

# **An Assessment of Impacts from the Trans Mountain Expansion Project on Matsqui First Nation**

**Decision Analysis Affinity Group Conference 2018**

Julian Gonzalez

EPI

[julian@ecoplan.ca](mailto:julian@ecoplan.ca)



# CONTEXT

# National Energy Board Hearing

- Trans Mountain (TM) Expansion Project
- Corridor through Matsqui Territory
- NEB Hearing July 2015 (15 month process)



# TM Impact Assessment

## Not satisfactory for Matsqui FN:

- TM human health risk assessment - No serious long-term effects from potential spill
- Socio-economic analysis on Aboriginal fisheries not conducted because of complexity of predicting socio-economic effects



ENVIRONMENTAL AND  
SOCIO-ECONOMIC ASSESSMENT  
FOR THE  
TRANS MOUNTAIN PIPELINE ULC  
TRANS MOUNTAIN EXPANSION PROJECT

VOLUME 5B: ESA - SOCIO-ECONOMIC

December 2013

ESA-NEB-TERA-00005BExecSum

Prepared for:



TRANSMOUNTAIN

Trans Mountain Pipeline ULC  
Suite 2700, 300 – 5th Avenue S.W.  
Calgary, Alberta T2P 5J2  
Ph: 403-514-6400

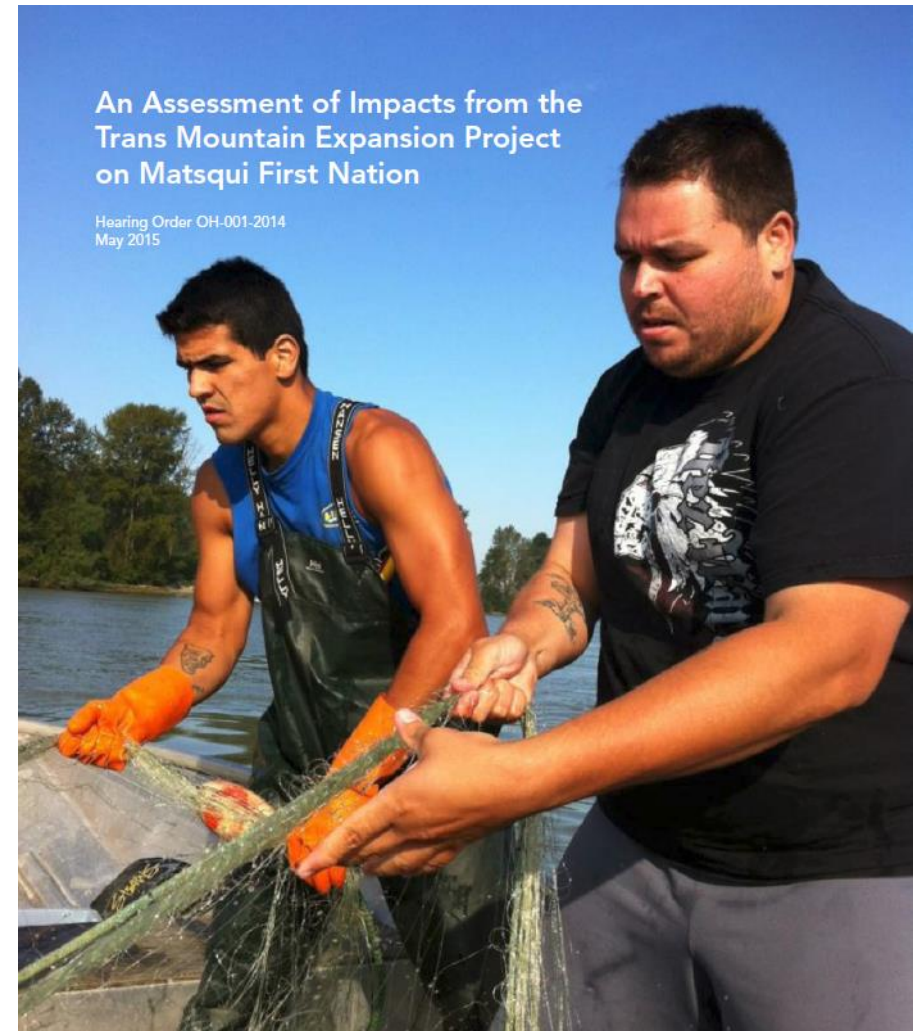
Prepared by:



TERA Environmental Consultants  
Suite 1100, 815 - 8th Avenue S.W.  
Calgary, Alberta T2P 3P2  
Ph: 403-266-2885

