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Extending NEPA to Address Disaster Mitigation

Hurricane Katrina displaced more than a million people when the levees protecting New Orleans failed,¹ but the Army Corps of Engineers mobilized quickly after the storm, using helicopters and dump trucks to plug the levees with sandbags and dirt,² and pumps to remove water at a rate of over 100,000 gallons per second.³ The September 11th attacks on the World Trade Center created 1.8 million tons of debris, which was cleared by city, state, and federal agencies in less than nine months.⁴ Time and again, the federal government has demonstrated its ability to turn its otherwise sluggish bureaucratic cogs in response to natural and other disasters,⁵ with an emphasis on the speed of “recovery” generally predominating.

One explanation for the faster than usual recovery following September 11th and Hurricane Katrina was the suspension of the National Environmental Policy Act (NEPA).⁶ In both formal⁷ and informal⁸ ways, the government looked the other way as projects rushed to spend federal

1. Allison Plyer, *Facts for Features: Katrina Impact*, THE DATA CENTER (Aug. 26, 2016), <https://www.datacenterresearch.org/data-resources/katrina/facts-for-impact/>.

2. *Pumps Begin to Drain New Orleans*, CNN (Sept. 6, 2005), <https://www.cnn.com/2005/US/09/05/neworleans.levees>.

3. *Hurricane Katrina Floods New Orleans*, NASA EARTH OBSERVATORY, <https://earthobservatory.nasa.gov/images/15445/hurricane-katrina-floods-new-orleans> (last visited Sept. 15, 2020).

4. The Associated Press, *Workers Recall Removing Last World Trade Center Debris Nine Years Ago*, DENVER POST (May 28, 2011), <https://www.denverpost.com/2011/05/28/workers-recall-removing-last-world-trade-center-debris-nine-years-ago/>.

5. Compare the speed of response to Katrina to the speed of removing the temporary structures created immediately after the storm. Autumn Giusti, *Removal of Temporary Pumps, Floodgates Signals End of Era*, ENGINEERING NEWS-RECORD (Nov. 7, 2018), <https://www.enr.com/articles/45800-removal-of-temporary-pumps-floodgates-signals-end-of-era> (announcing that thirteen years later, temporary structures built to prevent flooding and pump water were finally contracted for removal).

6. Michael B. Gerrard, *Emergency Exemptions from Environmental Laws After Disasters*, NAT. RESOURCES & ENV'T, Spring 2006, at 10 (arguing that NEPA and other laws should be sidelined after major disasters to make way for reconstruction).

7. *Id.* (“By the day the planes hit the World Trade Center towers on September 11, 2001, an elaborate system of exemptions from the environmental laws was in place, and it was fully utilized.”).

8. *Id.* at 10–11 (“In theory, many of these demolition, transport, and disposal operations may have violated environmental laws. Environmental impact review, advance notice of asbestos removal, source separation, and many other procedures would ordinarily be required for a large demolition project. None of these legal procedures were followed, and no one said a thing. No environmental agency or advocacy group would dare try to interfere with the rescue effort. In short, the environmental laws worked as they should have under such extreme circumstances—they got out of the way.”).

dollars and move forward with federal permits in hand. NEPA sets forth specific procedural steps in order for major federal actions to occur, including federal permitting and spending.⁹ The NEPA process is procedural, not determinative.¹⁰ The process is intended to bring to light the risks and effects the projects will have on the environment. However, NEPA will not prevent a project from going forward due to an environmental risk or effect.¹¹ Rather, the information produced by the NEPA process may be used to determine if the requirements of other environmental laws will be met, including the Clean Air and Water Acts and the Endangered Species Act, and may also be used by potential litigants when the process reveals unwarranted risks or effect which may be reasonably mitigated. A suspension of NEPA's requirements is not uncommon after a disaster, allowing federal agencies to propose, plan, and execute relief efforts without first evaluating the environmental impact.

The effects of suspending NEPA are far-reaching and diverse. Proponents suggest that doing so is necessary in order to capitalize on the benefits of rapid recovery.¹² Critics suggest that ignoring the environmental impact in cases of natural disaster might exacerbate existing environmental damage brought about by the disaster, and possibly multiply the effect of future disasters.¹³ The outright suspension of NEPA carries with it unforeseen consequences that might otherwise be addressed under the NEPA framework.

This Note argues that disaster impact should be considered under NEPA and explains how a streamlined NEPA process would more effectively facilitate disaster response than outright suspension. To do so, Part I introduces the role of NEPA in federal projects. Exceptions to NEPA's requirements will also be addressed, as NEPA's role in the disaster context is greatly influenced by the prevalence of exemptions. Part II discusses NEPA's role in disaster recovery and how this role might evolve in the future. As the United States faces an increasing onslaught of major natural disasters, federal agency involvement in disaster recovery

9. COUNCIL ON ENV'T. QUALITY, EXEC. OFFICE OF THE PRESIDENT, A CITIZEN'S GUIDE TO THE NEPA 4-5 (Dec. 2007), https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf.

10. See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1989).

11. *Id.* at 350 ("NEPA itself does not mandate particular results, but simply prescribes the necessary process.").

12. Michael B. Gerrard, *Disasters First: Rethinking Environmental Law After September 11*, 9 WIDENER L. SYMP. J. 223 (2003).

13. Alicia Hope Herron, David Neil, & Marc Hockings, *Post-Hurricane Katrina: Building Frameworks for Incorporating Social-Ecological Resilience*, SOCIETY FOR INT'L DEV.: WATER AND DEV. (2008).

will shift from its current position of contribution to one of control. In that perspective, it is plausible that rather than reducing NEPA's role through exemption, the federal government will rely more heavily on the Act to guide decisions during disaster recovery. Not all of the requirements of NEPA fit the inherent demand for efficient recovery post-disaster, but recent examples of NEPA streamlining suggest that the two need not be opposed. NEPA may also play a larger role pre-disaster in setting the framework for agencies to prepare for disaster mitigation and post-disaster recovery. Part III discusses how NEPA analysis could include disaster impact as part of the required analysis for all major federal actions, filling an existing gap in disaster prevention and mitigation.

