

EXCLUSIVE ECONOMIC ZONES:  
OCEAN RESOURCES AND OUR OCEAN HERITAGE

Prepared by: Kent Keith  
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Presented to  
Second Annual Pacific Basin Coastal Zone Management Conference

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Today I would like to share with you some thoughts on the exclusive economic zone (EEZ), an extraordinary concept which is reallocating ocean resources throughout the world. It will have an impact on the international balance of power, and the future of the Pacific Islands. It will have an impact on you and me, and especially on our children and their children.

The surface of this planet, as you know, is 71% water. Subtracting inland lakes and seas, it is two-thirds ocean. Ancient westerners, if they had known this, might have called this "Planet Ocean," instead of "Planet Earth."

The ocean is a source of food, a place of recreation, and a highway of commerce. More recently, we have become aware of its potential to supply us with minerals and energy. Farsighted thinkers and designers have looked at the ocean as a place to live, perhaps on ocean floating platforms which operate like city-states.

What happens to the ocean and its resources will have great influence on world history. And there is no more important milestone than the creation of EEZ's. As the world grows more crowded, more hungry, and more in need of minerals and energy, these EEZ's will steadily grow in importance.

### A History of the Law of the Sea

A discussion of the EEZ makes the most sense in the context of the history of the law of the sea. I will now do my best to sketch 3,000 years of ocean law in a few minutes.

The Sumerians, Egyptians, Greeks, Romans, and Chinese had ships. They may also have had sea codes, but if so, it appears that none of them survived antiquity. In Europe, commerce by sea largely ceased during the Dark Ages, but was stimulated by the rise of the Italian city-states about 1000 A.D. By the year 1400, Venice was said to have 3,000 ships afloat. Sea codes appeared, such as the Tablets of Amalfi, the Llibre del Consolat de Mar of Barcelona, and the Rules of Oleron -- which are yet mentioned occasionally in admiralty courts.

For two thousand years or more, the law of the sea was largely maritime law -- the rules, laws, and concepts affecting the business of carrying people and goods over water. However, theories of ownership and control over the ocean were already developing and being put into effect. Under Roman law, the sea was res nullius -- common to all because it was the property of no one. The writings of Cicero, Ovid, and Virgil compared the sea to sunlight and air, limitless resources not capable of being owned by anyone. Res nullius was contrasted with res communis -- the sea was common to all because it was the property of everyone. The difference is that under res nullius, if you physically capture and control a part of the ocean, it is yours. Under res communis, if you physically capture and control a part of the ocean, you are appropriating someone else's shares.

We are told that the Romans controlled navigation in the Mediterranean, subjecting non-Roman vessels to various forms of restriction. In 1201, England issued an ordinance, the gist of which was to require all vessels at sea to lower their sails when English warships ordered them to do so. Also, by the end of the 13th century, the Norwegians prohibited foreign ships from sailing north of Bergen without a royal license.

Venice was not impressed with res communis. Venice asserted controls, assuming sovereignty over the Adriatic, and requiring tribute from ships or prohibiting their passage. Genoa did the same. That was modest compared to the division of the oceans of the world made by Spain and Portugal in the 16th century. Spain claimed the exclusive right to navigation in the Western Atlantic, the Gulf of Mexico, and the Pacific Ocean. Portugal claimed the Atlantic south of Morocco and the entire Indian Ocean. These claims were backed by the authority of a Papal Bull. Spain and Portugal prohibited all commerce at sea except by the licenses which they issued -- and the death sentence or confiscation of goods was imposed on those who traded without a royal license.

The controls asserted by Spain and Portugal had quite a stifling effect on trade, and gave rise to controversies concerning mare liberum -- the open or free sea -- and mare clausum -- the closed or controlled sea. The debate began primarily because the Dutch wanted to break into the East Indies trade which was dominated by the Portuguese. Hugo Grotius, a Dutch scholar and jurist, was hired by the Dutch East India Company, and in 1609 a portion of his writings was published as a pamphlet entitled Mare Liberum. In that pamphlet, he asserted that the high seas were not within the sovereignty of any state, and thus navigation was open to any nation on the high seas -- including the Dutch in the East Indies. The sea could not be seized or enclosed, so it could not become property, and that meant it belonged to no one. A month after Grotius' treatise appeared, the Dutch won trading rights in the East Indies by treaty agreement at Antwerp.