# Scope of EPI's involvement

- Conduct an assessment of the potential impacts of the TM expansion project to Matsqui First Nation
- Support Matsqui governing body to decide if they will support or not the pipeline



# APPROACH

# Approach Overview

## 1 Project scope & understanding



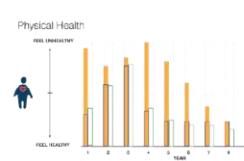
## 2 Scenarios



## 3 Identify Values & Impacts



## 4 Magnitude of Impacts



## 5 Measuring Significance



## 6 Addressing Impacts

## Who is the expert?

- Affected Population (Matsqui as Experts)
  - Impacts, values, magnitude, significance
- Technical Experts
  - Scenarios: they have to be possible
  - Measures: objectively measurable



# Scope

- How might the proposed Trans Mountain Expansion Project impact what is important to Matsqui?





# Scenarios with impacts to Matsqui



## **Developed by TM**

1. Routine operations
2. Hope spill
3. Strait of Georgia tanker spill

## **Developed by EPI using TM information**

4. Spill close to Matsqui reserve

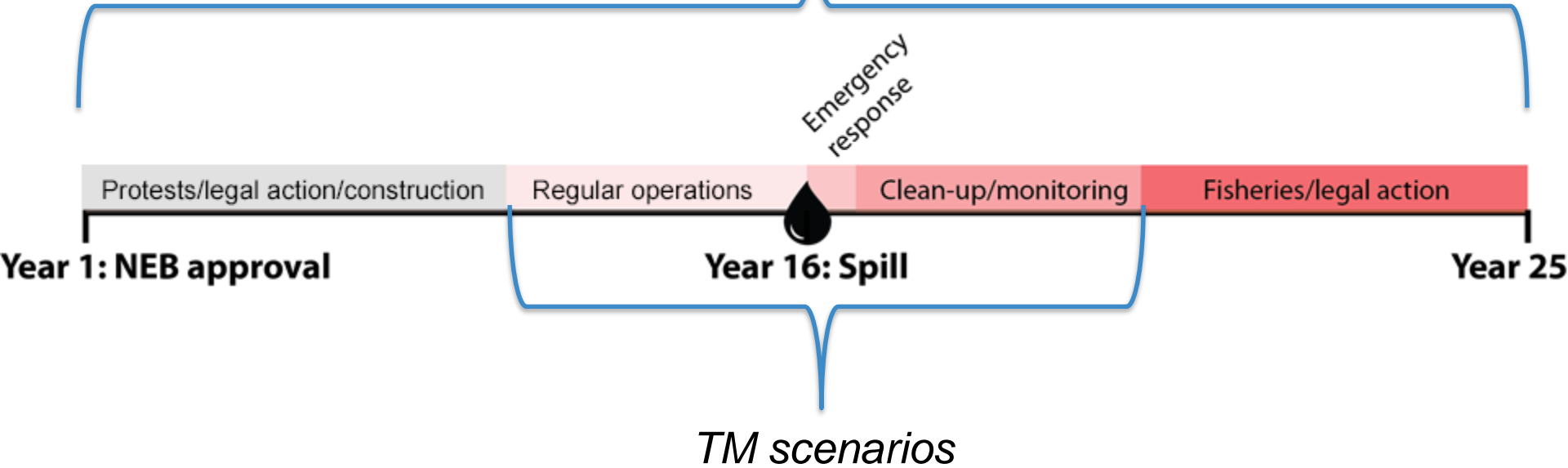
# Research and Analysis



## Scenario Timeline

*Expanded Scenario*

- *Kalamazoo*
- *Exxon Valdez*
- *Other small spills*
- *TM emergency response plan*
- *TM spill history*
- *XL pipeline studies*
- *Matsqui Governing Body*



# Identifying Values

## Events → Effects → Values

- Construction & Operations
- Spill & emergency Response
- Clean up & Monitoring
- Other: DFO response, litigation, media

- Oil in the river
- Oil on land
- Noxious fumes
- Evacuation
- River closure
- Machinery & workers

- Fish and wildlife health
- Feeling ill
- Anxiety and stress
- Loss of privacy
- Can't use reserve land
- Can't fish, hunt, gather
- No fish for FSC
- Lost rent, taxes, jobs

- Physical Health
- Psychological/emotional Health
- Use and enjoyment
- Sohl te mexw
- Cultural traditions & practices
- Trust in officials
- Community autonomy
- Economic/financial