I. NEPA is the Appropriate Pathway for Mandating Disaster Impact Consideration of All Federal Actions

A. *What is NEPA?*

According to its organic act, the National Environmental Protection Act¹⁴ was written

[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 a Council on Environmental Quality.¹⁵

Through the Act, Congress recognized the responsibility of the Federal Government in declaring and enforcing a set of policies designed to, among other things, preserve the environment for future generations and to ensure that the maximum beneficial uses are obtained without environmental degradation and other “unintended consequences.”¹⁶

To effect these objectives, the Act requires that “every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment” must be accompanied by a report on the environmental impact of the action, adverse environmental effects that cannot be avoided, alternatives to the proposal, and other relevant information in achieving

14. 42 U.S.C. § 4321 (2018).

15. *Id.* (emphasis added).

16. 42 U.S.C. § 4331(b)(3) (2018).

the objectives of the Act.¹⁷ The practical application of NEPA is that every major federal action is accompanied by either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). In this way, NEPA requires that the agency collect or produce information concerning the environmental impact of the project, that the agency carefully considers the impact, and that all of the relevant information is made available to other stakeholders, including the public, to allow others to voice objections or even litigate the matter in cases where the decisions violate the law.¹⁸ An Environmental Assessment is the initial evaluation of the environmental impact of the project. The EA's purpose is to gather information needed to determine if there will be a significant environmental impact. This information can come from other similar projects, prior environmental studies, or a review of all environmental areas of concern.¹⁹ If no significant impact is found, the agency is able to issue a Finding of No Significant Impact (FONSI). If the EA suggests that there will be significant impact, the agency is required to prepare a more comprehensive Environmental Impact Statement. The need to prepare an EIS is often viewed as a major hurdle in a project's timeline. One study found that between 1998 and 2006, the average time to complete an EIS was 3.4 years, with the shortest taking fifty-one days and the longest taking over eighteen years.²⁰ The complexity of preparing an EIS has been discussed at length by a number of critics.²¹

Proponents generally hold that the burden of preparing an EIS is the purpose of the Act, front-ending information transfer to enable litigation. NEPA requires the assessments and statements to be fully prepared, alternatives to be considered, and a reasoned approach to be taken.²² Even

17. 42 U.S.C. § 4332(C) (2018).

18. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). Other laws might include the Clean Water Act, Clean Air Act, Endangered Species Act, and other laws that place specific rather than procedural limitations on the projects and actions of both the federal government and the public at large.

19. The Department of Energy's Environmental Assessment Checklist provides a thorough list of items that might be addressed in an EA. OFFICE OF NEPA POL'Y AND COMPLIANCE, DEP'T OF ENERGY, ENVIRONMENTAL ASSESSMENT CHECKLIST (1994), <https://www.energy.gov/nepa/downloads/environmental-assessment-checklist-doe-1994> (last visited Sept. 14, 2020).

20. Piet deWitt & Carole A. deWitt, *How Long Does It Take to Prepare an Environmental Impact Statement?*, 10 ENV'T. PRAC. 164 (2008).

21. See, e.g., Richard A. Epstein, *The Many Sins of NEPA*, 6 TEX. A&M L. REV. 1 (2018); Bradley C. Karkkainen, *Toward a Smarter NEPA: Monitoring and Managing Government's Environmental Performance*, 102 COLUM. L. REV. 903 (2002); Helen Serassio, *Legislative and Executive Efforts to Modernize NEPA and Create Efficiencies in Environmental Review*, 45 TEX. ENV'T. L.J. 317 (2015).

22. *National Environmental Policy Act Review Process*, EPA,

when dramatic environmental damage is expected, nothing within the statute prevents an agency from making the decision to continue forward.²³ Instead, NEPA relies on other environmental laws, agency rules, and public outcry to compel agencies to reconsider actions before proceeding with, permitting, or otherwise supporting an environmentally hazardous project. NEPA *enables* this backlash from the public and other stakeholders by requiring agencies to consider other means and methods as alternatives to those that would harm the environment.²⁴ The purpose of the alternatives requirement is to allow agency officials to make a “fully informed and well-considered decision,” but it is also ammunition for opponents to projects who may now point to alternatives that the agency has disregarded.²⁵

NEPA’s reach extends to nearly every major federal action. The statute says its requirements cover every action that will “significantly affect[] the quality of the human environment.”²⁶ This implicates actions including “issuing regulations, providing permits for private actions, funding private actions, making federal land management decisions, constructing publicly-owned facilities, and many other types of actions.”²⁷ Courts have generally found major actions to include the construction of highways, dams, electric power projects, and other building

<https://www.epa.gov/nepa/national-environmental-policy-act-review-process> (last visited Sept. 16, 2020).

23. *Sierra Club v. Froehlke*, 630 F. Supp. 1215, 1223 (S.D. Tex. 1986) (“[T]he only role for a Court is to insure [sic] 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 action to be taken.”) (quoting *Township of Springfield v. Lewis*, 702 F.2d 426, 441 (3d. Cir. 1983)).

24. 40 C.F.R. § 1502.14(a) (2020) (Agencies must “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives that were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.”).

25. *Concerned Citizens Coal. v. Fed. Highway Admin.*, 330 F. Supp. 2d 787, 796 (W.D. La. 2004) (quoting *Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 435 U.S. 519, 558 (1978)). The agency is only empowered to disregard an alternative if reasonably supported by the agency record.

26. 42 U.S.C. § 4332(2)(C) (2018).

27. COUNCIL ON ENV’T. QUALITY, EXEC. OFFICE OF THE PRESIDENT, A CITIZEN’S GUIDE TO THE NEPA 4 (Dec. 2007), https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf.

construction,²⁸ but inconsistencies arise beyond these major groupings.²⁹ A general understanding is that a major agency action is one that requires “substantial planning, time, resources or expenditure.”³⁰ In practice, it is not uncommon for agencies to produce an EA and issue a FONSI, even for projects that undoubtedly will not have a significant impact on the human environment. The saying “better safe than sorry” is an appropriate refrain in this context. Unless the activity is covered by a specific exclusion, the agency is incentivized to prepare the minimum EA and corresponding FONSI for all of its major actions. Specific exclusions include actions that the agency has previously determined will have no significant impact in the environment and has issued a categorical exclusion to exempt the activity from the requirements of NEPA.

