

**NEPA's Relevance to *An Ocean Blueprint for the 21<sup>st</sup> Century***

by

David Keys

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## Introduction

The U.S. Commission on Ocean Policy submitted *An Ocean Blueprint for the 21st Century* (hereafter referred to as the “*Blueprint*”) to the President and Congress in September 2004. Mandated by the Oceans Act of 2000, the *Blueprint* contains 212 recommendations for the establishment of a comprehensive and coordinated ocean policy for the United States. The President appointed a chairman, fifteen commissioners, and an executive director who collectively comprise the U.S. Commission on Ocean Policy (USCOP). The Commission represents diverse interests and experience and unanimously supports the *Blueprint*’s findings, recommendations, and vision for the future.<sup>1</sup>

On December 17, 2004, in response to the Commission's findings and recommendations, the President issued an executive order establishing a Committee on Ocean Policy as part of the Council on Environmental Quality and released the U.S. Ocean Action Plan. Following the White House announcement of these actions, the Commission responded with a preliminary assessment of the Ocean Action Plan, calling it a promising first step toward the implementation of a comprehensive national ocean policy. On December 19, 2004, the Commission expired, as provided under the terms of the Ocean Act of 2000 (P.L. 106-256), as amended.

From a NEPA perspective, the most obvious thing I noticed about the *Blueprint* was that it refers to the National Environmental Policy Act or NEPA numerous times (17), but never really explains NEPA’s relevance or its richness. It only hints at NEPA’s true relevance, skirting around the edges making statements about NEPA but not ever really analyzing how the Act applies. The *Blueprint* could be greatly improved by adding a separate chapter on NEPA as well as expanding the individual references to NEPA. This paper will identify those 17 statements and elaborate on them in order to reveal NEPA’s real relevance to the *Blueprint*.

The ocean’s value to the nation is enormous and its full potential remains unrealized. Over half the U.S. population lives in coastal watershed areas and roughly one-half of the nation’s gross domestic product (\$4.5 trillion in 2000) is generated in those areas and in adjacent ocean waters. The U.S. exclusive economic zone (EEZ) extends 200 nautical miles offshore, encompassing diverse ecosystems and vast natural resources, such as fisheries and energy and other mineral resources. The U.S. EEZ is the largest in the world, covering over 13,000 miles of coastline and containing 3.4 million square nautical miles of ocean—larger than the combined land area of all fifty states.<sup>2</sup>

In the opinion of the USCOP our oceans and marine resources are in serious trouble, increasingly affected by rapid growth along the coasts, land and air pollution, unsustainable exploitation of some fishery resources, and often, ineffective management. The need for action seems clear enough. It also seems evident that, by tackling these problems now we can protect the oceans as well as “encourage productive and enjoyable harmony between man and his environment; as well as promote efforts which will prevent or eliminate damage to the environment and biosphere.”<sup>3</sup>

Either the phrase “National Environmental Policy Act”, or the acronym “NEPA”, is referred to 17 separate times in the main body of the *Blueprint* (see table below). The remainder of this paper will briefly analyze NEPA’s relevance in each of these sections of the *Blueprint*, but will analyze in more depth Recommendations 5-5 and 5-6 found on page 96 and 5-14 on page 286 concerning regional ecosystem assessments and training, respectively. The actual text in the *Blueprint* containing the NEPA references is in *italics* throughout this paper.

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### **Identification and analysis of NEPA’s use in the *Blueprint***

First Use, p.51. *“The images of soiled beaches, oil-soaked birds, and belly-up fish generated widespread public concern and contributed to the enactment of a law that would profoundly affect the approach of the federal government to natural resources of every description—the 1969 National Environmental Policy Act (NEPA).”*<sup>4</sup> This too brief introduction to NEPA should have set up the NEPA discussion for the whole *Blueprint* by including a summary of the legislative background and the significance of NEPA’s goals and action forcing provisions. It also should have included the next use and expounded on NEPA’s stewardship ethic.

Second Use, p.51. *“As a result, the stewardship ethic embodied by NEPA—the idea that the federal government should study, plan, and offer the opportunity for public comment before acting—was applied to the oceans.”*<sup>5</sup> The stewardship ethic needs much more elaboration than this. The whole concept of stewardship was basically missing from America’s manifest destiny past. NEPA’s real strength lay in its recognition of a moral responsibility to environmental stewardship, which aimed to protect, conserve, and restore the health and integrity of the biosphere while simultaneously “stimulating the health and welfare of man”.

Third Use, p.73. *“Legal disputes have already occurred over the seaward extent of jurisdiction of the Endangered Species Act and the National Environmental Policy Act.”*<sup>6</sup>

According to L.K. Caldwell, “Where the letter of the law gives no specific indication regarding its applicability in the global commons, an argument may be raised, as in the case of *Foley Bros. v. Filardo* (336 U.S. 281, 1949), that domestic law does not apply. And President Carter’s EO 12114 does not appear to accomplish this objective.”<sup>7</sup> And Daniel Mandelker adds: “NEPA does not expressly indicate whether it applies extraterritorially, and the legislative history does not address this problem directly. However, paragraph 102(2)(F) does address the international application of NEPA. Senator Jackson, the chief sponsor of NEPA in the Senate, explained that paragraph (F) would ‘give statutory authority to all Federal agencies’ to develop international cooperation programs to deal with environmental problems. His statement appears to indicate that federal agency participation in these programs is voluntary. Paragraph (F) also appears to impose a duty on federal agencies to ‘recognize’ worldwide environmental problems. Whether this duty applies to agency responsibilities to prepare impact statements is not clear.”<sup>8</sup>

