

1999

Environmental Impact Assessment Laws in the Nineties: Can the United States and Mexico Learn From Each Other?

Heather N. Stevenson
University of Richmond

Follow this and additional works at: <http://scholarship.richmond.edu/lawreview>

 Part of the [Environmental Law Commons](#), and the [International Law Commons](#)

Recommended Citation

Heather N. Stevenson, *Environmental Impact Assessment Laws in the Nineties: Can the United States and Mexico Learn From Each Other?*, 32 U. Rich. L. Rev. 1675 (1999).

Available at: <http://scholarship.richmond.edu/lawreview/vol32/iss5/9>

This Comment is brought to you for free and open access by the Law School Journals at UR Scholarship Repository. It has been accepted for inclusion in University of Richmond Law Review by an authorized editor of UR Scholarship Repository. For more information, please contact scholarshiprepository@richmond.edu.

ENVIRONMENTAL IMPACT ASSESSMENT LAWS IN THE NINETIES: CAN THE UNITED STATES AND MEXICO LEARN FROM EACH OTHER?*

I. INTRODUCTION

The National Environmental Policy Act of 1969¹ (NEPA) was the first major environmental law in the United States. The statute "was devised to establish a comprehensive national policy which would . . . guid[e] federal activity and provid[e] for a coordinated, informed approach toward dealing with environmental problems."² Since NEPA's enactment, agencies have been "required to prepare environmental analyses, with input from the state and local governments, Indian tribes, the public, and other federal agencies, when considering a proposal for a major federal action."³ Although most of the environmental impact assessment law in the world is modeled on NEPA⁴ and the impact assessment process developed under that Act,⁵ indi-

* The author wrote this article for the seminar class associated with the 1998 Allen Chair Symposium. The Editor-in-Chief of the *University of Richmond Law Review* selected it for publication.

1. 42 U.S.C. §§ 4321-4347 (1994).

2. James E. Harris, Comment, *The National Environmental Policy Act of 1969: A Step in the Right Direction*, 26 ARK. L. REV. 209, 210 (1972). "NEPA anticipates possible environmental problems and identifies alternative courses of action to avoid or mitigate adverse impacts." Nicholas A. Robinson, *International Trends in Environmental Impact Assessment*, 19 B.C. ENVTL. AFF. L. REV. 591, 593 (1992).

3. COUNCIL ON ENVIRONMENTAL QUALITY (CEQ), EXECUTIVE OFFICE OF THE PRESIDENT, *THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF ITS EFFECTIVENESS AFTER TWENTY-FIVE YEARS 1* (1997) [hereinafter CEQ STUDY].

4. See Robinson, *supra* note 2, at 593. In 1995, more than 86 countries had environmental impact assessment laws. Many of these countries have enacted environmental impact assessment (EIA) laws of their own volition. With the exception of European Economic Community requirements that member states have EIA laws, neither treaties nor pressure from the United Nations has forced most of these EIA law enactments. "Rather, the world has embraced EIA on its own merits." *Id.* at 591; see also Dinah Bear, *The National Environmental Policy Act: Its Origins and Evolutions*, 10 NAT. RESOURCES & ENV'T 3, 71 (1995).

5. See Council on Environmental Quality NEPA Regulations, 40 C.F.R. §§ 1500-1508.28 (1998).

vidual countries often have specific requirements in their laws that differ slightly from the NEPA model.⁶ The differences between NEPA and the laws of other countries may be the result of cultural or temporal differences based on when each individual country's environmental impact assessment law was adopted. Cultural differences reflect various socio-economic levels, geographic characteristics, and governmental organizational schemes.⁷ Countries that have adopted environmental impact assessment laws more recently often focus their policy on sustainable development or the right of human beings to live in a clean and healthy environment, in addition to the NEPA formula for environmental impact assessment.⁸

Can the United States learn from the environmental assessment laws and programs established in a developing country? The answer is, of course, that it can. In environmental law, where development of the law and improved scientific understanding of underlying environmental issues has been rapid,⁹ it

6. See Robinson, *supra* note 2, at 591.

7. See *id.* at 593.

8. For example, Brazil's environmental impact assessment law "has three purposes: to protect and enhance the existing environment, to reclaim the damaged environment, and to ensure sustainable socio-economic development." Felipe Páez, *Environmental Framework Laws in Latin America*, 13 PACE ENVTL L. REV. 625, 626 (1996). See generally PHILIPPE SANDS, PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW 221-36 (1995) (discussing human rights in relationship to environmental protection).

9. Environmental law in the United States came of age in the late 1960s and early 1970s with the passage of several key environmental statutes, including the National Environmental Policy Act (NEPA) in 1970, the Clean Water Act in 1972 of 1969, and the Clean Air Act Amendments of 1970. See National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321-4347 (1994); Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (1994) (more commonly known as the Clean Water Act); Clean Air Act, 42 U.S.C. §§ 7401-7671(q) (1994). Since then, environmental laws both in the United States and abroad have flourished. Laws now address diverse media (such as air, water, and hazardous wastes) and regulatory schemes. "Modern international environmental law dates to approximately 1972 when countries gathered for the United Nations Stockholm Conference on the Human Environment, and the United Nations Environment Programme (UNEP) was established." Edith Brown Weiss, *International Environmental Law: Contemporary Issues and the Emergence of a New World Order*, 81 GEO. L.J. 675, 678 (1993) (citing *Report on the United Nations Conference on the Human Environment at Stockholm*, 11 I.L.M. 1416 (1972)). Since the 1970s, international treaties with environmental components have blossomed. See *id.* at 679; see also, Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, Dec. 29, 1972, 26 U.S.T. 2403, 1046 U.N.T.S. 120 (commonly known as the London Ocean Dumping Convention); Convention for the Protection of World Cultural and Natural Heritage, Nov. 23, 1972, 27 U.S.T. 37, 1037 U.N.T.S. 151

is particularly important that countries learn from each other and share both scientific and legal knowledge. When one looks at all of the environmental impact assessment laws and statutes that have been spawned over the last thirty years,¹⁰ it is obvious that "[i]t is becoming a norm of customary international law that nations should engage in effective [environmental impact assessment] before taking action that could adversely affect either shared natural resources, another country's environment, or the Earth's commons."¹¹ Although the United States may have been the first country to create an environmental impact assessment procedure, it can learn from, and should consider, the changes and improvements that other countries have made in adopting environmental impact assessment laws and programs. An example of such a situation can be found in a comparison of Mexican and United States environmental impact assessment laws.

As part of the North American Free Trade Agreement (NAFTA)¹² and the North American Agreement on Environmental Cooperation (NAAEC) negotiations,¹³ the United States Environmental Protection Agency (EPA) conducted a comprehensive study of the Mexican environmental laws.¹⁴ The re-

(commonly known as the World Heritage Convention); Convention on International Trade in Endangered Species of Wild Fauna and Flora, *opened for signature*, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243 (commonly known as CITES).

10. See Robinson, *supra* note 2, at 591.

11. *Id.* at 602.

12. North American Free Trade Agreement, Dec. 17, 1992, 32 I.L.M. 289 [hereinafter NAFTA]. The heads of state of the three party countries (Canadian Prime Minister Brian Mulroney, Mexican President Carlos Salinas, and United States President George Bush) signed the treaty in their respective capital cities on December 17, 1992. See George E. Condon, Jr., *Bush, Salinas, Mulroney Sign NAFTA; Its Fate Now Up to Clinton*, SAN DIEGO UNION-TRIB., Dec. 18, 1992, at A17. NAFTA focuses on eliminating trade barriers and enhancing trade between the three signatories to the agreement. The treaty is somewhat unique in that it also addresses environmental issues under the North American Agreement on Environmental Cooperation, a NAFTA side agreement. For trade barriers to be eliminated, the parties to the agreement wanted a level playing field in terms of environmental regulations.

13. North American Agreement on Environmental Cooperation, Sept. 8, 1993, 32 I.L.M. 1480 (entered into force on Jan. 1, 1994) [hereinafter NAAEC].

14. See Anne Rowley, *Mexico's Legal System of Environmental Protection*, [1994] 24 ENVTL. L. REP. (Envl. L. Inst.) 10,431, at 10,431 (Aug. 1994). This paper will consider specifically Mexico's environmental impact assessment law found in the General Law of Ecological Equilibrium and Environmental Protection. Mexico's law also addresses other environmental concerns such as air quality and water quality issues. See LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCIÓN AL AMBIENTE

sults of this study indicated that although Mexican environmental laws were only ten years old at the time, the country's environmental regulatory system was roughly comparable to that of the United States.¹⁵ Given the attention this issue received in the NAFTA debate,¹⁶ some of Mexico's laws, such as the environmental impact assessment laws, are surprisingly more comprehensive and substantive than comparable United States statutes.