B. NEPA Stakeholders

A number of organizations have a stake in the NEPA process beyond the agency pursuing the major action. The Council on Environmental Quality (CEQ), part of the Executive Office of the President, has the primary responsibility over NEPA.³¹ CEQ’s role includes creating and enforcing guidelines and procedures that bind other executive agencies. An agency will have its own internal NEPA guidelines, and the CEQ is also involved in reviewing and approving these procedures. The Environmental Protection Agency (EPA) is involved in the NEPA process

28. See, e.g., *Steubing v. Brinegar*, 511 F.2d 489 (2d Cir. 1975) (highway); *Conservation Soc’y of S. Vt., Inc. v. Sec’y of Transp.*, 508 F.2d 927 (2d Cir. 1974) (highway); *Named Individual Members of the San Antonio Conservation Soc’y v. Tex. Highway Dep’t*, 446 F.2d 1013 (5th Cir. 1971), 406 U.S. 933 (1972) (highway); *Trout Unltd. v. Morton*, 509 F.2d 1276 (9th Cir. 1974) (dam); *Sierra Club v. Stamm*, 507 F.2d 788 (10th Cir. 1974) (dam); *Env’t Def. Fund, Inc. v. Corps of Eng’rs*, 492 F.2d 1123 (5th Cir. 1974) (dam); *Sierra Club v. Hodel*, 511 F.2d 526 (9th Cir. 1974) (electric power); *Union of Concerned Scientists v. Atomic Energy Comm’n*, 499 F.2d 1069 (D.C. Cir. 1974) (electric power); *Scenic Hudson Pres. Conf. v. FPC*, 453 F.2d 463 (2d Cir. 1971), 407 U.S. 926 (1972) (electric power); *Sierra Club v. Lynn*, 502 F.2d 43 (5th Cir. 1974) (building construction).

29. Case Comment, *Env’t Law: What Is “Major” in “Major Federal Action?”*, *Minnesota Public Interest Research Group v. Butz*, 498 F.2d 1314 (8th Cir. 1974), 1975 WASH. U. L.Q. 485, 489 n.21 (noting that courts have required an EIS for federal lumber contracts, refusal to permit a pipeline, cancellation of a government contract to procure helium, dredging of a harbor, spraying herbicide to kill vegetation in a river, using pesticides to kill fire ants, but not requiring EIS to dredge a marina, construct a 4.3 mile road in a national forest, widen a street, or allow stretch-jets at the Washington National Airport).

30. *Citizens Organized to Defend the Env’t, Inc. v. Volpe*, 353 F. Supp. 520, 540 (S.D. Ohio 1972); *Nat’l Res. Def. Council, Inc. v. Grant*, 341 F. Supp. 356, 366–67 (E.D.N.C. 1972); *Julis v. City of Cedar Rapids*, 349 F. Supp. 88, 89 (N.D. Iowa 1972).

31. COUNCIL ON ENV’T QUALITY, EXEC. OFFICE OF THE PRESIDENT, A CITIZEN’S GUIDE TO THE NEPA 5 (Dec. 2007), https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf.

as the primary reviewer of EISs and some EAs.³² The EPA’s comments are published for public review in the Federal Register. Finally, the U.S. Institute for Environmental Conflict Resolution is charged with “resolv[ing] environmental . . . disputes involving agencies and instrumentalities of the United States”³³ and “assisting the Federal Government in the implementation of the substantive policies set forth in . . . NEPA.”³⁴

C. Exemptions from NEPA Requirements

Exemptions to NEPA and its procedural requirements arise in a number of specific scenarios. Although the Act is written to cover all federal actions, the only federal actions bound by the Act are acts of federal agencies. Acts by the President, Congress, and the judiciary are not subject to the requirements of NEPA. Additionally, Congress has the power to legislate exemptions to specific federal actions from the requirements of NEPA, but has only done so on rare occasions.³⁵ This short list of legislative exemptions includes both ongoing general exemptions and also project-specific exemptions.³⁶ There are also specific agencies, such as the EPA, that are exempt from NEPA regulation in certain contexts³⁷ and others that are exempt for specific purposes.³⁸ Finally, other statutory schemes and regulations may exempt federal actions from the NEPA requirements in specific scenarios, including emergencies.³⁹

32. Clean Air Act, 42 U.S.C. § 7609 (2018).

33. 20 U.S.C. § 5604(8) (2018).

34. COUNCIL ON ENV’T QUALITY, EXEC. OFFICE OF THE PRESIDENT, A CITIZEN’S GUIDE TO THE NEPA 6 (Dec. 2007), https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf.

35. *Id.* at 10.

36. One example is the placement of the Trans-Alaska Oil Pipeline, which Congress exempted from NEPA. Specifically, the Act excludes specific actions of the Secretary of the Interior from being considered major Federal actions requiring NEPA, though objectively the actions were in fact major. 30 U.S.C. § 185(t) (2018). In another action, the Secretary of the Interior was directed to chemically “treat” blackbird roosts that were posing a health problem at Fort Campbell and the Milan Army Ammunition Plant. The birds had caused significant damage, posed a health hazard, and were interfering with aircraft operations. The extermination was specifically exempt from any NEPA requirement, so long as the activities were completed before a specified date. Act of Feb. 4, 1976, Pub. L. 94-207 (To complete the story, the Army proceeded to exterminate the birds well within the timeframe allotted by Congress.). *Army Again Mounts an Attack on Birds at Kentucky Base*, N.Y. TIMES, 24 (Feb. 26, 1975).

37. Actions taken by the EPA to fulfill certain statutory responsibilities are exempt from NEPA. *See, e.g.* Clean Air Act, 15 U.S.C. § 793 (2018).

38. For example, the Department of Housing and Urban Development has a number of exemptions from NEPA’s requirements for specific actions. *See* 24 C.F.R. § 58.5 (2020).

39. 42 U.S.C. § 5159 (2018).

1. Statutory exemptions

Specific to disasters, some statutory schemes have exempted certain acts from NEPA analysis, including the Stafford Disaster Relief and Emergency Assistance Act (Stafford Act).⁴⁰ Under the Stafford Act, any “action which is taken or assistance which is provided . . . which has the effect of restoring a facility substantially to its condition prior to the disaster or emergency” is exempt from NEPA.⁴¹ There are other disaster specific exclusions for debris removal,⁴² “federal emergency assistance”,⁴³ essential federal assistance,⁴⁴ and “general federal assistance.”⁴⁵

2. Categorical exclusions

For actions not specifically exempted by Congress, agencies are able to promulgate rules exempting specific agency actions through a process known as categorical exclusion. Federal agencies publish and renew policies and procedures for NEPA compliance, which are published in the Federal Register and approved by the CEQ. As part of the process of approving an agency-specific procedure, the agency determines specific categorical exclusions. These exclusions carry the same weight as any other exclusion, allowing the agency to predetermine which of its actions do not merit environmental review. The Federal Emergency Management Agency (FEMA) has an agency-specific NEPA procedure known as its Environmental and Historic Preservation (E&HP) Review procedure.⁴⁶ Like many agencies, FEMA’s procedure includes a lengthy list of categorical exclusions. The list includes exemptions for administrative tasks, such as the preparation of documents and studies,⁴⁷ but it also uses its categorical exclusions to meet its specific mission by eliminating the NEPA requirement for several emergency management categories of action. Specific to disaster relief, FEMA has categorical exclusions exempting agency actions from the requirements of NEPA for the following:

40. 42 U.S.C. § 5121 (2018).

