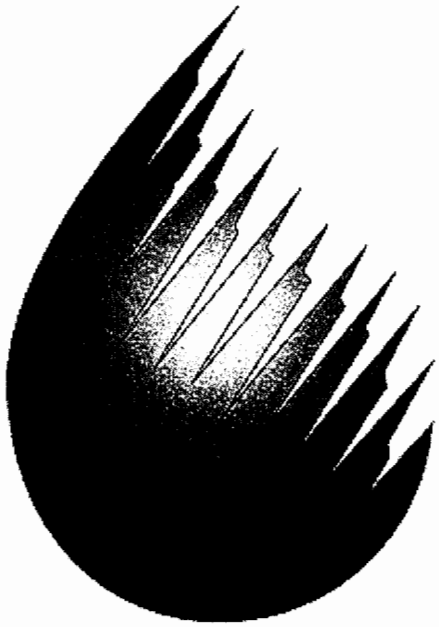
Southern Nevada Water Authority

MAJOR CONSTRUCTION AND CAPITAL PLAN



PROJECT DEFINITION AND STATUS REPORT

Amendment 7 Issued May 18, 2006
First Issued June 20, 2002

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Southern Nevada Water Authority

MAJOR CONSTRUCTION AND CAPITAL PLAN

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SECTION 1

INTRODUCTION AND PLAN SUMMARY

Introduction

The Southern Nevada Water Authority was formed in 1991 by a Cooperative Agreement among the following local entities:

- Big Bend Water District
- City of Boulder City
- City of Henderson
- City of Las Vegas
- City of North Las Vegas
- Clark County Water Reclamation District
- Las Vegas Valley Water District

The Southern Nevada Water Authority was established to unite these entities in cooperative efforts to address regional water resource and facility issues. In the early 1990s Clark County's population was about 800,000 and projected to grow to about 1,000,000 by the year 2000 and to 1,800,000 by the year 2025. Clark County's current population is more than 1,700,000 and forecasts issued in 2005 project a population in 2035 of approximately 3,500,000.

The Cooperative Agreement creating the Authority, together with the adjunct Facilities and Operations Agreement, stipulate that proposed facilities and other capital initiatives of the Authority will be defined and authorized in approved capital plan documents.

The Major Construction and Capital Plan (MCCP) was developed to meet continuing water needs of the community of Southern Nevada. The MCCP defines and authorizes projects to maintain facilities in a sound and functional condition, develop water resources, reduce operating costs, maintain or improve water quality, address environmental and safety issues, provide for support facilities (including power), and meet other objectives defined by the Authority.

The MCCP was initially approved and issued on June 20, 2002 and was last amended on September 15, 2005. The character of the MCCP is dynamic and responsive to the changing needs of the Authority. The projects presented and defined in the MCCP are reviewed and revised at least annually. The status of each project is updated in each revision. Only the Authority's Board of Directors can authorize revisions to the MCCP. Additionally, all increases to the total cost of the MCCP must be approved by the governing board of each Southern Nevada Water System (SNWS) Purveyor Member.

Plan Summary

The various sections of this MCCP document define the general location, scope, estimated costs, and schedule for each active project, list candidate projects that are not yet approved but may be proposed for future implementation, list all completed projects and project cash flows for active projects.

Cost estimates for previously approved projects have been updated since the previous amendment to reflect changes affecting project costs. All approved and active projects are individually defined in Section 3. This amendment of the MCCP adds eighteen new projects.

- Project No. 090G – Clark, Lincoln and White Pine Counties Groundwater Development
- Project No. 300E – SCADA System Replacement
- Project No. 300G – RMWTF Operators Video Display Upgrade
- Project No. 300H – Stage I and II Facilities PLC Upgrade
- Project No. 300I – AMSWTF Asbestos Removal
- Project No. 310E – North I-15 Treatment and Transmission Facilities Planning
- Project No. 320O – AMSWTF Filter Improvements Demonstration
- Project No. 320P – AMSWTF Chlorine Building I Rehabilitation
- Project No. 320Q – AMSWTF Process Drainage Improvements
- Project No. 340I – McCullough Lateral Planning
- Project No. 340J – Ductile Iron Pump Inspection and Evaluation
- Project No. 340K – Reservoir Vent Modifications
- Project No. 340L – Hemenway ROFC Improvements
- Project No. 340M – Air Vacuum and Relief Valve Piping Adjustments
- Project No. 340N – Stage II ROFC Isolation Valve Replacements
- Project No. 340O – Pumping Station 6 Forebay Relining
- Project No. 340P – Charleston Heights Lateral Repair and Valve Installation
- Project No. 370L – SCADA Communications Upgrades

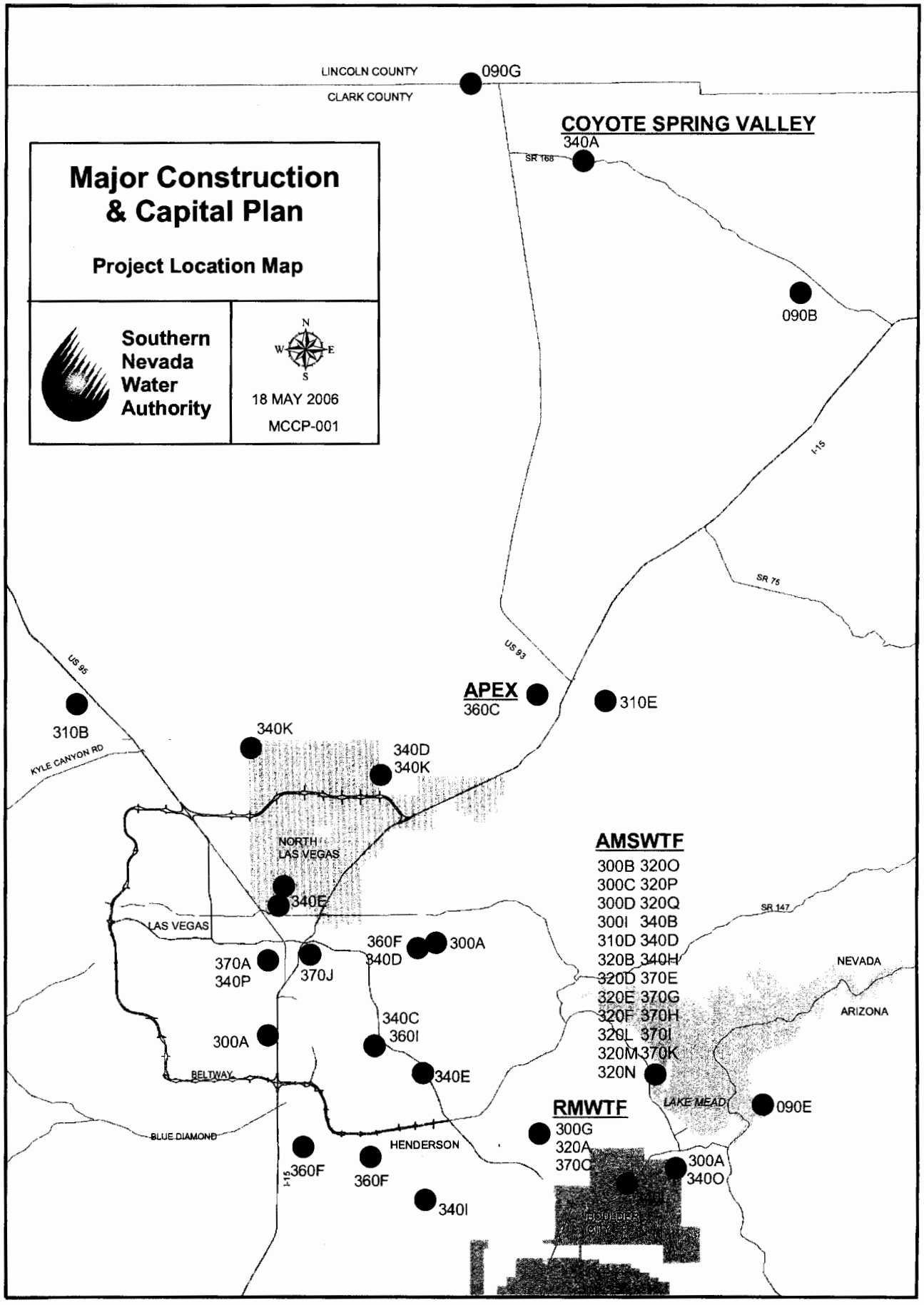
Fifteen of these new projects are for miscellaneous repair, maintenance or upgrade of major facility components of the SNWS that are necessary to keep the system in a sound and functional condition. Three projects are for planning efforts associated with the potential future projects developing additional water resources and system capacity. The estimated cost increase of these eighteen new projects is $179,021,000.