The British at this time were more concerned with establishing sovereignty over surrounding waters, and this required the concept of a closed sea. In 1619, the British scholar John Selden published his book, Mare Clausum. In that book he argued that the sea could be appropriated and had in fact been appropriated many times in the past -- Venice, Genoa, Spain, and Portugal had done so. Selden pointed out that ocean resources were exhaustible, and a

State had the right to protect its interests. He argued that the King of England could prohibit fishing and navigation by foreigners in British seas.

By the 17th century, then, the law of the sea had become much broader than maritime law. It remained centered on commerce and navigation, but it was becoming characterized by jurisdictional assertions -- national sovereignty over coastal seas, as with the British, Venetians and Genoans; or over entire oceans, as with the Spanish and Portuguese. The law of the sea had become maritime law and territorial law.

Much of the law of the sea has changed, and has been shaped in its changes, by technology. If we jump three centuries to the 20th century, we see technology as a prime mover in peaceful activities. We have learned to drill for oil in waters far from the coast. We have developed extremely efficient fisheries, so efficient that the future of some species is threatened. We are learning now how to mine the mineral wealth of the ocean floor. Energy, food, and important minerals are now available which were never available before. This has changed the law of the sea in only a few decades, until today it can be said that the law of the sea is ocean resource law. It establishes a framework for the comprehensive management of ocean resources on the ocean floor, continental shelf, water column, and ocean surface.

Let's trace the basic developments in this century. We enter the century with mare liberum, freedom of the high seas, and mare clausum, the territorial seas of coastal States. The League of Nations became interested in ocean issues, and a Conference on the Codification of International Law was held in 1930 at The Hague which among other things prepared a draft convention on the legal status of the territorial sea. The difficulties experienced then sound familiar now: How wide should the territorial sea be? What control can a State exercise in the area just beyond the territorial sea? How do you define the rights which a coastal State has within the territorial sea?

In 1939, as the second world war began, the United States urged the nations of the Americas to create a defense zone of 300 miles around the hemisphere to keep the zone free of hostile acts by non-American belligerent nations. At the end of the war in 1945, President Truman declared U.S. jurisdiction over our continental shelf, a declaration which inspired Chile and Peru to declare full sovereignty over a 200-mile zone in 1947.

### The United Nations Conferences on the Law of the Sea

As claims began to proliferate, the United Nations established the International Law Commission in 1947. The commission studied the high seas and territorial waters. It submitted a final report which consisted of 73 articles and commentaries. This report went to the U.N. General Assembly in 1956, and the UN called its first conference on the law of the sea. It was held in Geneva in 1958.

This first UN conference on the law of the sea was exceptionally important -- both for what it did and what it did not do. It succeeded in adopting four conventions. These were: (1) the Convention on the High Seas,

(2) the Convention on the Territorial Sea and Contiguous Zone, (3) the Convention on the Continental Shelf, and (4) the Convention on Fishing and Conservation of Living Resources of the High Seas. These conventions form the general backdrop to current law of the sea concepts and the new law of the sea convention undergoing ratification. I might add here that when these conventions refer to "States" they are referring to nation states or countries.

Under these conventions, the territorial sea was not specified, but practice was three miles; the contiguous zone was 12 miles; and the continental shelf could range between nine and 250 miles. The continental shelf is important, because oil is most easily accessible there, fish are far more plentiful there than on the high seas, and most of the important scientific research is conducted there.

