2002 STRATEGIC PLAN

Mojave Water Agency

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Executive Summary

About the Mojave Water Agency

The Mojave Water Agency (MWA) was established in 1960 in response to concerns over the existing regional overdraft condition where the annual demand on the ground water resources exceeds the long-term average annual supply. It was recognized that an alternative source of water would be needed to support existing and future needs. Consequently, the MWA secured a contract with the State Department of Water Resources to become one of 29 State Water Contractors with rights to take delivery of State Water Project water from the California Aqueduct. MWA initially secured an entitlement of up to 50,800 acre-feet of water per year, which was increased by the purchase of an additional 25,000 acre-feet of entitlement in 1998. This access to the State Water Project is a primary management asset the Agency has in regard to providing future water supplies to the region.

The primary purpose for creation of the MWA is summarized in its enabling legislation (the "MWA Law"):

> *"...the purpose of the agency shall be to do any and every act necessary to be done so that sufficient water may be available for any present and future beneficial use of the lands and inhabitants of the Agency..."*

About Our Strategic Plan

Overview

This Strategic Plan contains the Agency's Vision and Mission Statements, defines our goals as a public agency, and establishes our culture as an organization of individuals. The primary purpose of the Plan is to provide the framework and focus for the Agency that will facilitate the organization fulfilling its legislative mandate. It is also intended to be a clear and concise statement of the organizational philosophy and values. It forms our response to the challenges that we must address in managing this vital resource by providing a venue to develop specific goals and objectives for the organization, including

"key elements" or concepts, management plans and programs that require action by the Agency. Figure 1 summarizes how these concepts inter-relate. In essence, this plan serves as the template upon which the Agency's management decisions are to be made.

FIGURE 1

Our Vision, Mission, and Core Values

Our vision, mission and core values provide the foundation for our organization. These critical elements describe who we are, what we want to achieve, and what will guide our approach to business on a daily basis. Memorializing our organization's vision, mission, and values in this Strategic Plan is intended to provide the basis for incorporating these concepts into actions. The following contains a brief statement of the Agency's vision, mission, values and goals. Each of these is discussed in more detail in the body of the plan.

Our Vision: To become a recognized and respected leader in the community we serve through demonstrated knowledge, integrity and the quality of our actions.

Our Mission: Manage the region's water resources for the common benefit to assure stability in the sustained use by the citizens we serve.

Our Core Values:

- Service to the Community
- Integrity
- Innovation and Creativity
- Teamwork
- Employee Growth and Reward

Goals

The Goals as set forth in this Strategic Plan are designed to be tangible targets that assist the Agency in fulfilling its legislative mandate, vision and mission. These goals are summarized as follows:

Our Goals:

- **Goal 1** Develop sound fiscal and organizational policies that allow the Agency to be effective, innovative and responsive.
- **Goal 2** Manage water resources through or in conjunction with the State Water Project to meet future demands while maintaining independence during periods of water shortages.
- **Goal 3** Coordinate efforts to maintain adequate water quality so that groundwater is safe for drinking and other beneficial uses.
- **Goal 4** Develop public awareness so that individuals and stakeholder organizations support our efforts and understand their role in contributing to the Agency's mission.
- **Goal 5** Advance scientific understanding of the region's water resources to support efficient management of water resources.
- **Goal 6** Promote efficient use of the region's water resources through regional conservation programs.

For each of these goals, we have identified clear objectives that are supported by key elements. We will fulfill our goals and objectives by pursuing the selected strategies and applying strategic resources to key elements. The key elements are viewed as tactical activities that may change from year to year and are not included in the main body of the Strategic Plan. There are, however, descriptions of the key elements contained in Appendix B so that the reader is presented with a clearer view of how the Strategic Plan will be carried out. The key elements outlined in this strategic plan will serve as a guiding tool for the Agency's budgeting process. The budget will clearly identify which activities will be prioritized for funding and implementation. It is anticipated that Appendix B may need updating on an annual basis to accurately reflect the current activities that the Agency plans to implement in support of the Strategic Plan. Although the strategic components of the Plan will not vary significantly from year to year, they should be reviewed about every five years.

Strategic Plan Purpose and Development

Purpose

The Strategic Plan allows the Agency to focus as we use the management tools available to us for our daily activities. It is intended to define who we are, why are we here, what is it that we do, and the direction we want the Agency to take.

The Strategic Plan is a decision-making tool to help Agency leadership define key principles and establish priority. It is a road map for the Agency Board of Directors and staff that is derived from a common vision, and it will facilitate communication and a coordinated effort. The Plan also provides the primary mechanism to express our values and objectives and communicates the fundamental purpose of the Agency to our stakeholders and the public.

A properly formulated Strategic Plan should maintain focus and provide the basis for the many separate plans and programs ("management plans") that provide the level of detail needed to put Agency policy into action. Examples of management plans and programs that the Agency has or will formulate include the Regional Water Management Plan, Capital Improvement Plan, Information Technology Strategic Plan, human resources programs, and the various administrative programs and policies developed for daily management of the Agency. These management plans tend to focus on the next several years of Agency activity and are generally revisited for possible update on a five-year cycle. These, in turn, assist the Agency with the decision-making processes that are incorporated into the annual budget. The budget is essentially the near-term statement of the Agency's intended implementation of the goals and objectives that are derived from the strategic planning process and development of the management plans. Figure 2 represents the relationship between the organization, the Strategic Plan, the various management plans and the annual budget.

Development

All MWA programs and policies necessarily begin with the Appendices to the Water Code, Chapter 97, et seq. (the MWA Law). This is the legislative mandate which constitutes the enabling legislation that legally created the MWA. Staff established a list of primary concepts determined necessary for the MWA to follow through with its legal mandate. A "vision" depicting how the Agency should strive to view itself and to be viewed by others was also developed. These concepts were refined to those considered to be "core concepts", which were then distilled into a draft Mission Statement. The major concepts were also focused into a set of goals that subsequently allowed formation of specific objectives and key elements of those objectives, all directed toward fulfillment of the MWA Mission Statement. A series of "values" that describe our primary motivating factors was established and incorporated into the Strategic Plan as a measure of consistency among our goals and objectives.

These concepts were and will continue to be presented to the Board of Directors and the public for review and comment. Several iterations of public discussion are required to consolidate the draft mission statement and goals into a concise strategic plan document. Once adopted, the Strategic Plan will be reviewed regularly and updated as needed to maintain consistency with changing circumstances.

