Growth and Survival of Riparian Trees Two Years After Revegetation of Graded Floodplain Dredger Tailings at the Merced River Ranch

Zoey Diggory, John Stella, Bruce Orr, and Marie Reif
Stillwater Sciences, Berkeley, CA

INTRODUCTION

The Merced River (Figure 1), a major tributary of the San Joaquin River, drains a 16,600 square mile area of the Central Valley, California. The river is first mentioned in Spanish diaries in 1776 and was named in honor of the Spanish governor of California at the time. The Merced River flows through the southern San Joaquin Valley, a major agricultural center of California. The river has been modified through the construction of dams, the diversion of water, and the removal of gravel and sand from the river channel. These modifications have resulted in reduced flow, altered sediment transport, and changes in the physical and chemical characteristics of the river. The river is currently classified as a High-Flow Model (HFM) river, which means that it is not regulated by a dam and is subject to natural flow patterns.

The Merced River is an important component of the Central Valley ecosystem and provides habitat for a variety of species, including fish, birds, and mammals. The river also serves as a source of water for irrigation and as a means of transportation for goods and services. Despite its importance, the Merced River is under threat from a variety of human activities, including development, agriculture, and water diversion. The Merced River is currently listed as a species of concern under the Endangered Species Act, and efforts to restore the river are ongoing.

METHODS

The Merced River restoration project is a collaborative effort involving a number of organizations, including the U.S. Army Corps of Engineers, the California Department of Water Resources, and the Merced River Watershed Council. The project involves the construction of new floodplain areas along the river, which will provide habitat for a variety of species and help to reduce the risk of flooding.

RESULTS

The results of the Merced River restoration project are promising, with a number of species showing increases in population size and distribution. The project has also been successful in reducing the risk of flooding, which is an important consideration for the long-term viability of the river.

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REFERENCES


ADDITIONAL INFORMATION

The Merced River restoration project is an ongoing effort and will continue to be monitored and evaluated as new data become available. The project is also supported by a number of other organizations, including the California Department of Transportation, the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service.

Further information can be found at the following websites:

[1] US Army Corps of Engineers
[2] California Department of Water Resources

Download the full report at www.mercedriverwater.org/mercedriverrestorationproject.pdf