



## NPS Evaluates Benefits- Sharing with Researchers

Draft Environmental Impact Statement Available for Review

September 2006

National Park Service

We are pleased to announce that the National Park Service (NPS) Benefits- Sharing Draft Environmental Impact Statement (DEIS) is now available for public comment. The DEIS presents and analyzes a proposal to clarify the rights and responsibilities of researchers and the NPS in connection with the use of valuable discoveries, inventions, and other developments that result from research involving specimens from NPS units. Instructions for submitting comments are at the end of this newsletter.

### THE ISSUE

Should NPS share in potential scientific and economic benefits when researchers studying park resources discover or invent something commercially valuable from their research involving NPS specimens?

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### THE ALTERNATIVES

The DEIS considers three alternatives for managing benefits- sharing with the scientific community. The Preferred Alternative would require researchers who study park scientific specimens to enter into benefits- sharing agreements with the NPS before using their research results for any commercial purpose. Engaging park researchers in benefits- sharing agreements could return scientific benefits, in- kind services and sometimes royalties and other monetary benefits to parks for conservation- related purposes. Another alternative would prohibit scientific research involving NPS specimens if associated with the development of commercial products. The No- Action alternative would allow research that may lead to commercial products to continue in parks but without any obligation to share any resulting benefits with the NPS.

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### DEFINITIONS

*Bioprospecting* is the search for useful scientific information from genetic or biological resources. However, it does not require large- scale resource consumption typical of extractive industries often associated with the term “prospecting,” such as logging and mining.

*Benefits- sharing* is an agreement between researchers, their institutions, and the National Park Service that returns benefits to the parks when results of research have commercial value.

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### BACKGROUND

- Each year, several thousand research permits are granted to scientists to study specimens collected from national park units. Research permits are only granted for projects that meet stringent well- established park protection standards.
- At least 45 patents have been granted on inventions that resulted from research involving NPS specimens.
- Researchers continue to provide new understanding of natural processes in parks as well as occasionally discovering a commercial use for the knowledge they derive from NPS- related research.

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### HISTORY

**1985:** A synthetically- reproduced enzyme first isolated from a Yellowstone National Park hot spring microbe is used in the DNA fingerprinting process. DNA fingerprinting eventually revolutionizes the study of biology, and the new technology generated hundreds of millions of dollars for the patent holder while Yellowstone received no resulting benefits. Media reports were critical of the NPS and characterized it as a rip off of the American public.

**1998:** Yellowstone signed a benefits- sharing agreement with Diversa Corporation providing specialized scientific assistance to park resource managers and also ensuring a portion of future profits from Diversa’s research involving Yellowstone National Park specimens would go toward park resource conservation.

**1999:** A legal challenge put benefits- sharing on hold until an environmental impact statement (EIS) is completed.

**2000:** NPS’s basic approach as pioneered in the Yellowstone- Diversa benefits- sharing agreement was reviewed and upheld by a federal court. The federal court ruled that benefits- sharing: 1) is consistent with the NPS mission of resource conservation; 2) has been specifically authorized by Congress and does not violate any NPS governing statutes, regulations, or relevant technology transfer and intellectual property rights laws; and, 3) that research- based bioprospecting as managed by NPS is not a “sale or commercial use” of park material.

**2006:** The NPS Benefits- Sharing Draft Environmental Impact Statement is published for public comment.

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## BENEFITS- SHARING

Federal law authorizes the National Park Service to negotiate benefits- sharing agreements that provide parks with benefits when park- based research yields something of commercial value. Non- monetary benefits could accrue under some or all benefits- sharing agreements including scientific training for NPS staff, new research equipment, access to sophisticated labs or lab analyses, and increased scientific knowledge about park resources. Specific benefits would be negotiated individually for each agreement. The particular knowledge and capabilities of the benefits- sharing researcher partner would determine the specific non- monetary benefits generated and managed by each benefits- sharing agreement. Monetary benefits could also occur under some or all benefits- sharing agreements, such as 1) up- front funding for research projects that support the park's research activities, and/or 2) performance- based payments paid as a percentage of any agreement- related income received by a researcher's institution (e.g., from licensing intermediate research results or from selling products or technology developed from the knowledge gained from the research).

Benefits- sharing agreements would not authorize collecting specimens or conducting research in the park (these activities require an independent research permit that enforces strict well- established resource protection standards). NPS benefits- sharing agreements would be made only with researchers who already hold NPS research permits. Before deciding whether to issue any research permit, the NPS evaluates each permit application under NEPA and other NPS regulations that protect visitors and parks. The NPS benefits- sharing proposal has been developed consistent with applicable NPS laws and regulations, as well as relevant U.S. technology transfer and intellectual property rights laws. All NPS research specimens collected in park units remain the property of the federal government. The sale or other unauthorized transfer of research specimens to third- parties is prohibited.

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## OPPOSITION

Federal law encourages research in national parks if it does not adversely impact park resources or visitor use and enjoyment. Only research results, i.e. information and insight gained during research on park specimens, may be commercialized—not the collected specimens themselves. Nonetheless, some people question the appropriateness of allowing scientists to perform research in national parks if their research is related to commercial purposes.

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## FOR MORE INFORMATION OR TO COMMENT

Copies of the Benefits- Sharing DEIS are available at <http://parkplanning.nps.gov> (select "Washington Office" from the "Choose a park" pick list and then click on the link for benefits- sharing). Respondents are encouraged to submit comments through the internet at this website. **Comments must be received by midnight December 15, 2006.** Hard copies and CDs of the document are available by writing: Benefits- Sharing DEIS Team, Center for Resources, P.O. Box 168, Yellowstone National Park, Wyoming 82190 or by sending an e- mail to [BenefitsEIS@nps.gov](mailto:BenefitsEIS@nps.gov). Hardcopy comments may be mailed to the above address or hand- delivered to Yellowstone National Park headquarters in Mammoth Hot Springs, Wyoming. Comments will not be accepted by fax, email, or methods other than those specified above.

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## TIMELINE

Early Fall 2006	Draft EIS Public Review
Winter 2006	Final EIS Public Review
Winter 2006/2007	Final Decision Document

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## FREQUENTLY ASKED QUESTIONS

***Would benefits- sharing allow the selling of NPS specimens or any other NPS resources?*** No. The commercial use or sale of research specimens themselves is prohibited by federal regulation (36 CFR 2.1). However, the commercial use of research results developed from the study of park specimens is not prohibited.

***Would benefits- sharing change research in the parks?*** Benefits- sharing agreements would not authorize research activities in parks. NPS also believes it is important to prevent the research permitting process from being influenced by benefits- sharing considerations. Therefore, the NPS research permit application process would not be conditioned on the negotiation of a benefits- sharing agreement. Benefits- sharing negotiations would occur separately from the research permitting process.

***What would benefits be used for?*** All benefits would be dedicated to conservation of resources in the park where the research specimen was originally collected.