Figure 2

As noted above, several concepts were considered to guide the development of the mission statement and subsequent goals and objectives. These concepts are listed below without consideration of priority:

- Elimination of overdraft
- Flexible management of regional water resources
- Development of a long-term reliable and economical water supply
- Regional basis for Agency policy and programs
- Maximum independence (interruptibility) from the State Water Project during droughts
- Fiscal responsibility
- Asset (resource) management
- Economic justification for programs
- Value to beneficial users from Agency programs
- Enhanced understanding of area hydrogeology
- Increase the collection and sharing of data
- Public education and outreach
- Regional leadership
- Cooperation with local agencies
- Water conservation
- Water quality
- Ground water recharge programs
- Environmental considerations
- Implementation of the Mojave Basin Area Judgment

The following sections present the conclusions from our strategic planning process and how we intend to achieve our vision.

Our Vision, Mission and Core Values

Our vision, mission and core values provide the foundation for our organization. These critical elements describe who we are, what we want to achieve, and what will guide our approach to business on a daily basis. Memorializing our organization's vision, mission, and values in this Strategic Plan document is intended to provide the framework to incorporate these concepts into specific programs and projects.

Our Vision

To become a recognized and respected leader in the community we serve through demonstrated knowledge, integrity and the quality of our actions.

Our Mission

Manage the region's water resources for the common benefit to assure stability in the sustained use by the citizens we serve.

Our Core Values

Realizing our vision of the future will require that all of our actions be guided by a set of desirable core values common to the organization. Core values are essentially the qualities, customs, standards, and the principles that the Agency should use as the measure of our actions. Core values form our culture and style and thereby guide our decisions, policies and procedures. When reinforced through management practices, they create a unified organization through common knowledge, trust and confidence. They help employees understand the Agency's philosophy and how the individual contributes to the organization. Values provide continuity during periods of change and define the tradition that distinguishes MWA from other organizations.

The core values developed from the Strategic Plan process are summarized below:

- **Service to the Community:** We are here to make a positive difference in the High Desert and the water industry. As collective and individual ambassadors of the MWA, we will respond to the community's needs in a courteous, respectful and professional manner.

- **Integrity:** We will strive to continually earn the trust of those we serve and work with. We will have the courage to make difficult decisions and the compassion to listen to the needs of others in doing what is considered correct for the long-term viability of the area's water resource.

- **Innovation and Creativity:** We recognize that many of the challenges we face today are complex and, therefore, must be approached with creative and innovative solutions. We must always remember that the system we manage has many interdependencies, and our actions consequently have the potential for unintended consequences. We will combine innovation, aggressiveness and responsible risk-taking to address the challenges we encounter. We will always be seeking innovative ways to improve.

- **Teamwork:** We recognize the power and effectiveness of an organization that operates as a team. We will work to create and maintain a cooperative, friendly work environment that supports individual contributions as well as the team effort. We know that our success depends not on how well each person works, but on how well we work together, both within our organization and within our community.

- **Individual Growth and Reward:** We are committed to providing a work environment based upon mutual respect. We will provide career development and professional growth opportunities for our staff so that they can succeed. We will implement a compensation philosophy that, in conjunction with other attributes of Agency employment, will provide meaningful incentive to attract and maintain quality employees.

Our Goals and Objectives

Managing a regional agency that faces complex and controversial issues is a difficult challenge. Our strategic direction, defined by our goals and objectives, is designed to focus our response to this challenge. We believe that focusing our efforts on critical strategic areas and incorporating these efforts into our daily activities will achieve significant gains.

We will fulfill our mission by pursuing six primary and broad goals listed below without considering priority:

- **Goal 1** Develop sound fiscal and organizational policies that allow the Agency to be effective, innovative and responsive.
- **Goal 2** Manage water resources through or in conjunction with the State Water Project to meet future demands while maintaining independence during periods of water shortages.
- **Goal 3** Coordinate efforts to maintain adequate water quality so that groundwater is safe for drinking and other beneficial uses.
- **Goal 4** Develop public awareness so that individuals and stakeholder organizations support our efforts and understand their role in contributing to the Agency's mission.
- **Goal 5** Advance scientific understanding of the region's water resources to support efficient management of water resources.
- **Goal 6** Promote efficient use of the region's water resources through regional conservation programs.

For each of these goals, we have established clear objectives which are supported by key elements. We will fulfill our goals and objectives by pursuing the selected strategies and applying strategic resources to key elements. Descriptions of each of our six goals, associated objectives and key elements are provided on the following pages.

Goal 1

Develop sound fiscal and organizational policies that allow the Agency to be effective, innovative and responsive.

Goal 1 affects many parts of the organization. Achievement of this goal will allow effective and innovative response to changes in our internal and external environment. We will increase our effectiveness and maximize use of our limited resources by prioritizing and by collaboration with our stakeholders. This requires us to focus on our internal operations, including our people, processes and technology. We will focus on our staff to ensure that we can effectively hire, train, and retain the most qualified individuals. To improve our processes, we will focus on cross-media and cross-organizational activities that can help increase our program effectiveness. Opportunities to use technology to reach more people, improve data exchange with stakeholders, and increase the efficiency and effectiveness of our staff will be pursued.

Objectives - We will achieve this goal by pursuing the following measurable objectives:

A. Provide Board of Directors, staff and other agencies with timely access to information.

B. Recruit, hire and retain qualified staff.

C. Provide the training and tools necessary to staff for their success.

D. Provide tools to monitor the status of Agency finances.

Goal 2

Manage water resources through or in conjunction with the State Water Project to meet future demands while maintaining independence during periods of water shortages.

Goal 2 recognizes that the region will be increasingly dependent upon our ability to import State Water Project water to address the current overdraft and to meet future water supply demands. It also recognizes that the State Water Project system is not 100% reliable, particularly during periods of drought. This will require that the Agency find ways to take the maximum amount of water when it is available and to store that water in the ground water system for use during those periods when it is less available. The flexibility required to do this emphasizes the need for partnerships with imported water users, both within and outside the MWA, to maximize flexibility in the system.

Objectives - The objectives that will allow us to achieve Goal 2 and measure our accomplishments include:

A. Develop infrastructure to convey imported water to areas of greatest demand.

B. Increase the Agency's ability to bank and store water.

C. Balance competing uses for the water available.

D. Ensure a timely process for allocation of the water that is available.

E. Develop partnerships with entities inside and outside of the MWA.

Goal 3

Coordinate efforts to maintain adequate water quality so that groundwater is safe for drinking and other beneficial uses.

Our focus for this goal is the protection and preservation of the water resources for present and future beneficial uses within the MWA. The Agency Law and the Mojave Basin Area Judgment make general reference to water quality issues; however, specific water quality control measures are vested with other entities. The Agency may influence sub-regional water quality through ground water recharge programs and by controlling overdraft. The most effective means for the MWA to support water quality programs are monitoring and cooperative programs with other entities.

