

# “ECOSYSTEM-BASED MANAGEMENT”: A STEALTH VEHICLE TO INJECT EURO-STYLE PRECAUTION INTO U.S. REGULATION

by

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As debate continues over whether the United States will accede to the UN Convention on the Law of the Sea (UNCLOS), recent developments in Congress and the Executive Branch indicate a quiet but concerted effort to inject UNCLOS environmental principles into U.S. law. Some, including this author, have argued that U.S. accession to UNCLOS would explicitly usher into the U.S. legal system an aggressive version of Europe’s precautionary approach to regulating economic conduct.<sup>1</sup> In advance of accession, though, this “Precautionary Principle” is finding its way into U.S. policy statements and proposed legislation in the more politically palatable and innocuous-sounding, but no less *unscientific*, form of “ecosystem-based management” (EBM). As this LEGAL BACKGROUNDER will illustrate, application of EBM to use and exploration of the sea, and even land could substantially frustrate critical economic activity such as offshore oil exploration and marine genetic prospecting, while also imperiling U.S. sovereignty.

**Defining EBM.** EBM generally emphasizes four common principles. EBM “must: (1) be integrated among components of the ecosystem and resource uses and users; (2) lead to sustainable outcomes; (3) take precaution in avoiding deleterious actions; and (4) be adaptive in seeking more effective approaches based on experience.”<sup>2</sup> In contrast to a more narrowly focused biological and usually single species-oriented approach, EBM reflects “a holistic, ecosystem-based precautionary approach . . . aimed at conserving ecosystem integrity.”<sup>3</sup> In the context of oceans, EBM seeks to “maintain[] the natural structure and function of ecosystems, including the biodiversity and productivity of natural systems and identified important species.”<sup>4</sup> EBM proponents argue such an approach can only be achieved through a precautionary approach which errs on the side of conservation in the event of uncertainty, and shifts the burden of proof for showing that ocean use would impose *no* major unacceptable impacts from regulators to the economic actor or business.<sup>5</sup>

Europeans have prominently relied upon EBM when pursuing “marine spatial planning,” which is an integrated, forward-looking approach to protecting the marine environment. Since UNCLOS “legal boundaries...for maritime zones do not coincide with ecosystem boundaries...the UN...established an informal consultative process on oceans and Law of the Sea [which] promoted to the UN General Assembly the requirement for an integrated, ecosystem-based approach to management for the world’s oceans”<sup>6</sup> that embodies the Precautionary Principle, consistent with Chapter 17 of UN Agenda 21.<sup>7</sup>

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***Emergence of EBM in U.S. Policies and Proposals.*** On May 11, 2009, the State Department informed the Senate Committee on Foreign Relations of its treaty priorities. They include securing accession to UNCLOS and other related Precautionary Principle-based UN multilateral environmental agreements.<sup>8</sup> President Obama's June 12, 2009 Proclamation which "covers matters involving the oceans, the Great Lakes, the coasts of the United States...and related seabed, subsoil, and living and non-living resources," also reflects this trend. In particular, it calls for the U.S. to adopt a national "ecosystem-based framework...[that is] consistent with international [environmental] law, including customary international law, as reflected in the 1982 United Nations Convention on the Law of the Sea."<sup>9</sup> The President's use of EBM language comports with the goals outlined by environmental activist groups last November. They include establishing Europe's Precautionary Principle as U.S. law and ensuring UNCLOS accession.<sup>10</sup>

Were the relevant committees of the 111th Congress to convene UNCLOS hearings, they would need to explain away current congressional efforts to strengthen U.S. jurisdiction and control over many of the very same "waters of the United States" for which the U.S. government would be held legally responsible upon UNCLOS accession. The Clean Water Restoration Act of 2009 (S.787), introduced by Senator Russell Feingold in April 2009 and voted out of the Senate Environmental & Public Works Committee on June 18, 2009, is symbolic of this trend. Even as amended, it clarifies and expands the term "waters of the United States," and thereby, the scope of such jurisdiction and control, to include non-navigable waters<sup>11</sup> not previously covered by the Clean Water Act amendments to the Federal Water Pollution Control Act.<sup>12</sup>