41. 42 U.S.C. § 5159 (2018).

42. 42 U.S.C. § 5173 (2018).

43. 42 U.S.C. § 5192 (2018).

44. 42 U.S.C. § 5170b (2018).

45. 42 U.S.C. § 5170a (2018).

46. The latest instructions for the E&HP Review are published in the Federal Register. Proposed Flood Hazard Determinations, 81 Fed. Reg. 56,682 (Aug. 22, 2016).

47. 44 C.F.R. § 10.8(d)(2) (2011).

- (A) Activation of the Emergency Support Team and convening of the Catastrophic Disaster Response Group at FEMA headquarters;
- (B) Activation of the Regional Operations Center and deployment of the Emergency Response Team, in whole or in part;
- (C) Deployment of Urban Search and Rescue teams;
- (D) Situation Assessment including ground and aerial reconnaissance;
- (E) Information and data gathering and reporting efforts in support of emergency and disaster response and recovery and hazard mitigation . . .

. . . .

[The following actions taken under the Stafford Act:]

- (A) General Federal Assistance (§ 402);
- (B) Essential Assistance (§ 403);
- (C) Debris Removal (§ 407)
- (D) Temporary Housing (§408), except locating multiple mobile homes or other readily fabricated dwellings on sites, other than private residences, not previously used for such purposes;
- (E) Unemployment Assistance (§ 410);
- (F) Individual and Family Grant Programs (§ 411), except for grants that will be used for restoring, repairing or building private bridges, or purchasing mobile homes or other readily fabricated dwellings;

. . . .

- (O) Federal Emergency Assistance (§ 502).⁴⁸

These categorical exclusions are focused on enabling FEMA to rapidly respond to a disaster and perform life and property saving actions but provide a wide berth to allow the agency to fit the exclusions to a wide range of scenarios. The categorical exclusions for “general federal assistance”⁴⁹ and “essential assistance” cover much of FEMA’s role during and after a disaster. General federal assistance, pursuant to Section 402 of the Stafford Act, permits the President to “direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under Federal law (including personnel, equipment, supplies, facilities, and managerial, technical, and advisory services) in support of State and local assistance response or recovery efforts, including precautionary evacuations”⁵⁰ Accordingly, NEPA may

48. 44 C.F.R. § 10.8(d)(2)(xviii)–(xix) (2011).

49. *Id.*

50. Disaster Relief Act of 1974, Pub. L. No. 93-288, § 402(1) (as amended Pub. L. No. 116-

support state and local pre-disaster preparation and post-disaster recovery efforts at the direction of the president without the burden of NEPA preventing the time-sensitive response.

3. *Alternative arrangements*

The final recourse for agencies in need of NEPA exemptions is seeking permission from the CEQ by means of an *alternative arrangement*. This provides a final recourse for any agency that is unable to fully comply with the requirements of NEPA, for whatever reason, but especially pertinent for actions in time-sensitive situations such as disasters. The CEQ rule creating the alternative arrangement states:

Where emergency circumstances make it necessary to take an action with significant environmental impact without observing the provisions of these regulations, the Federal agency taking the action should consult with the Council about alternative arrangements. Agencies and the Council will limit such arrangements to actions necessary to control the *immediate impacts* of the emergency. Other actions remain subject to NEPA review.⁵¹

While alternative arrangements seem a convenient catch-all for handling the expediency of emergencies and disasters, the option is rarely used in disaster-related projects. Since 1980, the only projects to utilize the alternative arrangement were connected to rebuilding efforts in New Orleans after Hurricanes Katrina and Rita.⁵² This is likely because so many exemptions already exist for disaster-related projects. Specific to the rebuilding of New Orleans, the CEQ alternative arrangements were requested so that buildings, rather than being restored to a pre-disaster condition, could be improved—both for general modernization and also in preparation for the next storm.⁵³

48, August 22, 2019).

51. 40 C.F.R. § 1506.11 (2020) (emphasis added).

52. LINDA LUTHER, CONG. RESEARCH SERV., IMPLEMENTING THE NEPA FOR DISASTER RESPONSE, RECOVERY, AND MITIGATION PROJECTS (2011), <https://fas.org/sgp/crs/misc/RL34650.pdf>.

53. *Id.* The unfortunate irony here is that the exemptions make it very easy to rebuild facilities to a pre-disaster condition but do not allow improvements which might otherwise mitigate the effects of the next disaster. See *infra* Part II.A.

II. Correcting the Way NEPA Operates in the Disaster Context

The statutory, categorical, and alternative arrangement exemptions to NEPA are necessary components for time-critical projects, including disaster recovery, but the general scope of exemption creates gaps and undesirable secondary effects. Much support can be found for the apparent practicality of disposing with NEPA in response to disasters. This is expected, given the desire to “help” and “restore” communities and lives that have been affected by the disaster. However, entirely dismissing the role of NEPA during and after disasters may risk exacerbating the environmental damage of the disaster, does nothing to alleviate future disaster concerns, and removes a useful framework from the project planning, ultimately resulting in other gaps, delays, or noncompliance. Rather than exempting an entire class of projects from the requirements of NEPA, exemptions from specific requirements should be used to streamline the NEPA process. In this way, disaster recovery efforts will still benefit from NEPA without being bound to the same time-intensive process.

