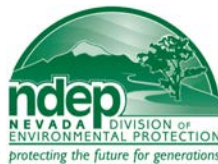
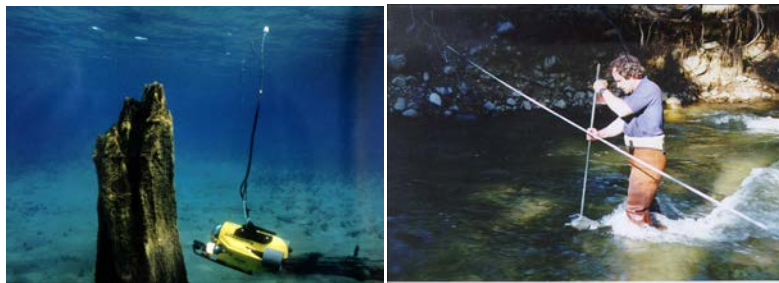


# TAHOE SCIENCE PROGRAM



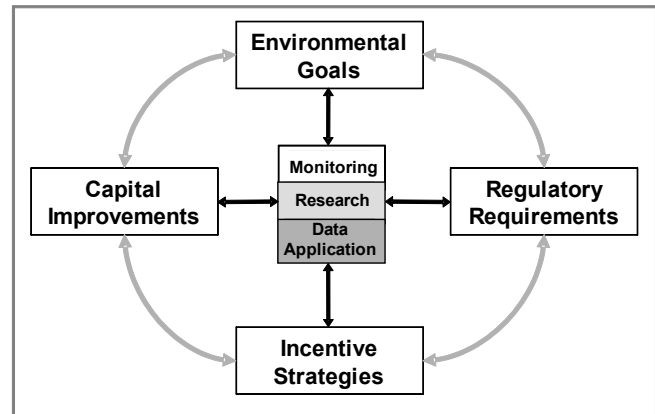
## Tahoe Science Program Fact Sheet

*“Knowledge is the basis for sound stewardship”*

### ***What is the Tahoe Science Program?***

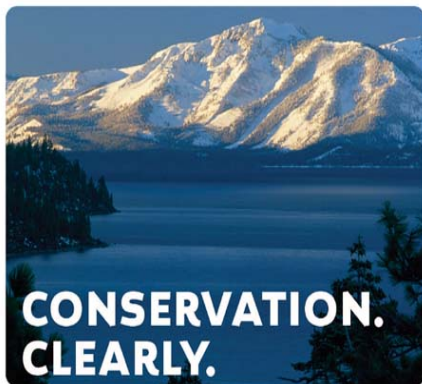
The Tahoe Science Program is a partnership between federal and state agencies, local jurisdictions, and the science community to achieve science-based decision-making and restoration of the Lake Tahoe Basin through environmental monitoring, applied research, and data application.

- *Monitoring* establishes baseline conditions and trends over time and tracks the effectiveness of restoration actions.
- *Research* seeks to understand the complex ecosystem of the Basin and generate information to support effective policies, regulations, and management.
- *Data application* analyzes, interprets, organizes, and reports technical information to environmental managers, regulators and the science community.



### ***Why do we need a Tahoe Science Program?***

The Lake Tahoe Basin is a unique and spectacular environment that has been significantly altered since the late 1800s by human activity. Restoring and conserving this area poses a substantial challenge to environmental managers and those responsible for encouraging sustainable development and recreational access.



The known effects of past human actions (e.g., clearcut logging and inappropriate development) over the last 150 years and the unique character of the Lake Tahoe Basin have led to broad-based support for substantive conservation and restoration efforts over the last two decades. These efforts have involved close partnerships among government agencies, the private sector, and the science community. Determining the most effective and affordable methods for conserving and restoring Lake Tahoe and its watershed has required scientists, managers, planners, developers,

regulators, and the public to work together to achieve the goal of restoring this national treasure for generations to come. The many challenges that remain require a sustained investment in science to understand the impacts of a changing climate, redevelopment of aging infrastructure, and the effectiveness of today's restoration projects.

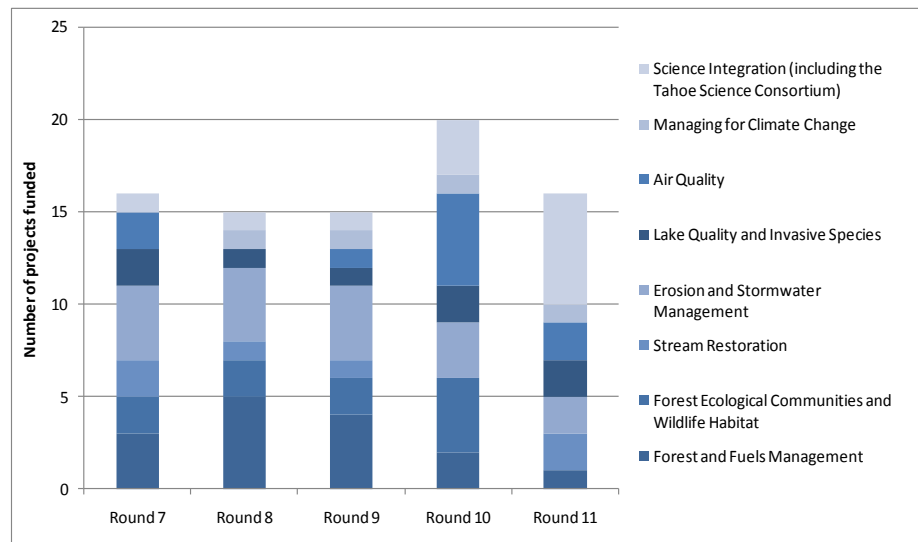
## What has the Tahoe Science Program done?

