SEED: SUSTAINABLE ENVIRONMENTAL AND ECONOMIC DEVELOPMENT—A CALL TO INCORPORATE VERIFIABLE SUSTAINABILITY RATINGS INTO NEPA REVIEWS

BY

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This Article's "SEED Proposal" suggests a framework for incorporating sustainability ratings into National Environmental Policy Act (NEPA) environmental reviews of infrastructure projects. The SEED Proposal can be implemented administratively and seeks to foster a more cooperative relationship between private project developers, the public, and agency decisionmakers. Policymakers must confront the twin challenges of maintaining economic growth while protecting environmental quality. Humanity has depleted or overused many of the world's resources. Meanwhile, we must employ these dwindling resources to address large population increases and widespread poverty. The environmental movement has long proposed sustainable environmental and economic development as a solution to these challenges. The United States federal government has begun to incorporate sustainable development into many Executive Orders, procurement decisions, and agency operations. However, NEPA decisionmakers could greatly advance the goal of sustainable development by incorporating sustainability ratings into environmental reviews.

The United States Green Building Council's LEED certification for green buildings serves as a proof of concept for many of the cooperative, voluntary measures within the SEED Proposal. At its heart is a sustainability ratings system with a third-party verification process designed by the Institute for Sustainable Infrastructure and the Harvard University Graduate School of Design: the Envision Sustainable Infrastructure Rating System.

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I. INTRODUCTION

The Organisation for Economic Co-operation and Development projects that the global population will reach 7.65 billion people by 2020.[1] By 2050, that number will reach 9.3 billion.[2] World gross domestic product (GDP) is expected to roughly quadruple from 2010 to 2050.[3] As the density and intensity of humanity's use of the Earth's natural resources continues to grow, each year we must do more with less. Current models of economic development cannot continue.[4] The way government and industry plan major development projects must adapt to looming resource constraints. Otherwise, a new generation will inherit a world where the supply of consumable resources has been depleted.

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[1] ORGANISATION FOR ECON. CO-OPERATION AND DEV., *Total Population*, *in* OECD FACTBOOK 2011–2012: ECONOMIC, ENVIRONMENTAL AND SOCIAL STATISTICS 30, 31 (2011), *available at* http://dx.doi.org/10.1787/factbook-2011-9-en.

[2] *Id.*; *see also* UNITED NATIONS, WORLD POPULATION PROSPECTS: THE 2010 REVISION HIGHLIGHTS AND ADVANCED TABLES 1 (2011), *available at* http://esa.un.org/unpd/wpp/Documentation/pdf/WPP2010_Highlights.pdf.

[3] ORGANISATION FOR ECON. CO-OPERATION AND DEV., OECD ENVIRONMENTAL OUTLOOK TO 2050: THE CONSEQUENCES OF INACTION 46 (2012), *available at* http://www.oecd.org/document/11/0,3746,en_2649_37465_49036555_1_1_1_37465,00.html.

[4] *See, e.g.*, Press Release, World Resources Forum, Davos World Resources Forum Calls for Immediate Action to Double Global Resource Efficiency (Sept. 2011), http://www.worldresourcesforum.org/davos-world-resources-forum-calls-immediate-action-double-global-resource-efficiency (last visited Feb. 17, 2013).

Since nearly its inception, the environmental movement has advocated for "sustainable development" as a solution to global resource management problems. For example, in 1983, the United Nations convened the Brundtland Commission to address concerns over the increasing rates of resource depletion and environmental degradation.[5] The commission advocated for "sustainable development," which it defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[6] Environmentalists often combine the goal of sustainable development with the precautionary principle.[7] The United Nations Conference on Environment and Development (the 1992 Rio Conference) adopted one of the most widely accepted formulations of the precautionary principle as Principle 15 of the Rio Declaration:

> In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.[8]

Notably, this definition seeks to consider the costs of precautionary actions that will protect against uncertain harms. The United Nations most recently met in June 2012 to define and discuss global sustainable development policies at the Rio+20 United Nations Conference on Sustainable Development (Rio+20 Earth Summit).[9]

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[5] United Nations, *Global Issues: Environment*, http://www.un.org/en/globalissues/environment (last visited Feb. 17, 2013).

[6] UNITED NATIONS, *Towards Sustainable Development*, *in* OUR COMMON FUTURE: REPORT OF THE WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT ch. 2, ¶ 1 (1987), http://www.un-documents.net/wced-ocf.htm (last Feb. 17, 2013) (under the Part I heading, click on "2. *Towards Sustainable Development*").

[7] *See, e.g.*, Michelle Campbell & Vernon G. Thomas, *Implementing the Precautionary Approach: Towards Enabling Legislation for Marine Mammal Conservation in Canada*, *in* GAINING GROUND: IN PURSUIT OF ECOLOGICAL SUSTAINABILITY 323 (David M. Lavigne ed., 2006) (explaining applications of the precautionary principle in international agreements regarding ocean management decision-making); David Freestone, *International Fisheries Law Since Rio: The Continued Rise of Precautionary Principle*, *in* INTERNATIONAL LAW AND SUSTAINABLE DEVELOPMENT: PAST ACHIEVEMENTS AND FUTURE CHALLENGES 138–39 (Alan Boyle & David Freestone eds., 1999) (noting that the precautionary principle has become a "guiding principle" in national and international environmental policy).

[8] United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3–14, 1992, *Rio Declaration on Environment and Development*, Principle 15, U.N. Doc. A/CONF.151/26 (Vol. 1) Annex I, *available at* http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm (last visited Feb. 17, 2013) (adopted by G.A. Res. 47/190 (Mar. 16, 1993)).

[9] *See Officials Warn Against Protectionism in Reaction to U.N. Efforts on Green Economy*, Daily Env't Rep. (BNA) No. 63, at A-7 (Apr. 3, 2012); *OECD Forum Says Carbon Taxes Key to Curbing Emissions, But Still Hard to Sell*, Daily Env't Rep. (BNA) No. 62, at A-8 (Apr. 2, 2012); *see also* United Nations, *Rio+20: United Nations Conference on Sustainable Development*, http://www.uncsd2012.org/rio20/index.html (last visited Feb. 17, 2013).

Industry and businesses are legitimately concerned that precautionary costs imposed despite an uncertain beneficial future value could hobble economic development. This fear extends beyond corporate profitability. It is no exaggeration to say that social stability in many countries depends on high rates of economic growth.[10] Hundreds of millions of people have been lifted out of extreme poverty in recent decades, but literally billions more also need immediate economic opportunities.[11] Sustainable development, when properly understood, is a risk minimization and risk management approach to economic development within environmental constraints and in the face of scientific uncertainty. Fortunately, many sustainable development practices can create near- and long-term cost savings and increase a business's consumer goodwill and brand value.[12] As exemplified by this Article's proposal, government also has a role in redistributing the private cost burden of some sustainability measures that provide widespread public benefits.

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[10] *See, e.g.*, David Zweig & Bi Jianhi, *China's Global Hunt for Energy*, 84 FOREIGN AFFAIRS 25, 25–26 (2005) ("Beijing's access to foreign resources is necessary both for continued economic growth and, because growth is the cornerstone of China's social stability, for the survival of the Chinese Communist Party (CCP)."); Daniel Abebe & Jonathan S. Masur, *International Agreements, Internal Heterogeneity, and Climate Change: The "Two Chinas" Problem*, 50 VA. J. INT'L L. 325, 326 (2010) (noting that "the very existence of [China's] governing regime depends on its ability to ensure social stability in Western China by guaranteeing high rates of economic growth").

[11] *See, e.g.*, Shaohua Chen & Martin Ravallion, China is Poorer Than We Thought, But No Less Successful in the Fight Against Poverty 2 (World Bank Dev. Research Grp., Policy Research Working Paper No. 4621, 2008), *available at* http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2008/05/19/000158349_20080519094812/Rendered/PDF/wps4621.pdf (showing that since 1981, about 500 million Chinese citizens have risen above the international $1/day poverty line); Martin Ravallion et al., Dollar a Day Revisited 3 & n.5 (World Bank Dev. Research Grp., Policy Research Working Paper No. 4620, 2008), *available at* http://www-wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2008/09/02/000158349_20080902095754/Rendered/PDF/wps4620.pdf (calculating that up to 95% of citizens in the developing world earn less than $10/day).

[12] *See, e.g.*, *Energy Efficiency Can Boost Bottom Line, Increase Employee Productivity, Speakers Say*, Daily Env't Rep. (BNA) No. 51, at A-12 (Mar. 16, 2012) ("DuPont's efficiency efforts in the past 15 years have resulted in $6 billion in savings."); *Companies Can Profit by Hedging Bets on Potential Climate Risks, Executives Say*, Daily Env't Rep. (BNA) No. 41, at A-6 (Mar. 2, 2012) (noting that energy efficiency upgrades can be "paid for by cost fuel savings."); *Developing Sustainable Products, Services For Customers Growing Corporate Trend*, Daily Env't Rep. (BNA) No. 51, at A-14 (Mar. 16, 2012); AMANDA LOWENBERGER ET AL., AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY & APPLIANCE STANDARDS AWARENESS PROJECT, REPORT NO. ASAP-8/ACEEE-A123, THE EFFICIENCY BOOM: CASHING IN ON THE SAVINGS FROM APPLIANCE STANDARDS, at iii (2012), *available at* http://www.aceee.org/research-report/a123 (stating that mandatory DOE energy efficiency standards for appliances, industrial equipment, and other products will save $1.1 trillion by 2035); ROCKEFELLER FOUND. & DEUTSCHE BANK GRP. CLIMATE CHANGE ADVISORS, UNITED STATES BUILDING ENERGY EFFICIENCY RETROFITS: MARKET SIZING AND FINANCING MODELS 7, 13 (2012), *available at* http://www.rockefellerfoundation.org/news/publications/united-states-building-energy-efficiency (estimating a $279 billion investment in retrofitting electricity usage in U.S. buildings could yield more than $1 trillion of energy savings over 10 years); *Assigning Value to Environmental Impacts Is Growing Corporate Sustainability Trend*, Daily Env't Rep. (BNA) No. 50, at A-3 (Mar. 15, 2012) (describing the growing trend of corporate sustainability reporting).