This paper will compare key provisions of NEPA and Mexico's environmental impact assessment law, focusing on specific statutes rather than the implementing regulations.¹⁷

[L.G.E.E.] (1996) (Mex.), available in LEXIS, Environ Library, Mxenv File (General Law of Ecological Equilibrium and Environmental Protection).

15. See Rowley, *supra* note 14, at 10,448.

16. During the process of negotiating the trade aspects of NAFTA, various non-governmental entities and other critics expressed concern about Mexico's environmental laws in particular. It was generally thought that Mexico's laws were less stringent than those of either Canada or the United States. The United States and Canada were concerned about the substantive content of Mexican environmental law and about that country's ability to enforce its laws. In fact, while NAFTA was being negotiated, then-Governor Clinton stated in a campaign speech in 1992 that additional environmental protection would be necessary before NAFTA could be approved. See Remarks by Governor Bill Clinton at the Student Center at North Carolina State University (Oct. 4, 1992), in *NAFTA & THE ENVIRONMENT* 263 (Daniel Magraw ed., 1995). NAFTA was signed before President Clinton took office in 1993, but the United States was the only party requiring negotiation of the environmental side agreement as a condition of approval of NAFTA. See Scot C. Stirling, *NAFTA, NEPA, NACE/CEC, and the National Law Center: Free Trade and the Environment*, in *MAKING FREE TRADE WORK IN THE AMERICAS* 521, 521 n.2 (Boris Kozolchych ed., 1993).

As a result of Canada's and the United States's desire to have more stringent environmental provisions related to NAFTA and a more level playing field, the parties began negotiating an environmental side agreement, the NAAEC, in the spring of 1993. See Daniel Magraw, *NAFTA & the Environment: Substance and Process*, in *NAFTA & THE ENVIRONMENT* 1, 15 (Daniel Magraw ed., 1995) (citations omitted). The NAAEC is one of the first of its kind—an environmental side agreement to a trade agreement developed by the parties with input from various nongovernmental organizations (NGOs). The administrative organization developed to implement the side agreement includes not only participation by the three environmental ministers of Mexico, the United States, and Canada, but also creates a Joint Public Advisory Committee, composed of various NGOs to provide public input into the process. A very unique element of the agreement is the commitment on the part of the parties to "effectively enforce its environmental laws and regulations." NAAEC, *supra* note 13, 32 I.L.M. at 1483-84.

17. Mexico's EIA statute was revised in 1996. Regulations implementing the revised statute are also currently under revision. The regulations in force at the moment are those implemented in 1988. Where it is appropriate in this paper, references will be made to the 1988 regulations to clarify specific points.

Part II provides an overview of NEPA's purpose and goals before examining the strengths and deficiencies of the statute. Part III addresses comparable provisions of the Mexican General Law of Ecological Equilibrium and Environmental Protection (LGEE) and concludes that in several instances, the Mexican laws are more substantive and comprehensive than NEPA. Part IV compares the two countries' laws and suggests modifications to both NEPA and Mexican law that would strengthen the statutes and provide more comprehensive environmental impact assessment in the United States and Mexico.

II. NEPA

A. Purpose and Goals of NEPA

Scholars and environmental practitioners have noted that NEPA is more of a policy act than a regulatory statute.¹⁸ NEPA addresses a broad range of policy issues including economic, social, and environmental concerns, rather than focusing with the specificity of typical laws on only one issue.¹⁹ It is also future-oriented rather than present-oriented.²⁰ With minor exceptions, NEPA has remained unchanged over the last three decades and remains the cornerstone of environmental regulation in the United States.²¹

18. See *Environmental Defense Fund, Inc. v. Corps of Eng'rs of the United States Army*, 325 F. Supp. 749, 759 (E.D. Ark. 1971), *aff'd*, 470 F.2d 289 (8th Cir. 1972), *cert. denied*, 412 U.S. 931 (1973); Lynton K. Caldwell, *Beyond NEPA: Future Significance of the National Environmental Policy Act*, 22 HARV. ENVTL. L. REV. 203, 204 (1998); David B. Burleson, Note, *NEPA at 21: Over the Hill Already?*, 24 AKRON L. REV. 623, 638 (1991).

19. See Caldwell, *supra* note 18, at 204; see also National Environmental Policy Act of 1969 § 101, 42 U.S.C. § 4331 (1994).

20. See Caldwell, *supra* note 18, at 205. As Caldwell argues, NEPA's "goals cannot be achieved by technical means and are seldom achieved by immediate responses." *Id.* at 204. Long-term policy changes reflected in, and implemented by, media-specific statutes can help achieve NEPA goals, such as the goal of assuring safe and healthful surroundings, or the goal of preserving historic aspects of our heritage. See National Environmental Policy Act § 101(b)(2), (4), 42 U.S.C. § 4331(b)(2), (4).

21. Subchapters I and II of NEPA (those sections of the statute that address policy and the CEQ) have only been amended three times since the statute was enacted. The last amendment was in 1982. The statute reflects a shift in environmental policy and regulation in the United States that began in the late 1960s and early 1970s. NEPA was the first statute to require federal agencies to consider all environmental impacts of a project, including for example, both air and water quality

When it was written, NEPA was truly a forward-thinking statute. Congress enacted the statute in response to concerns about federal agencies' lack of environmental protection and their tendency to deny future generations in this regard. Mismanagement of environmental issues was of great concern to citizens in the late 1960s and NEPA was Congress's response to this concern.²² For this reason, NEPA takes a broad-based policy view of environmental protection and management.²³ NEPA does not focus simply on one medium (such as water, air, or hazardous wastes), one species, or one special location or ecosystem. Instead, it makes an effort to balance "a broad range of environmental factors," including natural resources, historical resources, and social considerations.²⁴ NEPA calls for federal agencies to "create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans."²⁵ This last concept is a forerunner of today's sustainable development concept.²⁶

impacts, instead of focusing on only one type of impact. *See supra* note 18 and accompanying text.

22. *See* NICHOLAS YOST, ENVTL. LAW INST., NEPA DESKBOOK 5 (2d ed. 1995), (citing S. REP. NO. 296, at 8 (1969)).

23. *See id.*

24. *Id.* Natural resources, historical resources, and social considerations are all part of the human environment. NEPA requires that federal agencies "use all practicable means, . . . to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may . . . preserve important historic, cultural, and natural aspects of our national heritage." National Environmental Policy Act § 101(b)(4), 42 U.S.C. § 4331(b)(4).

25. National Environmental Policy Act § 101, 42 U.S.C. § 4331.

26. NEPA's policy section elaborates on the preliminary sustainable development concept. Section 101(b) requires the federal government:

[T]o use all practicable means . . . to . . .

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity, and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the

Although section 2 of NEPA specifies several purposes,²⁷ the statute actually has two main objectives. The first objective is protection of the environment. Section 2 of NEPA states that one of the purposes is to “promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man.”²⁸ Section 101(a) of NEPA states that the federal government will use all practicable means to “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.”²⁹

Congress’s second objective in crafting NEPA was to ensure that federal agencies take environmental factors into account in planning and deciding to undertake major federal actions.³⁰ The action-forcing provisions in section 102 of NEPA require federal agencies to prepare environmental documents commonly known as environmental impact statements (EIS).³¹ The EIS

maximum attainable recycling of depletable resources.

Id. § 101(b), 42 U.S.C. § 4331(b).

27. Section 2 of NEPA declares that:

The purposes of this Act are: [t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish the Council on Environmental Quality.

Id. § 2, 42 U.S.C. § 4321.

28. *Id.*

29. *Id.* § 101, 42 U.S.C. § 4331. NEPA even anticipates and addresses an issue that is a current “hot topic” in the international environmental law arena, that of intergenerational equity. Under this theory, the environmental interests of future generations are considered in current decision making by the present generation. See Brown Weiss, *supra* note 9, at 707.