The following table summarizes the changes of this amendment and the current status of the MCCP.

	This Amendment			
	Added Projects	**Deleted Projects**	**Completed Projects**	**Adjustments to Previously Approved Projects**
Number	18	0	2	---
Value **($1,000)**	179,021	0	1,320	77,831

SECTION 2

PROJECT LOCATION MAP


Major Construction & Capital Plan
Project Location Map
Southern Nevada Water Authority
18 MAY 2006
MCCP-001
LINCOLN COUNTY
CLARK COUNTY
090G
COYOTE SPRING VALLEY
340A
SR 168
090B
I-15
SR 75
US 93
US 95
APEX
360C
310E
310B
KYLE CANYON RD
340K
340D
340K
NORTH LAS VEGAS
340E
LAS VEGAS
360F
340D
300A
370A
340P
370J
340C
360I
300A
340E
BELTWAY
BLUE DIAMOND
HENDERSON
I-15
360F
360F
340I
AMSWTF
300B 320O
300C 320P
300D 320Q
300I 340B
310D 340D
320B 340H
320D 370E
320E 370G
320F 370H
320L 370I
320M 370K
320N
SR 147
NEVADA
ARIZONA
LAKE MEAD
090E
RMWTF
300G
320A
370C
300A
340O
BOULDER CITY

SECTION 3

ACTIVE PROJECTS

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: Water Resources (Muddy River)	**Project Number:** 090B
	Project Status: Procurement

Project Description:
Acquisition of water shares in the Muddy Valley Irrigation Company and other water rights on the Muddy River.

Project Schedule:

Activity	Date *
Project Approved	Jun-1997 A
Project Complete	Jan-2011

Project Cost:

Activity	Cost ($1,000) *
Acquisition of Water Rights	28,405
Total $	28,405

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
As of March 2006, SNWA had acquired approximately 7,159 acre-feet out of 9,500 acre-feet of Muddy Valley Irrigation Company shares authorized to be acquired and 2,001 acre-feet of long-term leases on other Muddy River surface water rights.

Primary Funding:
Regional Funding Plan

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Project Title:
Arizona Groundwater Banking

Project Number: 090E

Project Status: Implementation

Project Description:
Funding for banking of Colorado River water in Arizona that creates long term storage credits for Nevada's future use.

Project Schedule:

Activity	Date *
Project Approved	Dec-2004 A
Project Complete	Dec-2018

Project Cost:

Activity	Cost ($1,000) *
Water Purchase	340,000
Total $	340,000

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
A December 2004 amended agreement between the Southern Nevada Water Authority, the Nevada Colorado River Commission and the Arizona Water Banking Authority guarantees an additional 1.13 million acre-feet of long-term storage credits which, with the existing 0.12 million acre-feet of credits, totals 1.25 million acre-feet of banked Colorado River water for Nevada's future use.

Primary Funding:
Regional Funding Plan

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Project Title:
Water Resource Acquisition and Development

Project Number: 090F

Project Status: Implementation

Project Description:
Acquire rights to and develop the water resources needed to meet the needs of the community of Southern Nevada. These water resources include the Colorado River and Nevada's in-state water resources.

Project Schedule:

Activity	Date *
Project Approved	Oct-2003 A
Integrated Water Planning	Nov-2005 A
Planning Complete	Jul-2010
Project Complete	Jun-2020

Project Cost:

Activity	Cost ($1,000) *
Administration	6,000
Planning	4,000
Environment	5,000
Water Rights	24,000
Water Purchase	25,000
Total $	64,000

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Six years of severe drought have reduced available supplies of Colorado River water and impart urgency to the need to acquire and develop other water resources. A Water Planning Advisory Committee presented recommendations for development of water resource options to the SNWA Board of Directors on November 17, 2005. These recommendations have supported efforts to pursue water resources through a broad range of options, including conservation and in-state groundwater and surface water development. As of March 2006, $11,906,500 had been expended in the purchase of water rights on the Virgin River that predate the Colorado River Compact.

Primary Funding:
Regional Funding Plan

Southern Nevada Water Authority
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Project Title:	**Project Number:** 090G
Clark, Lincoln, and White Pine Counties Groundwater Development	**Project Status:** Planning

Project Description:

Conduct engineering and hydrologic studies, drill aquifer test wells, perform preliminary facility planning, conduct environmental analyses, and secure water rights required for development of groundwater resources in Clark, Lincoln, and White Pine Counties.

Project Schedule:

Activity	Date *
Project Approved	May-2006
EIS Record of Decision Issued	Oct-2008
Test Wells Completed	May-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	500
Planning	5,500
Environment	22,000
Test Wells	38,000
Total $	66,000

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

During 2004 and 2005, a stakeholder driven water planning process was conducted by means of a Water Planning Advisory Committee. The development of unused groundwater resources available in Clark, Lincoln, and White Pine Counties was one of several recommendations of the advisory committee. Related costs already incurred in support of this potential project which were authorized previously under Project No. 090F have been transfered to the budget for this project.

Primary Funding:

Regional Funding Plan

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Project Title:
PS6 - Valley View Regulating Tank Security and Offsite Improvements

Project Number: 300A

Project Status: Construction

Project Description:
Construct security and off-site improvements, including walls, gates, sidewalks, curbs and gutters, lighting and landscaping at Pumping Station 6 and at the Valley View Regulating Tank.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Jul-2005 A
Project Complete	Jan-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	10
Design	10
Construction	840
Total $	860

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Off-site improvements at the Pumping Station No. 6 were requested by neighbors to make the facility's appearance more compatible with the community and are necessary to meet current county standards and improve site security. Coordination with the county has resulted in additional off-site improvement requirements at an increased cost. Improvements at the Valley View Regulating Tank are required to improve site security.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
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Project Title: Radio Communication System Upgrades	**Project Number:** 300B **Project Status:** Planning

Project Description:

Purchase, install, and commission new radio communication equipment to upgrade the existing radio communication system for improved routine and emergency operations.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Planning Complete	May-2006
Design Complete	Jun-2006
Procurement Complete	Jul-2006
Project Complete	Aug-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	15
Procurement	600
Total $	615

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

The new system will provide better communication over a wider area during normal and emergency situations. This upgrade will be accomplished in consultation with the Southern Nevada Area Communication Council.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
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Project Title:	**Project Number:** 300C
Overhead Crane Upgrades	**Project Status:** Design

Project Description:
Refurbish overhead cranes at various pumping stations.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Procurement Complete	Jul-2006
Construction Complete	Dec-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	175
Procurement	175
Total $	350

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

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Project Title: Roofing Replacements	**Project Number:** 300D
	Project Status: Planning

Project Description:
Replace deteriorated roofing on various buildings throughout the Southern Nevada Water System.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Planning Complete	Nov-2005 A
Procurement Complete	May-2006
Project Complete	Nov-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	15
Procurement	790
Total $	805

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This project initially was focused on the Chlorine Building roof at AMSWTF and the Administration area roof at RMWTF. It was subsequently determined that additional roofing at AMSWTF needs to be repaired and that the damaged roof at Lamb PS needs to be replaced.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
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Project Title: SCADA System Replacement	**Project Number:** 300E **Project Status:** Programmed

Project Description:

Phase 1 of this project will define requirements, evaluate potential systems and develop project criteria for a new Supervisory Control and Data Acquisition System (SCADA) for the entire Southern Nevada Water System.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	May-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	200
Planning	1,800
Total $	2,000

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

This initial Phase 1 work is expected to be followed by a subsequent phase involving selection and implementation of a new SCADA system.