# Identifying Values

## 3 Identify Values & Impacts

Physical health



Psychological/  
emotional health



Use and  
enjoyment



Sohl te mexw  
(keepers of the land)



Trust in government



Cultural traditions  
and practices



Community  
Autonomy




Financial/  
Economic



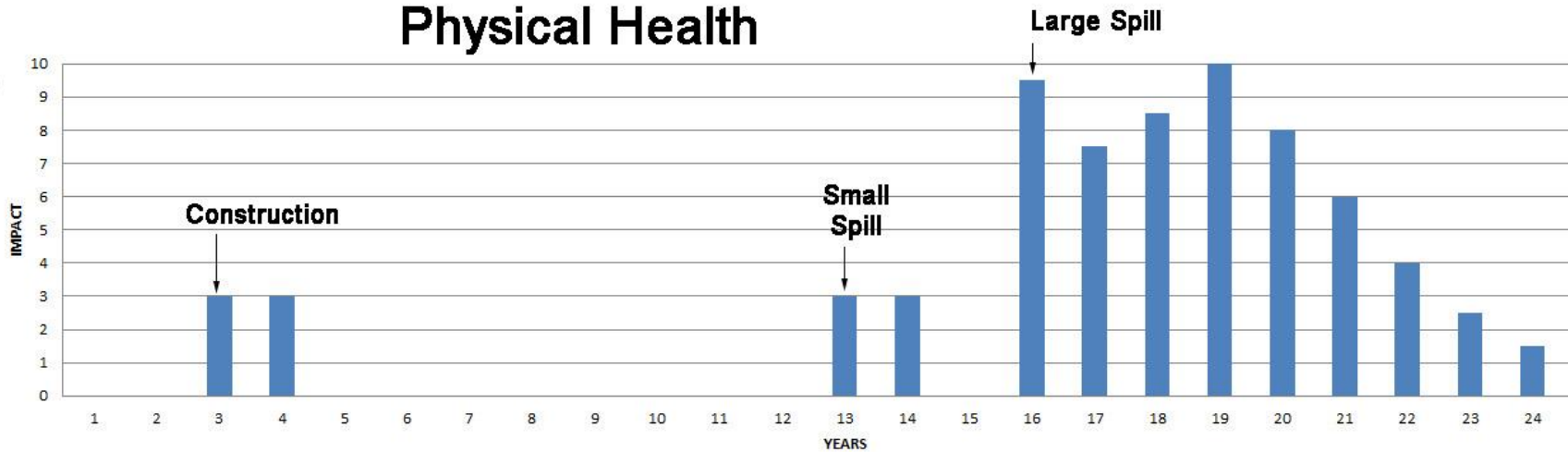
# Identifying Impacts

## Identifying **CHANGE** to what Matsqui cares about

Value	Before	After
Physical health 	<b>Physically healthy</b> <ul style="list-style-type: none"> <li>• <u>High energy</u> [from being outdoors and exposed to sunlight, air, and activity such as fishing, hunting, gathering]</li> <li>• <u>Low rates of illness</u> [from consuming fish &amp; wild food many times per week]</li> <li>• <u>Low stress</u> [from a generally active lifestyle]</li> </ul>	<b>Physical unhealthy</b> <ul style="list-style-type: none"> <li>• <u>Lethargic energy</u> [from limited time/activity outdoors after spill]</li> <li>• <u>Higher rates of illness</u> [from lower nutrition due to limited consumption of fish after spill]</li> <li>• <u>High stress</u> [from a more sedentary lifestyle]</li> </ul>

