Report from the UBCM Working Group on Offshore Oil and Gas to the Ministry of Energy, Mines and Petroleum Resources

September 2009

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Acknowledgements

This report is the culmination of three years work by the members of the Offshore Oil and Gas Working Group. This work would not have been possible without the ongoing support of the Ministry of Energy, Mines and Petroleum Resources. Working Group members have had the opportunity to learn about offshore oil and gas, discuss and hear various viewpoints on many aspects of the industry, and have begun to formulate their own perspectives as a result of this process.

The Working Group comprises local elected officials from the municipalities and regional districts that would be directly impacted if offshore oil and gas were to proceed. Specific communities were asked to participate on the working group due to their proximity to the area in question. While the faces around the table may have changed over the past three years, each of the communities has maintained their commitment to this process and retained their seat at the table. For their dedication, time and commitment to this project thanks to the following individuals, some of whom have been at the table since the first meeting (*):

Jim Abram, (Comox) Strathcona Regional District*
Hank Bood, Port Hardy
Gerry Furney, Port McNeill *
Sharon Hartwell, Telkwa, Past Chair, MOU Working Group
Russ Helberg, Port Hardy
Carol Kulesha, Queen Charlotte *
Brian Lande, Central Coast Regional District *
Roger McDonnell, (Comox) Strathcona Regional District
Des Nobels, Skeena Queen Charlotte Regional District *
Harry Nyce, Kitimat Stikine Regional District, Chair, MOU Working Group
Barry Pages, Masset *
Herb Pond, Prince Rupert
Rod Sherrell, Mount Waddington Regional District (Chair), Past Chair, MOU Working Group

And, while each of the members has brought their own passions and perspectives to this controversial, and often divisive issue, it is important to note that this report and its recommendations are supported by all members of the working group. The working group is pleased to deliver this report to the Ministry which reflects their collective thoughts to date, on this important policy matter.

Executive Summary

The topic of offshore oil and gas is not new to British Columbia. Exploration for offshore oil and gas began around 1958 which led to the drilling of a number of wells in the late 1960s in the Queen Charlotte and Tofino Basins. In 1972, the Government of Canada imposed a moratorium on crude oil tanker traffic through Dixon Entrance, Hecate Strait and Queen Charlotte Sound which was subsequently followed by a moratorium on all offshore oil and gas activities in British Columbia by both the provincial and federal governments. Even with moratoria in place, the issue of offshore oil and gas has continued to be raised within both the provincial and federal governments. The 2003 Speech from the Throne announced that, by 2010, the provincial government wanted an offshore oil and gas industry that was up and running, environmentally sound, and booming with job creation. Local governments responded accordingly.

In 2004, at their annual conference the Union of British Columbia Municipalities (UBCM) membership considered a resolution with respect to lifting the moratoria. Recognizing that there were differing opinions and interests on the matter, the UBCM membership decided it was better to be involved, rather than excluded, if the Province was in fact going to move forward. A resolution was endorsed that directed the UBCM to have further discussions with the Province about offshore oil and gas that would provide local governments with an opportunity to express their views and opinions. With this direction, the UBCM and the Province, through the Ministry of Energy, Mines and Petroleum Resources entered into a Memorandum of Understanding (MoU) on Consultation in Respect of Offshore Oil and Gas Development in 2005. Under this MoU, the UBCM Working Group on Offshore Oil and Gas was established.

Over the course of the Working Group's meetings, many experts were invited to the quarterly meetings in an effort to increase the Working Group members' understanding about offshore oil and gas (see Appendix 1 & 7). The overriding discussion by the Working Group has never been about who at the table is for, or against, offshore oil and gas development in British Columbia, rather, the focus has always been about identifying the specific interests for local governments.

Throughout the process, it has become clear that protection of the environment is the primary interest for all Working Group members. Members made it quite clear that if **adequate environmental protection cannot be provided, there is no interest in offshore oil and gas development** (for more information see Appendix 4). This cannot be overemphasized and the working group could not move forward until the environmental safety became the key recommendation. Since the protection of the environment has been declared as the key interest for the Working Group, members have spent a lot of time learning and discussing the risks and benefits associated with the offshore oil and gas sector.

The Working Group has also taken an active interest in learning about the experiences of offshore oil and gas sectors in other parts of the world. However, members are cognisant that if the moratoria were lifted today, production of oil and gas from offshore British Columbia would not occur for 15 to 20 years (see Figure 2). Such a long timeline to production has caused Working Group members to consider the strategic role that British Columbia's offshore hydrocarbon resources could potentially play in a future that is projected to be short on energy supply.

Working Group members have become well informed about the potential risks and benefits from developing British Columbia's offshore oil and gas resources. For this reason the Working Group has identified several preconditions which it believes should be in place if offshore oil and gas exploration, development and production, were to proceed off the coast of British Columbia. These are outlined in the report that follows.

Introduction

Historical Context

Exploration for oil and gas off the coast of British Columbia began around 1958. This included the drilling of eight offshore exploratory wells in the Queen Charlotte Basin in the late 1960s. However, no commercial discoveries were made.

In 1972, the federal government imposed a moratorium on exploration off the west coast through a policy decision to suspend all work obligations under existing permits and to not approve any further exploration programs or permits. A provincial moratorium on oil drilling was established through a 1981 Order in Council (British Columbia Reg. 10/82).

Consideration was given to lifting the provincial moratorium on oil drilling following the extensive 1986 Environmental Assessment review of Chevron's proposals for a program of exploratory drilling. However, the Nestucca Barge and Exxon Valdez oil spills discouraged further consideration of lifting the moratoria.

In 1989, the Province made a policy decision to extend its moratorium on offshore drilling for at least five years. The federal government announced it would not consider any development in the offshore area until requested by British Columbia. The federal and provincial governments are not considering any new applications for licenses, nor are they entertaining proposals for activity under any existing licenses.

Basin Status and Jurisdiction

The Geological Survey of Canada (GSC) estimates that there are 9.8 billion barrels of oil and 25.9 trillion cubic feet of gas in the Queen Charlotte Basin. The Queen Charlotte Basin is a semi-enclosed basin between mainland British Columbia and the Queen Charlotte Islands. The Basin is connected to the northeast Pacific via the Dixon Entrance in the north Queen Charlotte Sound in the south, and to the Strait of Georgia via Queen Charlotte Strait in the southeast (see Figure 1).

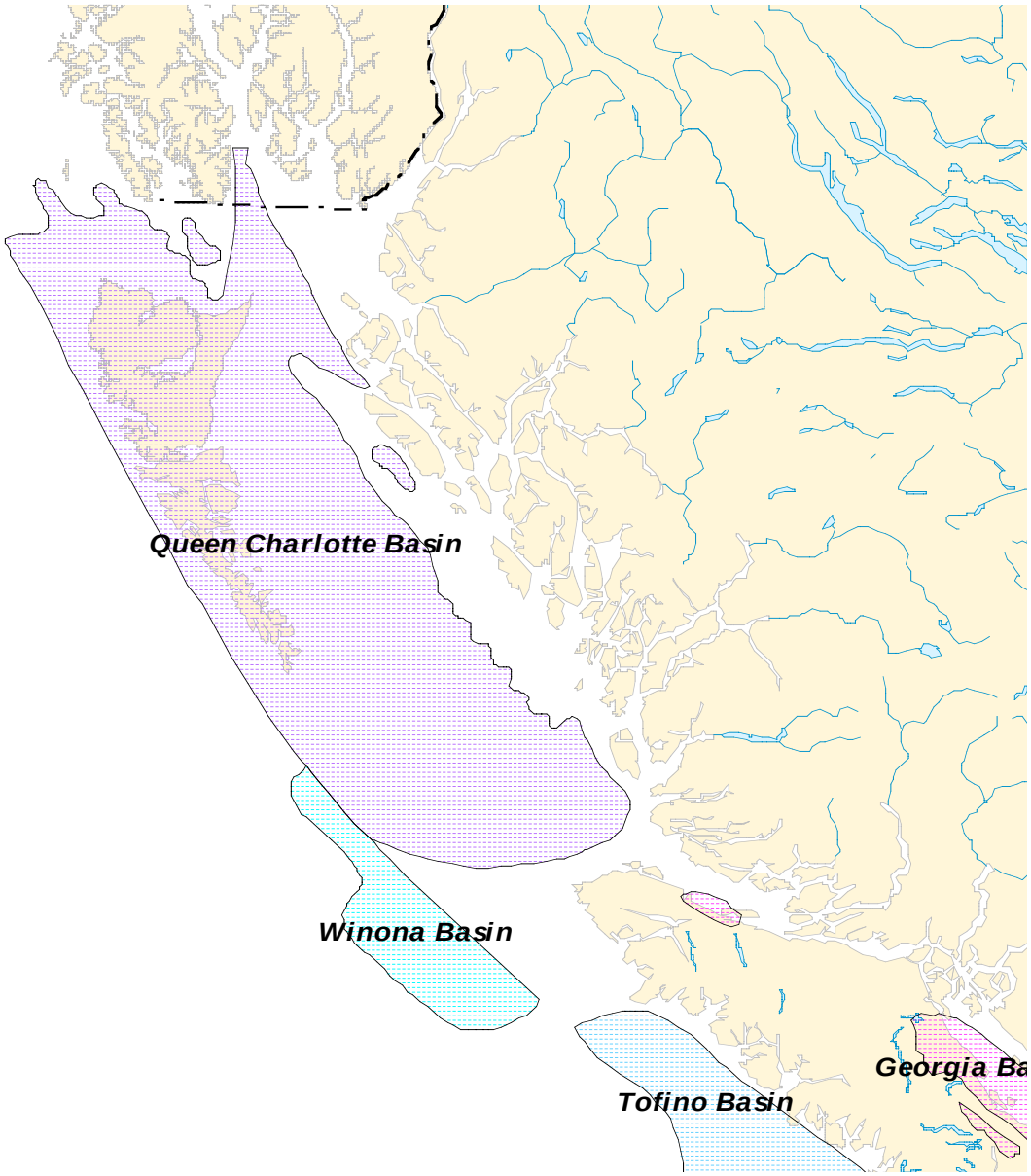

Figure 1: Map of the Queen Charlotte Basin.

Jurisdictional and ownership issues concerning Queen Charlotte Sound and Hecate Strait remain between the federal and provincial governments, and between coastal First Nations and all levels of government and these would need to be resolved before the offshore oil and gas industry would be able to begin their work in British Columbia, should the moratoria be lifted.