Objectives - The objectives that will allow us to achieve Goal 3 and measure our accomplishments include:

A. Identify long-term threats to groundwater quality and focus efforts to implement appropriate pollution prevention and remediation activities.

B. Coordinate with other agencies that share a role in groundwater resources.

C. Promote inter-agency communication and data exchange to identify threats to drinking water sources.

Goal 4

Develop public awareness so that individuals and stakeholder organizations support our efforts and understand their role in contributing to the Agency's mission.

Goal 4 focuses on public education and outreach programs and emphasizes engaging the community in the management of our water resources through dissemination of pertinent information. The Agency has historically focused public awareness efforts on several means of disseminating information. The Agency believes there are a number of organizations existing in the High Desert that we can partner with to cost-effectively present our message to the public.

Objectives - We will achieve this Goal by pursuing the following measurable objectives:

A. Increase the community's understanding of why long-term management of our water resources is important.

B. Ensure that the public and stakeholders understand the Agency's roles and responsibilities, and how they can assist in managing our water resources.

C. Encourage participation by the public, government agencies, and regulatory and environmental organizations in our efforts to manage our water resources.

Goal 5

Advance scientific understanding of the region's water resources to support efficient management of water resources.

Goal 5 addresses our ability to determine where and how we should implement water resources management programs, and how we measure the results of the programs that we implement. The appropriate systems must be in place for these purposes. We will continue our work with stakeholders to identify and implement additional monitoring resources that may be needed. These monitoring resources will be used to determine the effectiveness of our programs and to modify them to improve their effectiveness. The information gathered will allow us to understand the current state of the ground water basins and to communicate that understanding to the public.

Objectives - We will achieve this Goal by pursuing the following measurable objectives:

A. Increase quantitative water supply and quality data.

B. Develop quantitative data into useful information about the status of water supply and quality.

C. Coordinate the collection and reporting of water supply and quality information among programs, agencies and stakeholders.

Goal 6

Promote efficient use of the region's water resources through regional conservation programs.

Water conservation can significantly reduce the amount of water consumed by water users in the High Desert and effectively increase the potential for the available water supply to meet future needs. The MWA is the regional water manager, which influences the extent that we will be involved in local water conservation efforts. Our status as a State Water Contractor defines some of our water conservation responsibilities. Some grants that we receive from the State and Federal governments mandate specific water conservation efforts. Many of our stakeholders are retail water purveyors and municipalities involved at the local level, and we may assist their water conservation efforts through partnerships. The local agricultural community can also conserve significant quantities of water, and we may be able to assist with those efforts through programs offered by other organizations.

Objectives - We will achieve this Goal by pursuing the following measurable objectives:

A. Increase community understanding of the value that water conservation provides.

B. Reduce or eliminate the need to acquire additional water supplies.

C. Meet State requirements for water conservation programs within our region.

Implementing the MWA Strategic Plan

This Plan is intended to provide a framework that will guide allocation of resources and priority setting for the next five years, from March 2002 through February 2007. We will selectively implement Strategic Plan components that we determine will generate significant gains in achieving our mission and can position our organization to respond to future change. Implementation will occur through the Agency management plans and programs and the allocation of resources through the annual budget process (see Figure 2).

RESOURCE ISSUES

We recognize that we are constrained by the availability of funding and staff to support our regular program activities. The addition of strategic activities identified in this Plan will further impact existing resources. We will identify innovative ways to attract and retain qualified staff and fill vacancies as quickly as possible with qualified people. We will work with our stakeholders to identify additional funding resources and augment the effectiveness of our staff through collaborative efforts. Collaboration will also improve our cross-media and cross-agency coordination.

PRIORITY SETTING

We will establish clear priorities for implementation of our Strategic Plan in order to use our limited resources as effectively as possible. We will set these priorities using criteria developed by the Board of Directors and staff, and will assess them regularly to ensure they reflect changes in our internal and external environments. We will effectively communicate these priorities so that staff can adjust their work programs and our stakeholders will understand the basis for our actions.

Appendix A

Strategic Planning Definitions

MISSION STATEMENT A mission statement is a brief statement of the purpose of an organization that answers the following questions: What do we do? For whom do we do it? Why do we do it?

VISION A vision statement is a compelling, conceptual image of the desired future that answers the question "What do we want to be?" It also is inspiring, challenges everyone to achieve that future, and it is brief, memorable, and idealistic.

VALUES Values are philosophical statements that describe how an organization intends to conduct business on a daily basis. These values guide decision-making processes as well as the development and implementation of organizational policies and procedures.

GOAL A goal is the desired end result which addresses the organization's key strategic issues, identifies what the organization wants to achieve, supports the mission and vision, and provides a framework for more detailed, tactical planning.

OBJECTIVE An objective is a specific, measurable target for accomplishing a goal that describes a specific accomplishment, focuses on a result to be achieved, and forms the foundation for strategies and actions. It does not describe the manner in which a goal will be accomplished.

STRATEGY A strategy is a specific, high level action or approach that must be taken to achieve goals and objectives.

KEY ELEMENT A key element is a management plan, program or policy that has a clear scope, objectives and milestones, and is supported by sufficient resources. A key element can also include a known issue or controversy that impacts the organization and needs to be addressed.

Appendix B

Key Elements to Support Goals and Objectives

GOAL 1

Develop sound fiscal and organizational policies that allow the Agency to be effective, innovative and responsive.

Goal 1 affects many parts of the organization. Achievement of this goal will allow effective and innovative response to changes in our internal and external environment. We will increase our effectiveness and maximize use of our limited resources by prioritizing and by collaboration with our stakeholders. This requires us to focus on our internal operations, including our people, processes and technology. We will focus on our staff to ensure that we can effectively hire, train, and retain the most qualified individuals. To improve our processes, we will focus on cross-media and cross-organizational activities that can help increase our program effectiveness. Opportunities to use technology to reach more people, improve data exchange with stakeholders, and increase the efficiency and effectiveness of our staff will be pursued.

Objectives - We will achieve this goal by pursuing the following measurable objectives:

A. Provide Board of Directors, staff and other agencies with timely access to information.

B. Recruit, hire and retain qualified staff.

C. Provide the training and tools necessary to staff for their success.

D. Provide tools to monitor the status of Agency finances.

Key Elements

The following key elements define the actions we will take to reach Goal 1. These elements range from development of other plans and programs to policy development and specific projects that will help achieve the stated objectives.