Fourth Use, p.77. *“The Council on Environmental Quality (CEQ) coordinates broad federal environmental efforts, oversees implementation of the National Environmental Policy Act, and serves as the principal environmental policy advisor to the President.”*<sup>9</sup> On December 17, 2004, President Bush established by Executive Order a Cabinet-level “Committee on Ocean Policy” to coordinate the activities of executive branch departments and agencies regarding ocean-related matters in an integrated and effective manner to advance the environmental and economic interests of present and future generations of Americans. The CEQ Chairman also serves as Chairman of this Committee.<sup>10</sup> On December 17, 2004, the President submitted to Congress his formal response to the *Blueprint*, the U.S. Ocean Action Plan. There is a significant management challenge in implementing strategies that will ensure continued conservation and sustainability of coastal and marine habitats and living resources while at the same time ensuring that the American public enjoys and benefits from those same resources. The CEQ is currently working on an adaptive management guide that integrates NEPA and environmental management system (EMS) concepts in order to operationalize sustainability policy.

Fifth Use, p.96. See analysis on p.12 of this paper.

Sixth Use, p.157. *“In addition to the area-based programs discussed above, a number of other laws significantly affect coastal resources, including the National Environmental Policy Act, the Clean Water Act, and the Clean Air Act .”*<sup>11</sup> Federal programs and plans related to transportation, flood insurance, disaster relief, wetlands permitting, dredging, beach nourishment, shoreline protection, commercial and recreational fishing, aquaculture, and offshore oil, natural gas, and liquid natural gas all have NEPA compliance issues. Many of these programs and plans are fairly complex and could benefit from programmatic environmental impact analysis (EIA), but few are actually done. The relative lack of programmatic EIA documents and guidance on how to properly do them indicates the need for such guidance.

Seventh Use, p. 286. Recommendation 19-14<sup>12</sup> states: *“Congress should amend the Magnuson-Stevens Fishery Conservation Management Act to require that all newly appointed Regional fishery Management Council (RFMC) members complete a training course within six months of their appointment. The National Marine Fisheries Service should contract with an external organization to develop and implement this training course. After six months, a new*

*member who has not completed the training should continue to participate in RFMC meetings, but should not be allowed to vote. The recommendation continues to say the training course should:*

- *“Be open to current RFMC members and other participants in the process as space permits.”*
- *“Cover a variety of topics including: fishery science and basic stock assessment methods; social science and fishery economics; tribal treaty rights; the legal requirements of the Magnuson-Stevens Fishery Conservation and Management Act, the National Environmental Policy Act, the Administrative Procedures Act, and other relevant laws or regulations; conflict of interest policies for RFMC members; and the public process involved in developing the fishery management plans.”<sup>13</sup>*

There is a lot more than meets the eye concerning training. We did a NEPA training needs assessment and report in the NOAA Fisheries Southeast Region in 2003-2004.<sup>14</sup> The questionnaire consisted of 27 questions divided into five sections: characteristics of survey respondents, previous NEPA training provided to respondents, current need for NEPA training, topical coverage and delivery modes, and broader considerations and issues. The participation rate was excellent because there were 97 respondents out of 148 persons requested to participate (a 66% participation rate). In general, the respondents indicated minimal NEPA-related training, and that which had occurred was relatively recent. For example, 51 respondents (53%) had one or more NEPA-related training courses; over 80% of these persons indicated their training occurred within the last 2 years. A total of 47% of the respondents (46 of 97) had no previous NEPA training.

The current need for additional NEPA-related training was delineated based on considering individual job requirements and the respondents' perceptions of their training needs. The need for a general awareness of NEPA (38 persons) or a fairly complete knowledge of NEPA requirements (41 persons) was indicated by 79 persons. Further, 68 persons (73% of 93 respondents) indicated that they needed additional NEPA training, and 57 persons noted that such training was extremely or very important.

In consonance with the training portion of NOAA Fisheries Regulatory Streamlining Project (RSP) to enhance the agency's NEPA compliance, and in response to the questionnaire results, eight courses are recommended for a multi-level and integrated NEPA-focused training program for the SER of NOAA Fisheries. The basic purposes of the program would be to assist the agency in accomplishing its overall fisheries management-related mission in an environmentally responsible manner, to more cost-effectively meet NEPA compliance requirements, and to facilitate the RSP. The courses include one basic course (Basic NEPA), three intermediate courses (Integration of NEPA with Other Pertinent Laws, Writing EAs and EISs, and Reviewing EAs and EISs), and four advanced courses (NEPA Project Management, Cumulative Effects Assessment, Programmatic EISs, and Sustainment of NEPA Process). The first seven listed courses are proposed for durations of either two or three days. The final listed course has a one-half day length. The recommended frequencies of course offerings vary from once annually to once every three years. Classroom settings could be used in conjunction with lectures on DVDs and CDs with included reference materials.