The United States federal government has already begun to encourage and require its own agencies to develop sustainable development practices. President George W. Bush's Executive Order No. 13,423[13] consolidated and strengthened several earlier executive orders and set goals for federal agencies in the areas of recycling, energy efficiency, greenhouse gas emissions, renewable power, water conservation, vehicle fleets, petroleum conservation, alternative fuel, toxics reduction, procurement, sustainable buildings, and electronics stewardship.[14] President Obama signed Executive Order No. 13,514 in 2009.[15] That order directs the General Services Administration (GSA) to leverage the federal procurement process to lower federal greenhouse gas emissions and calls on federal agencies to set and meet a 2020 greenhouse gas emissions reduction target, increase energy efficiency, reduce fleet petroleum consumption, conserve water, reduce waste, support sustainable communities, and leverage federal purchasing power to promote environmentally responsible products and technologies.[16] All of these initiatives require federal agencies to lead by example. However, the federal government has failed to fully employ a bedrock environmental law, the National Environmental Policy Act (NEPA),[17] to more efficiently and effectively disseminate sustainable development concepts and to create an infrastructure of government agencies, private businesses, and professionals that can implement sustainable development on a broad scale.

This Article will begin in Part II by explaining the structure of the National Environmental Policy Act, the environmental review process, and the role of the courts. In Part III, this Article proposes the use of a verifiable sustainability rating system that will allow NEPA to provide decision makers and the public with more holistic, verifiable information regarding the predicted environmental impacts of a proposed federal action. Finally, Part IV will propose that the most efficient and pragmatic way to incorporate sustainability ratings into NEPA is under an existing or a supplemental administrative guidance document.

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13 Exec. Order No. 13,423, 3 C.F.R. 215 (2008). For a list of the previous executive orders that were revoked by Executive Order No. 13,423 see *id.* at 3,923.

14 *Id.*; *see also* U.S. Envtl. Prot. Agency, *Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management*, http://www.epa.gov/oaintrnt/practices/eo13423.htm (last visited Feb. 17, 2013).

15 Exec. Order No. 13,514, 3 C.F.R. 238 (2010); *see also* Council on Envtl. Quality, *Federal Leadership in Environmental, Energy and Economic Performance - Executive Order 13514*, http://www.whitehouse.gov/administration/eop/ceq/initiatives/sustainability (last visited Feb. 17, 2013).

16 Exec. Order No. 13,514, 3 C.F.R. 238 (2010); *see also Report Describes Efforts by Agencies to Mainstream Climate Change Adaptation,* Daily Env't Rep. (BNA) No. 41, at A-11 (Mar. 2, 2012) (noting the efforts of federal agencies to incorporate climate change adaptation considerations into their project and planning activities).

17 National Environmental Policy Act of 1969, 42 U.S.C. §§ 4321–4347 (2006).

II. THE NEPA FRAMEWORK

A. NEPA and CEQ

Congress passed NEPA in 1969 with bipartisan support, and President Nixon signed it into law on January 1, 1970.[18] Subchapter I of NEPA sets out the law's policy and goals, and contains the Congressional Declaration of National Environmental Policy.[19] NEPA is widely recognized as the world's first comprehensive statement of a national environmental policy.[20] It occupies such a historically influential role in national and international environmental law that it is often referred to as the "Environmental Magna Carta."[21] The purpose of NEPA is three-fold: 1) to declare a national policy that will encourage productive harmony between man and his environment; 2) to promote efforts that will prevent or eliminate damage to the environment; and 3) to enrich the understanding of the ecological systems and natural resources important to the nation.[22]

NEPA requires that federal agencies adopt a systematic, interdisciplinary approach to incorporate environmental considerations in their planning and decision making.[23] Congress designed NEPA to require the consideration and public disclosure of the expected environmental impacts of federal actions significantly affecting the environment *before* such actions are undertaken and to provide a meaningful opportunity for public input.[24] NEPA's requirements are procedural in nature.[25] NEPA does not require that a federal agency modify a proposed federal action to minimize environmental impacts, it only requires that a federal agency publicly disclose the expected significant environmental impacts of a proposed federal action.[26] For this reason NEPA has been called a "hard look" or "stop and think" statute.[27] The core mandate of NEPA requires all federal agencies to:

> [I]nclude in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment,

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18 *See* LINDA LUTHER, CONG. RESEARCH SERV., RL 33152, THE NATIONAL ENVIRONMENTAL POLICY ACT: BACKGROUND AND IMPLEMENTATION 1–6 (2008).

19 42 U.S.C. § 4331 (2006) (noting man's "profound impact" on the natural environment, and requiring the federal government to "use all practicable means and measures . . . 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").

20 *See, e.g.*, COUNCIL ON ENVTL. QUALITY, THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF ITS EFFECTIVENESS AFTER TWENTY-FIVE YEARS 1 (1997), *available at* http://ceq.hss.doe.gov/nepa/nepa25fn.pdf.

21 Brad Knickerbocker, *Environmental 'Magna Carta' Law Under Fire*, CHRISTIAN SCI. MONITOR, Nov. 7, 2002, http://www.csmonitor.com/2002/1107/p02s02-usgn.html (last visited Feb. 17, 2013).

22 42 U.S.C. § 4321 (2006).

23 *Id.* § 4332(2)(A).

24 *Id.* § 4332(2)(C) (requiring impact statements); 40 C.F.R. § 1500.1(b) (2012).

25 Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989).

26 *Id.* at 350–51.

27 *Id.* at 350; Becker v. Fed. R.R. Admin., 999 F. Supp. 240, 251 (D. Conn. 1996), *aff'd sub nom.* Rice v. Fed. R.R. Admin., 162 F.3d 1148 (2d Cir. 1998).

> a detailed statement by the responsible 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.[28]

This "detailed statement," known as the "heart" of NEPA, is called the Environmental Impact Statement (EIS) and is discussed at length below.[29] It is the most burdensome NEPA requirement, and it can be avoided at several preliminary junctures within the NEPA process.[30]

Subchapter II of NEPA establishes the Council on Environmental Quality (CEQ) to oversee NEPA's implementation.[31] The CEQ is a small administrative agency housed within the White House. A three-person council with one chairperson heads the CEQ.[32] The CEQ has a duty to promulgate binding regulations on all federal agencies to implement NEPA's statutory mandates.[33] The CEQ's other duties include analyzing the status and trends in national environmental quality; conducting studies, surveys, research, and analyses relating to ecological systems and environmental quality; evaluating the adequacy of national resources for human and economic requirements; and reviewing and developing programs to improve the quality of the natural environment.[34] From time to time, the CEQ issues interpretive guidance documents to aid other federal agencies in their

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[28] 42 U.S.C. § 4332(2)(C) (2006).

[29] *See also* 40 C.F.R. § 1502.14 (2012) (noting that the "heart" of the EIS is the requirement of a "rigorous," "substantial," and "objective" evaluation of reasonable alternatives to the proposed action).

[30] *See, e.g.*, David Enrico Reibel, *Environmental Regulation of Space Activity: The Case of Orbital Debris*, 10 STAN. ENVTL. L.J. 97, 118 (1991) (calling out the EIS as "NEPA's most procedurally burdensome mechanism"); *see also* Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government's Environmental Performance*, 102 COLUM. L. REV. 903, 920 (2002) (noting that agencies will often attempt to structure or characterize their actions in such a way as to avoid NEPA's onerous EIS requirement).

[31] *See* 42 U.S.C. §§ 4342–4347 (2006).

[32] *Id.* § 4342.

[33] *See* 40 C.F.R. §§ 1500–1508 (2012). Note that unlike the standard model for agencies overseeing their own organic statute, the CEQ did not originally have the power to promulgate its own NEPA-implementing regulations. *See* Jennifer R. Bartlit, *An Adequate EIS under NEPA: Deference to CEQ; Merely Conceptual Listing of Mitigation Leads Us to a Merely Conceptual National Environmental Policy*, 31 NAT. RESOURCES J. 653, 659 (1991). The CEQ was limited to reviewing NEPA-implementing regulations and procedures adopted by each individual federal agency. Presidential Executive Orders remedied this statutory oversight. Dinah Bear, *NEPA at 19: A Primer on an "Old" Law with Solutions to New Problems*, 19 ENVTL. L. REP. NEWS & ANALYSIS 10060, 10061–62 (1989). In 1970, President Nixon delegated to the CEQ the authority to adopt "guidelines" describing how to prepare EISs. *See* Exec. Order No. 11,514, 3 C.F.R. 104 (1970). In 1977, President Carter modified the 1970 Executive Order to allow the CEQ to promulgate binding regulations. *See* Exec. Order No. 11,991, 3 C.F.R. 124 (1978).

[34] 42 U.S.C. § 4344 (2006).

implementation of NEPA's requirements and to provide the public with more explicit agency positions for planning purposes.[35]

B. The Environmental Review Process

1. Federal Action Threshold

NEPA's procedural requirements only apply to "major federal actions significantly affecting the quality of the human environment."[36] The threshold inquiry to determine NEPA's applicability then becomes, what is a "major federal action"? The courts and CEQ regulations interpret the term broadly to include "new and continuing activities, including projects and programs entirely or partly financed, assisted, conducted, regulated, or approved by federal agencies; new or revised agency rules, regulations, plans, policies, or procedures; and legislative proposals."[37] For example, if a federal agency directly undertook a construction project, paid a state or private contractor to undertake construction, or issued a construction permit enabling the project, then NEPA would apply.[38] A federal decision maker's failure to act or decision not to act can fall within NEPA's reach if the decision not to act is reviewable in court or in an administrative tribunal pursuant to the Administrative Procedure Act (APA).[39] Although NEPA does not apply to purely private or purely state actions,[40] many states have passed their own versions of NEPA, collectively referred to as State Environmental Policy Acts (SEPAs), which may apply alternatively or concurrently to NEPA.[41]

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35 For a list of all the relevant CEQ guidance documents, see Council on Envtl. Quality, *CEQ NEPA Guidance*, http://ceq.hss.doe.gov/nepa/regs/guidance.html (last visited Feb. 13, 2013); *see also* 40 C.F.R. § 1506.7 (2011) (authorizing the CEQ to make interpretive rules concerning NEPA implementation).

