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Monsanto Co. v. Geertson Seed Farms: Limiting District Courts' Equitable Discretion to Grant Permanent Injunctions for NEPA Violations

REVIEWING FOR THE FIRST TIME AN ISSUE INVOLVING genetically modified crops, the Supreme Court of the United States in *Monsanto Co. v. Geertson Seed Farms*¹ restricted the ability for district courts to exercise their equitable discretion jurisdiction to issue permanent injunctions for violations under the National Environmental Policy Act (NEPA).² The district court found that the Animal Plant and Health Inspection Service (APHIS), a federal agency, violated NEPA by fully deregulating the use of Roundup Ready alfalfa (RRA), a type of alfalfa genetically modified to tolerate Roundup Ready herbicide, without first preparing an Environmental Impact Statement (EIS).³ On review, the Court held that the district court abused its discretion by enjoining APHIS from partially deregulating RRA and prohibiting most future planting of RRA until the completion of an EIS.⁴ However, the Court erred by applying the standard for irreparable harm under the four-factor balancing test for issuing permanent injunctions without considering the precautionary goals of NEPA, the irreparable nature of environmental harms, and the equitable discretion jurisdiction of district courts.⁵ Furthermore, the Court's own application of the four-factor test demonstrates the unworkable nature of this rule.⁶ Ultimately, the Court's decision confines the exercise of equitable discretion by district courts to issue injunctions for NEPA violations and limits the remedial options available for environmental plaintiffs.⁷

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1. *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743 (2010).

2. See *infra* Part IV.A.

3. *Geertson Farms Inc. v. Johanns*, No. C 06-01075 CRB, 2007 WL 518624, at *12 (N.D. Cal. Feb. 13, 2007).

4. See *Monsanto*, 130 S. Ct. at 2761 (explaining that the district court's broad injunction was improper for the same reasons the injunction against partial deregulation of RRA was improper).

5. See *infra* Part IV.A.

6. See *infra* Part IV.B.

7. See *infra* Part IV.A.

I. THE CASE

A. Factual Background

The Monsanto Company (Monsanto) manufactures agricultural products, including herbicides, pesticides, and genetically modified (GM) seeds.⁸ In the 1970s, Monsanto discovered the use of glyphosate⁹ as an herbicide.¹⁰ Monsanto sold this new herbicide as Roundup,¹¹ and today, glyphosate is one of the most widely used active ingredients in herbicides.¹² Then, in the 1980s, Monsanto developed GM seeds and began conducting the first field trials involving GM seeds in the United States.¹³ To compliment the success of Roundup herbicides, Monsanto introduced its first GM crop, Roundup Ready soybean seeds, for commercial use in 1996.¹⁴ Roundup Ready seeds are genetically modified to provide in-seed tolerance to glyphosate.¹⁵ This revolutionary in-seed tolerance allows farmers to treat GM crops

8. See *Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1133 (9th Cir. 2009) (explaining the nature of the Monsanto Company); see also HENRY W. LANE ET AL., *INTERNATIONAL MANAGEMENT BEHAVIOR: LEADING WITH A GLOBAL MINDSET*, 122 (6th ed. 2009) (describing the potential benefits of genetically engineered crops, such as herbicide, pest, and disease resistance, increased nutritional content, and the ability to grow crops in harsh environments).

9. See *R.E.D. Facts: Glyphosate*, U.S. ENVIRONMENTAL PROTECTION AGENCY (Sept. 1993), available at <http://www.epa.gov/oppsrrd1/REDs/factsheets/0178fact.pdf> (“Glyphosate is a non-selective herbicide registered for use on many food and non-food field crops as well as non-crop areas where total vegetation control is desired.”).

10. See LANE ET AL., *supra* note 8, at 121 (discussing Monsanto’s discovery of the glyphosate herbicide, Roundup, and the success of the product).

11. See Rick A. Relyea, *The Lethal Impact of Roundup on Aquatic and Terrestrial Amphibians*, 15 *ECOLOGICAL APPLICATIONS* 1118, 1118 (2005) (explaining that Roundup herbicide is a combination of the active ingredient glyphosate and an inactive ingredient used as a surfactant, which allows the chemical to seep into the plant).

12. See Stephen B. Powles & Christopher Preston, *Evolved Glyphosate Resistance in Plants: Biochemical and Genetic Basis of Resistance*, 20 *WEED TECH.* 282, 282 (2006) (stating that glyphosate is the dominant herbicide used world-wide).

13. See *Who We Are, Company History*, MONSANTO, <http://www.monsanto.com/whoweare/Pages/monsanto-history.aspx> (last visited Feb. 11, 2011) (describing the original field trials that the Monsanto Company conducted in 1987 with crops produced through biotechnology).

14. See *id.* (stating that in 1996, “Roundup Ready Soybeans [were] introduced, providing farmers with in-seed herbicide tolerance to Roundup and other glyphosate-based herbicides”); see also *Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1133 (9th Cir. 2009) (noting that Monsanto began developing Roundup Ready Alfalfa in the 1990s).

15. See Paul C. C. Feng et. al., *Glyphosate-Resistance Crops: Developing the Next Generation Products*, in *GLYPHOSATE RESISTANCE IN CROPS AND WEEDS: HISTORY, DEVELOPMENT, AND MANAGEMENT*, 45, 46–47 (Vijay K. Nandula ed., 2010) (providing an overview of the biotechnology used to confer glyphosate resistance in plants). Genetic modification is often interchanged with the phrases “transgenic” and “genetic engineering,” which all refer to the process of taking a gene from one organism (such as a bacterium) and inserting it into another species (such as a plant). See MERRIAM WEBSTER’S COLLEGIATE DICTIONARY 485, 1254 (10th ed. 1997) (defining “genetic engineering” and “transgenic”); see also Robert G. Parker, Alan C. York & David L. Jordan, *Comparison of Glyphosate Products in Glyphosate-Resistant Cotton (*Gossypium hirsutum*) and Corn (*Zea mays*)*, 19 *WEED TECH.* 796, 796 (2005) (explaining how advances in biotechnology allowed scientists to identify genes in bacteria that produce proteins resistant to chemicals used in herbicides, such as glyphosate).

with Roundup herbicide to kill surrounding weeds without destroying the crops themselves.¹⁶

APHIS has the authority to regulate “the introduction of organisms and products altered or produced through genetic engineering that are plant pests or are believed to be plant pests.”¹⁷ For GM crop manufacturers seeking deregulated status of a GM crop, APHIS first requires the GM crop manufacturers to conduct field trials to determine the potential environmental impacts of their GM seeds.¹⁸ Upon the completion of the field trials, the GM crop company may petition APHIS to deregulate the use of the GM crop as long as APHIS determines the GM crop is not a plant pest.¹⁹

The GM crop at issue in *Monsanto Co. v. Geertson Seed Farms* was Roundup Ready alfalfa (RRA).²⁰ Initially, APHIS considered RRA a regulated organism and required anyone intending to plant RRA to first obtain permission from APHIS.²¹ Monsanto, seeking to eliminate this requirement, petitioned APHIS in May 2003 to completely deregulate the use of RRA.²² In 2005, the United States Department of Agriculture (USDA) through APHIS approved the complete deregulation of RRA.²³

However, APHIS’s decision to deregulate the use of RRA triggered the statutory protections of NEPA.²⁴ Under NEPA, APHIS may grant a petition to deregulate a GM crop after either conducting an Environmental Impact Statement (EIS) or preparing an Environmental Assessment (EA) and issuing a finding of no significant impact (FONSI).²⁵ Under NEPA, an agency is only required to complete an EIS if the agency will conduct “[f]ederal actions significantly affecting the quality of the human environment.”²⁶

16. See Gerald M. Dill et. al., *Glyphosate: Discovery, Development, Applications, and Properties, in* GLYPHOSATE RESISTANCE IN CROPS AND WEEDS: HISTORY, DEVELOPMENT, AND MANAGEMENT, 1, 2 (Vijay K. Nandula ed., 2010) (explaining that glyphosate herbicides are broad-spectrum weed killers that target EPSP synthase, an enzyme which is found in all plants and critical for their survival). Glyphosate herbicides also destroy crops that are not genetically engineered to be resistant to glyphosate. *Id.*

17. 7 C.F.R. § 340.0(a)(2) n.1 (2011). See *id.* § 340.1 (defining plant pests).

18. *Id.* §§ 340.3(c)(5), 340.6(c)(5).

19. See *id.* § 340.6(c)(5) (explaining that the petition for nonregulated status must include field test results); see also Thomas P. Redick & A. Bryan Endres, *Litigating the Economic Impacts of Biotech Crops*, 22 NAT. RESOURCES & ENV’T, Spring 2008, at 24 (explaining how a biotech company can deregulate after demonstrating to APHIS that the new crop is not a plant pest).

20. *Geertson Seed Farms v. Johanns*, No. C 06-01075 CRB, 2007 WL 518624, at *1 (N.D. Cal. Feb. 13, 2007).

21. *Id.*

22. *Id.*

23. *Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1133 (9th Cir. 2009). See *Monsanto Co. and Forage Genetics International; Availability Determination of Nonregulated Status for Alfalfa Genetically Engineered for Tolerance to the Herbicide Glyphosate*, 70 Fed. Reg. 36917, 36917 (June 27, 2005) (announcing nonregulated status for two lines of Monsanto’s glyphosate-resistant alfalfa).