30. See National Environmental Policy Act § 102(2)(B), (C), 42 U.S.C. § 4332(2)(B), (C). CEQ regulations define “major federal action” as an action “with effects that may be major and which are potentially subject to Federal control and responsibility.” 40 C.F.R. § 1508.18 (1998). Major federal actions may include “adoption of official . . . policy adoption of formal plans . . . adoption of programs . . . approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decision as well as federal and federally assisted activities.” *Id.*

31. An environmental impact statement is the detailed document described in subsection 102(2)(C) of NEPA. NEPA requires that:

to the fullest extent possible . . . all agencies of the Federal Government shall . . . include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsi-

facilitates decision making for all major federal projects significantly affecting the human environment.³² Although the statute does not force a federal agency to halt a project deemed environmentally wasteful, it does require that the agency "stop and think" about the proposed action.³³ Federal actions occur "only after responsible decisionmakers ha[ve] fully adverted to the environmental consequences of the actions, and ha[ve] decided that the public benefits flowing from the actions [outweigh] their environmental costs."³⁴

Under NEPA and its associated regulations, as developed by the CEQ, an agency may document the environmental impact, or lack of impact, of a project in one of three ways: by categorical exclusion, by an EIS, or by an environmental assess-

ble official on (i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

National Environmental Policy Act § 102, 42 U.S.C. § 4332.

32. See *id.* § 102(2)(C), 42 U.S.C. § 4332(2)(C). CEQ regulations define the components of "significantly" in relation to "context" and "intensity." "Context" means that "the significance of an action must be analyzed in several contexts such as society as a whole . . . the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action." 40 C.F.R. § 1508.27(a) (1998). "Intensity" "refers to the severity of impact." *Id.* § 1508.27(b). CEQ regulations define the "human environment" to include: "the natural and physical environment and the relationship of people with that environment When an environmental impact statement is prepared and economic or social and natural or physical environmental effects are interrelated, then the environmental impact statement will discuss all of these effects on the human environment." 40 C.F.R. § 1508.14.

33. In *Robertson v. Methow Valley Citizens Council*, the Supreme Court stated that "by focusing the agency's attention on the environmental consequences of a proposed project, NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast." 490 U.S. 332, 349 (1989). See also *Strycker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223, 227-28 (1980). The CEQ regulations also stress that:

[I]t is not better documents but better decisions that count. NEPA's purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.

40 C.F.R. § 1500.1(c) (1998).

34. *Jones v. District of Columbia Redevelopment Land Agency*, 499 F.2d 502, 512 (D.C. Cir. 1974), *cert. denied*, 423 U.S. 937 (1975).

ment.³⁵ Categorical exclusions define types of projects or actions which have no significant effect on the human environment either cumulatively or individually. Because these projects and actions have no significant impact, they are exempt from the requirement to prepare an EIS.³⁶ Environmental assessments are used as an aid by an agency in determining whether an EIS must be prepared when the impacts of a project are unknown or the need for a more detailed EIS is uncertain.³⁷

To aid federal agencies and make them more responsive to citizens, NEPA also requires public involvement in environmental decision making. NEPA provides several access points for public review and comment before the development of a final EIS.³⁸ After an agency has determined that it must prepare an EIS for a proposed project,³⁹ it must publish a Notice of Intent to prepare the EIS in the Federal Register. Public involvement is also encouraged during the scoping process, "a public process designed to help the agency determine the scope of the issues to be addressed in the EIS."⁴⁰ Once a draft EIS is completed, the lead agency⁴¹ must obtain comments from other federal agencies with special expertise or with jurisdiction by law over the proposed action.⁴² The lead agency must also "[m]ake dili-

35. See National Environmental Policy Act § 102, 42 U.S.C. § 4332; 40 C.F.R. §§ 1501.4(b), 1507.3(b)(2)(i), 1507.3(b)(2)(ii), 1508.4, .11, .9 (1998). See also YOST, *supra* note 22, at 9.

36. See 40 C.F.R. § 1500.5(k).

37. See *id.* § 1501.3.

38. See *id.* § 1506.6.

39. Agencies frequently promulgate regulations listing specific types of projects that are categorically excluded from the environmental document process. An example of such regulations are those promulgated by the Federal Highway Administration in 23 C.F.R. § 771 (1998). Under these regulations, the construction of bicycle and pedestrian lanes, installation of noise barriers, landscaping, and the acquisition of scenic easements are some of the types of projects that are categorically excluded from required environmental documents. See 23 C.F.R. § 771.117.

40. RONALD E. BASS & ALBERT I. HERSON, *MASTERING NEPA: A STEP-BY-STEP APPROACH* 50 (1993). See 40 C.F.R. § 1501.7 (describing the scoping process). The CEQ also issued scoping guidance on April 30, 1981, to encourage successful implementation of the scoping process and provide suggestions for addressing common issues arising during scoping. See CEQ Memorandum, *Scoping Guidance* (Apr. 30, 1981), in YOST, *supra* note 22, at 276.

41. The "lead agency" is defined as the "agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement." 40 C.F.R. § 1508.16.

42. See *id.* § 1502.9(a).

gent efforts to involve the public in preparing and implementing . . . NEPA procedures.⁴³ Draft environmental impact statements must be made available to the public and any comments received on these draft documents must be included, along with the agency response to the comments, in the final EIS statement.⁴⁴

From the beginning of a project, the federal agency involved must seek information from other agencies and the public. The Notice of Intent to prepare an EIS is published in the Federal Register to provide notice to interested individuals that the federal agency is considering a particular project and is analyzing the environmental impacts of that proposed project.⁴⁵ Although the Notice of Intent does not actively solicit public comment, it provides a contact name and address allowing interested parties to make their opinions known to the agency.⁴⁶

The next public involvement step is scoping. The scoping process helps define issues to be addressed in the EIS,⁴⁷ allocates assignments between federal agencies if more than one agency is involved,⁴⁸ and adopts a time table for document production.⁴⁹ Affected federal, state, and local government agencies and other interested individuals are invited to a scoping meeting. Although scoping meetings are not required, CEQ regulations encourage agencies to hold such meetings because identification of substantive issues at an early phase of a project saves time and money in the project development process.

43. *Id.* § 1506.6. Section 102 of NEPA requires that copies of the agency documents (usually environmental assessments or environmental impact statements) "shall be made available to the . . . public." National Environmental Policy Act of 1969 § 102(2), 42 U.S.C. § 4332 (1994). As the Supreme Court stated in *Robertson*, "[p]ublication of an EIS, both in draft and final form, also serves a larger informational role. It gives the public the assurance that the agency 'has indeed considered environmental concerns in its decisionmaking process,' and, perhaps more significantly, provides a springboard for public comment." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (citation omitted).

44. *See* 40 C.F.R. §§ 1503.1-4.

45. *See id.* §§ 1501.7 (indicating when the Notice of Intent is to be published), 1508.22 (describing the minimum contents of the Notice of Intent).

46. *See id.* § 1508.22.

47. *See id.* § 1501.7(a)(3).

48. *See id.* § 1501.7(a)(4).

49. *See id.* § 1501.7.

Once the draft EIS is prepared, it is distributed to appropriate agencies for their review.⁵⁰ Appropriate agencies are those with special expertise in the area. For example, a document for a project with potential impacts on historic resources would be provided to the Advisory Council on Historic Preservation for that agency's comments. The draft EIS is also distributed to the public for review and comment.⁵¹ Federal agencies often hold public hearings or public meetings at this stage of EIS development to actively seek public comment on the project.⁵²

In preparing the final EIS, federal agencies must include a section in the document describing public comments and providing agency response to those comments.⁵³ Responses to comments may take the form of additions to, or modifications of, a proposed action; a correction of inaccurate factual information; or an explanation of why the comments do not warrant an action on the part of the agency.⁵⁴ Once the final EIS is complete, federal agencies may distribute the document again for comments.⁵⁵ The CEQ regulations require that the federal agency wait thirty days to take action after filing the final EIS.⁵⁶

B. *Strength of NEPA: Public Participation*

Some suggest that public involvement complicates project development because agency staff must listen and respond to all public comments and suggestions,⁵⁷ some of which may be unreasonable, impractical, or require that the agency conduct additional studies. Inclusion of the public, however, often results in a better project. For example, there is frequently greater public acceptance of any given project because the public has

50. *See id.* §§ 1503.1, 1503.2.

51. *See id.* § 1503.1(a)(4).

52. *See, e.g.,* Dept. of Transp. Order 5610.1C, Procedures for Considering Environmental Impacts (1982), reprinted in YOST, *supra* note 22, at 224.

53. *See* 40 C.F.R. § 1503.4.

54. *See* YOST, *supra* note 22, at 16-17.

55. *See id.* at 17.

56. *See* 40 C.F.R. § 1506.10(b)(2).