- **Information Technology Strategic Plan.** The Information Technology Strategic Plan will identify the computer hardware and software programs and peripheral technology needed by staff to be successful in their jobs. It will also address other key technology component, such as the Agency telephone system and communication between the main office and satellite locations. The Plan will also set the course for equipment maintenance and upgrades, and may influence job classification and hiring practices.

- **Employee Classification and Compensation Study.** This study will evaluate the existing work force to compare existing job titles and job descriptions with the actual demands of their jobs. It will also evaluate the current level of compensation for Agency positions relative to comparable jobs and organizations in Southern California. The primary purpose will be to ensure that our staff is adequately compensated for the jobs they perform and to develop adequate job descriptions for those jobs.

- **Employee Training and Retention Program.** Staff is hired to perform basic functions based upon their particular skill set upon hire. Every organization has a specific set of tools that it uses to accomplish its objectives. Specific procedures and tools are also improved with time. It is necessary to properly train Agency staff in the various aspects of their jobs in order for them to remain current with their particular skills and to advance in their personal development. Some individuals may seek to advance their careers through pursuit of a college education or advanced degrees. The Agency benefits by the ability to retain qualified staff and the increased likelihood that talented individuals will choose to develop their careers at the MWA. Staff is developing training programs to assist with this objective.

- **Agency Reserve Policy.** Each year the Agency debits or credits reserve fund accounts that may not be specific to any category of expenditure. The Board of Directors has adopted a policy that identifies specific reserve fund categories and establishes an appropriate level of reserve and use of those funds.

- **Water Purchase Policy.** The Board of Directors established a procedure for use of reserve funds to purchase supplemental water from the State Water Project.

- **Job Number Based Accounting System.** The Agency is developing and implementing a job number based accounting system to enhance tracking of expenditures to the project or program associated with the expense. This will allow better cost control and will aid tracking of in-kind contributions toward grant and loan funded projects.

- **Staffing Plan.** Technological advances and changing demands upon the Agency translate into modification of the skills and job function required of staff. A staffing plan will be developed to aid management in the recruitment of appropriate staff and for development of existing staff to fulfill these changing requirements.

- **Capital Improvement Plan.** The Agency generally identifies future capital facility projects and programs needed to fulfill its mission through the Regional Water Management Plan (RWMP). The RWMP is a program-level document spanning decades and lacks the specificity required to understand the near-term fiscal implications of Agency capital construction programs. The Agency receives funding for these projects from a number of sources, which complicates understanding of our ability to fund projects. Staff will develop a fiscal planning document that addresses the costs and revenues associated with capital projects over a five-year planning horizon. The plan will be updated each year as a component of the annual budget process to keep the two documents consistent and to update the fiscal capability of the MWA to fund additional capital projects

that may be needed. The Capital Improvement Plan is also a clear public statement about the Agency's intended capital projects over the near-term.

- **Acquisition Plan.** The Agency purchases a significant amount of materials in pursuing the course of daily business. Offices supplies, computer equipment, copiers, vehicles, office furniture, cellular telephones, specialized field equipment, etc. are purchased from a number of sources. Staff will develop a document that identifies a basic Agency policy and procedure for purchase of these materials, with the intent of institutionalizing the most cost-effective means available for purchase of these goods.

- **Personnel Rules Update.** The Agency personnel rules have not been updated since 1993. Personnel law and legal cases have since significantly affected the relationship between employees and employers. The Agency personnel rules will be updated at the earliest opportunity.

- **Agency Facility Plan.** Agency personnel are currently located at two main sites, and there are two remote office facilities used periodically by operations personnel. There is a need to review existing MWA facilities and the potential for modification in response to changes in staffing levels and Agency mission. Staff will prepare an approach for development of an Agency facility plan for consideration by the Board.

- **Resource Center/Agency Archive Program.** The passage of time and the increased activities of the Agency have resulted in the accumulation of a significant quantity of documents and files. The Agency has recently upgraded its document imaging system, which will assist significantly with document storage and retrieval. A number of hardcopy documents remain in the Agency library and archives and require organization. In some instances, documents taken from the Resource Center that have not been returned necessitates replacement of documents.

GOAL 2

Manage water resources through or in conjunction with the State Water Project to meet future demands while maintaining independence during periods of water shortages.

Goal 2 recognizes that the region will be increasingly dependent upon our ability to import State Water Project water to address the current overdraft and to meet future water supply demands. It also recognizes that the State Water Project system is not 100% reliable, particularly during periods of drought. This will require that the Agency find ways to take the maximum amount of water when it is available and to store that water in the ground water system for use during those periods when it is less available. The flexibility required to do this emphasizes the need for partnerships with imported water users, both within and outside the MWA, to maximize flexibility in the system.

Objectives - The objectives that will allow us to achieve Goal 2 and measure our accomplishments include:

A. Develop infrastructure to convey imported water to areas of greatest demand.

B. Increase the Agency's ability to bank and store water.

C. Balance competing uses for the water available.

D. Ensure a timely process for allocation of the water that is available.

E. Develop partnerships with entities inside and outside of the MWA.

Key Elements

The following key elements define the actions we will take to achieve Goal 2 objectives:

- **Regional Water Management Plan.** The Regional Water Management Plan (RWMP) is a program level document that assesses the regional water supply and demand balance, and identifies major infrastructure projects and the potential for ground water recharge, storage programs and conjunctive use. This Plan has a twenty-year planning horizon and is generally updated on a five-year cycle. The RWMP identified a number of potential capital projects, some of which are currently being implemented. It also considered the potential for the MWA to increase the amount of entitlement it might otherwise receive from the State Water Project through entitlement exchanges and water transfers with other entities. Examples of projects and their status are summarized in Table 1.

TABLE 1 SUMMARY OF RWMP PROGRAMS

PROJECT	PURPOSE	STATUS
Mojave River Pipeline	Water supply and groundwater recharge along Mojave River	Constructed through Barstow, under construction to Daggett
Lucerne Valley Recharge Site	Ground water recharge with imported water in Lucerne Valley	Land purchased and basic facility design complete
Oro Grande Wash Recharge Augmentation Project	Ground water recharge to serve uses in the Oro Grande Wash area, recharge the Regional Aquifer	Feasibility study underway
Transition Zone Recharge Project	Assess potential for recharge from Lower Narrows to Helendale	Feasibility study underway
Solano County Water Agency Exchange	Entitlement exchange program	Ongoing - entitlement transfers to MWA have occurred

The RWMP was originally adopted by the Board of Directors in 1994 and is currently being updated. The update will provide new information on the status of water supply and demand balance and will address the remaining projects and key issues from the 1994 Plan that have not been implemented. The RWMP update includes significant stakeholder involvement and is expected to provide valuable information to the Agency regarding priority of existing issues and identification of new issues. Significant emphasis is also placed on the potential for conjunctive use programs to provide water for storage in the ground water basins.