For a multi-course training program to be successful, a student accession system and record system must be established to keep track of the participants in each course, and when and where the course was taken. Such a system would be useful in ensuring that the courses are taken in the recommended sequence; it could also be used to provide a “certification of program completion” when a minimum of five courses (the one Basic course, 2 of the 3 listed Intermediate courses, and 2 of the 4 Advanced courses) have been completed. There also needs to be a link to the planning, programming, budgeting, and execution system so that training funds can be programmed, budgeted, approved, allocated, and so costs can be tracked through time.

One could go to an external organization for this training, but it may not be the best alternative from either cost- or training-effectiveness standpoints. Many agencies have in-house all the expertise they need to give training. What is missing is the training operations personnel and training system as described above. In other words, the people and resources to wicker it all together and make it work properly. But that will be a problem whether training is conducted in-house, or out.

“An Ecosystem Approach Task Force was formed by the Marine Fisheries Advisory Committee in 2001. In their report the Task Force identified issues that need to be addressed before ecosystem-based fisheries management could be implemented. The five key issues were considered to be the foundation necessary to implement ecosystem based fisheries management and included: (1) enhancing intra- and inter-agency cooperation and communication; (2) delineating geographic area(s) of the ecosystem; (3) preparation of quantified natural resource goals and objectives; (4) identify and apply specific indicators; and (5) socio-economic data to evaluate management tradeoffs. Finally, the Task Force suggested the implementation of several pilot projects to illustrate the benefits and challenges to Ecosystem-based Fishery Management.”<sup>15</sup>

Eighth Use, p.295. *“There also should be changes in the way that management measures are evaluated to comply with NEPA.”<sup>16</sup> As regions implement an ecosystem-based management approach, environmental impact assessments should be based on a shared knowledge of the ecosystem across the planning entities. Rather than having the RFMC, NMFS, EPA, and the U.S. army Corps of Engineers all prepare separate environmental impact statements, without sharing information on cumulative impacts, these analyses need to be combined to reduce duplication and improve the quality of ecosystem evaluations.”* I will further elaborate on regional ecosystem assessments when I analyze Recommendation 5-5 later in this paper (p.12).

Ninth Use, p.313. *“In addition to streamlining permitting, clear and consistent enforcement is needed to ensure compliance with permit conditions, and penalties must be stringent enough to discourage noncompliance. Any changes to the permitting processes under the MMPA will have to be consistent with the requirements of the National Environmental Policy Act.”<sup>17</sup> Lynton Caldwell’s assessment is that, “Actions taken in the U.S. and resulting in effects abroad may not be politically separable. Thus the MMPA, under which the sale in the United States of tuna caught with purse seines (causing dolphin mortality) was prohibited, led to controversy with Mexico and the General Agreement on Tariffs and Trade (now World Trade Organization) to which the U.S. adheres by treaty.”<sup>18</sup>*

Tenth Use, p.324. *“Other federal laws that are used to manage and protect coral reef resources include the following”:*

- *The Magnuson-Stevens Fishery Conservation and Management Act, which allows for management of coral harvest and provides limited protections for corals if they are designated as “essential fish habitat.”*<sup>19</sup>
- *The Coastal Zone Management Act, which provides for management of shoreline areas that may include coral reefs.*
- *The Clean Water Act, which regulates the discharge of dredged or fill material into U.S. waters.*
- *The Sikes Act, which requires the U.S. Department of Defense to provide for conservation and rehabilitation of natural resources on military installations, which in some locations include corals.*
- *The Endangered Species Act, National Environmental Policy Act,<sup>20</sup> and Lacey Act, all contain some provisions that can be applied to the protection of corals.*

Eleventh Use, p.353. “As discussed in Chapter 2, the 1969 Santa Barbara blowout took place during an era of rapidly expanding environmental awareness and helped spur the enactment of numerous major environmental laws, including the National Environmental Policy Act (NEPA)<sup>21</sup>, the Coastal Zone Management Act (CZMA), the Marine Mammal Protection Act (MMPA), and the Marine Protection, Research, and Sanctuaries Act (MPRSA).”

In 1982, Congress put four basins offshore northern California off limits to leasing. Additionally, Presidents have expanded on congressional action, providing longer term restrictions than those covered in annual appropriations bills. In 1990, President Bush withdrew areas offshore California, southern Florida, the North Atlantic states, Washington, and Oregon from leasing considerations until after 2000. A few years later, the Clinton Administration added additional areas to the restricted list, extended all of the withdrawals until 2012, and included a permanent prohibition on leasing in national marine sanctuaries. These presidential and congressional actions have removed some 610 million acres from leasing consideration and effectively limited access to the OCS program to the central and western Gulf of Mexico (95% of offshore production), a small portion of the eastern Gulf, and virtually all areas off Alaska.

Twelfth Use, p.354. “For example, the OCSLA [Outer Continental Shelf Lands Act] requires consultation with coastal states and localities at a number of points in the federal offshore decision making process, including during the development of a five-year leasing program, individual lease sale delineations, exploration and development-production plans, and environmental studies and oil and gas information programs. Further, the law carries provisions on offshore safety regulations, citizen suits and judicial review, enforcement authority, the applicability of NEPA,<sup>22</sup> geological and geophysical exploration, export limitations, documentation requirements for offshore vessels and rigs, and numerous opportunities to address other environmental issues.” Outer continental shelf (OCS) oil and gas activities, including planning, are accompanied by serious concerns about risk of direct, indirect, and cumulative adverse impacts on coastal and continental margin ecosystems. Specific information on the human environment is needed for leasing, development, and production decisions. The analysis in the environmental consequences section of any associated DEIS is critical for assessing the potential impacts of oil spills on the human environment.