57. *See generally* William Murray Tabb, *The Role of Controversy in NEPA: Reconciling Public Veto with Public Participation in Environmental Decisionmaking*, 21 WM. & MARY ENVTL. L. & POL'Y REV. 175 (1997).

been involved in the decision process. In effect, the public obtains a sense of ownership with regard to the project and the ultimate decision.⁵⁸

Involving the public in the decision process also makes sense from a policy standpoint. Environmental issues are not solely within the purview of government agencies; they are also community issues.⁵⁹ By allowing for community involvement, NEPA provides a sense of ownership in a federal agency project and allows citizens the opportunity to address important environmental issues. Although citizens sometimes express frustration about a project at public meetings and hearings, or at the time of their notification of these meetings,⁶⁰ the process developed under NEPA and the CEQ regulations has the potential to keep the public involved from the beginning to the end of a project.

The EIS process serves to disseminate information from the federal agency proposing a major federal action to the interested community of citizens. The EIS process also serves as a vehicle for the public to provide comments on, and participate in modifying, the proposed action. This "two-way" street promotes a free flow of information—one that might not be possible if the agency did not actively seek public input in its plans. The level of public participation and the nature of such participation is generally left to the federal agency to decide.⁶¹ As long as the agency meets the statutory and regulatory requirements, courts are not likely to find the agency public participation process inadequate.⁶² Although there is a disincentive to provide public participation opportunities when public input would lead the federal agency to conduct additional studies, or when the public objects to an agency project, forcing the agency to justify its actions,⁶³ federal agencies are directed to make the additional "diligent efforts" required by the CEQ to involve

58. See WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW § 9.1(B)(4), at 814 (2d ed. 1994).

59. See CEQ STUDY, *supra* note 3, at 17.

60. See *id.* at 18.

61. See Tabb, *supra* note 57, at 178.

62. Courts are limited to ensuring that federal agencies meet the procedural requirements of NEPA. For a discussion of substantive versus procedural requirements, see note 72, *infra*, and accompanying text.

63. See Tabb, *supra* note 57, at 176.

the public.⁶⁴ The complete NEPA public participation process serves to demonstrate that “a federal agency has appropriately considered and weighed the reasonably foreseeable environmental impacts of a proposed major action in a timely fashion before making a decision to undertake that action.”⁶⁵

C. *Limitation of NEPA*

1. Federal Focus

NEPA specifically applies only to major action taken by federal agencies.⁶⁶ As discussed in Part II.A., a major federal action is defined under the CEQ regulations as an action “with effects that may be major and which are potentially subject to Federal control and responsibility.”⁶⁷ Major federal actions may include “adoption of official policy . . . adoption of formal plans . . . adoption of programs . . . approval of specific projects, such as construction or management activities located in a defined geographic area. Projects include actions approved by permit or other regulatory decisions as well as federal and federally assisted activities.”⁶⁸ The definition of “federal agency” includes all agencies of the executive branch of government. It does not include Congress, the judiciary, or the President.⁶⁹

Environmental assessments or EISs are not usually required under NEPA for privately funded projects that do not require any sort of federal approval.⁷⁰ Such projects can, however,

64. *See id.* at 179.

65. *Id.* at 181 (citing *Hanly v. Kleindienst*, 471 F.2d 823, 830 (2d Cir. 1972)).

66. *See* National Environmental Policy Act of 1969 § 102, 42 U.S.C. § 4332 (1994).

67. 40 C.F.R. § 1508.18 (1998).

68. *Id.* Major federal actions have included construction of the Cross Florida Barge Canal, highways, dams, military housing, and incinerators, among other types of projects. *See* RODGERS, *supra* note 58, § 9.5(B)(3), at 879-93 (listing examples of major federal actions).

69. The CEQ regulations define “federal agency” as:

[A]ll agencies of the Federal Government. It does not mean the Congress, the Judiciary, or the President, including the performance of staff functions for the President in his Executive Office. It also includes for purposes of these regulations States and units of general local government and Indian tribes assuming NEPA responsibilities under section 104(h) of the Housing and Community Development Act of 1974.

40 C.F.R. § 1508.2.

70. Where a project requires federal approval, such as a permit or a lease, appro-

have significant environmental impact. Without federal review of such projects, impact assessment is relegated to the state and local level where impact assessment laws and regulations exist to address such projects.⁷¹ Although states and many localities are capable of assessing environmental impacts within their jurisdictions, their review does not always take a national ecosystem approach, but rather focuses on state and local environmental considerations.

2. NEPA Is Only Procedural

NEPA often has been described as a procedural statute.⁷² Through its procedures, NEPA "seek[s] to ensure environmen-

appropriate environmental documentation (often including an EIS) may be required. Although the project may not be a "major federal action," it still may trigger NEPA requirements under what is commonly known as the "small handle" problem. As an example of this problem, in *Colorado River Indian Tribes v. Marsh*, a federal district court held that the environmental impacts of a private development project had to be discussed in an environmental document. The document was originally necessary because a permit for work along a river bank was required from the U.S. Army Corps of Engineers. See *Colorado River Indian Tribes v. Marsh*, 605 F. Supp. 1425, 1433 (D.C. Cal. 1985).

71. As of 1995, the following states had "mini-NEPAs" requiring environmental impact assessment modeled after NEPA: Arkansas, California, Connecticut, District of Columbia, Florida, Hawaii, Indiana, Maryland, Massachusetts, Minnesota, Montana, New York, North Carolina, Puerto Rico, South Dakota, Virginia, Washington, and Wisconsin. See YOST, *supra* note 22, at 42.

72. See *Environmental Defense Fund, Inc. v. Massey*, 986 F.2d 528, 532 (D.C. Cir. 1993) ("NEPA is designed to control the decisionmaking process of U.S. federal agencies, not the substance of agency decisions."); see also *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 352 (1989) (discussing court review of mitigation plans in an environmental document, the court stated: "[t]here is a fundamental distinction, however, between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other."); *Strycker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223, 227 (1980)

("NEPA was designed to insure a fully informed and well-considered decision, but not necessarily a decision the judges of the Court of Appeals or of this Court would have reached had they been members of the decisionmaking unit of the agency . . . once an agency has made a decision subject to NEPA's procedural requirements, the only role for a court is to insure that the agency has considered the environmental consequences; it cannot interject itself within the area of discretion of the executive as to the choice of the action to be taken." (quotations omitted));

Nicholas Yost, *NEPA's Promise—Partially Fulfilled*, 20 ENV. L. 533, 534 (1990).

tally responsible decisionmaking.”⁷³ A federal agency is not required to choose the least environmentally harmful alternative described in the environmental impact statement in planning a major federal action.⁷⁴ Although reasonable alternatives must have been addressed in the document, and the environmental impacts of each alternative described either quantitatively or qualitatively, there is no requirement that federal agencies actually choose the least environmentally harmful alternative.⁷⁵ In many cases, that alternative might be the no action alternative,⁷⁶ and although it must be included in the environmental document, it is rare that the no action alternative is the one actually chosen by a federal agency. Why? Because some preliminary cost-benefit analysis and brainstorming usually takes place prior to initiating the preparation of an environmental document. It is not likely that a federal agency will spend the time and money required to prepare appropriate environmental documentation under NEPA when the “no action” alternative is the agency’s choice in the first place.

73. YOST, *supra* note 22, at 24; see Edmund S. Muskie and Eliot R. Cutler, *A National Environmental Policy: Now You See It, Now You Don't*, 25 MAINE L. REV. 163, 170, 172, 192 (1973).

74. See YOST, *supra* note 22, at 24.

75. See *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978) (declaring that NEPA imposes only procedural requirements on federal agencies); *Strycker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223, 227 (1980) (reiterating the finding of *Vermont Yankee* that NEPA is only procedural and therefore the courts have only to “insure that the agency has considered the environmental consequences.”); see also 40 C.F.R. § 1502.14(a)-(f) (1998); BASS & HERSON, *supra* note 40, at 84; Paul D. McHugh, *The European Community Directive—An Alternative Environmental Impact Assessment Procedure?*, 34 NAT. RESOURCES J. 589, 599 (1994); Connie Ozawa, *Targeting the NEPA Process: Critics Heard at CEQ Meeting*, 3 ENVTL. IMPACT ASSESSMENT REV. 102, 108 (1982).

In the early years of NEPA, courts appeared to indicate that they would “go beyond procedure and show a great willingness to conduct substantive review of final agency decisions.” YOST, *supra* note 22, at 24. Later court decisions, particularly that of *Vermont Yankee* have held that NEPA is essentially procedural.