36 42 U.S.C. § 4332(2)(C) (2006). CEQ regulations specify that the term "major" in "major federal actions" "reinforces but does not have a meaning independent of significantly." 40 C.F.R. § 1508.18 (2012); *see also id.* § 1508.27 (explaining that "'significantly,' as used in NEPA requires considerations of both context and intensity").

37 40 C.F.R. § 1508.18(a) (2012); *see also* Andrus v. Sierra Club, 442 U.S. 347, 361 (1979).

38 *See, e.g.*, Mineral Policy Ctr. v. Norton, 292 F. Supp.2d 30, 54 (D.D.C. 2003).

39 40 C.F.R. § 1508.18 (2011) ("Actions include the circumstance where the responsible officials fail to act and that failure to act is reviewable by courts or administrative tribunals under the Administrative Procedure Act."); Administrative Procedure Act, 5 U.S.C. § 706(1) (2006) (providing for review of agency action that is "unlawfully withheld or unreasonably delayed").

40 *See* Wilderness Soc'y v. U.S. Forest Serv., 630 F.3d 1173, 1177 (9th Cir. 2011) (describing NEPA as a procedural statute that applies only to the federal government).

41 *See* Catherine J. LaCroix, *SEPAs, Climate Change, and Corporate Responsibility: The Contribution of Local Government*, 58 CASE W. RES. L. REV. 1289, 1290 (2008) (stating that 15 states have SEPAs). About eight states have fairly substantial SEPA requirements. *See, e.g.*, Megan McQueeney, *Baseline in the Sand:* Communities for a Better Environment v. South Coast Air Quality Management District, 38 ECOLOGY L.Q. 293, 297–98 (2011) (discussing California's SEPA, the California Environmental Quality Act).

2. Lead Agency and Cooperating Agencies

Often, major federal actions involve more than one federal agency. NEPA requires that a "lead agency" be designated to take primary responsibility for conducting the NEPA environmental review.[42] The lead agency may actually consist of two or more "joint lead agencies" and may include federal partnerships with state and local agencies.[43] Other statutes will often grant a specified federal agency control over environmental reviews of federal actions within its area of expertise.[44] The lead agency has an obligation to identify and seek input from other "cooperating agencies" with relevant expertise.[45] The CEQ can act as a mediator when cooperating agencies have major disagreements during a NEPA review.[46]

3. Categorical Exclusions

Once a lead agency has been designated, it must determine whether the proposed federal action will "significantly" impact the environment.[47] First, the lead agency determines whether the proposed federal action falls within a Categorical Exclusion (CE).[48] Through study and experience, federal agencies may identify activities that do not need to undergo detailed environmental analysis.[49] Agencies can define categories of such activities as CEs in their NEPA implementing procedures as a way to reduce unnecessary paperwork and delay, and to allocate administrative resources to assessing significant environmental impacts.[50] CEs are generally routine federal actions, such as facility maintenance, and each CE must have been determined to not significantly affect the environment, either individually or

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42 40 C.F.R. § 1508.16 (2012).

43 *Id.* § 1501.5(b).

44 For example, the Energy Policy Act of 2005, Pub. L. No. 109-58, § 368, 119 Stat. 594, 727 (codified at 42 U.S.C. § 15926 (2006)), requires the Department of Energy to designate national interest electric transmission corridors and then assigns the Department of Energy as the lead agency for all environmental reviews of those decisions.

45 40 C.F.R. §§ 1501.6, 1506.2, 1508.5 (2012).

46 *See* 40 C.F.R. §§ 1504.1–.3 (2012). Referrals may be made to CEQ "only after concerted, timely (as early as possible in the process), but unsuccessful attempts to resolve differences with the lead agency." *Id.* § 1504.2.

47 40 C.F.R. § 1501.1(c) (2012) (explaining that NEPA requires early identification of "significant environmental issues deserving of study"); *id.* § 1501.4(c) (providing that the determination of whether to prepare an environmental impact statement is based on the environmental assessment); *id.* § 1501.4(e) (directing preparation of a "finding of no significant impact" if the agency determines an environmental impact statement is not warranted).

48 *See* 40 C.F.R. § 1508.4 (2012).

49 Final Guidance for Federal Departments and Agencies on Establishing, Applying and Revising Categorical Exclusions under the National Environmental Policy Act, 75 Fed. Reg. 75,628, 75,631 (Dec. 6, 2010); COUNCIL ON ENVTL. QUALITY, A CITIZEN'S GUIDE TO THE NEPA: HAVING YOUR VOICE HEARD 10 (2007), *available at* http://ceq.hss.doe.gov/nepa/Citizens_Guide_Dec07.pdf.

50 75 Fed. Reg. at 75,628. All CEs must provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect. 40 C.F.R. § 1508.4 (2012).

cumulatively.[51] A lead agency that chooses to apply a CE to a proposed federal action effectively exits the NEPA environmental review process.[52]

4. Environmental Assessments

If no CE applies to the proposed federal action, the lead agency must prepare an Environmental Assessment (EA).[53] An EA provides the basis for the lead agency to determine whether or not the proposed federal action will have significant environmental impacts.[54] CEQ regulations state the EA should be a "concise" public document that must contain "brief" discussions of the need for the proposed federal action, of possible alternative projects, of the expected environmental impacts of the proposed action and of each alternative, and a listing of agencies and persons consulted.[55] There are approximately 45,000 EAs prepared each year.[56] The CEQ suggests that these documents should be no more than fifteen pages.[57] However, the EA results in a judicially reviewable final agency action under the APA.[58] Because of litigation risks and the possibility of resultant project delays, lead agencies often prepare in-depth EAs much longer than fifteen pages.[59] An EA both: 1) evaluates the context of the project to human and national society, the affected region, the affected locality, and affected long-term and short-term interests; and 2) estimates the intensity (i.e., severity) of the proposed project's beneficial and adverse environmental impacts including uncertainties, cumulative impacts from existing and foreseeable future projects, direct impacts, and foreseeable indirect impacts.[60] The EA largely

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51 40 C.F.R. § 1508.4 (2012); COUNCIL ON ENVTL. QUALITY, *supra* note 49, at 8–10.

52 40 C.F.R. §§ 1508.4, 1508.9 (2012). The lead agency has the discretion to continue the NEPA review process even if a CE could apply to the proposed federal action. *Id.*

53 *Id.* § 1508.9.

54 *Id.*

55 *Id.*; *see also* National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(E) (2006)(requiring an alternatives analysis).

56 COUNCIL ON ENVTL. QUALITY, CONSIDERING CUMULATIVE EFFECTS UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 4 (1997), *available at* http://ceq.hss.doe.gov/publications/cumulative_effects.html (click on "Chap. 1 - Introduction to Cumulative Effects Analysis").

57 Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, 46 Fed. Reg. 18,026, 18,037 (Mar. 23, 1981) (Question #36a).

58 5 U.S.C. § 704 (2006); *see also* Save Our Cumberland Mountains v. Norton, 297 F. Supp. 2d 1042, 1046 n.1 (E.D. Tenn. 2003) ("Issuance of an environmental assessment (EA) constitutes a 'final agency action' for purposes of review under the Administrative Procedure Act.").

59 *See, e.g.*, U.S. FISH & WILDLIFE SERV., FINAL ENVIRONMENTAL ASSESSMENT: ISSUANCE OF AN MBTA PERMIT TO THE NATIONAL MARINE FISHERIES SERVICE AUTHORIZING TAKE OF SEABIRDS IN THE HAWAII-BASED SHALLOW-SET LONGLINE FISHERY (2012), *available at* http://www.fws.gov/pacific/migratorybirds/pdf/NMFS%20Permit%20Final%20EA.pdf (57 pages); NAT'L ARCHIVES & RECORDS ADMIN. ET AL., FINAL ENVIRONMENTAL ASSESSMENT: JOHN F. KENNEDY PRESIDENTIAL LIBRARY AND MUSEUM ADDITION AND RENOVATION (2009), *available at* http://www.archives.gov/about/plans-reports/environmental-assessment/kennedy-report.pdf (82 pages).

60 40 C.F.R. §§ 1508.27, 1508.3 (2012); *see also* Nat'l Parks & Conservation Ass'n v. Babbitt, 241 F.3d 722, 730–31 (9th Cir. 2001) (discussing the importance of analyzing the context and intensity of an action when determining whether it has a significant effect on the environment); Hanly v. Mitchell, 460 F.2d 640, 643–44 (2d Cir. 1972) (articulating NEPA's requirement that environmental considerations be assessed in a detailed statement).

focuses on the physical environment (i.e., not on the psychological effects of potential physical impacts).[61]

When the lead agency completes an EA, it must issue a determination regarding the possibility of environmental impacts.[62] The lead agency must either issue a finding of no significant impact, or if it determines the environmental impacts of the proposed project will be significant, then it must prepare an EIS.[63] Certain impacts are commonly significant, such as projects affecting major wetlands or endangered species.[64] As such, the lead agency always has the discretion to skip an EA and move directly to an EIS.[65] Alternatively, the lead agency may determine that the proposed federal action will not result in any significant impacts to the environment. In that case, it must issue a Finding of No Significant Impact (FONSI).[66] The lead agency may also determine that the proposed federal action's adverse environmental impacts would be significant, but that those impacts can be avoided or mitigated to a level below the significance threshold, in which case the lead agency must then issue a Mitigated Finding of No Significant Impact (M-FONSI).[67] Generally, M-FONSIs must contain agreed-upon, judicially enforceable mitigation measures.[68] "Mitigation" may include:

(a) Avoiding the impact altogether by not taking a certain action or parts of an action.

(b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation.

(c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

(d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

(e) Compensating for the impact by replacing or providing substitute resources or environments.[69]

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61 40 C.F.R. §§ 1508.8, 1508.14 (2012); Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 775 (1983).

62 40 C.F.R. § 1508.9(a)(1) (2012).

63 *Id.* § 1501.4 (describing the procedure for when to prepare an EIS).

64 *See id.* § 1508.27(b)(3), (9) (listing wetlands and endangered species as "intensity factors").

65 *See id.* § 1501.3(a).

66 *Id.* § 1508.13.

