCMRC, and found that spilled diluted bitumen can be successfully removed from the surface of the water using traditional mechanical response equipment.

Research conclusions published in 2016 by Biochemistry PhD, Dr. Heather Dettman of Natural Resources Canada's CanmetENERGY Laboratory in Devon, Alberta supports the results from Gainford. Dr. Dettman observed that diluted bitumen floats when exposed to water at temperatures up to 25 degrees C, and displays similar behaviour as other heavy crude oils when exposed to fresh water. In the unlikely event of a spill, it is amenable to conventional recovery measures such as the use of booming and skimmers.

For more information about research or other aspects of the Trans Mountain Emergency Management Program, please contact:
Jamie Kereliuk, Director, Emergency Management
Jamie_Kereliuk@kindermorgan.com

Moved and Seconded by Councillors Shukin and Donaldson that Council forward the correspondence from Susan Gage, United Old Growth Forests to MEASC for input and comments.

Tina Hansen

From: Mayor and. Council
Subject: FW: United we stand
Attachments: Declaration - United We Stand..pdf

From: Joan Dan <joandan@telus.net>
Sent: October 19, 2022 10:11 AM
To: Mayor and. Council <mayorAndCouncil@metchosin.ca>
Subject: United we stand

Sent from my iPad

Begin forwarded message:

> **From:** Joan Dan <joandan@telus.net>
> **Date:** October 19, 2022 at 8:02:04 AM PDT
> **To:** andy <metchosinmacs@gmail.com>
> **Subject: Fwd: Updated Declaration: Link & attachment**
>
> Hello Mayor and Council,

I was hoping you would agree to being a signatory on the letter below. You will notice that the first signature is from the Union of BC Indian Chiefs. Also Ecojustice, West Coast Environmental Law and many others have signed this. I think it would be lovely if Metchosin was the first Municipality to support this. As I am on the organizing committee I am asking you first. Please consider this.

Sincerely,
Joan Rosenberg

Dear Friends of Old Growth Forests,
I'm writing to you as someone passionately committed to the protection of the last of BC's old growth forests. Two years ago, the BC government promised to protect old growth and they have not kept that promise. So now, a coalition of environmental organizations is organizing a major **Declaration** to end logging in old growth forests, and a **Super-Rally at the BC Legislature on Saturday November 26, 2022.**

The **Declaration** is largely based on the Union of BC Indian Chiefs' recent Resolution and is supported by independent reporting, scientific data, and the urgency of the climate crisis. It's already been signed by over 60 organizations, including environmental, faith, community groups and more. We invite you to add your organization's name by signing on at this link: **Declaration: United We Stand for Old-Growth Forests!** Your

signature on this Declaration will be part of a press release and invitation to participate in the November 26 event in Victoria, BC.

Then, on November 26, we envision a march and **Super-Rally**: the streets of Victoria and the BC Legislature grounds filled with folks from all walks of life, carrying signs which identify their organizations, their communities, and their care for ancient forests and our future generations.

Ultimately, we are aiming for endorsement of the Declaration and for participation in the November 26 March and Super-Rally by a broad range of organizations representing working people, Indigenous peoples, land stewards and knowledge keepers, activists, scientists, youth, educators, communities, celebrities, environmental and social justice groups, faith groups and more.

Please join with us by signing the Declaration! As we gather momentum, we will be asking your organization to promote the rally among your members and communities and if you are able, to mobilize your supporters to participate in the rally. More information to come!

Susan Gage
United For Old Growth Organizing Team

PS: Questions? Please email me at united4oldgrowth@gmail.com

United We Stand for Old Growth Forests!
Declaration, March and Super-Rally
BC Legislature Saturday, November 26, 2022

September 11th marked the 2nd anniversary of the British Columbia government's release of the report of its Old-Growth Strategic Review (OGSR) panel, "A New Future for Old Forests". The report recommended **immediate action to stop logging of the most at-risk old growth forests in BC.** It called for a major shift in BC forestry practices, namely to "Declare conservation of ecosystem health and biodiversity of British Columbia's forests as an overarching priority and enact legislation that legally establishes this priority for all sectors." It called for the full involvement of First Nations communities, the inherent rights and title holders of this land. It called for public reporting that is "vetted, trustworthy, accurate and shared," and included a three-year framework.

In light of overwhelming support for old growth forest protection, **the Horgan government made clear 2020 election promises to implement all 14 recommendations of the OGSR report.** However, two years later, the NDP's response has been poor. Our main critiques are as follows:

- Without on-the-ground measures, the talk-and-log status quo continues, and thousands of hectares of at-risk forests continue to be logged across the province. More than three million hectares of at-risk forest remain vulnerable to logging, and ancient giants are felled daily.
- The government earned a record $1.8 billion in stumpage fees in 2021, but has not provided sufficient funding to First Nations to support immediate deferrals, long term solutions, and their transition to sustainable second growth forestry.
- Despite only one year remaining on the OGSR framework, the government has not established an implementation plan with clear measurable objectives, timelines, accountability, and steps for well-resourced enforcement and evaluation. Limited reports to the public continue to be 'variable, biased, often inaccurate.'
- While we are in a **Code Red** global climate crisis, this is a dangerous failure. Healthy forests are essential to maintaining safe, sustainable communities, critical water ecosystems, biodiversity, salmon habitat and so much more. With more extreme weather, wildfires and flooding, the failure to protect vital forest ecosystems is already life threatening and has decimated some communities in B.C.
- Since the release of the OGSR, well over 1100 people have been arrested, while peacefully defending old-growth forests in multiple parts of B.C., demonstrating the widespread frustration with the NDP government and its failure to keep its promises on this vital issue.