A. *NEPA Avoidance Perpetuates Status Quo*

One of the most often used exemptions for NEPA analysis is an exemption for projects that bring buildings or other infrastructure back to its pre-disaster state.⁵⁴ The well-intentioned idea being that restoration of the affected structure will not cause any *additional* unacceptable effect on the human environment because the restoration is merely returning the facility to the same state that existed before the disaster. Such restoration should not require additional environmental impact studies because its impact on the environment had already been realized. Not infrequently, these facilities were constructed in the era of NEPA, and so the Environmental Assessment or Environmental Impact Statements, having already been completed when the facility was first constructed, would require only partial updates to satisfy the requirement without an exemption. In many other instances, however, the facilities were originally constructed before NEPA was enacted, meaning that the exempted restoration allows reproduction of projects that never underwent an Environmental Assessment.

54. LINDA LUTHER, CONG. RESEARCH SERV., NEPA AND HURRICANE RESPONSE, RECOVERY, AND REBUILDING EFFORTS (2006).

The problem is not that projects are being approved without an environmental analysis, but that the exemption from the NEPA procedure creates an incentive for agencies to resort to the status quo as the path of least resistance. The status quo becomes the favored method for quickly rebuilding the affected area, rather than seeking appropriate improvements and changes which might better equip the community to withstand the next disaster.⁵⁵ Although improvement and resilience is often at the front of the discussion post-disaster, the reality is that in the chaos of a disaster, any reduction in procedure incentivizes a path, whether or not it is preferred.

B. NEPA as the Facilitating Umbrella Statute

While the NEPA-less route may be preferred, an exemption from NEPA does not extend exemptions from other environmental laws, such as the Endangered Species,⁵⁶ Clean Air,⁵⁷ Clean Water,⁵⁸ and National Historic Preservation Acts.⁵⁹ While taking NEPA out of the process may reduce the apparent bureaucratic burden, its removal may create other stumbling blocks in the permitting and approvals process. This is because NEPA is often treated as the umbrella statute for all environmental concerns relating to a project. In a way, NEPA is the facilitator and roadmap to guide the agency through the many environmental law obstacles that can stall or destroy a project. Removing NEPA may reduce the lead time for starting a project, but the reduction in planning upfront can cause delays later on.

The idea of NEPA serving as an umbrella for other all environmental statutes is based partly on the procedural nature of the Act. Rather than imposing specific environmental compliance requirements, NEPA requires the consideration of the environmental ramifications of the action, often by following a procedure that analyzes the action in light of other environmental laws.⁶⁰ For many agencies, agency-specific NEPA

55. See LUTHER, *supra* note 52 (addressing the inability of community leaders to navigate the hurdles of NEPA during the chaos of post-disaster relief).

56. 16 U.S.C. § 1531 (2018).

57. 42 U.S.C. § 7401 (2018).

58. 33 U.S.C. § 1251 (2018).

59. 16 U.S.C. § 470 (2018).

60. For example, the Department of Transportation's guidelines suggest that administrators should "[t]o the maximum extent practicable and at the earliest possible time . . . coordinate and integrate all relevant environmental and planning studies, reviews, and consultations into the NEPA process" including, specific to the Department, compliance with the National Historic Preservation Act, Endangered Species Act, Clean Water Act, and Coastal Zone Management Act, among others. *Order DOT 5610.1D: Procedures for Considering the Environmental Impacts*, DEPARTMENT OF TRANSPORTATION (Dec. 16, 2016), <https://www.transportation.gov/office-policy/transportation->

procedures specify how to ensure compliance with the Endangered Species, Clean Air, Clean Water, and National Historic Preservation Acts. It can often be these other acts, rather than NEPA, that cause the delays which have become synonymous with NEPA compliance.⁶¹ Doing away with NEPA for disaster-related projects does not eliminate the administrative burden of compliance with the other statutes, but may result in disruptions and delays if the sponsoring or approving agency is no longer following its routine.⁶²

C. Streamlining Recovery by Expanding NEPA's Role During Recovery

Despite the blame, NEPA could become a tool for streamlining, not delaying projects. Following Hurricane Katrina, some stakeholders in New Orleans cited NEPA as the barrier preventing federal funds from being efficiently distributed.⁶³ This is because NEPA often acts as a gatekeeper for federal funds, preventing money from being distributed for projects that do not pass muster with other environmental statutes.

As the frequent facilitator of environmental compliance requirements, one solution to expedite post-disaster recovery may be to expand agency-specific NEPA procedures further. Doing so would allow the agencies to promulgate specific guidelines for specific types of disasters upfront, before the urgency of a disaster prevents thoughtful consideration. This way the CEQ, EPA, and other stakeholders may adequately participate in the discussion and approval of the procedures. Such a process would also provide a framework for Congress to plan and act for the alleviation or exemption of other environmental compliance requirements in emergency situations. One example of such preemptive environmental legislation appears in the Endangered Species Act.⁶⁴ In order to obtain an exemption from the Endangered Species Act, an agency or other qualified applicant

policy/dot-order-56101d-procedures-considering-environmental-impacts. Rather than specify compliance for each environmental statute separately, NEPA is used as the catchall to ensure that the agency is meeting all of the environmental regulatory requirements for the given project.

61. For example, a logging project in a national forest may be approved and undergo the NEPA process. However, if during the logging activities, an endangered species is identified that the EA or EIS did not adequately address, the logging activities will be indefinitely stopped until adequate mitigation measures are approved by the Fish and Wildlife Service.

62. *See infra* note 84.

63. LUTHER, *supra* note 52 (citing Hearing before Senate Committee on Banking, Housing and Urban Affairs, "Two Years After the Storm: Housing Needs in the Gulf Coast," Statement of Edgar A.G. Bright, III, CMB President, Standard Mortgage Corporation Member of the Residential Board of Governors of the Mortgage Bankers Association (Sept. 25, 2007), <https://www.banking.senate.gov/imo/media/doc/bright.pdf>).

64. 16 U.S.C. § 1531 (2018).

is required to submit an extensive application to the Secretary of the Department of Interior, who then holds formal hearings and prepares a report for the Endangered Species Committee. This committee then makes its own final determination, including possible mitigation requirements.⁶⁵ The whole process can take years. In the disaster context, the statute provides:

In any area which has been declared by the President to be a major disaster area under the Disaster Relief and Emergency Assistance Act, the President is authorized to make the determinations required by subsections (g) and (h) of this section for any project for the repair or replacement of a public facility substantially as it existed prior to the disaster under section 405 or 406 of the Disaster Relief and Emergency Assistance Act, and which the President determines (1) is necessary to prevent the recurrence of such a natural disaster and to reduce the potential loss of human life, and (2) to involve an emergency situation which does not allow the ordinary procedures of this section to be followed. Notwithstanding any other provision of this section, the Committee shall accept the determinations of the President under this subsection.⁶⁶

In this way, the Endangered Species Act has a built-in disaster relief exception that permits the President to make specific determinations relating to the Endangered Species Act in a disaster area for projects restoring facilities to pre-disaster condition. While the exemption's requirement for status quo restoration is at odds with other arguments made,⁶⁷ the exemption stands as a model of disaster-specific language that a disaster-specific NEPA procedure may incorporate. Similar exemptions could be utilized across the spectrum of environmental compliance. The creation of agency disaster-specific NEPA procedures would help identify appropriate exemptions that could be recommended to congress or otherwise created by the agencies with CEQ approval, and would also serve as an exercise of agency preparation for navigating the post-disaster compliance landscape.

