

# **Appendix I**

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## **Key Judicial Decisions**

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## **I.1 Introduction**

This appendix provides the text of two judicial decisions by the U. S. District Court in the District of Columbia, that reviewed issues directly related to the Yellowstone–Diversa CRADA. The decisions (issued in March 1999 and April 2000) addressed different parts of the plaintiffs’ claims against the NPS. (*See also* Chapter 1, Section 1.7 for a brief overview of relevant laws (Sections 1.7.1 and 1.7.2), regulations (Section 1.7.3), policies (Sections 1.7.4 and 1.7.5), and additional judicial decisions (Section 1.7.6) applicable to this EIS).

## **I.2 What Happened in Court?**

### **I.2.1 Edmonds Institute, et al. v. Babbitt, et al., 42 F. Supp. 2d 1 (D.D.C. 1999)**

Plaintiffs filed an action alleging that the Yellowstone–Diversa CRADA violated the Federal Technology Transfer Act of 1986, the National Park Service Organic Act, the Yellowstone National Park Organic Act, the National Environmental Policy Act, the Administrative Procedure Act and the so-called public trust doctrine. In the first (March 1999) decision, the court dismissed the plaintiffs’ claim that the National Park Service (NPS) had violated the public trust doctrine and ruled that the NPS had failed to demonstrate compliance with NEPA. The court ordered the NPS to conduct “any and all review mandated by [NEPA].” The court also explained that “[t]he Court is concerned here solely with enforcing the procedural requirements of NEPA” (March 1999 decision, footnote 12); and, that the court’s role is “to ensure that the agencies act through the process mandated by Congress in reaching their substantive determination.”

### **I.2.2 Edmonds Institute, et al. v. Babbitt, et al., 93 F. Supp. 2d 63 (D.D.C. 2000)**

In its final (April 2000) decision, the court dismissed with prejudice all of the plaintiffs’ remaining claims. Specifically, the court ruled that the Yellowstone–Diversa CRADA was consistent with the mandates of the NPS and Yellowstone Organic Acts, NPS regulations and the Federal Technology Transfer Act of 1986; does not authorize an impermissible “consumptive use” of park resources as alleged by plaintiffs; does not conflict with the conservation mandate of the NPS and Yellowstone Organic Acts as alleged by plaintiffs; does not involve the “sale or commercial use” of park resources as alleged by the plaintiffs; and, noted “in certain respects the CRADA may impose restrictions on Diversa’s research activities over and above those provided in a permit.”

The court noted that Congress specifically authorized the NPS to negotiate “equitable, efficient benefits-sharing arrangements” with researchers who study NPS resources (quoting the National Parks Omnibus Management Act of 1998, 16 U.S.C. § 5935(d)).

## **I.3 What Was the Effect of the Court Case?**

To comply with the District Court's order and NEPA, the NPS published the Benefits-Sharing DEIS for public review on September 22, 2006, and accepted comments on the DEIS through January 29, 2007. The NPS developed the alternatives presented in the draft EIS in response to earlier public scoping comments, received during June–August 2001 and April–May 2002.

The NPS suspended the Yellowstone–Diversa CRADA while the EIS process is being completed. With the CRADA suspended, neither Diversa nor Verenum Corporation (in June 2007, Diversa merged with Celunol Corporation to form Verenum) has had any obligation to Yellowstone from its marketing of at least one new product developed from research first started at Yellowstone.

The NPS has not and will not enter into any other benefits-sharing agreements unless the EIS process ends with a decision to implement benefits-sharing. Research that might yield valuable new discoveries and inventions has continued in the national parks in compliance with current regulations and policies.

***Documents begin next page***

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA

EDMONDS INSTITUTE, et al., )

Plaintiffs, )

v. )

BRUCE BABBITT, in his )  
official capacity as Secretary )  
of the Department of the )  
Interior, et al., )

Defendants. )

Civil Action 98-561 (RCL)

MAR 24 1999

NANCY MAYER WHITE  
U.S. DISTRICT COURT

ORDER

Upon consideration of defendants' motion to dismiss, defendants' motion for summary judgment, and plaintiffs' cross-motion for summary judgment, the various oppositions thereto, and the record in this case, and for the reasons set forth in the memorandum opinion issued this date, it is hereby

ORDERED that defendants' motion to dismiss is GRANTED in part and DENIED in part, and that Count V of the first amended complaint is hereby DISMISSED with prejudice; and it is further

ORDERED that defendants' motion for summary judgment is hereby DENIED; and it is further

ORDERED that plaintiffs' motion for summary judgment is hereby GRANTED; and it is further

ORDERED that summary judgment is hereby entered on Count IV and that defendants suspend implementation of the Yellowstone-Diversa CRADA pending the completion of any and all review mandated by the National Environmental Policy Act, including but not limited to the preparation of an Environmental Assessment.

SO ORDERED.

  
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Royce C. Lamberth  
United States District Judge

DATE: 3-24-99

UNITED STATES DISTRICT COURT  
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FILED

MAR 24 1999

NANCY WALKER WASHINGTON CLERK  
U.S. DISTRICT COURT

MEMORANDUM OPINION

This matter comes before the Court on defendants' motions to dismiss several counts of plaintiffs' first amended complaint and for summary judgment on plaintiffs' NEPA claim, as well as plaintiffs' cross-motion for summary judgment on the NEPA claim. The underlying issue is the legality of the Department of the Interior's decision to enter into a novel agreement that allows a private biotechnology company to "bioprospect" microbial organisms from geysers and other thermal features in Yellowstone National Park. Upon consideration of the three motions, the oppositions thereto, and the relevant record in this case, the Court will GRANT the defendants' motion to dismiss Count V of the complaint and DENY the remainder of the defendants' motions; the Court will GRANT the plaintiffs' motion for summary judgment on the NEPA claim and enter summary judgment in plaintiffs' favor.

## I. FACTS

### A. Introduction: The Yellowstone-Diversa CRADA

On August 17, 1997, the defendants held a ceremony to commemorate the 125<sup>th</sup> anniversary of the nation's oldest national park, Yellowstone National Park. The ceremony was attended by top environmental policymakers including Vice President Al Gore, Secretary of the Interior Bruce Babbitt, National Park Service Director Robert Stanton, and Yellowstone Superintendent Mike Finley, who announced that the federal government had entered into a novel contract with San Diego-based Diversa Corporation by which Diversa would obtain a nonexclusive right to "bioprospect" microbial organisms in Yellowstone, in exchange for an agreement to share potential financial returns with the Park. The agreement, officially called a Cooperative Research and Development Agreement (CRADA), was the first of its kind to involve a national park. As explained in the Statement of Work incorporated in the CRADA, Yellowstone and Diversa will cooperate to research and catalog the Park's biological diversity, primarily in the Park's thermal features such as geysers, hot springs, fumaroles, and mud pots, but also in the Park's "alpine tundra ecosystems, subalpine forests; riparian habitats, sedge marshes, bogs, swamps, streams and lakes." Statement of Work at 2. Based on this initial survey, the sites will be "prioritized and systematically sampled by [Diversa] scientists," using techniques to be "jointly selected by YNP and [Diversa] to ensure that there is no significant impact to park resources or other

appropriate park uses." Id. The samples

will consist of raw samples taken directly from the environment; for example, sample types will include raw environmental samples (biological tissues, soils, sediments, water and rock) located at YNP. Nucleic acids will be isolated directly from these environmental samples or they will be used as inocula for laboratory enrichment [to produce a microbial community large enough to harvest nucleic acids]....