24. *Geertson Seed Farms*, No. C 06-01075 CRB, 2007 WL 518624, at *1–*2.

25. 42 U.S.C. § 4332(2)(C) (2006). See also 40 C.F.R. §§ 1508.9, 1508.13 (2010) (explaining the relationship between environmental assessments and a finding of no significant impact and defining both terms); Redick & Endres, *supra* note 19, at 24 (explaining how the APHIS may grant deregulation after issuing a finding of no significant impact under NEPA); *infra* Part II.A. for a discussion of NEPA.

26. 42 U.S.C. § 4332(2)(C).

In response to Monsanto's deregulation petition, APHIS completed a draft EA and accepted public comments.²⁷ APHIS received a total of 663 comments, 520 of which opposed RRA deregulation.²⁸ Organic farmers opposed RRA deregulation since gene transmission between RRA seeds and their organic alfalfa could limit their ability to market their crops as organic.²⁹ With pollinating bees able to travel up to two miles, this concern over gene transmission between RRA and organic alfalfa remains.³⁰ Genetic contamination also caused organic farmers to fear exclusion from export markets such as Japan's, which limit the level of GM alfalfa to one percent of the total alfalfa crop.³¹ Other commentators raised concerns over the potential for an increase in glyphosate-resistant weeds and the environmental impacts associated with the expected increased herbicide usage due to RRA deregulation.³²

Despite these concerns, APHIS issued a FONSI and approved RRA deregulation.³³ The FONSI explained that the full deregulation of RRA would allow farmers to plant RRA within close proximity of organic alfalfa.³⁴ Instrumental to the RRA deregulation, APHIS placed the burden on organic farmers to ensure organic crops were not contaminated with RRA.³⁵

B. Procedural History

In opposition to APHIS's decision, Geertson Seed Farms, the Sierra Club,³⁶ and other farmers and environmentalists filed a lawsuit against Mike Johanns, the Secretary of the USDA, in the United States District Court for the Northern District of California.³⁷ The plaintiffs claimed that APHIS violated NEPA, the Endangered Species Act (ESA), and the Plant Protection Act (PPA) by not preparing an EIS.³⁸ The district court reviewed APHIS's decision not to prepare an EIS under the arbitrary and capricious standard and concluded that the APHIS did not give the

27. *Geertson Seed Farms*, No. C 06-01075 CRB, 2007 WL 518624, at *2. See 7 C.F.R. § 340.6(d)(2) (describing the notice and comment procedure).

28. *Geertson Seed Farms*, No. C 06-01075 CRB, 2007 WL 518624, at *2.

29. *Id.* at *4-*5. Gene transmission refers to the contamination of organic alfalfa with the gene that makes Roundup Ready alfalfa resistant to glyphosate herbicides. *Id.* at *2.

30. *Id.* at *5.

31. *Id.* at *2, *7. *But see* Redick & Endres, *supra* note 19, at 25 ("Since a small percentage of U.S. alfalfa (1 to 3 percent with a value of approximately \$480 million) is exported, and most of that to Japan, the export-related aspects of the underlying facts have been rendered largely moot.").

32. *Geertson Seed Farms*, No. C 06-01075 CRB, 2007 WL 518624, at *2.

33. *Id.*

34. See *id.* (noting that once deregulated, RRA is not long subject to isolation distances).

35. See *id.* (explaining that the organic operations would be responsible for preventing cross-contamination).

36. The Sierra Club is a grassroots environmental organization that advocates for alternative energy and nature conservation. *Welcome to the Sierra Club!*, *About*, SIERRA CLUB, <http://www.sierraclub.org/welcome/> (last visited Nov. 2, 2011).

37. *Geertson Seed Farms*, No. C 06-01075 CRB, 2007 WL 518624, at *1.

38. *Id.* at *1, *3.

environmental impacts of RRA deregulation the “hard look” required by NEPA.³⁹ Moreover, the district court found that the plaintiffs raised “substantial questions” indicating that RRA could significantly impact the environment.⁴⁰ As a result, the district court granted summary judgment in favor of the plaintiffs and required APHIS to prepare an EIS.⁴¹

In the remedial phase of the lawsuit, the district court permitted the parties to submit proposed final judgments.⁴² APHIS proposed a partial deregulation of RRA pending the completion of the EIS.⁴³ To maintain the status quo while considering the proposed judgments, the district court issued a preliminary injunction.⁴⁴ The preliminary injunction prohibited all future planting of RRA after March 30, 2007, with the exception of farmers who purchased RRA relying on APHIS’s deregulation order.⁴⁵ In addition, the district court vacated APHIS’s deregulation decision, returning RRA to a regulated article.⁴⁶ After finding APHIS’s proposal inadequate, the court permanently enjoined APHIS from completely or partially deregulating RRA until completion of an EIS.⁴⁷ The district court’s permanent injunction also imposed handling conditions, proposed by APHIS, on any already-planted RRA.⁴⁸

39. *See id.* at *12 (explaining that APHIS concluded there is no significant impact of gene transmission between RRA and organic alfalfa because it is up to the organic farmers to prevent cross-contamination, even though APHIS did not determine whether farmers could actually protect their crops from such contamination).

40. *See id.* (“Substantial questions are raised regarding (1) the deregulation of Roundup Ready alfalfa without any geographic restrictions will lead to the transmission of the engineered gene to organic and conventional alfalfa; (2) the possible extent of such transmission; and (3) farmers’ ability to protect their crops from acquiring the genetically engineered gene.”). The District court also felt substantial questions were raised as to whether RRA would lead to glyphosate-resistant weeds. *Id.*

41. *Id.* *See* *Geertson Farms Inc. v. Johanns*, No. C. 06-01075, 2007 WL 1302981, at *4 (N.D. Cal. May 3, 2007) (stating that APHIS indicated that it could take up to two years to complete an EIS). However, APHIS announced on January 27, 2011 its decision to fully deregulate RRA. Cindy J. Smith, Administrator, APHIS, *Record of Decision: Glyphosate – Tolerant Alfalfa Events J101 and J163: Request for Nonregulated Status* (Jan. 27, 2011), available at http://www.aphis.usda.gov/brs/aphisdocs/04_11001p_rod.pdf. *See also* *Determination of Regulated Status of Alfalfa Engineered for Tolerance to the Herbicide Glyphosate*; *Record of Decision*, 76 Fed. Reg. 5780 (Feb. 2, 2011) (announcing deregulated status for RRA).

42. *Geertson Seed Farms v. Johanns*, No. C 06-01075 CRB, 2007 WL 518624, at *13 (N.D. Cal. Feb. 13, 2007).

43. *Geertson Farms Inc.*, No. C. 06-01075 CRB, 2007 WL 1302981, at *2. APHIS’s proposed to allow farmers to continue planting RRA while imposing requirements to minimize gene flow risk such as: 1) isolation distances between RRA and organic alfalfa fields; 2) harvesting conditions; 3) recordkeeping of all organic alfalfa being grown near RRA fields; and 4) cleaning procedures for harvesting equipment. *Id.* The goal of this proposal was to allow the continued expansion of the RRA market as opposed to maintaining the status quo. *Id.*

44. *Geertson Farms Inc. v. Johanns*, No. C. 06-01075 CRB, 2007 WL 776146, at *2 (N.D. Cal. Mar. 12, 2007).

45. *Id.*

46. *Id.* at *3.

47. *Geertson Farms Inc.*, No. C. 06-01075 CRB, 2007 WL 1302981, at *5–*6. The district court’s final judgment stated: “The federal defendants’ June 14, 2005 Determination of Nonregulated Status for [RRA] is VACATED. Before granting Monsanto’s deregulation petition, even in part, the federal defendants shall prepare an environmental impact statement” *Geertson Farms Inc. v. Johanns*, No. C. 06-01075 CRB (N.D. Cal. May 3, 2007) available at <http://ipcm.wisc.edu/Portals/0/Blog/Files/20/261/RRASummary.pdf>.

48. *Geertson Farms Inc.*, No. C. 06-01075 CRB, 2007 WL 1302981, at *9. APHIS proposed handling conditions to reduce gene transfer. *Id.* *See supra* note 43.