In accordance with the provincial and federal governments' commitment to a new and improved relationship with First Nations, both governments and industry will have to develop a respectful, working relationship with the coastal First Nations whose traditional territories they are working within. This may be done through a variety of means including, but not limited to, benefits sharing arrangements, Memoranda of Understanding, or Protocol Agreements.

Most importantly, a stringent environmental and fiscal regulatory system <u>MUST</u> be implemented. This could be done through an Accord between British Columbia and Canada, paralleling the existing Atlantic Accord. The Accord would define offshore oil and gas revenue sharing between British Columbia and Canada. Separate suites of legislation could then be brought in under the Accord, as is the case with the Atlantic models. These suites of legislation would regulate benefits sharing and industry activities related to British Columbia offshore oil and gas.

The UBCM Working Group on Offshore Oil & Gas

Over the past 30-40 years, the issue of offshore oil and gas has been an issue of discussion for federal and provincial governments due to a variety of factors. Local governments have responded accordingly. When the issue resurfaced in 2004, it came forward to the full UBCM membership.

At the 2004 UBCM Convention resolution B114 was put forward which stated:

> *WHEREAS preliminary science suggests that the north coast of British Columbia has offshore oil and gas reserves that may equal or better the offshore Hibernia oil fields, and the federal government has had a moratorium on offshore oil and gas exploration in the Queen Charlotte Basin since 1972, and the science of exploration and extraction has been highly developed to ensure protection of the environment;*
>
> *AND WHEREAS the royalties from the development of offshore oil and gas could provide significant net revenues to federal, provincial, local and First Nations governments to fund health care, education, transportation and other services to the benefit of all British Columbians, and exploration and development will create business and employment opportunities throughout the province, most significantly in those coastal communities currently suffering the highest unemployment rates in the province:*
>
> *THEREFORE BE IT RESOLVED that the Union of BC Municipalities fully support the lifting of the federal moratorium on offshore oil and gas exploration in the Queen Charlotte Basin.*

After much debate and discussion the resolution was endorsed.

Following debate of B114, resolution B115 was considered and referred to the UBCM Executive:

> *THEREFORE BE IT RESOLVED that the Union of British Columbia Municipalities encourage the provincial and federal governments to convene a multi-party interest process regarding offshore oil and gas exploration with a view to developing a consensus on if or how both governments should proceed with offshore oil and gas exploration;*

AND BE IT FURTHER RESOLVED that this multi-party negotiation include local parties deemed to be affected, including local governments.

When considered by the UBCM Executive upon referral, B115 was endorsed. The resolution provided UBCM with the direction to engage the provincial government in further discussions about offshore oil and gas and provide local governments with an opportunity to express their views and opinions but also to learn more about the industry and its potential implications for communities.

With this direction, the UBCM and the Province, through the Ministry of Energy, Mines and Petroleum Resources entered into an MoU on Consultation in Respect of Offshore Oil and Gas Development in 2005 (see Appendix 2). Under the MoU, a working group was established with the following focus:

- *identify the interests of local government in relation to exploration and development of offshore oil and gas; and*
- *explore how the interests of local government could be addressed through the fiscal, regulatory, and environmental assessment regimes for the exploration and development of offshore oil and gas.*

Jointly with the Province, a working group of local elected officials was established in September 2005. The Working Group is chaired by a member of the UBCM's Executive and includes representatives from the following communities and regions:

Village of Masset
City of Prince Rupert
Village of Queen Charlotte
District of Port Hardy
Town of Port McNeill
Central Coast Regional District
Mt. Waddington Regional District
Skeena Queen Charlotte Regional District
Comox Strathcona Regional District (now Strathcona Regional District)
Kitimat-Stikine Regional District

The representatives on the Working Group reflect a broad cross-section of communities that could be potentially impacted by offshore oil and gas development in the Queen Charlotte Basin. Terms of Reference (see Appendix 3) were developed and the Working Group has been meeting quarterly for the past 3 years.

The over riding discussion by the Working Group has never been about who was for or against offshore oil and gas development, but about identifying the specific interests of communities. While each of the members of the Working Group have brought their own perspectives about offshore oil and gas to the table, all expressed an interest in learning more about the industry, its impact on the surrounding environment and communities, and what potential benefits could be forthcoming if offshore oil and gas development were to proceed. The Working Group is informal in its structure and meetings have focused on identifying and addressing the key issues of interest to Working Group members.

One of the first meetings of the Working Group was an Interest Identification Workshop, held in 2006, which specifically sought local government input as to what were the most significant issues for communities. These issues and others are discussed further in the next section. Defining community or local government interests with respect to offshore oil and gas was an important step for the Working Group. Participants were asked to respond to the following question:

If oil and gas development were to proceed, what would be your community's major specific interests?

Concern for, and protection of, the environment was identified as **THE** overarching principle. **If adequate environmental protection cannot be provided, there is no interest in offshore oil and gas development.** By adequate, the Working Group seeks assurance that there are sufficient safeguards in place to protect coastal and ocean dwelling species – including but not limited to marine mammals, salmon, and sedentary species as well as larval fish stages – from seismic activity and oil spills.

The Working Group identified a number of recommendations that it would make to the Province that are essential to its support. These recommendations are not to be considered exhaustive as other concerns may come forward as further research and scientific discovery enlarges our knowledge.

These recommendations fall under the following three categories:

1. socio-economic development including opportunities for residents and settlement of conflict with other resource users;
2. fiscal and regulatory regime development including local oversight and revenue sharing; and
3. enhanced information sharing to ensure communities can prepare adequately for industrial development in the region.

Working Group members identified advisory bodies as the preferred method of engaging community representatives on offshore oil and gas development (for more information see Appendix 6). The Working Group sees a need for a public engagement process which should include taking this report out to the coastal communities.

The remainder of this report is divided into the following topic areas:

- Strategic Energy Planning – Why Now?
- Environmental Concerns – Seismic Exploration
- Environmental Concerns – Development and Production
- Ocean Planning
- Regulatory Context
- Regional Benefits

A summary of the discussion and presentations from quarterly meetings are presented under each topic area along with the associated recommendations put forward by working group members to that specific issue. **As noted the accompanying recommendations have been put forward based on the assumption that environmental considerations have been met as a prerequisite to offshore oil and gas development.**

RECOMMENDATIONS TO GOVERNMENT: PROPOSED BY THE UBCM WORKING GROUP ON OFFSHORE OIL & GAS

A. Why Now? Strategic Energy Planning

Peak oil is the point in time when the maximum rate of global petroleum extraction is reached, after which the rate of production enters terminal decline. It signifies massive changes for our oil dependent societies. It is important to note that peak oil is not about running out of oil, but the peaking and subsequent decline of the production rate of oil.

Optimistic estimates of peak production forecast the global decline will begin by 2020 or later. Pessimistic predictions of future oil production operate on the thesis that either the peak has already occurred, and that we are on the cusp of the peak, or that it will occur shortly. The exploration and development of offshore oil and gas should be part of a strategic solution to the energy crisis that does, and will continue to confront, British Columbia's communities. Government needs to balance the concerns of the energy crisis or the production and consumption of petroleum based energy with their commitment to a green economy.

A fully operational offshore oil and gas industry in British Columbia would involve four consecutive stages: permitting, exploration, development, and production. Environmental assessment is a pre-requisite to the permitting stage. In the event that the moratoria are lifted and the environmental assessment process is initiated, it will take at least 10 to 20 years for oil and gas to be produced from the Queen Charlotte Basin (see Figure 2). This is a modest estimate that assumes no roadblocks are encountered during the environmental assessment and permitting stages.

Once the initial regulatory and permitting requirements have been met, exploration can commence. The timeline for this phase varies. Exploration took less than five years in Cook Inlet, Alaska but over two decades for the Hibernia oil field on the east coast of Canada.

The development stage, which involves the construction and commissioning of infrastructure requirements and the drilling and completion of additional wells needed to produce the oil and/or gas, is

typically characterized by a short burst of activity. It can occur as quickly as one year, as in the case of Cook Inlet, or can take five to ten years, as with Hibernia.

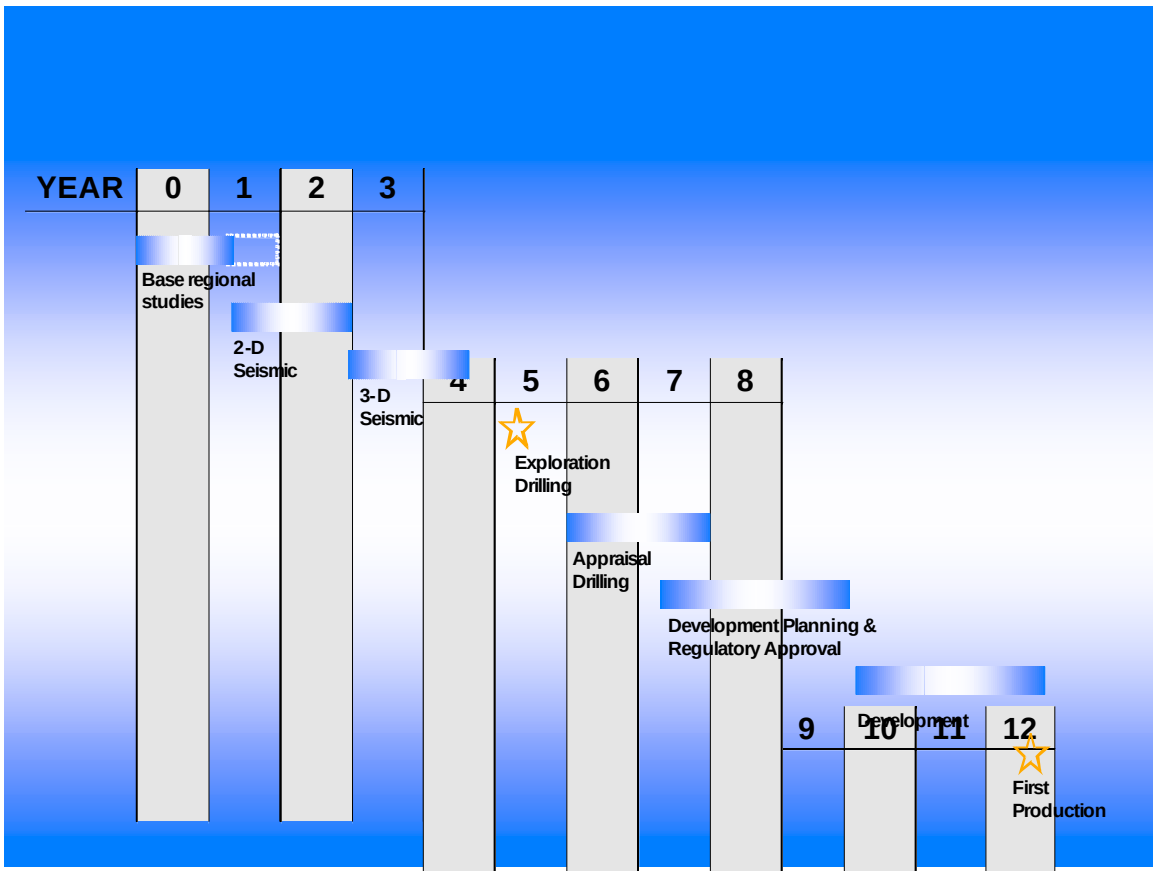

Figure 2: Potential Industry Development Timeline (http://www.empr.gov.bc.ca/OG/offshoreoilandgas/ReportsPresentationsandEducationalMaterial/Documents/UBCM_29_May_2006.ppt).