D. Specific Rather than General Exceptions for Disaster Recovery

Rather than completely exempt disaster relief from NEPA, the Act's requirements could be tailored to fit the urgency of the efforts. In this way,

65. For a detailed explanation of the process, see M. LYNNE CORN ET AL., CONG. RESEARCH SERV., ENDANGERED SPECIES ACT (ESA): THE EXEMPTION PROCESS (2017).

66. 16 U.S.C. § 1536(p) (2018).

67. See *supra* Part II.A.

agencies may benefit from utilizing the framework to ensure compliance with environmental laws, communities may benefit from the additional environmental and disaster specific considerations, and urgent projects will benefit from scaled down requirements which will streamline compliance. The underlying purpose of NEPA is to force agencies and others to take a hard look at the impact of their projects; this can still be achieved in the flurry of disaster recovery with appropriate changes.

One existing legislative model that demonstrates how the requirements of the Act can largely be fulfilled while reducing the administrative burden is the Safe, Accountable, Flexible, Efficient, Transportation Equity Act (SAFETEA).⁶⁸ While only one of many acts that have been used to winnow down all of the requirements of NEPA, SAFETEA demonstrates how NEPA can be modified for a specific objective without completely dismantling all of the benefits of the Act with a general exemption. The Department of Transportation was struggling with a large backlog of incomplete and stalled projects due in part to the extensive Environmental Impact Statement requirements that accompany projects spanning significant geographical areas.⁶⁹ The full list of NEPA reductions may be instructive, but specific actions included below should be considered in the disaster relief context.

Under SAFETEA, the Department of Transportation was required to coordinate with state, local, and tribal agencies to receive input on the environmental process, but the public comment period was all but eliminated. The agency was not required to consider alternatives to the proposed action to the same degree as it would under full NEPA, and Congress required final decisions to be promulgated within thirty days of commencement or else be notified of the reason for the delay.⁷⁰ Private citizens were barred from suing under the Administrative Procedure Act for any arbitrary and capricious decisions, but the Department was required to furnish additional information about its decisions to be published on the Federal Register.⁷¹

A similar set of reductions to the NEPA process could be used after disasters, proposed and controlled by the Council on Environmental

68. Safe, Accountable, Flexible, Efficient Transportation Equity Act, Pub. L. No. 109-59, 119 Stat. 1144 (2005).

69. Larger geographical areas, in contrast to smaller areas, often have greater varieties of ecologies, higher numbers of alternative options for the agency to consider, and a higher number of stakeholders to manage and satisfy.

70. *A Summary of Highway Provisions in SAFETEA-LU*, FEDERAL HIGHWAY ADMINISTRATION (Aug. 25, 2005), <https://www.fhwa.dot.gov/safetealu/summary.htm>.

71. *Id.*

Quality (CEQ). Especially pertinent, the CEQ could authorize an elimination of the public comment period, a reduction in the requirements for evaluating alternative options, and a moratorium on litigation stemming from the disaster-specific projects. In exchange, agencies could be required to prepare disaster-specific NEPA compliance plans in advance, providing specific guidelines for how the agency intends to expedite the NEPA process for different disaster scenarios. In exchange for the reduced hurdles, the agencies would provide greater amounts of information to the public regarding the known environmental impacts and the decisions being made.

Other conditions could be imposed depending on the type or magnitude of the disaster. The purpose always being to preserve the NEPA framework for facilitation, while condensing the procedural timeline. This would also allow NEPA to serve as the framework for accounting for disaster specific impact of federal projects. This can be accomplished by incorporating disaster-specific considerations into the NEPA process.

III. To Satisfy the Statutory Mandate of NEPA, Agencies Must Account for a Project's Impact on Disasters

The language of NEPA suggests it is an ideal vehicle for ensuring that federal agencies are taking disaster impact and mitigation into account before proceeding with agency actions. The Act's purpose, to encourage "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,*"⁷² necessitates that the effect of disasters on agency projects should be evaluated as part of the NEPA process. This includes both the project's aggravation of disasters generally, and project's impact on the disasters' effects.⁷³

Including disaster effects analysis under NEPA would mandate all federal agencies to preemptively consider the effect of its actions on natural disasters. It has been argued that "[t]he challenge for policy makers who wish to raise awareness of and mitigate natural hazards is to gain the

72. 42 U.S.C. § 4321 (2018) (emphasis added).

73. As an example, consider New Orleans. To receive a Section 404 permit authorizing the infill of wetlands along coastal Louisiana, the effect that the removal of wetlands would have on the inland reach of a hurricane would have to be included, as well as the flooding of the infilled land in the case of a hurricane. NEPA would not proscribe granting the permit due to the bad effects, but if the studied effects are bad enough, the public disclosure of the risks would influence the Corps' decision as to whether the permit is appropriate. These permits are governed by the Administrative Procedure Act's arbitrary and capricious standard, so it would also be a tool for the agency to deny permits that might otherwise require approval.

attention of potential victims and local officials before the disaster strikes.”⁷⁴ Though the requirement would not feasibly apply retrospectively to past projects, inclusion of disaster effects in the NEPA analysis would satisfy a critical need to keep disaster-related considerations at the forefront of major federal actions.

One of the major criticisms of disaster-relief policy is that it “ultimately responds to an event by advancing policy that deals retrospectively with deficiencies in the delivery of disaster relief, while rarely if ever dealing prospectively with future disasters.”⁷⁵ Including this analysis in NEPA will help to reverse this perspective. Additionally, by including disaster effects in the NEPA equation and reducing the NEPA exemptions for disasters, systematic resilience to the next disaster event will increase as federal funds for relief are conditioned on projects that have taken these disasters into account.