Primary Funding:

Wholesale Delivery Charge

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Project Title: RMWTF Operators Video Display Upgrade	**Project Number:** 300G
	Project Status: Programmed

Project Description:
Upgrade the display unit for the operators in the control room of the River Mountains Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Procurement Complete	Oct-2006
Project Complete	Dec-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	40
Procurement	200
Total $	240

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

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Project Title:
Stage I and II Facilities PLC Upgrades

Project Number: 300H

Project Status: Programmed

Project Description:
Upgrade the programmable logic controllers at the pumping stations and rate-of-flow control stations on the Stage I and Stage II facilities constructed by the Bureau of Reclamation during the 1970s and 1980s.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	Jun-2006
Design Complete	Dec-2006
Procurement Complete	Apr-2007
Construction Complete	Apr-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	200
Design	800
Procurement	2,000
Installation	1,650
Total $	4,650

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
SNWA Operations will install the new controllers using in-house personnel. The award of a construction contract for installation is not anticipated.

Primary Funding:
Wholesale Delivery Charge

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Project Title: AMSWTF Asbestos Removal	**Project Number:** 3001
	Project Status: Programmed

Project Description:
Remove building materials containing asbestos from various areas of the Alfred Merritt Smith Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	Jul-2006
Procurement Complete	Sep-2006
Project Complete	Feb-2007

Project Cost:

Activity	Cost ($1,000) *
Asbestos Removal	200
Total $	200

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

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Project Title:	**Project Number:** 310B
Three Lakes Valley Groundwater Development	**Project Status:** Design

Project Description:

Construct approximately 130,000 LF of 30-inch pipeline, up to 9 wells, required treatment facilities, a rate of flow control & hydroturbine facility, monitoring wells, power supply system and related appurtenances.

Project Schedule:

Activity	Date *
Project Approved	Jul-2004 A
Design Complete	May-2007
Construction Complete	Mar-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	1,000
Environment	3,370
ROW	5,800
Permitting	50
Design	4,600
Construction Management	4,200
Construction	77,300
Water Rights	50
Total $	96,370

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

In 2005, the State Engineer granted 8,018 AFY in ground water rights from the Three Lakes North, Three Lakes South, and Tikaboo South hydrologic basins. An application is under review to allow these rights to be diverted from well locations in the Three Lakes South basin.

Primary Funding:

Regional Funding Plan

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Project Title: IPS-1 Pump and Motor Replacements	**Project Number:** 310C
	Project Status: Construction

Project Description:
Purchase and install larger motors and pumps with additional pump bowls to preserve pumping system capacity at Intake Pumping Station No. 1.

Project Schedule:

Activity	Date *
Project Approved	Jul-2004 A
Design Complete	Mar-2005 A
Construction Complete	Mar-2007
Project Complete	May-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	100
Design	1,000
Construction	25,000
Total $	26,100

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This project was placed on an accelerated schedule as a result of rapidly declining Lake Mead water levels. The project is currently under construction and is scheduled to be completed before the peak pumping season in 2007.

Primary Funding:
Regional Funding Plan

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Project Title: EBROFC Valve Replacements	**Project Number:** 310D
	Project Status: Construction

Project Description:

Replace three 48-inch diameter butterfly valves in the rate-of-flow control station vault of the Emergency Bypass between the discharge of Intake Pumping Station No. 2 and the inlet of the Alfred Merritt Smith Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Design Complete	Dec-2005 A
Construction Complete	Jun-2007
Project Complete	Aug-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	1
Design	124
Construction Management	10
Construction	1,300
Total $	1,435

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:

Wholesale Delivery Charge

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Project Title:
North I-15 Treatment and Transmission Facilities Planning

Project Number: 310E

Project Status: Programmed

Project Description:
Develop facilities concept plans and initiate environmental and predesign activities for potential treatment and transmission of Colorado River surplus and augmentation water along the north I-15 corridor.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	Jun-2008

Project Cost:

Activity	Cost ($1,000) *
Planning	42,000
Treatment Pilot Studies	4,000
Total $	46,000

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This planning work is necessary to assure that facilities can be designed and constructed in time to deliver water resources that may become available through future agreements under discussion with the Colorado River basin states and the Bureau of Reclamation. The estimated costs shown above should be sufficient for planning activities through June 2008.

Primary Funding:
Regional Funding Plan

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Project Title:	**Project Number:** 320A
River Mountains Water Treatment Facility Water Quality Laboratory and Pilot Plant	**Project Status:** Construction

Project Description:

Construct a regional water quality laboratory and pilot plant to test water quality as required by drinking water regulations, to perform applied research to optimize existing treatment technologies and to evaluate new treatment technologies. The facilities to be built at the River Mountains Water Treatment Facilities include a 45,000 square-foot central water quality laboratory and support facilities and a 2,000 square-foot, 10-gpm pilot plant.

Project Schedule:

Activity	Date *
Project Approved	Jun-2002 A
Design Complete	Oct-2004 A
Construction Complete	Sep-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	989
Planning	860 A
Environment	207
Permitting	200
Design	6,500
Construction Management	1,928
Construction	36,637
Total $	47,321

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

The project budget was amended to incorporate increases in scope which include new laboratory analytical equipment, office furnishings, moving costs for transfer of lab functions to new facility, and changes to the design and construction of the pilot plant.

Primary Funding:

Wholesale Delivery Charge

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Project Title:
Remodel Former AMSWTF Laboratory Spaces

Project Number: 320B

Project Status: Planning

Project Description:
Remodel the former laboratory space at the AMSWTF. The remodeled space will house Maintenance Engineering and computer server equipment. It will also provide for a group assembly area.

Project Schedule:

Activity	Date *
Project Approved	Jun-2002 A
Design Complete	Apr-2007
Construction Complete	Jul-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	50
Planning	40
Environment	12
Permitting	12
Design	137
Construction Management	87
Construction	1,246
Total $	1,584

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The construction of the central laboratory at the RMWTF under Project No. 320A will allow laboratory functions at the AMSWTF to be shifted to the RMWTF. This project will remodel the resulting available spaces to provide for other necessary operations.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
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Project Title:	**Project Number:** 320E
AMSWTF Cathodic Corrosion Protection System Repairs and Upgrades	**Project Status:** Design

Project Description:

Evaluate, repair, and upgrade the overall cathodic corrosion protection systems at the Alfred Merritt Smith Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Apr-2006 A
Construction Complete	Aug-2007
Project Complete	Sep-2007

Project Cost:

Activity	Cost ($1,000) *
Planning	25
Design	200
Construction	375
Total $	600

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:

Wholesale Delivery Charge

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Project Title:
AMSWTF Filtration System Valve Repairs

Project Number: 320F

Project Status: Design

Project Description:
Repair or replace valves and valve actuators in the filtration systems at the Alfred Merritt Smith Water Treatment Facility, including filter influent and effluent valves, wash water valves and air valves for filters 1 through 20.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Jun-2006
Project Complete	Dec-2008

Project Cost:

Activity		Cost ($1,000) *
Construction		1,500
	Total $	1,500

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The existing filtration system valves in filters 1 through 20 have deteriorated and all leak. A major overhaul or replacement of the valves will restore filter performance.

