

**Ocean Policy Session Proceedings**  
PNWER Annual Summit – Whistler, British Columbia  
July 21, 2014

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**Co-Chair** Senator Arnie Roblan, Oregon

**Co-Chair** Captain John Staynor, VP Compliance, ITB Marine Group Ltd.

**Speakers**

Charles Short, Manager, Marine Resources, Resource Management Objectives Branch, Ministry of Forests, Lands and Natural Resources Operations, BC

Paul Klarin, Marine Program Coordinator, Oregon Department of Land Conservation and Development

Dale Jensen, Program Manager, Washington Department of Ecology, Spill Prevention, Preparedness & Response

Bruce Gilles, Cleanup Program Manager, Oregon DEQ Cleanup and Emergency Response

Graham Knox, Director, Environmental Emergency Program, BC Ministry of Environment

Anil Mathur, Chief Executive Officer, Alaska Tanker Company

Tim Meisner, Director General, Marine Policy, Transport Canada

Senator Kevin Ranker, Washington State Legislature

Senator Deb Boone, Oregon State Legislature

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**Opening Remarks**

John Staynor shared a story about oil spill responsiveness in remote community in Alaska (Tellor), and made a request to legislators: whatever rules you put in place, please enforce them. Industry players are not against legislation – it keeps us all on the straight and narrow (level playing field).

Arnie Roblan stated that the ocean has always been a part of life, both as a major transportation highway and economic powerhouse.

Each of the speakers briefly introduced themselves.

**Marine Spatial Planning**

***BC's Experiences with Integrated Marine Planning Process***

***Charlie Short***

Natural resources includes the ocean – integrated in with all other resources (forests, lands, etc.)

Coastal BC at a glance: diverse, complex ecosystems – divided into eco-sections (depth, substrates, fish/invertebrate communities, mammals, etc.) BC has 37,000 km of coastline (refer to slideshow for other statistics).

When planning, need to consider how people use the marine environment and whether that use complements or conflicts with the health of the environment. Human uses include fishing, tourism & recreation, shipping, extension of the highways, alternative energy, forestry, pipelines, utility corridors, pipelines, ocean technology = \$14 billion or 12-15% of BC GDP. Also need to consider

cultural heritage and First Nations' land claims throughout BC (100 nations have claimed coastal territory).

Governmental jurisdiction gets complicated in marine environments: federal government has jurisdiction over the water column; provincial has jurisdiction over the seabed and whatever is between the "jaws of the land" (harbours).

There is a long history of land planning, but marine spatial planning (MSP) is more recent. The benefits of MSP include:

- Identifying economic opportunities,
- Facilitating social license for industry to operate,
- Easing or resolving tensions and conflict by understanding the issues and rights (cumulative effects),
- Identifying sensitive areas in the environment,
- Building efficiency in decisions
- Developing a shared vision (governments, communities, First Nations)

Marine Planning Partnership (MaPP) is a collaborative effort among the Government of BC and First Nations, plus robust stakeholder and public engagement process, and a robust scientific advisory committee. MaPP is investigating how to maintain local economies, ecological integrity, collaborative financing and planning, cumulative effects, human well-being, etc.

Plan includes different components:

- Spatial – maps, zoning, recommended uses and activities, ecologically and culturally sensitive areas
- Non-spatial – context, goals, vision

The experience of MaPP: Values change over time; planning best practices change over time. More modern planning is sophisticated and data rich, and dependent on expertise. Process-heavy approach that requires time to build relationships. The process benefited from adequate funding, expertise, and political will. However, support is mixed and not all marine-based stakeholders participated.

Next Steps: The plan is complete and seeking additional feedback. MaPP will be preparing decision points for the fall. MaPP will continue to work on implementation agreements between government and First Nations.

For more information: [www.mapocean.org](http://www.mapocean.org)

### ***Oregon's Experience with Marine Spatial Planning and Marine Renewable Energy*** ***Paul Klarin***

In the past, the Wild West, natural resources had no jurisdictional boundaries. Now, land is divided up, but the ocean largely isn't. When you propose big changes, generally people balk.

Agency Programs and Planning: refer to slideshow for diagram

Why undertake marine spatial planning? Oregon has recognized and encouraged marine renewable energy development, wants a plan for development, wants a say in what happens to the ocean and coastline. Oregon has jurisdiction over the ocean 3 miles from the shoreline (1258 square miles).

