

**MEMORANDUM OF UNDERSTANDING REGARDING
THE SOUTHERN NEVADA WATER AUTHORITY'S
WATER CONSERVATION/EFFICIENCY PROGRAMS**

1999 - 2004

TABLE OF CONTENTS

I. Definitions _____	1.
- Best Management Practices	
- Consumptive Use	
- Implementation	
- Purveyor	
- Return Flows	
- Southern Nevada Water Authority	
II. Statement of Purpose _____	2.
III. General Provisions _____	3.
- Initial Term of the Memorandum of Understanding	
- Renewal of the Memorandum of Understanding	
- Legal Authority	
- Non-Contractual Agreement	
- Modifications	
IV. Best Management Practices _____	4.
- Water Measurement and Accounting System	
- Incentive Pricing & Billing	
- Water Conservation/Efficiency Coordinator	
- Information/Education Program	
- Distribution System Audit Program	
- Customer Audit/Incentive Programs	
- Commercial & Industrial Audit/Incentive Program	
- Landscape Audit Programs	
- Landscape Ordinances	
- Landscape Retrofit Incentive Program	
- Wastewater Management/Recycling Program	
- Fixture Replacement Programs	
- Plumbing Regulations	
- Water Shortage Contingency Plan	
V. Implementation Schedules _____	7.
- Current Practices	
- Practices to Implement Within 5 Years	

SECTION 1 - DEFINITIONS

- **Best Management Practices** - A Best Management Practice (BMP) means a policy, program, practice, rule, regulation, ordinance, or the use of devices, equipment or facilities which meets either of the following criteria:
 - a. An established and generally accepted practice among water suppliers that results in more efficient use or conservation of water.
 - b. A practice for which sufficient data is available from existing water conservation projects to indicate that: significant conservation, or conservation related benefits can be achieved; the practice is technically and economically reasonable, and not environmentally or socially unacceptable; and the practice is reasonable for most water suppliers to carry out.
- **Consumptive Use** - Nevada's apportionment of 300,000 acre-feet per year of Colorado River water is a "consumptive use" apportionment. This means that Nevada's net use of Colorado River water cannot exceed 300,000 acre-feet per year. Written as a formula, the relationship is:

$$\text{Diversions} - \text{Return Flows} = \text{Consumptive Use}$$

- **Implementation** - Achieving and maintaining the staffing, funding, and the priority levels necessary to attain the level of activity called for in the 14 BMPs, and to satisfy the commitment by the Southern Nevada Water Authority Member Agencies to use good faith efforts to optimize savings from implementing the 14 BMPs contained within this Memorandum of Understanding.
- **Purveyor** - An agency engaged in the retail delivery of potable water.
- **Return Flows** - Flows, such as treated wastewater, which are returned to the Colorado River and are again available for diversion pursuant to Nevada's consumptive use allocation of Colorado River water.
- **Southern Nevada Water Authority (SNWA)** - The SNWA was formed under Chapter 277 of the Nevada Revised Statutes in 1991 to seek new water sources for Southern Nevada, and to manage existing and future water resources effectively. The SNWA Member Agencies are: Big Bend Water District, the Cities of: Boulder City, Henderson, Las Vegas, and North Las Vegas, the Clark County Sanitation District, and the Las Vegas Valley Water District (LVVWD).

SECTION 2 - STATEMENT OF PURPOSE

The purposes of this Memorandum of Understanding (MOU) are to:

- a) Define the water conservation/efficiency measures the SNWA Member Agencies agree to implement in accordance with the Bureau of Reclamation's Criteria for Water Conservation Plans.
- b) Expedite the adoption of these measures by providing a timeline and criteria for implementation.

Southern Nevada, with an average annual rainfall of just 4 inches, is one of the most arid regions in the United States. It is also home to some of the fastest growing communities in the nation. Water in this arid desert community is a limited and precious resource. Southern Nevada's current available water resources are limited to a consumptive use allocation from the Colorado River of 300,000 acre-feet per year (afy), 46,437 afy in groundwater rights, and 21,800 afy in reclaimed water use. A reliable water supply, now and in the future, is essential to maintain the economic prosperity and quality of life Southern Nevada residents enjoy. A responsible water conservation/efficiency strategy is one of the solutions needed to ensure Southern Nevada has adequate water resources to meet future demands.

Expanding wastewater reuse is not addressed in this MOU because the delivery of water to the Las Vegas Valley, and the subsequent return of treated wastewater to Lake Mead, constitutes a very efficient reuse system. This is because the return flow credits allow diversions in excess of 300,000 afy to occur so long as Southern Nevada's consumptive use of Colorado River water does not exceed 300,000 afy. In a few years, the generation of return flow credits will be critical for the Southern Nevada Water Authority to be able to make deliveries to the Member Agencies. Thus, the maximum amount of effluent reuse is specified in the SNWA cooperative agreement.