Thirteenth Use, p.366. *“In reviewing a proposed project under Section 10, the USACE is required by the National Environmental Policy Act<sup>23</sup> to consult other federal agencies. Depending on the circumstances, these agencies and authorities may include”: the U.S. Coast Guard, Federal Aviation Administration, USEPA, National Marine Fisheries Service, and the U.S. Fish and Wildlife Service. This section 10 reference is to the Rivers and Harbors Act of 1899 and it goes far beyond merely “consulting with other federal agencies”. Section 10 reads: “That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of War prior to beginning the same.” Under Section 10, the Corps may authorize activities that could affect navigable waters of the United States. To a large extent, the regulatory authority of the Corps under the Rivers and Harbor Act is overlapped by Section 404 of the Clean Water Act. If an action triggers NEPA and also requires a Section 404 permit, the lead agency must take great care to integrate the environmental review process required by NEPA with the Section 404 program. In general, Section 404 of the Clean Water Act authorizes the Corps to issue permits for discharges of dredged or fill material into waters of the United States.*

Fourteenth Use, p.367. *“The Federal Energy Regulatory Commission (FERC) asserts jurisdiction, under the Federal Power Act (FPA), over private, municipal, and state (not federal) hydropower projects seaward to 12 nautical miles.” “Although in issuing a license for a wave, current, or tidal project, FERC is directed by the FPA to equally consider environmental and energy concerns, it is not an agency with a broad ocean mission. As with wind energy, several other federal laws may apply to ocean wave projects. For example, NEPA<sup>24</sup>, the federal consistency provision of the CZMA, the National Historic Preservation Act, and the Fish and Wildlife Coordination Act may apply, as may the consultation provisions of the Endangered Species Act and the Marine Mammal Protection Act. But there is no comprehensive law that makes clear which of these individual laws may be applicable, nor is there any indication that overall coordination is a goal, thus leaving implementation to mixed federal authorities.”*

The ocean and coastal environment are rife with conflicts among competing users and groups of people applying different sets of values to the same issues. To resolve these conflicts, information is needed not only about the natural environment but also about relevant social, cultural, and economic factors. The CEQ NEPA Regulations anticipated this need when they defined “human environment to be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.”<sup>25</sup>

The National Sea Grant College Program does fund some studies that examine legal, political, economic, anthropological, and other human dimensions of ocean and coastal affairs. However, those projects often receive less than 10 percent of the Program’s overall research



budget. In other programs, social and economic sciences get even less support, creating a situation where basic information is not available to support management and planning.

Fifteenth Use, p.379. *“To meet specific programmatic requirements of the National Environmental Policy Act (NEPA)<sup>26</sup> and other laws that require impact analyses, individual resource management agencies have had to pull together social science and economic information at various times. For example, National Oceanic and Atmospheric Administration’s (NOAA’s) National Marine Fisheries Service hired anthropologists and economic researchers following enactment of the 1976 Magnuson-Stevens Fisheries Conservation Management Act.”* In addition, NEPA Coordinators were hired in Headquarters and in each of the five (now six) regions in 2002. In the spring of 2002, NOAA Fisheries (NMFS) committed to a Regulatory Streamlining Project (RSP) via a report to the U.S. Congress. This report was prepared in response to instructions from Congress to improve the quality and efficiency of regulatory decisions. Compliance with the requirements of NEPA is intertwined with the RSP. Further, NEPA was identified as...“the ideal vehicle for integrating many of the various statutory mandates under one regulatory umbrella”.

Sixteenth Use, p.382. *“The Minerals Management Service [MMS] instituted a relatively comprehensive socioeconomic research program in the 1970s to aid in developing five-year leasing plans that would meet NEPA<sup>27</sup> standards, and to address requirements of the OCS Lands Act Amendments for monitoring the impacts of offshore oil and gas development on the human environment.”* The MMS major legal mandates are the OCSLA and NEPA. An objective of both laws is to provide the information needed for balanced decision making. Both direct MMS to study the human environment, and both include guidance on social and economic information needs. Social science research provides information essential to understanding the consequences of OCS-related activities on the populations, economies, and social and cultural systems in areas where the activities occur, it supports MMS planning and management processes, and provides information for effective interaction with the public about such effects.

Seventeenth Use, p.382. *“The U.S. Army Corps of Engineers has also funded research into marine cultural heritage to meet its NEPA obligations.”<sup>28</sup>* There are many references in the *Blueprint* to the Corps. One area that is only touched on lightly in the *Blueprint* that needs more in depth analysis is the Corps’ Nationwide Permit (NWP) program. This program streamlines the Section 404/Section 10 process for those activities supposedly having minimal environmental impacts. The Army Corps of Engineers has both combat and civil works programs and a rich heritage that is inextricably linked with our nation’s past. On the combat side, engineers have served in all of our nation’s wars. On the civil works side, throughout the 19<sup>th</sup> century the Corps built coastal fortifications, surveyed roads and canals, eliminated navigational hazards, explored and mapped the western frontier, and constructed buildings and monuments in the nation’s capital. In the 20<sup>th</sup> century, the Corps became the lead federal flood control agency. Assigned the military construction mission in 1941, the Corps constructed facilities at home and abroad to support the Army and Air Force. When NEPA came into effect in 1970, the Corps made a concerted effort to comply with both the spirit and letter of the law. Things did not always work out as planned, but the huge organization made some progress at integrating public involvement and environmental awareness into its decision making process. In 1997, the Corps filed 48 DEISs with EPA. Almost 30 percent of those DEISs (14/48) were for watershed protection and flood control.<sup>29</sup>

