



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: CO861

Title: Eutrophication of Reservoirs on the Colorado Front Range

Focus Categories: Ecology, Water Quality

Keywords: Reservoirs, Eutrophication, Drinking water, Nutrients

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Abstract

Eutrophication, or the aging of lakes and reservoirs due to nutrient inputs, has been observed in many, if not most, Colorado Front Range reservoirs. While eutrophication is a natural process, the rapid pace with which it is occurring in Front Range reservoirs is a cause for concern. For many reservoirs, a shift in use is occurring rapidly as well, away from irrigation water storage and toward municipal water supply, with generally more stringent requirements for water quality. This proposal involves two phases. The first will be a review and synthesis of what is currently known about Front Range reservoirs, including at least the following: Standley Lake, Horsetooth Reservoir, Carter Reservoir, Boyd Lake, Boulder Reservoir, and upper South Platte reservoirs. The second phase will be a 3-year, intensive and focused effort to improve our understanding of key reservoirs selected to represent the types of systems that are most important on the Front Range and will include specific information on how nutrient inputs and other factors should be best managed to protect reservoir water quality.