

SEA CHANGES

Perspectives on Alaska's Future Under the Pending United Nations Convention of the Law of the Sea and the Findings of the United States Oceans Commission Report

Executive Summary



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INTRODUCTION

Alaska is the most maritime state in the Union. The coastline of the state is more than twice the coastline of the rest of the states combined, and Alaskan waters contribute more than half of the total United States fisheries catch. The waters off Alaska's coasts feature productive offshore oil facilities, extensive methane hydrates, hydrothermal vents, and potentially enormous offshore mineral deposits. Alaska's location at the top of the Pacific Ocean provides both strategic air transit routes and growing maritime commerce opportunities. At the same time, Alaska is increasingly impacted by global climate change, and the dangers of marine pollution. Alaska's legislature must be aware of these issues, to help it prepare for the maritime potentials and problems of the 21st century.

There are two key initiatives on the horizon that will impact Alaska's maritime future. These are the United Nations Convention on the Law of the Sea, and legislation expected to follow the United States Oceans Commission Report. This paper will briefly overview the Law of the Sea treaty and the Oceans Commission Report, and will provide insight into several key aspects of Alaskan maritime interests.

OVERVIEW OF THE LAW OF THE SEA TREATY

The United Nations Convention on the Law of the Sea is a global treaty intended to regulate all aspects of maritime law. It became recognized as international law after the 60th ratification of the treaty, in 1994. Although the United States is not yet an official signatory to the treaty, it has generally abided by its provisions as customary international law. Both President Bush and the United States Senate have signaled their intention to address this treaty during the upcoming 109th session of Congress; it is likely to be fully ratified by the United States within the next two years.

The foremost provisions of the treaty set the allowable recognized marine territorial limits of coastal countries. Territorial limits are concentric, with varying levels of sovereign territorial rights in each particular zone. Coastal countries are allowed to claim a ***territorial sea***, to a limit of 3-12 nautical miles from shore, measured from the low tidewater mark. This zone is generally considered as the sovereign national territory of the coastal country. In the United States, the territorial seas limit is generally considered to be three nautical miles from shore, and is under the jurisdiction of the coastal state. Adjacent to the territorial sea, coastal countries may claim an additional ***contiguous zone***, out to a limit of 24 nautical miles from shore, within which they may establish and enforce regulations for customs duties, fiscal, immigration, and environmental laws, and to help enforce regulations within its land territory or territorial sea. Under United States law, this zone is regulated by federal administration. Beyond the contiguous zone, coastal countries may claim an additional zone, out to a distance of 200 nautical miles from shore, as its ***exclusive economic zone***, termed an EEZ. Within this zone, coastal countries have sovereign rights to explore and exploit all resources of the sea, whether living or non-living (that is, fisheries, and oil and minerals), whether in the waters, on the sea floor, or in the marine subsoil. Under the original terms of the treaty, coastal countries are obliged to allow neighboring countries and landlocked countries to have

access to fish stock surpluses that the coastal country cannot itself make use of. Coastal countries are charged under the terms of the treaty to regulate their respective EEZs, to promote conservation of fish stocks and to prevent marine pollution, within international standards. Beyond the EEZ, coastal countries may claim additional rights as an EEZ over the adjoining *continental shelf* extending beyond the EEZ, to a distance as far as the continental shelf extends, which may extend the EEZ many hundreds of nautical miles. We believe United States national interests support as large an EEZ and continental shelf claim as possible, not only for regulatory and economic purposes, but as a security buffer.

The Law of the Sea treaty has provisions for negotiated settlement of territorial disputes. Such disputes may be submitted to the International Tribunal for the Law of the Sea established under the terms of the convention, to the International Court of Justice, or to arbitration between the parties. The Tribunal has exclusive jurisdiction over any disputes involving the deep seabed between signatories to the treaty.

ALASKAN MARITIME TERRITORIAL CONCERNS AND THE LAW OF THE SEA TREATY

If the United States becomes a signatory to the Law of the Sea Convention, there may be several territorial issues may emerge to involve waters off the coast of Alaska.