SECTION 3 - GENERAL PROVISIONS

- **Initial Term of the Memorandum of Understanding** - The initial term of this MOU shall be for a period of one year. This initial term shall commence upon approval of the Southern Nevada Water Authority Board of Directors.
- **Renewal of MOU** - This MOU shall be automatically renewed after the initial term of one year on an annual basis unless one or more of the SNWA Member Agencies provide the SNWA Board of Directors with a written notice (at least 30 days prior to the renewal date) of an intent to withdraw from or change the MOU.
- **Legal Authority** - The content within this MOU is not intended to expand the existing authority of the SNWA Member Agencies.
- **Non-Contractual Agreement** - This MOU is intended to embody general principles agreed upon between and among the SNWA Member Agencies and is not intended to create contractual relationships, rights, obligations, duties or remedies in a court of law between or among the SNWA Member Agencies.
- **Modifications** - The SNWA Member Agencies agree that this document constitutes the entire understanding between and among the agencies. Any modifications to this MOU must be approved unanimously by the SNWA Board of Directors.

SECTION 4 - BEST MANAGEMENT PRACTICES

1. Water Measurement and Accounting Systems

All water conveyed through a Purveyor's distribution system, and delivered to the Purveyor's customers shall be metered and/or accounted for.

2. Incentive Pricing and Billing

Each Purveyor shall develop and implement a rate structure that provides an incentive for the efficient use and management of water.

3. Water Conservation/Efficiency Coordinator

Each Member Agency shall designate a Water Conservation/Efficiency Coordinator responsible for facilitating implementation of the BMPs.

4. Information/Education Program

Each Member Agency shall support and promote information/education programs and materials for all customers. The programs shall include, but not be limited to lectures, workshops, speaker's bureau, informational literature, display booths and youth education.

5. Distribution System Audit Program

A. At least once every five years, each Purveyor shall monitor unaccounted for water and determine if a distribution system audit is cost-effective. If an audit is conducted, it shall be conducted using methodology such as that described in the American Water Works Association's "Manual of Water Supply Practices, Water Audits and Leak Detection." Distribution system leak detection and repair should be carried out whenever the audit reveals that it would be cost-effective.

B. Each Purveyor shall also implement a program to advise customers whenever the possibility of a leak is detected on the customer's side of the meter.

Section 4 - Best Management Practices (continued)

6. Customer Audit/Incentive Program

- A. Each Purveyor shall support and promote interior and exterior water audits for single-family residential, multi-family residential and government/institutional customers. The program should be proactive and target the largest water users in each group, but also be available to all customers within the respective groups.
- B. Each Purveyor shall support and promote incentive programs to encourage customers to perform plumbing and/or landscaping retrofits that were identified as cost-effective measures in the audit.

7. Commercial and Industrial Audit/Incentive Program

- A. Each Purveyor shall support and promote a program to perform interior and exterior water audits for commercial and industrial customers. The program should be proactive and target the largest water users, but also be available to all commercial and industrial customers. A Purveyor may also choose to assist various industries in developing their own interior and exterior water audit programs.
- B. Each Purveyor shall support and promote incentive programs to encourage customers to perform plumbing and/or landscaping retrofits that were identified as cost-effective measures in the audit.

8. Landscape Audit Programs

Each Purveyor shall support and promote a landscape irrigation audit program for large irrigation customers to maximize water efficiency.

9. Landscape Ordinances

Each Member Agency shall support the coordinated development and adoption of ordinances, restrictions, or guidelines to require the use of water-saving technologies and methods in the design and installation of new landscaping to maximize water efficiency.

Section 4 - Best Management Practices (continued)

10. Landscape Retrofit Incentive Program

Each Purveyor shall support a program to encourage an existing property to upgrade or retrofit the landscaping or irrigation system to maximize water efficiency.

11. Wastewater Management/Recycling Program

Continue to manage wastewater resources as agreed upon in the SNWA Cooperative Agreement and the SNWA Water Budget.

12. Fixture Replacement Programs

Each Purveyor shall support and promote a program to replace high water use toilets and showerheads with low flow models in existing buildings to maximize water efficiency.

13. Plumbing Regulation

Each Member Agency shall support the development and implementation of codes/ordinances that require the use of ultra-low-flow plumbing fixtures in all new construction, and in any refurbishment of an existing building as stated in NRS - 278.582

14. Water Shortage Contingency Plan

Each Purveyor shall develop a coordinated, interlocal water shortage contingency plan that outlines policies and procedures for system operation and allocation during water supply shortages.

SECTION 5 - IMPLEMENTATION SCHEDULES

1. Current Practices

- Incentive Pricing & Billing
- Information/Education Program
- Plumbing Regulations
- Wastewater Management/Recycling Program
- Water Conservation/Efficiency Coordinator
- Water Measurement & Accounting System
- Water Shortage Contingency Plan
- Landscape Audit Programs
- Landscape Ordinances
- Landscape Retrofit Incentive Program
- Commercial & Industrial Audit/Incentive Program
- Customer Audit/Incentive Programs
- Distribution System Audit Program
- Fixture Replacement Programs

2. Practices to Expand/Enhance Within 5 Years *

- Information/Education Program
- Landscape Ordinances
- Landscape Retrofit Incentive Program
- Commercial & Industrial Audit/Incentive Program
- Customer Audit/Incentive Programs
- Fixture Replacement Programs

* **The expansion/enhancement of these 6 BMP'S will be reviewed by each Southern Nevada Water Authority Agency on an annual basis. Specific implementation schedules will be developed by each of the Member Agencies as appropriate for customers within their service areas.**