## Regional Ecosystem Assessments

Recommendation 5-5, the fifth reference to NEPA, on page 96 of the *Blueprint*, states: “*The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA), working with other appropriate federal and regional entities, should coordinate the development of regional ecosystem assessments, to be updated periodically.*”

Such an arrangement could simultaneously solve three of NEPA’s thorniest problems, which are: cumulative effects analysis (CEA), cooperating agency participation, and actual protection of the human environment. The concept of regional ecosystem assessments is not new.

In the spring of 1973 I was stationed at a U.S. Army missile site in what was then known as the Federal Republic of Germany (Bundesrepublik Deutschland), near the beautiful town of Bad Kissingen, West Germany. Back in the United States, seven scientists from Louisiana State University’s Sea Grant Legal Program, Department of Marine Sciences, and Botany Department wrote a page-and-a-half paper and were published in the commentary section of the journal *Ecology* in March 1973.<sup>30</sup>

Their argument was simple. NEPA was an essential first step for protection of the environment, but the Act did not require a regional viewpoint. They then go on to cite various portions of Section 102(2)(A) and (G) of NEPA. They cited this part of paragraph 102(2)(A): “all agencies of the Federal Government shall utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences...” In addition, they cited this out of 102(2)(H): “...ecological information in the planning and development of resource-oriented projects...” The authors made a simple error when they cited Sections 102(A) and (G), instead of 102(2)(A) and 102(2)(H), but their thinking was accurate. And more importantly, their brief analysis is a goldmine of insight that we should revisit today to help implement NEPA’s original intent.

They continued to say that: “In order for the above phrases to have meaning, there must be recognition of the outside factors that affect and are affected by the particular federal activity. Furthermore they stated that each federal activity frequently interrelates with other federal and non-federal activities nearby.” Lest we forget, these authors were writing a scant three and one half years after Hurricane Camille (category 5) plowed into Bay St. Louis, Mississippi (August 17, 1969). Comparisons between Hurricane Katrina (category 3) of the 2005 season and Camille are inevitable because of their similar strengths and nearly identical landfall locations.

They proceed. “When there are many proposed actions and projects in or contiguous to one area, a regional overview is essential. Any urbanized or industrial area could serve to illustrate the problem, but the wetland area surrounding and impinging upon New Orleans and Lake Ponchartrain, Louisiana, provides an appropriate example of the limitations of this piecemeal approach for assessing environmental impact. Among the projects with possible adverse effects are the following:”

1. Modification of the Mississippi River Gulf Outlet
2. A “new town” development east of New Orleans
3. A new port and ship lock development
4. A new airport

5. Proposed interstate highway 410
6. Decrease of fresh water inflow into Lake Ponchartrain by a series of reservoirs along the Amite River
7. Construction of hurricane protection levees and other flood control structures
8. Backup facilities for a potential superport
9. Recreational developments at various sites including Jones Island, Fontainebleau State Park, Venitian Isles, and Eden Isles
10. Filling of part of Lake Ponchartrain within Jefferson Parish
11. Shell dredging within Lake Ponchartrain
12. Oil leases in Lake Ponchartrain and offshore

“Undoubtedly part of the reason for not using a regional approach is due to the lack of readily available techniques though some related ideas have been proposed.” Eugene Odum presented one such technique in 1969<sup>31</sup>. We need to follow up on Odum’s basic hypotheses on ecological succession and develop plausible interpretations of NEPA’s intent and integrate it into ecosystem management implementation.

The authors continue, “Paragraph (C) (iv) of Section 102 (NEPA) [here again, they actually meant 102(2)(C)(iv)] states that ‘the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity...’ must be considered in the preparation of the environmental impact statement. Unless the environmental impact statement views the region and all the projects being considered in the region, there is no way to assess the long-term productivity in order to balance it against the short-term uses being proposed.”

The authors conclude, “We also believe that NEPA should be amended to include more specific criteria for the preparation of the environmental inventory of areas under possible impact (for example, the sampling and measuring techniques which are acceptable, the intensity of the sampling, the minimum information needed per habitat per type of proposed environmental action). These criteria should also require that the inventory work be done by an outside and objective agency, to obviate any collusive agreements, and include a means for setting priorities on the basis of the size or impact of a proposed action.”