67 Council on Envtl. Quality, Memorandum from Nancy H. Sutley, Chair, Council on Envtl. Quality, to Heads of Federal Departments and Agencies 3 (Feb. 18, 2010), *available at* http://www.whitehouse.gov/sites/default/files/microsites/ceq/20100218-nepa-mitigation-monitoring-draft-guidance.pdf [hereinafter Draft Guidance for NEPA Mitigation and Monitoring].

68 *See infra* notes 176–79 and accompanying text; *see also* Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact, 76 Fed. Reg. 3,843, 3,848 & n.21 (Jan. 21, 2011) (describing an enforceability threshold for M-FONSIs).

69 40 C.F.R. § 1508.20 (2012).

M-FONSIs allow the lead agency to escape the stringent EIS requirements in the next step of the NEPA process; the Act provides textual support for this mechanism.[70]

5. Environmental Impact Statements

The lead agency must place a notice in the Federal Register and prepare an EIS if it finds the proposed project may result in significant adverse environmental impacts.[71] The EIS is a long, involved study that can involve many federal, state, and local cooperating agencies; can take more than a year to prepare;[72] requires significant agency staffing and funding; and sometimes spans thousands of pages.[73] Federal agencies conduct roughly 450 EISs each year.[74] The centerpiece of the EIS document is an extensive discussion of possible alternatives to the proposed action.[75] The EIS must consider: 1) the unaltered federal action proposal; 2) the "no action" alternative, and 3) at least one other alternative; usually a smaller or larger version of the proposed project or a different route or location for infrastructure corridors.[76] EISs often evaluate more than three alternatives.[77]

The preparation of an EIS is really a process within a process. Note that while the lead agency may conduct the EIS process itself, it may also contract with independent consultants to prepare the EIS.[78] First, the lead agency must conduct scoping to limit the environmental impacts to be

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70 *See* 42 U.S.C. § 4332(2)(C)(i)–(ii) (2006) (requiring a "detailed statement," i.e., an EIS, for "any adverse environmental effects *which cannot be avoided* should the proposal be implemented" (emphasis added)).

71 40 C.F.R. § 1508.22 (2012).

72 *See id.* § 1502.6.

73 THE NEPA TASK FORCE REPORT TO THE COUNCIL ON ENVIRONMENTAL QUALITY: MODERNIZING NEPA IMPLEMENTATION 66 (2003), *available at* http://ceq.hss.doe.gov/publications/modernizing_nepa_implementation.html. The page limit regulation is routinely ignored. *See* 40 C.F.R. § 1502.7 (2012) (requiring less than 150 pages, or less than 300 for proposals of "unusual scope or complexity"); *id.* § 1502.10 (discussing the recommended format).

74 COUNCIL ON ENVTL. QUALITY, CONSIDERING CUMULATIVE EFFECTS, *supra* note 56, at 4.

75 *See* 42 U.S.C. § 4332(2)(C)(iii) (2006); 40 C.F.R. § 1502.14 (2012).

76 *See* 40 C.F.R. § 1502.14 (2012).

77 *See* JACKSON B. BATTLE ET AL., ENVIRONMENTAL DECISIONMAKING: NEPA AND THE ENDANGERED SPECIES ACT 332 (2d ed. 1994) (explaining that in some cases the number of reasonable alternatives to consider may be actually quite high).

78 CRAIG N. JOHNSTON ET AL., LEGAL PROTECTION OF THE ENVIRONMENT 111 (3d ed. 2010). Who actually conducts the technical environmental studies can be an issue of contention. The agency may do it, but often if a private developer is undertaking the action, it may pay a contractor to prepare the studies. *See id.* The independence of the contractors can be questioned and may invite litigation. *See, e.g.*, Carrie La Seur, *Both Sides Claim Victory over Inspector General's Report on Keystone XL EIS*, GREAT PLAINS TAR SANDS PIPELINES (Feb. 10, 2012), http://tarsandspipelines.wordpress.com/2012/02/10/both-sides-claim-victory-over-inspector-generals-report-on-keystone-xl-eis (detailing the recent controversy surrounding the State Department's choice of a third-party contractor for the Keystone XL EIS); OFFICE OF INSPECTOR GEN., AUD/SI-12-28, SPECIAL REVIEW OF THE KEYSTONE XL PIPELINE PERMIT PROCESS (2012), *available at* http://www.sanders.senate.gov/imo/media/doc/Keystone%20Final%20Report%20020912.pdf (discussing the third-party contracting process and concluding that the State Department had not been improperly influenced in selecting a contractor for the Keystone XL EIS).

considered in the EIS.[79] Second, after a period of study, the lead agency will release a Draft EIS (DEIS).[80] A copy of the DEIS must be submitted to the EPA,[81] and the Clean Air Act (CAA)[82] requires EPA to comment on the DEIS.[83] Third, the lead agency collects comments on the DEIS during a Public Notice and Comment period.[84] Comments may be written submissions or statements at public hearings.[85] Fourth, the agency incorporates any suggested changes it believes are necessary into a Final EIS (FEIS).[86] The lead agency must also respond to all "substantive comments" obtained from the public.[87] Fifth, the lead agency must select one of the alternative proposals examined in the FEIS for implementation.[88] Again, the decisionmaker need not choose the most environmentally protective option.[89] Sixth, the lead agency must prepare a Record of Decision (ROD).[90] The ROD commonly contains mitigation measures as part of the selected

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79 40 C.F.R. § 1501.7 (2012).

80 *Id.* § 1502.9.

81 *Id.* § 1506.9.

82 Clean Air Act, 42 U.S.C. §§ 7401–7671q (2006).

83 Clean Air Amendments of 1970, Pub. L. No. 91-604, § 309, 84 Stat. 1676, 1709 (codified as amended at 42 U.S.C. § 7609 (2006)). The EPA reviews and publicly comments on environmental impacts of major federal actions pursuant to the Clean Air Act. 42 U.S.C. § 7609(a) (2006). The EPA refers the action to the CEQ if it determines that the action does not meet environmental standards. *Id.* § 7609(b). A Memorandum of Agreement between EPA and CEQ specifies that the EPA will carry out the administrative aspects of the EIS filing process. Memorandum of Agreement between Charles Warren, Chairman, Council on Envtl. Quality and Douglas M. Costle, Adm'r, U.S. Envtl. Prot. Agency (Oct. 7, 1977), *available at* http://ceq.hss.doe.gov/current_developments/docs/CEQEPA_MOU_EIS_Filing_10071977.pdf. Federal agencies refer to CEQ when disagreements arise between agencies concerning proposed federal actions with potentially unsatisfactory environmental effects. U.S. Envtl. Prot. Agency, *National Environmental Policy Act (NEPA): Basic Information*, http://www.epa.gov/compliance/basics/nepa.html (last visited Feb. 13, 2013); *see also* 40 C.F.R. § 1504.1(b) (2012) (noting that section 309 of the CAA directs EPA to publicly comment on federal actions requiring an EIS and refer any unsatisfactory EIS to the CEQ). "CEQ's role, when it accepts a referral, is generally to develop findings and recommendations, consistent with the policy goals of section 101 of NEPA." U.S. Envtl. Prot. Agency, *supra*; *see also* 40 C.F.R. § 1504.3(f) (2012) (laying out CEQ's responsibilities after a referral from a lead agency).

84 40 C.F.R. § 1503.1 (2012). Minimum time periods are calculated from the date EPA publishes the Notice of Availability in the Federal Register. *Id.* § 1506.10(a). Review periods for DEISs, draft supplements, and revised DEISs are 45 calendar days unless the lead agency extends the prescribed period or a reduction of the period has been granted. *Id.* § 1506.10(c), (d). The review periods for final EISs and final SEISs is 30 calendar days unless the lead agency extends the period or a reduction or extension in the period has been granted. *Id.* § 1506(b), (d). If a calculated time period would end on a non-working day, the assigned time period will be the next working day (i.e., time periods do not end on weekends or federal holidays). U.S. Envtl. Prot. Agency, *Submitting Environmental Impact Statements*, http://www.epa.gov/compliance/nepa/submiteis/index.html#filing (last visited Feb. 17, 2013).

85 U.S. Envtl. Prot. Agency, U.S. Envtl. Prot. Agency, *National Environmental Policy Act (NEPA): Basic Information, supra* note 83.

86 40 C.F.R. § 1503.4(a) (2012).

87 *See id.* § 1503.4(b).

88 *Id.* § 1502.14(e).

89 *See* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350–51 (1989).

90 40 C.F.R. § 1505.2 (2012).

alternative.[91] Finally, the lead agency must monitor the project implementation and issue Supplemental EISs (SEISs) if the agency makes substantial changes to the proposed action relevant to environmental impacts, if significant new circumstances arise, or if information relevant to environmental impacts becomes available.[92]

C. Judicial Review

NEPA does not expressly provide for judicial review, and its drafters may not have even considered the possibility.[93] However, the courts began to assume a reviewing role within a year of the enactment of the Act.[94] Each determination made by the lead agency throughout the entire NEPA process—fro example, applicability of a CE, issuance of a FONSI or an M-FONSI, or failure to respond to significant public comments—can be challenged as a final agency action under the APA.[95] Reviewing courts apply the APA's highly deferential arbitrary and capricious standard of review to the agency's decision.[96] The review is limited to the four corners of the administrative record at the time of the decision.[97]

To withstand judicial review, an EIS must set forth sufficient information: 1) for the general public to make an informed evaluation, 2) for the decision maker to fully consider the environmental factors and make a reasoned cost-benefit analysis, and 3) to ensure that serious criticisms cannot be "swept under the rug."[98] The judicial remedy for an insufficient EIS or for an unsupported FONSI/M-FONSI (i.e., failure to prepare a necessary

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91 *Id.* § 1505.2(c) (providing that the ROD shall "[s]tate whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not" and requiring "monitoring and enforcement program [to] be adopted and summarized where applicable for any mitigation").

92 *Id.* § 1502.9(c). Supplements can also be issued to DEISs. *Id.*

93 *See* DANIEL R. MANDELKER, NEPA LAW AND LITIGATION 3-2 (2d ed. 2012).