Urgently needed is a just transition for Indigenous nations and forest-dependent communities that protects these carbon-rich ancient forests and their critical role in ensuring a livable future for all.

Today, and every day, we, the undersigned, stand together in an unprecedented show of unity amongst working people, Indigenous land stewards and knowledge-keepers, activists, scientists, youth, educators, communities, celebrities, environmental and social justice groups, faith organizations and more. Standing united against the destruction of old growth forests. Standing strong for future generations.

Our coalition is bringing a broad-based mass mobilization to the BC Legislature that reflects the majority of public will in BC for progressive solutions to the crisis in the woods. Based on the Union of BC Indian Chiefs Resolution 2022-32, and supported by independent reporting, the scientific data on old growth, and the urgency of the climate crisis, we demand that the BC NDP government:

- **Immediately halt logging in at risk old growth forests** and additional areas suggested by First Nations
- Provide **fulsome and immediate financial support for First Nations** to implement logging deferrals and resilience planning on their unceded territories, including Indigenous conservation strategies and compensation for any lost revenues and employment as a result of deferrals
- Pursue full protection as the goal for all deferral areas, and invest to make protection the best economic option
- Fulfill its election promise to **implement all 14 recommendations** of the OGSR panel by September 2023, within the 3-year timeline which government promised, including biodiversity legislation for all sectors, and provide regular progress reports
- Urgently move toward the paradigm shift and resilience planning outlined in the OGSR recommendations, **prioritizing ecosystem integrity and biodiversity** as the highest priority of forest management and as essential in the climate crisis
- Implement a just transition for all communities while moving toward a sustainable, second-growth forestry
- Provide: regular and detailed updates on deferrals and long-term solutions to safeguard and restore at-risk old growth; communications on all forest stewardship related decision-making; and reports on timelines and progress to ensure **transparency and accountability** for all OGSR recommendations
- Ensure forestry related decisions are fully compliant with **free, prior, and informed consent and uphold the Title and Rights of First Nations** pursuant to the government's responsibilities under the UN Declaration of the Rights of Indigenous Peoples
- Acknowledge the role of intact forests and sustainable forest practices in both limiting and mitigating climate change, and incorporate increased conservation targets into the CleanBC climate plan

On Saturday November 26 -- All Out!

DECLARATION SIGNATORIES, Oct. 11

Initial Signatories

Union of BC Indian Chiefs (UBCIC)
Elders for Ancient Trees
Sierra Club BC
Wilderness Committee
STAND.Earth

Additional Signatories to Date

Anglican Diocese of New Westminster
Awi'nakola Tree of Life Foundation (Kwakwaka'wakw Nation)
BC Chapter of CAPE, Canadian Association of Physicians for the Environment
BC Chapter of CANE, Canadian Association of Nurses for the Environment
BC SEA
BC-Yukon KAIROS
Canadian Parks and Wilderness Society -- BC
Chemainus Climate Solutions
Clayoquot Action
Climate Caucus, *a non-partisan network of 500+ locally elected leaders working on climate change, biodiversity, and social Justice across Canada*
Climate Justice Victoria
Community Trees Matter Network
Conservation North
Council of Canadians, Campbell River Chapter
Council of Canadians, Victoria Chapter
Cowichan Valley Naturalists
Creatively United for the Planet Society
David Suzuki Foundation
Denman Island Climate Action Network (DICAN)
Denman Islanders for Climate Action and Social Justice
Dogwood
Ecojustice
Elphinstone Logging Focus
Esquimalt Climate Organizers (ECO)
Esquimalt United Church Justice Team
First Metropolitan United Church
Friends of Carmanah-Walbran
Friends of Clayoquot Sound
Georgia Strait Alliance
Greater Victoria Teachers Association (GVTA)
Greenpeace Canada
Halfmoon Bay Environmental Society
Holy Cross Anglican Church (Vancouver)
Island Forest Futures
Juan de Fuca Forest Watchers
Leadnow
NADPH, Nurses and Doctors for Planetary Health
Nonviolence International Canada
Old Growth Options Group

Our Lady of Guadalupe Tonantzin Community Society
Parents 4 Climate
Pender Ocean Defenders
Programs in Earth Literacies
RAVEN: Respecting Aboriginal Values and Environmental Needs
Red Cedar Community Association
Rolling Justice Bus
SOFT-CV (Save Our Forests Team - Comox Valley)
Spuzzum First Nation
Thriving Roots Preschool
Tree of Life Nature Preschool
Valhalla Wilderness Society
West Coast Environmental Law
Wildsight
Worker Solidarity Network
350 Canada