Monsanto appealed the scope of the injunction to the Court of Appeals for the Ninth Circuit.⁴⁹ Monsanto claimed that the permanent injunction was overly broad, because the district court erred by presuming irreparable harm without first applying the four-factor balancing test for issuing permanent injunctions.⁵⁰ However, the Ninth Circuit held that the district court properly applied the four-factor balancing test and thus did not abuse its discretion in issuing the injunction.⁵¹ The Ninth Circuit's opinion noted that the district court expressly recognized that injunctions do not automatically issue for NEPA violations.⁵²

Following the Ninth Circuit's opinion in *Geertson Seed Farms v. Johanns*, the Supreme Court decided *Winter v. Natural Resource Defense Council, Inc.*⁵³ In *Winter*, the Court held that the district court erred by issuing a preliminary injunction to halt a Navy sonar training exercise, because the district court improperly applied the four-factor balancing test for preliminary injunctions.⁵⁴ The plaintiffs claimed that the Navy's sonar training program injured marine mammals and the Navy violated NEPA by not preparing an EIS before initiating the training program.⁵⁵ On appeal, the Ninth Circuit agreed, finding that the plaintiffs established a "possibility" of irreparable harm, warranting a preliminary injunction.⁵⁶ The Navy appealed, claiming the lower courts erred by allowing an injunction to issue based on the possibility of irreparable harm.⁵⁷ The Court agreed, holding "[o]ur frequently reiterated standard requires plaintiffs seeking preliminary relief to demonstrate that irreparable injury is *likely* in the absence of an injunction."⁵⁸

In light of the Court's decision in *Winter*, the defendants in *Geertson Seed Farms* requested a rehearing from the Ninth Circuit.⁵⁹ The Ninth Circuit denied the request and issued an amended opinion affirming its previous holding and incorporating a very brief analysis of *Winter*.⁶⁰

The Supreme Court of the United States granted certiorari to review the scope of the district court's injunction, and in doing so, established a new test for issuing permanent injunctions for NEPA violations.⁶¹

49. *Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1136 (9th Cir. 2009). Monsanto intervened on the government's side along with the company's licensee, Forage Genetics, Inc. *Id.* The defendants did not dispute the NEPA violation. *Id.*

50. *Id.*

51. *Id.* at 1139.

52. *Id.* at 1137.

53. 555 U.S. 7 (2008).

54. *See id.* at 26–27 (explaining that the district court did not seriously consider each factor).

55. *Id.* at 14, 16–17.

56. *Id.* at 19.

57. *Id.* at 21.

58. *Id.* at 22 (emphasis in original).

59. *See Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1133 (9th Cir. 2009), *amending and superseding*, 541 F.3d 938 (9th Cir. 2008).

60. *See id.* at 1133, 1137.

61. *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2756 (2010).

II. LEGAL BACKGROUND

The Supreme Court's decision in *Monsanto Co. v. Geertson Seed Farms* marked the first time the Supreme Court heard a case focusing on GM crops.⁶² In *Monsanto*, the primary environmental statute at issue was NEPA.⁶³ Parties injured under environmental lawsuits seek injunctive relief as an equitable remedy and district courts previously had broad discretion in fashioning equitable remedies.⁶⁴ However, in *Tennessee Valley Authority v. Hill*,⁶⁵ the Supreme Court held that the underlying environmental statute may limit the district court's discretion to create an equitable remedy by requiring the district court to grant an injunction to prevent environmental harm.⁶⁶ NEPA, unlike other environmental statutes, seeks to protect the environment through procedural requirements.⁶⁷ District courts in the Ninth Circuit previously considered injunctions as the only proper remedy to a NEPA procedural violation.⁶⁸

In 2008, the Supreme Court in *Winter v. National Resource Defense Council, Inc.* held within the four-factor balancing test, plaintiffs must demonstrate irreparable harm is likely without a preliminary injunction for NEPA violations.⁶⁹ The Court in *Winter* noted the test for a preliminary injunction is essentially the same as a permanent injunction except that a preliminary injunction requires the plaintiff to demonstrate a *likelihood* of irreparable harm instead of actual irreparable harm.⁷⁰ Recently, the Court in *Monsanto* extended this reasoning to hold that district courts must apply the four-factor balancing test in granting permanent injunctions for NEPA violations.⁷¹

A. National Environmental Policy Act (NEPA)

NEPA was signed into law on January 1, 1970.⁷² NEPA was enacted for the dual rationales of requiring federal agencies to evaluate the significant environmental consequences of their projects and allowing the public to provide input on these proposed projects.⁷³ Section 101 of NEPA explains a national commitment to

62. See Gabriel Nelson, *Supreme Court to Take First Look at GM Crops in Case With NEPA Implications*, GREENWIRE (Apr. 22, 2010), <http://www.eenews.net/public/Greenwire/2010/04/22/1> (“The development of genetically modified crops has introduced a variety of novel legal questions, but the Supreme Court has never before agreed to consider the issues raised by the technology.”).

63. *Monsanto*, 130 S. Ct. at 2749.

64. See *infra* Part II.B.

65. 437 U.S. 153 (1978).

66. *Id.* at 194.

67. See *infra* Part II.A. The Endangered Species Act, unlike NEPA, mandates substantive results. See *infra* notes 101–106.

68. See *infra* note 113.

69. *Winter v. Natural Res. Def. Council, Inc.* 555 U.S. 7, 22 (2008).

70. *Id.* (citing *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545–46 n.12 (1987)).

71. *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2756 (2010).

72. 42 U.S.C. §§ 4321–47 (2006).

73. *Id.* See generally *Pacific Legal Foundation v. Andrus*, 657 F.2d 829, 836–37 (6th Cir. 1981) (describing the legislative history of NEPA); see also Howard Geneslaw, *Cleanup of National Priorities List Sites, Functional*

protecting and preserving the quality of the environment and makes the Federal Government responsible for furthering specific environmental objectives.⁷⁴ The purpose of NEPA is:

*To 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*⁷⁵

Furthermore, section 102 of NEPA is one of the “action-forcing” provisions directed at all federal agencies “to assure consideration of the environmental impact of their actions in decisionmaking.”⁷⁶ This “action-forcing” statutory requirement ensures that agencies consider detailed information regarding any significant environmental impacts and do not overlook negative environmental impacts, while providing the public the information needed to aid in reaching or implementing a decision.⁷⁷

In any lawsuit arising under NEPA, the threshold question is whether the proposed action will have a significant effect on the environment and thus requires an EIS.⁷⁸ An EIS is required when “substantial questions are raised as to whether a project *may* cause significant degradation of some human environmental factor.”⁷⁹ An EIS must address any mitigating steps that will reduce adverse environmental impacts as a result of the proposed project.⁸⁰ Without addressing mitigating measures, the agency and members of the public cannot adequately determine the severity of the impact of the project on the environment.⁸¹ Ultimately, the EIS analysis ensures the agency takes a “hard look” and weighs the costs and benefits of the proposed project.⁸²

Equivalence, and the NEPA Environmental Impact Statements, 10 J. LAND USE & ENVTL. L. 127, 129 (1994) (explaining the two main purposes of NEPA).

74. See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989) (“Section 101 of NEPA declares a broad national commitment to protecting and promoting environmental quality.”); *Kleppe v. Sierra Club*, 427 U.S. 390, 409 (1976) (“NEPA announced a national policy of environmental protection and placed a responsibility upon the Federal Government to further specific environmental goals by [‘]all practicable means, consistent with other essential considerations of national policy.[’]”).

75. 42 U.S.C. § 4321 (2006).

76. *Kleppe*, 427 U.S. at 409 (quoting Conference Report on NEPA, 115 CONG. REC. 40416 (1969)).

77. *Robertson*, 490 U.S. at 349.

78. See 42 U.S.C. § 4332(2)(C) (explaining the conditions which require preparation of an Environmental Impact Statement).

79. *Geertson Seed Farms v. Johanns*, No. C. 06-01075 CRB, 2007 WL 518624, at *4 (N.D. Cal. Feb. 13, 2007) (quoting *Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998)) (emphasis in original).

80. See *Robertson*, 490 U.S. at 351 (explaining NEPA’s requirement that an EIS contain mitigating measures).

81. See *id.* at 352 (“Without such a discussion, neither the agency nor other interested group and individuals can properly evaluate the severity of the adverse effects.”).

82. *Id.*

If an agency decides not to prepare an EIS, the agency must instead prepare an EA.⁸³ An EA is a public document which discusses the environmental impacts and alternatives of a proposed project.⁸⁴ The EA also determines whether an agency must prepare an EIS or a finding of no significant impact (FONSI), explaining why the project would not have a significant impact on the environment.⁸⁵

Although NEPA purports to define goals for the nation and imposes procedural requirements, NEPA does not mandate substantive results.⁸⁶ For example, in *Robertson v. Methow Valley Citizens Council*,⁸⁷ the Court found that the Forest Service would not violate NEPA if, after taking the proper procedural steps, it found that the potential environmental cost of losing up to 100% of the mule deer herd in a national forest outweighed the benefits of allowing downhill skiing at a resort adjacent to the area.⁸⁸ Thus, NEPA does not restrict an agency, in light of an informed decision, from proceeding with an activity that may adversely affect the environment.⁸⁹

B. District Courts' Discretion to Remedy Environmental Injuries with Injunctions

District courts' discretion to grant equitable relief traces back to England where separate courts existed for law and equity.⁹⁰ The Court has long recognized the jurisdiction of federal district courts to apply sound discretion when fashioning equitable remedies.⁹¹

In 1944, the Supreme Court addressed the district courts' discretionary power to grant or withhold relief in *Hecht Co. v. Bowles*.⁹² In *Hecht*, the Court sided with the district court and reversed the court of appeal's judgment enjoining The Hecht Company department store from future sales after The Hecht Company involuntarily violated the maximum price provisions and record keeping

83. See *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (explaining how an agency may prepare an EA as a preliminary step before preparing an EIS).

84. 40 C.F.R. § 1508.9(a) (2010).