- **Improvement District-Morongo Agreement.** The Improvement District-Morongo (IDM) consists of the MWA and four public water purveyors with capacity in the Morongo Basin Pipeline. Discussions are underway regarding a number of issues associated with administration of the pipeline. One issue is the potential for MWA to store water in the IDM service area for subsequent use by the IDM participants during periods of drought. This is an example of the type of partnerships the Agency will pursue with entities within the MWA to increase reliability of supplies during drought periods.

- **Water Purchase Policy.** As discussed under Goal 1 above, the Board of Directors has implemented a policy governing the use of reserve funds to purchase water from the State Water Project. This policy established a mechanism that will directly influence the potential to increase the quantity of the Agency's stored water.

- **Continued Support for the Watermaster and the Judgment.** The Mojave Basin Area Judgment incorporates a physical solution intended to provide the mechanisms to purchase and deliver supplemental water to cure the overdraft within the Mojave Basin Area. The physical solution requires the construction of physical facilities to deliver supplemental water to specific regions, and requires enhanced understanding of the region's hydrogeology. The MWA was appointed by the Court as the initial Watermaster to implement the Judgment, and provides staff and legal support for that function. Examples of support provided to date include the installation of monitoring wells, development of a ground water flow model in cooperation with the United States Geological Survey, and construction of the Mojave River Pipeline. The MWA has also initiated area-specific studies, such as the Transition Zone Recharge Feasibility Study and the Oro Grande Wash Recharge Augmentation Project. The Agency will continue in its efforts to provide the facilities and information that are required for effective implementation of the Judgment and thereby facilitate the purchase and storage of supplemental water.

- **Water Storage Inventory.** The Agency relies upon mass balance calculations with verification by water level change data to estimate the quantities of ground water stored in the Mojave Basin Area. This information also provides an indication of the amount of de-watered storage space that remains available for storage of additional water. This is an annual calculation that accounts for natural inflow and outflow for the basins, water extracted and consumptively used, supplemental water from the State Water Project, and wastewater return flows imported to the basin. The Agency will continue to monitor changes in water storage as a component of the updated RWMP, with annual recalculation consistent with the methodology employed for the RWMP update.

- **Water Exchange Programs.** The MWA is currently involved in two entitlement water exchange programs with other State Water Contractors. Approximately 1,500 acre-feet per year is exchanged to the Antelope Valley-East Kern Water Agency to provide water to a power plant located within the MWA. The water is transported to the plant through AVEK facilities located near a shared boundary. The MWA also entered into an agreement with the Solano County Water Agency (SCWA) that provides for the delivery of SCWA entitlement to the MWA during hydrologically "wet" periods. The SCWA can request return of up to one-half of the total entitlement delivered to the MWA. SCWA would then take delivery of MWA entitlement from the State Water Project during "dry" periods. To date the MWA has taken delivery of 11,000 acre-feet of SCWA entitlement, and none has been returned to them. The RWMP identifies water exchange programs as one element to bolster Agency supplies, and the RWMP update will investigate the potential for additional exchange programs.

- **External Banking Programs.** Banking programs are one means to effectively increase the water supply available, particularly during droughts. The MWA has entered into a program with the Solano County Water Agency that facilitates water storage, and will investigate the potential for additional storage programs with update of the RWMP. It is conceivable that programs may be identified that would allow the MWA to store entitlement water outside of the Agency.

- **Urban Water Management Plan.** The Urban Water Management Plan (UWMP) program was required by the State and is structured primarily for retail purveyors to document how they will continue to provide water to their customers during periods of drought. Recently, the State has extended that requirement to wholesale water providers, and has limited the ability of entities without an UWMP to receive certain categories of grant funding from the State. The MWA will prepare an UWMP for submittal to the State.

- **Comprehensive Water Allocation Priority Policy.** It is apparent through implementation of Agency programs that it would be useful to develop and implement a water allocation priority policy. It is not clearly stated what criteria the Agency will apply when conflicting customer demands for imported water deliveries exceed the available supply. The MWA will develop a policy for adoption by the Board of Directors establishing clarified criteria for allocation of available supplies and indicating when those criteria would need to become effective.

- **Comprehensive Water Rate Study.** The MWA annually adopts water delivery charges specific to the location of Agency facilities. A key component of the water rate is the charge levied by the Department of Water Resources to deliver the water to the MWA, which is primarily the cost of energy. These costs have fluctuated significantly in recent years, often creating a significant disparity between the actual cost to deliver the water and the water rate that has been adopted by the Board of Directors and charged to the customer. The MWA is monitoring these circumstances and is attempting to determine ways to modify the current processes to more closely align the actual costs and charges to the customer. There has also been recent discussion regarding the merits of differential water charges for different classes of water use, primarily associated with rates of consumptive use. Staff will investigate the validity of this approach and assess whether such an approach can result in an increase in stored water. These efforts will be memorialized in a rate study submitted to the Board for their consideration and approval.

GOAL 3

Coordinate efforts to maintain adequate water quality so that groundwater is safe for drinking and other beneficial uses.

Our focus for this goal is the protection and preservation of the water resources for present and future beneficial uses within the MWA. The Agency Law and the Mojave Basin Area Judgment make general reference to water quality issues; however, specific water quality control measures are vested with other entities. The Agency may influence sub-regional water quality through ground water recharge programs and by controlling overdraft. The most effective means for the MWA to support water quality programs are monitoring and cooperative programs with other entities.

Objectives - The objectives that will allow us to achieve Goal 3 and measure our accomplishments include:

A. Identify long-term threats to groundwater and focus efforts to implement appropriate pollution prevention and remediation activities.

B. Coordinate with other agencies that share a role in groundwater resources.

C. Promote inter-agency communication and data exchange to identify threats to drinking water sources.

Key Elements

The following key elements define the actions we will take to achieve Goal 3 objectives.

- **Water Quality Trend Monitoring.** The MWA collects water quality data from a number of locations. Data is also available from a number of other entities within the MWA. The Agency will compile this data and analyze it with the assistance of our geographic information systems and other tools to discern trends. Integrating data from a number of sources will allow identification of contamination "hot spots" requiring coordinated remediation efforts. These tools will also be used to assess the susceptibility of drinking water resources to existing and potential contamination threats. This information will be disseminated to water purveyors and private well owners to help them understand the potential threats they face and identify the steps they may take to ensure drinking water quality. These programs will require the development of partnerships with entities such as the County Department of Environmental Health, State Department of Health Services, Lahontan Regional Water Quality Control Board, the Environmental Protection Agency, and private sources.