94 *See* Calvert Cliffs' Coordinating Comm., Inc. v. U. S. Atomic Energy Comm'n, 449 F.2d 1109, 1114–15, 1122 (D.C. Cir. 1971) (concluding that the Atomic Energy Commissions' regulations imposed limits on the review of environmental issues, which failed to meet the "judicially enforceable duties" present in NEPA section 102).

95 *See, e.g.*, Sw. Williamson Cnty. Cmty. Ass'n v. Slater, 243 F.3d 270, 274 n.3 (6th Cir. 2001) (stating that the issuance of a FONSI or an EIS is a final agency action under NEPA and subject to review under the APA); Sierra Club v. U.S. Army Corps of Eng'rs, 446 F.3d 808, 816 (8th Cir. 2006) (determining that the Corps's decision to issue a FONSI was a final agency action under NEPA); California v. Block, 690 F.2d 753, 773–74 (9th Cir. 1982) (determining the agency failed to respond to public comments concerning site designations in its Final EIS).

96 Administrative Procedure Act, 5 U.S.C. § 706(2)(a) (2006); Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 375–76 (1989).

97 *See* 5 U.S.C. § 706(2)(2006); *Marsh*, 490 U.S. at 373–75, 378 (discussing the practical importance of limiting the administrative record to the time of the agency's decision). The record generally consists of the EIS and ROD, although extra-record evidence may be allowed to review allegations of a lead agency's failure to raise important environmental issues in an EIS. *See* Cnty. of Suffolk v. Sec'y of Interior, 562 F.2d 1368, 1384 (2d Cir. 1977).

98 Silva v. Linn, 482 F.2d 1282, 1285 (1st Cir. 1973); *Cnty. of Suffolk*, 562 F.2d at 1384–85 (quoting *Silva v. Linn*, 482 F.2d at 1283).

EIS) is to require the agency to complete a sufficient EIS.[99] This remedy can effectively kill a proposed major project that an agency just spent over a year planning in consultation with other federal, state, and local agencies.[100]

NEPA does *not* require the agency to select the most environmentally protective project alternative within an EIS.[101] NEPA does not require any particular substantive result; its requirements are *procedural* in nature.[102] The courts ostensibly do not engage in any rebalancing of competing environmental, social, administrative, economic, political, or other factors.[103] However, proposed actions that require an EIS nearly always interact with other federal statutes.[104] These statutes may have their own *substantive* requirements for weighing the different EIS alternatives. For example, the Clean Water Act[105] requires that wetlands disruption should be avoided if at all possible;[106] the National Historic Preservation Act[107] and the Transportation Act[108] require highway routes to avoid public parks and historic sites;[109] and the Endangered Species Act[110] may bar any project that poses risks to endangered or threatened species or their critical habitats.[111] However, the courts have found no implied third party cause of action where a federal action's adverse environmental impacts fail to stay below predicted levels.[112] If the agency followed the proper NEPA process, it need not be clairvoyant in its analysis of scientific uncertainties because under the

99 *See, e.g.*, Sierra Club v. U.S. Army Corps of Eng'rs, 701 F.2d 1011, 1034 (2d Cir. 1983).

100 *See, e.g.*, Ocean Advocates v. U.S. Army Corps of Eng'rs, 402 F.3d 846, 871 (9th Cir. 2005) (noting that the appropriate remedy for Army Corps's failure to prepare an EIS before issuing a permit was for it to prepare an EIS, even though the project at issue was already constructed).

101 Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) ("If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs.").

102 *Id.*

103 *See, e.g.*, Natural Res. Def. Council v. Morton, 458 F.2d 827, 836 (D.C. Cir. 1972) (noting that NEPA only requires information sufficient to permit a reasoned choice among alternatives); Natural Res. Def. Council v. Callaway, 524 F.2d 79, 93 (2d Cir. 1975) (explaining that an agency must set forth a reasoned explanation for conclusions); Citizens Against Burlington v. Busey, 938 F.2d 190, 194 (D.C. Cir. 1991) (noting that judges are tasked only with enforcing NEPA's procedural requirements, not with "coax[ing] agency decisionmakers to reach certain results").

104 *See* 40 C.F.R. § 1502.25 (2012) (requiring that a draft EIS be integrated with related surveys and studies imposed by other environmental review laws, and that it list all federal permits, licenses, and entitlements associated with the proposed action).

105 Federal Water Pollution Control Act, 33 U.S.C. §§ 1251–1387 (2006).

106 *See* 33 C.F.R. § 320.4(b) (2012).

107 16 U.S.C. §§ 470–470x-6 (2006 & Supp. I 2007).

108 Department of Transportation Act, Pub. L. No. 89-670, 80 Stat. 931 (1966) (codified as amended in scattered sections of 49 U.S.C.).

109 16 U.S.C. § 470u (2006); 49 U.S.C. § 303 (2006).

110 16 U.S.C. §§ 1531–1544 (2006 & Supp. IV 2011).

111 *See id.* § 1536(a)(2) (requiring federal agencies to ensure that their actions are not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat); *id.* § 1538 (specifying acts prohibited by the statute).

112 Noe v. Metro. Atlanta Rapid Transit Auth., 644 F.2d 434, 435 (5th Cir. 1981) (dismissing suit for lack of jurisdiction, even though noise levels failed to stay within EIS-predicted levels).

arbitrary and capricious standard, the agency may act on the basis of any rational theory of the scientific evidence.[113]

III. THE SUSTAINABLE ENVIRONMENTAL AND ECONOMIC DEVELOPMENT (SEED) PROPOSAL

This Part describes the Sustainable Environmental and Economic Development (SEED) Proposal, a program that can be used to increase the quality, accuracy, and uniform consideration of sustainability concepts throughout the NEPA review process. The Proposal was inspired by the widespread success of the U.S. Green Building Council's (USGBC) Leadership in Environmental and Energy Design (LEED) program for building construction.[114] One of SEED's overarching goals is to foster increased cooperation between federal agencies, private developers, and the public at large.[115]

A. The Proposed SEED Framework

As discussed in the Part I, the United States faces significant challenges in balancing long-term economic development and environmental quality. To ensure that an appropriate balance is struck, federal agencies need to methodically incorporate the consideration of sustainability indicators into the NEPA environmental review process. The Act provides direct textual support for the consideration of sustainability concepts by requiring the lead agency to examine "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity."[116] Several Executive Orders[117] and the CEQ's statutory duties[118] place an obligation on the Council to consider proposals to incorporate sustainability indicators into NEPA. The SEED Proposal accomplishes this goal by adopting seven measures.[119]

1. The EA Qualitative Checklist

CEQ should develop a brief qualitative checklist for lead agencies to routinely consult during the EA process. The purpose of this checklist is to reinforce NEPA's "stop and think" function and to efficiently disseminate sustainability concepts and sustainability implementation resources. This checklist should highlight for lead agencies a number of broad, high priority sustainability elements such as those identified by EPA's Office of Solid

113 *See* Sierra Club v. Marita, 46 F.3d 606, 621 (7th Cir. 1995) (stating that an agency is entitled to use its own methodology unless it is irrational).

114 *See infra* Part III.B.

115 *See infra* Part III.A.

116 National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C)(iv) (2006).

117 *See supra* Part I.

118 *See supra* Part II.A.

119 *See infra* Part III.A.1–7. The SEED Proposal would not directly affect CEs. *See* discussion *supra* Part II.B.3.

Waste and Emergency Response (OSWER) in relation to environmental contamination cleanups:

1. Minimize Total Energy Use and Maximize Use of Renewable Energy
    - Minimize energy consumption (e.g. use energy efficient equipment)
    - Power cleanup equipment through onsite renewable energy sources
    - Purchase commercial energy from renewable resources
2. *Minimize Air Pollutants and Greenhouse Gas Emissions*
    - Minimize the generation of greenhouse gases
    - Minimize generation and transport of airborne contaminants and dust
    - Use heavy equipment efficiently (e.g. diesel emission reduction plan)
    - Maximize use of machinery equipped with advanced emission controls
    - Use cleaner fuels to power machinery and auxiliary equipment
    - Sequester carbon onsite (e.g., soil amendments, revegetate)
3. *Minimize Water Use and Impacts to Water Resources*
    - Minimize water use and depletion of natural water resources
    - Capture, reclaim and store water for reuse (e.g. recharge aquifer, drinking water irrigation)
    - Minimize water demand for revegetation (e.g. native species)
    - Employ best management practices for stormwater
4. *Reduce, Reuse and Recycle Material and Waste*
    - Minimize consumption of virgin materials
    - Minimize waste generation
    - Use recycled products and local materials
    - Beneficially reuse waste materials (e.g., concrete made with coal combustion products replacing a portion of the Portland cement)
    - Segregate and reuse or recycle materials, products, and infrastructure (e.g. soil, construction and demolition debris, buildings)
5. *Protect Land and Ecosystems*
    - Minimize areas requiring activity or use limitations (e.g., destroy or remove contaminant sources)
    - Minimize unnecessary soil and habitat disturbance or destruction
    - Use native species to support habitat
    - Minimize noise and lighting disturbance[120]

[120] OFFICE OF SOLID WASTE & EMERGENCY RESPONSE, U.S. ENVTL. PROT. AGENCY, PRINCIPLES FOR GREENER CLEANUPS 4 (2009), *available at* http://www.epa.gov/oswer/greenercleanups/pdfs/oswer_greencleanup_principles.pdf ("OSWER cleanup programs should consider these recommended elements when carrying out greener cleanup environmental footprint assessments and evaluating best practices that may be useful during the cleanup process."); *see also* Minnesota Pollution Control Agency, *Toolkit for Greener Practices* http://www.pca.state.

2. Centralized Information Database

After identifying each of these elements for the lead agency, the checklist should link to an up-to-date online database that provides, to the extent possible, the contact information for regional and local private contractors and businesses with relevant expertise for each of these sustainability elements. The GSA may soon have particularly relevant information on sustainable suppliers nationwide.[121] For example, the database could point the lead agency to a renewable energy generator where it could obtain sustainable energy to implement the project. CEQ could expand this database over time to allow experienced, vetted, private consultants and contractors to actively advertise their sustainability services directly to interested lead agencies. The website would serve as a clearinghouse for relevant guidance documents produced by CEQ, EPA, U.S. Army Corps of Engineers (USACE), Occupational Health and Safety Administration (OSHA), GSA, and other federal, state, and local agencies. CEQ and EPA could use this website to publicize "model" projects with high-quality and innovative sustainability measures.[122] Additionally, lead agencies could use the database to determine whether a given project qualifies for certain public grant programs designed to help finance sustainable development.[123] CEQ, a small agency with limited resources, could delegate the preparation and maintenance of this database to EPA. EPA, which must comment on all EISs pursuant to the CAA, could merge its existing sustainability- and NEPA-focused websites into this overarching database.[124]

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mn.us/index.php/topics/preventing-waste-and-pollution/sustainability/greener-practices-toolkit/toolkit-for-greener-practices-option-list.html (last visited Feb. 17, 2013) (describing a similar alternative).