Whether or not the U.S. is a party to the treaty, a potential territorial dispute exists over the demarcation of the maritime boundary between Canada and Alaska, in the region of the Beaufort Sea. The United States maintains that the boundary follows the landform in a continuous northeasterly line. Canada maintains that the boundary should instead be demarcated as a straight continuation of the geographic border between Canada and Alaska. At issue is a wedge-shaped piece of marine territory that may hold significant hydrocarbon reserves. The United States government has already leased eight plots of submarine terrain in this contested territory, for exploration and exploitation of potential oil reserves. Canada has lodged diplomatic protests. If the United States ratifies the Law of the Sea treaty, this issue will likely be brought before the Tribunal for some form of adjudication there.

A similar boundary dispute between Canada and the United States, regarding the maritime demarcation line between Maine and Nova Scotia, and the waters of the Georges Bank, was settled by arbitration in 1984. In that case, a line roughly equidistant between the territories was settled upon. A similar resolution might settle the Beaufort Sea dispute. It has been suggested by Doctor Rob Huebert, a noted Canadian political scientist and scholar on Law of the Sea issues, that an alternative resolution might be to allow for joint management of the Beaufort Sea wedge. Whichever plan of resolution is finally determined, Alaska's legislature should be well aware of this pending dispute, so as to encourage negotiations and provide important state-interests input to the process, in whatever forum it is held.

Alaska's southern maritime boundary ends at the Dixon Entrance, between Alaska's Alexander Archipelago and Canada's Queen Charlotte Islands. There has been a longstanding dispute, dating from the early 19th century, as to just where this maritime boundary should lie. There was an attempted resolution of the problem in 1903, at which time an arbitration panel settled in favor of the United States' interpretation of the boundary. Canada has never officially recognized this settlement, although the dispute has rarely caused serious controversy. The boundary, however, involves access to important migratory fish stocks and may - once the U.S. joins the Treaty - be brought by Canada before the International Tribunal for review.

PENDING CONTINENTAL SHELF CLAIM UNDER THE LAW OF THE SEA TREATY

Article 76 of the Law of the Sea treaty provides that a signatory coastal country may have an internationally recognized extension of its EEZ, to a distance of 350 nautical miles or more from shore, depending on the range of the underlying continental shelf, and certain geological specifications. Under the waters of Alaska's Beaufort and Chukchi Seas lies the extended continental shelf of the Chukchi Plateau. This underwater ridge extends nearly 600 miles beyond the northern coast of Alaska. Ratification of the treaty could, therefore, allow the United States to make a claim to an area of submarine terrain covering nearly half again the size of the state of Alaska. This continental ridge is known to be rich in oil, natural gas, and methane hydrates.

Recognition of such a continental shelf claim is not automatic; under the terms of the treaty, there are requirements that extensive bathymetric, geologic, and sedimentary surveys be undertaken to firmly establish the actual range of the continental shelf. A coastal country that ratifies the treaty has a 10-year deadline to conduct such surveys, and submit a claim to the United Nations Seabed Authority. In anticipation of the U.S. Senate ratification, U.S. research on geology of the Arctic Ocean floor has been stepped up in recent years to support an eventual claim.

Russia is already conducting an extensive survey, to support its claim to a continental shelf extending far into the Arctic Ocean. It is likely that a pending continental shelf claim by Russia may overlap a potential claim by the United States over the same submarine terrain. Time is of the essence, as the Bush Administration has recognized; the sooner that the United States ratifies the treaty and completes its own surveys, the sooner that a claim may be made on the submarine terrain of the Chukchi Plateau and the Bering Sea, thereby forestalling the international recognition of the pending claim by Russia.

United States accession to the treaty could also allow various territorial frictions that have occurred in the Arctic Ocean over the past 25 years to be finally resolved under the aegis of the treaty; the resulting political stability could enhance economic development throughout the Arctic.

MARINE TRANSPORT IN ALASKA AND THE LAW OF THE SEA TREATY

Due to the thinning of sea ice in the Arctic Basin and the reduction in summer coverage, there will be extended shipping seasons in the Arctic in all areas. The Beaufort, Bering and Chukchi seas are of the greatest importance to Alaska in the immediate future. Eventually the possibility of trans-Arctic traffic from East Asia and the West Coast of North America to Europe will also offer shippers new routes to consider.