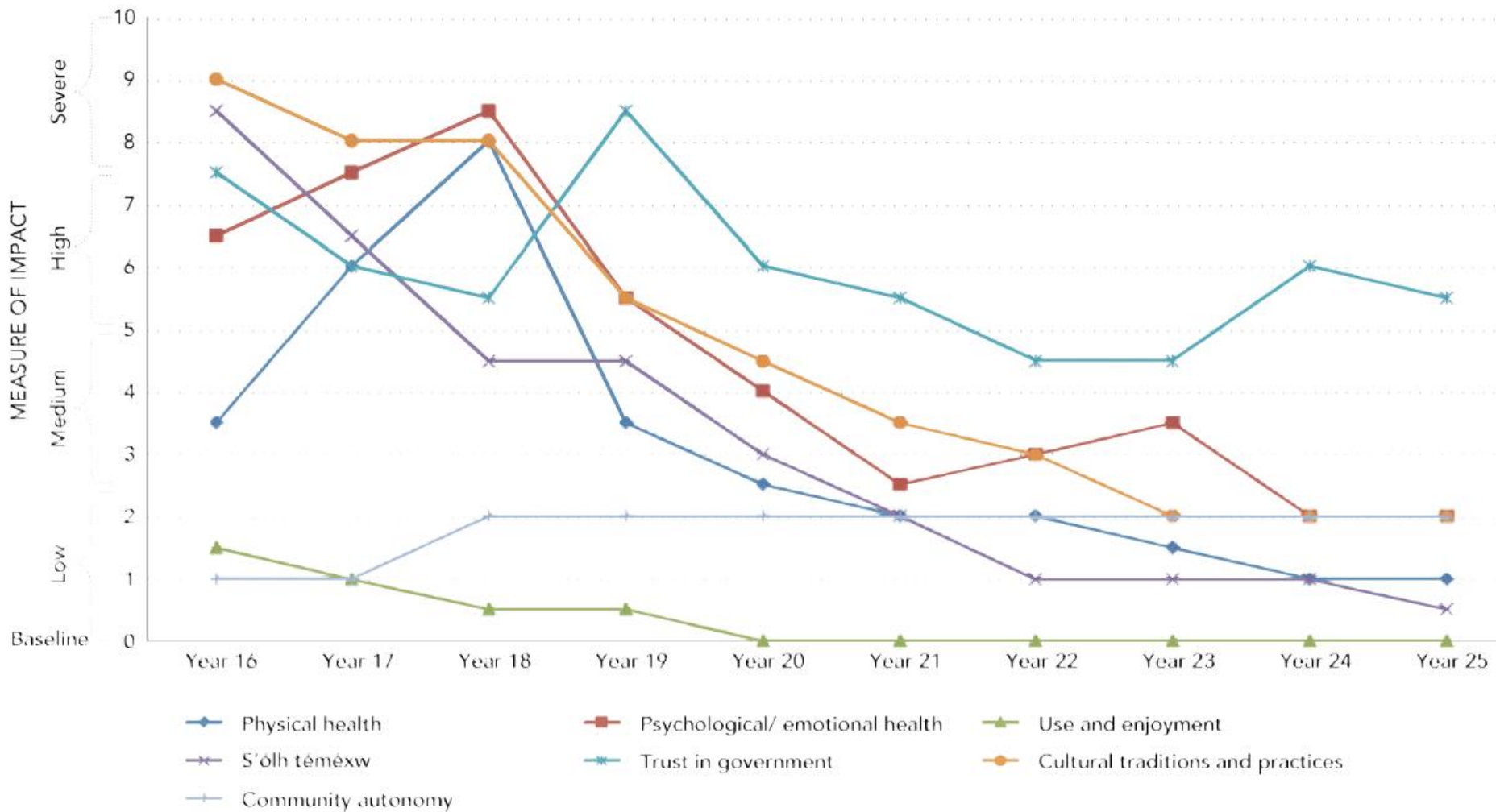
# Magnitude of impacts over time

## Physical Health





# Magnitude of impacts over time

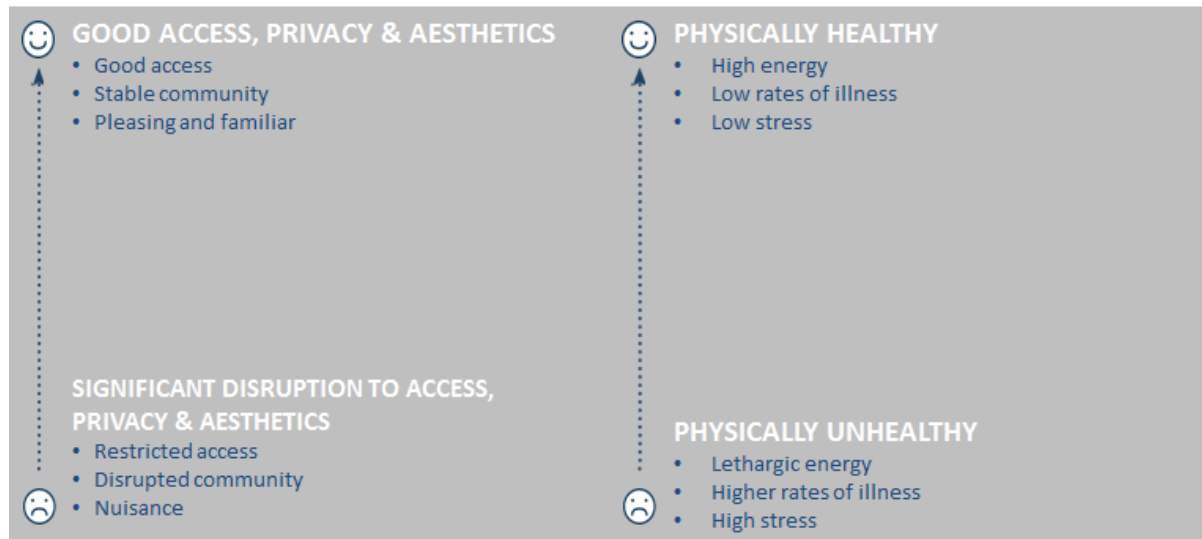


# Measuring Significance

## USE AND ENJOYMENT



## PHYSICAL HEALTH

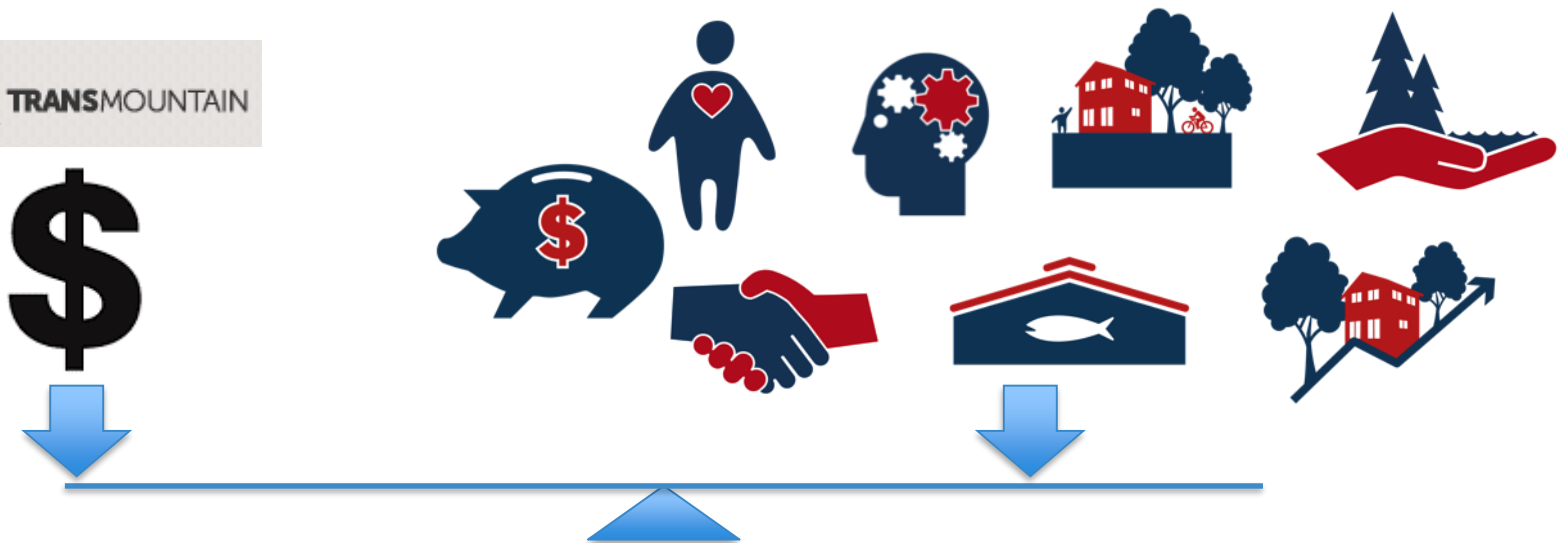


# Monetary Compensation

Monetary Value of All Non-mitigable Losses to Make Matsqui **“Whole”**

- Market Losses
- Non-Market Losses

Values Impacted



# Some ways of addressing impacts of potential spills

## BEFORE (preparedness)

### FOR EXAMPLE:

- Emergency response plan and capacity building
- Increase capacity for processing and storage of fish
- Guaranteed salmon from different watershed

# Some ways of addressing impacts of potential spills

## AFTER (compensation)

### FOR EXAMPLE:

- Agreed process for measuring and compensating losses
- Damage schedule
- Bonding/trust established in case of spill

# CLOSING



# Summary

- Matsqui culture is unique and very different than the broader Canadian culture
- Potential losses to Matsqui are unique (e.g. S'ólh té méxw)
- Focus on values – what is important to Matsqui
- Matsqui as experts (values, magnitude, significance, impacts)

# Thank you

Julian Gonzalez

EPI

[julian@ecoplan.ca](mailto:julian@ecoplan.ca)