The Omnibus Public Land Management Act of 2009 (HR 146), which President Obama signed into law on March 30, 2009,<sup>13</sup> provides another example. The law incorporates EBM language within recent amendments<sup>14</sup> made to the Wilderness Act of 1964<sup>15</sup> that likely expanded the extent and types of federal undeveloped lands eligible for public preservation and protection, and thus, designation as a component of the National Wilderness Preservation System. In addition, the law employed EBM language to "establish a new program to develop a coordinated and comprehensive Federal ocean and coastal mapping plan for the Great Lakes and coastal state waters, the territorial sea, the exclusive economic zone, and the continental shelf of the United States that enhances ecosystem approaches in decision-making for conservation and management of marine resources and habitats..."<sup>16</sup> The National Wilderness Preservation System will now cover marine spatial zones roughly corresponding to those established by the UNCLOS.

Representative Sam Farr has reintroduced the Oceans Conservation, Education, and National Strategy for the 21st Century Act (HR 21). One of its primary purposes is to "promot[e] ecosystem-based approaches to management of United States ocean waters, coastal waters, and ocean resources."<sup>17</sup> Although HR 21, when originally introduced, expressly incorporated Europe's Precautionary Principle, that term was subsequently dropped during an April 2008 mark-up review and replaced with EBM language.<sup>18</sup>

House Energy and Commerce Committee Chair Henry Waxman introduced the American Clean Energy and Security Act of 2009 (HR 2454) on May 15, 2009,<sup>19</sup> and the full House narrowly passed it in expanded form on June 26, 2009.<sup>20</sup> The bill requires "the Federal Energy Regulatory Commission, the Secretary of the Interior, and the National Oceanic and Atmospheric Administration, in consultation with the Council on Environmental Quality and, as appropriate, coastal States, regional organizations of coastal States, and relevant nongovernmental organizations, [to] jointly conduct a study of the potential for marine spatial planning to facilitate the development of offshore renewable energy facilities in a manner that protects and maintains coastal and marine ecosystem health."<sup>21</sup> It mandates that any marine spatial plan ultimately developed be "based on the principle of ecosystem-based management."<sup>22</sup> It defines EBM as "a management approach that ensures the future ecological and economic sustainability of natural resources by (A) accounting for all ecosystem interactions and direct, indirect, and cumulative impacts of human activities on the ecosystem; (B) emphasizing protection of ecosystem structure, functions, patterns, and processes; and (C) maintaining ecosystems in a healthy and resilient condition."<sup>23</sup>

On May 14, 2009, the House Committee on Natural Resources released a discussion draft of the Federal Lands and Resources Energy Development Act of 2009. It provides that "the Secretary shall promulgate regulations requiring that all oil and gas operations shall be conducted to achieve *zero discharge of pollutants* into the waters of the Outer Continental Shelf." According to the Majority Staff summary, the bill requires that "all new...offshore...leases...meet a 'no discharge' requirement to lessen the amount of ocean pollution from drilling."<sup>24</sup> This Precautionary Principle-inspired provision, which would effectively preclude most offshore drilling, was included even though scientific evidence reveals that "natural seeps of petroleum...contribute the highest amount of

petroleum to the marine environment, accounting for 45 percent of the total annual load to the world's oceans and 60 percent of the estimated total load to North American waters,<sup>25</sup> and despite the fact that offshore drilling makes economic common sense for virtually bankrupt coastal states, such as California and Florida, now plagued by huge budget deficits.<sup>26</sup> Such regulations, in effect, would cover "all submerged lands lying seaward off State coastal waters (3 miles offshore) which are under U.S. jurisdiction,"<sup>27</sup> and potentially apply to all sources of pollution, including, carbon dioxide and other greenhouse gas emissions,<sup>28</sup> except for, perhaps, carbon dioxide adequately sequestered in sub-seabed geological formations.<sup>29</sup>