Finally, the production stage, which includes the gathering, processing and transmission of the extracted oil and/or gas, is generally the longest stage. Norway's offshore oil and gas industry entered into its production stage in 1980 and has just reached its peak oil production in the last couple of years. Production in Cook Inlet began in 1965 and reached its peak in 1970 for oil and 1996 for gas. Cook Inlet continues to produce oil and gas today.

RECOMMENDATIONS REGARDING STRATEGIC ENERGY PLANNING:

- **The Government of British Columbia must allocate a portion of the revenues from offshore oil and gas royalty and tax revenue to support the research, development and production of renewable and alternative energy.**

- **The development of offshore oil and gas must not diminish the Government of British Columbia's commitment to expanding its energy portfolio. Support should continue for the development and production of renewable energy technologies as identified in the 2007 British Columbia Energy Plan and 2008 Speech from the Throne, in consultation with the people of BC.**

- **Both the provincial and the federal governments must embark upon a coordinated strategic energy plan to ensure that the oil and gas developed from British Columbia's offshore would be made available to British Columbians and Canadians first before it is exported.**

B. Environmental Concerns: Seismic Exploration

The exploration stage begins with the compilation of existing geological information for the area of interest. This information is used to design seismic surveys that produce images of the rock structure below the seabed. Marine seismic surveys are conducted by exploration companies searching for deposits of oil and gas below the seabed.

Seismic exploration has been a major environmental concern for the Working Group. In an effort to clarify what the risks from seismic surveys are, the Working Group has had several experts from the field present to them on what a seismic survey entails, what the risks are from an environmental point of view, what the mitigative measures are that the seismic industry employs and what the seismic standards are around the world.

In a seismic survey, sound pulses are projected into the Earth's crust and the echoes of those pulses are used to create images of layers of sediment, rock and hydrocarbons. These images are then analyzed to locate the potential hydrocarbon traps, which can be drilled using mobile rigs to test for hydrocarbon reserves.

Modern, marine-based seismic surveys use large arrays of airguns to project sound pulses down into the seabed. Airguns are the primary source of noise from a marine seismic survey. An airgun is a hollow metal cylinder that generates pulses of sound by releasing bursts of highly pressurized air into the water. Airguns are usually combined into an array and fired in unison to make a louder pulse that penetrates deeper into the seabed.

Long streamers of sensitive hydrophones (underwater microphones) are used to detect echoes of the airgun pulses from the sub-bottom layers. The airguns and streamers are towed from a large survey vessel firing its airguns every ten seconds or so over an area where there are potential hydrocarbon deposits.

Petroleum Geo-Services (PGS) is an example of a company that funds seismic exploration and in turn sells the data to exploration companies on a non-exclusive basis. From the client perspective, multi-client seismic operations are typically less expensive on a per unit basis than acquiring the seismic data on an exclusive basis. From the Province's perspective, a multi-client seismic operation would reduce the length

and time required to complete the seismic survey in comparison to several companies performing their own surveys.

Seismic surveys on the West Coast typically receive a lot of negative public attention. Noise from a seismic survey may have the potential to harass or injure marine wildlife. Some members of the Working Group would like to see more information on the long-term physiological effects of marine seismic surveys – rather than on the immediate behavioural effects – on salmon, sedentary fish, and larval fish species.

The Joint Nature Conservation Committee[1] (JNCC), an environmental advisory body for the British Government, was the first body in the world to issue operational guidelines for seismic survey activity to minimise disturbance to marine mammals. The guidelines have been in force since 1995 and the JNCC has been adapting them ever since to best reduce the risk to marine mammals. Since 1964, seismic surveys have been occurring off the coast of the United Kingdom without apparent harm to the populations of fish, cetaceans and other marine mammals.

General precautions to reduce the disturbance caused by seismic surveys prescribed by the JNCC include:

- Determine the likelihood of encounters with marine mammals especially during the breeding and calving seasons;
- Seek to provide the most appropriately qualified and experienced personnel to act as marine mammal observers;
- Use the lowest practicable power levels throughout the survey;
- Use methods to reduce/baffle unnecessary high frequency noise;
- Ensure the correct soft start procedure is followed to allow marine mammals to move away from an area;
- Ensure no shooting apart from that necessary for the normal operations of a seismic survey.

[1] Joint Nature Conservation Committee comprises 14 members: a Chair and five independent members appointed by the Secretary of State; the Chairman of Council for Nature Conservation and the Countryside; the Chairmen or deputy Chairmen of Countryside Council for Wales, Natural England and Scottish Natural Heritage; and one other member from each of these bodies.

The recently developed Canadian Seismic Statement of Practice was developed from best practises around the world including the JNCC guidelines. Seismic surveys in Canada and in the US have marine mammal observers aboard ships to watch for whales, dolphins and seals close to an operating seismic vessel. Survey operators will shut down an operating airgun array if a marine mammal is sighted within a range of a few kilometres. As well, when beginning a survey line, operators will use a soft start, "ramping up", of their airgun arrays rather than firing all of their guns immediately, to warn off nearby marine life.

RECOMMENDATIONS REGARDING SEISMIC EXPLORATION:

- **Complete baseline studies before beginning seismic exploration to assess the current marine environment, including the migration of cetaceans along British Columbia's coast.**

- **Continue scientific studies during and after seismic exploration for comparative analysis with baseline data.**

- **Ensure research is peer-reviewed and, when possible, replicated in independent studies.**

- **Decrease the environmental footprint of seismic activity by promoting the sharing of seismic data.**

- **Minimize the environmental impact of seismic exploration by using best practices from around the world.**

- **Continue to use adaptive guidelines to regulate seismic exploration under the Canadian Seismic Statement of Practice with respect to mitigation of seismic sound in the marine environment.**

C. Environmental Concerns: Production

Once the location and type of hydrocarbon reserves are identified, infrastructure can be commissioned and additional wells drilled as needed for the production of oil and gas. This is known as the development stage. It is followed by the production stage which involves the actual production of oil and gas resources. Traditionally, the decommissioning stage follows the production stage and involves the deconstruction and removal of offshore oil and gas production infrastructure. However, ongoing research is proving the utility of offshore oil and gas platforms for artificial reefs and alternative energy generation, such as wind and tidal energy, if left at the production site.

The major environmental concern regarding the production and transportation of oil and gas offshore British Columbia is an oil spill. The effects of the Exxon Valdez oil spill on British Columbia's marine ecosystems have not yet been forgotten. The incident has changed forever the way crude oil is produced and transported along the Pacific coast.

In the aftermath of the Exxon Valdez oil spill, the US Congress crafted a comprehensive oil spill prevention bill. The *Oil Pollution Act* (*OPA*) of 1990 was the result of public hearings held in the State of Alaska where citizens and local government leaders demanded public involvement in the oversight of oil transportation. Members of the Working Group who went to Cook Inlet or the Gulf of Mexico as part of the British Columbia government's tours were impressed with the changes to oil spill prevention and response since the Exxon Valdez spill and *OPA* (1990). The changes that followed included the gradual replacement of the single-hulled Alaskan oil tanker fleet with new inner- and outer-hulled tankers, vessel tracking systems and tug escorts.

The protection of the environment remains THE overarching principle for working group members when considering whether or not offshore oil and gas development should proceed in British Columbia.

RECOMMENDATIONS REGARDING ENVIRONMENTAL CONCERNS ABOUT PRODUCTION OF OIL AND GAS:

- **Work with coastal communities and First Nations to identify sensitive sites that need to be protected in the event of an accident.**

- **Adopt a zero discharge policy - of drilling muds and platform wastes - and a no gas flaring policy, except for safety purposes.**

- **Establish a substantial remediation fund from industry to be used in the event of an oil spill. (In light of the high costs for clean up of oil spills, the fund will have to be very robust.)**

- **Invest in the necessary infrastructure to minimize risk of an oil spill and damage to surrounding areas in the event of an oil spill by:**

    - **Establishing deep sea salvage tugs along the central and north coast to assist vessels in distress.**
    - **Implementing a vessel tracking system for the British Columbia coast.**

- **Develop tight regulations which would delineate exact responsibilities in the event of an oil spill to ensure timely clean-up. This would include:**

    - **Development of an Incident Command System (ICS) and an oil spill organization that would be a repository for all equipment and contact information in the case of an oil spill.**
    - **Enhancement of current marine spill response capability on the British Columbia coast, such as Burrard Clean Operations, or creation of a separate organization to deal strictly with offshore oil and gas, similar to Cook Inlet Spill Prevention and Response Inc. (CISPRI) in Alaska.**

- **Adopt a cautious approach and use adaptive management techniques when regulating the offshore oil and gas industry in British Columbia.**

- **Create legislation surrounding the decommissioning of offshore oil and gas platforms post-production to ensure that industry remains responsible for platforms right through to the decommissioning stage.**

D. Ocean Planning

The combination of complex oceanographic conditions and seafloor characteristics in the Queen Charlotte Basin create a wide range of ecological niches which, in turn, support a diverse array of species. There are few places in the world that equal the abundance and diversity of marine life as there is in the Basin. The ocean, its weather, seascapes and wildlife shape the lifestyle, culture, economy, history, personality and art of British Columbia. For more than 10,000 years, people have made their homes along the inlets, shorelines, and estuaries.