The present routes of the Northwest Passage through the Arctic archipelago of Canada and the Northern Sea Route across the top of Russia from the Barents Sea to the Bering Sea have well established procedures. Since Canada and the Russian Federation are already signatories to the Law of the Sea Convention, the use of these routes will not be affected by the United States ratifying the Convention. The rights of free passage for merchant shipping in the U.S. waters of the Beaufort Sea will likewise not be affected.

The possibility of expanding national jurisdiction on the continental shelf under Article 76 of the Convention has led to an increase in scientific cruises throughout the Arctic Ocean and adjacent seas. These are governed, when necessary by bilateral and multilateral agreements. There are no provisions in the Convention that would inhibit such agreements for scientific cruises and indeed it may create a better environment for science if the U.S. was to ratify.

Passage of oil tankers, LNG ships and bulk ore carriers would have to meet the environmental provisions of each nation while in the waters of the coastal state, irrespective of whether the Convention is ratified by the U.S. Pollution in the Expanded Economic Zone (EEZ) would not be affected by ratification either, and coastal states would seek to stop or inhibit it as they do now.

The recent breakup of the Malaysia freighter, Selendang Ayu, in the Aleutian Islands and the resultant oil spill indicate the weakness of Alaska, as the coastal state, and the federal government in controlling merchant shipping. The best effort was made by Alaska in 1976 when it passed the Coastal Management Act, requiring shippers to meet stringent requirements or pay into a coastal fund. When Alaska lost in Chevron vs. Hammond in 1979 on the grounds that the State was preempting the federal government, these regulations were ended. Federal requirements were not increased until the wreck of the Exxon Valdez resulted in the passage of Oil Pollution Act of 90. OPA90, unfortunately, has only minor impact on vessels that are not oil tankers. Alaska in 1990 passed the strongest oil spill legislation of any state. Other states also increased their requirements to a degree. However, the weakness of the present system of oil spill response, state and federal, has been demonstrated by three recent spills in Puget Sound, the Delaware River and the Aleutians; spills occurring in three different states involving one foreign registered tankers, one U.S. registered tanker and one foreign freighter carrying soy beans and 440,000 gallons of very heavy Bunker C oil.

Tourism would have to meet the same requirements in coastal waters or the EEZ as now,

These would primarily be limitations on dumping of sewage and garbage and meeting the provisions already existing of the Safety of Life at Sea Convention to which all states that are signatory to the International Maritime Codes are required to observe. The recent problems of Alaska with large tourist ships would be neither helped nor hindered by U.S. ratification.

In short, ratifying the Law of the Sea Convention would place no restraints on shipping that do not already exist in national laws governing coastal waters and the EEZ, bilateral and multilateral agreements and the International Maritime Codes.

FISHERIES IN ALASKA AND THE LAW OF THE SEA TREATY

As noted, the Russian Federation has ratified the 3rd Law of the Sea Convention. After almost a quarter century, the United States is considering ratification, although there is still strong opposition. U.S. fisheries in the North Pacific and Russian fisheries in the Russian Far East (RFE) share many stocks. The U.S. management regime has been relatively stable for the past 20 years. The fishing industry in the RFE has been in a state of turmoil since the collapse of the Soviet Union in 1990 which led to rapid privatization and commercialization of the industry. Fishing effort shifted quickly from emphasis on low value to high value stocks. The following will compare Russian and United States fisheries management practices, and examine the effects on the North Pacific fisheries overall if the U.S. were to ratify the Law of the Sea treaty.

At the time the U.S. Fisheries Conservation and Management Act of 1976 (Magnusson Act), was passed the fisheries of the North Pacific had passed through almost a half century of unmanaged forays by distant water fleets, primarily those of Japan and the Soviet Union. At that time, there were several international agreements in place as listed below:

- North Pacific Fur Seal Convention
- International Pacific Halibut Convention
- International Whaling Convention
- International North Pacific Fisheries Convention
- U.S.-Japan and U.S.-USSR King Crab Agreements
- Contiguous Fisheries Zone Agreements
- U.S. Republic of Korea Fishing Agreements
- Canada-U.S. Reciprocal Fishing Agreement

Despite these being in place, several stocks were severely decimated prior to 1970. Herring fisheries were dominated by Canada until 1960, then by the Soviet Union in the 1960s. The U.S. and Japan herring take was much more moderate during this period. By 1970, 90% of the North Pacific herring catch was by the Soviet Union.