Although the bill does not expressly incorporate Europe's Precautionary Principle, its zero risk threshold and burden of proof reversal seems to reflect it in spirit. This result was likely achieved through use of embedded EBM language that is virtually identical to that contained within HR 21.<sup>30</sup>

**Conclusion.** The administration and the 111th Congress convey the impression that these proposals do not relate to the UNCLOS.<sup>31</sup> Presumably, they wish to avoid a time-consuming and politically risky Senate floor debate that would reveal to an uninformed and economically weary American public the costs, as well as the putative benefits, actually associated with U.S. UNCLOS accession.

The reality, however, is that the U.S. government would be hard pressed to avoid a discussion of how the proposals discussed above, or an even more formal embrace of the ecosystem-based management precaution embodied in UNCLOS, would impair important American economic and sovereignty interests. Such obligations, being consistent with Europe's Precautionary Principle, would require the strict and costly preservation and protection of the oceans from land, air and water-based sources of pollution within the U.S., without any need to prove or quantify the environmental benefits resulting from government regulation. Our government is asking the American public to bear the costs which will result from precaution-driven EBM. In turn, we deserve that such measures be examined in venues such as congressional hearings on U.S. UNCLOS accession, rather than disguised via use of obtuse administration policy statements, a raft of amendments to existing federal environmental laws, and arcane regulatory proceedings.

## NOTES

<sup>1</sup> See Lawrence A. Kogan, *What Goes Around, Comes Around: How UNCLOS Ratification Will Herald Europe's Precautionary Principle as U.S. Law*, 7 SANTA CLARA INT'L L. (June 2009), abstract available online at Social Science Research Network (SSRN) at 53, 56-97, at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1356837](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1356837).

<sup>2</sup> See Donald F. Boesch, *Scientific Requirements for Ecosystem-based Management in the Restoration of Chesapeake Bay and Coastal Louisiana*, ECOLOGICAL ENGINEERING 26 (2006) 6-26, at 7, 10-11, at: <http://www.umces.edu/president/EBM%20CB-LA.pdf>.

<sup>3</sup> See Duncan E.J. Currie, *Ecosystem-Based Management in Multilateral Environmental Agreements: Progress towards Adopting the Ecosystem Approach in the Int'l Mgmt. of Living Marine Resources*, World Wildlife Fund (Mar.2007), at 1-2, at: [http://assets.panda.org/downloads/wwf\\_ecosystem\\_paper\\_final\\_wlogo.pdf](http://assets.panda.org/downloads/wwf_ecosystem_paper_final_wlogo.pdf).

<sup>4</sup> *Id.*, at 2.

<sup>5</sup> *Id.*, at 2 and 8, full document at 13; Carrie V. Kappel and Rebecca G. Martone, *Ecosystem-based Management, The Encyclopedia of Earth*, Oct. 4, 2006, J. Emmett Duffy, Ed. at: [http://www.eoearth.org/article/Ecosystem-based\\_management](http://www.eoearth.org/article/Ecosystem-based_management).

<sup>6</sup> See Charles Ehler and Fanny Douvère, *Visions for a Sea Change Report of the First International Workshop on Marine Spatial Planning*, Intergov't'l Oceanographic Comm. and Man and the Biosphere Programme, IOC Manual and Guides, 46: ICAM Dossier, 3. Paris: (UNESCO 2007), at 36, at: <http://www.unesco-ioc-marinesp.be/uploads/documentenbank/322a25f624fcb940dc70d0b3b510de24.pdf>.

<sup>7</sup> See Robin Kundis Craig, *Sustaining the Unknown Seas: Changes in U.S. Ocean Policy and Regulation Since Rio '92*, 32 ENV'TL REP. 10191-10192 (Feb. 2002), at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=922508](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=922508).