85. *Id.* § 1508.9(a)(1). See *Blue Mountains Biodiversity Project*, 161 F.3d at 1212 (“The statement of reasons is crucial to determining whether the agency took a “hard look” at the potential environmental impact of a project.” (quoting *Save the Yaak Committee v. Block*, 840 F.2d 714, 717 (9th Cir. 1988))). See, e.g., *Geertson Seed Farms v. Johanns*, No. C 06-01075 CRB, 2007 WL 518624, at *2 (N.D. Cal. Feb. 13, 2007) (defining a FONSI as a finding of no significant impact after conducting an EA).

86. See *Robertson v. Methow Valley Citizens Council*, 490 U.S. 331, 350 (1989) (explaining how “NEPA itself does not mandate particular results, but simply prescribes the necessary process”); *Vermont Yankee Nuclear Power Corp. v. National Resources Defense Council, Inc.*, 435 U.S. 519, 558 (1978) (noting that NEPA does not propose specific substantive national goals).

87. 490 U.S. 332 (1989).

88. *Id.* at 351.

89. *Id.* (“Other statutes may impose substantive environmental obligations on federal agencies, but NEPA merely prohibits uninformed—rather than unwise—agency action.”).

90. See *Hecht Co. v. Bowles*, 321 U.S. 321, 329 (1944) (recognizing that the judicial equitable practice dates back hundreds of years and was intended to “deter, not to punish”).

91. See *id.* (“An appeal to the equity jurisdiction conferred on federal district courts is an appeal to the sound discretion which guides the determinations of courts of equity.” (quoting *Meredith v. City of Winter Haven*, 320 U.S. 228, 235 (1943))).

92. 321 U.S. 321 (1944).

requirements of the Emergency Price Control Act.⁹³ The district court determined that an injunction would not ensure better compliance in the future and would be against the petitioner's and public's interest.⁹⁴ The Court found the language of the statute did not require mandatory injunctions upon a statutory violation and affirmed the district court's findings.⁹⁵

The Court's decision in *Hecht* is important for two reasons. First, *Hecht* stands for the proposition that "[f]lexibility' and 'practicality' are the touchstones of these remedial determinates, as 'the public interest,' 'private needs,' and 'competing private claims' must all be weighed and reconciled against the background of the court's own limitations and its particular familiarity with the case."⁹⁶ Second, the Court recognized that statutes may limit the district court's exercise of discretion in crafting equitable remedies.⁹⁷ Thus, if a statute does not specify a remedy, the district court has broad discretion to issue a remedy consistent with the statute.⁹⁸ For example, in *Weinberger v. Romero-Barcelo*,⁹⁹ the Court determined that because an environmental statute listed several remedies for statutory violations, including an injunction, the district court retained discretionary powers to issue a remedy consistent with the statute.¹⁰⁰

On the other hand, if a statute limits the remedy for a specific action to an injunction, the district court has a duty to issue an injunction.¹⁰¹ For example, more than thirty years after *Hecht*, the Court in *Tennessee Valley Authority v. Hill*¹⁰² held that the district court erred by not permanently enjoining the construction of a dam as required under the Endangered Species Act (ESA) to protect the critical habitat of an endangered species of fish.¹⁰³ The district court applied the traditional balance of harms test and declined to enjoin the construction of the dam because the dam was near completion and over \$50 million in dam-construction funds would have been lost.¹⁰⁴ The district court decided against the injunction even though the completion of the dam would eliminate an entire species of endangered fish.¹⁰⁵

93. *Id.* at 321, 324, 326.

94. *Id.* at 326.

95. *See id.* at 330 ("[W]e resolve the ambiguities of § 205(a) in favor of that interpretation which affords a full opportunity for equity courts to treat enforcement proceedings . . . in accordance with their traditional practices, as conditioned by the necessities of the public interest which Congress has sought to protect.").

96. *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2766 (2010) (Stevens, J., dissenting) (quoting *Hecht Co. v. Bowles*, 321 U.S. 321, 329–30).

97. *See U.S. v. Oakland Cannabis Buyers' Co-op.*, 532 U.S. 483, 497 (2001) ("Courts of equity cannot, in their distraction, reject the balance that Congress has struck in a statute."); *see also* Zygmunt J. P. Plater, *Statutory Violations and Equitable Discretion*, 70 CAL. L. REV. 524, 554–56 (1982) (analyzing whether the language of the statute in *Hecht* required the district court to grant an injunction).

98. *See Plater, supra* note 97, at 553 (describing the relationship between equity and statutes).

99. 456 U.S. 305 (1982).

100. *Weinberger v. Romero-Barcelo*, 456 U.S. 313, 320 (1982).

101. *See, e.g., Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1987) (requiring courts to protect endangered species "whatever the cost").

102. 437 U.S. 153 (1978).

103. *Id.* at 172.

104. *Id.* at 166.

105. *Id.* at 165–66.

However, the Court recognized the importance of granting an injunction to remain consistent with the statutory language and legislative intent of the ESA, which requires endangered species be protected at all costs.¹⁰⁶

Environmental injuries are unique since an injunction may be the only remedy available. As the Court stated in *Amoco Production Co. v. Village of Gambell*,¹⁰⁷ “[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, *i.e.*, irreparable. If such injury is sufficiently likely, therefore, the balance of harms will usually favor the issuance of an injunction to protect the environment.”¹⁰⁸ However, a presumption of irreparable harm is not necessary to protect all environmental interests.¹⁰⁹ While district courts still retain the jurisdiction to grant equitable remedies, the substantive requirements of many environmental statutes ultimately control the district courts’ discretion to balance the harms when granting injunctions.

C. Standards for Injunctive Relief for NEPA Violations

Determining how to fashion a remedy consistent with the statutory language of NEPA went unanswered by the Court until *Winter* in 2008.¹¹⁰ Prior to *Winter*, district courts remedying environmental statutory violations had constructed a framework that took into consideration specific substantive requirements and remedies of environmental statutes.¹¹¹ NEPA, unlike other environmental statutes, describes policy goals of national environmental protection through procedural requirements but does not mandate specific remedies for statutory violations.¹¹² District courts in the Ninth Circuit routinely concluded that the only logical remedy for a NEPA violation, which is a purely procedural violation, was an injunction.¹¹³ As a result, courts reasoned that a NEPA violation required a relaxed

106. *Id.* at 184.

107. 480 U.S. 531 (1987).

108. *Id.* at 545.

109. *See id.* at 545–46 (proposing that a presumption of irreparable harm is unnecessary to fully protect the environment and is against traditional principles of equity of balancing the harms).

110. *See* Daniel Mach, Comment, *Rules Without Reasons: The Diminishing Role of Statutory Policy and Equitable Discretion in the Law of NEPA Remedies*, 25 HARVARD ENVTL. L. REV. 205, 221, 223 (2011) (noting that before *Winter* and *Monsanto*, it was debatable whether NEPA limited district courts discretion by requiring an injunction for a violation).

111. *See* *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 534 (1987) (involving the Alaska National Interest Lands Conservation Act); *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 306 (1982) (involving the Federal Water Pollution Control Act); *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 165 (1978) (involving the Endangered Species Act).

112. *See* *Robertson v. Methow Valley Council*, 490 U.S. 332, 350 (1989) (noting that NEPA does not require specific environmental outcomes, rather, it describes the procedure); *Baltimore Gas & Electric Co. v. Natural Res. Def. Council, Inc.*, 462 U.S. 87, 100 (1983) (“NEPA does not require agencies to adopt any particular internal decisionmaking structure”).

113. *See* *Envtl. Prot. Info. Ctr. v. Blackwell*, 389 F. Supp. 2d 1174, 1184 (N.D. Cal. 2004) (explaining that barring unusual circumstances, “injunctive relief typically follows from a finding of a violation of NEPA.”); *Sierra Club v. U.S. Fish & Wildlife Serv.*, 235 F. Supp. 2d 1109, 1141 (D. Or. 2002) (noting that injunctions are the common remedy in the Ninth Circuit for NEPA violations in the absence of rare or unusual circumstances);

showing of irreparable harm to grant an injunction.¹¹⁴ This rationale limited the discretion of district courts when remedying NEPA violations by tipping the balance in favor of injunctions.¹¹⁵ However, as the Ninth Circuit recognized before the Court's decision in *Winter*, an injunction is not an automatic remedy for a NEPA violation.¹¹⁶

In 2008, the Court in *Winter* clarified that district courts must apply the four-factor balancing test when determining whether to issue a preliminary injunction for a NEPA violation.¹¹⁷ For a preliminary injunction, a plaintiff must demonstrate: 1) success on the merits is likely; 2) irreparable harm is likely; 3) a balanced consideration of hardships favors a preliminary injunction; and 4) a preliminary injunction is in the public interest.¹¹⁸ The Court further noted that irreparable harm requires the plaintiff to demonstrate a "likelihood of irreparable injury—not just a possibility."¹¹⁹

The Court in *Winter* also concluded that the standard for preliminary injunctions is essentially the same as for permanent injunctions.¹²⁰ According to the Court in *eBay Inc. v. MercExchange, L.L.C.*,¹²¹ in order for a district court to grant a permanent injunction to remedy a NEPA violation, a plaintiff must demonstrate that: 1) he has suffered an irreparable harm; 2) the remedies available at law will not compensate the injury; 3) a balanced consideration of hardships favors an equitable remedy; and 4) a permanent injunction would not be against public interest.¹²² Moreover, the public interest factor requires that courts acting in equity pay close attention to the public consequences of issuing a permanent injunction.¹²³

Colorado River Indian Tribes v. Marsh, 605 F. Supp. 1425, 1439 (C.D. Cal. 1985) ("Once a substantial NEPA violation has been shown, an injunction should issue without detailed consideration of traditional equity principles, because the injunction in aid of NEPA enforcement is the execution of a congressional policy mandate.").