A. Using NEPA to Account for Disasters

As aforementioned, NEPA does not require any specific outcome, rather it requires agencies to take a hard look at the environmental impact of a project before proceeding. As a so-called “umbrella statute,” it often carries with it the requirements of other environmental statutes, which often have specific requirements based on environmental objectives and concerns. This includes, for example, everything from the effect of an action on animals listed as endangered,⁷⁶ to the method of transporting hazardous waste according to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).⁷⁷ Complying with NEPA generally requires checking the relevance and compliance with these other environmental laws. The type and scope of the project, therefore, have a significant impact on the analysis required. Logging activities in a national forest near a known nesting area for an endangered species will require information and planning to ensure that none of the species are impacted by the logging under the ESA, but the same activity would likely not require any discussion regarding the method of transporting the logs under CERCLA.⁷⁸

74. THOMAS A. BIRKLAND, *AFTER DISASTER: AGENDA SETTING, PUBLIC POLICY, AND FOCUSING EVENTS* 50 (Georgetown Univ. Press 1997).

75. *Id.* at 51.

76. 16 U.S.C. § 1538 (2018).

77. 42 U.S.C. § 9607 (2018).

78. An assumption here is that the trees in question are not classified as hazardous substances.

NEPA generally requires an assessment of *any* environmental impacts, but what those “impacts” are is largely guided by the requirements of other laws. Including disaster impacts and effects within the NEPA analysis could take shape in two ways. First, the disaster analysis could sit wholly within NEPA as a general requirement. In this way, NEPA would require a hard look at these impacts, but not prescribe any specific action. Accountability for agencies under this method would largely be left to potential litigants. An alternative to this general requirement would be to require that disaster impact is considered for each of the substantive environmental laws in question for the given project. Under this approach, compliance for each statute would have to be evaluated for the probability of disasters in a given area. Compliance, for example, with the Clean Air Act and Clean Water Act would need to be considered in the context of a probable natural disaster. Even where these statutes provide specific private and public exemptions for natural disasters, federal agencies would be required to take a hard look at the project’s impact in a natural disaster.

Since NEPA is only a procedural requirement, adding disaster impact to the list of assessments begs the question of whether this would produce any desired effect. While NEPA does not require specific actions, the requirement to take a hard look and to consider alternatives will invariably impact agency decisions. The agency may still pick the most disastrous path among alternatives, but without a rational basis and appropriate administrative record, it will be subject to judicial review.⁷⁹ Including the disaster analysis within NEPA does not alone incentivize agencies to proactively mitigate these risks, but the information would inform a rational response. Further, in areas of heightened disaster concern, the threat of private litigation might be enough incentive.⁸⁰ Projects that have significant impacts that are not properly addressed and mitigated are also subject to public outcry, protest, and other political ramifications.⁸¹ This is

79. *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402, 402, 407 (1971), *abrogated by* *Califano v. Sanders*, 430 U.S. 99 (1977).

80. *See, e.g.*, David R. Hodas, *Enforcement of Environmental Law in A Triangular Federal System: Can Three Not Be A Crowd When Enforcement Authority Is Shared by the United States, the States, and Their Citizens?*, 54 MD. L. REV. 1552, 1624 (1995) (“[I]n empowering citizens as private attorneys general . . . , Congress intended to limit the ability of those in the regulated community to ‘capture’ their regulating agencies.”).

81. *See, e.g.*, Dara Lind, *Congress’s Deal on Immigration Detention, Explained*, VOX (Feb. 12, 2019), <https://www.vox.com/2019/2/12/18220323/immigration-detention-beds-congress-cap> (reporting that Immigration and Customs Enforcement, part of the Department of Homeland Security, received conditioned funding that put a cap on the number of immigrant detainees it may have at one time—a response to earlier public outcry regarding the condition of detention centers).

the *bite* of NEPA—failing to satisfy all of the requirements at the onset of the project only increases the project’s risk of death by litigation. For major and important projects, this risk motivates agencies to meet every threshold of the Act to ensure a timely dismissal or summary judgement.

B. To What Extent Would Disaster Effects be Evaluated?

A significant part of determining the scope of a NEPA analysis for any agency action is an evaluation of direct and indirect effects. Beyond the significant direct environmental effects of a project there are cumulative and indirect effects. Cumulative effects are those that result from the incremental impact of the project when considered in the aggregate, alongside other actions in the past, present, and reasonably foreseeable future, regardless of the agency or private actor.⁸² Indirect effects are those that are caused by the project, but are further removed in time or distance, but are still reasonably foreseeable.⁸³ Both of these impacts play a role in determining the effect of the project on the environment in cases of disaster.

To account for disasters under NEPA, agencies may be required to consider direct, indirect, and cumulative effects of project impact during disasters. Accounting for cumulative effects of a disaster requires agencies to consider compounding effects of a disaster given other existing and future public and private projects, not just the immediate agency project. A wetland infill permit, for example, would require the Army Corps of Engineers to consider the disaster impact of the proposed developmental use of the infilled land, though likely not the impact of an unknown use after a period of redevelopment in the distant future.⁸⁴ That infill project’s disaster impact would also be evaluated in light of other projects in the area, limited not only to other infill projects, and also known, future neighboring projects.

Both in and outside of the disaster context, there is a limitation on the extent of indirect responsibility one project will have for its impact. This is practical reality, due to the infinite extent of secondary, tertiary, and further impacts that might derive from the agency action. Courts generally

82. 40 C.F.R. § 1508.7 (2012).

83. 40 C.F.R. § 1508.8(n) (2012).

84. For one example of the cumulative effects requirement for a federal action that enables private development, see *Hall v. Norton*, 266 F.3d 969, 978–79 (9th Cir. 2001) (reversing summary judgment where the Bureau of Land Management, in an EIS prepared for the sale of federal land, had failed to evaluate the impact that future development on the land would have on emission in the Las Vegas valley).

maintain that an “agency need not speculate about all conceivable impacts, but it must evaluate the reasonably foreseeable significant effects of the proposed action.”⁸⁵ To understand the term “reasonably foreseeable,” courts have congregated around the idea of an impact “sufficiently likely to occur that a person of ordinary prudence would take it into account in reaching a decision.”⁸⁶

C. Determining the Relevant Type and Magnitude of Disaster

To properly address disaster impact, agencies would be required to address the relevant type and the relevant magnitude of the disaster. The reasonableness standard would inform both of these decisions, requiring the agency to take a hard look at the relevant types and magnitudes of disaster for the given project area. One way to decide when more substantial disaster estimations are appropriate is to consider the type of impact the project will have in the disaster. Projects specifically intended to mitigate disaster effects will have a “direct effect” in the disaster context and will require a heightened standard. Based on the amount of “directness,” the need for higher levels of mitigation correspondingly increases—suggesting that more substantial storms should be considered in the evaluation. Other projects might have some combination of indirect and cumulative effects and be subject to the lower reasonableness standard.