Primary Funding:
Wholesale Delivery Charge

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Project Title:	**Project Number:** 320I
Alfred Merritt Smith Water Treatment Facility Pilot Plant	**Project Status:** Planning

Project Description:

Construct a 10,000 square-foot, 150-gpm pilot plant for evaluation and optimization of treatment processes specific to the water quality characteristics at the AMSWTF.

Project Schedule:

Activity	Date *
Project Approved	Jul-2004 A
Design Complete	Jun-2008
Construction Complete	May-2010
Project Complete	Sep-2010

Project Cost:

Activity	Cost ($1,000) *
Administration	330
Environment	80
Permitting	80
Design	850
Construction Management	580
Construction	8,250
Total $	10,170

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Project implementation is being deferred as a result of recent changes to the raw water delivery systems recently completed or currently in planning and construction.

Primary Funding:

Wholesale Delivery Charge

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Project Title: Chloramine Disinfection Study	**Project Number:** 320J **Project Status:** Planning

Project Description:
Evaluate and define requirements that would be associated with chloramine disinfection of treated water as a potential technique for reducing formation of disinfection byproducts.

Project Schedule:

Activity	Date *
Project Approved	Dec-2004 A
Project Complete	Dec-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	500
Total $	500

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

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Project Title:	**Project Number:** 320K
Surface Water Treatment Pilot Studies	**Project Status:** Planning

Project Description:

Perform pilot studies of treatment processes that would be appropriate for application to surface waters such as the Virgin and Muddy Rivers and the epilimnion of Lake Mead to achieve compliance with drinking water standards.

Project Schedule:

Activity	Date *
Project Approved	Dec-2004 A
Project Complete	Dec-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	1,700
Total $	1,700

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

The estimated costs indicated here are for initial pilot study activities, involving paper and bench scale studies. Full-scale pilot testing of target treatment processes will require additional funding.

Primary Funding:

Regional Funding Plan and Wholesale Delivery Charge

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Project Title: AMSWTF Electrical Disconnect Switch Replacements	**Project Number:** 320L **Project Status:** Planning

Project Description:

Replace seven worn 4160-volt electrical disconnect switches at various locations in the Alfred Merritt Smith Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Procurement Complete	Oct-2006
Project Complete	Feb-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	105
Procurement	160
Total $	265

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Higher frequency of repair and reliability considerations of various subsystems in the plant result in the need for this project.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
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Project Title:	**Project Number:** 320M
Spare Filter Backwash Control Valve	**Project Status:** Planning

Project Description:

This project will purchase a new filter backwash control valve and allow for the refurbishment of the exising valve to be maintained as a spare.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Procurement Complete	May-2006
Project Complete	Dec-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	15
Procurement	135
Total $	150

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

This valve is a single point of failure at the AMSWTF and is 35 years old. Current maintenance history and equipment life cycle necessitate this project.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
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Project Title: AMSWTF A and B Clearwells Slide Gate Actuators	**Project Number:** 320N
	Project Status: Design

Project Description:

Purchase and install new slide gate actuators with waterproof enclosures for the A and B Clearwells at the Alfred Merritt Smith Water Treatment Facility. Repair or replace the Stage 1 gates as necessary, particularly Forebay 2 Aqueducts A and B inlet gates.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Project Complete	Aug-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	10
Design	190
Construction	1,000
Total $	1,200

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Original equipment was installed during the construction of the A and B clearwells at the Alfred Merritt Smith Water Treatment Facility. Repair and replacement parts for this equipment are no longer available. An inspection was performed on all of the Stage 1 gates and repairs or replacements should be made as indicated in the inspection report.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 320O
AMSWTF Filter Improvements Demonstration	**Project Status:** Programmed

Project Description:

Implement recommended improvements to the media and underdrain systems of one filter basin to demonstrate the effectiveness of the recommended improvements.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Design Complete	May-2007
Construction Complete	Mar-2008
Project Complete	Apr-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	50
Design	150
Construction	600
Total $	800

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

A study completed under Project No. 320D recommended certain improvements to the media and underdrain systems of the filters at the Alfred Merritt Smith Water Treatment Facility. This project is intended to demonstrate whether those recommendations will produce the predicted improvements.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: AMSWTF Chlorine Building I Rehabilitation	**Project Number:** 320P
	Project Status: Programmed

Project Description:
Recalibrate tanker scales, test chlorine piping, and repaint the building.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Project Complete	Jun-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	10
Design	140
Construction	600
Total $	750

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The Chlorine Building was constructed in 1995 and has been is use since that time. After completion of the new chlorine building the existing building needs to have the chlorine gas pipelines tested, the tanker scales recalibrated and the building needs repainting.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: AMSWTF Process Drainage Improvements	**Project Number:** 320Q **Project Status:** Programmed

Project Description:
Incorporate improvements to allow hydraulic components and structures of the Alfred Merritt Smith Water Treatment Facility to be drained more quickly.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	Sep-2006
Design Complete	Sep-2007
Construction Complete	Sep-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	75
Planning	50
Environment	10
Permitting	15
Design	150
Construction Management	120
Construction	750
Total $	1,170

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Coyote Spring Valley Well and Moapa Transmission System

Project Number: 340A

Project Status: Design

Project Description:
Construct a 6,200 gpm pumping station with a 0.75 MG forebay, approximately 81,200LF of 24-inch pipeline, a 0.75 MG regulating tank and associated appurtenances to convey water from the MX-5 well site in Coyote Spring Valley to Moapa Valley Water District facilities in Moapa. Equip the MX-5 well to produce approximately 6,500 acre-feet per year and connect supplies from other wells to the system to produce a total of approximately 9,000 acre-feet per year in Coyote Spring Valley.

Project Schedule:

Activity	Date *
Project Approved	Jul-2002 A
Design Complete	Oct-2006
Procurement Complete	May-2008
Construction Complete	Nov-2008
Project Complete	Nov-2010

Project Cost:

Activity	Cost ($1,000) *
Administration	1,461
Environment	5,125
Design	4,465
Construction Management	1,087
Construction	41,325
Total $	53,463

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This project is being accomplished in cooperation with the Moapa Valley Water District to comply with State Engineer Order No. 1169. Although design was completed in 2003, construction is pending right-of-way and environmental approvals by the Bureau of Land Management. Project completion is two years after construction completion to meet expected environmental mitigation requirements. Project costs have been revised to reflect new treatment requirements necessitating design revisions, potential environmental mitigation requirements, and price escalation over the past three years.