Oregon's Statewide Planning Goals & Guidelines: Goal 19 – Ocean Resources is as follows: To conserve marine resources and ecological functions for the purpose of providing long-term ecological, economic, and social value and benefits to future generations. This Goal prioritizes renewable marine resources (e.g. living) above other uses, protecting biodiversity on the coast.

Oregon Territorial Sea Plan (TSP) has the goal to conserve the long-term values, benefits, and natural resources of the nearshore ocean and the continental shelf. To achieve this goal, the State of Oregon will:

1. Give higher priority to the protection of renewable marine resources than to the development of non-renewable ocean resources;
2. Support development of ocean resources that is environmentally sound and economically beneficial to coastal communities and the state;
3. Protect the diversity of marine life, the functions of the marine ecosystem, the diversity of marine and estuarine habitats, and the overall health of the marine environment; and
4. Seek the conservation of ocean resources within the larger marine region that is of ecologic and economic interest to the State of Oregon.

This plan has been amended a number of times since March 2008 to present day.

The planning process involves users, stakeholders, communities, local interest groups, ports, and Eco Trust before submitting to governments for approval. Using this process, they have developed a working marine map to look at data and seek feedback (loop) to feed into the plan.

The map creation started with GIS data, developed goals, created map layers, TSP working group, Goal 19 resources and uses, draft plan maps, draft plan. Refer to <http://oregon.marinemap.org> for more information. This site shows all the different activities going on in the marine coastal areas.

Part Five of the TSP: renewable energy exclusion area, proprietary use and management area, resources and uses conservation area, resources and uses management area, renewable energy facility suitability study area, renewable energy permit area – each area is subject to different standards and regulations

Next steps:

- In the ocean, there are no size restrictions on wind turbines. The ones planned for offshore Oregon are much larger than anything else that exists.
- Wave energy generator (pressure sensing pads on the seabed, giant flap that pushes water).
- The future for small coastal communities is wave power, replacing the existing imported fossil fuels

The development of the TSP has resulted in benefits for industry and stakeholders, government, and community. With this plan, government can make better decisions, with more confidence and reduced risk factors.

Developing such a plan as the TSP takes time, takes effort, and takes funding to be successful.

**Questions for Panel:**

How many legislative committees were involved in the planning process?

Response: none, it was already set up. The funding came from stakeholders, along with resources from federal government. That's why it took so long – two years to line up components.

How could this information be applied to other areas?

Response (Charles Short): lessons learned from other jurisdictions will be helpful to anyone else looking to implement this type of project.

Response (Paul Klarin): the ocean knows no boundaries, so everyone who uses the ocean needs to be involved.

In the map, how do you update new structures and sub-sea cables? Is there a mechanism that gets information onto NOAA charts?

Response (Paul Klarin): yes, the Marine Program does the updates and provides the new information to NOAA.

Kevin Ranker: Why aren't BC, WA, and OR coordinating at the staff level to have a West Coast regional mapping process?

Response (Paul Klarin): the West Coast Governors' Alliance is working together for those purposes.

Kevin Ranker: What are your thoughts for build-out in the future for wave and tidal energy? Will there be any instance where the power goes back to the grid?

Response: It is possible. West Coast will likely be platform technology for turbines. The two biggest advantages: avoid the sensitive intertidal zone (20-30 miles out) and reduce "eyesore" complaints.

Note: cable costs \$1M per mile, 80% of the risk of entire project is in the cable.

## **Panel Discussion on Oil Spill Preparedness and Response**

### ***Anil Mathur, CEO, Alaska Tanker Company (ATC)***

ATC carries 1/3 of AK production out of the state and 10% of oil brought into WA and CA. The company is recognized as the safest tanker company in the world, and it recognizes the importance of the balance between energy and the environment.

ATC uses a performance improvement model influenced by:

- Regulators – policies and safety programs
- Unions – safety program participation, anecdotal storytelling
- Work force – enhanced communications

Inter-jurisdictional cooperation is important to shipping for the following reasons:

- Consistency in operating procedures,
- Improved initial critical response for spills,
- Access to more people and equipment,
- Consistency in oil spill response procedures,
- One command post / one response,
- Port of refuge decisions,
- Better able to assist ship and crew.