Large quantities of pollock were taken by the Soviet Union and Japan in the 1930s. This fishery was interrupted, as were many others, by World War II. Both countries resumed pollock fishing in the 1950s with Japan dominating in the eastern Bering Sea and the Soviet Union in the western Bering.

American cod fisheries began in the 1860s in the western Bering Sea. Canada joined in cod fishing in the 1920s Japan in the late 1950s and the USSR in the 1960s. Despite a relatively late entry, half of the recorded cod catch in the North Pacific was by Japan until 1970. Blackcod was a lightly fished species by Canada and the U.S. until 1960. Then Japan and the USSR entered with massive efforts that increased the catch eight fold.

Yellowfin sole were fished by Japan in the eastern Bering prior to World War II. Japan resumed this fishery in the early 1950s and was joined by the USSR in 1959. The fishery declined precipitously after five years of intensive take and there were fears that the stock was beyond recovery by 1970.

Those species not subject to large scale efforts of the distant water fleets of Japan and the Soviet Union had more normal patterns. Salmon species had ups and downs in Alaska, Canada and the Russian Far East. Halibut did not suffer from the excessive takes noted above for other species. The Pacific Halibut Convention certainly had a role in ensuring that halibut catches received better monitoring than many other species in the period prior to 1970.

In 1976, the Magnuson Act (now called the Magnuson-Stevens Act) established the 200-mile Exclusive Economic Zone for the United States. This concept has been thoroughly discussed for over a decade and was a part of the position presented by the United States and several others at the 3rd United Nations Law of the Sea Conference which began official sessions in July 1974. The U.S. Ambassador at conference was John Norton Moore (still actively teaching and working on LOS matters at the University of Virginia) and the lead in Fisheries came from Donald L. McKernon of the State Department, formerly at the University of Washington. McKernon had stated the general principles that an effective law of the sea must follow in 1972. These are:

1. Adequate national and international organizations, primarily regional in nature, must be formed to conserve resources and to provide a high sustained yield. Such organizations must be available to all nations, providing expertise to the developing as well as the developed states.
2. There must be a better balance between the rights of the coastal states and those of distant-water fishing states. That is, preferential rights must be given to the coastal states over fishery resources lying off their coasts and associated with coastal waters.
3. Where disputes over fisheries arise between nations, there must be an adequate means to resolve these conflicts in a timely manner, while protecting the rights of both parties.

4. A stable world fisheries regime, while taking into account the interests of the coastal states located near productive fishing grounds and the distant-water states with their large and efficient fishing fleets, must also consider the world-wide interests of mankind in the food resources of the oceans, including landlocked and shelf-locked states and those states with narrow access to a sea which may not be productive adjacent to their coasts..
5. Effective guidelines must be developed for the ultimate allocation of the resources among the nations of the world.
6. An international regime must be established to ensure accurate registration of the amount and changes in fishing effort, to compile adequate catch records, and to provide some overview of the activities of all nations which wish to exploit living resources.
7. International standards must be applied to prevent the waste of renewable resources and provide adequate opportunity for the full development and use of all fishery resources. A nation must not be allowed to prevent the use of fishery resources simply because they lie off its coast.
8. A combination of national and international enforcement of accepted rules must be provided to prevent unfair treatment of any nation's fishermen and to ensure that all fishermen operate according to accepted norms.

Within these broad ranging principles the Magnuson Act was developed to suit the needs of the United States fisheries. Most important was the decision to regionalize fisheries management into eight regions. At the beginning of the discussions in the early 1970s there was a strong movement toward centralizing fisheries management in one council. Luckily, with Alaska leading the way, the other states agreed on regionalization. Having the McKernon principles to fall back upon helped a great deal.

Many of these principles were incorporated in the Law of the Sea Convention passed by in 1982. It was not possible to achieve any degree of regionalization which was left to the future. It was felt that regional organizations could be worked out either bi-laterally or multi-laterally among nations. Some of this has occurred with the Barents Council being an example. Articles 61 through 73 in the Convention deal with living resources including: fish, shellfish, sea turtles and marine mammals. These provisions recognize international interdependence on these resources and provide a framework for their cooperative and sustainable management; or as we now term it "ecosystem based management".

