

Marlette Lake Water System Advisory Committee



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MARLETTE LAKE WATER SYSTEM
ADVISORY COMMITTEE

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**REPORT TO THE 72nd SESSION OF THE NEVADA LEGISLATURE BY THE
MARLETTE LAKE WATER SYSTEM ADVISORY COMMITTEE**

The Advisory Committee continued, during the 2001-2002 interim period, its oversight of various state government programs in the Marlette/Hobart watershed and the provision of water to communities in Western Nevada. The photographs included in this report provide a visual record of the various facilities, programs, and Advisory Committee activities during the 2001-2002 interim period. All supporting documents and meeting minutes are on file and available from the Research Library of the Legislative Counsel Bureau.

The Advisory Committee wishes to recognize and thank the many individuals who attended and testified at its meetings or participated in its field investigations. In particular, the Advisory Committee wishes to acknowledge the continued efforts of Senator Lawrence E. Jacobsen and Assemblyman Joseph E. Dini, Jr., to protect and enhance the resources of the Marlette/Hobart areas and the water system.

This report is transmitted to the Governor of the State of Nevada and the members of the 72nd Session of the Nevada Legislature for their information and consideration.

Respectfully submitted,

Senator Mark E. Amodei
Acting Chairman
Marlette Lake Water System Advisory Committee

I. INTRODUCTION

The Nevada Legislature's Marlette Lake Water System Advisory Committee is a permanent committee authorized by *Nevada Revised Statutes* (NRS) 331.165.

At its meeting of September 6, 2001, the Legislative Commission appointed three members of the Legislature and one staff member of the Legislative Counsel Bureau (LCB) to serve on the Marlette Lake Water System Advisory Committee. The other four members of the committee were appointed by the Executive Branch agencies specified in NRS 331.165. The members serving on the Advisory Committee between the 71st and 72nd Legislative Sessions were:

Assemblyman Joseph E. Dini, Jr., Chairman
Senator Mark E. Amodei, Vice Chairman
Assemblywoman Bonnie L. Parnell
Robert E. Erickson, Research Director, LCB (nonvoting member)
Mike Meizel, Chief, Buildings and Grounds Division, Department of Administration
Wayne R. Perock, Administrator, Division of State Parks, State Department of Conservation and Natural Resources
Gene Weller, Deputy Administrator, Division of Wildlife, State Department of Conservation and Natural Resources
Steve Robinson, State Forester Firewarden, Division of Forestry, State Department of Conservation and Natural Resources

Additional Legislative Counsel Bureau staff services for the Advisory Committee were provided by M. Scott McKenna, Principal Deputy Legislative Counsel, Legal Division, and Nenita Wasserman, Senior Research Secretary, Research Division.

The Advisory Committee held three public meetings during the 2001-2002 interim period. The meetings of October 30, 2001, June 3, 2002, and October 29, 2002, all were conducted at the Legislative Building in Carson City.

The Advisory Committee also gathered information and inspected facilities and projects in the Marlette and Hobart areas on three occasions during the 2001-2002 interim.

1. October 30, 2001 – Facilities in the Marlette Lake and Hobart Reservoir watersheds, and pipeline and water facilities between Hobart and Lakeview.
2. June 3, 2002 – Rainbow trout spawning and egg harvesting program of the Division of Wildlife at Marlette Lake.
3. October 29, 2002 – Tour of Marlette Lake and Hobart Reservoir watersheds and dedication of plaques at Marlette Lake recognizing the service of retiring Senator Lawrence E. Jacobsen and Assemblyman Joseph E. Dini, Jr.

II. FINAL REPORT OF THE MARLETTE LAKE WATER SYSTEM ADVISORY COMMITTEE

The 2001 Nevada Legislature, with its approval of Senate Bill 570 (Chapter 602, *Statutes of Nevada 2001*), required the Legislative Commission to review each legislative committee created by statute. The Marlette Lake Water System Advisory Committee was included in this review, which focused on the need to continue the existence of this and other statutory committees.

At its meeting of April 5, 2002, the Legislative Commission received a report given by Advisory Committee Member and Legislative Counsel Bureau Research Director Robert E. Erickson. That report is included here in its entirety.

SUNSET REVIEW REPORT TO THE LEGISLATIVE COMMISSION BY THE MARLETTE LAKE WATER SYSTEM ADVISORY COMMITTEE

April 1, 2002

The Nevada Legislature's Marlette Lake Water System Advisory Committee is a permanent committee authorized by *Nevada Revised Statutes* 331.165. At the start of each interim, the Legislative Commission appoints three legislators and one nonvoting representative of the Legislative Counsel Bureau. Pursuant to statute, the other four members represent the Division of Wildlife, Division of State Parks, Division of Forestry, and Department of Administration.