- **Arsenic Treatment Evaluation Project.** The Federal Government recently reduced the maximum contaminant level for arsenic in drinking water supplies from 50 parts per billion (ppb) to 10 ppb effective in 2006. Several water purveyors within the MWA currently have wells that exceed 10 ppb and will either have to abandon those wells or blend or treat the water extracted at significant expense. The MWA has instituted a

demonstration project that will field test a relatively inexpensive method of arsenic removal at the wellhead.

- **Water Quality Impacts Associated With Imported State Water Project Water.** The quality of State Water Project water is different from the native water supplies. In some parts of the basin the quality is less than the native water supply and in some areas it is superior. The method of recharge, such as percolation or injection, also has implications for the potential impacts to water quality. Impacts from SWP water are generally characterized by changes in total dissolved solids (TDS). The MWA will investigate the potential for development of a model to estimate and track changes in TDS due to introduction of SWP water.

- **Joint Septic Systems Project.** The MWA has formed a partnership with the Victor Valley Wastewater Reclamation Authority and the Lahontan Regional Water Quality Control Board to assess the impacts of current and future septic wastewater disposal systems. This effort will entail compiling land use, sewer system infrastructure, septic tank location, wastewater return flow and water quality data into a geographic information system. The system will be used to identify areas that are currently being negatively impacted by existing septic tank systems, and to identify areas that might be prioritized for retrofit to a sanitary sewer system or for logical extension of the current reclamation system. Public awareness programs informing current septic system users about the need for proper system maintenance will also aid this effort.

- **Well Destruction Programs.** The Agency is involved in a number of programs that require staff to identify and catalogue wells. Many are inoperable but were not properly destroyed, and they present pathways for surface contaminants to reach the ground water system. Wells with screened intervals between different aquifers can also cause cross-contamination of pollutants between the aquifers. When found, these wells are characterized as to potential threat, and the information is forwarded to the County Department of Environmental Health. The County will contact the well owner and indicate that it is necessary to properly destroy the well. These efforts are sometimes successful but often result in no action by the property owner. The Agency will continue to coordinate this effort with the County, but eventually it will be necessary to implement a formal program with sufficient funding to systematically destroy the thousands of improperly abandoned wells within the MWA.

- **Wellhead Protection Study.** Recent requirements by the State Department of Health Services and the Federal Environmental Protection Agency have emphasized wellhead protection programs. This is essentially an evaluation of the areas adjacent and tributary to a well to identify potential sources of contamination. Areas critical to the water supply for

the well and land use restrictions that should apply to those areas are identified. The MWA does not operate any wells, but it does possess information that can be useful to water purveyors needing to establish their own wellhead protection criteria. The Agency will assist water purveyors with the development of their wellhead protection efforts.

- **Arsenic and Chromium Study.** Several locations have arsenic concentrations in excess of recently promulgated Federal standards. Total Chromium and Chromium 6 have been found at elevated levels in some areas of the Agency. The California Department of Health Services is currently working with the United States Geological Survey to investigate the causes of these elevated constituents at specific locations. The study may also provide information regarding cost-effective ways that the contaminant source can be managed to acceptable levels of impact. The MWA will support this program to the extent possible through existing cooperative programs with the USGS.

GOAL 4

Develop public awareness so that individuals and stakeholder organizations support our efforts and understand their role in contributing to the Agency's mission.

Goal 4 focuses on public education and outreach programs and emphasizes engaging the community in the management of our water resources through dissemination of pertinent information. The Agency has historically focused public awareness efforts on several means of disseminating information. The Agency believes there are a number of organizations existing in the High Desert that we can partner with to cost-effectively present our message to the public.

Objectives - We will achieve this Goal by pursuing the following measurable objectives:

A. Increase the community's understanding of why long-term management of our water resources is important.

B. Ensure that the public and stakeholders understand the Agency's roles and responsibilities, and how they can assist in managing our water resources.

C. Encourage participation by the public, government agencies, and regulatory and environmental organizations in our efforts to manage our water resources.

Key Elements

The following key elements define the actions we will take to achieve Goal 4 objectives.

- **Quarterly Newsletters.** The Agency publishes a quarterly newsletter that provides information on MWA water resources management programs. It also presents articles pertinent to water conservation and education programs.

- **Annual Report.** The MWA publishes an annual report that summarizes the Agency mission, objectives and accomplishments for the prior year. The report also summarizes Agency finances.

- **Press Releases.** Press releases are used to disseminate summaries of newsworthy events to the media. Examples include the start or completion of major capital improvement projects, publication of major documents, receipt of major funding instruments, or noteworthy public events.

- **Facility Tours.** Tours are provided to the public and stakeholder community to reinforce understanding of the Agency and its functions. Tours are conducted of local Agency facilities, such as pipelines, recharge sites and climate stations, and of State Water Project facilities such as Silverwood Lake and the Edmonston Pumping Plant. These tours provide the participants with a sense of the scope of the programs that involve MWA, and provide understanding of how we are affected by the State Water Project.

- **Community Speaking Engagements.** Agency staff and Board members frequently present information regarding the MWA and its programs to local Chambers of Commerce, civic organizations, and other

associations and community-based organizations. Staff has also participated in classroom instruction for programs ranging from elementary school through the community college level.

- **Victor Valley Community College Strategic Partnership.** The Agency has collaborated with the Victor Valley Community College (VVCC) to advance the use of geographic information systems (GIS) for water resources management. The VVCC has recently established a GIS training program and laboratory. The Agency has provided equipment and data for VVCC to use in developing their GIS programs. Agency staff guests for course lectures, and is also receiving training at the College. A student intern program is currently in effect at MWA to provide students with valuable work experience and a labor pool for the Agency. The partnership results in the exchange of significant quantities of data and increased understanding of the water resource management capabilities presented by GIS.

- **Lewis Center Strategic Partnership.** The Lewis Center for Educational Research in Apple Valley continues to develop a number of curriculums pertinent to natural resource management. Their programs and facility emphasize the application of technology for this purpose. Their facility is located adjacent to the upper Mojave River Narrows, which provides access to a reach of the River with extensive riparian habitat and perennial stream flows. Staff at the Center has expressed interest in developing scientifically valid monitoring programs and data analysis to quantify the impacts human activity may be having on the River system. Agency staff has provided the Center with suggestions for programs that would enhance understanding of the local natural resources. The MWA also facilitates introduction of Center staff to individuals and organizations that may help them with their programs. The Agency may develop an exhibit at the Lewis Center that emphasizes the importance of our local water resources need to properly manage them. This partnership is expected to continue to further public understanding of the issues pertinent to water resources management through the knowledge gained and disseminated by the students and facility.