British Columbia's coastal waters support a wide array of ecological, industrial and recreational activity. The ocean not only feeds us but feeds our coastal ecosystems as well. Every year thousands of salmon swim from the oceans upstream to spawn and then die. The marine-derived nutrients of the decomposing salmon make their way into the animals, plants, insects and soil of the terrestrial ecosystems.

Fishing is integral to British Columbia's north and central coasts. It has been a way of life for generations and continues to provide work, recreation, and sustenance. Farming fish, shellfish and marine plants are other marine based industries that sustain the economies of the north and central coasts. Currently, pilot projects are underway to determine the feasibility of shellfish aquaculture on the north coast and Queen Charlotte Islands/Haida Gwaii.

Marine-based transportation is the primary method of moving goods to and from coastal communities on the north and central coasts. The deepwater ports of British Columbia play a crucial role in bringing goods to Canada and connecting Canadian industries to the world. The volume of bulk cargo ship, tanker and cruise-ship traffic are all expected to increase over the next decade. The coastal waterways of the north and central coasts are also important transportation corridors for people. A steady stream of recreational and commercial boats travel this marine highway everyday.

The fjords, coasts, wildlife, land and seascapes make this area remarkable for kayaking, whale watching, surfing, sport fishing, recreational boating, scuba diving, beachcombing and cruising. In addition to local residents and other Canadians, people from all over the world come to enjoy the spectacular scenery the British Columbia coast has to offer.

Increased levels of marine-based activities potentially threaten the wildlife, natural spaces and health of our ocean ecosystems. One species of particular significance to this region is the ancient glass sponge reefs. These reefs were thought to have gone extinct during the Cretaceous period, but were discovered in Hecate Strait in 1987. The living fossils exist in only a few other places on the west coast of North America.

These deep connections between the marine ecosystem and the various uses and activities make management decisions difficult and must consider the overall picture in order to keep our oceans healthy. The Working Group is concerned about the cumulative impacts of increased levels of marine-based activities and the added impact that offshore oil and gas activity could have on the marine environment. With the potential for an offshore oil and gas industry, it is important to ensure that we have a clear understanding of what is happening in our ocean, when it is happening, and what impact the offshore oil and gas industry would have on other ocean users.

RECOMMENDATIONS REGARDING OCEAN PLANNING:

- **Provide funding for both local government and First Nations to participate in ocean planning activities.**

- **Be active and coordinated in ocean planning activities such as the Pacific North Coast Integrated Management Area (PNCIMA).**

- **Fund academic institutions and scientists to conduct an assessment of the cumulative impacts, including the generated noise, of marine-based activity that occur offshore British Columbia.**

- **Ensure that offshore oil and gas exploration and development does not inhibit other community development ventures.**

- **Assess the potential impacts of offshore oil and gas activities on salmon migration patterns as well as other marine-based habitat.**

E. Regulatory Context

The permitting stage is an important component of a stringent regulatory regime. British Columbia's offshore oil and gas industry will require cooperation among several regulatory agencies to decide whether to issue permits and to identify conditions upon their approval. This can take many years to resolve. A prolonged permitting process has been observed with the Mackenzie Gas Pipeline Project. A similar timeline should be expected for the approval of permits for the Queen Charlotte Basin if offshore oil and gas development were to proceed.

The environmental assessment process is a pre-requisite to the permitting stage. British Columbia's Environmental Assessment Office reviews major projects to assess their potential impacts. This process is important to ensure that major projects meet the goals of environmental, economic and social sustainability. The assessment process is also needed to ensure that the issues and concerns of the public, local governments, First Nations, interested stakeholders and government agencies are all considered. However concerns have been raised that assessing projects without monitoring to ensure compliance with the Environmental Assessment Review recommendations is not fully meeting the public's concerns.

Offshore oil and gas development falls under both provincial and federal environmental assessment responsibility. The Canada-British Columbia Agreement on Environmental Assessment Cooperation ensures that the two governments carry out a single, cooperative environmental assessment process while retaining their respective decision-making powers. This harmonized approach creates greater efficiency and effectiveness for both the private and public sectors.

In general, the environmental assessment process includes four main elements:

1. Opportunities for all interested parties, including First Nations and local governments, to identify issues and provide input;
2. Technical studies of the relevant environmental, social, economic, heritage and health effects of the proposed project;
3. Identification of ways to prevent or minimize undesirable effects and enhance desirable effects; and

4. Consideration of the input of all interested parties in compiling the assessment findings and making recommendations about project acceptability.

Coastal communities want the ability to express their views and interests to decision makers with regards to the regulation of offshore oil and gas activities. The Working Group discussed the importance of provincial and federal governments working with local governments to develop a "social license" for offshore oil and gas development by taking into account their views and interests. This includes ensuring that there is degree of local control; local capacity building; and clarity with respect to the royalty regime, benefit sharing model and environmental considerations.

The basic issue for consideration is in what form or manner should local communities participate in offshore oil and gas development? One form is a citizen's advisory council.

In the aftermath of the 1989 Exxon Valdez incident, citizens and local government leaders demanded public involvement in the oversight of oil transportation. As a result, Alaska has incorporated citizen advisory committees into the regulatory process for offshore oil and gas development. Under the 1990 *Oil Pollution Act*, the Cook Inlet and Prince William Sound Regional Citizen Advisory Councils (RCACs) were created.

The RCACs are seen as a mechanism to foster long-term partnerships between industry, government, and the coastal communities of Alaska. They provide a mechanism for the public to express concerns about projects before they are initiated, and throughout the development and production stages. They use websites, newsletters, press releases, conferences, and visits to schools and community meetings to talk with citizens and share information on offshore oil and gas projects and transportation in their communities. RCAC members include representatives from Alaska First Nations, local governments, the Alaskan Chamber of Commerce, environmental groups, recreational groups, commercial fishing groups and aquaculture associations.

RECOMMENDATIONS REGARDING REGULATORY CONTEXT:

- **Establish a mechanism for local input into, and oversight of, decision making processes like a Regional Citizen Advisory Committee.**

- **Engage in a process to inform local citizens of the potential risks and benefits of offshore oil and gas development (see Appendix 6 for Community Outreach Survey results).**

- **Ensure the regulatory regime includes best practices as they are established and identified from around the world.**

- **Ensure monitoring of compliance of implementation of the recommendations from the Environmental Assessment process throughout the life of the project.**

F. Regional Benefits

The development of a regional benefits sharing model is an important piece of an offshore oil and gas development planning strategy. **This model needs be developed before exploration for offshore hydrocarbon resources begins.** Local governments have become wary of non-renewable natural resource industries. They have become accustomed to a revenue model that excludes them or provides very limited contributions back to local economies in lieu of resource extraction.

There are local politicians, businesses and other groups in British Columbia coastal communities who consider oil and gas development as a possible lifeline for their economies, devastated in recent years as a result of declining fish stocks, problems in the forest industry and slow activity in mining. Conversely, there are equally valid concerns from others about the risks of offshore development.

The development of British Columbia's offshore oil and gas resources would occur in the coastal areas of the Province, and in general, coastal communities could face potential direct impacts from that development. At this time no one knows which, if any, of the Province's four offshore hydrocarbon basins will see development and even within those four basins, or where development may occur.

This uncertainty about which communities will be most impacted carries at least one advantage – there is no basis for individual communities vying with each other over which should become the "hub" of offshore development. Instead, it is possible to examine the question in a more general fashion, looking not at how a particular community could benefit, but rather at how the region as a whole could benefit (Appendix 5).

Revenues from offshore oil and gas production offer one source of funding that could partially address the income disparity that exists between coastal communities.

The Province has a number of options it could consider with respect to the sharing of revenue and benefits from offshore oil and gas development:

1. Economic Benefit Agreements

This form of agreement is negotiated with a community to enhance the local benefits from a project. These benefit agreements ensure local

employment and procurement opportunities in addition to satisfying economic development priorities. Benefit agreements have been used widely in Canada especially in the mining sector in northern Canada and the Atlantic Offshore.

2. Revenue Sharing Models
Revenue sharing models have precedence in British Columbia and may be tailored to address concerns with respect to equalization and/or compensation. In addition, revenue sharing is a convenient form of transferring fiscal resources. Recent examples include the Blueberry First Nations Economic Benefit Agreement and Ministry of Forests Forest and Range Opportunity Agreements.

3. Legacy Funds
The justification for such funds is that some portion of government revenues from the exploitation of a non-renewable resource should be put aside for when revenues decline or when the resource has been depleted, or both. Norway, Alberta and Alaska have all established some form of legacy fund.

4. Dedicated Funds
Dedicated funding is the appropriation of funds collected from a specific revenue source that must be used for a specific purpose. This appropriation is legislated to ensure the funds are used for their designated purposes. These could include alternative energy projects, emergency response, fishing sector support and "just-in-case" funding.

RECOMMENDATIONS REGARDING REGIONAL BENEFITS:

- **Consult with local governments and First Nations on the specific allocation of funds when developing regional revenue sharing models.**

- **Develop regional revenue and benefit sharing models. Options include, but are not limited to:**

    - **A long term permanent fund, to replace the industrial tax and royalty base when the industry is gone;**
    - **A percentage of revenue to go to coastal communities to support infrastructure development for transportation, medical services, community services, recreation, education and training facilities; The**

allocation of a percentage of offshore oil and gas revenue to an alternative energy development fund.

- **Build capacity in the region to be able to compete for, and secure, industry jobs through working with local governments and industry to support skills development, education and training for local people.**

Concluding Remarks

The protection of the environment is THE overarching principle for working group members when considering whether or not offshore oil and gas development should proceed in British Columbia. If adequate environmental protection cannot be provided, there is no interest in offshore oil and gas development.

The UBCM Working Group has dedicated a lot of time and effort towards understanding and learning about offshore oil and gas development around the world. From the information shared, members have presented in this report policy items to be considered if offshore oil and gas development were to proceed in British Columbia. Certain issues stood out as being critical for implementation. These were:

- Safety of the environment must be of primary importance;
- A "precautionary approach" (as defined below) must be upheld for any decisions made;
- Baseline scientific data should be collected and there must be a commitment to ongoing research and monitoring over the long term; and
- An innovative approach to share the resource and its revenues with local governments and communities.

As uncertainty is inherent in environmental management, the Working Group strongly recommends government adopt a "precautionary approach" when making decisions about offshore oil and gas. This means that decisions regarding offshore oil and gas development should be objective - that is, based upon scientific studies, reviewed and approved by third parties. It also means that multiple studies should be consulted and their results evidence that, based on the best available information at the present time, the risks are not expected to cause irreversible damage to the environment.