121 *See GSA Seeks to Count Emissions in Procurement, But Data Said Lacking*, Daily Env't Rep. (BNA) No. 41, at A-5 (Mar. 2, 2012); *GSA Launching Website to Share Ideas On Improving Supply Chain Sustainability*, Daily Env't Rep. (BNA) No. 47 (Mar. 2, 2012).

122 For examples of such projects, see *EPA Considering Smart Urban Growth as Part of Agency Sustainability Plan*, Daily Env't Rep. (BNA) No. 48, at A-5 (Mar. 13, 2012), and *About 35 Renewable Energy Projects Completed on Blighted Land, EPA Says*, Daily Env't Rep. (BNA) No. 65, at A-3 (Feb. 17, 2013).

123 One such program is the Department of Housing and Urban Development's Sustainable Communities Regional Planning Grant. U.S. Dep't of Hous. & Urban Dev., *Sustainable Communities Regional Planning Grants*, http://portal.hud.gov/hudportal/HUD?src=/program_offices/sustainable_housing_communities/sustainable_communities_regional_planning_grants (last visited Feb. 17, 2013) (provides grants to help improve regional planning efforts that integrate housing and transportation decisions, and increase state, regional, and local capacity to incorporate livability, sustainability, and social equity values into land use plans and zoning). "The . . . Program supports metropolitan and multijurisdictional planning efforts" through a consortium-based model that brings together numerous groups to inform the planning process. *Id.*; *see also EPA Offering Technical Help for Green Infrastructure*, Daily Env't Rep. (BNA) No. 36, at A-15 (Feb. 24, 2012) (describing EPA's grant program to help communities acquire technical assistance for green infrastructure improvements to aid stormwater and wastewater management). This program implements Executive Order 13,514. *See supra* notes 15–16 and accompanying text.

124 Examples of such websites include: U.S. Envtl. Prot. Agency, *Environmental Impact Statement (EIS) Database*, http://www.epa.gov/oecaerth/nepa/eisdata.html (last visited Feb. 17,

3. Voluntary Sustainability Rating System

All projects undergoing NEPA review must contain a discussion of possible project alternatives, and the vast majority will contain proposed environmental impact mitigation measures.[125] The lead agency, a cooperating agency, the public, or a private developer may have initially recommended a given project alternative or mitigation measure.[126] However, these alternatives and mitigation measures may be innovative, highly site-specific, or technically complex. The other parties in the environmental review may find it difficult to evaluate whether the proposals will actually limit the project's environmental impacts. This can introduce tensions and accusations of bad faith during the NEPA process, especially where the proposed innovative project alternative or mitigation measure provides significant cost-savings compared to a traditional method, or where it would allow the lead agency to issue an M-FONSI and avoid the time-consuming preparation of a full EIS.

To combat this confusion and controversy, CEQ should establish a voluntary sustainability rating system to increase certainty regarding the environmental impacts of possible project alternatives and mitigation measures in EAs, FONSIs, M-FONSIs, EISs, and RODs. Proponents of these proposed alternatives and measures could then certify the sustainability of their proposals using a well-known, well-understood industry standard. This would greatly increase the other parties' understanding of and confidence in the true sustainability level of a proposal. In practice, environmental professionals have noted the inherent difficulties in choosing a coherent system of sustainability metrics that can be widely applied across a vast array of projects and settings.[127] CEQ is one of many entities that have attempted to systematically define sustainability metrics, although that effort has proceeded in fits and starts.[128]

2013); U.S. Envtl. Prot. Agency, *Contaminated Site Cleanup Information (CLU-IN)*, http://www.clu-in.org (last visited Feb. 17, 2013).

125 *See* National Environmental Policy Act of 1969, 42 U.S.C. § 4332(2)(C)(iii) (2006) (requiring that EISs contain alternatives); 40 C.F.R. § 1502.16(e)–(h) (2012) (requiring discussion of mitigation measures).

126 *See* COUNCIL ON ENVTL. QUALITY, *supra* note 49, at 14 (noting that it can be constructive and beneficial for the agency when citizens "identify or develop reasonable alternatives that the agency can evaluate in the EIS").

127 *See, e.g.*, SUSTAINABLE REMEDIATION FORUM, SUSTAINABLE REMEDIATION WHITE PAPER—INTEGRATING SUSTAINABLE PRINCIPLES, PRACTICES, AND METRICS INTO REMEDIATION PROJECTS 9 (David E. Ellis & Paul W. Hadley eds., 2009), *available at* http://www.sustainable remediation.org/library/issue-papers/SURF%20White%20Paper.pdf (noting the difficulty in comparing the relative sustainability of remedies for toxic chemical contamination); *see also GSA Launching Website*, *supra* note 121 (explaining that the "GSA does not endorse any specific third party sustainability reporting standards for suppliers," and that it "uses elements from different standards and protocols for its internal sustainability report").

128 *See* COUNCIL ON ENVTL. QUALITY, THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF EFFECTIVENESS AFTER 25 YEARS, at 27 (1997), *available at* http://ceq.hss.doe.gov/publications/effectiveness_study.html; *Council on Environmental Quality to Develop National System of Environmental Indicators*, 37 Env't Rep. (BNA), 2320 (Nov. 10, 2006).

Fortunately, the Institute for Sustainable Infrastructure (ISI) in collaboration with the Harvard University Graduate School of Design recently released the Envision Sustainable Infrastructure Rating System.[129] The Envision Rating System "looks at the costs and benefits over the entire lifecycle of an infrastructure project, including design and construction, operations and maintenance, and decommissioning."[130] The ISI describes its rating mechanism as follows:

> The Envision Stage 2 Rating Tool is made up of 60 credits divided into five sections: Quality of Life, Leadership, Resource Allocation, Natural World, and Climate and Risk.
>
> Each Envision credit is described in a 2-page write-up that includes the intent, metric, levels of achievement, description, an explanation of how to advance to a higher achievement level, evaluation criteria and documentation, sources, and related credits.[131]

Although currently untested, the Envision system appears to be the first comprehensive sustainability rating system to reach the implementation stage, and its backers have the industry reputation and academic heft necessary to achieve its widespread adoption.[132] The ISI advertises the broad scope of infrastructure projects that Envision can rate, such as "roads, bridges, pipelines, railways, airports, dams, levees, solid waste landfills, water supplies, wastewater treatment plants, power transmission lines, telecommunications towers and . . . public spaces."[133] NEPA requires environmental reviews for almost all of these examples. If Envision can fulfill its promise, it could be nearly seamlessly integrated into the NEPA process on a voluntary basis.

Neither the Envision system nor any other rating system need be adopted wholesale.[134] NEPA participants could limit the sustainability rating of their project to an evaluation of the project's most adverse environmental impacts to avoid unnecessary delay, effort, and cost. As discussed above, the

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129 Inst. for Sustainable Infrastructure, Project Application Process Unveiled, www.sustainableinfrastructure.org/news/project-app-process_051612.cfm (last Feb. 17, 2013).

130 *Nonprofit Organization, Harvard Team Launch Sustainable Infrastructure Rating System*, Daily Env't Rep. (BNA) No. 64, at A-5 (Apr. 4, 2012).

131 Inst. for Sustainable Infrastructure, *Envision Sustainable Rating System*, http://www.sustainableinfrastructure.org/rating/index.cfm (last visited Feb. 17, 2013).

132 Inst. for Sustainable Infrastructure, *New Envision System Establishes First-Ever Holistic Framework for Rating Sustainability of Infrastructure Projects*, http://www.sustainableinfrastructure.org/news/pr012312.cfm (last visited Feb. 17, 2013).

133 Inst. for Sustainable Infrastructure, *The Need for Sustainable Infrastructure Design and Development*, http://www.sustainableinfrastructure.org/rating/infrastructure/whatistheneed.cfm (last visited Feb. 13, 2013).

134 For instance, ISI has teamed up separately with the American Water Works Association to "develop[] a framework for rating underground water infrastructure projects"—a framework that utilizes the Envision rating system. *Groups Plan Framework to Rate Water Infrastructure*, Daily Env't Rep. (BNA) No. 54, at A-19 (Mar. 21, 2012).

EA will result in a FONSI, M-FONSI, or an EIS.[135] If the lead agency is contemplating issuing an M-FONSI, it could rate each of the mitigation measures serving as the basis for the M-FONSI determination. The EIS process requires an initial scoping of environmental issues to be examined.[136] For a given EIS, it may often be desirable to limit sustainability ratings to those identified issues.

4. Independent Third-Party Verification

The success of any sustainability rating system will hinge on independent third-party verification. Most NEPA review participants will not have the technical expertise or professional certification necessary to rate a project alternative or mitigation measure. Additionally, accusations of bias would likely flourish if parties interested in the environmental review were to themselves conduct the sustainability rating. The use of independent third-party professional sustainability raters would help ensure the integrity of the rating system. Existing environmental and engineering consulting firms could readily expand to provide rating services.[137] The sustainability rater's education and certification process need not be overly cumbersome or expensive. For example, the Provisional Credentialing Certificate[138] for the Envision system requires:

> Successful achievement of a four year degree in engineering, architecture, the sciences or related curriculum; [c]ompletion of ISI conducted computer-based courses on Envision and its use; [s]uccessful passage of an online examination on the use of Envision of 75 questions with a successful score of 75%; [and] [s]ubmission of all applicable fees [i.e., $150–$650 depending on occupation and ISI membership status].[139]

135 *See* 40 C.F.R. § 1508.9(a)(1) (2012); Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact, 76 Fed. Reg. 3843 (Jan. 21, 2011).