In addition to the above provisions, other elements that would promote more integrated ecosystem based management are contained in Article 77(4) on sedentary continental shelf species; Articles 116-120 on living resources on the high seas; and Articles 192-196 dealing with marine habitat protection. Marine habitat protection would also involve

those Articles devoted to pollution control from land based sources (Article 207); seabed activities (Article 208; and vessels (Article 211).

Control of distant water fleets has been uneven, largely resting on the ability of the coastal state to enforce its Extended Economic Zone (EEZ). Some progress has been made in helping the small island nations of the South Pacific enforce control of tuna take within their EEZs and generally they have secured a better return on tuna caught in their waters.

After passage of the Magnuson Act, the U.S. fishing industry moved rapidly to develop its own distant water fleets. There was and is substantial foreign investment in these fleets. However, the major goal of the Act, better fisheries management of the U.S. portion of the high seas was strongly achieved, especially in the North Pacific. Whether the spectacular return of pollock stocks was the result of stopping distant-water fleet predations or a natural cycle is still debated, but the fact is that it largely occurred after the fisheries came under U.S. management and stringent limits were placed on the overall take. Yellowfin sole have returned to a more normal level. King crab stocks of the Bering Sea crashed after the act was passed and some other high value crab stocks have had problems. Largely the Act and regional fisheries management has worked best in the protection of flatfish, pollock, Atka mackerel and cod.

With the Magnuson Act providing the necessary tools for U.S. management, there has not been strong pressure from the fishing industry to ratify the treaty.

At present, the following conventions are still operative in the U.S. portions of the North Pacific:

International Pacific Halibut Convention	United States and Canada
International Whaling Convention	United States, Japan, Russian Federation, South Korea, China and fifty-two other nations
Convention of Anadromous Stocks in the North Pacific Ocean	United States, Canada, Japan, Russian Federation
United States – Republic of Korea Fishing Agreements	United States, South Korea
United States / Canada Salmon Treaty	United States, Canada

As shown above, there has been a concerted effort to maintain an international position on salmon, whales and halibut. Other species are largely left to what was set up by the Magnuson Act for enforcement and monitoring. The major problem that has received attention is the relationship between pollock populations in the eastern and western Bering Sea. Other species, such as Atka mackerel in the western Aleutian Islands, have

been diminishing in recent years from a peak in 1992. How much of this may be due to fishing in Russian sections of the Bering Sea is unknown. During the period of extensive Russian exploitation of the eastern Bering Sea, there was a great deal of scientific literature published by the Russians on what is now the American sector of the Bering. Since 1990, there has been little scientific investigation by Russia compared to what was done in the Soviet period. Relationships between other flatfish stocks shared by both nations follow a similar pattern.

Since the LOS Convention does not address regionalization to any degree, there is little in the Convention that would inhibit development of regional management programs if the nations with interests in the North Pacific desired to do so. The main problem is a comprehensive regional data base on the overall ecosystem including stock numbers. The presence of a good deal of poaching in the western Bering inhibits the development of such a program without strong national agreements on its necessity. This would mean in essence agreement between the Russian Federation, Canada, the United States, South Korea, Japan and China; all of whom have operations in some part of the North Pacific.

The great changes in the Russian fisheries since 1980 make it even more necessary to have good data on stocks in the Russian sectors of the North Pacific. The distant water fleets that roamed the world in the three decades before 1980 caught more than 11 million metric tons, mainly from the North Pacific, the North and South Atlantic and the Antarctic. The fleets based in the Russian Far East caught almost half of this total, largely from the North Pacific. Now the distant water fleets are almost totally disbanded with a few ships incorporated in the local companies and cooperatives that have developed since the collapse of the Soviet Union. Present fishing totals in the RFE are about 2.5 million tons spread over about 400 commercial efforts, largely based in Vladivostok, Nakhodka, Korsakov and Petropavlovsk.

The difference in pollock fisheries between the U.S. and Russian Sectors since 1976 shows the importance of management data. As the U.S. gained control of the eastern Bering fisheries and the Gulf of Alaska, it was able to stabilize pollock allowable catch at around 1 million metric tons per year. The Russian sector, including the Sea of Okhotsk totaled more than 3 million metric tons per year during the Soviet period and then decreased rapidly to the same level as the American sector. The Western Bering stocks are so low that no quotas are issued by Russia some years. Part of the loss was due to foreign fleets operating in the so called "doughnut hole" areas lying beyond the respective EEZs of Russia and the United States in the western Bering and the Sea of Okhotsk. The Western Bering hole may also have affected U.S. stocks of pollock.