The Convention on the Continental Shelf gave coastal States sovereign rights for the purpose of exploring and exploiting the natural resources of the continental shelf. The high seas consisted of all parts of the sea which were beyond the territorial sea. The Convention on the High Seas states: "The high seas being open to all nations, no state may validly purport to subject any part of them to its sovereignty." This sounds like our old friend res communis -- the seas are open to everyone and no one can appropriate them. However, the Convention guaranteed freedom of navigation, fishing, freedom to lay submarine cables and pipelines, and freedom to fly over high seas. This sounds like another old friend, res nullius -- States can unilaterally use the high seas, since it is the property of no one, and whatever is there is there for anyone to take. The only restriction in the Convention was that a State must give reasonable regard to the interests of other States in exercising its freedom of the high seas.

A second UN Conference was held in 1960. One of its goals was an agreement on the breadth of the territorial sea. The Conference was not successful. Skipping seven years, we arrive in 1967 at a presentation made at the UN by Arvid Pardo, Ambassador of Malta, in which he noted the wealth of the seabed, and argued that it should be treated as the common heritage of mankind. This set in motion a chain of events resulting in 1973 in the convening of UNCLOS III, the third UN Conference on the Law of the Sea.

UNCLOS III had eleven sessions, and developed a number of draft texts or negotiating texts during years of negotiations. On April 30, 1982 the delegates at UNCLOS III voted to adopt a new law of the sea convention. The vote was 130 in favor, 4 opposed, and 17 abstentions. The United States was one of the four opposed, primarily because of the manganese nodule mining portion of the text. The Convention was signed on December 10, 1982 by 119 States in ceremonies at Montego Bay in Jamaica. The final step is ratification by the legislative bodies of the signatory States. The ratification of 60 countries is required to put it into force and effect.

The new UN convention has 17 parts with 320 articles, plus nine annexes. It establishes 12-mile territorial seas, contiguous zones of 24 miles, exclusive economic zones of 200 miles, and continental shelves which extend to the outer edge of the continental margin or to a distance of 200 nautical miles, whichever distance is greater.

## The EEZ under the UN Convention

What does this proposed convention say about exclusive economic zones? The EEZ has been part of the proposed convention from the beginning. It was in the Informal Negotiating Text which emerged in 1975, the Revised Single Negotiating Text of 1976, and the Informal Composite Negotiating Text of 1977. While the new law of the sea convention is not yet ratified and in force and effect, the EEZ portion of the convention is being overtaken by custom and practice. The EEZ is generally recognized throughout the world, even without the convention.

Since 1974, when the EEZ concept was introduced at the UN conference, 56 countries have established 200-mile EEZ's, and 36 more have established 200-mile exclusive fishery zones. The United States established its 200-mile fishery zone in 1976, and its 200-mile EEZ in 1983. The total area closed off by all these 200-mile zones is estimated at 28 million square nautical miles, or 32% of the total ocean space on this planet. Thus, even before the treaty is ratified, one third of all ocean space has been enclosed in some sort of maritime zone.

The fifteen countries with the largest EEZ's account for 16 million square nautical miles, or 57% of the total 28 million. The United States leads with 2.2 million square nautical miles, followed by Australia with 2 million, Indonesia with 1.5 million, New Zealand with 1.4 million, Canada with 1.4 million, the USSR with 1.3 million, and Japan with 1.1 million. The other eight countries with large EEZ's are Brazil, Mexico, Chile, Norway, India, Philippines, Portugal, and Madagascar, in order of declining size. Thus, 10% of the number of nations in the world control half of the ocean space which comes within the EEZ. There is great irony, here. The less developed or developing nations pushed the hardest to establish EEZ's, but the largest EEZ's are controlled by the advanced countries.

Even more important than the size of the EEZ's is the amount of resources they contain. Over 90 percent by volume of the world's fish catch is estimated to be taken within the EEZ. Most known hydrocarbon resources are within 200 miles of shore. And most distant-water scientific research is conducted within the EEZ. Only a few nations with large EEZ's also have rich EEZ's, but taken together, most of the wealth of the ocean is found within 200 miles of the shore, and this wealth will be regulated under the new EEZ regime.