STATUTORY AUTHORITY (NRS 331.165)

NRS 331.165 Advisory committee: Creation; composition; officers; recommendations.

1. The Marlette Lake water system advisory committee is hereby created to be composed of:

(a) One member appointed by the administrator of the division of wildlife of the state department of conservation and natural resources.

(b) One member appointed by the administrator of the division of state parks.

(c) Three members from the state legislature, including at least one member of the senate and one member of the assembly, appointed by the legislative commission.

(d) One member from the staff of the legislative counsel bureau appointed by the legislative commission. The member so appointed shall serve as a nonvoting member of the advisory committee.

(e) One member appointed by the state forester firewarden.

(f) One member appointed by the department of administration.

2. The voting members of the advisory committee shall select one of the legislative members of the advisory committee as chairman and one as vice chairman. After the initial selection of a chairman and vice chairman, each such officer serves a term of 2 years beginning on July 1 of each odd-numbered year. If a vacancy occurs in the chairmanship or vice chairmanship, the person appointed to succeed that officer shall serve for the remainder of the unexpired term.

3. The director of the legislative counsel bureau shall provide a secretary for the advisory committee.

4. Members of the advisory committee serve at the pleasure of their respective appointing authorities.

5. The advisory committee may make recommendations to the legislative commission, the interim finance committee, the department of administration, the state department of conservation and natural resources and the governor concerning any matters relating to the Marlette Lake water system or any part thereof.

HISTORICAL BACKGROUND

Comprehensive discussions of the history of the Marlette Lake Water System are contained in Bulletin No. 79 of the Legislative Counsel Bureau—*The Marlette Lake Water System—A Report on the Feasibility and Desirability of its Retention*, February 1969, and Bulletin No. 01-20—*Continued Review of the Marlette Lake Water System*.

The Comstock Lode, one of the richest mining areas in the world, was discovered in 1859 on the eastern flank of Mount Davidson in the Virginia Range. The Virginia Mining District was the first mining district organized in western Utah Territory. The great mining town Virginia City was established nearby, with its post office dating from December 3, 1859. The nearby mining towns of Gold Hill (1859) and Silver City (1860) were soon established, and all three towns supported large populations in the 1860s, 1870s, and 1880s.

The provision of water to the mining towns on the Comstock posed a serious problem in early Nevada. Originally, several nearby springs and streams fed a series of tunnels, flumes, pipes, ditches, and reservoirs that were constructed. By the early 1870s, these supplies of water had become inadequate. As the area continued to grow, a decision was made by the Virginia and Gold Hill Water Company in August 1871 to develop a water system stretching over 21 miles to the west into the Carson Range, part of the Sierra Nevada Mountains. Surface water was plentiful in the Carson Range, but the key to the system was the

inverted siphon, pressure pipeline designed by Hermann Schussler, a German-born engineer from San Francisco.

In August 1873, the first water from Hobart Creek in the Carson Range reached Virginia City and Gold Hill. Wild celebrations by residents of the area reverberated up and down the surrounding canyons and mountainsides. Originally, the system included: (1) a small diversion dam on upper Hobart Creek at Red House; (2) a 4.62-mile wooden flume to a tank that marked the start of the pipeline, at an elevation 351 feet higher than the outlet end of the pipeline in the Virginia Range; (3) a riveted, wrought iron, 11½-inch pressure pipeline extending seven miles, down to the lowest point on the system at Lakeview and back up to the high point in the Virginia Range; (4) a 4.04-mile flume to a point where Five-Mile Reservoir was constructed; and (5) a 5.66-mile flume to tanks located above Virginia City and Gold Hill. The pipe for the system was made of iron plates bent to a cylindrical shape and then riveted. The pipe was fabricated in San Francisco and shipped by train to Lakeview. The pipe came in 26-foot sections and the thickness of each pipe segment varied depending on where engineering calculations showed differences in internal pressure. The first pipe segments were laid on June 11, 1873, and just six weeks later (July 25, 1873) the last section was in place. There were 1,524 joints in the pipeline as laid, and 1 million rivets and 35 tons of caulking lead were used in its installation.

In 1875, a second flume and pipeline was installed adjacent to the original system to double the original maximum production of 2.2 million gallons per day. However, the flow of water in summer months from the Hobart drainage dwindled to about 700,000 gallons per day.