<sup>8</sup> See *Ltr. from Richard R. Verma, Ass't Sec'y, Legis. Affairs of the Dept. of State to John F. Kerry, Chm., Comm. on For. Rel.*, U.S. Senate (May 11, 2005), at: [http://www.globalsolutions.org/files/general/White\\_House\\_Priorities\\_List.pdf](http://www.globalsolutions.org/files/general/White_House_Priorities_List.pdf).

<sup>9</sup> See A PROCLAMATION BY THE PRESIDENT OF THE UNITED STATES OF AMERICA, NATIONAL OCEANS MONTH, 2009 (June 12, 2009) at: [http://www.whitehouse.gov/the\\_press\\_office/Presidential-Proclamation-National-Oceans-Month-and-Memorandum-regarding-national-policy-for-the-oceans](http://www.whitehouse.gov/the_press_office/Presidential-Proclamation-National-Oceans-Month-and-Memorandum-regarding-national-policy-for-the-oceans).

- <sup>10</sup> See *Transition to Green: Leading the Way to a Healthy Environment, A Green Economy and a Sustainable Future*, Env't Transition Recommendations for the Obama Admin. (Nov. 2008), at 1-12 to 1-13, at: <http://www.scstatehouse.gov/citizensinterestpage/EnergyIssuesAndPolicies/CommentsReceived2ndRequest/Sierra%20Club%20Attachme%20No.%20%20to%2012-01-08%20Comments.pdf>.
- <sup>11</sup> See Sec. 3(8) of "The Clean Water Restoration Act" (S.787) at: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:s787is.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:s787is.txt.pdf); see also *Senate Comm. Votes to Expand Clean Water Act*, Calif. Farm Bur. Fed. (June 24, 2009) at: <http://www.cfbf.com/agalert/AgAlertStory.cfm?ID=1337&ck=E48E13207341B6BFFB7FB1622282247B>.
- <sup>12</sup> See *Fed'l Water Pollution Control Act (Clean Water Act)*, Digest of Fed'l Res. Laws of Interest to the U.S. Fish and Wildlife Service, U.S. Fish and Wildlife Svc. website at: <http://www.fws.gov/laws/lawsdigest/fwatrpo.html>.
- <sup>13</sup> See Public Law 111-11, 111<sup>th</sup> Cong. (Mar. 20, 2009) at: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_public\\_laws&docid=f:publ011.111.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_public_laws&docid=f:publ011.111.pdf).
- <sup>14</sup> See Public Law 111-11, Sections 1204(e)(1)(C); 4001; and 4003(b)(1)(B)(iii).
- <sup>15</sup> See *The Wilderness Act of 1964*, reproduced at: <http://www.wilderness.net/index.cfm?fuse=NWPS&sec=legisAct#1>.
- <sup>16</sup> See P.L. 111-11, Subtitle B, Section 12202(a); Subtitle C, Section 12302(1)(A); Subtitle D, Sections 12402(a)(1)(A) and (a)(3), and 12405(c)(2)and(3).
- <sup>17</sup> See *Ocean Conservation, Education, and National Strategy for the 21st Century Act*, 111<sup>th</sup> Cong. (HR 21), at: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:h21ih.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h21ih.txt.pdf). See also HR 21, Section 3(3).
- <sup>18</sup> Kogan, *What Goes Around Comes Around*, *supra* note 1 at 90, 91-94.
- <sup>19</sup> See *The American Clean Energy and Security Act of 2009* (HR 2454), at: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111\\_cong\\_bills&docid=f:h2454ih.txt.pdf](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_bills&docid=f:h2454ih.txt.pdf).