Primary Funding:
Regional Funding Plan

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
PS 1A, 2A, 1B and 2B Pump Repairs and Flow Meter Installation

Project Number: 340B

Project Status: Design

Project Description:
Repair or replace impellers, shafts, seal rings, bearings, and casings on up to 28 pumps and install individual flow meters at Pumping Stations 1A, 2A, 1B, and 2B.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Mar-2005 A
Construction Complete	Dec-2005 A
Design Complete	Jun-2007
Construction Complete	Jun-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	100
Planning	100
Design	400
Construction	2,100
Total $	2,700

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Cavitation has worn the pumps' impellers to the point where the pumps need to be repaired. Flow meters are necessary to gather data on the pumps' performance before and after they are repaired. The flow meter portion of the project is complete. The repair of the pumps will be started after the efficiency data has been developed to prioritize the repairs.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Hacienda Pumping Station Improvements

Project Number: 340C

Project Status: Design

Project Description:
Repair or replace shafts, wear rings and bearings, machine pump casings, and grout pump bases, as needed, on seven pumps. Upgrade electrical switchgear and control system. Construct blockwall and improve on-site and off-site drainage.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Planning Complete	Dec-2004 A
Design Complete	Jul-2006
Construction Complete	Oct-2008
Project Complete	Nov-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	230
Design	690
Construction	4,620
Total $	5,540

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The existing pumps and electrical switchgear require excessive and frequent maintenance. This project includes remachining or replacement of the pumps and upgrading the electrical switchgear and control system. These improvements, along with blockwall construction, will improve the operational reliability and security of this critical facility.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
PS 1C, 2C, Sloan, Lamb, BPS1A, and BPS2 Variable Frequency Drive Enhancements

Project Number: 340D

Project Status: Programmed

Project Description:
Enhance variable frequency drive backup capability by installing additional electrical gear for alternate constant speed operation in Pumping Stations 1C, 2C, Sloan, Lamb, BPS1A, and BPS2.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Planning Complete	Dec-2006
Design Complete	Sep-2007
Construction Complete	May-2009
Project Complete	Jul-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	100
Design	400
Construction	2,200
Total $	2,700

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Continual failures of the variable frequency drives have reduced the capability of the pumps to meet the demands placed on them. Operations has continued to work with the manufacturer to eliminate the problems. The performance and reliability of the variable frequency drives will continue to be evaluated through July 2006. The need for additional upgrades or modifications will be reassessed then.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations

Project Number: 340E

Project Status: Design

Project Description:
Install sleeve valves to replace existing ball valves at the Galleria, Gibson, Simmons, and Carlton Rate-of-Flow Control Stations.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Sep-2006
Construction Complete	Dec-2007

Project Cost:

Activity	Cost ($1,000) *
Construction	600
Total $	600

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 340G
Transmission Pipelines Discharge Modifications Study	**Project Status:** Planning

Project Description:

Evaluate discharge locations on existing transmission pipelines to determine whether modifications should be made to mitigate potential damage to adjacent or downstream properties from water discharges during pipeline draining operations. Develop a report that recommends modifications which may include extension of discharge drain pipes to established storm drains or channels or construction of other improvements.

Project Schedule:

Activity	Date *
Project Approved	Jul-2004 A
Project Complete	May-2006

Project Cost:

Activity	Cost ($1,000) *
Study	400
Total $	400

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Recommendations from this study will be considered in developing the scope of potential future projects for discharge modifications.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Pumping Plant No. 7 Upgrades

Project Number: 340H

Project Status: Design

Project Description:
Replace worn pumps, motors and electrical equipment in Pumping Plant No. 7 on the Boulder City Lateral.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Design Complete	Jul-2006
Construction Complete	Oct-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	10
Design	500
Construction	300
Total $	810

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The pumps at Pumping Plant No. 7 are 30 years old and have lost over 10 percent efficiency at various operating points. The internal wear has made rehabilitation of the pumps more costly than replacement of the pumps.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
McCullough Lateral Planning

Project Number: 3401

Project Status: Programmed

Project Description:
Prepare facilities concept plans and initiate environmental and predesign activities for a potential transmission system from the River Mountains Water Treatment Facility to the southwest area of the Las Vegas Valley.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	Jun-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	11,500
Planning	32,000
Environment	2,000
Total $	45,500

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This planning work is expected to lead to definition of pumping, transmission, storage, and rate-of-flow control facilities that will be designed and constructed under a future separate authorization. The estimated costs shown above should be sufficient for planning activities through June 2008.

Primary Funding:
Regional Funding Plan

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 340J
Ductile Iron Pump Inspection and Evaluation	**Project Status:** Programmed

Project Description:

Inspect and evaluate ductile iron pumps within the Southern Nevada Water System to assess corrosion effects and corrosion protection systems.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Project Complete	Jun-2008

Project Cost:

Activity	Cost ($1,000) *
Planning	782
Total $	782

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Reservoir Vent Modifications

Project Number: 340K

Project Status: Programmed

Project Description:
Modify the vents at the Decatur, Horizon Ridge, South Valley Regulating Tank, and Grand Teton Reservoirs to provide better security and protection against contamination.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Design Complete	Sep-2006
Procurement Complete	Dec-2006
Construction Complete	Jun-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	75
Design	200
Procurement	200
Construction	580
Total $	1,055

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: Hemenway ROFC Improvements	**Project Number:** 340L
	Project Status: Programmed

Project Description:
Replace the flow control valve, construct another flow train, and refurbish the electrical and control systems.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Design Complete	Feb-2007
Construction Complete	Nov-2007

Project Cost:

Activity	Cost ($1,000) *
Design	200
Construction	1,300
Total $	1,500

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Air Vacuum and Relief Valve Piping Adjustments

Project Number: 340M

Project Status: Programmed

Project Description:
Adjust and upgrade air vacuum and relief valves along with the related piping at seven rate-of-flow control stations to provide for drainage outside of the facilities.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Design Complete	Dec-2006
Construction Complete	Aug-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	88
Design	150
Construction	600
Total $	838

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Stage II ROFC Isolation Valve Replacements

Project Number: 340N

Project Status: Programmed

Project Description:
Replace isolation valves in the Stage II rate-of-flow control stations.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Planning Complete	Dec-2006
Design Complete	Sep-2007
Project Complete	May-2010

Project Cost:

Activity	Cost ($1,000) *
Administration	90
Design	324
Procurement	1,800
Construction	786
Total $	3,000

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The isolation valves in the Stage II ROFC stations (total of 9 ROFCs) are 25 years old and need to be replaced since they no longer provide isolation. 23 valves in total with diameters ranging from 10 inch to 48 inch.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Pumping Station 6 Forebay Relining

Project Number: 340O

Project Status: Programmed

Project Description:
Replace the membrane lining in the forebay of Pumping Station 6.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Design Complete	May-2007
Construction Complete	Nov-2007

Project Cost:

Activity	Cost ($1,000) *
Design	150
Construction	250
Total $	400

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The existing lining in the forebay was installed when the forebay was first constructed in 1970 and is approaching the end of its service life. An opportunity to replace the lining will occur during a planned extended outage of the pumping station.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Charleston Heights Lateral Repair and Valve Installation

Project Number: 340P

Project Status: Programmed

Project Description:
Install 48-inch valve(s), assess pipeline condition and repair up to 525 LF of deteriorated pipe.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Design Complete	Jun-2008
Construction Complete	Mar-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	114
Design	600
Construction	3,172
Total $	3,886

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This project wll restore pipe integrity on a damaged section of the Charleston Heights Lateral and allow isolation of the Charleston Heights from the Twin Lakes Lateral.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 360C
Electric Power Transmission Facilities	**Project Status:** Planning

Project Description:

Construct or purchase electric power transmission facilities to deliver electric power from generating resources and other power-purchase locations to water pumping and other identified loads.

Project Schedule:

Activity	Date *
Project Approved	Jan-2002 A
Design Complete	Feb-2008
Construction Complete	Sep-2009
Project Complete	Dec-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	100
Planning	100
Environment	300
ROW	500
Permitting	100
Design	5,000
Construction Management	2,500
Construction	36,200
Total $	44,800

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

The project schedule and costs are very preliminary pending definition on whether the transmission capacity will be acquired by building new facilites or by purchasing capacity in existing facilities. An agreement in 2002 with Nevada Power Company for transmission service from the Silverhawk Project allowed the building of these transmission facilities to be deferred. Opportunities for reducing transmission costs through implementation of this project are being assessed periodically.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Energy Supplier Conversion

Project Number: 360D

Project Status: Procurement

Project Description:
Implement the changes in metering and communications required at both SNWA and purveyor facilities to meet NPC standards for energy supply from CRC through NPC's electric distribution grid.