...After the [nucleic acids] are isolated from the environmental matrix, it will undergo one or more steps to render it clonable. Once the total [nucleic acids] have been purified, it will be used to construct [a library of genetic information]....

The gene libraries are used by [Diversa] as starting material for the discovery and cloning of biocatalysts, bioactive, and other compounds.... Following subcloning and overexpression into a suitable industrial host, the resulting gene products, consisting of enzymes and bioactive molecules, will undergo biochemical characterization and be evaluated by [Diversa] for potential commercial application.

Id. at 2-3. The libraries of genetic information will also be available to Park scientists for their own research. The CRADA and Statement of Work explicitly state that all activity carried on under the agreement will be in accordance with applicable law, including Park management policy.<sup>1</sup>

Despite the impressive scientific aspects of the agreement,

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<sup>1</sup>Pursuant to the CRADA, a Research Authorization/Collection Permit was issued to Diversa in 1998 authorizing the collection of biological tissues, soils, sediments, water, and rock from Yellowstone.

the most innovative feature of the CRADA is the consideration that the Park receives in exchange for access to the Park's biodiversity. The specifics of the financial agreement are included in Appendix B to the CRADA, which has not been released to the public (nor to this Court) despite the requests of members of Congress and at least two FOIA lawsuits of which the Court is aware. Nevertheless, the defendants have disclosed that Diversa will make annual payments of around \$20,000 to the defendants, as well as provide research equipment and other support for the Park's use and benefit. The most significant aspect of the agreement, however, is that Diversa agrees to pay the Park royalties on any future commercial use or product derived from the company's bioprospecting activities in the Park. Although the specifics are not public, the Park has indicated that it will receive royalties of between .5% and 10% depending upon the nature of the raw material and the final product.

The Yellowstone-Diversa CRADA marks the first time in history that an American national park would stand to gain financially from scientific discoveries made within its borders. To understand the significance of this shift in policy, it is necessary to briefly examine the emerging field of "bioprospecting" and how it relates to the Yellowstone National Park.

#### **B. Bioprospecting**

The term "bioprospecting" refers to a relatively new method

of natural resource exploitation. Natural resource use on federal lands historically has consisted largely of traditional consumptive uses such as timber harvesting, mining, hunting, and grazing.<sup>2</sup> Bioprospecting presents a totally new, related (whether the fundamental nature is different than traditional consumptive or indistinguishable is a matter of much debate) use that targets microscopic resources--the genetic and biochemical information found in wild plants, animals, and microorganisms. See generally John R. Adair, Comment, The Bioprospecting Question: Should the United States Charge Biotechnology Companies for the Commercial Use of Public Wild Genetic Resources?, 24 Ecology L.Q. 131 (1997). Pioneered as a resource management strategy by developing nations such as Costa Rica, bioprospecting has enormous commercial potential, which appears to have been among the defendants' motives in introducing it to Yellowstone National Park. See Michael Milstein, Yellowstone Managers Stake a Claim on Hot-springs Microbes, Science, Oct. 13, 1995 (quoting Yellowstone officials); see also Soukup Decl. ¶ 9.

Bioprospecting has developed in conjunction with the booming field of biotechnology, a multibillion dollar industry that uses biological resources such as genes and enzymes to develop industrial products. The uses of such products range from stripping the paint from old Navy boats, to extraction of gold from ore, to DNA fingerprinting, to fighting cancer.

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<sup>2</sup>Such consumptive uses, however, have not historically been permitted in the national parks.

One of the best-known examples of the financial and other benefits to be gained from bioprospecting and biotechnology is an enzyme called Taq polymerase, which was developed from a microbial species named *Thermus aquaticus*, first discovered in 1966 in the Mushroom Pool, a hot spring eight miles from Old Faithful in Yellowstone National Park. Due to its hot spring origins, Taq polymerase can withstand extremely high temperatures, which makes it ideally suited to the chemical processes used by scientists to copy DNA material, a process with numerous applications in medicine, law enforcement, and other fields. In addition to the social benefits of Taq polymerase, it has enormous financial value. The patent on the enzyme was sold in 1991 for \$300 million to a company and now generates an estimated \$100 million per year.

As the benefits of biotechnology have become increasingly visible, the demand for bioprospecting has also grown. This increased demand places greater and greater value on places like Yellowstone National Park that have a high level of biological diversity, where greater concentrations of genetic information offer the best chance of discovering biochemical materials that may lead to important (and commercially rewarding) products.

### C. Biodiversity in Yellowstone National Park

Yellowstone National Park was created by Act of Congress in 1872, whereby "[a] tract of land in the States of Montana and Wyoming, lying near the headwaters of the Yellowstone River" was

"dedicated and set aside as a public park or pleasuring ground for the benefit and enjoyment of the people." 16 U.S.C. § 21. Today, the Park includes more than two million acres in Wyoming, Montana, and Idaho. Some three million people visit the Park each year to enjoy its scenic views, rich variety of wildlife, and world-famous geysers and hot springs.

Although Yellowstone is often associated with bears, bison, and other large animals, scientific discoveries over the last several decades have revealed that the Park's greatest wealth of life may be hidden from the naked eye. Yellowstone is home to an estimated eighty percent of the world's terrestrial geysers and more than half of its thermal features, including hot springs, mud pools, and fumeroles.<sup>3</sup> These areas were once thought to be wastelands, too hot to sustain life. Now, however, scientists have discovered that the Park's thermal features are home to a microbial community whose biological diversity may rival that of the tropical rainforests.

Scientists in the Park, such as those employed by Diversa pursuant to the Yellowstone-Diversa CRADA, take teaspoon-sized samples from geysers and hot springs to be analyzed in laboratories outside the Park. A single test tube's worth of water and sediment can contain thousands of separate species of microscopic organisms. Extrapolate that to the 10,000 geysers,

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<sup>3</sup>In addition to the sheer number of thermal features in Yellowstone, the Park's uniqueness is heightened because it is one of the last thermal fields in the world that has not been harnessed as a geothermal power source.

hot springs, and other thermal features in the Park, and the potential number of as-yet-unidentified species is staggering. Park officials estimate that far less than one percent of the Park's microbes have been catalogued.

Such a wealth of microbial life is a treasure jealously guarded by many, including environmentalists, park enthusiasts, scientists, and (most recently) bioprospectors. Because each species in the microbial soup has its own genetic makeup and unique characteristics, the tremendous diversity of species translates into an equally awesome diversity of genetic and biochemical information for investigation and potential development for commercial or industrial use. Biotechnology companies salivate at the possibility of making a discovery like that of *Thermus aquaticus* (discussed above) or one of the dozen or so other creatures discovered in the Park that have already led to potentially lucrative products.