### ***Dale Jensen, Program Manager, WA Department of Ecology, Spill Prevention, Preparedness & Response***

Collaboration and relationships enables the department to advance its work forward. These relationships and the resulting support have resulted in the lowest rate of spills in the country.

Emerging energy transportation risks include:

- Vessel inspections,
- Oil transfer inspections,
- Pre-boom requirement

The first priority is always preventing spills through contingency plans and response plans.

Geographic response planning strategy:

1. Ensuring the safety of responders (people).
2. Containing the source to minimize impact.
3. Understanding the risks and concerns in the particular area of the spill (species, etc.) to advise diversion and notification plans.

WA has state-wide responsibility for spill response. Approximately 4,000 spills a year occur and are small and managed. Goal: rapid, aggressive, well-coordinated response.

The Northwest Area Committee and Region 10 Regional Response Team aim to protect public health and safety and the environment through spill response planning. The focus has been on the coastline area; never have moved crude oil through the inland part of the state of WA, but are planning for those next steps.

Next steps:

- Vessel traffic risk assessment recommendations
- Inland and marine risk assessment (gap analysis)
- Geographic response planning (with trans-border partners)

Study: Marine Rail Oil Transportation Study (interface between rail and marine, safety impacts, investments needed).

Kinder Morgan Pipeline application to National Energy Board: intervened to raise attention for cumulative impacts to marine ecosystem.  
[www.ecy.wa.gov/programs/spills/oilmarine](http://www.ecy.wa.gov/programs/spills/oilmarine)

***Bruce Gilles, Cleanup Program Manager, Oregon DEQ Cleanup and Emergency Response***

Mission is to prevent spills of oil and hazardous materials and clean up environment to levels protective of human health and the environment if spills occur.

Key relationships include:

- Oregon emergency management plan,
- CERCLA,
- Oil Pollution Act,
- Clean Water Act.

Oregon & National Contingency Plan: coordinated response from both the state team (through the governor and deputy) and the national team (refer to slideshow for a detailed diagram).

DEQ Spill Program:

- Marine oil spill prevention and planning: staffing, facility spill contingency plans, geographic response plans, NW area committee, drills & exercises.
- Spill response: staffing, Oregon emergency response system notifications.
- Funding: oil spill contingency fees, cost recovery, hazardous substance remedial action fund.

Most response work involves highways, and most contingency planning involves marine environments (Columbia River and coastal zone). Team works with regional response team, NW Area Committee, and BC Oil Spill Task Force.

***Graham Knox, Director, Environmental Emergency Program, BC Ministry of Environment***

Program is the agency responsible for all spills in province regardless of their source (marine or land). Priority is to look out for public health & safety, environmental, and economic factors.

BC has 3500 spills reported yearly: vessels, cargo, facilities, illegal dumping, and pipelines. Approximately 10% are significant, while 90% are quickly dealt with by the person who caused the spill.

MOE provides technical assistance, regulatory oversight, and direct response activities. Also promotes and participates in:

- Industry stewardship,
- Planning prevention and preparedness (working with industry, working groups),
- Industry exercises and drills,
- Training exercises,
- Planning and prevention work with: Western Canada Environmental Emergency Group, BC Oil Spill Task Force, Pacific States.

BC Requirements for Expanded Movement for Heavy Oil include the following conditions for such activity:

1. Successful environmental review
2. World-leading marine spill regime
3. World-leading terrestrial spill regime
4. First Nations rights and engagement
5. Fair share of fiscal benefits

Currently engaging in process with other bodies to determine what “world-leading” regimes would be.

***Tim Meisner, Director General for Marine Policy, Transport Canada***

World-class tanker safety system is first priority. Developing such a safety system involved significant engagement with First Nations and other stakeholders, DFO, other government organizations – a Canada-wide effort.

The objective of safety system is to protect communities and the environment and ensure safe shipping. The size and type of tanker traffic has changed dramatically, so this system is needed even though Canada has never experienced a spill before.

Timeline of development:

- Fall 2012, conducted broad consultation with targeted stakeholders across Canada
- Mar 2013, announced creation of this system
- Fall 2013, produced Tanker Safety Expert Panel report
- May 2014, World-class Tanker Safety System framework and new measures announced by Minister Raitt in NB

Pillars of Safety System Framework:

- Prevention (prevent spills from happening)
- Preparedness and Response (responding and cleaning in case of a spill)
- Liability and Compensation (holding polluters liable)

Each pillar is divided into elements:

1. Existing state,
2. Desired future state,
3. Federal actions needed.

Note: considerable science work ongoing to treat bitumen and other response, also changing compensation liability limits – unlimited compensation from industry, intend to build in a continuous improvement process.