In 1887, a third pressure pipe was installed in substantially the same location as the first two pipelines. When completed, the water system included three reservoirs, a total of 21 miles of pressure pipes, approximately 46 miles of covered box flume, several structures, and one three-quarter mile tunnel. The total investment at that time was in excess of \$3.5 million.

With the decline of the Comstock in the years and decades to come, the fortunes of the water system suffered. In 1933, the water company's name was changed to the "Virginia City Water Company." By 1941, the company started to remove parts of the first (1873) and third (1887) pipelines to replace the flume between Five-Mile Reservoir and Virginia City with pipes. Continued failures in the aging pipeline and a lack of funds caused the company to sell the water system to Curtiss-Wright Corporation in 1957. That corporation planned to use water from the system for a proposed missile test site on lands owned by that corporation in Storey County. However, the contract for the missile testing program was never approved. After making certain improvements to the

system, Curtiss-Wright subsequently sold it to the Marlette Lake Company. In 1963, the Marlette Lake Company offered to sell the water system to the State of Nevada for \$1.65 million of the State's general obligation bonds. Included in the sale, which was approved by the 1963 Legislature, were water rights, over 5,300 acres of land, easements, pipelines, flumes, Red House, the caretaker's house at Lakeview (Lakeview House, 1873), and other water facilities.

For many years following those transactions, the State of Nevada was able to provide water to its Capitol Complex and the maximum security prison. Subsequently, the State began selling water to Carson City, particularly during periods of peak demand.

SELECTED COMMITTEE ACTIVITIES

Currently, most of the water provided by this system to Carson City, Gold Hill, Silver City, and Virginia City comes only from Hobart Reservoir. This shallow body of water is not a reliable resource in dry years, and pumping is required from Marlette Lake over a drainage divide into Hobart. During periods of pumping, State personnel must monitor the diesel generator and pump on a 24-hour basis. Also, there are environmental considerations that must be addressed as this area is within the Lake Tahoe Basin.

A 2000 study commissioned by the Carson Water Subconservancy District evaluated the various alternatives to this supplemental pumping out of Marlette. The study pointed out that over the long-term the most cost-effective and environmentally sensitive method of conveying water from Marlette Lake to Hobart Reservoir would be to bore a hole through the drainage divide between these two bodies of water. The engineering costs are estimated at between \$4 million and \$6 million. However, the operating and maintenance costs after construction should be minimal. Also, the long-term environmental concerns are reduced under this option.

At its meeting of October 30, 2001, the Marlette Lake Water System Advisory Committee unanimously voted to endorse this concept and recommend that Federal funding be requested. It is important that an oversight body, made up of representatives of both Nevada's Legislative and Executive Branches, be continued to guide important resource decisions in this geographical area. In addition to water resources, the area also is an important source of trout eggs for Nevada's fish hatcheries, forest resources, and recreation activities ranging from mountain biking to cross-country skiing.

ACTIVITIES DURING THE 1999-2000 INTERIM

The Legislative Commission's Marlette Lake Water System Advisory Committee (*Nevada Revised Statutes* 331.165) submitted these proposals to the Governor of the State of Nevada and the members of the 71st Session of the Nevada Legislature for their consideration.

Among others, the committee recommended:

1. Continuation of the project of the Carson City Water Subconservancy District, including a cost-benefit analysis and involvement of all stakeholders.
2. Cooperation of Washoe County and the United States Bureau of Land Management with Storey County officials on reinstatement of original right-of-way of the waterline from Lakeview to Virginia City.
3. Support for the commitment by the Department of Administration to perform additional metering of water transported and sold to Virginia City.

III. RECOMMENDATION OF THE LEGISLATIVE COMMISSION

At its meeting of December 17, 2002, the Legislative Commission re-reviewed the reports made by the Marlette Lake Water System Advisory Committee and six other statutory legislative committees. The Commission approved a motion to recommend that the 72nd Session repeal NRS 331.165 (the Marlette Lake Water System Advisory Committee), but that the valuable oversight of this committee be continued by the Legislative Commission's ongoing committees reviewing activities in the Lake Tahoe Basin.