76. See 40 C.F.R. § 1502.14(d) (1998).

III. MEXICAN ENVIRONMENTAL IMPACT ASSESSMENT LAW

A. *Mexican Environmental Law: Purpose, Goals and Legal Setting*

A brief introduction to the Mexican legal framework will provide the reader with a basis for comparing the various EIA provisions. Mexico's legal system is based on the civil code system.⁷⁷ Such a system places emphasis on administrative proceedings to develop and to enforce the law.⁷⁸ As a result, less emphasis is placed on judicial precedent in case law. This contrasts sharply with the Anglo-American common law legal system.⁷⁹

The underlying basis for Mexican environmental law is the Mexican Constitution.⁸⁰ In Article 25 of the Mexican Constitution, economic development and productivity are subject "to consideration of environmental protection and natural resource conservation."⁸¹ Article 27 builds on this consideration and authorizes the federal government "to impose measures on owners of private property to protect the general public's well-being."⁸² Natural resources are held in trust for the people by the Mexican federal government.⁸³

Mexico's environmental law is divided into three specific tiers. The first tier is composed of statutory law, of which the General Law of Ecological Equilibrium and Environmental Protection⁸⁴ is the most comprehensive environmental statute. This statute addresses such topics as environmental policy and planning, environmental impact assessment, wild flora and fauna, biodiversity, sustainable use, air pollution, water pollu-

77. See Rowley, *supra* note 14, at 10,432.

78. See *id.*

79. See *id.*

80. CONSTITUCIÓN POLÍTICA DE LOS ESTADOS UNIDOS MEXICANOS [CONST.] (MEX.), available in LEXIS, Mexico Library, Mxcnst File (available only in Spanish).

81. Rowley, *supra* note 14, at 10,432.

82. *Id.*

83. See *id.*

84. See LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCIÓN AL AMBIENTE [L.G.E.E.] tit. I-IV (1996) (MEX.), available in LEXIS, Envirn Library, Mxenv File.

tion, and nuclear energy.⁸⁵ Other media-specific statutory provisions addressing specific environmental issues are scattered throughout the body of the law.⁸⁶ However, the LGEE provides the foundation for most of Mexico's efforts to protect the environment.⁸⁷ More specifically for the purposes of this paper, it outlines the environmental impact assessment functions of the federal government.⁸⁸

The second tier of environmental law includes the various administrative regulations implementing the LGEE.⁸⁹ The President, in cooperation with the affected federal agencies, has responsibility for promulgating the environmental regulations.

The third and final tier incorporates technical standards, or "norms," that are developed by the federal agencies responsible for environmental programs. As in the United States, these technical standards are usually media-specific.⁹⁰

The cabinet-level federal agency primarily responsible for natural resource management and environmental protection in Mexico is the Secretaria de Medio Ambiente, Recursos Naturales y Pesca (SEMARNAP).⁹¹ SEMARNAP "is responsible for overall environmental policy formulation and implementation, development of environmental regulations and standards, and for conducting research concerning the environment."⁹² The agency also administers the environmental impact assessment

85. *See id.*

86. *See Rowley, supra* note 14, at 10,432-33. These additional statutes "govern the conservation of certain natural resources and protection of the environment from the adverse effects of certain activities." *Id.*

87. *See id.*

88. *See* L.G.E.E. tit. I, ch. V, arts. 28-41; Páez, *supra* note 8, at 646.

89. Current implementing regulations for the LGEE were promulgated in 1988. The Mexican government is in the process of revising the regulations, but has not amended any of them to date. *See* Fascimile Memorandum from Professor Beatriz Bugada to Heather Stevenson, Allen Chair Editor, *University of Richmond Law Review* 1-2 (Sept. 27, 1998) (on file with the *University of Richmond Law Review*).

90. *See Rowley, supra* note 14, at 10,433. Examples of norms include those regulating air emissions from certain power plants and discharges to water from glass processing. *See id.* at 10,433, n.15.

91. The name of the federal agency primarily responsible for natural resource management and environmental protection was recently changed from the Secretariat of Social Development (SEDESOL) to SEMARNAP. *See* Fascimile Memorandum from Beatriz Bugada to Heather Stevenson, *supra* note 89.

92. Rowley, *supra* note 14, at 10,434.

process and is responsible for monitoring compliance with environmental regulations and taking appropriate investigatory and enforcement actions.⁹³

The comprehensiveness of Mexico's LGEE "contrasts with the United States legal regime in which there are separate statutes covering air pollution, water pollution, solid waste handling and disposal, environmental impact assessment and various natural resource issues."⁹⁴ Under Mexican law, the vast majority of the environmental statutes are incorporated in the LGEE rather than in separate media-specific statutes.

The purpose of Mexico's LGEE includes fostering sustainable development and guaranteeing:

[E]veryone's right to live in an environment suitable for their development, health and well-being; . . . [p]reserving, restoring and improving the environment; [p]reserving and protecting biodiversity as well as establishing and managing protected natural areas . . . [; s]ustainable use, preservation and, if necessary, restoration of soil, water and other natural resources in order that obtainment of economic benefits and the public's activities are compatible with the preservation of ecosystems; p]reventing and controlling air, water and soil pollution; [g]uaranteeing the relevant participation of people . . . in the preservation and restoration of ecological equilibrium and environmental protection, [and establishing the appropriate coordination and enforcement mechanisms to carry out the national environmental policy.]⁹⁵

Mexican law is clear about the overarching purpose for the state's environmental laws. The requirement of fostering sustainable development and providing a right to live in a suitable environment are particularly interesting as these two provisions do not have directly comparable statements of policy in the United States's NEPA. In NEPA, sustainable development is addressed more obliquely under the policies of fulfilling:

93. *See id.*

94. Office of General Counsel, U.S. Environmental Protection Agency, *Evaluation of Mexico's Environmental Laws and Regulations—Interim Report of EPA Findings*, reprinted in *NAFTA & THE ENVIRONMENT* 185, 194 (Daniel Magraw ed., 1995).

95. LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCIÓN AL AMBIENTE [L.G.E.E.] tit. I, ch. I, art. 1 (1996) (Mex.), available in LEXIS, Envirn Library, Mxenv File.

[T]he responsibilities of each generation as trustee of the environment for succeeding generations . . . attain[ing] the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences . . . and enhanc[ing] the quality of renewable resources and approach to the maximum attainable recycling of depletable resources.⁹⁶

The purpose expressed in the beginning of the LGEE is expanded further under Mexico's environmental policy. This policy underlies the promulgation of the regulations implementing the statute.⁹⁷ In developing the environmental policy for the nation, the President and the Federal Executive Branch are required to consider, among other issues, all of the following: ecological equilibrium; ecosystem preservation; inter-generational equity; use of renewable resources; agency coordination to create efficient environmental protection; encouragement of individuals to include preservation and restoration of ecological equilibrium in economic and social fields; the right to an environment suitable for human development, health and well-being; the eradication of poverty; the role of women in society; pollution control; and promotion of regional and global ecosystem preservation and restoration.⁹⁸ The policy is broad and comprehensive.

Chapter IV of the LGEE places the national environmental policy in perspective when it states that the policy is to be "observed in the planning and execution of actions for which the federal public administration agencies and entities are responsible."⁹⁹

Under the LGEE, Mexico's federal agencies are required to implement an environmental impact assessment program that incorporates the national environmental policy.¹⁰⁰ An incredi-

96. National Environmental Policy Act of 1969 § 101, 42 U.S.C. § 4331(b)(1), (3), (6) (1994).

97. See L.G.E.E. tit. I, ch. III, art. 15.

98. See *id.*

99. *Id.* tit. I, ch. IV, art. 17.

100. See *id.*

The environmental policy guidelines . . . shall be observed in the planning and execution of actions for which the federal public administration agencies and entities are responsible, in accordance with their respective

bly broad and comprehensive impact assessment program could be developed under this policy umbrella because the policy appears to cover so much federal agency activity. Although Mexico has made great strides in environmental impact assessment, the country still has work to do to meet the grand national environmental policy with respect to public involvement in the impact assessment process.¹⁰¹

B. *Strengths of the Mexican Law*

1. Environmental Impact Assessment Requirements Apply to All Projects

Mexico's environmental impact assessment provisions are included in Chapter IV of the LGEE at Articles 28 through 35 Bis 3.¹⁰² The statute specifies that certain works or activities require authorization from the appropriate federal agency, the SEMARNAP, prior to beginning construction.¹⁰³ The authorization is obtained in part by presenting an environmental impact statement to the SEMARNAP for review and approval. The statute applies to all parties, including individuals, corporations, government agencies, or other entities attempting to carry out works or activities "which could cause ecological imbalance."¹⁰⁴

scopes of jurisdiction, as well as in the exercise of powers conferred to the Federal Government by law to regulate, promote, restrict, prohibit, orient, and generally, encourage the actions of individuals in economic and social fields.