In both the Russian and the U.S. sectors king crab stocks have been in decline. In the Kodiak area of the Gulf of Alaska, king crab harvests increased dramatically in the 1960s, but by the early 1970s only small quotas could be approved. Bristol Bay stocks reached a low during the years 1970-72, but then peaked again in the period 1977-80. The stock again declined in the 1980s but then stabilized at a much lower level in the 1990.

All crab harvests in the RFE have suffered from poaching. Data shows that 43% of the catch between 1996 and 2000 – red and blue king crab – is the result of over-harvest or illegal poaching. King crabs were not fished intensively during the Soviet period, but after 1990 the take increased dramatically.

The herring fishery in the North Pacific began in the 1870s with Canada being the principal participant. The U.S. fishery reached peak production in the 1920s. Catches decreased dramatically in the 1960s when a very strong Soviet effort began and a somewhat lesser Japanese catch. The Soviet effort was primarily in the western Bering Sea.

With passage of the Magnuson Act, herring catches in the U.S. sector were stabilized by an intensive effort, including Herring Savings Areas, in the Bering Sea and the Gulf of Alaska. In the Russian sector, herring stocks remain large in the Sea of Okhotsk and have recovered slightly in the western Bering Sea.

This brief discussion of the differences of fisheries management between the U.S. and Russian sectors in the North Pacific makes clear that anything that would build better data bases that could be shared would be beneficial. If the U.S. were to ratify the 3rd LOS it would provide a common base to build a strong regional agreement between the nations having interest in the North Pacific fisheries. The LOS provisions dealing with living resources are generally not seen as imposing significant new obligations on the U.S. Additionally, it should be noted that Senator Steven's office is making particular efforts to ensure that if the United States ratifies the treaty, managed fish stocks in the American EEZ will not be subject to undercutting by foreign fleets seeking to take advantage of the Convention's 'surplus fish stocks' regulations.

ALASKAN OFFSHORE RESOURCE DEVELOPMENT AND THE LAW OF THE SEA TREATY

The Law of the Sea treaty has extensive provisions for offshore resource regulation, development, and administration. Historically, many of these involved the perceived potential for offshore minerals development. As the treaty was originally written in 1982, deep seabed minerals development in the high seas, beyond the limits of national jurisdiction, was to be administered under a wealth-sharing theme. Since the time of the treaty's inception, however, this theme has been discarded in favor of free-market orientation. Offshore minerals development is now beginning in various locations around the world. There is also growing interest in the potentials of methane hydrates and hydrothermal vents.

Alaska's offshore resource development interests center around oil and natural gas. Alaskan waters feature three offshore facilities in the Beaufort Sea, as well as lesser developments in Cook Inlet and Bristol Bay. These facilities are all within the territorial waters of Alaska, and thus subject to state and federal regulation. Future developments may be foreseen at greater distances from shore, with the increase in technology and

prolonged energy prices. This possibility has already been addressed for over a decade, with continuing explorations throughout the seventeen maritime oil assessment provinces surrounding Alaska, and in the area of the Chukchi plateau. For this reason, it is in Alaska's best interests that the EEZ surrounding Alaska is as large as possible.

An intriguing aspect for future offshore resource development off the coasts of Alaska lies in the potential of methane hydrates. Methane hydrates are natural deposits of methane gas trapped in ice; they are often found in cold, high-pressure environments such as beneath seafloors. At the time of the Law of the Sea treaty's inception in 1982, these were not considered as a viable marine development prospect. Subsequent exploration and assessments of the seafloor have continued since that time; some estimates now place the energy potential of methane hydrates at over twice the combined remaining reserves of oil, gas, and coal of the entire planet. Surveys of the Arctic Ocean indicate that this area is particularly rich in these resources, and studies predict utilization of methane hydrates in the Arctic maritime regions of the world within the next 10 years, according to the United States Methane Hydrate Advisory Committee. Methane hydrates are a mixed blessing however; melting of massive methane hydrate deposits can alter the structure of the seafloor itself, and the discharge of methane into the atmosphere is now recognized as a contributor to global climate change. These potentials and dangers have encouraged significant studies to be commissioned regarding them, including recent ones by the United Nations International Seabed Authority and the United States Methane Hydrates Commission. Although Alaska will not likely be impacted by Law of the Sea regulations on methane hydrate extraction, it is foreseeable that Alaska could be a major contributor to methane hydrate research around the world.