Much scientific research still needs to be carried out in order to achieve the due diligence required by a "precautionary approach". Baseline studies need to be completed before beginning seismic exploration to assess the state of marine environment before offshore oil and gas development could take place. This research needs to be conducted during and after seismic exploration and all the way through to the production stage of oil and gas so that proper comparative analyses

can be done to determine the effects of the industry on the marine environment.

With the moratoria on offshore oil and gas development in place, there remains adequate time for conducting baseline research and carrying out of other planning activities, including community engagement.

At present, there are varying degrees of support for offshore oil and gas development in the regions surrounding the Queen Charlotte Basin. This means there is still a great deal of work that needs to be done by the Government of British Columbia to gain a "social licence" if it wishes to proceed.

Experience in other natural resource sectors (forests, mining, etc.) has not been positive for local government. They have become wary of the boom and bust economy associated with non-renewable natural resource industries - that provides little to no lasting benefits to their economies, communities or for the residents that live there. **If offshore oil and gas development were to proceed, the Government of British Columbia would need to proceed in a way that recognizes the interests of local and First Nation's governments up front and addresses them immediately.**

The UBCM Working Group members represent a wide range of viewpoints. While each of the members of the Working Group have brought their own perspectives about offshore oil and gas to the table, all expressed an interest in learning more about the industry, its impact on the surrounding environment and communities, and what potential benefits could be forthcoming if development was to proceed. Their ability to transcend opinions and collaborate based on factual information demonstrates the integral role that local governments, and the communities they represent, could play in any decision making process regarding offshore oil and gas development in British Columbia.

Appendices

Appendix 1
Presentations made to the UBCM Working Group

Appendix 2
MoU between UBCM and MEMPR on Offshore Oil & Gas

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Appendix 7
Presentations Made to the UBCM Working Group in Chronological Order

Appendix 1:

Presentations Made to the UBCM Working Group

Why Now? Strategic Energy Planning

Presentation: BC Energy Plan - March 2007
Paul Wieringa from the Ministry of Energy, Mines and Petroleum Resources provided an overview of the provincial government's *BC Energy Plan: A Vision for Clean Energy Leadership.* Included in the Energy Plan are some specific references to the Province's direction with respect to offshore oil and gas.

Presentation: Peak Oil - February 2008
BC Offshore Oil and Gas Branch member Dr Ron Smyth discussed the issue of peak oil – the concept that the world has maxed out on its production of cheap energy. Key geographic areas that have provided the majority of our oil supply have or will reach their peak by about 2010.

Environmental Concerns: Seismic Exploration

Seismic Surveys - January 2007
Mike Demarchi, Vice President, Senior Wildlife Ecologist, LGL Environmental Research Associates, discussed how seismic surveys are conducted, the environmental risks and measures that are taken to mitigate or avoid the risks.

Current Technology - June 2007
Clint Tippet from Shell Canada, provided an overview of the changes that have taken place in offshore oil and gas technology over the past 20-30 years.

Seismic Surveys – November 2007
Dr Lance Barrett-Lennard from the Vancouver Aquarium provided an overview on the status of killer whales along the BC coast and the impact of oil and gas activity on marine life. He indicated that major threats to the killer whale population include food supply, disturbance, contaminants and oil spills. In addition, he provided an overview of concerns with respect to marine mammals and offshore oil and gas.

Department of Fisheries and Oceans Canada (DFO) Regulatory Environment - November 2007
Adam Silverstein from DFO provided an overview of DFO's regulatory environment, the *Fish Act*, *Canadian Environmental Assessment Act* (CEAA) and *Species at Risk Act* (SARA). In addition, he discussed the Batholiths seismic research project and DFO's role in the final decision not to proceed with the project.

Seismic Surveys - May 2008
Robert Sorley from PGS Geophysical, outlined how seismic activity would be conducted in BC's offshore marine environment. This presentation was given shortly after Canada adopted the Seismic Statement of Practice (April 2008) which regulates exclusion zones and management of seismic and species at risk.

Seismic Surveys – September 2008
Dr. Mark Tasker, Head of Marine Advice, Joint Nature Conservation Committee (JNCC) gave a brief history of seismic exploration in the UK and an overview of the JNCC guidelines on seismic exploration. He stated that seismic exploration has been occurring offshore Great Britain since 1964 with no observed deaths. He also stated that while there is evidence of disturbance at the individual group level, there has been no evidence of disturbance at the population level.

Seismic Surveys – September 2008
Oonagh O'connor, Energy Campaign Manager, LOS, stressed the importance of noise in the marine environment. The use of sound in the water is equal to sight on land. She said that there remain more unknowns about the effects of seismic exploration on marine species than there is known.

Seismic Surveys – September 2008
David Hedgeland, HSEQ Environmental Manager, PGS Geophysical, came over from England to answer some of the more technical questions the working group had for Robert Sorely of PGS at the prior working group meeting. David explained 2D versus 3D seismic, how the sound travels through the water and the substrate, and identified scientific studies completed on seismic exploration as well as areas of research that require more scientific studies.

Environmental Concerns: Production

BC's Oil Spill Response Strategy - May 2006
Duncan Ferguson, Acting Manager, Hazard Management with the Ministry of Environment provided an overview of the various agencies, ministries and groups at the federal, provincial and local level that are called upon when there is a spill. He provided an overview of the Ministry of Environment and provided an overview of BC's Oil Spill Response and Countermeasures System (OSRIS) which provides an extensive mapping of shore zone areas.

BC's Oil Spill Response Strategy - May 2006
Craig Dougans, Manager, Operations and Maintenance of Western Canada Marine Response Corporation (WCMRC, known as Burrard Clean) discussed the role that his company plays in spill response assistance. He noted that WCMRC was the only operation in western Canada that provided this service to these affected companies.

Impacts of Oil Spills on Marine Life - November 2007
Doug Sandilands from the Vancouver Aquarium provided an overview of the BC Cetacean Sighting Network, Robson Bight Warden Program and Strait Watch. He identified lessons learned from the Robson Bight accident.

Ocean Planning

Regulatory Context

Provincial Context of BC Offshore Oil and Gas Development – February 2006
BC Offshore Oil and Gas Team member Jean Dragushan provided an overview of the provincial context related to offshore oil and gas including; identifying offshore basins of interest, historical overview, role of the federal government, results of previous federal reviews and provincial engagement with communities and first nations on the matter.

What Happens if the Moratoria are Lifted? - May 2006
BC Offshore Oil and Gas Team member Jean Dragushan outlined a series of activities that would need to happen once the moratoria were lifted including: an agreement with the federal government; consultation with First Nations and communities; scientific studies and work to be undertaken by industry.

Regulatory Road Map with Process for Atlantic & Arctic Offshore Oil and Gas - May 2006
Gordon Erlandson from Erlandson Consulting Inc. provided an overview of the offshore oil and gas regulatory process for Atlantic and Arctic Canada.

BC Offshore Oil and Gas Regulatory Framework - March 2007
Boris Tyzuk, Legal Counsel to the BC Offshore Oil and Gas Branch, led the Working Group through the basics of the Canadian regulatory system in the Atlantic Provinces and the Arctic, and the basics for Norway and Australia.

Federal and Provincial Government Context - February 2008
Offshore Oil and Gas Branch member Susan Kelly provided an overview of the provincial and federal government contexts within which provincial staff is working. She noted focused community meetings are planned for Prince Rupert and Port Hardy

Regional Benefits

Offshore Oil and Gas Industry in Newfoundland Labrador - February 2006
Mark Shrimpton, Principal, Jacques Whitford Consulting, made a presentation to the working group on the impacts of the offshore oil and gas industry in Newfoundland and Labrador.

Impact of Oil and Gas Industry in Northern Rockies Region - May 2006
Mayor Chris Morey from Fort Nelson made a presentation on the impact of the oil and gas industry on the northern Rockies region of BC.

BC Coastal Communities' Trip to Stavanger, Norway - January 2007
Port Hardy Mayor Hank Bood provided an overview of the mayors' trip to Stavanger, Norway to assess the aquaculture industry and offshore oil and gas operations within that country. A number of other elected officials from BC's coastal communities were represented on the mission.

Introduction to Royalty Regimes and Benefit Sharing - June 2007
BC Offshore Oil and Gas Branch member Jennifer Davison provided an overview of the various royalty regime and benefits sharing agreements in place in other jurisdictions. In addition, the group assessed the variations in governance structures, royalty regimes and

other benefit sharing agreements and their comparability within the BC context.

Shell's Community Involvement - June 2007
Morgan Yates from Shell Canada, spoke to the different arrangements and levels of community involvement between industry and communities with respect of offshore oil and gas exploration and development.

Overview of Haisla's Model of Economic Development
Haisla Chief Steve Wilson provided an overview of the Haisla's model of economic development. This model is based on an older trade model, promoting joint ventures with industry. In addition, he provided an update on the status of the energy/trade corridor running from the Alberta border to Kitimat.

The Alaska Permanent Fund and Communities - May 2008
Bruce Richards of the Kenai Borough, Alaska discussed how the Permanent Fund has benefited Alaskan communities.

Ocean Marinespace (formerly OIBC) - May 2008
Patrick Marshall, CEO OIBC, provided an overview of OIBC's community consultation initiative in four targeted communities: Prince Rupert, Kitimat, Port Hardy and Port MacNeil.

Alaska Permanent Fund - May 2008
Michael Burns, CEO Alaska Permanent Fund Corporation, provided an overview of the Alaska Permanent Fund discussing its purpose and structure. He also discussed the Dividend Fund and how it works for citizens of Alaska.

Alberta Heritage Fund - May 2008
Lowell Epp, Director Capital Markets, Alberta Finance, provided an overview of the Alberta Heritage Fund, and discussed how the oil boom has affected the average Albertan.

The (draft) Schofield Report – September 2008
BC Offshore Oil and Gas Branch staff member, Jennifer Davison, provided an overview of the economic model, assumptions and results of the (draft) Schofield report (due to be released by the end of the year).

Appendix 2:

MoU between UBCM and MEMPR on Offshore Oil and Gas

WHEREAS:

The Province of British Columbia has indicated that exploration and development of offshore oil and gas must be done in an environmentally responsible and scientifically sound manner, and has committed to promote prosperity and economic opportunities for First Nations and coastal communities;

The Minister of Energy, Mines and Petroleum Resources is the minister responsible for matters related to the development of offshore oil and gas, and the BC Offshore Oil and Gas Branch has been established to enable offshore oil and gas development to occur;

The UBCM is the representative voice of local governments in British Columbia and has an interest in the social, economic and environmental well-being of the province and its communities; and

Section 277 of the *Community Charter* allows the minister responsible and the UBCM to enter into a Memorandum of Understanding or other arrangement respecting consultation on any matter that affects local government or the Province.