- <sup>20</sup> See *House Approves Climate Change Bill*, UPI (6/26/09) at: [http://www.upi.com/Top\\_News/2009/06/26/House-approves-climate-change-bill/UPI-90601246060315](http://www.upi.com/Top_News/2009/06/26/House-approves-climate-change-bill/UPI-90601246060315); Greg Hitt and Stephen Power, *House Passes Climate Bill*, WALL ST. J., June 27, 2009 at: <http://online.wsj.com/article/SB124610499176664899.html>.
- <sup>21</sup> See HR 2454, Subtitle I, Section (b)(1).
- <sup>22</sup> See HR 2454, Subtitle I, Section (a)(1) and (2).
- <sup>23</sup> See HR 2454, Subtitle I, Section (a)(1)-(3).
- <sup>24</sup> See *The Federal Lands and Resources Energy Development Act of 2009*, a House Committee on Natural Resources Staff Discussion Draft (hereinafter referred to as Drilling Bill Discussion Draft), at: <http://www.offshoreenergylawblog.com/files/Uploads/Documents/Interior%20bill%20staff%20discussion%20draft.pdf>; *The Federal Lands and Resources Energy Development Act of 2009 SUMMARY*, Committee on Natural Resources Majority Staff Discussion Draft (May 14, 2009) at 2, at: <https://blogs.sonnenschein.com/capitaljoules/Documents/090514%20House%20NR%20Energy%20Discussion%20Draft%20Summary.pdf>.
- <sup>25</sup> See *Oil in the Sea III: Inputs, Fates, and Effects*, National Research Council (Nat'l Academies Press © 2003), Report in Brief, at 3, at: [http://dels.nas.edu/dels/rpt\\_briefs/oil\\_in\\_the\\_sea\\_final.pdf](http://dels.nas.edu/dels/rpt_briefs/oil_in_the_sea_final.pdf); *id.*, at Chap. 3, Input of Oil to the Sea at: 67-70, at: [http://books.nap.edu/openbook.php?record\\_id=10388&page=65](http://books.nap.edu/openbook.php?record_id=10388&page=65).
- <sup>26</sup> William E. Gibson, *Offshore Drilling: A Current Danger*, SunSentinel.com, June 17, 2009 at: <http://www.sun-sentinel.com/news/local/southflorida/sfl-offshore-drilling-current-06sbjun17.0.7671297.story>; David R. Baker, *Schwarzenegger Considers Oil Drilling Off Coast*, SFGate.com, June 7, 2009 at: <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2009/06/07/MN251808DH.DTL>; *Needing Cash, Calif. Rethinks Offshore Oil Ban*, Assoc. Press, May 20, 2009 at: <http://www.msnbc.msn.com/id/30830782>.
- <sup>27</sup> See *Outer Cont'l Shelf Lands Act*, Digest of Fed'l Res. Laws of Interest to the U.S. Fish and Wildlife Service at: <http://www.fws.gov/laws/lawsdigest/OUTCONT.HTML>; *OCS Lands Act History*, Minerals Mgmt Svc., U.S. Dept. of the Interior at: <http://www.mms.gov/aboutmms/OCSLA/ocslahistory.htm>.
- <sup>28</sup> See *Massachusetts v. Environmental Protection Agency (EPA)*, 127 S. Ct. 1438, 1457 (2007).
- <sup>29</sup> See Notification of Entry into Force of the 'CO<sub>2</sub> Sequestration' Amendments to Annex 1 to the 1996 Protocol to the Convention On the Prevention of Marine Pollution by Dumping of Wastes and other Matter (London Protocol 1996) LC-LP.1/Circ.11 (Feb. 16, 2007) at: [http://www.imo.org/includes/blastDataOnly.asp/data\\_id%3D17756/11.pdf](http://www.imo.org/includes/blastDataOnly.asp/data_id%3D17756/11.pdf).
- <sup>30</sup> Staff Discussion Draft, *supra* note 25 at Subtitle A, Short Section 2(4).
- <sup>31</sup> Kogan, *What Goes Around Comes Around*, *supra* note 1, at 51-53.