114. See *Sierra Nevada Forest Prot. Campaign v. Weingardt*, 376 F. Supp. 2d 984, 993 (E.D. Cal. 2005) (explaining that "a NEPA violation supports a finding of irreparable harm, given the risk to the environment from uninformed decision-making"); *Border Power Plant Working Grp. v. Dept. of Energy*, No. 02-CV-513-IEG (POR), 2003 WL 22331251, at *3 (S.D. Cal. June 4, 2003) ("The premise for relaxing the equitable tests in NEPA cases is that irreparable damage may be implied from the failure of responsible authorities to evaluate thoroughly the environmental impact of a proposed federal action." (quoting *American Motorcyclist Ass'n v. Watt*, 714 F.2d 962, 966 (9th Cir. 1983))); see also William S. Eubanks, II, *Damage Done? The Status of NEPA after Winter v. NRDC and Answers to Lingering Questions Left Open by the Court*, 33 VT. L. REV. 649, 656 (2009) (discussing how the Ninth Circuit, the First Circuit, and the D.C. Circuit all adopted a relaxed standard of irreparable harm for granting injunctions for NEPA violations).

115. See Eubanks, *supra* note 114, at 654 (noting how district court judges felt less discretion in balancing the equities of NEPA violations than with other statutes containing substantive requirements).

116. See *Northern Cheyenne Tribe v. Norton* 503 F.3d 836, 842 (9th Cir. 2007) ("We are bound by precedent to hold that a NEPA violation is subject to traditional standards in equity for injunctive relief and does not require an automatic blanket injunction against all development.").

117. *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008).

118. *Id.*

119. *Id.* at 21.

120. See *infra* note 176 and accompanying text.

121. 547 U.S. 388 (2006).

122. *Id.* at 391.

123. *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982).

District courts cannot sidestep this four-factor balancing test by categorically issuing permanent injunctions.¹²⁴ For example, the Court in *eBay* held that the district court and court of appeals erred by categorically granting or denying injunctive relief in patent infringement lawsuits instead of applying the four-factor balancing test.¹²⁵ Thus, the Court reinforced the necessity of performing the four-factor balancing test in all circumstances to determine whether injunctive relief is appropriate.¹²⁶ However, when both preliminary and permanent injunctions are sought for an environmental injury, the Court has also recognized that the balance of harms will usually favor the issuance of an injunction to protect the environment because monetary damages are not always sufficient to redress an environmental injury.¹²⁷

The Court has also implied that an injunction may be favorable when the consequences of the proposed agency project are not well established. For example, the plaintiffs in *Winter* argued that the Navy's sonar training program was detrimental to marine mammals and the Navy should have prepared an EIS before conducting the training exercises.¹²⁸ Upon balancing the harms, the Court noted that a preliminary injunction was not warranted, because it was not the kind of activity with "completely unknown effects on the environment."¹²⁹ The Court in *Winter* leaves open the possibility that agency activities with unknown environmental impacts may tip the balance in favor of issuing an injunction.¹³⁰

D. Injunctions for Genetically Modified Seeds in the Future

Prior to the district court's decision in *Geertson Seed Farms v. Johanns*, cases involving GM seeds were not common.¹³¹ However, recent lawsuits have presented similar issues to those raised in *Monsanto*. For example, *Center for Food Safety v. Vilsack*¹³² involved a challenge to an APHIS order to deregulate genetically modified sugar beet seeds without first preparing an EIS.¹³³ Since cases involving genetically

124. See *Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1137 (9th Cir. 2009) ("The Supreme Court held in *eBay* that courts cannot grant or deny injunctive relief categorically in place of applying the four-factor test.").

125. *eBay*, 547 U.S. at 393–94.

126. See *id.* at 394 (stating that patent cases are not excluded from the four-factor balancing test analysis).

127. See *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987) (finding environmental injury is often irreparable); see e.g., *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 172–74 (1978) (involving a permanent injunction and discussing the need for an injunction to prevent the loss of an endangered species as a result of an agency project).

128. *Winter v. Natural Resources Defense Council*, 555 U.S. 7, 14, 16–17 (2008)

129. *Id.* at 23.

130. See *id.* (explaining that the kind of harm that NEPA seeks to prevent through requiring an EIS is uninformed agency decision-making, as opposed to a training exercise which had been ongoing for the past 40 years).

131. Some of these cases did not directly involve the issues presented in *Monsanto*. See, e.g., *Monsanto Co. v. Scruggs*, 249 F. Supp. 2d 746, 748 (N.D. Miss. Mar. 16, 2001) (dealing with patent infringement).

132. No. C 08-00484 JSW, 2009 WL 3047227 (N.D. Cal. Sept. 21, 2009).

133. *Id.* at *1.

modified crops are a new issue being brought in federal courts,¹³⁴ it is necessary for courts to adhere to NEPA's principles and the standards for issuing injunctive relief as defined by precedent. Although the Court in *Monsanto* recognized that gene transfer is considered a type of injury, this decision may limit district courts from issuing injunctions for injuries related to GM seeds resulting from NEPA violations.¹³⁵ *Monsanto*, in conjunction with *Winter*, clarified that district courts must apply *eBay's* traditional four-factor balancing test for all permanent injunctions and chips away at district courts' ability to administer equitable discretion.¹³⁶

III. THE COURT'S REASONING

In *Monsanto Co. v. Geertson Seed Farms*, the Court in a seven to one majority reversed the Ninth Circuit's ruling and held that the district court erred in enjoining APHIS from partially deregulating RRA and prohibiting almost all future planting of RRA until APHIS completed an EIS.¹³⁷ The Court did not rule on the district court's decision to completely enjoin the deregulation of RRA before APHIS completed an EIS because the petitioners failed to raise this issue in their briefs.¹³⁸ As a result, the Court's decision seemed to favor both parties.¹³⁹ In so deciding, the Court held that district courts must apply the four-factor balancing test of *eBay* when determining whether to grant permanent injunctions for NEPA violations.¹⁴⁰ Applying this test, the Court determined that the respondents could not show that they would suffer an actual irreparable injury from any partial deregulation.¹⁴¹ In a dissenting opinion, Justice Stevens argued that the district court properly acted within its discretion to enjoin any partial deregulation and most future planting of RRA.¹⁴²

134. *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743 (2010); *Center for Food Safety v. Vilsack*, No. C 10-04038 JSW, 2009 WL 3047227 (N.D. Cal. Sept. 21, 2009).

135. *See Monsanto*, 130 S. Ct. at 2755–56 (describing how gene flow can cause both economic and environmental injuries).

136. *See Mach*, *supra* note 110, at 223 (discussing the interrelatedness of the Court's decision in *Monsanto* and *Winter*).

137. *Monsanto*, 130 S. Ct. at 2761–62. Justice Alito delivered the opinion of the court, in which Chief Justice Roberts and Justices Scalia, Kennedy, Thomas, Ginsburg, and Sotomayor joined. Justice Stevens was the sole dissenter in this case. Justice Breyer recused himself from hearing *Monsanto* because his brother, Judge Charles R. Breyer, issued the district court opinion. Additionally, at a threshold level, the Court found that respondents had standing to seek injunctive relief because the gene flow injuries that respondents would suffer were "sufficiently concrete to satisfy the injury-in-fact prong of the constructional standing analysis." *Id.* at 2754.

138. *See Monsanto*, 130 S. Ct. at 2756 ("Because petitioners and the Government do not argue otherwise, we assume without deciding that the District Court acted lawfully in vacating the deregulation decision.").

139. *See* Jeffrey L. Fox, *GM Alfalfa—Who Wins?*, 28 NATURE BIOTECH. 770, 770 (2010).

140. *Monsanto*, 130 S. Ct. at 2756.

141. *Id.* at 2759.

142. *Id.* at 2766–67 (Stevens, J., dissenting).