The parties previously entered into a Memorandum of Understanding on Consultation in respect of Offshore Oil and Gas Development dated March 2005, and wish to renew it as set out below:

THEREFORE THE PARTIES HAVE THE FOLLOWING UNDERSTANDING:

PURPOSE

The purpose of this Memorandum of Understanding is to facilitate the process by which the BC Offshore Oil and Gas Branch will consult with the UBCM.

The focus of this process will be to:

- identify the interests of local government in relation to exploration and development of offshore oil and gas; and
- explore how the interests of local government could be addressed through the fiscal, regulatory, and environmental

assessment regimes for the exploration and development of offshore oil and gas.

LINKAGES TO OTHER PROCESSES

The BC Offshore Oil and Gas Branch will have consultations with individual local governments and other local government associations, but recognizes that UBCM is the organization that represents all local governments in the province.

The BC Offshore Oil and Gas Branch is involved in processes of consultation with First Nations with respect to matters related to the exploration and development of offshore oil and gas.

The BC Offshore Oil and Gas Branch expects to enter into negotiations with the Government of Canada with respect to matters related to the exploration and development of offshore oil and gas.

IMPLEMENTATION

The BC Offshore Oil and Gas Branch and the UBCM agree to maintain the Offshore Oil and Gas Working Group to further the purpose stated in this Memorandum of Understanding.
The Working Group is comprised of a member of the UBCM's Community Economic Development Committee and local elected officials representing areas that could potentially be affected by the exploration and development of offshore oil and gas.

TERM/AMENDMENT

The term of this Memorandum of Understanding will be two years from the date of signing unless otherwise amended.

The Parties may agree, in writing, to renew this Memorandum of Understanding.

The Parties may agree, in writing, to amend or terminate this Memorandum of Understanding at any time.

SIGNED on behalf of the Ministry of Energy, Mines and Petroleum Resources

The Honourable Richard Neufeld
Minister of Energy, Mines and Petroleum Resources

SIGNED on behalf of the Union of British Columbia Municipalities

Councillor Brenda Binnie
President

Mayor Sharon Hartwell
Chair, Community Economic Development Committee

Appendix 3:

MoU on Offshore Oil and Gas Terms of Reference

A Working Group has been established to implement the March 2005 Memorandum of Understanding between the Union of BC Municipalities and the Ministry of Energy, Mines and Petroleum Resources. The term of the MoU is two years from the date of signing (March 2007) unless otherwise amended or terminated by one of the Parties. Working Group membership was jointly determined by UBCM and the Ministry and comprises local elected officials representing the geographic region that has the potential to be the most affected if exploration and development of offshore oil and gas proceeds. Representation from the UBCM's Community Economic Development Committee is also included to facilitate reporting out to the UBCM Executive.

The mandate for the Working Group, as identified by the MoU, will be to:

- identify the interests of local government in relation to exploration and development of offshore oil and gas; and
- explore how the interests of local government could be addressed through the fiscal, regulatory and environmental assessment regimes for the exploration and development of offshore oil and gas.

The purpose of the Working Group is to:

- gain knowledge and an understanding of the relevant issues related to the exploration and development of offshore oil and gas;
- provide input and feedback to the Province on the specific issues, interests and concerns of local governments related to exploration and development of offshore oil and gas and, where appropriate, put forward proposals to the Province as to how local government interests could be addressed;
- identify issues to be addressed and discussed at Working Group meetings; and
- foster frank and open discussion that will facilitate a broader knowledge base of offshore oil and gas issues.

The Working Group will meet quarterly and a summary of the key decision points from meetings will be reported to the relevant parties after each meeting.

Appendix 4:

Local Government Interests Identification Workshop

Defining community or local government interests with respect to offshore oil and gas development was a key step for the Working Group. By identifying those interests for industry and government, these issues are more likely to be considered in the planning and decision making processes.

Participants were asked to respond to the following question:

If oil and gas development were to proceed, what would be your community's major specific interests?

Concern for protection of the environment was identified as a primary interest. This is THE deal breaker. If adequate environmental protection cannot be provided, there is no interest in offshore oil and gas development. By adequate, the Working Group seeks assurance that there are sufficient safeguards in place to protect marine mammals from seismic activity and the coastline from oil spills.

In addition, the Working Group identified a number of recommendations that it would make to government before it would offer its support for offshore oil and gas exploration and development. These recommendations fall under the following three categories:

- socio-economic development including opportunities for residents and settlement of conflict with other resource users;
- fiscal and regulatory regime development including local oversight and revenue sharing; and
- enhanced information sharing to ensure communities can prepare adequately for industrial development in the region.

The Working Group was asked to identify critical issues, needs and wants, concerns, fears and hopes for each of the member communities. Members were asked to consider their expectations and future desires for their communities with regard to the development of an offshore oil and gas industry.

What do coastal communities want?

There was general agreement that the major considerations for communities with respect to the development of offshore oil and gas include:

- community dividends and shares in the revenue including a long-term income fund
- skills development and jobs to keep communities viable
- basic service levels for health, education and infrastructure development
- local oversight of all stages of offshore oil and gas exploration and development

Under current policies, the Queen Charlotte Basin region will bear a significant proportion of the risks of offshore oil and gas activity but are unlikely to benefit substantially from that activity in terms of industry expenditure impacts. Therefore, it may be necessary to find ways of directing to the region a reasonable amount of the revenue gained from offshore activity to ensure the communities in the region are receiving a fair share of the benefits from the offshore resource. Options could include revenue-sharing arrangements with local governments and First Nations, cost-sharing agreements, or the provision of targeted grants for such purposes as investment in community infrastructure, local service needs and/or training required for jobs in the industry.

Oil spills were also identified as potential threats to marine and human life on the coast. The Ministry of Environment and Burrard Clean Operations spoke to the existing, and new, training programs which will ensure that there is a high state of preparedness in place to mitigate the impact if and when an oil spill occurs.

Biologists from the Vancouver Aquarium identified acoustic noise as a primary cause of damage to marine life, particularly whales, and the negative impact that would occur from seismic operations from offshore oil and gas development. To counter, representatives from both geophysical companies and oil and gas companies spoke to the significant level of technological improvements and expertise used to protect against environmental damage.

Appendix 5:

Local Government Benefits Sharing Identification Workshop

The Working Group held a roundtable discussion about benefit planning. Each member was asked what was important for them and their community.

There was general consensus in the roundtable discussions about the importance of benefit planning and concerns that it had to be well thought out and planned. The resource is important strategically and it was argued that coastal communities could potentially agree to development if they were guaranteed that the resulting revenues would be well used, with clear local benefits, with local control and discretion.

The Working Group recognized Norway as a good example of a jurisdiction with a high standard of living and high environmental standards even with an offshore industry. Benefits there are shared by all citizens. In addition, Alaska was reviewed as another jurisdiction that has done well, economically, from its offshore industry.

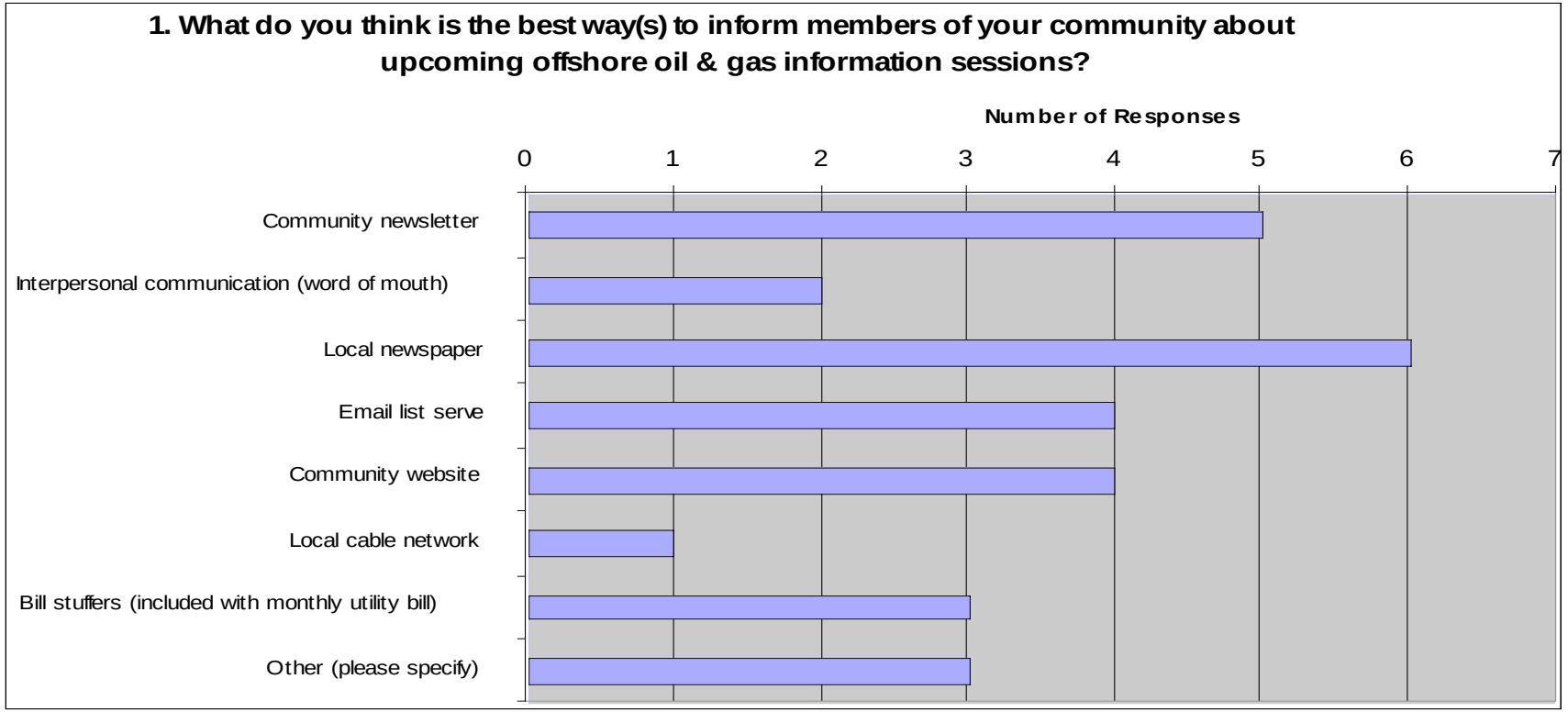
Based on the presentations given to the Working Group, members were equally divided between benefits now and benefits for future generations. In addition, many members would like to focus revenue sources on the development of alternative energy projects.