#### D. Bioprospecting in Yellowstone

The Yellowstone-Diversa CRADA does not represent the first time that the National Park Service has permitted scientific research and collection of microbial specimens from Yellowstone's thermal features. According to a declaration supporting defendants' motion for summary judgment, the earliest research permit authorizing collection of microbial samples from the park was in 1898. In recent years, the number of annual requests by researchers for access to the Park has averaged 1,500, with some

250-300 research permits issued each year (between 40 and 50 of which are for microbial research projects).<sup>4</sup> National Park Service regulations govern this general permit system, to ensure that research activities are consistent with the Park's overall goals.

Before the Yellowstone-Diversa CRADA, researchers were free to remove any specimen within the purview of their permit and develop it as they wished. If such development led to commercial uses, such as in the case of Taq polymerase, the Park Service never saw any proceeds from the derivative products.<sup>5</sup>

In need of funds, and recognizing that potentially valuable natural resources were being removed from Yellowstone with no remuneration to the Park and its owners, the American people, see Soukup Decl. ¶ 9, officials within the Department of Interior began to consider a dramatic shift in park management policy-- from the traditional conception of biochemical and genetic resources as a "common heritage of mankind" to a management scheme (patterned on the successes of Costa Rica and other nations) that uses bioprospecting to provide funds and incentives for the conservation of biological diversity.

To that end, the defendants opened negotiations in 1995 with

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<sup>4</sup>As discussed below, recent changes in DOI policy (calling for a review of all research permits and suggesting that CRADAs be required for all commercial research) may have affected these figures.

<sup>5</sup>Yellowstone even reputedly declined contributions offered by the current holder of the patent on Taq polymerase, reportedly because of uncertainty as to the legality of such a transaction.

the Diversa Corporation and other biotechnology companies to explore possible bioprospecting contracts. Lacking any statutory authority specific to the national parks or other federal lands, the government decided to cast any potential agreement as a cooperative research and development agreement (CRADA) under the Federal Technology Transfer Act of 1986, which authorizes federal laboratories to enter into CRADAs with nonfederal entities to facilitate the sharing of research performed by government scientists. By the fall of 1996, Diversa and the defendants were cooperating to draft a CRADA that would permit the collection of raw environmental materials from Yellowstone.

When plaintiffs learned in 1997 of the defendants' negotiations, they submitted a petition for rulemaking and collateral relief to the defendants requesting that they not enter into the Yellowstone-Diversa CRADA without first performing an environmental impact analysis and giving the public notice of the proposed change in policy. By letter dated September 23, 1997, defendant National Park Service notified plaintiffs that it was initiating a ninety-day internal review of the Yellowstone-Diversa CRADA. By letter dated January 21, 1998, the Park Service denied the plaintiffs all relief requested. A final version of the CRADA was signed by National Park Service Director Robert Stanton and Yellowstone Superintendent Mike Finley on May 4, 1998.

The Yellowstone-Diversa CRADA has signaled a major change in defendants' park management policy on scientific research.

Documents obtained by plaintiffs pursuant to the Freedom of Information Act show that as early as 1996 Park Service officials including Yellowstone Superintendent Mike Finley considered the issue of royalties from bioprospecting to be an issue that transcended Yellowstone. The author of one memorandum stated that "[a]ny precedent set will affect all parks, and may influence profitable resource access by other industries besides biotech/microbiology." Mendelson Decl. attach. 2. A September 10, 1998 memorandum from the Solicitor of the Department of Interior to the Chief of Staff, all Assistant Secretaries, and all heads of Bureaus and Offices, indicated that the issue of bioprospecting was being discussed on a department-wide basis. The Solicitor recommended that each bureau and agency immediately review all research permits and include the following provision in each permit:

Use of collected specimens may be for scientific and educational purposes only

Any specimen collected under this permit, or any component of any specimens--including natural organisms, enzymes, genetic materials, or seeds--may be used for scientific or educational purposes only, and may not be used for commercial purposes unless the permittee has entered into a cooperative research and development agreement (CRADA) with the [relevant agency of the Department of Interior]. Breach of this condition will be grounds for revocation of the permit and denial of future research permits. Furthermore, if the permittee develops commercial products from collected specimens or components thereof without a CRADA, any such commercial product will be subject to the payment of a royalty rate

of ten percent (10%) to the agency or Department.

Pls.' Reply Brief, Ex. 1. Plaintiffs also claim that the Park Service revealed in separate FOIA litigation that between fifteen and eighteen research groups have expressed interest in entering into a CRADA authorizing collection and use of specimens from Yellowstone alone. Mendelson Decl. ¶ 16.

E. The Future of Bioprospecting on Federal Lands

The precise number of bioprospecting CRADAs being considered department-wide by the defendants is unknown, but a number of parks other than Yellowstone hold great potential for bioprospecting. Judging by the DOI Solicitor's September 1998 memorandum, other federal lands may be under consideration for bioprospecting CRADAs. Nevertheless, as far as the Court is aware, the defendants have not conducted a rulemaking procedure for this change in policy, nor have the defendants solicited public comment informally. The defendants have declined requests from members of Congress seeking information about the financial aspects of the Yellowstone-Diversa CRADA. Essentially, the future of bioprospecting on federal lands in the United States appears to be a work in progress, but the government as of yet has not engaged in any public debate on the issue nor made any definitive policy statement through regulations or less formal means.

F. Procedural History of this Case

First, because the defendants challenge plaintiffs' standing, a brief description of the various parties is appropriate.

Plaintiff Edmonds Institute is a nonprofit public interest organization based in Edmonds, Washington. Among the group's goals are the regulation of biotechnology and the maintenance and protection of biodiversity. The Institute's Executive Director is Beth Burrows, who is alleged in the complaint to have visited Yellowstone many times and plans to visit the Park again, where she enjoys the aesthetic and recreational pleasures of the Park, including its thermal features.

Plaintiff Alliance for the Wild Rockies is a nonprofit organization dedicated to the preservation and protection of the native biodiversity of the Northern Rockies Region; it has an office in Bozeman, Montana dedicated primarily to issues dealing with Yellowstone National Park and the surrounding ecosystem. The Alliance has 1,000 member businesses and 3,500 individual members, some of whom are alleged in the complaint to regularly hunt, fish, camp, canoe, and otherwise enjoy Yellowstone, including its thermal features and other distinct ecosystems. In addition, some members of the Alliance have worked or currently work as rangers, researchers (including both businesses and individuals), and as guides in the Park.

Plaintiff International Center for Technology Assessment (CTA) is a Washington, D.C.-based nonprofit corporation focused

on the environmental, economic, and ethical issues surrounding the biotechnology industry (including bioprospecting), particularly as it relates to the national parks.