Project Schedule:

Activity	Date *
Project Approved	Jun-2002 A
SNWA Facilities	Aug-2004 A
Project Complete	Jun-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	40
Construction Management	360
Procurement	1,000
Total $	1,400

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: ROFC Energy Recovery	**Project Number:** 360F
	Project Status: Design

Project Description:

Retrofit three existing rate-of-flow control stations (ROFCS) with mini hydro turbines where pressure head (energy) is lost delivering water to purveyors. Mini hydro turbines potentially may recover about 2.7 MW of capacity and an initial annual energy output of 11,000 MWh. One candidate ROFCS is at Horizon Ridge Reservoir and two are at Sloan Pumping Station.

Project Schedule:

Activity	Date *
Project Approved	Dec-2002 A
Feasibility Studies Complete	Jun-2003 A
FERC Exemption Received	Mar-2004 A
Design Complete	May-2006
Construction Complete	Feb-2007
Project Complete	Mar-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	50
Permitting	40
Design	650
Construction Management	110
Construction	5,600
Total $	6,450

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

The project approach has evolved since first conceived as a result of preliminary engineering analysis. The current approach entails identifying the best available turbine equipment through a competitive bidding process, then proceeding with design of structural, mechanical, and electrical modification to the ROFCS based on the selected turbine. Project estimates have increased to include replacement of certain valves that have not been functioning properly.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Intermountain Power Project Unit 3 - Predevelopment

Project Number: 360G

Project Status: Planning

Project Description:
Participate with other project partners in predevelopment activities to define project scope and design criteria for the proposed 900 MW expansion of electrical generating capacity at the coal-fired Intermountain Power Project facility near Delta, Utah.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Project Complete	Apr-2008

Project Cost:

Activity	Cost ($1,000) *
Planning	2,800
Total $	2,800

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Predevelopment activities for the proposed power plant began in June 2005 upon completion of the feasibility study previously authorized under Project No. 360E.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 360H
Pumping Station Electrical Transformer Repairs	**Project Status:** Planning

Project Description:
Recondition or replace substation transformers at existing pumping stations.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Apr-2007
Project Complete	Nov-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	7
Planning	11
Permitting	7
Design	55
Construction	770
Total $	850

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Electrical substation transformers at some pumping stations have been in operation for more than 25 years. Results of maintenance testing will be used to assess transformer degradation and the need for repair or replacement. Preventative work will reduce the risk of unplanned disruption to the pumping stations. The project schedule will be adjusted periodically to match the need for preventative work. This project will be accomplished in cooperation with the Colorado River Commission of Nevada.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Hacienda Pumping Station Electrical Substation Upgrades

Project Number: 360I

Project Status: Procurement

Project Description:
Install a second 69kV transformer and new breakers and relays in the electrical substation.

Project Schedule:

Activity	Date *
Project Approved	Dec-2004 A
Design Complete	May-2006
Procurement Complete	Nov-2006
Construction Complete	Jun-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	10
Planning	10
Design	60
Construction Management	30
Construction	1,390
Total $	1,500

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Hacienda is a critical pumping station that has been continuously in service for over 20 years. These upgrades will make the electrical system as reliable as other SNWA pumping stations. The Colorado River Commission will help implement this project.

Primary Funding:
Regional Funding Plan

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: Production Group Satellite Facility	**Project Number:** 370A
	Project Status: Programmed

Project Description:
Construct a satellite maintenance facility in the Las Vegas Valley for the SNWS Production Group.

Project Schedule:

Activity	Date *
Project Approved	Jun-2002 A
Planning Complete	Dec-2006
Design Complete	Oct-2007
Construction Complete	Apr-2009
Project Complete	Jul-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	250
Design	330
Construction	3,400
Total $	3,980

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
It was determined that the SNWS Production Satellite Facility should be located on the Valley View Boulevard site to optimize use of support functions already available at that site. The location of this building is being coordinated with the overall facility planning for the Valley View Boulevard site.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 370B
Security System Upgrades	**Project Status:** Construction

Project Description:

Install communications equipment and surveillance systems that are consistent with the vulnerability assesments performed by MANTEC and other related studies done on Authority facilities. Develop, install and test security software to protect the SCADA system at SNWS.

Project Schedule:

Activity	Date *
Project Approved	Jun-2002 A
Vulnerability Assessment Complete	Sep-2003 A
Construction Complete	Jun-2006
Project Complete	Sep-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	20
Planning	50
Construction	3,430
Total $	3,500

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
RMWTF Fleet Maintenance & Electrical Maintenance Facility

Project Number: 370C

Project Status: Programmed

Project Description:
Construct a fleet maintenance and electrical maintenance facility at the River Mountains Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	Jun-2002 A
Planning Complete	Aug-2007
Design Complete	Feb-2008
Construction Complete	Jun-2009
Project Complete	Aug-2009

Project Cost:

Activity	Cost ($1,000) *
Administration	50
Planning	25
Environment	8
Permitting	8
Design	350
Construction Management	200
Construction	1,500
Total $	2,141

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The project scope was amended to include an electrical maintenance facility to support Colorado River Commission electrical system work on SNWA projects.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Fiber-Optic Network Improvements

Project Number: 370D

Project Status: Implementation

Project Description:
Upgrade the 12-count fiber-optic cable between Twin Lakes and Carlton Square to 48-count cable, procure a fiber-optic connection between the regional commercial network and the Sloan Pumping Station, procure a fiber-optic connection to the new SNWA building, and procure the services of a professional telecommmunication consultant to evaluate the existing fiber-optic network.

Project Schedule:

Activity	Date *
Project Approved	Jan-2003 A
Construction Complete	Apr-2006 A
Telecom. Network Eval. complete	Aug-2006
Project Complete	Dec-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	450
Design	140
Construction Management	70
Procurement	680
Construction	420
Total $	1,760

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
Ongoing assessment of communications requirements for security and operations purposes resulted in a change of scope for this project. The Las Vegas Valley Water District (LVVWD) and the Authority have developed and approved an interlocal agreement for LVVWD to reimburse the Authority for costs associated with this project that directly benefit the LVVWD.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
AMSWTF Mechanic Maintenance Shop Addition

Project Number: 370E

Project Status: Design

Project Description:
Construct a new mechanic maintenance shop.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Jun-2006
Construction Complete	Sep-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	220
Design	880
Construction Management	320
Construction	8,000
Total $	9,420

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
A new shop is needed with additional overhead space to accommodate an overhead crane, equipment, delivery vehicles and space for administrative and training functions. The project scope and cost estimates have been amended as a result of requirements and circumstances identified during the design process.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: AMSWTF Computer Room HVAC Replacement	**Project Number:** 370G **Project Status:** Procurement

Project Description:
Replace HVAC system in the computer room at the Alfred Merritt Smith Water Treatment Facility.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Planning Complete	Jun-2004 A
Procurement Complete	Apr-2006
Project Complete	May-2006

Project Cost:

Activity	Cost ($1,000) *
Procurement	95
Total $	95

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 370I
Evaporative Cooler Upgrades	**Project Status:** Planning

Project Description:
Replace the evaporative coolers at fourteen different pumping stations with more efficient evaporative coolers.

Project Schedule:

Activity	Date *
Project Approved	Jul-2004 A
Procurement Complete	Jun-2007
Construction Complete	Jun-2008

Project Cost:

Activity	Cost ($1,000) *
Administration	210
Procurement	420
Construction	2,100
Total $	2,730

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
The replacement of the coolers at all 14 sites will result in a savings of over 650 acre feet of water per year.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 370J
SNWA Office Tenant Improvements	**Project Status:** Design

Project Description:

Construct improvements necessary for SNWA occupancy of leased office space in a new building planned to be finished and available in July 2007.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Planning Complete	Dec-2005 A
Design Complete	Sep-2006
Construction Complete	Jul-2007
Project Complete	Oct-2007

Project Cost:

Activity	Cost ($1,000) *
Administration	150
Permitting	75
Design	700
Construction	22,500
Furniture, Fixtures and Equipment	3,600
Total $	27,025

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

On December 16, 2004, the Board approved a lease agreement with Parkway Center, LLC to lease office space for SNWA staff and functions. As is common in such lease agreements, SNWA is responsible for tenant improvements such as work space configuration, interior plumbing and electrical, floor coverings, finishes and furnishings. The revised cost includes two additional floors that will be partially sub-leased to LVVWD for a temporary term and the substantial increase in building trade related construction costs in the Las Vegas valley.