A. *The Majority's Reasoning*

The Court reversed and remanded the district court's decision, finding that the district court abused its discretion by enjoining APHIS from partially deregulating RRA and prohibiting almost all future planting of RRA until completion of an EIS.¹⁴³ Regarding the partial deregulation of RRA, the Court found the district court abused its discretion for two main reasons. First, the district court's decision preempted agency action by APHIS to independently decide to whether to partially deregulate RRA.¹⁴⁴ Second, the respondents failed to satisfy the four-factor balancing test because there was no evidence respondents would suffer irreparable harm from any partial deregulation.¹⁴⁵

First, the Court found the district court erred in enjoining partial deregulation of RRA because, “[u]ntil APHIS actually seeks to effect a partial deregulation, any judicial review of such a decision is premature.”¹⁴⁶ The Court noted that respondents brought suit under the Administrative Procedures Act (APA) to challenge APHIS's complete deregulation of RRA.¹⁴⁷ However, APHIS did not appeal the district court's finding that the complete deregulation of RRA violated NEPA and it was for the agency to decide whether to effectuate a partial RRA deregulation.¹⁴⁸ If APHIS conducted another EA and then decided to issue a partial deregulation of RRA, any injured person could bring suit under the APA to challenge the agency order.¹⁴⁹ Therefore, the district court prematurely prevented APHIS from any kind of partial deregulation of RRA.¹⁵⁰

Furthermore, the Court found that the district court's “middle course” between two extremes was internally inconsistent.¹⁵¹ According to the Court, it did not logically follow that the district court would not allow any partial deregulation without first the preparation of an EIS, but it would allow those farmers who purchased seeds in reliance on APHIS's full deregulation order to proceed without an EIS.¹⁵² The Court reasoned that if allowing some farmers to continue planting and harvesting RRA without conducting an EIS was acceptable, then allowing partial deregulation of RRA without an EIS should also be acceptable.¹⁵³

Second, based on the Court's reasoning as to why a broad injunction was improper, the Court concluded that the district court abused its discretion to enjoin partial deregulation because respondents failed to satisfy the four-factor balancing

143. *Id.* at 2761–62 (majority opinion).

144. *Id.* at 2758–59.

145. *Id.* at 2758–59.

146. *Id.* at 2758.

147. *Id.*

148. *Id.*

149. *Id.*

150. *Id.*

151. *Id.* at 2759.

152. *Id.*

153. *Id.*

test for permanent injunctive relief.¹⁵⁴ Specifically, respondents could not show that they would suffer irreparable harm, the first prong of the test, if APHIS ordered a partial deregulation.¹⁵⁵ If APHIS imposed proper limitations on a partial deregulation, it is possible that such deregulation would not cause respondents any irreparable harm at all.¹⁵⁶ For these reasons, the Court found that the district court abused its discretion in enjoining APHIS from effecting a partial deregulation.¹⁵⁷

The Court also held that the district court abused its discretion by prohibiting almost all future planting of RRA.¹⁵⁸ The Court decided a nationwide injunction was too broad because if APHIS decided partial deregulation was appropriate, then farmers should be able to plant RRA in accordance with the agency's decision.¹⁵⁹ Additionally, the vacatur of the APHIS's deregulation decision, which restored RRA's regulated status, was sufficient to redress respondent's injury, thereby making an injunction against all RRA planting redundant.¹⁶⁰ Therefore, the Court reversed the Ninth Circuit's and district court's judgments.

B. Justice Stevens's Dissent

Issuing the sole dissent in *Monsanto Co. v. Geertson Seed Farms*, Justice Stevens declared that in light of all of the facts presented in this case, the district court did not abuse its discretion in issuing the permanent injunctions.¹⁶¹ Justice Stevens viewed the district court's decision as both an "equitable application of administrative law" and a reasonable remedy in light of the risks of gene transfer from RRA.¹⁶²

First, Justice Stevens believed that the district court balanced the harms by not enjoining the RRA farmers that purchased and planted RRA in reliance on the prior APHIS deregulation order while, at the same time, reducing the threat of seed contamination in the environment by enjoining any partial deregulation.¹⁶³ Justice Stevens reasoned that allowing only these RRA farmers to plant and harvest RRA translated into a smaller number of farms for APHIS to monitor while APHIS prepared an EIS.¹⁶⁴ Additionally, Justice Stevens thought that the injunction on partial deregulation was justified, because the district court already found APHIS's

154. *Id.*

155. *Monsanto*, 130 S. Ct. at 2759–60.

156. *Id.* at 2760.

157. *Id.* at 2761.

158. *Id.*

159. *Id.*

160. *Id.*

161. *Id.* at 2767 (Stevens, J., dissenting).

162. *Id.* at 2767, 2769.

163. *Id.* at 2764.

164. *Id.*

deregulation proposal inconsistent with the significant threat of GM seed contamination and APHIS's limited ability to monitor such contamination.¹⁶⁵

Second, Justice Stevens viewed the injunctions as reasonable based on the threat of gene transfer.¹⁶⁶ Justice Stevens stated that although a plaintiff never has to prove a particular harm will occur, a significant risk that harm may occur is sufficient to support an injunction.¹⁶⁷ Justice Stevens criticized many of the Court's hypothetical limitations on a partial deregulation because the limitations were easy to sidestep and difficult to enforce.¹⁶⁸ For these reasons, Justice Stevens viewed the district court's decision as reasonable in light of the circumstances of the case and not an abuse of its discretion.

IV. ANALYSIS

In *Monsanto Co. v. Geertson Seed Farms*, the Court found that the district court abused its discretion by permanently enjoining the partial deregulation of RRA and almost all future planting of RRA until APHIS completed an EIS.¹⁶⁹ However, the Court primarily focused on the impropriety of the permanent injunction on partial deregulation of RRA.¹⁷⁰ The Court, improperly relying on dicta from *Winter*, held that district courts must apply the four-factor balancing test from *eBay* when granting permanent injunctions for NEPA violations.¹⁷¹ By raising the irreparable harm threshold, the Court effectively limited district courts' discretion to issue permanent injunctions to remedy future NEPA violations.¹⁷² In applying its own test, the Court demonstrates the unworkable nature of this new standard.¹⁷³ While this new standard may result in increased judicial efficiency, the cost is borne by plaintiffs that may have to suffer irreparable harm before a district court may issue a permanent injunction.

A. The Court Restricted District Courts' Discretion to Issue Permanent Injunctions for NEPA Violations Without Considering the Statutory Purpose of NEPA

Utilizing mere dicta from *Winter*, the Court made an unprecedented leap in logic in *Monsanto* by holding that in order to issue a permanent injunction for a NEPA

165. *See id.* at 2769 (“Petitioners and APHIS had already come back to the court with a proposed partial deregulation order which, the [district] court explained, was incompatible with its determination that there is a substantial risk of gene spreading and that APHIS lacks monitoring capacity. That same concern would apply to any partial deregulation order.”) (emphasis in original).

166. *Id.* at 2769–70.

167. *Id.* (quoting 5 JOHN NORTON POMEROY, A TREATISE ON EQUITY JURISPRUDENCE AND EQUITABLE REMEDIES, § 1937, at 4398 (2d ed. 1919)).

168. *Id.* at 2768 n.8, 2771 n.12.

169. *Id.* at 2761 (majority opinion).

170. *See id.* at 2757–61 (discussing at length the impropriety of the district court's injunction on partial deregulation).

171. *See infra* note 174 and accompanying text.

172. *See infra* Part IV.A.

173. *See infra* Part IV.B.

violation, a district court must satisfy the traditional four-factor balancing test for permanent injunctions from *eBay*.¹⁷⁴ However, based on the Court's holding in *Winter*, such a result does not necessarily follow.

The facts of *Winter*, unlike the facts of *Monsanto*, involved the standard for issuance of a *preliminary* injunction for a NEPA violation, which requires a plaintiff to demonstrate a likelihood of irreparable harm, rather than the actual irreparable harm required for a permanent injunction in *Monsanto*.¹⁷⁵ In *Winter*, the Court reached for a footnote from *Amoco Production Co. v. Village of Gambell*, which also involved a preliminary injunction, to note that the four-factor balancing test applies to both preliminary and permanent injunctions for NEPA violations.¹⁷⁶ In effecting this shift, the *Monsanto* Court departed from precedent that required courts to assess the purpose of the underlying environmental statute to determine whether the district court abused its discretion in creating a remedy.¹⁷⁷ By extending the holding of *Winter* to require district courts to apply the *eBay* four-factor balancing test when issuing permanent injunctions for NEPA violations, the Court completely disregarded the statutory purpose of NEPA and limited the discretion of district courts to grant permanent injunctions.

Although “a major departure from the long tradition of equity practice should not be lightly implied,”¹⁷⁸ the Court has recognized that Congress may limit district courts' discretionary powers by statute.¹⁷⁹ In creating the standard for permanent injunctions for NEPA violations, the Court failed to discuss how *Monsanto* fits amongst the Court's precedents, such as *Tennessee Valley Authority v. Hill* and *Weinberger v. Romero-Barcelo*, where the Court interpreted the language of an environmental statute to determine whether the statute limited the district court's discretion.¹⁸⁰ As exemplified in *Tennessee Valley Authority*, the Court found that the statutory language of the Endangered Species Act (ESA) limited the district court's

174. *Monsanto*, 130 S. Ct. at 2756. The Court in *Monsanto* cited to a three-page range of the *Winter* opinion to support its proposition that “[t]he traditional four-factor test applies when a plaintiff seeks a permanent injunction to remedy a NEPA violation.” *Id.*

175. See *Monsanto*, 130 S. Ct. at 2756 (stating the test for a permanent injunction); *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 20 (describing the standard for a preliminary injunction); see also Mach, *supra* note 110, at 223 n.94 (arguing the Court prematurely extended *Winter* to apply to permanent injunctions).