Finally, plaintiff Phil Knight is a resident of Bozeman, Montana who allegedly visits Yellowstone some twelve times a year to hike, photograph, and otherwise enjoy its aesthetic and recreational qualities. Mr. Knight is specifically alleged to have visited many of the Park's thermal features.

Defendants, of course, are Secretary of the Interior Bruce Babbitt, sued in his official capacity, and Robert Stanton, Director of the National Park Service, also sued in his official capacity only.

As mentioned briefly above, plaintiffs filed a petition in 1997 requesting that the agency not enter into the Yellowstone-Diversa CRADA (or similar agreements) because the agency had failed to provide public notice of its proposed change in policy and had not undertaken the environmental impact assessment required by law. The defendants denied plaintiffs' request in January of 1998.

On March 5, 1998, plaintiffs filed this action, alleging that the Yellowstone-Diversa CRADA violated the Technology Transfer Act of 1986, 15 U.S.C. § 3701 et seq., the National Park Service Organic Act of 1916, 16 U.S.C. § 1 et seq., the Yellowstone National Park Organic Act, 16 U.S.C. § 21, et seq., the National Environmental Policy Act, 42 U.S.C. § 4321 et seq., and the so-called public trust doctrine, as well as the

Administrative Procedure Act, 5 U.S.C. §§ 702, 706. Following the signing of the final CRADA on May 4, 1998, the parties jointly requested a revision of the pleading schedule, and plaintiffs filed a first amended complaint on June 17, 1998.

Defendants filed their motion to dismiss Counts I, II, III, and V on August 28, 1998, along with a motion for summary judgment on plaintiffs' remaining count brought under the NEPA. Plaintiffs filed their opposition with a cross-motion for summary judgment on the NEPA claim on September 24, 1998. These three motions are currently before the Court. Defendants' motion to dismiss alleges that the plaintiffs do not have standing to challenge the Yellowstone-Diversa CRADA and, alternatively, that the plaintiffs have failed to state a claim upon which relief can be granted. Defendants have elected not to challenge plaintiffs' standing to bring the NEPA claim, and the cross-motions for summary judgment address the substantive merits of that issue. The Court will consider the motion to dismiss first, and the cross-motions for summary judgment second.

## II. LAW AND APPLICATION

### A. Defendants' Motion to Dismiss Counts I, II, III, and V

In their motion to dismiss, defendants challenge plaintiffs' ability to bring each of the claims included in the first amended complaint, with the exception of the NEPA claim which the defendants have not sought to have dismissed. In particular, the

defendants argue that the plaintiffs have not met the constitutional and prudential requirements of the standing doctrine,<sup>6</sup> and that the statutes and authorities cited by the plaintiffs do not give rise to a cognizable cause of action.

#### 1. Standing

The Supreme Court and the Court of Appeals have devoted a great deal of attention to the issue of standing in recent decades, including a number of important decisions in the 1990s. In these decisions, two distinct aspects of the standing doctrine have been identified. First, Article III of the Constitution provides the Judiciary with the authority to decide "Cases" and "Controversies." The courts have interpreted that authority to impose a constitutional limitation on what persons or entities may bring suit in federal court. Specifically, a plaintiff must demonstrate (1) that it has suffered "injury in fact," which is defined as an invasion of a judicially cognizable interest that is both (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) that the injury is fairly traceable to the conduct complained of; and (3) that a favorable ruling will likely, as opposed to conceivably, redress the plaintiff's injury. See Lujan v. Defenders of Wildlife, 504

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<sup>6</sup>Defendants have not challenged the standing of any particular plaintiff, but instead have asserted arguments that do not differentiate between the plaintiffs. Therefore, the Court will also address defendants' arguments generally rather than as applied to each plaintiff in turn. Because all plaintiffs have alleged largely identical interests and injuries, this approach should have no practical effect on the Court's determinations.

U.S. 555, 560-61 (1992); Animal Legal Defense Fund v. Glickman, 154 F.3d 426, 431 (D.C. Cir. 1998). Second, in addition to the constitutional standing requirements stemming from Article III, the courts have traditionally imposed so-called prudential requirements on plaintiffs. Among these prudential requirements is a showing that "the interest sought to be protected by the complainant is arguably within the zone of interests to be protected or regulated by the statute or constitutional guarantee in question." Association of Data Processing Serv. Orgs. v. Camp, 397 U.S. 150, 153 (1970); see National Credit Union Admin. v. First Nat'l Bank & Trust Co., 118 S. Ct. 927, 933 (1998); Animal Legal Defense Fund, 154 F.3d at 431. The constitutional and prudential requirements are conceptually distinct, and the Court will address them separately.

a. Constitutional Standing Requirements

Defendants argue that the plaintiffs have failed to satisfy both the "injury in fact" requirement and the "redressability" requirement of constitutional standing. The Court disagrees on both issues.

With regard to injury in fact, defendants do not dispute that aesthetic and recreational interests, as a general matter, are cognizable for standing purposes. Indeed, the Supreme Court has left no room for debate on that issue. See Lujan v. Defenders of Wildlife, 504 U.S. at 562-63 ("Of course, the desire to use or observe an animal species, even for purely esthetic

purposes, is undeniably a cognizable interest for purpose of standing."); Sierra Club v. Morton, 405 U.S. 727, 734 (1972) ("The injury alleged by the Sierra Club will be incurred entirely by reason of the change in the uses to which Mineral King will be put, and the attendant changes in the aesthetics and ecology of the area. ...We do not question that this type of harm may amount to an 'injury in fact' sufficient to lay the basis for standing..."); Animal Legal Defense Fund, 154 F.3d at 432. Instead, the defendants argue that plaintiffs' alleged injury is not "actual or imminent." This argument, however, is unpersuasive.

Defendants place great weight on the fact that collection of specimens under the CRADA will amount to taking samples that each contain about a teaspoon of water, sediment, and microbial life. There is no support, however, for the argument that an actual injury will not give rise to standing if it comes in small doses or a if defendant considers it to be insignificant.

In a recent en banc decision, the entire Court of Appeals agreed that a cognizable injury in fact arises where a plaintiff alleges that his aesthetic interest is affected by degradation of the environment or a reduction of the supply of wildlife to be viewed or studied. See Animal Legal Defense Fund, 154 F.3d at 433; id. at 449 (Sentelle, J., dissenting). Neither the majority nor the dissenters expressed concern that small injuries should not be cognizable. Were that the case, then standing analysis would become a question, for example, of whether \$1000 or \$50 or

§2 were required for a plaintiff to state an injury in fact. This type of inquiry has no place in the standing analysis, but is rather an issue going to the merits. In this case, for example, defendants' argument that the environmental impact of the specimen collection is insignificant is relevant to plaintiffs' NEPA claim, but it is not determinative of whether plaintiffs have established a cognizable injury in fact.