We sorely need a regional assessment mandate emanating from the NEPA regulations. Ian McHarg in his 1976 biological alternatives paper<sup>32</sup> also criticized the EIS process for becoming ad hoc project exercises divorced from the comprehensive understanding of regions. McHarg’s approach to impact analysis was to build the ecological database on the scales of physiographic regions and watersheds, then to draw on that information to assess the consequences of possible actions.<sup>33</sup>

Regional ecosystem assessments may be the only feasible way to sustain our oceans. The Gulf of Mexico is a case in point. It is bordered by the U.S. States of Florida, Alabama, Mississippi, Louisiana, and Texas as well as Mexico and Cuba. The Gulf encompasses 1.8 million square miles and is the receiving body for 66 percent of the rivers within the continental United States, including the Mississippi River, the largest river system in North America. The U.S EPA created the Gulf of Mexico Program in 1998 which brings together federal and state environmental and resource management programs to collaboratively improve the health of the Gulf region while sustaining economic development.<sup>34</sup>

## **To Revise or Not To Revise, That Is the Question**

Recommendation 5-6, on page 96 of the *Blueprint* states: “*The Council on Environmental Quality should revise its National Environmental Policy Act guidelines to state that environmental impact statements for proposed ocean- and coastal related activities should incorporate the regional ecosystem assessments called for in Recommendation 5-5.*” Of course, they are no longer “guidelines”, but have been regulations since 1978, but only amended once, in 1986. This recommendation simultaneously broaches two crucial subjects. The first is direct and concerns regional ecosystem assessments, which is covered in the preceding section of this paper. The indirect, and more important I think, is the concept of revising the CEQ regulations, which must be considered along with possible NEPA amendments because the regulations were created to “implement Section 102(2)”<sup>35</sup> of NEPA. Either one of these topics could be the subject of a whole treatise by itself, which I do not have time to discuss in this paper.

However, there is a lot of activity now concerning if, how much, and in what ways to amend the NEPA statute and/or its implementing regulations. There are two main federal government sources of impetus for change. The first is the CEQ, created by Title II of NEPA, and the second is the House Resources Committee. The CEQ published an interdisciplinary task force report in September 2003 entitled *Modernizing NEPA Implementation*. The report came up with three general recommendations and five priority recommendations, none of which in either category dealt with amending the statute or regulations. Enter the House Resources Committee.

It held a number of public hearings in various areas of the country and issued its draft NEPA Task Force report on December 21, 2005. There are 22 draft recommendations in the House Resources Committee report on NEPA, broken down into nine Groups. Of these 22 draft recommendations, 13 recommend that NEPA be amended, 5 recommend that CEQ promulgate regulations, and 4 recommend that CEQ study various aspects and make recommendations at a later date. The final Task Force Report was issued July 31, 2006, but “has not been officially adopted by the Committee on Resources.”

### **Conclusions**

I think the CEQ NEPA Regulations (40 CFR 1500-1508) need revising in several ways, but of importance here are regional ecosystem assessments and NEPA training standards.

### **Regional Ecosystem Assessment changes**

The Magnuson-Stevens Fisheries Conservation and Management Act created six regions within the United States exclusive economic zone (EEZ) and established eight regional fisheries management councils (RFMCs) to develop fisheries management plans for each managed species or group of species. The eight RFMCs have begun to transition toward ecosystem-based approaches to fishery management, but that effort is in its incipient stages. Revised CEQ regulations concerning regional ecosystem assessment could greatly enhance how ecosystem-based fisheries management is implemented.

Both the Pew Oceans Commission and the U.S. Commission on Ocean Policy have recommended the creation of regional ocean or ecosystem councils. The primary function of a

regional ecosystem council is the development of a regional ecosystem assessment, based on which, goals and objectives are devised to protect, restore, and maintain the health of the marine ecosystem. NOAA has affirmed the use of regional ecosystem councils in its strategic plan for FY2005-FY2010 as a means to collaborate and coordinate with partners to achieve regional ecosystem objectives.

The National Marine Fisheries Service (NOAA Fisheries) has drafted a strategy that would establish ten regional marine ecosystem councils, with regions based on Large Marine Ecosystem delineations. The regional marine ecosystem councils would comprise federal, state, local, and tribal decision makers, RFMCs, industry and resource users, community and non-governmental organization interest groups, academia, and the public. The ecosystem councils would be responsible for developing a regional marine ecosystem strategy that provides operational goals and objectives for the ecosystem, information on the ecosystem region, and performance metrics for assessing progress. Regional Fishery Management Councils would modify their fishery management plans as necessary, to accord with the overarching guidance of the appropriate regional marine ecosystem strategy.<sup>36</sup>

The regional Fishery Management Councils have argued that the existing fishery management council process could effectively be used as a basis for establishing further collaboration with other agencies. As highlighted by the *Blueprint*, many of the key elements of a regional process are already embodied in the RFMCs: regional councils based loosely on ecosystem boundaries, incorporation of science in management plans, and an emphasis on local public participation. Also, the RFMCs already include federal and state representatives from many agencies. However, the development of an ecosystem policy (consisting of goals and objectives for maintaining ecosystem health) inevitably involves reconciling competing objectives. Vesting such authority in a regional ecosystem council could constrain the RFMCs and NOAA Fisheries' management.

Revised CEQ NEPA regulations could overcome these barriers by describing who and how the regional assessments will be done after the fashion of 40 CFR Part 1502. A good start on those procedures can be found in the March 1973 *Ecology* paper discussed above where the authors suggest:

*“...specific criteria for the preparation of the environmental inventory of areas under possible impact (for example, the sampling and measuring techniques which are acceptable, the intensity of the sampling, the minimum information needed per habitat per type of proposed environmental action). These criteria should also require that the inventory work be done by an outside and objective agency, to obviate any collusive agreements, and include a means for setting priorities on the basis of the size or impact of a proposed action.”*

In addition, the revised regulations should specify what scale and level of GIS mapping and analysis are mandatory. This regional ecosystem assessment revision effort could be an ideal place to put into regulations some of the basic principles of cumulative effects analysis.