In the proposed UN convention, the EEZ is covered by Part V, Articles 55 through 75. The basic rights, jurisdiction, and duties of the coastal State in the EEZ are set forth in Article 56, which says in part:

1. In the exclusive economic zone, the coastal State has:
  - (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the sea-bed and of the sea-bed and its

- subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
- (b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:
    - (i) the establishment and use of artificial islands, installations and structures;
    - (ii) marine scientific research;
    - (iii) the protection and preservation of the marine environment;
  - (c) other rights and duties provided for in this Convention.

The EEZ thus establishes rights, but not full sovereignty for the coastal State. It is a zone for economic purposes -- to manage and exploit economic resources. It is a transitional zone, between the territorial sea and the high seas. Article 58 makes it clear that the rights traditionally exercised in the high seas -- navigation, overflight, laying of submarine cables and pipelines, and other lawful uses -- can be exercised in the EEZ, subject to coastal State regulations.

For the most part, the remaining articles in Part V regarding the EEZ relate to the conservation and utilization of living resources, and the sharing of these resources with other States. Under Article 62, the coastal State shall determine its capacity to harvest the living resources of its EEZ, and if it doesn't have the capacity to harvest the entire allowable catch, then it shall give other States access to the surplus. The rights of land-locked States and geographically disadvantaged States are to be considered in the process, unless the coastal State in question has an economy which is "overwhelmingly dependent on the exploitation of the living resources of its exclusive economic zone."

Article 62 gives the coastal State significant powers over the nationals of other States fishing in its EEZ. These foreign nationals "shall comply with the conservation measures and with the other terms and conditions established in the laws and regulations of the coastal State." These laws and regulations may include the following:

- (a) licensing of fishermen, fishing vessels and equipment, including payment of fees and other forms of remuneration, which, in the case of developing coastal States, may consist of adequate compensation in the field of financing, equipment and technology relating to the fishing industry;
- (b) determining the species which may be caught, and fixing quotas of catch, whether in relation to particular stocks or groups of stocks or catch per vessel over a period of time or to the catch by nationals of any State during a specified period;

- (c) regulating seasons and areas of fishing, the types, sizes and amount of gear, and the types, sizes and number of fishing vessels that may be used;
- (d) fixing the age and size of fish and other species that may be caught;
- (e) specifying information required of fishing vessels, including catch and effort statistics and vessel position reports;
- (f) requiring, under the authorization and control of the coastal State, the conduct of specified fisheries research programmes and regulating the conduct of such research, including the sampling of catches, disposition of samples and reporting of associated scientific data;
- (g) the placing of observers or trainees on board such vessels in the ports of the coastal State;
- (h) the landing of all or any part of the catch by such vessels in the ports of the coastal State;
- (i) terms and conditions relating to joint ventures or other co-operative arrangements;
- (j) requirements for the training of personnel and the transfer of fisheries technology, including enhancement of the coastal State's capability of undertaking fisheries research;
- (k) enforcement procedures.

These new powers, of course, have created difficulties for nations which rely on distant-water fisheries in the EEZ's of other States. This is a problem for the USSR, the United States, Japan, West Germany, the United Kingdom, Spain, Poland, Thailand, South Korea, Singapore, and Taiwan.

#### Two General Problems with EEZ's

There are at least two general problems with all the rights and powers granted the coastal State in the EEZ. The first problem is how the coastal State is to enforce its jurisdiction in the EEZ. The second problem is how the coastal State is to take advantage of its EEZ resources to its economic benefit. One is defensive and protective; the other is offensive and exploitative. Both require significant capital expenditures.

Let me say a few words about enforcement. The navies of the world have been classified into five classes, with the United States and the Soviet Union in the first class, the navies of France and Britain in the second class, and the remaining navies of the world in the third, fourth, or fifth classes. Even for the superpowers, the United States and the USSR, enforcement of the EEZ is not easy. Large warships are not especially cost-effective in this regard. Smaller vessels and aircraft would be better suited for EEZ patrols, but these do not seem to be abundant. For developing nations, whose navies are clustered in the third, fourth, and fifth classes, the prospects for enforcement seem rather dim. Aircraft and ships are expensive to buy, operate, and maintain.