In any event, although each sample taken from Yellowstone may be the size of a test tube, the overall impact of the specimen collection authorized by the CRADA and its corresponding permit is not teaspoon-sized. As described in the CRADA's Statement of Work, Diversa plans to study the microbes present in a wide array of ecosystems and "systematically sample[]" the sites in order of their uniqueness and genetic diversity. This will entail a significant amount of collection throughout a large area of the Park and, by the CRADA's own terms, is expected to have a duration of at least five years. Taken together, the amount of teaspoon-sized samples can hardly be considered so inconsequential as to not even constitute a cognizable injury to plaintiffs' legitimate aesthetic and recreational interests.

Also, as defendants concede, the collection of microbial samples, while not rising to the level of strip mining or timber harvesting, does involve some intrusion into the delicate ecosystems around Yellowstone's thermal features. For example, one of the plaintiffs alleges that, since the implementation of the CRADA, he has observed footprints and other signs of human

intrusion around thermal features which disrupted his aesthetic enjoyment of the Park. Such physical damage to the Park's environment is certainly injury in fact, as could be the mere presence of researchers in the Park's ecosystems if this presence is notable to the plaintiffs and arguably interferes with their enjoyment of the Park's natural wonders. Defendants' argument that someone (hikers, or other scientists) could be trampling the geysers even if there was no Yellowstone-Diversa CRADA does not refute the fact that trampled geysers (to give one example of plaintiffs' alleged injuries) constitutes an injury in fact for standing purposes.

This finding is entirely in keeping with the case law of the Supreme Court and the Court of Appeals. Modern decisions have found actual or imminent injury in fact where continued whaling allegedly threatened the interests of whale watchers, see Japan Whaling Assoc. v. American Cetacean Soc'y, 478 U.S. 221, 231 (1986), and where plaintiffs alleged that governmental action made a national forest more vulnerable to forest fire, see Mountain States Legal Found. v. Glickman, 92 F.3d 1228, 1234 (D.C. Cir. 1996). See also Animal Legal Defense Fund, 154 F.3d at 434-35 (and cases cited therein). Because the collection of microbial specimens is an actual invasion of plaintiffs' recognized aesthetic and recreational interests, plaintiffs have established injury in fact for standing purposes.<sup>7</sup>

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<sup>7</sup>Plaintiffs also allege that they have suffered informational and economic harm as a result of the Yellowstone-Diversa CRADA. Because the injury to their aesthetic and

Defendants' next contention--that a favorable ruling would not redress plaintiffs' injuries--is equally unavailing. The essence of defendants' argument is that Diversa would have the opportunity to conduct the same research without the CRADA under an ordinary research and collection permit. This argument fails for several reasons.

As a preliminary matter, the Court disagrees with defendants' implicit assertion that the CRADA is essentially a meaningless document--that Diversa could enter the Park under an ordinary permit, collect specimens, and develop them as it pleases, and that this precludes a finding of redressability. Particularly in light of the DOI Solicitor's September 1998 memorandum, it appears that research conducted on DOI lands now cannot be used for commercial purposes (as opposed to pre-1997, when such commercial development was not prohibited). Therefore, it is clear that one effect of the Yellowstone-Diversa is to authorize Diversa to commercially develop the fruits of its research on Yellowstone specimens.<sup>9</sup>

Defendants argue that removing the commercial aspect of research and collection activity in the Park cannot possibly redress any alleged injury to plaintiffs' aesthetic injuries.

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recreational interests are sufficient to establish standing, the Court will not address the plaintiffs' other theories of standing.

<sup>9</sup>The other effects include a commitment to issue a collection permit to Diversa and to cooperate with Diversa's research and collection activities, neither of which is insignificant in the context of redressability.

This ignores the reality that the commercial nature of an activity can and does affect its impact on the subject environment and particularly on people's aesthetic and recreational interests in the Park. Although parkgoers may be willing to forgive the trespass of their national parkland when the goals of that trespass are scientific and educational, commercial exploitation of that same parkland may reasonably be perceived as injurious. This commonsense notion has not even been challenged in other contexts. For instance, in Alaska Wildlife Alliance v. Jensen, 108 F.3d 1065 (9<sup>th</sup> Cir. 1997), the Ninth Circuit found standing for plaintiffs to challenge the Department of Interior's decision to allow commercial fishing in Glacier Bay National Park. The court reasoned that "[a] finding in plaintiffs' favor, that commercial fishing is statutorily prohibited in Glacier Bay, would result in the elimination of commercial fishing in the relevant areas. This would redress plaintiffs' claimed injuries." Id. at 1069. The same is true in this case, where a favorable ruling from this Court would invalidate (or at least suspend) the Yellowstone-Diversa CRADA, and thus eliminate commercial bioprospecting from Yellowstone National Park, redressing plaintiffs' claimed injuries. There is an undeniable reality that commercial activity is qualitatively different than scientific and educational activity of a similar nature, due to the very different forces and motivations that drive them.

Even were the Court blind to the commonsense distinction

between commercial exploitation and purely scientific investigation, the defendants' argument must fail for another reason. Although defendants may have the discretion to permit Diversa to collect specimens from Yellowstone under an ordinary permit, this fact does not deny plaintiffs the standing to challenge the issuance of permits pursuant to the CRADA. See FEC v. Akins, 118 S. Ct. 1777, 1786 (1998) ("Agencies often have discretion about whether or not to take a particular action. Yet those adversely affected by a discretionary agency decision generally have standing to complain that the agency based its decision upon an improper legal ground."); Animal Legal Defense Fund, 154 F.3d at 442.

The bottom line is that the plaintiffs in this case claim an injury to their aesthetic and recreational interests from Diversa's activities conducted pursuant to the Yellowstone-Diversa CRADA. If the Court invalidates the CRADA, or enjoins its exercise pending the completion of an environmental impact statement, as the plaintiffs request, then the plaintiffs' injuries will be redressed. Therefore, the plaintiffs have established redressability.

Because the plaintiffs have demonstrated that they suffered injury in fact, fairly traceable to the defendants' decision to enter into the Yellowstone-Diversa CRADA,<sup>9</sup> which would likely be

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<sup>9</sup>Defendants did not challenge this aspect of standing. Even had they done so, the Court is satisfied that plaintiffs' alleged injuries are "fairly traceable" to the defendants' decision to enter into the CRADA. See, e.g., Telephone & Data Sys. v. FCC, 19 F.3d 42, 47 (D.C. Cir. 1994) ("[O]ne narrow proposition at

redressed by a ruling in their favor, the Court finds that they have satisfied the standing requirements imposed by Article III.

b. Prudential Standing Requirements

Defendants also argue that plaintiffs do not have standing to bring their claim under the Federal Technology Transfer Act (FTTA) because they do not "arguably fall within the zone of interests to be protected by the statute." Although the issue is a close one, the Court disagrees.

The Supreme Court and the Court of Appeals have made clear that the "zone of interests" requirement is not intended to be overly demanding. The Supreme Court has very recently affirmed that "for a plaintiff's interests to be arguably within the 'zone of interests' to be protected by a statute, there does not have to be an 'indication of congressional purpose to benefit the would-be plaintiff.'" National Credit Union Admin., 118 S. Ct. at 935. As the Court of Appeals has stated, the focus is "not on those who Congress intended to benefit, but on those who in practice can be expected to police the interests that the statute protects." Mova Pharmaceutical Corp. v. Shalala, 140 F.3d 1060, 1075 (D.C. Cir. 1998). Put another way, standing is precluded only "if the plaintiff's interests are ... marginally related to or inconsistent with the purposes implicit in the statute." National Credit Union Admin., 118 S. Ct. at 934.