The first step in addressing the type and magnitude of a disaster for a given project is to look at the project’s purpose, to determine whether a “direct effect” standard should guide the disaster considerations. Projects that are intended to mitigate disaster effects or otherwise provide for public welfare *during* a disaster would necessarily require a higher standard, and therefore consideration of a higher magnitude disaster, scaled to the reasonableness of the project location.⁸⁷ This is justified because insufficiently estimating the disaster impact for this type of project has an outsized consequence in the disaster context. For example, a flood control project in Houston⁸⁸ might consider an average “major storm,” but still fall

85. *Dubois v. U.S. Dept. of Agric.*, 102 F.3d 1273, 1286 (1st Cir. 1996).

86. *Sierra Club v. Marsh*, 976 F.2d 763, 767 (1st Cir. 1992).

87. For example, levees, sea walls, flood prevention reservoirs, retrofitting infrastructure for earthquake readiness, and tornado warning systems among others.

88. *Watershed Overview*, HARRIS COUNTY FLOOD CONTROL DISTRICT, <https://www.hcfcd.org/Find-Your-Watershed/addicks-reservoir> (Apr. 14, 2020) (“Together with Barker Reservoir, Addicks Reservoir was built in the 1940s as part of a federal project to reduce flooding risks along Buffalo Bayou . . .”).

desperately short⁸⁹ of the most significant tropical cyclone rainfall event in United States history.⁹⁰ Under the disaster-specific NEPA analysis, consideration of only an average major storm would not be sufficient to meet the reasonableness standard.

All other impacts for projects not addressing disaster mitigation would fall under the indirect and cumulative umbrellas, and be subject to a reasonableness inquiry for appropriate applicability. Under this inquiry, some projects will require no disaster considerations at all. Others, though not a project specifically designed to mitigate the effects of a disaster, will require extensive planning due to the location, timing, type, or other characteristics of the project. For example, the Bureau of Land Management leases federal land for oil and gas drilling and permits wells.⁹¹ The Bureau might consider the disaster impact of fracking activities, specifically on earthquake activity.⁹² The largest recorded earthquake believed to be induced by well stimulation was a magnitude 5.8 quake in central Oklahoma.⁹³ Given this information, it may not be reasonable to require an evaluation of magnitude 9.0 quakes when performing a disaster impact evaluation for future wells.⁹⁴ But, locating the wells close to infrastructure, homes, or other susceptible areas would warrant a higher standard for the given area than an otherwise equivalent well isolated from any development.

In considering reasonableness for the question of type, agencies could consider the historical presence of disasters in a project area, in addition to future forecasting. It might make sense, then, for the impact of a project in Florida to be evaluated in the context of hurricanes, but the same impacts would not be relevant for a project in Nebraska. Similarly, it might

89. See *Flooding Impacts in Connection with the Reservoirs*, HARRIS COUNTY FLOOD CONTROL DISTRICT, <https://www.hcfd.org/Hurricane-Harvey/Countywide-Impacts/Flooding-Impacts-in-Connection-with-the-Reservoirs> (last visited Oct. 12, 2020).

90. Merrit Kennedy, *Harvey the 'Most Significant Tropical Cyclone Rainfall Event in U.S. History,'* NPR (Jan. 25, 2018), <https://www.npr.org/sections/thetwo-way/2018/01/25/580689546/harvey-the-most-significant-tropical-cyclone-rainfall-event-in-u-s-history>.

91. 43 C.F.R. § 3160 (2020).

92. For current fracking permit requirements, see *id.* (Hydraulic Fracturing on Federal and Indian Lands; Oil and Gas).

93. *How Large are the Earthquakes Induced by Fluid Injection*, USGS, https://www.usgs.gov/faqs/how-large-are-earthquakes-induced-fluid-injection?qt-news_science_products=0#qt-news_science_products (last visited Oct. 12, 2020).

94. The Richter scale is based on a logarithmic scale of amplitude as measured by a seismograph, so each full whole number step represents a tenfold increase in measured amplitude, corresponding to roughly thirty-one times more energy than the previous number. In this example, a magnitude 9.0 earthquake has roughly one hundred times more energy than a magnitude 6.0 quake.

be reasonable to consider the hurricane disaster impact of a coastal bridge project in Texas, but it might be unreasonable to consider the same hurricane impact for a project hatching and releasing sea turtles in the same area.

The purpose of including the disaster impact effects under NEPA would not be advanced by a push to require the most stringent evaluations, such as the largest storm, or the most unlikely disasters. These requirements miss the mark. First, the evaluation continues to be procedural in nature. Adding needlessly strict requirements raises the hurdles but does not prevent the most detrimental projects from progressing. Requiring a reasonableness standard in determining the relevant disaster serves to put the agency on notice of the potential disasters, while protecting the agency decisions from all but the most blatant errors in judgement.⁹⁵ The purpose of requiring agencies to look at the disaster effects is no different in form than the original purpose of NEPA—to require agencies to take a hard look and consider the impacts of their projects before any dirt is turned, not to prescribe any single path forward.

IV. Conclusion

NEPA can be an asset for disaster-relief and mitigation efforts, rather than merely hindering progress. During disaster-relief, this may be accomplished by preserving NEPA's framework and limiting general exemptions, while streamlining the process by removing specific time-intensive requirements. NEPA becomes the appropriate vehicle for disaster mitigation efforts by requiring agencies to take a hard look at the disaster impact of the project during the environmental assessment. This way, relevant disaster impacts are considered before any shovels hit the ground.

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⁹⁵. See *Chevron U.S.A., Inc. v. Nat. Res. Defense Council, Inc.*, 467 U.S. 837 (1984) (explaining that when administrative actions are taken subject to a statutory mandate, agency interpretations of the statute are given deference where there is not a violation of a clear mandate and the agency's interpretation is reasonable).