Offshore minerals development is very limited in Alaska, although profitable seabed mining has already been undertaken in other parts of the world. There is now a rising commercial interest in ferromanganese crusts and polymetallic sulfides, which are mineral deposits located at inactive hydrothermal vents and along tectonic faults. Alaska's productivity as a land-based mining state is well established, and it is predictable that this mineral wealth is even greater offshore, considering that Alaska is located at the top of the Pacific tectonic plate and the undersea volcanic activity of the Ring of Fire. Marine prospecting near hydrothermal vents may also yield significant profits in biotechnology. Seabed organisms that can survive in high pressure, high temperature environments such as at hydrothermal vents have already yielded billions of dollars of profit in industrial uses and medical technology.

Although there is great economic potential for marine methane hydrate deposits and hydrothermal vents, these areas are often the sole habitat for unique marine organisms. It is foreseeable that the growing environmental concern over these unique organisms may lead to increased calls for additional marine protected areas in the waters of the EEZ surrounding Alaska. Administration of these areas will necessarily involve reference to the Law of the Sea treaty, and it is advisable that Alaska build up a knowledge base on these resources and the Law of the Sea treaty itself.

THE OCEANS COMMISSION REPORT AND ALASKA

There is a great and growing concern throughout the United States over the condition of the oceans surrounding the country and the impact of human activities upon them. This is Alaska's concern as well. Our lives, our livelihood, our past and future are closely connected to the sea, more so than any other state in the Union.

Congress passed the Oceans Act of 2000, to address the perceived problems of over-fishing, pollution, and ecological change. Pursuant to that Act, the United States Commission on Oceans Policy was created, with the express purpose of studying the condition of the oceans, and drafting recommendations for a comprehensive change in national oceans policy. The 16 members of the Commission was comprised some of the most accomplished Americans involved in oceans affairs, including Alaska's Edward Rasmuson. After a three-year study, the Commission submitted for review an extensive list of recommendations for administrative and management change, covering a wide range of oceans related activities. The full report has now been completed and is awaiting review in the 109th Congress. Many of their findings and recommendations for oceans policy change involve issues that are of critical importance to Alaska.

To fully understand the Oceans Commission Report and its recommendations, it is necessary to briefly review the past and current state of affairs of oceans policy. The last comprehensive United States study of the state of the oceans was in 1966. Subsequent administrative changes included the 1976 Magnuson Act which authorized the creation of eight fisheries management regimes, initiation of the Law of the Sea Convention, and the 1994 Magnuson-Stevens Act which outlined regulations for improved fisheries management.

Oceans management responsibilities today are divided into a large and confusing number of agencies at various levels of government. Frequently, there is overlap of responsibilities, lack of coordination, or a failure to address changing circumstances and the growing understanding of the interconnectedness of the oceans and their elements. It is now recognized that proper management of the oceans requires an ecosystems based approach, and this is central to the recommendations of the Oceans Commission Report. Pursuant to promoting an ecosystems management approach, the Commission has recommended the creation of Regional Oceans Councils to be charged with protection of the regional ecosystems, a National Oceans Policy Advisory board to provide direct recommendations to Congress and the President, and a National Oceans Council to provide overarching management policy at the executive level.

There is also a call within the Oceans Commission Report for a substantial and permanent increase in maritime research funding. At present, national funding for oceans research is very low, particularly in comparison with various other government initiatives. Proposed funding would channel more than \$5 billion of additional funding into new programs and initiatives to improve understanding and management of oceans science. Among these programs are the plans for the Arctic Ocean Observation System,

an array of over 700 sea and ice-worthy buoys which will provide real-time satellite uplink data on the state of the Arctic Ocean.