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least is clear: injurious private conduct is fairly traceable to the administrative action contested in the suit if that action authorized the conduct or established its legality.").

The FTTA, codified at 15 U.S.C. § 3701 et seq., authorizes, inter alia, agencies to enter into CRADAs with nonfederal parties and to negotiate licensing agreements to share intellectual property generated by federal research. The law was enacted in response to a congressional concern that, despite billions in federal dollars spent on research and development at federal laboratories, little of this research and development led to commercially valuable uses. See Chem Serv., Inc. v. Environmental Monitoring Sys. Lab.--Cincinnati, 12 F.3d 1256, 1264 (3d Cir. 1993) (citing the Senate Report). The Yellowstone-Diversa CRADA cites the FTTA (along with the National Park Service Organic Act) as its legal basis, apparently taking the view (expressed in defendants' briefs) that Yellowstone National Park is itself a federal "laboratory."

When viewed in terms of recent cases interpreting the "zone of interest" requirement, it is not unreasonable to find that those who use federal laboratories "in practice can be expected to police the interests protected" by the FTTA. This is particularly true if one accepts the government's amazingly broad interpretation of the term "laboratory" under the FTTA to include the national parks and perhaps (if the Solicitor's September 1998 memo is any indication) all federal lands.

This interpretation of the zone of interests arguably protected by the FTTA is not inconsistent with the decision of the only federal court of appeals to consider this issue to date.

In Chem Service, Inc., the Third Circuit found that competitors<sup>10</sup> of a private laboratory that has entered into a CRADA with the EPA had standing. See Chem Serv., Inc., 12 F.3d at 1267. The court determined that, because the FTTA's CRADA provisions were integrally related to federal procurement laws, "[t]o the extent that a CRADA is used to circumvent the statutory and regulatory requirements of the federal procurement laws, we find that Congress intended potential bidders to such a contract to be within the zone of interests protected under the FTTA." Id.

It is not apparent on the face of the FTTA that it shares a similarly "integral" relationship with the laws and regulations governing the national park system. Nevertheless, if the DOI insists on interpreting the FTTA to apply to Yellowstone (and potentially to other parks and federal lands), then the relationship between the two bodies of law grows closer to a point that an "integral" relationship is shown. The intuitive barrier to this decision is that it seems absurd that an entire two-million-acre national park should be considered a "laboratory" under the FTTA. It is precisely the defendants who are to blame for this interpretation, however, and it would be inequitable to allow an agency to avoid review of its action

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<sup>10</sup>Although this theory was not stressed in the parties' briefs, the complaint does allege that some plaintiffs (both individuals and businesses) are researchers. These plaintiffs are in a very tangible sense competitors with Diversa for access to the myriad ecosystems in Yellowstone and even for the very microbes which Diversa seeks to collect. On this theory alone, plaintiffs could reasonably be found to fall within the zone of interests of the FTTA.

taken pursuant to a statute merely by adopting an absurd interpretation of that statute. Therefore, under the particular factual and legal posture of this case, the Court finds that the plaintiffs do indeed arguably fall within the zone of interests to be protected by the CRADA provision of the FTTA, and therefore the Court finds that the plaintiffs have established prudential standing on this claim as well.

To conclude this standing analysis, the Court finds that the plaintiffs have established their standing to bring each of the claims asserted in their first amended complaint. The Court will now proceed to defendants' argument that plaintiffs have failed to state a cause of action in Counts I, II, III, and V of their complaint.

## 2. Failure to State a Claim

Defendants argue that, even if the plaintiffs are found to have standing to bring this action, they fail to state a claim in Counts I, II, III, and V of the first amended complaint. The Court agrees with the defendants in some respects, and disagrees in other respects, as set forth below.

### a. Federal Technology Transfer Act

Defendants first assert that Count I fails to state a claim under the FTTA. In two respects, the Court agrees. First, plaintiffs' assertion that defendants have violated 15 U.S.C. §

3710a(c)(5)(C)(v) cannot possibly state a claim, because that provision by its clear and unambiguous terms applies only to an agency that has contracted out the operation of a federal laboratory to a nonfederal entity, a circumstance which is not present in this case. Second, the Court agrees that 15 U.S.C. § 3710a(f) cannot form the basis for a cause of action; it provides only that "[n]othing in this section is intended to limit or diminish existing authorities of any agency." Such a provision does not provide the Court with any judicially manageable standard by which to review agency action, and thus it cannot give rise to a cause of action. Likewise, defendants are correct that § 3710a(d)(1), which defines CRADA to include agreements between federal laboratories and nonfederal entities, cannot in a vacuum create any enforceable right in plaintiffs.

The Court disagrees, however, that plaintiffs cannot present any claim under the FTTA. Defendants conveniently ignore that plaintiffs' claim that the Yellowstone-Diversa CRADA violates the FTTA is explicitly brought under the APA, alleging that the defendants' action was "arbitrary, capricious, an abuse of discretion and otherwise not in accordance with law ... in violation of the Administrative Procedure Act, 5 U.S.C. §§ 702 and 706." As the defendants are undoubtedly well aware, the APA provides plaintiffs a cause of action with which to challenge interpretations of law and other final agency actions alleged to be in violation of a statute. See 5 U.S.C. § 702. The defendants have not argued that the Yellowstone-Diversa CRADA

does not constitute final agency action reviewable under the APA, nor could they. Even if not presented with perfect clarity in their amended complaint, plaintiffs have stated a cause of action under the APA that the defendants have acted in violation of the FTTA.

b. National Park Service and Yellowstone Organic Acts

Defendants likewise assert that the National Park Service Organic Act and the Yellowstone Organic Act cannot "conceivably give rise to a cause of action." This assertion is inconsistent with past decisions of this and other courts. Furthermore, it fails to recognize that plaintiffs are also suing under the Acts' implementing regulations.

This Court and the Court of Appeals have entertained claims based on the National Park Service Organic Act (NPSOA), often in conjunction with a particular park's organic act, on several occasions. In Daingerfield Island Protective Society v. Rabbitt, 40 F.3d 422 (D.C. Cir. 1994), for instance, the Court of Appeals considered claims brought under the NPSOA and other federal laws. After quoting from 16 U.S.C. § 1, the Court of Appeals stated: "As the district court correctly observed, this language gives the Park Service 'broad, but not unlimited discretion in determining what actions are best calculated to protect Park resources.' We must uphold the Park Service's exercise of discretion unless it is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law'...."