176. See *Winter*, 555 U.S. at 32 (“The standard for a preliminary injunction is essentially the same as for a permanent injunction with the exception that the plaintiff must show a likelihood of success on the merits rather than actual success.” (quoting *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 546, n.12 (1987))). The propriety of a permanent injunction as not at issue in *Winter*, therefore the court's discussion of permanent injunctions is purely dicta. The Court in *Winter* stated, “our analysis of the propriety of preliminary relief is applicable to any permanent injunction as well.” *Id.* at 33.

177. See, e.g., *Weinberger v. Romero Barcelo*, 456 U.S. 305, 318–19 (1982) (interpreting the language and purpose of the underlying environmental statute to not restrict district courts' exercise equitable discretion to grant relief consistent with the statute).

178. *Weinberger*, 456 U.S. at 320.

179. See *id.* at 313 n.7 (1982) (“Congress may intervene and guide or control the exercise of the courts' equitable discretion.”); see also *Hecht Co. v. Bowles*, 321 U.S. 321, 330 (1944) (recognizing that Congress could limit courts equitable discretion through a clear statement of intent); *supra* Part II.B for a discussion of the Supreme Court's consideration of environmental statutes in determining whether a district court abused its discretion in granting injunctions.

180. See *supra* notes 100–06 and accompanying text.

discretion to balance the hardships and mandated courts to tip the balance in favor of the environment when issuing a permanent injunction to remedy an agency action that threatened the existence of an endangered species.¹⁸¹

The Court should have asked whether the goals and language of NEPA limited the district court's discretion in fashioning an equitable remedy in *Monsanto*.¹⁸² The statutory purpose and goals of NEPA fall closer to the ESA at issue in *Tennessee Valley Authority* than the Federal Water Pollution Control Act (FWPCA) at issue in *Weinberger*.¹⁸³ Analogous to the ESA, NEPA is precautionary in principle and seeks to prevent environmental injuries through informed agency decision making.¹⁸⁴ Additionally, just as the Court in *Tennessee Valley Authority* found an injunction was the only remedy for the particular ESA violation, district courts have previously found injunctions are the only remedy for NEPA violations which will remain consistent with the statutory purpose.¹⁸⁵

Despite this precautionary nature, NEPA does not mandate a specific result and allows agency discretion when assessing actions which may significantly affect the environment.¹⁸⁶ At the same time, the statute's lack of substantive requirements leaves intact district courts' discretion to fashion equitable remedies for NEPA violations.¹⁸⁷ But environmental injuries are unique since monetary damages may never sufficiently remedy the harm.¹⁸⁸ Thus, the only statutory restraint NEPA imposes on the district courts' discretion to balance the equities is to ensure that the remedy conforms to NEPA's purpose of preventing environmental damage that results from uninformed decision making.¹⁸⁹

In addition, the Court failed to recognize that the district court's injunction against the partial deregulation of RRA was consistent with the statutory purpose of NEPA. The district court properly took a preventative approach by enjoining the

181. See *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 194–95 (1978) (stating “[o]nce the meaning of an enactment is discerned and its constitutionality determined, the judicial process comes to an end”).

182. See *Weinberger*, 456 U.S. at 314 (explaining that in *Tennessee Valley Authority*, “[t]he purpose and language of the statute limited the remedies available to the District Court; only an injunction could vindicate the objectives of the Act”).

183. See *id.* (finding that the ESA violation in *Tennessee Valley Authority* required an injunction to conform to the statute's ban on critical habitat destruction while the FWPCA provided examples of other remedies besides an injunction which would ensure statutory compliance).

184. The purpose of NEPA is, “[t]o declare a national policy which will . . . prevent or eliminate damage to the environment.” 42 U.S.C. § 4321 (2006) (emphasis added). One purpose of the Endangered Species Act (ESA) is “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved” 16 U.S.C. § 1531(b). The ESA also provides that agencies, by relying on scientific data, shall ensure that a proposed action “is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.” *Id.* § 1536(a)(2). See also *Tenn. Valley Auth.*, 437 U.S. at 194 (explaining the ESA prioritizes protected species, adopting a policy of “institutionalized caution”).

185. See *supra* note 113.

186. 42 U.S.C. § 4331(a) (2006) (explaining that the federal, state, and local governments as well as the public should use all practicable means to meet the goals of the statute).

187. See *Kleppe v. Sierra Club*, 427 U.S. 390, 421 (1976) (Marshall, J., concurring in part, dissenting in part) (indicating that NEPA's vague wording allows courts to develop a “common law” of NEPA).

188. *Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987).

189. See *supra* note 89 and accompanying text.

partial deregulation of RRA until completion of an EIS because the risks of genetic contamination were imminent and difficult to monitor.¹⁹⁰ To support the broad injunction, the Court acknowledged following key facts: 1) RRA can contaminate conventional plants; 2) planting RRA in a controlled setting does not completely prevent contamination; 3) APHIS acknowledged its limited ability to monitor or enforce limitations proposed in a partial deregulation; and 4) RRA contamination to conventional farms could seriously impact farmers' livelihoods and the American alfalfa market in the long term.¹⁹¹ All of these facts justify the district court's permanent injunction.

Preventing the contamination of organic crops through gene transfer of GM alfalfa was the district court's primary concern.¹⁹² If the district court had not enjoined partial deregulation, APHIS planned to proceed with a partial deregulation, despite APHIS's limited ability to monitor gene transfer, which threatened the same level of harm as a full deregulation.¹⁹³ In fact, the USDA Office of the Inspector General previously scrutinized APHIS for its failure to properly monitor the effects and field tests of GM crops.¹⁹⁴ Limiting any deregulation until the completion of an EIS was justified on this matter alone.

However, the possibility of irreparable harm associated with the partially deregulated use of RRA extends beyond the threat of gene transfer. The Center for Food Safety (CFS) expressed concern over the development of Roundup resistant weeds due to the mass use of a single herbicide.¹⁹⁵ Currently, at least ten known species of weeds are resistant to glyphosate, the active ingredient in Monsanto's Roundup herbicide.¹⁹⁶ Additionally, contamination of local streams and water sources by the overuse of pesticides containing RRA may result in irreparable harm.¹⁹⁷ As Congress noted in NEPA, "complex environmental cases often require

190. The respondents did not dispute the existence of a NEPA violation. *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2752 (2010).

191. See *Monsanto*, 130 S. Ct. at 2762 (Stevens, J., dissenting) (summarizing the district courts findings).

192. See *id.* at 2770 ("The District Court found that gene transfer can and does occur, and that if it were to spread through open land the environmental and economic consequences would be devastating.").

193. The Court acknowledged that there was "more than a strong likelihood that APHIS would partially deregulate RRA were it not for the District Court's injunction." *Id.* at 2754 (majority opinion).

194. See OFFICE OF INSPECTOR GEN. SOUTHWEST REGION, USDA, AUDIT 50601-8-TE, AUDIT REPORT: ANIMAL AND PLANT HEALTH INSPECTION SERVICE CONTROLS OVER ISSUANCE OF GENETICALLY ENGINEERED ORGANISM RELEASE PERMITS (2005), available at <http://www.usda.gov/oig/webdocs/50601-08-TE.pdf> (citing multiple weaknesses in APHIS's deregulation procedures, including how field trials are conducted). The audit report provides an example of APHIS's lack of guidance to applicants in conducting field trials where an applicant was allowed to plant an edible GM crop in an open field, which was accessible to the public from a road. *Id.* at 7.

195. See Redick & Endres, *supra* note 19, at 26 (explaining that the Center Food Safety is concerned about creating resistant weeds through the use of a single herbicide).

196. See Jack Kaskey, *Attack of the Superweed: New Strains Resist Roundup, the World's Top-Selling Herbicide*, BLOOMBERG BUSINESSWEEK (Sept. 8, 2011, 5:45 PM), <http://www.businessweek.com/magazine/attack-of-the-superweed-09082011.html> (explaining that a total of 11 known glyphosate-resistant weeds exists in at least 26 states and it is expected that by 2015, 14 million acres of U.S. cotton, soybean, and corn crop will be invaded).

197. See, e.g., Relyea, *supra* note 11, at 1118 (demonstrating through experiments that glyphosate pesticides are deadly to tadpoles and juvenile frogs).

exceptionally sophisticated scientific determinations, and that agency decisions should not be made on the basis of ‘incomplete information.’”¹⁹⁸

Completion of an EIS is critical before conducting activities “with completely unknown effects on the environment.”¹⁹⁹ Unlike the sonar training exercise in *Winter*, which the Navy performed for 40 years, the first GM crop was approved for deregulation in 1992, around twenty years before *Monsanto*.²⁰⁰ Therefore, it would be against the purpose of NEPA to allow a partial deregulation when the full effects of gene transfer are unknown and the ability to control this process is unavailable.²⁰¹

After *Monsanto*, in the absence of another environmental statute, an environmental plaintiff is effectively limited to a preliminary injunction to prevent an agency action that violates NEPA.²⁰² However, for those plaintiffs unable to demonstrate a likelihood of injury, relief is unlikely as is standing.²⁰³ The other option for an environmental plaintiff is to wait and see if irreparable harm will occur; however, under *Monsanto*, this requires a plaintiff to actually suffer an irreparable harm before a court can enjoin the agency’s action.²⁰⁴ This approach is not only completely contradictory to the preventative purpose of NEPA but also eliminates the hallmark notion of district courts’ flexibility to balance both parties’ hardships and craft a remedy using its equitable discretion.²⁰⁵

198. *Monsanto*, 130 S. Ct. at 2771 (Stevens, J., dissenting) (quoting *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 371 (1989)).