Id.

101. See discussion *infra* Part III.C.1.

102. See, e.g., L.G.E.E., tit. I, ch. V, arts. 28, 30.

103. The list of works or activities that could cause ecological imbalance or exceed other limits and conditions include the following: water works; communication, oil, and gas pipelines and other similar types of structures; petroleum, petrochemical, chemical, steel, paper, sugar, cement, and electrical industry projects; mining exploration and exploitation projects; hazardous waste treatment works; forestry use of jungles or other species for which regeneration is difficult, and forestry plantations; changes in land use that could affect soil usage; certain industrial parks; real estate developments in coastal areas; activities in wetlands; activities in protected natural areas; certain fishing and aquacultural projects; and works "which could cause serious and irreparable ecological imbalances, harm to public health or to ecosystems or exceed the limits and conditions established in the legal provisions regarding preservation of ecological equilibrium and environmental protection." *Id.* art. 28.

104. *Id.*

Mexico has also promulgated implementing regulations for the LGEE.¹⁰⁵ These regulations, last updated in 1988, are currently under revision. Until new regulations are adopted, the 1988 version is still in force. While the statute sets out the basic framework of the procedure, the regulations provide additional details about the environmental impact assessment process. The regulations specify which types of works or activities generally do not produce significant environmental impacts, would not cause ecological imbalance, and therefore do not require environmental impact statements.¹⁰⁶ The statute, however, specifies that certain works, subject to federal government jurisdiction, which "could cause negative effects on the environment, natural resources, wild flora and fauna and other resources" and which are not required otherwise to prepare an environmental impact statement, are not totally absolved from meeting all environmental regulations and norms.¹⁰⁷ Such projects are still required to meet relevant media-specific norms and any other relevant regulations or environmental norms.¹⁰⁸

Once an entity determines that it is attempting a work or activity which requires an environmental impact statement, the entity must prepare and submit the appropriate impact assessment document to the SEMARNAP. The impact statement must include, at a minimum:

[A] description of the possible effects on the ecosystem or ecosystems which could be affected by the work or activity concerned, taking into consideration the combination of elements that comprise said ecosystems, as well as preventive and mitigation measures and other measures necessary to prevent and minimize the negative effects on the environment.¹⁰⁹

In addition to an environmental impact statement, works or activities that are considered to be highly hazardous must in-

105. See Regulation of the General Law of Ecological Equilibrium and Environmental protection in Matters Pertaining to Environmental Impact [Regulation of the L.G.E.E.] (1988) (Mex.), available in LEXIS, Envirn Library, Mxenv File.

106. See *id.*

107. See L.G.E.E., tit. I, ch. V, art. 29.

108. See *id.*

109. *Id.* art. 30.

clude a risk assessment study.¹¹⁰ Certain types of projects may first present a preventative report rather than an environmental impact statement.¹¹¹ Once such a report is submitted, the SEMARNAP has twenty days to determine if an environmental impact statement is necessary.¹¹² When an entity submits an environmental impact statement to SEMARNAP, that secretariat begins the project evaluation process. The SEMARNAP must issue a resolution concerning the project within sixty days of receipt of the environmental document.¹¹³

2. Mexican Law Is Not Strictly Procedural

After completing the project evaluation process, the SEMARNAP must issue a resolution that either authorizes, authorizes with conditions, or denies authorization for the proposed work or activity.¹¹⁴ Unlike the procedural focus of NEPA, the Mexican LGEE has substantive characteristics. The SEMARNAP may reject, authorize, or require modifications of a proposed project based on the environmental impacts.¹¹⁵ Under NEPA, the federal agency preparing the environmental document must only address and consider the environmental impacts of the proposed project.¹¹⁶ Other issues and priorities

110. *See id.*; *see also* Regulation of the L.G.E.E. ch. II, art. 6.

111. *See* L.G.E.E. tit. I, ch. V, art. 31.

112. *See id.*

113. *See id.* art. 35 Bis.

114. *See id.* art. 35. The LGEE requires that:

Once the environmental impact statement is evaluated, the Secretariat shall issue the corresponding resolution with proper basis and grounds, in which it may:

I. Authorize the performance of the work or activity concerned, under the requested terms;

II. Authorize the work or activity concerned subject to the modification of the project or on the establishment of additional prevention and mitigation measures, for the purpose of preventing, mitigating or compensating the adverse environmental impacts likely to be produced in the construction, normal operation and in the event of an accident. In the case of conditional authorizations, the Secretariat shall indicated [sic] the requirements to be observed in the performance of the planned work or activity, or

III. Deny the requested authorization.

Id.

115. *See id.*

116. *See supra* note 72 and accompanying text.

may allow a federal agency in the United States to choose an alternative for its project that is not the most environmentally sensitive.¹¹⁷

C. Limitation of the Mexican Law: Public Participation Is Limited

The foundation for public participation in Mexican environmental decision making is the Mexican Constitution.¹¹⁸ The LGEE includes provisions to meet the constitutional requirements with respect to environmental impact assessment. Articles 33 and 34 of Chapter V of the LGEE provide public opportunities for review and comment. Article 33 requires that SEMARNAP notify state and municipal authorities when it receives an environmental impact statement. Article 34 requires that the SEMARNAP make environmental impact statements available to the public so that they may be reviewed by anyone.¹¹⁹

A list of the environmental impact assessments approved by the SEMARNAP is published in the Ecological Gazette, and a single copy of the document is made available for public review at the Center for Public Information in Mexico City.¹²⁰ Within ten days of this publication, any member of the public may request that the EIA be made available to the public. SEMARNAP may organize public information meetings when necessary to discuss projects with possible serious ecological imbalances or harm to the public health or the ecosystem. Public comments are added to the project file. In preparing its resolution on the project, SEMARNAP must address the public comments and any mitigation measures for environmental impacts proposed by members of the public. Draft environmental documents are published infrequently and only then on a voluntary basis. The public is invited to comment on an environmen-

117. See *supra* note 75 and accompanying text.

118. See Rowley, *supra* note 14, at 10,434 & n.39.

119. See L.G.E.E., tit. 1, ch. IV, arts. 33, 34.

120. See Greg Block, *One Step Away from Environmental Citizen Suits in Mexico*, in *MAKING FREE TRADE WORK IN THE AMERICAS* 626, 632 (Boris Kozolchyk ed., 1993).

tal impact assessment in Mexico at the end of the process, rather than being allowed to participate in the development of the impact analysis.¹²¹

Mexican citizens also have other avenues for objecting to agency decisions and environmental evaluations. Under Article 189 of the LGEE, citizens have the right to make a public denunciation of an agency's actions.¹²² Such an accusation can lead to an investigation of the problem by the Office of the Federal Attorney General for Environmental Protection.¹²³ The recommendations of the Office of the Federal Attorney General for Environmental Protection are "public, autonomous and non-binding."¹²⁴ Citizens who have a direct injury as a result of an agency action may file a suit under the Law of Amparo.¹²⁵ Such suits are somewhat similar to citizen suits in the United States, but standing for review of environmental matters under this type of proceeding rarely has been established.¹²⁶

A third avenue for public complaints against an agency action on environmental issues is through the provisions of the NAAEC, the NAFTA side agreement addressing environmental issues.¹²⁷ Under the NAAEC, the Secretariat of the Commission for Environmental Cooperation (CEC) may consider a submission from a nongovernmental organization or person that a party is failing to effectively enforce its environmental law.¹²⁸ One example is the Cozumel Pier submission.

In that submission, three Mexican nongovernmental organizations (NGOs) filed under Article 14 of the NAAEC on January 18, 1996.¹²⁹ The submission alleged that the Mexican government had not followed the requirements of the LGEE with respect to environmental impact assessment procedures for the

121. *See id.* at 632; Rowley, *supra* note 14, at 10,436. In the United States, NEPA requires that agencies solicit public participation at several points in the project development process. *See supra* Part II.B.1.

122. *See* L.G.E.E., tit. VI, ch. VII, art. 189.

123. *See id.* arts. 192-195.

124. *Id.* art. 195.

125. *See* Rowley, *supra* note 14, at 10,435.

126. *See id.*

127. *See* NAAEC, *supra* note 13, 32 I.L.M. at 1488.

128. *See Final Factual Record of the Cruise Ship Pier Project in Cozumel, Quintana Roo*, Secretariat of the CEC, Factual Record No. 1, at 1 (1997).