## **Training revisions**

The revised CEQ NEPA regulations should require both specific training in the subject matter of the agency plus how to integrate various laws under the NEPA umbrella. Federal agencies should be required to ensure that their environmental staffs—which include NEPA—contractor personnel, and decision-makers have appropriate environmental training and education for their level in the organization. Such training and education should include at a minimum familiarization with recognized management and decision-making tools and techniques; an introduction to interdisciplinary project team management; familiarization with frontloading of information; how to incorporate socioeconomic and environmental justice analyses; and an overview of project management to include the NEPA and EIS processes.

Since most agencies have different missions and different authorizing statutes, the specific agency training should be done by agency personnel. Other more generic management material could be done by outside contract and NEPA specific training should be done by the most qualified whether inside or outside the agency. The important point for the revised CEQ regulations would be to lay out the general parameters of what the training should entail and to then require an agency training plan that specified what type of training was occurring, when, where, by whom, and how it will be funded. Agencies could then submit to CEQ a certified list of personnel who had met the training requirements and a certificate could then be generated by CEQ and signed by the Chairman.

## **Closing thoughts**

I believe the NEPA statute may need amending in one place. Namely, Section 202 that creates in the Executive Office of the President a Council on Environmental Quality. This section should be amended to say that a Department of Environment is created and that it will rely on a Presidential Departmental Reorganization Program that proposes to bring together the many natural resource and environmental programs now scattered throughout the Federal Government. One could start by reviewing an earlier Reorganization Plan that proposed to create a Department of Natural Resources in 1972.<sup>37</sup>

By historical practice and case law interpretation, the President and Congress have operated on the premise that the power to establish, structure, and reorganize federal agencies is a legislative power, conferred on Congress by the U.S. Constitution. In the absence of a specific statute stating otherwise, the President lacks authority to reorganize executive branch departments and agencies. However, over the last one hundred years, Congress has intermittently granted the President such authority, with a variety of restrictions and with provisions for expedited congressional approval or disapproval of the President's proposals. A total of eighteen reorganization acts were passed between 1932 and 1984. In 1970, President Nixon used the Reorganization Act of 1949, which authorized the President to propose agency reorganization subject to congressional disapproval, to establish the National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency. The most recent presidential reorganization authority expired at the end of 1984.

One can only imagine a Department of Environment whose purpose is to sustain the self-regulating functions of the biosphere by creating policy and programs that focus on the interactions between human systems and natural systems. Plus, from a public administration

standpoint a department would have enough mass to suffer the slings and arrows of outrageous political fortune and still have the possibility of coming out essentially in tact. Thirty-five years ago we thought it was next to impossible, but we now have a Department of Homeland Security, which proves it can be done quickly if the vision and political will is present. “Consolidation of all natural resource functions, especially those applicable to oceans and coasts, would enable the federal government to move toward true ecosystem-based management.”<sup>38</sup> One can envision a Department of Environment consisting of three basic entities of air, land, and water where water would be further subdivided into marine ecosystems, freshwater ecosystems, coastal zones, waterways, wetlands, and water quality. As a case in point, the government of Western Australia created a Department of Environment and Conservation on July 1, 2006. It was created by merging the Department of Environment, the Department of Conservation, and the Department of Land Management. The new Department of Environment and Conservation is responsible for protecting and conserving the environment and nature of Western Australia. Closer to home is the La Voie verte, the Green Lane, also known as Environment Canada.

Lastly, if we cannot implement the above suggested changes and get to a point where we provide environmental analysis to the decision making process with the purpose of actually protecting the life support functions of the biosphere, then it is indeed time to suggest a constitutional amendment. It could be simple and straightforward such as: All citizens, present and future alike, have an inalienable right to a clean, healthy, and sustainable environment. Professor Lynton K. Caldwell, one of the chief architects of NEPA, at one time thought that too much emphasis on the EIS and politics had gotten the upper hand and that a constitutional amendment would be the only way to protect the environment. That is, a constitutional amendment based on the language in Section 101 of NEPA.<sup>39</sup>

NEPA is extremely relevant to the *Blueprint* in many ways, but its real relevance needs to be explained in much more depth as suggested herein. And more importantly, NEPA is relevant for sustaining the Earth’s oceans as well as to the United States and its neighbors, our citizens, and a world burgeoning in almost every way imaginable. It remains to be seen if the political system that created NEPA will decide to keep its basic tenets in tact and adapt the rest, or overturn the whole thing in favor of something else now only seen dimly. Only time will tell.

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## End Notes

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<sup>1</sup> *An Ocean Blueprint for the 21<sup>st</sup> Century* (hereafter cited as *Blueprint*), U.S. Commission on Ocean Policy, Final Report, Washington, DC, 2004, 522 pages, plus 7 internal appendices and 6 external appendices. Front matter, letter to the President, fourth page.

<sup>2</sup> *Ibid.*, front matter, map, second page.

<sup>3</sup> NEPA statute, P.L. 91-190, 42 U.S.C. 4321-4347, Section 2, Purpose.

<sup>4</sup> *Ibid.*, p.51. This is the first mention of NEPA in the *Blueprint*, where NEPA's history is briefly mentioned.

<sup>5</sup> *Ibid.*, p.51. This is the second mention of NEPA in the *Blueprint*, where NEPA's stewardship role is briefly discussed.