136 40 C.F.R. § 1501.7(a)(2) (2012) (requiring lead agency to identify significant issues during the scoping process).

137 *See, e.g.*, *3.1 Million Workers Held Green Jobs In 2010*, *Bureau of Labor Statistics Reports*, Daily Env't Rep. (BNA) No. 56, at A-13 (Mar. 23, 2012) (discussing a Bureau of Labor Statistics report indicating green jobs like environmental consulting are available in numerous sectors of the economy); Press Release, Bureau of Labor Statistics, U.S. Dep't of Labor, Employment in Green Goods & Services – 2010, at 2 (Mar. 22, 2012), *available at* http://op.bna.com/dlrcases.nsf/id/lswr-8smnlq/$File/Green%20Jobs%202010.pdf (noting the growing number of "Green Goods and Services" jobs, like environmental consulting and management, that are being added to the private and public sectors).

138 The full Sustainability Professional certification is scheduled to become available in 2014 after the field-testing period for the Envision system. *See* Inst. for Sustainable Infrastructure, *ISI Credentials*, www.sustainableinfrastructure.org/assessors/credentialing.cfm (last visited Feb. 17, 2013).

139 *Id.*

5. Incentivizing Participation with Brand Recognition

Sustainability ratings will be much more effective at reforming the NEPA process if CEQ creates a recognizable, trusted brand for the ratings. CEQ must strongly promote sustainability ratings through the EA Checklist,[140] Centralized Information Database,[141] the CEQ's existing website,[142] and other appropriate methods. The CEQ can identify model sustainable development projects in the checklist and in the database. The projects themselves should prominently display an intuitive, recognizable symbol reflecting their level of sustainability. Private developers participating in the NEPA process will be able to advertise their commitment to sustainability and thus generate goodwill for their products and services.[143] Importantly, fewer people will accuse private developers of taking an insincere, marketing-based approach to sustainability—known as "green washing"—if the sustainability rating system achieves strong brand recognition and trust.[144] The public will have a tool to distinguish good-faith industry sustainability efforts from mere public relations pandering and empty gestures. The earlier in the NEPA process a project alternative or mitigation measure is rated, the less opposition the project will face in public hearings, in written comments, and from subsequent litigation.[145]

6. Incentivizing Participation in Setting NEPA Review Time Limits

The CEQ regulations allow and encourage lead agencies to set appropriate time limits on the EIS process.[146] In fact, when a NEPA project applicant requests that the lead agency impose time limits, the lead agency must do so.[147] The project applicant can request that the lead agency set time limits for the entire NEPA review until the lead agency issues a final decision.[148] These provisions are ostensibly designed to address a common criticism of NEPA—namely, that it is too slow and unpredictable, especially

140 *See supra* Part III.A.1.

141 *See supra* Part III.A.2.

142 Council on Envtl. Quality, *National Environmental Policy Act*, http://ceq.hss.doe.gov/index.html (last visited Feb. 17, 2013).

143 *See, e.g.*, *Companies Taking Care With Supply Chains to Protect Reputation, Executives Say*, Daily Env't Rep. (BNA) No. 51, at A–9 (Mar. 16, 2012) (discussing how customers' expectations have caused companies to focus on their supply chain sustainability and overall environmental performance).

144 *See generally* Richard Dahl, *Green Washing: Do You Know What You're Buying?*, 118 ENVTL. HEALTH PERSPECTIVES, June 2010, at A246 (discussing the concept of green washing, its prevalence, and its effect on consumers).

145 *See, e.g.*, James T.B. Tripp & Nathan G. Alley, *Streamlining NEPA's Environmental Review Process: Suggestions for Agency Reform*, 12 N.Y.U. ENVTL. L.J. 74, 87 (2003) (discussing how postponing meaningful EAs and EISs causes problems by eventually slowing down planning).

146 40 C.F.R. § 1501.8 (2012).

147 *Id.* § 1501.8(a).

148 *Id.* § 1501.8(b)(2); *see also id.* § 1501.8(c) (allowing state or local agencies and members of the public to request time limits, though the lead agency has no obligation to respond).

for private business planning.[149] Project applicants may not be aware of their power to request these time limits, and so may fail to do so. However, the main drawback from the applicant's perspective is that forcing the lead agency—which has the ultimate power to deny, alter, or approve the project[150]—to designate a NEPA review time limit can create an adversarial atmosphere. This adversarial mindset may take hold early on and last throughout a long EIS process. Additionally, the applicant can force the lead agency to set time limits, but the lead agency retains the discretion to determine the duration of each step in the entire EIS process.[151] The lead agency faces no regulatory deadline to respond to a request to set time limits and can set a very low bar for itself when it does set time limits.[152] Thus, requesting these limits may be futile from the applicant's perspective.

The lead agency conducting a NEPA review should offer project applicants shorter time limits during the EIS process in exchange for higher sustainability ratings for mitigation measures and project alternatives. That is to say, a lead agency should offer the project applicant shorter time limits provided that the applicant agrees to achieve commensurately higher ratings scores and meet minimum scores for more dimensions of sustainability.[153] The regulations allow the lead agency broad discretion in setting time limits—empowering the agency to make such offers—provided that the final time limits "are consistent with the purposes of NEPA and other essential considerations of national policy."[154] If such an agreement were reached, the lead agency and the public would receive greater certainty that the project would cause fewer and less severe environmental impacts, clearly a goal consistent with the purposes of the Act.[155] Similarly, the project applicant would help create a cooperative relationship with decision makers, reduce controversy surrounding the project, and possibly save itself more money from this expedited review than it would spend to meet the requested sustainability ratings.

149 The CEQ has recently issued a final guidance to address some of these concerns. *See* Improving the Process for Preparing Efficient and Timely Environmental Reviews Under NEPA, 77 Fed. Reg. 14,473, 14,479 (Mar. 12, 2012); *see also* Fed. Highway Admin., U.S. Dep't of Transp., *Evaluating the Performance of Environmental Streamlining: Development of a NEPA Baseline for Measuring Continuous Performance*, http://www.environment.fhwa.dot.gov/strmlng/baseline/index.asp (last visited Feb. 17, 2013) (recognizing that the "perception that NEPA results in delays and additional costs . . . is a common one").

150 *See* 40 C.F.R. § 1508.18(b)(4) (2012).

151 *Id.* § 1501.8(a), (b)(2).

152 *See id.* § 1501.8(a)–(b)(1) (providing a variety of non-binding factors the lead agency may consider in determining time limits).

153 The time limit should still be within the constraints of regulations setting the duration of public comment periods. *Id.* § 1506.10.

154 *Id.* § 1501.8(a), (b)(1).

155 *See* National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (2006) (declaring the prevention or elimination of environmental damage as a central purpose of the Act).

7. Monitoring the Implementation and Effectiveness of Sustainability

Consistent with CEQ's recent guidance, sustainable mitigation measures and project alternatives must be properly implemented and monitored for effectiveness.[156] Under the SEED Proposal, sustainability rating would be a voluntary undertaking. However, courts should enforce the sustainability aspects of project alternatives selected in EIS RODs, as well as the mitigation measures designed to reduce the adverse environmental impacts of M-FONSIs. To create a standard of enforceability, sustainability commitments should be tied to sustainability ratings. Once a project applicant commits to achieving a given sustainability rating for a mitigation measure or for an aspect of a project alternative, the lead agency should clearly document these sustainability commitments. This documentation should detail a timeframe for achieving the selected sustainability ratings and should detail a plan for implementation and effectiveness monitoring. These commitments should then be incorporated as conditions into legally enforceable project permits, grants, and other approvals for the project. Hopefully, creating clear standards of enforceability will also limit the disputed issues and cost in any subsequent litigation.

The lead agency should negotiate with the project applicant to identify the entity that will conduct monitoring, as well as to determine the frequency and duration of the monitoring. This negotiation, in addition to setting NEPA review time limits, provides another avenue for project applicants to create a cooperative relationship with the lead agency and the public. In larger projects, sustainability ratings could be updated during the preparation of SEISs. Either individually or in combination, the lead agency, the project applicant, concerned citizens, or relevant environmental regulators could agree to pay for mitigation implementation monitoring and sustainability effectiveness ratings. Regardless, the lead agency should clearly identify the entity responsible for monitoring and the consequences for failing to achieve sustainability goals within the NEPA decision documents and legally enforceable project permits, grants, and other approvals. The consequences need not be draconian. The entire project should not be halted, but it may be appropriate to require the applicant to make a good-faith attempt to achieve the agreed-to sustainability ratings using other means. All of the monitoring data should be entered into a centralized information database, as described in Part III.A.2.

B. Proof of Concept – LEED

The U.S. Green Building Council's LEED Certification program provided the inspiration for this Article's SEED Proposal. This section briefly addresses structure and success of the LEED program. Notably, the significant technical expertise, professional infrastructure, and public awareness created by the LEED program could be readily expanded to meet the needs of the SEED

156 *See infra* Part IV.

Proposal.[157] The Green Building Council administers the LEED program based on a points system with five main credit categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality.[158] A building's overall score can qualify it for Certified, Silver, Gold, or Platinum status.[159] The LEED program actually contains a variety of rating systems applicable depending on the type of building being rated: new construction and major renovations, existing buildings operations and maintenance, commercial interiors, core and shell development, retail, schools, homes, neighborhood development, and healthcare.[160] Since its creation in 2000, the LEED program has certified more than 2 billion square feet of properties and certifies 2 million square feet of commercial building space per day globally.[161] The Council collects public comments and updates the LEED scoring system periodically.[162] In addition, the Council provides accreditation for individuals who wish to conduct third-party certification of home projects.[163] LEED's successful model both complements and competes with other third-party green building certification organizations including the National Green Building Standard,[164] the Green Building Initiative's Green Globes,[165] and the federal government's Energy Star program.[166] Other sustainability initiatives limit themselves to monitoring greenhouse gas

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157 LEED is far from the only source of technical expertise and professional infrastructure that SEED could draw upon. *See, e.g.*, *3.1 Million Workers Held Green Jobs In 2010*, *Bureau of Labor Statistics Reports, supra* note 137 (noting the "[m]ore than 3.1 million workers [that] held jobs associated with the production of green goods and services in 2010").

