

Nomination Received by Council on Environmental Quality, Executive Office of the President  
For the CEQ NEPA Pilot Project Program  
<http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa/nepa-pilot-project-nominations>

**PART I. NOMINATOR**

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<b>Organization:</b>	Environmental Law Institute
<b>Project Title:</b>	Digitizing NEPA
<b>Submitted by:</b>	Member of the Public
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**PART II. SHORT ANSWERS**

**I. What Federal agency or agencies will be involved in this pilot project?**

This Digitizing NEPA pilot project to create a GIS-based digitized NEPA system for ocean and coastal management would involve federal agencies responsible for completing NEPA documents that relate to the marine environment. These could include, for example, the National Oceanic and Atmospheric Administration, the Bureau of Ocean Energy Management, Regulation and Enforcement, the U.S. Fish and Wildlife Service, the Environmental Protection Agency, the U.S. Army Corps of Engineers, and the U.S. Coast Guard, among others. It also could include the National Ocean Council and those responsible for developing coastal and marine spatial planning.

**II. What is the Federal action to which this NEPA pilot project applies?**

Specifically, we propose to focus the pilot project on ocean and coastal NEPA documents in light of the new national ocean policy. The Digitizing NEPA pilot project would apply retroactively to build a GIS-based information system using past environmental assessments (EAs) and environmental impact statements (EIS's) that relate to the ocean and coastal environment. The ideal region would be one with a reasonable number of previous EAs and EIS's that provide explicit information related to the geographic extent of predicted impacts. So as not to be overly broad, we envision a pilot project that focuses on federal actions in a specific region like the San Francisco Bay area in California, Puget Sound in Washington, or the Chesapeake Bay.

**III. How will this pilot project reduce the costs and time needed to complete the NEPA process?**

Federal agencies, consultants and applicants, tasked with developing environmental assessments and environmental impact statements would be direct beneficiaries of this pilot project.

While the Digitizing NEPA pilot project would create an up-front cost in the development of a data management system, once developed a digitized NEPA system should create efficiencies in the process that will save time and money. It would enable agencies, the private sector and the public with easy access and review of other NEPA documents that contain information related to past, current, and reasonably foreseeable future actions. This project should improve the utility of the information collected during the NEPA process for other purposes, including the development of new EAs and EIS documents. Such a system should shorten the time needed for

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searching for other projects in order to comply with requirements to assess direct, indirect, and cumulative effects. More importantly it should allow for better and more comprehensive analysis. This should translate into better management of cumulative impacts and improvement of ecosystem services.

**IV. How will this pilot project ensure rigorous environmental protection?**

A digitized NEPA system should improve environmental protection by creating the building blocks upon which to understand and assess cumulative human impacts to the environment. It will enable regulators to more easily monitor, evaluate, and minimize such impacts, which will certainly help conserve the ecosystem services upon which our Nation depends. Furthermore, this digitized NEPA system could be used to track mitigation measures and enable review of the predicted versus actual impacts in a spatially-explicit way. The information collected could also be used to inform future environmental assessments beyond NEPA and help the public better understand the impacts of federal actions on the ecosystem.

**V. How will this pilot project improve the quality and transparency of agency decisionmaking?**

Researchers, managers, and practitioners often find themselves “drowning in data while gasping for knowledge of how ecosystems respond to human activities.” Although it is necessary to have sufficient data for environmental management, it is equally important to ensure that data and information is adequately shared, synthesized, integrated, and communicated to support effective regional or project-level management. This project is the first step toward revolutionizing NEPA by creating a system that will facilitate the improved analysis of cumulative impacts—the ultimate challenge for environmental impact analysis.

This project seeks to address several challenges that must be overcome to achieve effective and efficient environmental governance. Currently, agency personnel and consulting firms rely on institutional know-how and search engines such as Google to identify NEPA documents. Many regulatory documents, including permits, environmental assessments, and environmental impact statements are developed and maintained on an agency by agency basis. While most recent regulatory records are maintained in some sort of digital format, such as PDFs, many are not collected or maintained in a way that is searchable or allows for holistic and spatial assessment. In other words, there is no comprehensive GIS-based database upon which regulators or the regulated community can rely to address this important mandate.

Furthermore, by creating a publicly accessible and searchable database, the public will have better access to agency documents. Mapping the documents and predicted impacts will add to the wave of efforts that use mapping as a tool to engage and inform the public.