<sup>6</sup> *Ibid.*, p.73. This is the third mention of NEPA in the *Blueprint*.

<sup>7</sup> Lynton Keith Caldwell, *The National Environmental Policy Act, An Agenda for the Future*, Indiana University Press, Bloomington, IN, 1998, p.130.

<sup>8</sup> Daniel R. Mandelker, *NEPA Law and Litigation*, Second edition, Thomson West, 2002, p.5-43.

<sup>9</sup> *Blueprint*, p. 77. This is the fourth mention of NEPA in the report.

<sup>10</sup> CEQ website: <http://ocean.ceq.gov/>

<sup>11</sup> *Blueprint*, p.157. This is the sixth mention of NEPA in the report. I have skipped over the fifth instance, which includes the Recommendations on page 96. I will return and analyze them in more detail after a general analysis of all the other NEPA instances.

<sup>12</sup> *Blueprint*, p.286.

<sup>13</sup> *Blueprint*, p.286. This is the seventh mention of NEPA in the *Blueprint*.

<sup>14</sup> Larry Canter and David Keys, *Use of a Training Needs Assessment to Develop a NEPA-focused Training Program*, NOAA Fisheries Southeast Region, St. Petersburg, FL, June 2004.

<sup>15</sup> Jepson for the GMFMC, *Ecosystem Fisheries Management: A Summary of Workshops Conducted Along the Gulf Coast*, November 1, 2005.

<sup>16</sup> *Blueprint*, p.295. This is the eighth mention of NEPA.

<sup>17</sup> *Blueprint*, p. 313. This is the ninth mention of NEPA.

<sup>18</sup> Caldwell, *Agenda for the Future*, p.101

<sup>19</sup> Essential fish habitat (EFH) is defined as: Those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.

<sup>20</sup> *Blueprint*, p.324. This is the tenth mention of NEPA.

<sup>21</sup> *Blueprint*, p.353. This is the eleventh mention of NEPA.

<sup>22</sup> *Blueprint*, p.354. This is the twelfth mention of NEPA.

<sup>23</sup> *Blueprint*, p.366. This is the thirteenth reference to NEPA.

<sup>24</sup> *Blueprint*, p. 367. This is the fourteenth reference to NEPA.

<sup>25</sup> CEQ NEPA Regs, Section 1508.14, Human Environment.

<sup>26</sup> *Blueprint*, p.379. This is the fifteenth reference to NEPA in the *Blueprint*.

<sup>27</sup> *Blueprint*, p. 382. This is the sixteenth reference to NEPA.

<sup>28</sup> *Blueprint*, p. 382. This is the seventeenth and final reference to NEPA.

<sup>29</sup> The Council on Environmental Quality, *Environmental Quality, The 1997 Report of the CEQ*, p. 356.

<sup>30</sup> *Ecology*, Vol. 54, No. 2 (March 1973, pp.231-232. James H. Stone, John W. Day Jr., Marc J. Hershman, William G. Smith, Harold C. Loesch, Sherwood M. Gagliano, and James G. Gooselink.

<sup>31</sup> Odum presented his ideas in a nine-page paper published in *Science*, Vol. 164: 262-270, April 18, 1969. The title was "The Strategy of Ecosystem Development" and its major idea was that to resolve man's conflict with nature one had to understand ecological succession. He said that the strategy of "maximum protection", i.e., trying to achieve maximum support of complex biomass structure, often conflicted with man's goal of "maximum production", i.e., trying to achieve the highest possible yield. Odum thought that recognizing the ecological basis for this conflict was the first step in establishing rational land-use policies. He also created a tabular model of ecological succession that contained 24 trends that one could expect in the development of ecosystems.

<sup>32</sup> "Biological Alternatives to Water Pollution", in Joachim Tourbier and Robert W. Pierson, Jr. eds., 1976, *Biological Control of Water Pollution*, Philadelphia, Center for Ecological Design and Planning, University of Pennsylvania, pp.7-12. McHarg, p.11: "The Environmental Impact Study procedure, while valuable, is ad hoc, adventitious, and negative. That is, the sum of environmental impact analyses for projects in a region do not contribute to an understanding of that region as an interacting biophysical system."

<sup>33</sup> *To Heal the Earth, Selected Writings of Ian L. McHarg*, Ian L. McHarg and Frederick R. Steiner, eds., Island Press, Washington, DC, 1998, p.209.

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<sup>34</sup> *Blueprint*, p.89.

<sup>35</sup> 40 CFR 1500.1(a)

<sup>36</sup> Diana Evans, "Developing an Ecosystem Approach to Fisheries", *Managing Our Nation's Fisheries II*, Ecosystem Panel Background, March 2005, p.100.

<sup>37</sup> *Papers Relating to the President's Departmental Reorganization Program, A Reference Compilation*, revised February 1972. This was one of President Nixon's reorganization plans based on the theory that "...the major cause of the ineffectiveness of government is not a matter of men or money. It is principally a matter of machinery. It will do us little good to change personnel or to provide more resources unless we are willing to undertake a critical review of government's overall design." Pages 3-4.

<sup>38</sup> *Blueprint*, p.115.

<sup>39</sup> Lynton K. Caldwell, "A Constitutional Law for the Environment: 20 Years with NEPA Indicates the Need", *Environment*, Vol. 31, No. 10, December 1989, pp.6-11 and 25-28.