Primary Funding:

Regional Funding Plan

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title: AMSWTF Warehouse Storage System Improvements	**Project Number:** 370K **Project Status:** Planning

Project Description:

Purchase new and modify existing storage shelves in the AMSWTF warehouse. Purchase and install required office furniture.

Project Schedule:

Activity	Date *
Project Approved	Sep-2005 A
Planning Complete	Apr-2006 A
Procurement Complete	Jun-2006
Construction Complete	Aug-2006
Project Complete	Sep-2006

Project Cost:

Activity	Cost ($1,000) *
Administration	5
Procurement	120
Construction	125
Total $	250

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Construction of the additional warehouse space was accomplished in project 080F. No provision was made in that contract for shelving and office furniture needed for operation.

Primary Funding:

Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
SCADA Communications Upgrades

Project Number: 370L

Project Status: Programmed

Project Description:
Upgrade failsafe interlocks at 27 facilities and provide redundant timers on the fiber optic communications system.

Project Schedule:

Activity	Date *
Project Approved	May-2006
Project Complete	Dec-2007

Project Cost:

Activity	Cost ($1,000) *
Construction	250
Total $	250

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
This project will continue the deployment and upgrade of the failsafe interlock system and replace old telemetry equipment that is no longer available or supported by the manufacturer.

Primary Funding:
Wholesale Delivery Charge

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SECTION 4

CANDIDATE PROJECTS

Candidate Projects

The following projects are candidates for potential future approval. These candidate projects are conceptual, with uncertain schedule and cost projections that are subject to change. As more definitive information about the possible scope and benefit of these projects becomes available, they may become active projects in future amendments of the MCCP or they may be dropped from further consideration.

Candidate Project	Possible Completion Date	Order-of-Magnitude Cost Estimate ($1,000)
SNWA Office Building Construct or purchase an office building dedicated to SNWA functions, including Board meeting room and offices; administrative, engineering, and water conservation offices; CRC offices; and conference rooms.	2007	$20,000
Renewable Energy Project(s) Construct or purchase power from power generating plants using renewable energy such as mini-hydro-turbines on SNWS turnouts or the Las Vegas Wash, methane from wastewater treatment plants, wind, geothermal, or solar radiation.	2008	$30,000
Electric Power Generation Facilities – Intermountain Power Project Unit 3 Ownership of a portion of Unit 3 of a coal-fired power plant proposed for construction at the Intermountain Power Project facilities near Delta, Utah.	2012	$200,000

SECTION 5

COMPLETED PROJECTS SUMMARY

COMPLETED PROJECTS SUMMARY

Project No.	Project Title	Year Completed	Cost ($1,000)
090A	Water Resource (Coyote Spring Valley)	2000	30,299
100D	SNWS Power System Upgrades — Equipment Prepurchase	2003	6,127
100E	SNWS Power System Upgrades — Equipment Installation	2003	16,239
100F	CRC Power System Upgrades	2003	4,832
100G	SNWS Power System Upgrades — Material Prepurchase	2003	1,041
100T	SNWS Power System Upgrades — Remote Terminal Units	2003	521
320C	Disinfection By-Products Control Strategy	2004	181
320D	AMSWTF Filter Media and Underdrain Improvements Study	2004	194
320G	Lake Mead Intake No. 1 Modifications	2004	7,095
320H	Pumping Plant 6 Rechlorination Station	2004	100
340F*	**Transmission Pipelines Cathodic Corrosion Protection System Repairs**	**2005**	**1,116**
360A	Equity Purchase of Electric Power Generation Facilities – Silverhawk Project	2004	115,100
360B	Equity Purchase of Electric Power Generation Facilities	2003	53,000
360E	Feasibility Study of Intermountain Project Unit 3	2005	525
370F	AMSWTF Utility Building Chiller Replacement	2005	85
370H*	**Flame Detection Equipment for High Pressure Hydraulic System**	**2006**	**204**
		TOTAL	**236,659**

*** Project definition sheets for recently completed projects are appended to this section.**

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:
Transmission Pipelines Cathodic Corrosion Protection System Repairs

Project Number: 340F

Project Status: Complete

Project Description:
Repair and upgrade the overall cathodic corrosion protection system for the Pittman and South Valley transmission pipelines.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Jan-2004 A
Construction Complete	Nov-2005 A

Project Cost:

Activity	Cost ($1,000) *
Administration	4 A
Design	127
Construction Management	52 A
Construction	933 A
Total $	1,116

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:
These repairs and upgrades were recommended in a study completed in 2002.

Primary Funding:
Wholesale Delivery Charge

Southern Nevada Water Authority
MAJOR CONSTRUCTION AND CAPITAL PLAN

Project Title:	**Project Number:** 370H
Flame Detection Equipment for High Pressure Hydraulic Systems	**Project Status:** Complete

Project Description:

Install ultraviolet flame detectors for valve actuators in five pumping stations equipped with high pressure hydraulic systems.

Project Schedule:

Activity	Date *
Project Approved	Jul-2003 A
Design Complete	Sep-2004 A
Construction Complete	Dec-2005 A
Project Complete	Mar-2006 A

Project Cost:

Activity	Cost ($1,000) *
Administration	4 A
Construction	200 A
Total $	204

* Project Dates and Costs are projected unless indicated by an "A" for "Actual".

Remarks:

Primary Funding:

Wholesale Delivery Charge

SECTION 6

APPENDICES

APPENDIX A

Abbreviations

AMSWTF	Alfred Merritt Smith Water Treatment Facility
CIP	Capital Improvements Plan for 900 mgd Capacity
CRC	Colorado River Commission
ESDC	Engineering Services During Construction
gpm	gallons per minute
LF	linear feet
MCCP	Major Construction and Capital Plan
MG	million gallons
mgd	million gallons per day
MVWD	Moapa Valley Water District
MW	megawatts
NPC	Nevada Power Company
NTP	Notice to Proceed
PP	Pumping Plant
PS	Pumping Station
RMWTF	River Mountains Water Treatment Facility
ROFC	Rate of Flow Control Station
SNWA	Southern Nevada Water Authority
SNWS	Southern Nevada Water System

Notes

Projects are grouped into general categories and assigned project numbers based on those categories. The project categories and project numbering scheme is as follows.

Number	Category
090	Water Resources
100	Power Projects transferred from CIP
300 through 309	General Projects
310 through 319	Water Supply Projects
320 through 339	Water Treatment Projects
340 through 359	Water Transmission Projects
360 through 369	Power Projects
370 through 379	Support Facility Projects

In addition to the three-digit category number, project numbers also have distinguishing alpha character designations. For example, a water supply project might have a unique project number of 315D.