Because the enforcement of the EEZ is likely to require different technology, prospects are not completely dim for developing countries. Coastal navies can be effective, even if they are not first class bluewater powers. For example, missile-armed fast patrol boats are comparatively inexpensive but potent, and the acquisition of such weaponry by developing coastal States would give their navies a great deal of effective strength. It should be noted that among developing coastal States, six of the seven with the largest EEZ's also rank fairly high in naval power -- Indonesia, Brazil, Mexico, Chile, India, and the Philippines.

Overall, however, it is estimated that 77 out of 102 states, or 75%, have very limited EEZ enforcement potential. It is on this basis that some commentators have concluded that most developing States have gained little from the new EEZ regime, and cannot enforce what they have.

This is true -- for now. It must be admitted. Poaching will occur. But in the long term, the problem will be solved. Enforcement technology will be developed. As for exploitation, the EEZ's will not run away. They are here to stay. Capital will be found, and the resources will be developed. For now, they are a future potential.

It is interesting to remember that it took a century for the U.S. to develop the resources of, and enforce the laws within, the area known as the Louisiana Purchase. While it is true that most coastal States will need capital to develop their EEZ resources, this is not unusual. The United States relied heavily on imported capital for its land development, as did modern Hawaii.

### The Pacific Islands and their EEZ's

What does the EEZ mean to the Pacific Islands? For centuries, many Pacific Islands have struggled with the problem of small land masses, limited resources, and population pressures. Viewed by foreign powers, many Pacific Islands have been valuable only as refueling stations or staging areas or rest stops; or, worse, as battlegrounds.

The EEZ has already changed that. Even the smallest Pacific Islands now have large EEZ's. These EEZ's have vast resources which can be developed in the coming decades and centuries. These resources include fish, marine minerals, and favorable waters for ocean thermal energy conversion, or OTEC. Pacific Islands will have control over the development of these resources by themselves, by others, or in partnerships. Thus, even the smallest Pacific Islands are no longer little dots on a map -- they are the future nodes or nerve centers of an extensive new ocean regime. This a major breakthrough. It is a major allocation of resources to the Pacific Islands.

I said at the beginning of my speech that the EEZ is an extraordinary concept which is reallocating ocean resources throughout the world. I said that it will have an impact on the international balance of power. I have noted that 32% of the world's oceans are now in 200-mile zones. In looking at world history, it is striking how the development of certain resources has changed the power and position of a region. Think of the great plains of the

American Midwest which made America the breadbasket of the world. Think of the development of oil in the Middle East. Looking ahead, think of the vast mineral resources of Australia and the Soviet Union. And now, think of the potential for food, energy, and minerals from the millions of square miles of ocean in the EEZ's of the Pacific Islands.

### The United States EEZ and Pacific Islands

What about the United States EEZ and Pacific Islands? The President issued a proclamation on March 10, 1983, establishing an EEZ for the United States, described as "a zone contiguous to the territorial sea, including zones contiguous to the territorial sea of the United States, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands (to the extent consistent with the Covenant and the United Nations Trusteeship Agreement), and United States overseas territories and possessions." The proclamation stated that it was not changing existing U.S. policies concerning the continental shelf, marine mammals, or fisheries. It noted in particular that it was not changing U.S. policy on highly migratory species of tuna "which are not subject to United States jurisdiction and require international agreements for effective management."

In general, the proclamation followed the proposed UN Convention on the Law of the Sea. In a statement of the President which accompanied the proclamation, the United States asserted jurisdiction over mineral resources out to the 200-mile limit, and declined to assert a right to regulate marine scientific research within the U.S. EEZ. The statement concluded by saying that "The Administration looks forward to working with the Congress on legislation to implement these new policies."