The Tahoe Science Program identified key areas of research needed to support environmental restoration and conservation projects and established an applied research program that has engaged a diverse community of researchers from academia, government agencies and the private sector. Accomplishments include:

- Implementing an applied science program, as part of the Southern Nevada Public Land Management Act (SNPLMA), which has provided \$18.75 million since 2007 to support 77 applied research projects and the Tahoe Science Consortium through annual competitive award processes ([www.fs.fed.us/psw/partnerships/tahoescience](http://www.fs.fed.us/psw/partnerships/tahoescience))
- Publishing *An Integrated Science Plan for the Lake Tahoe Basin: Conceptual Framework and Research Strategies* in 2010 (available at [www.tahoescience.org](http://www.tahoescience.org))



- Forming the *Tahoe Science Consortium* and establishing the *Science and Management Integration Team*
- Revising the region-wide Status & Trends Evaluation Program to make it the primary source of monitoring information for characterizing long-term environmental and socioeconomic conditions in the basin (available at: [www.tahoemonitoring.org](http://www.tahoemonitoring.org))



Research projects funded annually (Rounds) since 2007

## What are the benefits of the Tahoe Science Program?

Science is helping to focus and prioritize resource management issues including: Restoration of the lake's renowned historic clarity through the control of excessive fine sediment and nutrient loading, prevention and control of invasive aquatic species, reduction of wildfire risk and improving forest health, informing sustainable development strategies to cope with climate change, and protecting Lake Tahoe's nearshore environment. Partnerships between scientists and managers have resulted in:

- New models to quantify the sources of key water quality pollutants (i.e., fine sediment, nitrogen, and phosphorus) and their impacts on deepwater lake clarity



- New science-based tools to estimate the effectiveness of capital restoration projects and operations to reduce pollutant loads and achieve the goal of restoring lake clarity within 20 years
- Development of techniques to control the spread of aquatic invasive species in Lake Tahoe without the use of chemical pesticides
- Development of advanced planning practices to guide the reduction of excess forest fuels to reduce the likelihood of catastrophic wildfire and improve forest health while minimizing steep slope erosion and adverse impacts to sensitive stream environment zones
- Development of environmental indicators that can guide management solutions to improve the health of Lake Tahoe's nearshore environment

### ***What is the Tahoe Science Consortium?***

The Tahoe Science Consortium (TSC) is a unique partnership between two federal agencies and three academic institutions—U.S. Forest Service (Pacific Southwest Research Station), U.S. Geological Survey, the Desert Research Institute, University of California-Davis, and the University of Nevada-Reno—dedicated to providing science to restore Lake Tahoe and its fragile watershed, manage its wildland-urban interface, and anticipate the impacts of climate change. The TSC oversees the selection of the science themes and manages the peer and agency review process for the applied research program, prepares reports, and sponsors workshops, symposia, and interagency committees to enhance the integration of science in environmental restoration. It also sponsors a biennial Tahoe Science Conference that encourages scientists, engineers, artists, economists, environmental managers, regulators, policy-makers, business owners, federal, state, local and tribal representatives, and the general public from the Sierra Nevada and around the world to exchange ideas and develop collaborations to protect high alpine ecosystems under changing environmental and social climates (for more information: [www.tahoescience.org](http://www.tahoescience.org))



### ***What is the Science and Management Integration Team?***

The Science and Management Integration Team (SMIT) is a standing group of agency representatives and scientists that meets regularly to exchange leading-edge scientific findings and evolving management issues. Its goal is to identify, prioritize, recommend, and communicate research and monitoring activities to accelerate the restoration of Lake Tahoe.

### ***What is the future of the Tahoe Science Program?***

The Tahoe Science Program has achieved great success in the past six years and has established the infrastructure, plans, and knowledge base to inform and guide environmental restoration now and in the future. New approaches and funding strategies are being developed to sustain this program beyond the conclusion of the 2000 Lake Tahoe Restoration Act in November 2011 and SNPLMA support for the Tahoe Science Program in 2012.

*For more information about the Tahoe Science Program, please contact the Tahoe Science Consortium: (775) 881-7561; [www.tahoescience.org](http://www.tahoescience.org)*