Likewise, this Court just three months ago considered a claim that the Park Service's deer management program was inconsistent with the NPSOA. See Davis v. Latschar, Civ. Action 97-232, 1998 WL 968474 (D.D.C. 1998). Of particular relevance to the case presently before the Court is a line of decisions by this and other courts that have reviewed the 1970 and 1978 amendments to the NPSOA and found those amendments to reflect a renewed insistence on the part of Congress that the national parks be managed in accordance with the primary purpose of the NPSOA, namely the conservation of wildlife resources. See National Rifle Assoc. of Am. v. Potter, 628 F. Supp. 903, 909-10 (D.D.C. 1986); Sierra Club v. Andrus, 487 F. Supp. 443, 447-49 (D.D.C. 1980); see also Michigan United Conservation Clubs v. Lujan, 949 F.2d 202, 207 (6<sup>th</sup> Cir. 1991) (expressly agreeing with and adopting the reasoning of National Rifle Assoc. of Am. v. Potter); Bicycle Trails Council of Marin v. Babbitt, 82 F.3d 1445, 1449-50 n.2 (9<sup>th</sup> Cir. 1996) (expressly adopting the findings in Potter). In addition to the decisions of other circuits just cited, the Fifth and Eighth Circuits have also entertained claims under the NPSOA and the APA. See Dunn-McCampbell Royalty Interest, Inc. v. NPS, 112 F.3d 1283, 1286 (5<sup>th</sup> Cir. 1997) (finding that, although NPSOA alone did not directly provide cause of action, plaintiffs could sue under the APA); Maugolf v. Babbitt, 125 F.3d 661, 668-69 (8<sup>th</sup> Cir. 1997) (referring to the NPSOA and its implementing regulations and stating: "[The Park Superintendent's discretion] must be

exercised with an eye toward promoting specific regulatory objectives ... and it is subject to the arbitrary-and-capricious standard of review...").

It is also relevant that the plaintiffs' first amended complaint specifically alleges that the defendants have also violated the regulations implementing the NPSOA, including 36 C.F.R. § 2.1(c)(3)(v), which generally prohibits the "Sale or commercial use of natural products." Defendants of course claim that this regulation is inapplicable because the Yellowstone-Diversa CRADA does not call for the "sale" or "commercial use" of natural products from the Park. Whether or not this interpretation can be sustained, it is clearly a question on the merits which should be addressed later--not an appropriate ground for finding that plaintiffs have failed to state a claim. Defendants also argue that other, more specific, regulations such as those governing research and collection (36 C.F.R. § 2.5) make the general provisions of 36 C.F.R. § 2.1 inapplicable. This reasoning is not convincing, primarily because the regulations governing research permits by their own terms are applicable only to scientific and educational research and do not contemplate commercial research. Finally, defendants argue that "[a]t a minimum, [their] interpretation of [their] own regulations is certainly a reasonable one that should be upheld under the reasoning of Chevron U.S.A., Inc. v. Natural Resources Defense Council, 467 U.S. 837 (1984)." That may well be, but it also is a question that goes substantially to the merits and should be

decided on summary judgment, not on a motion to dismiss for failure to state a claim.

For all of these reasons, the Court finds that the plaintiffs have sufficiently stated a cause of action under both the National Park Service Organic Act and the Yellowstone National Park Organic Act.

c. Public Trust Doctrine

Defendants' final argument relative to their motion to dismiss is that plaintiffs have no cause of action under the so-called "public trust doctrine." On this issue, the Court agrees with the defendants and will dismiss Count V of plaintiffs' complaint.

In Sierra Club v. Andrus, 487 F. Supp. 443 (D.D.C. 1980), this Court considered a claim similar to this one insofar as plaintiffs invoked the organic acts of both the Park Service and the particular park at issue and also the public trust doctrine. There, as here, the court recognized that the NPSOA imposed a limited discretion on the Secretary of Interior, reviewable by the courts. See id. at 448-49. The court also examined plaintiffs' trust theory and found that Congress had supplanted any trust obligations by enacting the detailed regulatory system governing the national parks. See id. at 449. The plaintiffs do not contest this view, except to argue that their public trust doctrine claim should be heard if the Court were to dismiss their claims under the Park Service and Yellowstone Organic Acts.

Because the Court will not dismiss plaintiffs' claims under those two statutes and their implementing regulations, there is no reason to question the holding of Sierra Club v. Andrus in this case. Therefore, Count V of plaintiffs' complaint will be dismissed.

For all of the reasons set forth above, the Court finds that the plaintiffs have established constitutional and prudential standing and have stated claims under the FTTA, the NPSOA, and the Yellowstone National Park Organic Act. Defendants' motion to dismiss is denied as to those claims. However, plaintiffs have not stated a claim under the public trust doctrine, and the defendants' motion to dismiss will be granted as to Count V of the complaint.

**B. Cross-Motions for Summary Judgment on the NEPA Claim**

Defendants elected not move to dismiss plaintiffs' claim under the National Environmental Policy Act (NEPA) and instead filed a motion for summary judgment. Plaintiffs then filed a cross-motion for summary judgment. Upon consideration of these motions, the oppositions thereto, and the record in this case, the Court will deny defendants' motion, grant plaintiffs' motion, and enter partial summary judgment on this claim, including an injunction ordering the defendants to prepare an environmental assessment (EA).

In the NEPA, Congress declared a "broad national commitment

to protecting and promoting environmental quality." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 348 (1989) (citing 42 U.S.C. § 4331). To implement this commitment, the NEPA includes what its principal sponsor in the Senate referred to as "action-forcing" provisions, see id. at 349; Calvert Cliffs' Coordinating Comm. v. Atomic Energy Comm'n, 449 F.2d 1109, 1113 (D.C. Cir. 1971) (quoting Senator Jackson), including the mandate in 42 U.S.C. § 4332 that

to the fullest extent possible ... all agencies of the Federal Government shall--

(C) include in every recommendation or report on proposals for ... major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on--

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

This "detailed statement," typically referred to as an Environmental Impact Statement or EIS, "ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant

information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." Methow Valley Citizens Council, 490 U.S. at 349.

As the statutory language indicates, the duty to prepare an EIS is triggered only by a proposal for "major federal action significantly affecting the quality of the human environment." See Fund for Animals v. Thomas, 127 F.3d 80, 83 (D.C. Cir. 1997). To guide agencies in determining whether this threshold has been met, the Council on Environmental Quality (created by the NEPA) has issued regulations setting forth three levels of initial review. First, those proposals that normally require an EIS should immediately trigger preparation of an EIS. Second, the agency may designate types of actions that normally do not require the preparation of an EIS and can therefore be "categorically excluded." Third, any action that is not covered by the first or second option will be subject to an Environmental Assessment or EA. See 40 C.F.R. § 1501.4 (Whether to prepare an environmental impact statement); see also 40 C.F.R. §§ 1508.4 (Categorical exclusion), 1508.9 (Environmental assessment). Using these guidelines, the agency makes the initial determination of what level of review is appropriate for any particular action, subject to judicial review under an arbitrary-and-capricious standard. See National Trust for Historic Preservation v. Dole, 828 F.2d 776, 781 (D.C. Cir. 1987).