The following day, Representative Breaux introduced H.R. 2061, a bill to implement an exclusive economic zone adjacent to the territorial sea of the U.S. Two months later, Representative Jones introduced H.R. 2853, to establish a National Oceans Policy Commission to make recommendations to Congress and the President on a comprehensive national oceans policy. The recommendations would include the implementation of the EEZ. A series of hearings were held on this bill in 1983. Both bills have now expired, but may be re-introduced.

The U.S. EEZ includes 200 miles around Hawaii, Guam, the Northern Marianas, and American Samoa. The amount of ocean affected is very large indeed. The zone around Hawaii is more than 600,000 square miles, or 100 times the size of our land mass. Guam and the Northern Marianas, combined, have 312,000 square miles in their EEZ. American Samoa has 75,000 square miles. Thus, the four members of the Pacific Basin Development Council have EEZ's totalling a million square miles. That is extremely important.

The actual control of these EEZ's will vary according to the international legal status of the islands in question. Independent island nations will administer their own zones. The zones of Hawaii, Guam, the Northern Marianas, and American Samoa are another matter. The zones are U.S. zones, but there may be an opportunity for state or territorial participation in their management.

This is my hope for Hawaii -- that State and County governments will be able to participate with appropriate federal government agencies in managing, conserving, and developing the EEZ resources around the Hawaiian Islands. There are several reasons I would like to see this. First, we live in the islands, and the management of the EEZ will have an impact on us. Second, the EEZ is an extension of our coastal zone, in which we are involved through our CZM program. Third, our State government currently has jurisdiction over submerged lands up to the limit of the U.S. territorial sea. As the U.S. further extends its jurisdiction over ocean resources by declaring a 200-mile EEZ, it is logical for local government involvement to also be extended. Hawaii could ask for a delegation of power from the U.S. government to manage the EEZ around Hawaii's eight major islands.

But there is a fourth reason that I would like to see local governments involved in the management and enjoyment of EEZ's. I believe this would be an important step toward regaining our lost heritage -- our loss of the ocean as part of our culture, our psyche, our self-definition, our way of life in the Pacific. Half of God's creation is nearly unknown to us. We have lost the wonder and adventure of discovering, learning about, and interacting with the plants and animals and forces of the ocean world. Half of our potential experience as human beings is going unexperienced. Without awareness of the ocean, we are not aware of the rhythms and cycles of the planet. We are, in a sense, strangers to two-thirds of our planet. We are strangers in our own home.

I know that for the ancient Hawaiians, this was not the case. They could read the wind and waves, the clouds and currents. The ocean was an integral part of daily life. The ocean was an extension of the land. It was a place to work and play, to use and enjoy. The division of Hawaiian lands into ahupuaa's reflected this. In order to give each chief the full spectrum of resources for his people, the land was divided into pie-shaped wedges which ran from the mountain tops down through the valleys and out into the ocean. Konohiki rights still exist in Hawaii's nearshore waters. These are exclusive, private fishing rights based on ancient Hawaiian custom and usage.

It is my understanding that life on other Pacific Islands also included this balance between the land and the sea -- this single continuum of the world's resources and mysteries. Societies based around low-lying atolls were fundamentally aquatic, with the land an extension of the ocean. But in all these societies, the ocean was part of the local diet, recreation, arts and crafts, and religion. Human societies in the Pacific were amphibious. The ocean was part of the human consciousness.

Much of this consciousness has been lost. In Hawaii's case, we have been land-oriented now for 150 years -- since westernization began. I do not propose that we go back to ancient days. I propose that we regain our ocean heritage. I propose that we rediscover what the ancients knew -- the fullness of a life in which the ocean is part of our consciousness. I propose that we go forward with our EEZ's, and look to this new jurisdiction as an opportunity to once again include the ocean in our daily lives. In so doing, I believe we will not only make our cultures and economies richer again, but will also make ourselves whole.

Thank you.