The following is a list of concerns, not in any order, brought forward by Working Group members during the roundtable discussion:

- guaranteeing skills development, training and education to keep jobs in, or as close to, communities as much as possible;
- guaranteeing local ownership and control, with industrial activity driven by communities; and
- guaranteeing local infrastructure and basic service levels including health care, hospitals, doctors, nurses, social programs, education and transportation infrastructure.

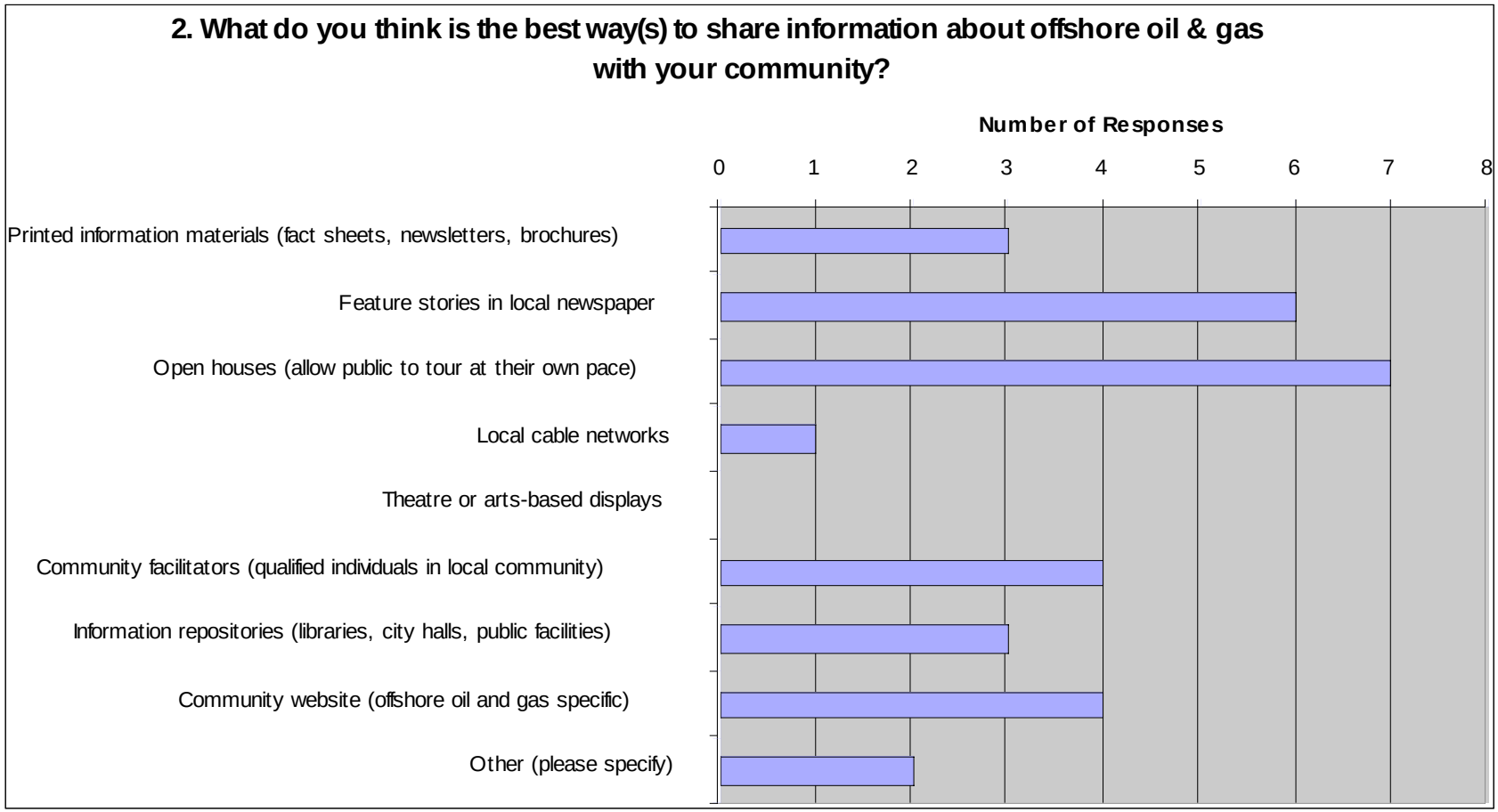
Appendix 6:

UBCM Working Group Community Outreach Survey Results



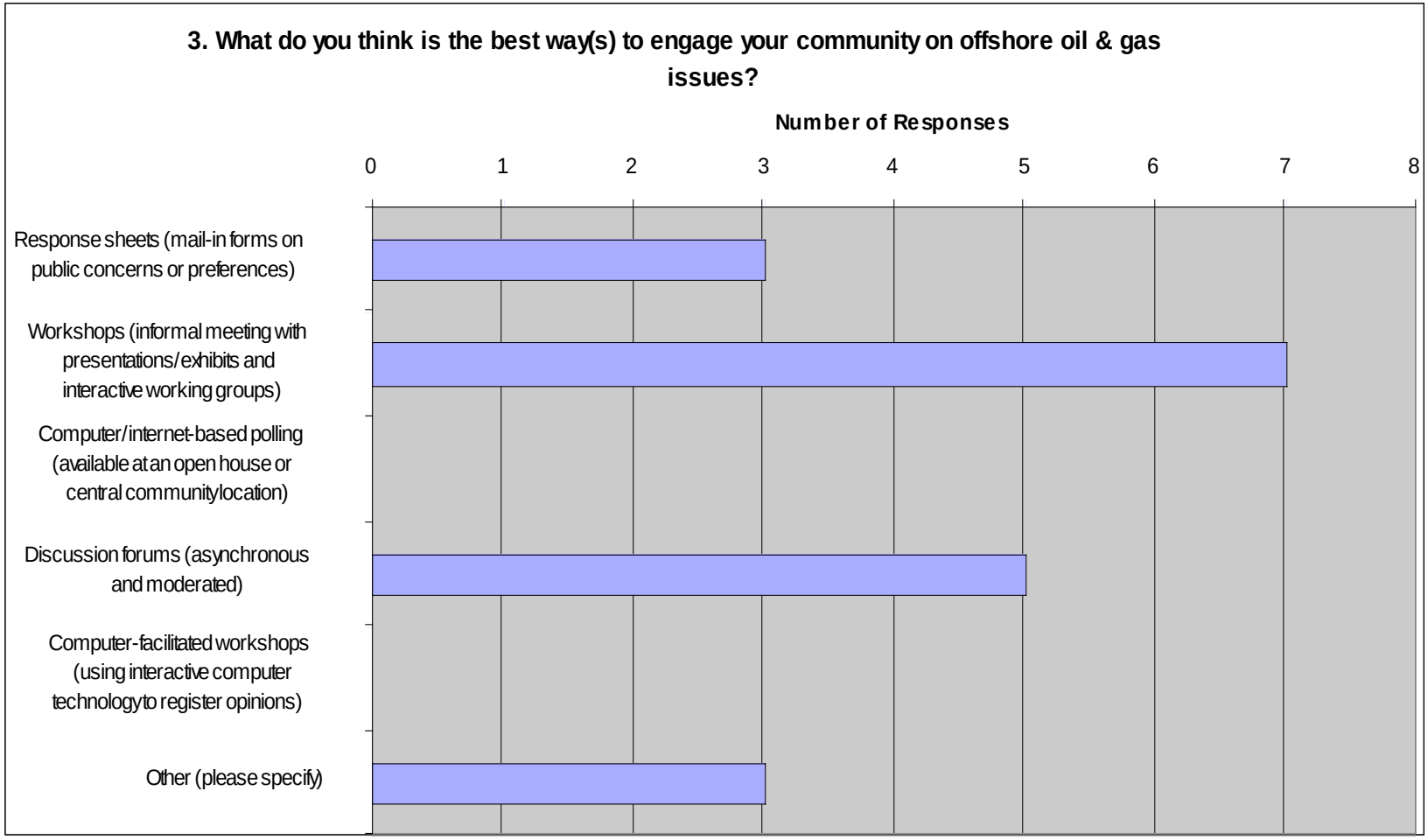
Other Responses:

- Virtually everyone gets a BC Hydro invoice
- Local library & community meetings
- Each community website and local newsletter . . . They all have them . . . Should have an ad about the meetings and the meetings should be held in the smaller communities as well as the bigger ones