**VI. Will this pilot project develop best practices that can be replicated by other agencies or applied to other Federal actions or programs? Please describe?**

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As envisioned, a GIS-based NEPA information system would be expanded beyond the pilot region to cover all NEPA actions so that the U.S. would have a comprehensive NEPA document system. Therefore, all agencies and all federal actions would be relevant. Furthermore, the system could be replicated by states or a system could be developed that allowed for the integration of state and federal documents. If an ocean region is picked as a pilot program, this project would directly support the implementation of the new National Ocean Policy issued by President Obama on July 19, 2010. With this new Executive Order, President Obama incorporated by reference the Final Recommendations of the Interagency Ocean Policy Task Force (Final Recommendations) of the same date that provide guiding principles for marine stewardship, including one principle stating that “[p]olicies, programs, and activities of the United States should be managed and conducted in a manner that seeks to prevent or minimize adverse environmental impacts to the ocean, our coasts, and the Great Lakes ecosystems and resources, including cumulative impacts, and to ensure and improve their integrity” (emphasis added) The combined Executive Order and Final Recommendations provide for a new overarching coastal and marine spatial planning (CMSP) framework that incorporates, as key elements, the principles of EBM, adaptive management, and precaution. The CMSP process is to “objectively and transparently guide and balance allocation decisions” for marine resources and “allow for the reduction of cumulative impacts from human uses” (emphasis added).

Significantly, those tasked with developing CMSP are called upon to do it by building upon existing regional governance approaches, data management approaches, and planning efforts. While this CMSP framework clearly anticipates sustainable development while minimizing cumulative impacts, beyond laying out general elements of CMSP, there is no clear guidance on how to accomplish such an objective. The project proposed here is one mechanism to achieve such objectives by utilizing an existing legal framework to take the first step toward comprehensive cumulative impact identification and assessment.

### **PART III. PROJECT DESCRIPTION**

*(See attachment on following page.)*

## DIGITIZING NEPA

The Environmental Law Institute (ELI) proposes a project, *Digitizing NEPA*, which will help bring the National Environmental Policy Act (NEPA) into the 21<sup>st</sup> Century. Specifically, the project goal is to develop digital information system that will enable NEPA documents (environmental assessments and environmental impact statements) to be identified by region and searched in a comprehensive way. Furthermore, the project aims to move NEPA documentation toward a system that categorically tracks predicted impacts using a GIS-based system. Such an approach will enable an improved understanding of the cumulative human impacts to environment and provide an improved approach for reducing such impacts.

This project seeks to address several challenges that must be overcome to achieve effective and efficient environmental management. These challenges include identifying cumulative human impacts to ecosystems; building an information data system that is relevant and useful for regulators and managers; and digitizing regulatory information so that it is readily accessible to regulators, the regulated community, and stakeholders.

We recommend focusing the pilot project in an ocean and coastal area so that the efforts also support implementation of the new National Ocean Policy and the development of coastal and marine spatial planning—priorities for the Obama Administration. It could also focus on a priority restoration area such as Chesapeake Bay or Puget Sound, since there are already concerted efforts underway to minimize cumulative impacts in these regions.

It is anticipated that project implementation would include the following tasks:

1. Developing the project team and an advisory body;
2. Developing a fleshed out pilot concept based on input from advisors;
3. Obtaining input from agencies and stakeholders;
4. Based on draft approach and comments, developing a pilot system;
5. Testing the system and enabling stakeholders and agencies to test system and make comments;
6. Revising and finalizing pilot system; and
7. Working with agencies to operationalize the system on a broad scale.

Technical needs include:

1. Legal expertise to ensure the system in its design satisfies legal and regulatory requirements and can be used in NEPA analyses.
2. Ecological expertise to ensure that the system will appropriately capture (or at least take the initial steps in capturing) the information needed to understand cumulative impacts.
3. Computational expertise to create a GIS-based NEPA document and impact assessment data information system.
4. Public participation expertise to ensure system satisfies needs of agency and stakeholder communities through meaningful engagement throughout the project process.

Therefore, this project will require a team of experts—including legal, ecological, and computational—to design a GIS-based data information system that is useful for marine and coastal regulators, the regulated community, and the public. In addition to requiring a team of experts working directly on the project, the project will require federal agencies and others to support the project by providing input on project design and comments on draft materials.

If adopted, this system should enable better assessment of environmental impacts. And with that, regulators should have the capacity to reduce such impacts. This will certainly help conserve the ecosystem services upon which we depend. Furthermore, this system should create efficiencies in the process that will save time and money

This analysis system could be used to inform regional ocean governance and other regional governance programs, as well as the soon-to-be-formed regional planning bodies under the coastal and marine spatial planning framework because:

- NEPA is a forward-looking process that encompasses the goal of sustainable development;
- NEPA is the one of the first regulatory hurdles in the development pathway for many projects;
- NEPA is the point at which analysis of cumulative impacts occurs on a project level;
- It is the primary mechanism available to assess potential ecosystem impacts and conduct baseline environmental analyses;
- It is cross-cutting in analysis but linked to sector-specific decision-making;
- Large amounts of federal, state, and private funding are spent implementing these laws;
- Done properly an integrated approach could potentially ease the regulatory burden placed on ocean users.

The utility of this tool, however, is currently limited because the information collected exists in the wrong format.

ELI has discussed this concept with a variety of law, policy, and science experts, including several individuals from federal agencies. However, ELI has not communicating directly with a federal agency to specifically propose this project or explore partners and support.

This project is not yet underway.