- **Education Mini-Grants.** There are several educational opportunities pertinent to water resources management issues that could be developed at local schools and colleges provided a minimal amount of initial funding is made available. The Agency will consider selectively funding some of these programs to the extent that they support our mission and goals.

- **Web Site Upgrade.** The Agency maintains an Internet site that is a source of significant information to the public. Public meeting agendas, news releases, job announcements and basic information about the Agency,

the Board of Directors and the functions of various departments are all posted on the site. Some data and documents are available for download, but increased use of this capability can significantly streamline our current methods of providing timely information to the public. The Web site can also be utilized to make Board and Watermaster Agenda packets available on-line, and can facilitate the exchange of basic data between the MWA and our stakeholders. Update of the Web site will be addressed through implementation of the Information Technology Strategic Plan.

- **Mojave Environmental Education Coalition Partnership.** The Mojave Environmental Education Coalition (MEEC) has recently formed to provide a forum for disseminating information about the environment of the Mojave Desert to the public. The Agency will contribute information and resources to the MEEC to the extent that appropriate information can be developed and disseminated to the public in support of the Agency mission.

- **River Walk Project.** Cities in the Victor Valley area are developing a trail system that would connect the City of Victorville and the City of Hesperia along the Mojave River. This project may provide public education opportunities relevant to water resources management issues, and the MWA will participate in development of those opportunities to the extent practical.

GOAL 5

Advance scientific understanding of the region's water resources to support efficient management of water resources.

Goal 5 addresses our ability to determine where and how we should implement water resources management programs, and how we measure the results of the programs that we implement. The appropriate systems must be in place for these purposes. We will continue our work with stakeholders to identify and implement additional monitoring resources that may be needed. These monitoring resources will be used to determine the effectiveness of our programs and to modify them to improve their effectiveness. The information gathered will allow us to understand the current state of the ground water basins and to communicate that understanding to the public.

Objectives - We will achieve this Goal by pursuing the following measurable objectives:

A. Increase quantitative water supply and water quality data.

B. Develop quantitative data into useful information about the status of water supply and quality.

C. Coordinate the collection and reporting of water supply and water quality information among programs, agencies and stakeholders.

Key Elements

The following key elements define the actions that will be taken to achieve Goal 5 objectives:

- **Key Well Project.** The Agency database contains a vast amount of water level and water quality data from a number of sources, but it is primarily derived from Agency-monitored wells. The Agency will develop a key well program that consists of a collection of key wells that accurately represent the existing and historical condition of the ground water basin the Agency manages. Hydrographs will be developed and updated on a regular basis and made available to the Agency Board of Directors and to the public. The Agency will also continue to compile ground water information and data for as wide a geographic area as possible to increase its value to a number of agencies and the public. Expanded data collection will also facilitate communication and data exchange between the Agency and the other entities. Expansion of the system and development of data exchange protocol will be needed if the data is to be more accessible to stakeholders.

- **Water Resources Geographic Information System.** The MWA is developing the GIS tools needed to improve our capability to understand and manage the ground water system. An effective GIS will require a comprehensive and reliable data set and will be integrated with other Agency information technology tools. Information will become more accessible to our stakeholders through GIS data compilation and access established through the Internet. The GIS will provide the tools needed for integrated watershed assessment and management.

- **Mojave Desert Ecological Program.** The United States Geological Survey (USGS) is the lead agency in an effort to gather data to support resource management in the Mojave Desert. The data, including some generated by the MWA through its cooperative programs with the USGS, is being compiled into a GIS. Agency staff has acquired the initial data products from this effort and will include the appropriate data coverages from that data set into our GIS system. Staff will continue to develop the working relationship with the Mojave Desert Ecological Program staff to exchange data pertinent to our mission and goals.

- **Transition Zone Monitoring Project.** The "Transition Zone" reach of the Mojave River from the Lower Narrows to Helendale has hydrologic properties that are key to the movement of water from the upper Mojave River Basin (Alto) to the middle Mojave River Basin (Centro). The Transition Zone has specific performance functions under the Mojave Basin Area Judgment. The Agency has consequently developed monitoring systems within the Transition Zone and has selected a consultant to perform a hydrogeologic analysis and assess the potential for recharge in the area. The MWA will utilize the data developed from the technical analysis and determine whether additional monitoring or modification of existing monitoring is warranted. Transition Zone monitoring will continue to be priority activity for the MWA.

- **Agency-wide Ground Water Model.** In 2000 the USGS completed a ground water flow model for the Mojave River Basins, the El Mirage Basin, and the Lucerne Valley Basin west of the Helendale Fault. The model should be updated to encompass the remaining portions of the MWA.

- **Re-evaluation of Subsurface Flows Between Subareas.** The Mojave Basin Area Judgment contains estimates of subsurface ground water flow from one Subarea to another—Este to Alto, Oeste to Alto, Alto to Centro, Centro to Baja, and from Baja toward Afton Canyon. The Judgment requires the MWA to re-evaluate these subsurface flow estimates, which originated in Department of Water Resources Bulletin 84, published in 1967. This has been accomplished by a USGS drilling and analysis program for the Este and Oeste Subareas, and was estimated for all subsurface flow boundaries through development of the USGS Ground Water Flow Model. Webb and Associates prepared a report for the Watermaster in 2000 that also revisited the issue of subsurface flows at these boundaries. The MWA will utilize this recently generated information and recommend any adjustments that might be necessary to the Watermaster and the Court. The data will also be used to devise methods to monitor future changes in subsurface flows between Subareas.

- **Field Data Collection Automation Program.** The MWA collects large quantities of water level, water quality and climate data in the field. The data is currently manually entered into logbooks and then must be manually entered into computer database programs. The data collected is

also provided to the USGS for entry into the National Water Inventory System following quality assurance tests. The USGS also manually collects large quantities of field data for MWA cooperative programs. The manual collection of data and subsequent manual entry into a database increases the potential for error. The two agencies recently entered into a cooperative program to automate field data collection and streamline data quality assurance. Agency staff has developed prototype equipment utilizing handheld personal digital assistants, GPS units, laptop computers and available software programs. These concepts are being further developed by the USGS as a potential new standard for their field data collection efforts and for use with cooperators such as the MWA. The Agency expects that development of these systems will increase the rate and accuracy of data collection and allow rapid integration of collected data into Agency information systems. This program will also make pertinent data available to Agency stakeholders in a more timely manner.