199. *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 23 (2008).

200. *See id.* at 21 (discussing the longstanding Navy training exercise). *See Petitions for Nonregulated Status Granted or Pending by APHIS*, APHIS, http://www.aphis.usda.gov/biotechnology/not_reg.html (last updated Dec. 27, 2011) (listing the plants which have nonregulated status and noting the first crop to achieve nonregulated status in 1992).

201. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989) (explaining how NEPA prohibits uninformed decision making by federal agencies).

202. *See Amoco Prod. Co. v. Vill. of Gambell*, 480 U.S. 531, 545 (1987) (noting that due to the irreparable nature of environmental harms, a finding that an irreparable harm is “sufficiently likely” is enough to issue a preliminary injunction). If a plaintiff must demonstrate actual harm, it may be too late for a permanent injunction to remedy the injury.

203. For a plaintiff to have standing to bring an environmental lawsuit, the plaintiff must show the injury is “concrete, particularized, and actual or imminent.” *Monsanto*, 130 S. Ct. at 2751. Although the court found respondents had a sufficiently concrete injury for standing purposes, this injury did not satisfy the irreparable injury prong of the four-factor balancing test for granting permanent injunctions. *Id.* at 2775 (explaining that the harms that respondents will experience “are readily attributable to APHIS’s deregulation decision, which, as the District Court found, give rise to a significant risk of gene flow to non-genetically-engineered varieties of alfalfa”).

204. By having to wait for an agency to conduct an EA and effectuate a partial deregulation, gene transfer may already occur before the plaintiff is able to seek relief from the court. *See Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 35 (2008) (Breyer, J., dissenting) (explaining in some instances, the lack of an injunction and requirement for an agency to prepare an EIS will end up causing the harm which an EIS could prevent).

205. *See supra* notes 75, 96 and accompanying text.

B. The Court's Application of the Four-Factor Balancing Test to the District Court's Decision Demonstrates the Difficulty in Meeting the Irreparable Harm Standard for Permanent Injunctions for NEPA Violations

The Court demonstrated, through applying its newly announced four-factor balancing test for permanent injunctions, the difficulty in meeting the heightened standard for irreparable harm for NEPA violations.

First, the Court confused the proper standard for finding irreparable harm in granting permanent injunctions under its own test. The Court noted, “[m]ost importantly, respondents cannot show that they *will* suffer irreparable injury if APHIS is allowed to proceed with any partial deregulation”²⁰⁶ Shortly after, the Court reasoned that because respondents could file a new suit challenging a partial deregulation if and when APHIS conducted this action, “a permanent injunction is not now needed to guard against any present or imminent risk of *likely irreparable harm*.”²⁰⁷ This statement implied that the Court would allow a finding of likely irreparable harm as opposed to actual harm for a permanent injunction. Although a likelihood standard for permanent injunctions is more consistent with the statutory purpose of NEPA, the Court proceeded to apply the heightened actual harm standard in its analysis.²⁰⁸

As Justice Stevens explained in his dissent, “[a]lthough ‘a mere possibility of a future nuisance will not support an injunction,’ courts have never required proof ‘that the nuisance *will* occur’; rather, ‘it is sufficient . . . that the *risk* of its happening is greater than a reasonable man would incur.”²⁰⁹ Just as the Court criticized the district court for misapplying the four-factor balancing test by categorically issuing injunctions for NEPA violations, the Court itself confused the correct standard.²¹⁰

Second, the Court improperly relied on its own hypotheses instead of the district court’s findings to determine that respondents could not demonstrate irreparable harm will occur without an injunction.²¹¹ Based on the district court’s assessment of the facts, not only did the plaintiffs demonstrate that irreparable harm was likely to occur, they demonstrated that irreparable harm had already occurred.²¹² The district court found that conventional alfalfa fields were cross-contaminated with RRA during the limited time when Monsanto had specific regulations in place for

206. *Monsanto*, 130 S. Ct. at 2759–60 (emphasis added).

207. *Id.* at 2760 (emphasis added). This statement is contrary to the argument the Court made in its discussion of the respondent’s ability to meet the injury prong for standing. *See supra* note 203.

208. *See supra* notes 154–57 and accompanying text.

209. *Monsanto*, 130 S. Ct. at 2770 (Stevens, J., dissenting) (quoting 5 JOHN NORTON POMEROY, A TREATISE ON EQUITY JURISPRUDENCE AND EQUITABLE REMEDIES, § 1937, at 4398 (2d ed. 1919)).

210. *See id.* at 2757 (majority opinion) (“Notwithstanding the lower courts’ apparent reliance on the incorrect standard set out in the pre-*Winter* Circuit precedents quoted above, respondents argue that the lower courts in fact applied the traditional four-factor test.”).

211. *See id.* at 2760 (providing an example of a situation where the Court determined that no injury would result to the respondents if RRA were deregulated by APHIS).

212. *Geertson Seed Farms v. Johanns*, No. C 06-01075 CRB, 2007 WL 1302981, at *1 (N.D. Cal. May 3, 2007).

planting.²¹³ Contamination by RRA is irreparable environmental harm, because once organic alfalfa is contaminated with the RRA engineered gene, which farmers cannot remove from their crops, they have to wait three to four years to replant organic alfalfa.²¹⁴ Furthermore, if farmers already suffered irreparable harm during this period of supposed enforcement by APHIS, more gene contamination and irreparable injury would be just as likely if APHIS were allowed to issue a partial deregulation on RRA.²¹⁵

However, the Court ignored these clear examples of actual irreparable harm and proposed that the farmers in the case could not be certain that they would experience irreparable harm until APHIS actually undertook a specific partial deregulation plan.²¹⁶ Further, and even more troubling, the Court relies on a highly speculative hypothetical situation to suggest that under a partial deregulation of RRA the respondents might suffer no injury at all from gene transfer.²¹⁷ This hypothetical proposes RRA deregulated in a remote region of the country.²¹⁸ As Justice Stevens retorted, “I doubt that [APHIS] would choose to deregulate genetically modified alfalfa in a place where the growing conditions and sales networks for the product are so poor that no farmer already plants it.”²¹⁹

The fact that the Court had to create a fictitious scenario in order to claim farmers would not suffer irreparable harm is evidence that the Court’s heightened standard for irreparable harm disfavors issuing permanent injunctions for NEPA violations. Moreover, creating hypotheses discounts the district court’s function as fact-finder.²²⁰ If reviewing courts are allowed to favor their own scenarios over actual factual findings, then environmental plaintiffs may struggle to satisfy the irreparable harm prong of the four-factor balancing test.

213. *Geertson Seed Farms v. Johanns*, 570 F.3d 1130, 1137 (9th Cir. 2009).

214. *Geertson Seed Farms v. Johanns*, No. C 06-01075 CRB, 2007 WL 518624, at *5 (N.D. Cal. Feb. 13, 2007).

215. *Geertson Seed Farms*, 570 F.3d at 1137.

216. *Monsanto*, 130 S. Ct. at 2760.

217. *Id.* at 2760.

[A] partial deregulation need not cause respondents any injury at all, much less irreparable injury; if the scope of the partial deregulation is sufficiently limited, the risk of gene flow to their crops could be virtually nonexistent. For example, suppose that APHIS deregulates RRA only in a remote part of the country in which respondents neither grow nor intend to grow non-genetically-engineered alfalfa, and in which no conventional alfalfa farms are currently located. Suppose further that APHIS issues an accompanying administrative order mandating isolation distances so great as to eliminate any appreciable risk of gene flow to the crops of conventional farmers who might someday choose to plant in the surrounding area.

Id.

218. *Id.*

219. *Id.* at 2768 n.8 (Stevens, J., dissenting).

220. *See id.* at 2772 (“[I]t bears mention that the District Court’s experience with the case may have given it grounds for skepticism about the representations made by APHIS and petitioners.”).

V. CONCLUSION

In *Monsanto Co. v. Geertson Seed Farms*, the Supreme Court of the United States held that the district court abused its discretion by enjoining partial deregulation and most future planting of RRA, while APHIS prepared an EIS pursuant to NEPA.²²¹ In its holding, the Court disregarded precedent and adopted the standard four-factor balancing test for the issuance of permanent injunctions for NEPA violations.²²² In doing so, the Court failed to weigh the precautionary goals of NEPA and consider the irreparable nature of environmental injuries.²²³ Furthermore, the Court's own application of the four-factor balancing test to the facts demonstrated the difficulty in meeting the new threshold level for irreparable harm.²²⁴ By raising the threshold for irreparable harm and limiting district courts' discretion to grant permanent injunctions, environmental plaintiffs may be forced to experience actual irreparable harm as a result of a NEPA violation.²²⁵

221. *Id.* at 2761–62 (majority opinion).

222. *Id.* at 2756.

223. *See supra* Part IV.A.

224. *See supra* Part IV.B.

225. *See supra* Part IV.A.