129. *See id.*

Cozumel Pier project. The NGOs claimed that the entire Cozumel Pier project had not been considered in the SEMARNAP's environmental impact assessment process, but rather that the project had been segmented.¹³⁰ The Secretariat accepted the submission and recently completed the factual record addressing the issues as required under the NAAEC.¹³¹

Under the NAAEC, the Secretariat submits a final factual record to the CEC for its review without any specific recommendation.¹³² The CEC may choose whether to act on the federal record.¹³³ In the Cozumel Pier instance, the CEC has not yet acted on the factual record. The NGOs, however, have obtained results from their actions. Public awareness of the project has increased.¹³⁴ The CEC's decision that the NGO's submission was valid and that they had standing under the NAAEC also expands the traditional public involvement and participation options available to Mexicans interested in ensuring that governmental agencies enforce the appropriate environmental laws.¹³⁵

II. COMPARING THE MEXICAN AND AMERICAN LAWS: SUGGESTIONS FOR MODIFICATIONS

As discussed in Parts II and III, there are strengths and weaknesses in both NEPA and the comparable Mexican environmental impact assessment laws. In comparing the environmental impact assessment laws of the United States and Mexico, there are at least two modifications to NEPA that the United States should consider incorporating into its statute. Both are based on Mexican modifications to the NEPA pattern. There

130. *See id.* at 4.

131. *See* NAAEC, *supra* note 13, 32 I.L.M. at 1488.

132. *See id.*

133. *See id.*

134. The project has had continent-wide exposure through the media. *See, e.g.,* Tom Eckert, *Treasure Island Revisited, Plot This Time Has Big Government, Big Business and Big Ships Threatening Precious Coral Reefs*, TORONTO STAR, Feb. 22, 1997, at A6; Molly Moore, *Cozumel Pier Debate: Cruise Ships or Coral?*, SEATTLE TIMES, June 2, 1996, at K8.

135. *See* David G. Schiller, *Great Expectations: The North American Commission on Environmental Cooperation Review of the Cozumel Pier Submission*, 28 U. MIAMI INTER-AM. L. REV. 437, 477 (1997).

is also one modification that Mexico should consider incorporating into its LGEE, based on the strengths of NEPA.

A. NEPA Should Incorporate an "Authorization" Provision

In contrast to NEPA's procedural-only posture and lack of force in environmental projects, the Mexican environmental impact assessment process is not only procedural, but substantive.¹³⁶ SEMARNAP has the power to authorize a project, with or without conditions, or to deny authorization for a project.¹³⁷ The SEMARNAP's authority is similar to federal agency permitting authority at an early stage in the project development process. Providing such specific direction to entities desiring to construct or otherwise engage in projects that have the potential to impact the environment can prevent future environmental impacts. It is this concept that Congress should incorporate into NEPA.

As an example of how environmental impact assessment laws in the countries would be applied, consider the environmental analysis of a major road project under NEPA and the LGEE. Under NEPA, the Federal Highway Administration (FHWA) and the state Department of Transportation¹³⁸ prepare a draft EIS¹³⁹ for the project. At this early stage of project development, the agency may not have detailed project design plans, and may only have identified a one to two-mile corridor within which the new road will be located.¹⁴⁰ The exact location of

136. See Block, *supra* note 120, at 632 n.18; LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCIÓN AL AMBIENTE [L.G.E.E.] tit. I, ch. V, art. 35 (1996) (Mex.), available in LEXIS, Envirn Library, Mxenv File; see also *supra* Part III.B.2.

137. See L.G.E.E., tit. I, ch. V, art. 35; *supra* note 113 and accompanying text.

138. See 23 C.F.R. § 771.109 (1998); 40 C.F.R. §§ 1501.5(b), 1506.2 (1998).

139. In this example, we will assume that the project is a "major federal action" and that it has significant impacts such that it warrants the preparation of an environmental impact statement. See RODGERS, *supra* note 58, § 9.5(B)(3), at 879.

140. The environmental impact assessment process begins early in the development of a highway project. Detailed project plans usually have not been completed by the time the environmental document is prepared. This makes sense, as one of the practical purposes of the NEPA process is to identify potential problems before an agency has committed too many resources to a particular project or project alternative. See 40 C.F.R. § 1502.2(f) (1998) (stating that "[a]gencies shall not commit resources prejudicing selection of alternatives before making a final decision"); see also Atomic Energy Comm'n, Scientists' Inst. for Pub. Info., Inc. v. AEC, 481 F.2d 1079, 1094 (D.C. Cir. 1973) (requiring that EISs be written "early enough so that whatever information

the project will depend on the location of wetlands and other sensitive areas, the location of underground gasoline storage tanks or contaminated areas, the location of historic structures or archaeological sites, and various other design considerations. The EIS will estimate the possible impacts on wetlands, contaminated sites, and historic resources.¹⁴¹ In preparing the final EIS and the Record of Decision,¹⁴² the agency may make some general mitigative commitments to choose a particular route or minimize impacts to resources, but exact environmental impacts may not be known at this stage. And most importantly, the agency is not required to choose the least environmentally damaging alternative to the new roadway (which might be the "no action" alternative).¹⁴³

Considering the same scenario under the Mexican LGEE, however, the SEMARNAP would have the authority to deny a proposed project based on the analysis in the environmental impact assessment.¹⁴⁴ The transportation agency in Mexico could be required to construct or redesign the road in a specified location to minimize environmental impacts (e.g., by limiting road width or following design requirements for bridges). Although it is not clear that the Mexican government always uses the environmental impact assessment law in such a rigorous fashion,¹⁴⁵ it is clear that the authority to do so is present in the statute.¹⁴⁶

is contained can practically serve as an input into the decisionmaking process"). The court also indicated that "one of the functions of a NEPA statement is to indicate the extent to which environmental effects are essentially unknown." *Id.* at 1092.

141. Section 4(f) of the Department of Transportation Act requires that the impacts to historic resources be documented. *See* 49 U.S.C. § 303 (1994).

142. The Federal Highway Administration's NEPA regulations require that the Record of Decision "present the basis for the decision as specified in 40 CFR § 1505.2, summarize any mitigation measures that will be incorporated in the project and document any required section 4(f) approval." 23 C.F.R. § 771.127(a).

143. *See* *Strycker's Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 227-28 (1980); *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 558 (1978); *see also* National Environmental Policy Act of 1969 § 102(2)(C), (E), 42 U.S.C. § 4332(2)(C), (E) (1994) (requiring an analysis of project alternatives in the EIS); 40 C.F.R. § 1502.14(d) (1998) (requiring that the "no action" alternative be included in the EIS).

144. *See* LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCIÓN AL AMBIENTE [L.G.E.E.] tit. I, ch. V, art. 35 (1996) (Mex.), available in LEXIS, Environ Library, Mxenv File.

145. *See* Block, *supra* note 120, at 634.

146. *See* L.G.E.E. tit. I, ch. V, art. 35.

There is no comparable authority for the CEQ, or any other federal reviewing agency, to force a lead agency to modify a project or to choose a particular alternative under NEPA.¹⁴⁷ As mentioned earlier, NEPA is often considered a procedural "paper tiger" with no substantive bite.¹⁴⁸ Modifying this statute to incorporate an authorization provision similar to that of the LGEE would provide an environmental impact assessment statute that would go one step further towards narrowing and focusing agency project designers to prevent environmental impact at a later date.

Strengthening NEPA's substantive requirements, rather than simply focusing on procedural requirements, would raise the level of importance of environmental issues in project development. Currently, "environmentally unwise agency decisions occur despite the impeccable execution of NEPA procedures."¹⁴⁹ The courts have ignored any substantive aspects of NEPA and do not consider "the substance, or merits, of particular agency decisions under NEPA."¹⁵⁰ Early in the history of NEPA, scholars recognized that without judicial acknowledgment of its substantive aspects, NEPA would be little more than a vehicle for notification of future environmental harms.¹⁵¹ It appears that this has been the case.

Congress should amend NEPA to strengthen its substantive aspects. Such an amendment should provide the CEQ, or some other reviewing agency such as the EPA, with an opportunity to reject or require modification of an agency's chosen project alternative. The reviewing agency would then have the ability to require that federal agencies more fully incorporate NEPA's policies in their decision making.¹⁵²

The disadvantage of this proposed modification to NEPA is that it would add an additional approval layer (an approval by the CEQ or other reviewing agency as designated in the amend-

147. See *supra* note 72 and accompanying text.

148. Burleson, *supra* note 18, at 630.

149. Philip Michael Ferester, *Revitalizing the National Environmental Policy Act: Substantive Law Adaptations from NEPA's Progeny*, 16 HARV. ENVTL. L. REV. 207, 223 (1992).