Defendants in this case prepared neither an EA nor an EIS

before entering into the Yellowstone-Diversa CRADA. Instead, defendants argue that they are entitled to summary judgment because (1) the activities performed under the CRADA fall under a categorical exclusion for "day-to-day resource management and research activities," see Department of the Interior Department Manual, 516 DM 7, App. 7, § 7.4(E)(2), and (2) approval of the CRADA was not a "major federal action." Both of these arguments fail.

As a preliminary matter, it is significant (practically determinative, in fact) that, while defendants have relied on a categorical exclusion before this Court, they have provided no evidence whatsoever of such a determination being made before the CRADA was finalized. Although the Court of Appeals has not addressed this particular issue, both judges of this Court that have considered the issue have found that a post hoc invocation of a categorical exclusion during litigation cannot justify a failure to prepare an EA or EIS. See Anacostia Watershed Soc'y v. Babbitt, 871 F. Supp. 475, 481 (D.D.C. 1994); Fund for Animals v. Espy, 814 F. Supp. 142, 149-51 (D.D.C. 1993). On this basis alone, the Court finds that the defendants' failure to prepare an EA or an EIS was arbitrary and capricious.<sup>11</sup>

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<sup>11</sup>The Court does not intend to establish a requirement that an agency prepare a full-blown statement of reasons for invoking a categorical exclusion. Such a requirement would detract from the legitimate governmental interest in avoiding unnecessary paperwork for actions that legitimately fall under a categorical exclusion and do not require an EA or EIS. The Court simply holds that a post hoc assertion of a CE during litigation, unsupported by any evidence in the administrative record or elsewhere that such a determination was made at the appropriate

Even had the defendants provided some evidence of a contemporaneous decision to invoke the categorical exclusion for "day-to-day" research and resource management, the Court has serious doubts as to whether such an invocation could survive arbitrary-and-capricious review. First, commercial exploitation of natural resources does not strike the Court as logically equivalent to "day-to-day resource management and research activities." Second, and frankly more weighty in terms of arbitrary-and-capricious review, the DOI's own Department Manual identifies several exceptions applicable to all categorical exclusions. These exceptions include actions that may "[h]ave adverse effects on such unique geographic characteristics as ... ecologically significant or critical areas, including those listed on the Department's National Register of Natural Landmarks," 516 DM 2, App. 2, § 2.2, "[h]ave highly controversial environmental effects," *id.* § 2.3, "[h]ave highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks," *id.* § 2.4, "[e]stablish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects," *id.* § 2.5, or "be directly related to other actions with individually insignificant but cumulatively significant environmental effects," *id.* § 2.6. Even had the defendants complied with the initial determination procedures mandated by the NEPA, the CEQ regulations, and their very own department time, cannot justify a failure to prepare either an EA or an EIS.

manual, the Court finds that they could not reasonably have found none of the exceptions listed above to apply. The defendants themselves proclaim the ecological significance of Yellowstone's thermal features, and Old Faithful at least must be on the Department's National Register of Natural Landmarks. Cf. id. § 2.2. Likewise, there can be no debate that the Yellowstone-Diversa CRADA is a precedent-setting agreement within the National Park System and the DOI in general. The first agreement of its kind, the CRADA was announced in the presence of the Vice-President, the Secretary of the Interior, the Director of the Park Service, and the Superintendent of Yellowstone. As many as eighteen other entities have already discussed similar agreements with the defendants. Finally, the very Solicitor of the DOI has called for a reevaluation of all research permits on lands controlled by the Department and recommended insertion of a provision prohibiting commercial development of the fruits of such research without a CRADA. Any argument that 516 DM 2, App. 2, § 2.5 does not apply here cannot possibly pass muster even under the deferential arbitrary-and-capricious standard of review.

The Court declines to decide at this time that the defendants must prepare an EIS, rather than merely an EA, preferring to leave that determination to the agency so long as those procedures mandated by law are complied with. The Court does consider defendants' argument that the CRADA somehow maintains the status quo to be counterintuitive and to defy the

defendants' own treatment of the agreement in the planning stages and at its announcement. The Court understands that, even without this or a similar CRADA, scientists with collection permits may still enter the Park's thermal features and scoop up test tubes full of water, sediment, and microbes. Nevertheless, the introduction of commercial bioprospecting into the nation's parks represents a dramatic change in Park Service policy both in Yellowstone and more generally. With regard specifically to Yellowstone, the defendants have offered no persuasive counter to plaintiffs' assertion that the CRADA, on its face, allows for a tremendously broad range of activities spanning a broad range of ecosystems. Although the CRADA appears aimed primarily at the Park's thermal features, the Statement of Work describes a survey of "microbes and fungi residing in YNP's alpine tundra ecosystems, subalpine forests; riparian habitats, sedge marshes, bogs, swamps, streams and lakes." These sites will then be "prioritized and systematically sampled," with the samples to include "biological tissues, soils, sediments, water and rock." In the Court's estimation, the scope of this language is indeed substantial.

Despite some misgivings, however, the Court is not prepared to hold that a Finding of No Significant Impact, reached after the preparation of an EA and a bona fide effort by defendants to comply with the letter and spirit of the NEPA, could never be upheld. The novel legal and factual issues raised by bioprospecting in Yellowstone require an intensive deliberation

by the defendants, ideally with public input--precisely the deliberation mandated by Congress through the NEPA. The Court will therefore defer to this process, rather than substitute its own judgment for that of the agency without the benefit of a well-developed record.<sup>12</sup>

For the reasons just set forth, the defendants will be ordered to suspend operation of the Yellowstone-Diversa CRADA and prepare an environmental assessment in accordance with the requirements of the NEPA. Summary judgment on Count IV will be entered in favor of the plaintiffs.

### III. CONCLUSION

For the reasons set forth above, defendants' motion to dismiss will be granted in part and denied in part, and Count V of the first amended complaint will be dismissed. Defendants' motion for summary judgment on the NEPA claim will be denied, plaintiffs' cross-motion for summary judgment on that issue will

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<sup>12</sup>The Court is concerned here solely with enforcing the procedural requirements of the NEPA. The Court does not express any view as to the substantive validity of bioprospecting as a natural resource management strategy, in the national parks or elsewhere. Indeed, that issue is one of considerable debate among and within many groups, including environmentalists and park enthusiasts. Some view bioprospecting (along with biotechnology) as an important tool for highlighting the value of biodiversity, and as providing a welcome incentive to preserve and protect our nation's natural resources, while others fear that it could open national parks and their resources to destructive (and perhaps unforeseen) abuses. Such substantive debates are usually best left to the political branches, and the Court's role is merely to ensure that the agencies act through the processes mandated by Congress in reaching their substantive determinations.

be granted. Summary judgment will be entered on Count IV against the defendants, and they will be ordered to suspend the implementation of the Yellowstone-Diversa CRADA pending completion of an EA or an EIS.

A separate order will issue this date.

  
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Royce C. Lamberth  
United States District Judge

DATE: 3-24-99

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