**IV. PHOTOGRAPHS FROM MARLETTE LAKE TOURS
DURING THE 2001-2002 INTERIM PERIOD**



~ North Road to Marlette Lake ~



~ Pipe at Meter Box ~



~ Dead Wood ~



*~ Selective Clearing Project by
Division of Forestry ~*



*~ Discarded Sections of
Old Pipeline ~*



~ Marlette Lake ~



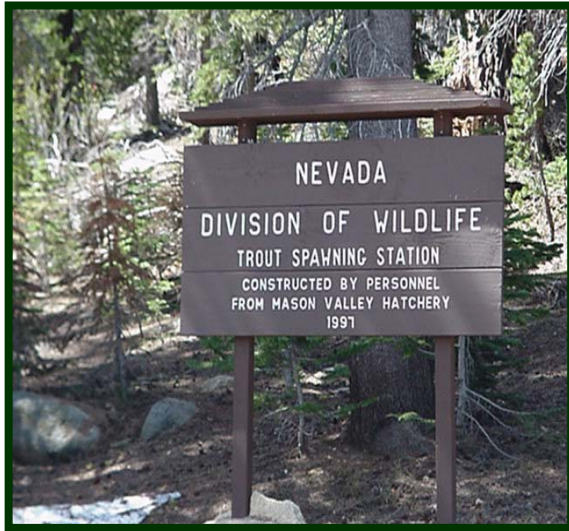
~ Looking North at Marlette Lake ~



*~ Speaker Joseph E. Dini, Jr.;
Pamela B. Wilcox, Administrator, Division of State Lands;
Robert E. Erickson, Research Director, Legislative Counsel Bureau;
and Assemblywoman Bonnie L. Parnell ~*



*~ Presentation to Marlette Lake Water System Advisory Committee
by Jay Howard, Division of State Parks,
Nevada Resource Team ~*



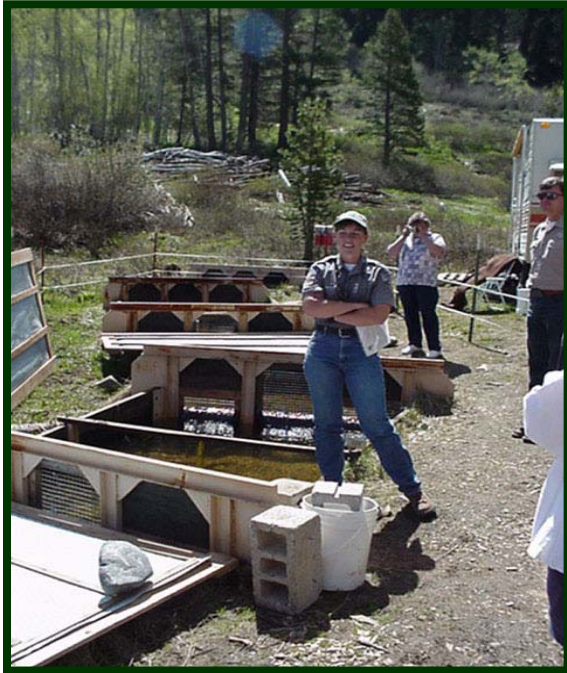
~ Trout Spawning Station at Marlette Lake ~



~ Electric Fence to Keep Bear and Other Wildlife Out of Holding Pens ~



~ Fish Ladders and Holding Pens at Marlette Lake ~



*~ Presentation to Marlette Committee
by Division of Wildlife Staff ~*



*~ Rainbow Trout in Holding Pen
Await Spawning ~*



*~ Briefing in Marlette Basin by
Sean Espinoza, Division of Wildlife ~*

*~ “Visitors” to Division of Wildlife Bait Station in Marlette Basin
Caught by Camera Only—Wildlife Inventory Project ~*



~ Bobcat ~



~ Flying Squirrel ~



~ Ermine ~





*~ Senator Lawrence E. Jacobsen and Robert E. Erickson,
Research Director, Legislative Counsel Bureau,
in Marlette Basin ~*



~ Spencer's House on Road to Marlette ~



*~ Work Crew, Jason Perock and Wayne R. Perock,
at Site of Forest Clearing Project
in Marlette Basin ~*



~ Hobart Reservoir ~



~ Quaking Aspen and Other Vegetation in the Marlette Basin ~



~ Road to Marlette ~



*~ Robert E. Erickson, Research Director,
Legislative Counsel Bureau, by Aspens ~*



~ Dedications to Nevada's Two Longest Serving Legislators ~

JOSEPH E. DINI, JR.

A Nevadan who Made a Difference for
Marlette Lake and Lake Tahoe

Nevada State Assemblyman 1966-2002

LAWRENCE E. JACOBSEN

A Lifelong Friend of Marlette Lake
and Western Nevada

Nevada State Senator and Assemblyman 1962-2002



~ View through the Trees at Marlette Lake ~



~ Aerial View of Marlette Lake ~