150. *Id.* at 208.

151. See *id.* at 209.

152. See *id.* at 230.

ment) on top of an already complicated project development process for most projects. In a political climate where government is considered a block to, and the bane of, many developers and construction contractors, an additional regulatory approval is not likely to be accepted easily. But as pressures on environmental resources increase, NEPA should focus federal agency decision making on environmental issues and require that projects be modified to incorporate environmental considerations to a greater degree.¹⁵³

B. NEPA Should Apply to All Actions with Significant Environmental Impact

The scope of environmental impact assessment differs in Mexico and the United States. As noted above, NEPA only applies to major federal actions which significantly affect the human environment. Only projects that are conducted by federal agencies, funded by federal agencies, or for which federal permits or approvals are required must prepare an environmental impact statement under NEPA.¹⁵⁴

By contrast, Mexican law makes no distinction between the private and public project initiator. Instead, the focus under Mexican law is on the possibility of environmental impact rather than on the entity proposing the project. Some privately funded development projects may have more potential environmental impact than many federal projects. For example, a private individual may destroy a historic home without performing an environmental impact analysis and without review by governmental entities. Preparation of an environmental document under a modified NEPA with appropriate public notice could prevent such destruction by providing an opportunity for individuals or agencies to negotiate to purchase or preserve the historic building.

153. Several authors have suggested that NEPA should be substantive rather than procedural. See Edmund S. Muskie and Eliot R. Cutler, *supra* note 73, at 188; Burleson, *supra* note 18, at 636; J. Durwood Felton, III, Note, *NEPA: Full of Sound and Fury . . . ?*, 6 U. RICH. L. REV. 116, 128 (1971); James E. Harris, Note, *The National Environmental Policy Act of 1969: A Step in the Right Direction*, 26 ARK. L. REV. 209, 224 (1972).

154. See 40 C.F.R. § 1508.18 (1998) (defining "Major Federal Action").

To implement the underlying purpose of NEPA and avoid "actions which endanger the continued existence or the health of mankind: [t]hat we will not intentionally initiate actions which do irreparable damage to the air, land and water which support life on earth," Congress should revise NEPA to apply to all projects with significant environmental impact, whether the project initiator is a private or a public entity.¹⁵⁵ Recognizing the magnitude of such a change, it would be appropriate, and likely necessary to ensure actual passage of such an amendment, to limit the application of the environmental document required of the amendment to specific types or sizes of projects. Article 28 of Chapter V of the LGEE provides an example of how to determine whether a project requires environmental impact analysis under Mexican law. This article lists the types of projects that could cause ecological imbalance. The list includes water works, oil pipelines, petroleum industries, chemical industries, installations for the treatment of hazardous wastes, forestry, changes in the soil usage of forest areas, real estate developments affecting coastal areas, activities in wetlands and other aquatic systems, etc.¹⁵⁶ A similar list of projects could be developed under a revised NEPA. Such a list would require analysis of projects which significantly affect the environment, while allowing those projects with minimal impacts to avoid the document process. The NEPA process, one that is in place now and with which many people are familiar, provides a convenient framework for this analysis.

C. *The LGEE Should Promote Enhanced Public Participation*

"Environmental issues cannot be properly dealt with by government alone. Citizen and social organization involvement is of utmost importance to reach effective solutions."¹⁵⁷ In the past, Mexico has not promoted public participation in the environ-

155. Jose A. Egurbide, Comment, *Stop Biting the Hand that Feeds Us: Safeguarding Sustainable Development Through the Application of NEPA's Environmental Impact Statement to International Trade Agreements*, 22 PEPP. L. REV. 1089, 1092 n.21 (1995) (citing remarks of Sen. Jackson 115 CONG. REC. 40,416 (Dec. 20, 1969)).

156. See LEY GENERAL DEL EQUILIBRIO ECOLÓGICO Y DE PROTECCIÓN AL AMBIENTE [L.G.E.E.] tit. I, ch. V, art. 28 (1996) (Mex.), available in LEXIS, Envirn Library, Mxenv File.

157. Block, *supra* note 120, at 636 (citation omitted).

mental impact assessment process. In the early 1990s, the public did not have an opportunity to comment on environmental impact statements until after the SEMARNAP had prepared its resolution. Although the provisions of the LGEE allowed the public to review a file on a project, the public was actually afforded an opportunity to review an environmental impact assessment only after the SEMARNAP had approved the document.¹⁵⁸

Since the early 1990s, Mexico may have improved its public participation process, but it still does not mirror the intricate and open public participation process described, and required, under NEPA. Citizens do not have access to the "ears" of agency staff and do not have an opportunity to comment on a proposed project until the SEMARNAP has completed its evaluation and determined its recommendation. There is no opportunity to comment on a draft decision document as there is under NEPA.

Although the Mexican constitution promotes public involvement, the LGEE does not yet provide such public participation opportunities. Mexico should consider modifying the public participation procedures under the LGEE to allow public input in the environmental impact review process at several steps along the way. As is the case under NEPA, Mexico could incorporate public review at any of the following stages: the beginning of the process (with a notice of receipt of a document or, preferably, when an entity begins to prepare a document); the middle of the process (incorporating public comment on a draft SEMARNAP decision); and the end of the process (in a final report documenting all of the public comment and SEMARNAP responses to those comments). Increased public comment and input into the environmental impact assessment process would provide a more complete picture of the possible impacts of a proposed project, and would allow more informed decisions on the part of the project and regulatory decision makers.¹⁵⁹

158. *See id.* at 632 (citing GENERAL ACCOUNTING OFFICE REPORT TO THE CHAIRMAN, U.S.-Mexico Trade: Assessment of Mexico's Environmental Controls for New Companies, GGD-92-113, at app. III-16 (1992)).

159. Often, the public is aware of issues about which project staff are unaware. For example, local citizens are often familiar with historical land use in an area. This information can pinpoint the location of underground storage tanks within a project

V. CONCLUSION

NEPA is the grandfather of the world's environmental impact assessment laws. Because of the broad view taken by Congress in writing the various provisions of NEPA, the law has withstood the test of time. Other countries around the world have used NEPA as a pattern for their environmental impact assessment law. In some instances, those countries have not adopted all of the NEPA provisions, including important public involvement provisions. Modifications of these international laws to include active public participation processes is important if countries expect and desire the public in their jurisdictions to participate in environmental impact assessment.

As other countries have adopted NEPA-like procedures, subtle changes have been made that, if applied to NEPA, would make that statute more potent. Rather than resting contentedly in the knowledge that NEPA is a good law, Congress should consider making changes to strengthen the law. The following suggestions are based on a comparison of the Mexican LGEE and NEPA.

First, the United States should follow Mexico's lead and apply NEPA to all major projects, not just federal actions. Mexico does not limit the environmental impact assessment requirement to major federal actions. Any entity proposing a work or action that might have environmental impact must prepare the appropriate documentation. Although making such a change in NEPA to include all projects with significant impact (rather than the narrower field of federal actions) would mean additional work for the staff of the CEQ, Congress should modify NEPA to require environmental impact analysis for all projects with significant environmental impacts on the human environment.

Second, as Mexico has done under its LGEE, NEPA should be given substantive requirements. The environmental impact assessment process under Mexican law allows the SEMARNAP to approve, approve with conditions, or deny approval of, a

site when current conditions provide no clues about the location or the existence of such tanks. Public participation in project development provides an opportunity for this type of information to be presented to project and regulatory decision makers. See *supra* Part II.B.1.

proposed project. Under NEPA, the environmental impact assessment process is only a decision making process. To improve the long-range planning aspects of project development and to promote choosing of the least environmentally harmful alternative, Congress should consider providing the CEQ with the authority to approve, approve with conditions, or disapprove an agency's preferred alternative as described in an environmental impact statement. Such a change would increase the workload of the CEQ staff and would require increases in staffing and funding for the agency.

Third, Mexico should consider modifying its public participation provisions to match those of NEPA. Public input in a project can be crucial, not only to ensure that information used in environmental analyses is complete and accurate, but also to allow the public to learn about proposed activities and help them support the project. Lack of adequate public comment and input on a large project can sometimes result in bad press, legal action, and ultimate project failure. A commitment to involve the local community in project design and decision making can often stave off the objections to the project.

Both the United States and Mexico have advanced environmental impact assessment laws and regulations. But both environmental impact assessment programs can be improved. The suggestions provided in this paper address key areas of improvement that should be seriously considered by the respective agency decision makers.

Heather N. Stevenson