Alaska's interests in the Oceans Commission Report largely center on proposed administrative changes in the management of fisheries. As stated, United States blue water fisheries are divided into eight management councils. The councils are intended to provide for sustainable fisheries utilization by balancing commercial and recreational fishing interests with sound science and statistical analysis of fish stocks. Ultimate authority is vested in the Secretary of Commerce. There have been varying levels of success with this structure.

In the North Pacific region, which includes Alaska's waters, there is the North Pacific Fisheries Management Council. The NPFMC is noteworthy as a particularly successful management council; all of the eighty-two managed fish stocks in North Pacific waters are at healthy, sustainable levels. This is largely due to the NPFMC's adherence to the biological catch guidelines provided by its science and statistical committee, and to the fact that the NPFMC already follows an ecosystems-based management approach to fisheries administration. This has not always been the case with other fisheries management councils, and there have been instances of over-fishing as a result.

The Oceans Commission Report is calling for the creation of Regional Oceans Councils to address these shortcomings. The creation of an ROC in the North Pacific will either fundamentally alter or replace the current NPFMC structure entirely, as it will expand oceans oversight beyond traditional fisheries management. Additionally, the creation of a National Oceans Council and National Oceans Policy Advisory board with sub-departments of oceans management policy may transfer various powers of oceans management to the executive branch. Various environmental groups, such as the Pew Oceans Commission and Oceana, have advised an even stronger ecosystems management approach, with environmentalist input and greater federal oversight of fisheries and oceans regions. Governor Murkowski's office has expressed concern with this approach in a detailed commentary, and reiterates support for the successful regional and local advisory and management regime that has served Alaska so well. The Bush administration, for its part, is already seeking to move forward with some of the Commission's recommendations, including the creation of a cabinet-level Committee on Ocean Policy. This committee will be tasked with implementing a balanced approach to oceans management issues, and is intending to seek the input of regional maritime interests.

It is in Alaska's best long-term interests to support the recommendations of the Oceans Commission, regardless of limited reservations about the implementation of the policies. The Report has yet to be reviewed by Congress, and any actual bureaucratic structures have yet to be determined. Considering that Alaska has such overwhelming maritime interests and experience, that Alaska's leadership has set the standard for successful marine legislation, and that the NPFMC has been so successful to date, our best approach to the Oceans Commission Report may be to help lead the process of crafting new oceans management strategies. Alaska can promote this by first becoming aware of the issues

which face us in oceans management – economic opportunities, ecological dangers, and legal-administrative changes – and then by seeking to fully understand and address the issues. There are many outstanding arctic and marine science programs throughout Alaska; these deserve the full support of Alaska and its legislature, so that Alaska can enjoy the benefits of maritime leadership and act to protect the interests of its seas and people. As a small state, with a common understanding of the critical importance of maritime issues, Alaska can move quickly and boldly to provide answers for the entire nation.

SUMMARY OF RECOMMENDATIONS

This report recommends the State of Alaska consider:

- 1) creating a detailed knowledge-base assessment of how resource development may be affected if the United States ratifies the Law of the Sea Treaty.
- 2) developing a strategic plan on addressing Article 76 (continental shelf claim) of the Law of the Sea Treaty.
- 3) encouraging the United States to see the largest EEZ and continental shelf claim possible, not only for regulatory and economic purposes, but as a security buffer.
- 4) encouraging negotiations and providing vital state-interest input concerning the Alaska boundary disputes between Canada and the United States as they relate to emerging shipping opportunities, oil and gas prospects, and the Law of the Sea Treaty.
- 5) establishing a maritime legal studies program, to decisively promote its continuing interests in marine legislation, including the impending Law of the Sea Treaty and the recommendations of the United States Oceans Commission Report.
- 6) proactively supporting the North Pacific Fisheries Management Council, as a management program that successfully promotes sustainable fisheries and Alaska's real economic and social welfare.
- 7) advancing the North Pacific region as a prototype for pending federal oceans action plans.
- 8) holding hearings on a new marine protection laws, including regulations for more stringent oversight of foreign vessels transiting Alaskan waters especially in light of the recent oil spill in the Aleutian Islands.
- 9) commissioning a detailed examination of the potential opportunities and challenges associated with hydrothermal vents and methane hydrates, as these issues will become increasingly important in maritime affairs in the next decade.
- 10) increasing the level of funding for marine and maritime research to match Alaska's place as the primary maritime state in the Union.

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