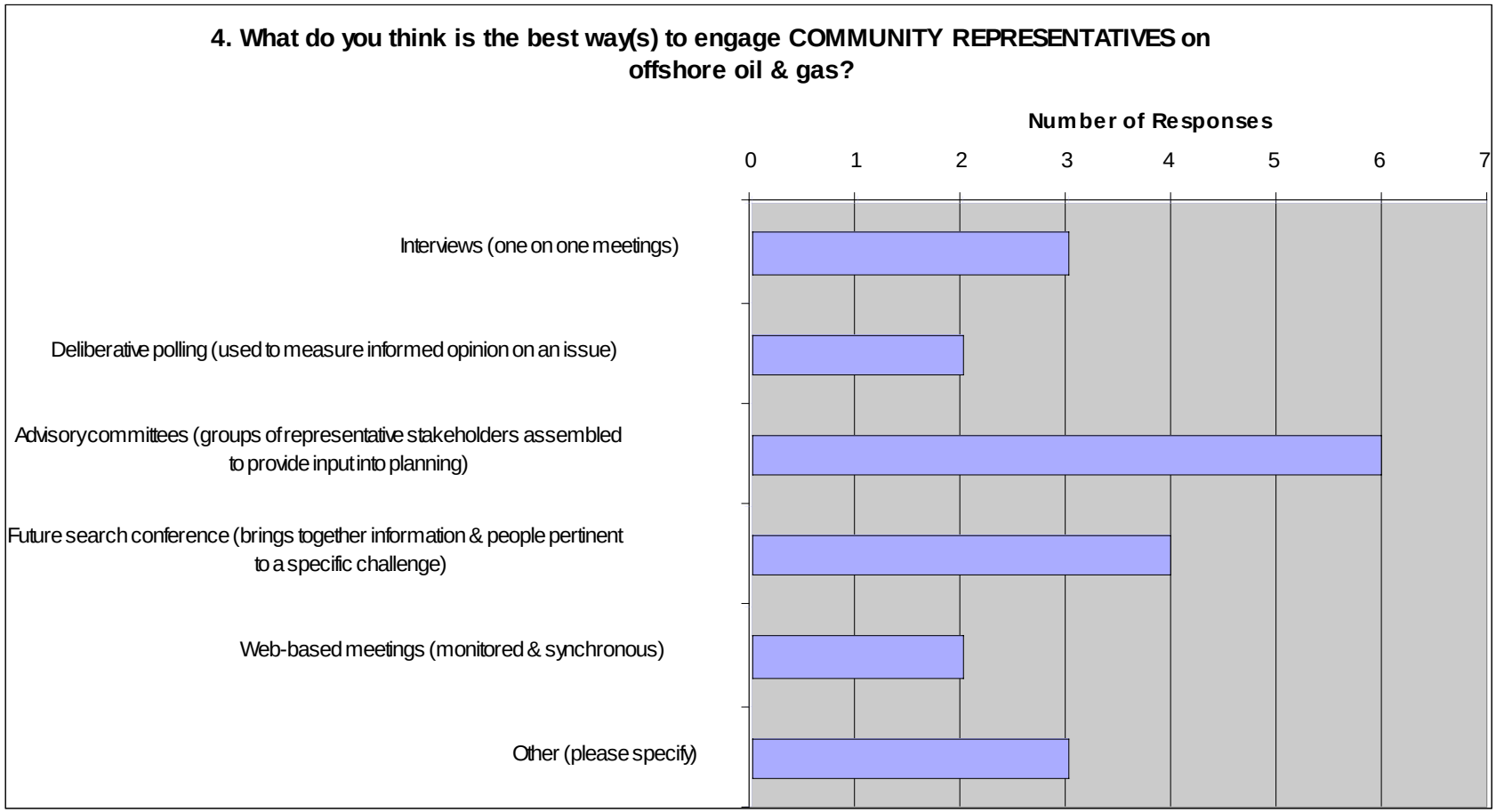
Other Responses:

- Articles should be written by a contract writer who is provided with the information that we have gathered. Robin Brunet who writes various technical articles for the Truck Loggers Association (604-684-4291)
- Town hall meetings in the evenings in the smaller communities



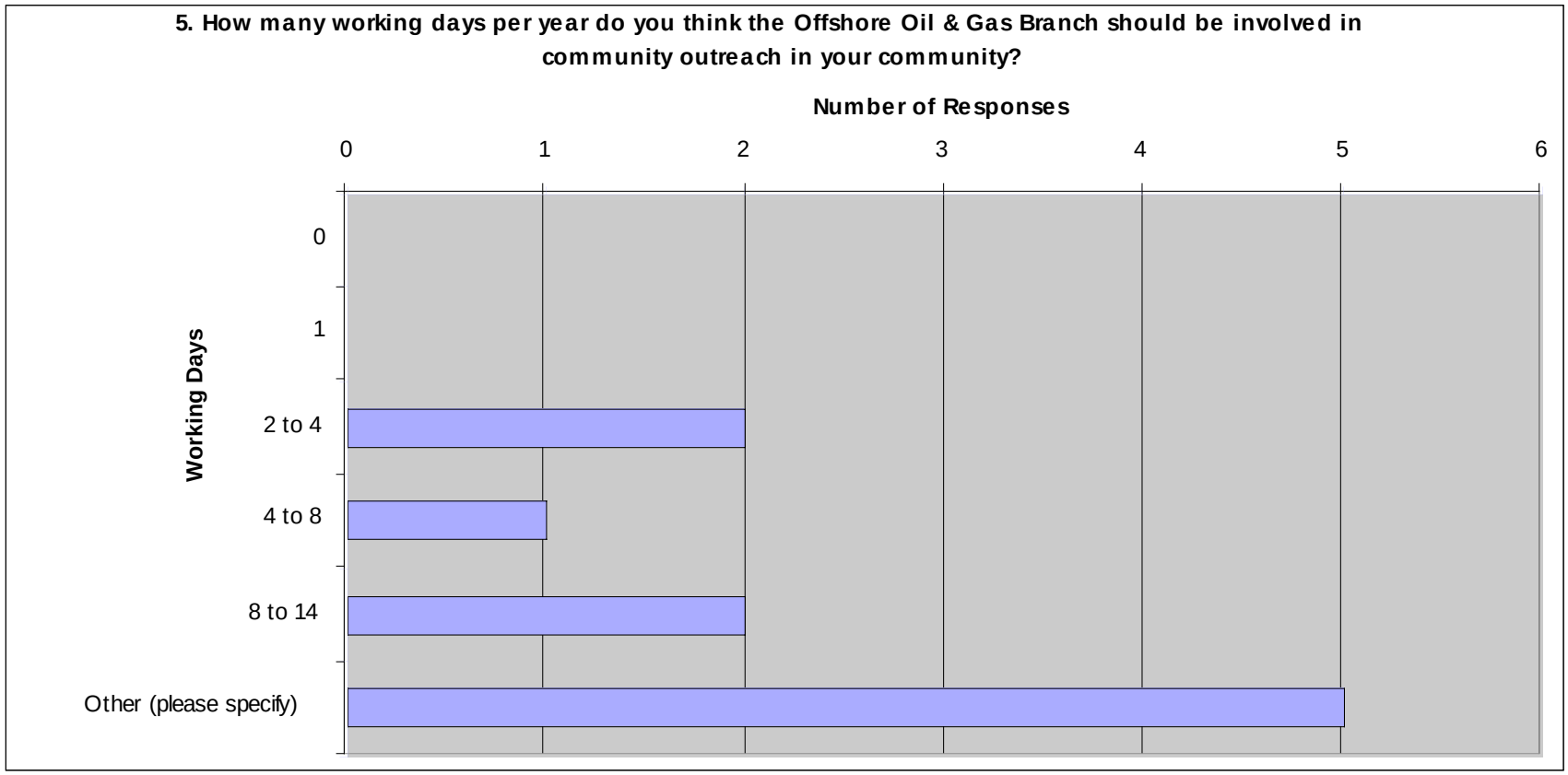
Other Responses:

- Through a Chamber of Commerce or an Economic Development Committee
- Town hall meetings and open houses
- Don't know



Other Responses:

- This committee is a good example of how well an advisory committee works
- Depends on what changes to the status quo is being considered
- In person workshops/ meetings



Other Responses:

- Once every 2 months (6 working days)
- As many as possible
- As many as possible
- Depends on what changes to the status quo are being considered
- This will not be a quick process . . . If you are serious about getting public feedback then it will take time to get it

Appendix 7:

Presentations Made to the UBCM Working Group in Chronological Order

- Offshore Oil and Gas Provincial Context presentation, Jean Dragushan, Offshore Oil and Gas Team, February 2006
- Offshore Petroleum: Socio-Economic Benefits presentation, Mark Shrimpton, Jacques Whitford, February 2006
- "Oil and Gas – What's in it for You?" presentation, Mayor Chris Morey, May 2006
- BC's Offshore Oil and Gas: What Happens if the Moratoria are Lifted presentation, Jean Dragushan, Offshore Oil and Gas Team, May 2006
- Regulatory Process for Offshore Oil and Gas – What Does it Look Like in Other Parts of Canada presentation, Gordon Erlandson, Erlandson Consulting Inc., May 2006
- BC's Oil Spill Response Strategy presentation, Duncan Ferguson, Ministry of Environment, May 2006
- BC's Oil Spill Response Strategy presentation, Craig Dougans, Burrard Clean, May 2006
- Offshore Oil and Gas Working Group Interest Identification Workshop Report, Lynda Cronin, October 2006
- LGL presentation, Mike Demarchi, January 2007
- Coastal Mayor Trip to Norway, Mayor Hank Bood, January 2007
- BC 2007 Energy Plan, Paul Wieringa, Ministry of Energy, Mines and Petroleum Resources, March 2007
- Atlantic Accords Regulatory Framework Background Paper, Boris Tyzuk, Legal Counsel to Offshore Oil and Gas Branch, March 2007
- General Oil and Gas Work Authorization Process for the Atlantic Offshore Areas, Boris Tyzuk, March 2007
- Australian Regulatory Structure Background Paper, Boris Tyzuk, March 2007
- Federal Regulatory Framework for Frontier Lands Background Paper, Boris Tyzuk, March 2007
- List of Federal and Provincial Statutes that May Apply to Onshore or Offshore Oil and Gas Activities, Boris Tyzuk, March 2007
- Norwegian Regulatory Structure Background Paper, Boris Tyzuk, March 2007
- BC Offshore Fiscal Regime presentation, Jennifer Davison, Offshore Oil and Gas Branch, June 2007

- Shell's Community Involvement presentation, Morgan Yates, Shell Canada, June 2007
- Industry Current Technology presentation, Clint Tippet, Shell Canada, June 2007
- Impact of Marine Acoustics presentation, Dr Lance Barrett-Lennard, Vancouver Aquarium, November 2007
- BC Cetacean Sightings Network presentation, Doug Sandilands, Vancouver Aquarium, November 2007
- Batholiths Project Environmental Assessment Process presentation, Adam Silverstein, Department of Fisheries and Oceans Canada, November 2007
- Provincial and Federal Context of Offshore presentation, Susan Kelly, Offshore Oil and Gas Branch, February 2008
- Peak Oil presentation, Dr Ron Smyth, Offshore Oil and Gas Branch, February 2008
- Alberta Heritage Fund presentation, Lowell Epp, Alberta Finance and Enterprise, May 2008
- Alaska Permanent Fund presentation, Michael Burns, Alaska Permanent Fund Corporation, May 2008
- Kenai Borough presentation, Bruce Richards, May 2008
- PGS Seismic presentation, Robert Sorley, May 2008
- Ocean MarineSpace presentation, Patrick Marshall, May 2008
- Seismic Surveys, David Hedgeland, HSEQ Environmental Manager, PGS Geophysical, September 2008
- Living Oceans Society (LOS), Oonagh O'connor, Energy Campaign Manager, LOS, September 2008
- Joint Nature Conservation Committee (JNCC), Dr. Mark Tasker, Head of Marine Advice, JNCC September 2008
- The (Draft) Schofield Report, Jennifer Davison, Offshore Oil and Gas Branch, September 2008