

TAHOE: STATE OF THE LAKE REPORT 2007

INTRODUCTION

The monitoring of Lake Tahoe for nearly 40 years by the University of California, Davis, has resulted in a unique record of change in one of the world's most beautiful and endangered lakes. In this new public report, we summarize that record of the impacts of recent human activity on the water's clarity, temperature, chemical makeup and biology.

The trends revealed here tell us that Lake Tahoe is a very complex system, and its long-term behavior is not always as expected.

Our job in the scientific community is to understand that complexity and use our understanding to recommend ecosystem restoration and management options. Choosing among those management options, and implementing them, is the work of the non-scientific community.

This new UC Davis *Tahoe: State of the Lake Report*, which we intend to produce annually, is intended to give the non-scientific community more information about the variables that matter most to lake health.

Until now, only one measurement of Lake Tahoe's health status has been widely available to the public: the annual clarity report (often called the Secchi depth, after the instrument used to collect the clarity data). In the *Tahoe: State of the Lake Report*, the UC Davis Tahoe Environmental Research Center (TERC) will publish many more measurements of lake conditions.

The report is not intended to be a scorecard for the lake. Rather, it will provide a context for understanding what changes are occurring on a year-to-year basis: Was Lake Tahoe warmer or cooler than the historical record last year? Are algae increasing in concentration? And, of course, how do all the changes impact the lake's famous clarity?

The data we present are the result of the efforts of a great many scientists,

students and technicians who have worked at Lake Tahoe throughout the decades—so many that it is not possible to list them all. (A partial listing is available at terc.ucdavis.edu.) Similarly, the funding that has been required to maintain this effort has come from a great many sources, spanning federal, state and local agencies.

TERC's monitoring is frequently done in collaboration with other research institutions and agencies. In particular we would like to acknowledge the role of the U.S. Geological Survey (USGS), the National Aeronautics and Space Administration (NASA), the Desert Research Institute (DRI) and the University of Nevada, Reno (UNR).

We hope you find this report helpful. I welcome your comments.

Sincerely,

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