- **Engineer's Water Supply Report.** The Agency publishes an Annual Engineer's Report on Water Supply that summarizes water supply and demand information for the preceding Water Year. The report tabulates surface water inflow and outflow, ground water production and use, imported water deliveries, changes to ground water in storage, climate data, building activity and population changes and summarizes Agency facilities and programs. The Report provides the Agency Board of Directors, our stakeholders and the public with a summary of the state of the ground water basins and Agency water resources management programs.

- **Ground Water Level Report.** The Agency annually publishes a report presenting tables and hydrographs of ground water level data collected throughout the Agency. The Report provides the Board of Directors, our stakeholders and the public with site-specific ground water level information indicative of local and regional ground water level trends.

- **Continued Evaluation of the Regional Hydrogeology.** The MWA covers 4,900 square miles of geographically diverse territory. Hydrogeologic data is more complete for some areas of the region than for others, and additional analysis is needed. These include, but are not limited to: hydrologic budget re-evaluation in the Este and Oeste Sub-basins and the Morongo Basin; re-evaluation of flow from ungaged stream courses; re-evaluation of runoff and recharge along the mountain front; and, potential for recharge in the Joshua Basin and Pipes Wash areas. It is also necessary to enhance understanding of the Mojave River Basin subsurface geology to improve estimates of potential ground water storage and the water quality impacts from recharge. The ability to perform these and other tasks will be limited by staffing and financial resources. The MWA will seek to partner with others to address these issues whenever possible.

GOAL 6

Promote efficient use of the region's water resources through regional conservation programs.

Water conservation can significantly reduce the amount of water consumed by water users in the High Desert and effectively increase the potential for the available water supply to meet future needs. The MWA is the regional water manager, which influences the extent that we will be involved in local water conservation efforts. Our status as a State Water Contractor defines some of our water conservation responsibilities. Some grants that we receive from the State and Federal governments mandate specific water conservation efforts. Many of our stakeholders are retail water purveyors and municipalities involved at the local level, and we may assist their water conservation efforts through partnerships. The local agricultural community can also conserve significant quantities of water, and we may be able to assist with those efforts through programs offered by other organizations.

Objectives - We will achieve this Goal by pursuing the following measurable objectives:

A. Increase community understanding of the value that water conservation provides.

B. Reduce or eliminate the need to acquire additional water supplies.

C. Meet State requirements for water conservation programs within our region.

Key Elements

The following key elements define the actions we will take to achieve Goal 6 objectives:

- **Joint Landscape Conservation Program.** Typical landscaping can account for more than half of the water used at a residence or business, and it can account for most of the water consumed. Reduction of water consumed by landscaping could significantly contribute to conservation efforts. The MWA can assist by encouraging the use of drought tolerant xeriscape. Such a program would necessarily be administered at the local level by water purveyors, city government, and the County. The MWA can be the catalyst for this effort through a coalition to develop appropriate standards for landscaping, and development of model landscape ordinances specific to either commercial or residential landscaping. The members of the coalition would adopt and enforce appropriate ordinances at the local level.

- **Study of Cost Savings Through Irrigation Methods.** Irrigation is a major component of cost for High Desert agriculture. Energy is a significant component of that cost, which will continue to increase as water levels decline and water must be lifted from increased depths. Some irrigation practices are inherently more efficient than others, which directly translates to the quantity of water applied to the crop. However, the upgrade to more efficient agricultural practices has its own cost that must be considered against the potential water and energy savings. The

agricultural community would be assisted in this decision process by analysis specific to the region, comparing the costs and savings associated with various methods of conserving irrigation water. This is an effort that the Agency could coordinate through one of the High Desert organizations with expertise in agricultural practices, and it could involve academic institutions from the region in data gathering and analysis.

- **Mobile Water Audit Lab.** Mobile water audit labs provide an economical method to provide site-specific analysis of irrigation practices for large water users. Typically, analysis of park, golf course, and large commercial landscapes and agricultural water users can correct system deficiencies and imbalances, and significantly reduce the amount of water applied. These systems can also provide data to determine the most efficient time of day and rate to apply water, often resulting in significant reductions in use. The Agency can assist this program by providing funding for other organizations to purchase and staff a mobile lab, or by providing the mobile lab and training for use by other organizations.

- **Grants for Agriculture Conservation.** Agricultural water users may not have the fiscal resources needed for a conversion to more efficient irrigation methods. The Agency can assist by directly funding agricultural conversions, by funding other organizations for this purpose, or by partnering with other organizations to solicit grants and loans.

- **Department of Water Resources and U.S. Bureau of Reclamation Partnership.** The DWR and the U.S. Bureau of Reclamation (USBR) have funding available for a number of conservation programs at the local level. The MWA will seek partnerships with these organizations to secure funding for local programs that meet DWR and USBR mandates and objectives. These funds could be administered by the MWA or by our local partners.

- **Evaluation of Costs of Conservation and Imported Water.** Individuals and entities faced with the prospect of purchasing State Water Project water from the MWA should first consider alternative conservation measures. The MWA may also determine it is cost effective to fund water conservation efforts as an alternative to State Water Project water purchases. These decisions could be enabled through analysis, determining the cost differential to make those choices. This analysis would necessarily be specific to different types of water use within different regions of the MWA. This program could be funded directly by the MWA and could involve academic institutions and local organizations in data gathering and analysis.

- **Consumptive Use Analysis.** The Agency relies upon estimates of consumptive use rates for different water use types to calculate total consumptive use within the MWA. The Mojave Basin Area Judgment relies upon consumptive use rate assumptions to administer water transfers

between parties to the Judgment. It may be appropriate to reassess the current consumptive use assumptions and develop refined estimates of actual consumptive use associated with specific water uses. This analysis would necessarily address the practical limitations and potential application of the consumptive use estimates developed.

- **Continued Implementation of the Judgment.** The Physical Solution in the Mojave Basin Area Judgment requires that water use and the calculated "production safe yield" be brought into balance in each Subarea. This is accomplished by the annual "rampdown" of production rights held by the parties until balance is achieved. This does not preclude the parties from continuing to produce the amount of water they need, but it requires that they offset their over-production by the transfer of production rights from another party or by the purchase of supplemental water. The purchase of production rights or imported supplemental water effectively increases the cost of water to the user, which presents a powerful incentive for conservation. Production rights have been ramped down by 20% since the entry of Judgment, resulting in reduced water use. Additional rampdown will be necessary in some Subareas, with the likely result being increased incentive to conserve the available supply. The Agency will continue to support implementation of the Judgment.

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