**Questions:**

Does the DEQ have a tie-in resilience plan?

Response (Bruce Gilles): Yes.

Comment: Worked with BP for 13 years in Arctic. Good thing following the oil spill in Prince William sound was the baseline of marine biology in the near-shore in case of a future spill, and continue to drill people involved in the clean up – time is of the essence in clean-up. Need to know the tides, currents, and winds, need to know where in the water column the oil is going to float – and who has the jurisdiction to get the clean up going. In Gulf of Mexico, the spill there repeated almost every mistake made in Alaska and did more harm to the environment in the clean up than the spill. Want to encourage every group with a plan to learn from other spills and keep practicing the clean-up regime (avoid loss of knowledge from turn-over).

Response: succession planning is important. Need to also be aware of the difference between ocean and river systems for clean-up.

**Discussion of Past Action Items:**

***Kevin Ranker - Update on Ocean Acidification***

Need to think about how we communicate ocean acidification and how we think about the issue. An Inconvenient Truth and Al Gore was the greatest asset and greatest liability for the climate change discussion – made it into a partisan discussion, which it should not be (in the UK it is not – it is a cross-government issue).

Maslow's Hierarchy of Needs: right now most people's concerns centre around the safety and security level, not climate change and ocean health. Need to flip the way we think about the issue by taking a clear jobs perspective – what's at stake for the economy if ocean acidification continues.

- In WA, the shellfish industry has lost 300 jobs to Hawaii because of OA.

- Valuable wild and recreational fisheries: the food web connections (out of U of AK research) generates over 42,000 jobs in WA from all the different aspects of the food web that feeds upward to fisheries.

When focused on jobs, the conversation about OA becomes more real for most people. Commercial fisheries are big money, and recreational fisheries are really big money.

The real progress happens when we (all the different jurisdictions) put aside differences (and blame and who started it), to just figure out what to do about ocean acidification. Last year at PNWER, the five coastal governments were close to agreeing to do something about OA. During the summit, Governor Parnell, AK, had the following comment: "I hope we focus on the areas where we agree, as opposed to the areas we disagree."

WA created the Marine Resource Advisory Committee to implement the recommendations of the Blue Ribbon Council to counteract OA. CA and OR signed an agreement on OA hypoxia. It is exciting that so much collaboration has happened. PNWER can be a forum to formalize action for OA.

### ***Deborah Boone - Update on Ocean Energy***

Emergency Tsunami preparedness planning: when the big earthquake happens, people on the coast will be cut off, possibly for 3-5 years, the time it will take to rebuild the major highways. OR power ocean technology is a path forward: want to focus on the positive aspects and the value achieved (learning from mistakes).

NW National Renewable Energy Centre with a test site for the Pacific Marine Energy Centre (north energy test site and south energy test site). Needed to tweak legislation to be able to use the power generated by test device in Oregon. The wave energy generator is a home-grown project in Oregon (started as an engineering project at university).

Coos Bay offshore power: B ocean energy. This project demonstrates the Oregon way: unique method of working with communities (don't go in and say – this is what we're doing and be quiet until we're done). Ms. Boone may write a book on the topic.

Oregon Energy Trust has an annual conference: [waveenergy.org](http://waveenergy.org)

Tidal energy: Renewable Energy Research project in Montreal for tidal energy. Partner is Boeing (space division) bringing QA expertise and funding. For more information: [www.rerhydro.com](http://www.rerhydro.com)

Ocean Renewal Energy Group: Nanaimo, Vancouver, Halifax (tidal has moved forward over wave energy because there are fewer objections (e.g. fishing communities, and communities who object to wave energy because the installations can be seen whereas tidal installations are underwater). Oil companies did a lot of the early work for ocean energy.

Need to be patient with the development of ocean energy – it all takes time to get understanding, permits, and approvals.

### **Wrap-Up**

Passion for safety and environment comes from legislatures and industry representatives both. Results don't come from regulations, but from people learning and living those regulations with enforcement.



**Ideas for the Future**

Cooperative for oil spill response: why isn't it wrapping around to include YK and NT as the NW passage opens up to be sure we have response plans for those areas.