158 U.S. Green Bldg. Council, *LEED Credit Categories*, https://new.usgbc.org/leed/rating-systems/credit-categories (last visited Feb. 17, 2013).

159 *See, e.g.*, U.S. GREEN BLDG. COUNCIL, LEED 2009 FOR EXISTING BUILDINGS OPERATIONS AND MAINTENANCE RATING SYSTEM vii, xv (2012), *available at* https://new.usgbc.org/resources/leed-existing-buildings-v2009-current-version.

160 U.S. Green Bldg. Council, *LEED Green Building Rating Systems*, https://new.usgbc.org/leed/rating-systems (last visited Feb. 17, 2013).

161 Melissa Hincha-Ownby, *LEED-Certified Space Tops 2 Billion Square Feet*, MOTHER NATURE NETWORK (July 30, 2012, 7:00 AM), http://www.mnn.com/money/green-workplace/blogs/leed-certified-space-tops-2-billion-square-feet; *see also* Cal. Exec. Order No. B-18-12 (Apr. 25, 2012), *available at* http://www.gov.ca.gov/news.php?id=17508 (requiring that new state buildings and major renovations to large buildings in California achieve at least LEED Silver certification).

162 *See* U.S. Green Bldg. Council, *The Next Version of LEED*, https://new.usgbc.org/leed/developing-leed/future-versions (last visited Feb. 13, 2013); *see also Report Says Building Professionals Should Consider Future Climate Effects*, Daily Env't Rep. (BNA) No. 39, at 13 (Feb. 29, 2012) (discussing a USGBC report that urges building professionals to consider climate change adaptation and mitigation strategies in their construction projects).

163 U.S. Green Bldg. Council, *LEED for Homes Green Raters*, https://new.usgbc.org/leed/credentials/certificates/green-raters (last visited Feb. 17, 2013).

164 *See* Nat'l Ass'n of Homebuilders, *ICC-700 National Green Building Standard*, http://www.nahb.org/page.aspx/generic/sectionID=2510 (last visited Feb. 17, 2013); *see also* Nat'l Ass'n of Homebuilders, *Rigorous ICC 700 National Green Building Standard Certification*, http://www.nahbgreen.org/Certification/ngbs.aspx (last visited Feb. 17, 2013) (describing the rating system for the National Green Building Standard).

165 *See* Green Building Initiative, *Sustainable Building Assessment & Certification*, http://www.thegbi.org (last visited Feb. 13, 2013).

166 *See* Energy Star, http://www.energystar.gov (last visited Feb. 13, 2013).

emissions,[167] promoting voluntary information collection,[168] conducting scientific and policy research,[169] and encouraging corporate sustainability performance disclosures.[170]

IV. SEED IMPLEMENTATION

This Part reviews some of CEQ's recent guidance and recommends that this Article's SEED Proposal be implemented administratively under an existing CEQ guidance document or a supplemental guidance document. These guidance documents represent CEQ's interpretation of NEPA, and the Supreme Court has held they are entitled to "substantial deference."[171] Federal agencies consult these guidance documents when developing and revising their internal NEPA-implementing procedures, which may consist of regulations, agency guidance documents, or procedure manuals.[172]

In 2010, on the 40th anniversary of NEPA's enactment, the White House and CEQ unveiled an initiative to "modernize and reinvigorate" NEPA.[173] CEQ subsequently released and drafted several guidance documents designed to streamline the NEPA review process and increase NEPA's effectiveness in documenting and reducing the adverse environmental impacts of federal actions.[174] The most relevant guidance document is described below: "Final Guidance Clarifying Appropriateness of 'Findings of

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167 *See Gold Standard Foundation to Update Rules for Its Carbon Emissions Credit Certification*, Daily Env't Rep. (BNA) No. 37, at A-2 (Feb. 27, 2012) (describing the Gold Standard Foundation, an organization that certifies the carbon mitigation effectiveness of renewable energy and energy efficiency projects); *Western Climate Initiative Outlines Steps for Evaluating Carbon Offset Projects,* Daily Env't Rep. (BNA) No. 35, at A-9 (Feb. 23, 2012) (noting the regional greenhouse gas cap-and-trade program proposed by the Western Climate Initiative).

168 *See* CERES, http://www.ceres.org (last visited Feb. 17, 2013) (describing the mission of CERES as "mobilizing a powerful network of investors, companies, and public interest groups" to promote sustainability initiatives).

169 *See New Global Research Agenda Aims To Guide Policies Toward Sustainability*, Daily Env't Rep. (BNA) No. 66, at A-4 (Apr. 6, 2012) (discussing Future Earth, a new project "to provide cutting-edge research on sustainability" issues and policies).

170 *See Calls Grow to Require Companies to Report on Sustainability or Explain Why They Do Not*, Daily Env't Rep. (BNA) No. 62, at A-11 (Apr. 2, 2012) (noting initiatives aimed at encouraging large companies to report their sustainability performance).

171 Andrus v. Sierra Club, 442 U.S. 347, 358 (1979).

172 40 C.F.R. § 1505.1 (2012).

173 Council on Envt'l Quality, *Steps to Modernize and Reinvigorate NEPA*, http://www.whitehouse.gov/administration/eop/ceq/initiatives/nepa (last visited Feb. 17, 2013).

174 *See* Final Guidance on Improving the Process for Preparing Efficient and Timely Environmental Reviews Under the National Environmental Policy Act, 77 Fed. Reg. 14,473, 14,473 (Mar. 12, 2012) (recommending the use of techniques that "are consistent with a thorough and meaningful environmental review . . . and effectively convey the relevant considerations in a timely manner"); Final Guidance for Federal Departments and Agencies on Establishing, Applying, and Revising Categorical Exclusions Under the National Environmental Policy Act, 75 Fed. Reg. 75,628, 75,631–38 (Dec. 6, 2010) (suggesting several ways through which agencies can reduce delays and redundancies in the NEPA review process); Draft Guidance for NEPA Mitigation and Monitoring, *supra* note 67 (explaining "how Federal agencies should analyze the environmental impacts of greenhouse gas emissions and climate change when they describe the environmental impacts of a proposed action under NEPA").

No Significant Impact' and Specifying When There is a Need to Monitor Environmental Mitigation Commitments" (Mitigation and Monitoring Guidance).[175] The SEED Proposal can be used to implement the recommendations of the Mitigation and Monitoring Guidance.

CEQ issued its final Mitigation and Monitoring Guidance in January of 2011.[176] The purpose of the guidance is to recommend methods for federal agencies to ensure that mitigation commitments are implemented, to monitor the effectiveness of mitigation measures, to remedy failed mitigation, and to involve the public in mitigation planning.[177] The guidance document directs federal agencies to adopt internal procedures to ensure that mitigation commitments found in M-FONSIs and RODs are actually implemented.[178] It also directs federal agencies to clearly document mitigation commitments in decision documents; to describe how and when these commitments will be implemented; to specify measurable performance standards and expected results; to identify the timeframes for mitigation implementation and effectiveness monitoring; and to include all of these requirements as legally enforceable conditions in project grants, permits, and other approvals.[179] CEQ explicitly approves the use of a third party to monitor mitigation implementation and effectiveness,[180] and has held up the U.S. Department of the Army's NEPA mitigation and monitoring regulations as an effective model for other agencies to emulate.[181]

Federal agencies can adopt this Article's SEED Proposal to implement the directives of the CEQ's Mitigation and Monitoring Guidance.[182] However, CEQ could also supplement the Mitigation and Monitoring guidance to specifically identify the SEED Proposal as an acceptable mitigation and monitoring model. The SEED Proposal recommends the Institute for Sustainable Infrastructure's Envision Sustainability rating system as a uniform, widely applicable standard for the performance and enforceability of mitigation commitments.[183] An Envision-certified contractor could monitor mitigation measures and evaluate their effectiveness as an independent, credible third party.[184] The sustainability ratings would facilitate the creation of standardized conditions in project grants, permits, and other approvals.

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175 Final Guidance for Federal Departments and Agencies on the Appropriate Use of Mitigation and Monitoring and Clarifying the Appropriate Use of Mitigated Findings of No Significant Impact, 76 Fed. Reg. 3,843, 3,846 (Jan. 21, 2011).

176 Press Release, Council on Envt'l Quality, White House Council on Environmental Quality Issues Mitigation and Monitoring Guidance Under NEPA (Jan. 14, 2011), http://www.whitehouse.gov/administration/eop/ceq/Press_Releases/January_14_2011 (last visited Feb. 17, 2013).

177 76 Fed. Reg. at 3,847.

178 *Id.* at 3,848.

179 *Id.* at 3,848–49.

180 *Id.* at 3,850.

181 *Id.* at 3,849 n.32.

182 *See supra* Part III.A.

183 *See supra* Part III.A.3.

184 *See supra* Part III.A.4 and III.A.7.

V. CONCLUSION

The world faces monumental economic and environmental challenges that can be addressed through the use of sustainable development. While the executive branch has begun to incentivize the adoption of sustainable development practices, it has overlooked the cornerstone of environmental law, NEPA, as a tool to reach sustainability goals. This Article's SEED Proposal builds off of the LEED program's proof of concept in the green buildings context to bring NEPA's wide-reaching influence over infrastructure projects to bear on the sustainability challenge. The SEED Proposal will disseminate sustainability concepts quickly and efficiently; reduce duplication of effort in federal agencies, private developers, and citizens groups; encourage the adoption of uniform sustainability metrics that can be used as standards of performance and enforceability; expand the private and public labor pool of sustainability professionals; and encourage cooperation between private developers, agency decision makers, and the public by providing new avenues to streamline NEPA environmental reviews while reducing adverse environmental impacts. The agency implementation of the CEQ's Mitigation and Monitoring Guidance will soon require that NEPA project reviews ensure the enforceability of mitigation commitments. Under the SEED Proposal, private developers will have access to negotiating tools that will expedite NEPA reviews, reduce public controversy over proposed mitigation measures, and provide a valuable branding benefit, all while avoiding allegations of "green washing." Even if CEQ issues no further guidance, federal agencies can and should adopt the SEED Proposal as a way to implement the directives of the existing CEQ Mitigation and Monitoring Guidance document.