APPENDIX B

MAJOR CONSTRUCTION AND CAPITAL PLAN
ACTUAL AND PROJECTED CASH FLOW FOR ACTIVE PROJECTS
AS OF MAY 18, 2006
(in $1000)

		Prior Years	2006	2007	2008	2009	Out Years	TOTAL
090B	Water Resources (Muddy River)	21,489	1,150	1,150	1,150	1,150	2,316	28,405
090E	Arizona Groundwater Banking	110,200	-	-	-	23,000	206,800	340,000
090F	Water Resource Acquisition and Development	23,988	8,300	8,300	8,300	8,300	6,812	64,000
090G	Clark, Lincoln and White Pine Counties Groundwater Development	24,006	2,060	19,371	18,124	2,439	-	66,000
		-						
300A	PS6 - Valley View Regulating Tank Security and Offsite Improvements	11	489	360	-	-	-	860
300B	Radio Communication System Upgrades	-	615	-	-	-	-	615
300C	Overhead Crane Upgrades	-	-	178	172	-	-	350
300D	Roofing Replacements	-	586	219	-	-	-	805
300E	SCADA System Replacement	-	1,000	1,000	-	-	-	2,000
300G	RMWTF Operators Video Display Upgrade	-	240	-	-	-	-	240
300H	Stage I and II Facilities PLC upgrade	-	650	2,500	1,500	-	-	4,650
300I	AMSWTF Asbestos Removal	-	-	200	-	-	-	200
		-						
310B	Three Lakes Valley Groundwater Development	2,068	4,000	17,000	55,302	18,000	-	96,370
310C	IPS-1 Pump and Motor Replacements	2,233	18,367	5,500	-	-	-	26,100
310D	EBROFC Valve Replacements	8	600	827	-	-	-	1,435
310E	North I-15 Treatment and Transmission Facilities Planning	-	7,000	22,000	17,000	-	-	46,000
		-						
320A	RMWTF Water Quality Laboratory and Pilot Plant	16,387	21,934	9,000	-	-	-	47,321
320B	Remodel Former AMSWTF Laboratory Spaces	-	80	220	1,284	-	-	1,584
320E	AMSWTF Cathodic Corrosion Protection System Repairs and Upgrades	142	200	258	-	-	-	600
320F	AMSWTF Filtration System Valve Repairs	-	1,250	250	-	-	-	1,500
320I	AMSWTF Pilot Plant	-	-	450	550	4,370	4,800	10,170
320J	Chloramine Disinfection Study	-	-	-	500	-	-	500
320K	Surface Water Treatment Pilot Studies	-	971	729	-	-	-	1,700
320L	AMSWTF Electrical Disconnect Switch Replacements	-	160	105	-	-	-	265
320M	Spare Filter Backwash Control Valve	-	150	-	-	-	-	150
320N	AMSWTF A and B Clearwells Slide Gate Actuators	-	1,200			-	-	1,200
320O	AMSWTF Filter Improvements Demonstration	-	100	400	300	-	-	800
320P	AMSWTF Chlorine Building I Rehabilitation	-	-	-	500	250	-	750
320Q	AMSWTF Process Drainage Improvements	-	50	200	920	-	-	1,170
		-						
340A	Coyote Spring Valley Well and Moapa Transmission System	2,277	500	22,000	23,486	2,600	2,600	53,463
340B	PS 1A, 2A, 1B and 2B Pump Repairs and Flow Meter Installation	327	-	1,186	1,187	-	-	2,700
340C	Hacienda Pumping Station Improvements	318	3,727	813	682	-	-	5,540
340D	PS 1C, 2C, Sloan, Lamb, BPS1A, and BPS2 VFD Enhancements	-	250	700	1,500	250	-	2,700
340E	Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations	-	300	300		-	-	600
340F*	Transmission Pipelines Cathodic Corrosion Protection System Repairs	1,116	-	-	-	-	-	1,116
340G	Transmission Pipelines Discharge Modifications Study	40	360	-	-	-	-	400
340H	Pumping Plant No. 7 Upgrades	1	-	809	-	-	-	810
340I	McCullough Lateral Planning	-	5,000	16,000	24,500	-	-	45,500
340J	Ductile Iron Pump Inspection and Evaluation	-	100	500	182	-	-	782
340K	Reservoir Vent Modifications	-	400	655	-	-	-	1,055
340L	Hemenway ROFC Improvements	-	500	1,000	-	-	-	1,500
340M	Air Vacuum and Relief Valve Piping Adjustments	-	180	658	-	-	-	838
340N	Stage II ROFC Isolation Valve Replacements	-	100	500	1,000	1,100	300	3,000
340O	Pumping Station 6 Forebay Relining	-	200	200	-	-	-	400
340P	Charleston Heights Lateral Repair and Valve Installation	-	20	500	2,600	766	-	3,886
		-						
360C	Electric Power Transmission Facilities	-	-	3,000	3,000	3,000	35,800	44,800
360D	Energy Supplier Conversion	70	800	530	-	-	-	1,400
360F	ROFC Energy Recovery	324	2,576	3,550	-	-	-	6,450
360G	Intermountain Power Project Unit 3 - Predevelopment	288	1,497	1,015	-	-	-	2,800
360H	Pumping Station Electrical Transformer Repairs	-	-	-	-	150	700	850
360I	Hacienda Pumping Station Electrical Substation Upgrades	29	1,000	471	-	-	-	1,500
		-						
370A	Production Group Satellite Facility	-	200	330	3,000	450	-	3,980
370B	Security System Upgrades	1,381	1,800	319	-	-	-	3,500
370C	RMWTF Fleet Maintenance & Electrical Maintenance Facility	-	-	141	1,300	700	-	2,141
370D	Fiber-Optic Network Improvements	477	1,220	63	-	-	-	1,760
370E	AMSWTF Mechanic Maintenance Shop Addition	23	-	2,397	7000	-	-	9,420
370G	AMSWTF Computer Room HVAC Replacement	-	95	-	-	-	-	95
370H*	Flame Detection Equipment for High Pressure Hydraulic Systems	204	-	-	-	-	-	204
370I	Evaporative Cooler Upgrades	-	-	-	1000	1000	730	2,730
370J	SNWA Office Tenant Improvements	98	3,525	23,402	-	-	-	27,025
370K	AMSWTF Warehouse Storage System Improvements	-	120	130	-	-	-	250
370L	SCADA Communications Upgrades	-	-	250	-	-	-	250
	Total	$207,505	$95,622	$171,636	$176,039	$67,525	$260,858	$979,185

APPENDIX C
VARIANCE REPORT

Comparative costs and changes for active and recently completed projects since last MCCP Amendment in thousand dollars.

		Sep. 2005 MCCP	Actual Costs thru Dec. 2005	Outstanding Committed Costs		Adjustment to Active Projects	Projects Added this Amendment
WATER RESOUCES							
090B	Water Resources (Muddy River)	28,405	21,489	-		-	-
090E	Arizona Groundwater Banking	340,000	110,200	230,000		-	-
090F	Water Resource Acquisition and Development	64,000	23,988	8,347		-	-
090G	Clark, Lincoln and White Pine Counties Groundwater Development	-	24,006	10,035		-	66,000
	Subtotal	**432,405**	**179,683**	**248,382**		**-**	**66,000**
GENERAL							
300A	PS6 - Valley View Regulating Tank Security and Offsite Improvements	350	11	-		510	-
300B	Radio Communication System Upgrades	615	-	615		-	-
300C	Overhead Crane Upgrades	350	-	-		-	-
300D	Roofing Replacements	180	-	-		625	-
300E	SCADA System Replacement	-	-	-		-	2,000
300G	RMWTF Operators Video Display Upgrade	-	-	-		-	240
300H	Stage I and II Facilities PLC upgrade	-	-	-		-	4,650
300I	AMSWTF Asbestos Removal	-	-	-		-	200
	Subtotal	**1,495**	**11**	**615**		**1,135**	**7,090**
WATER SUPPLY PROJECTS							
310B	Three Lakes Valley Groundwater Development	69,500	2,068	593		26,870	-
310C	IPS-1 Pump and Motor Replacements	26,100	2,233	22,723		-	-
310D	EBROFC Valve Replacements	1,231	8	1,427		204	-
310E	North I-15 Treatment and Transmission Facilities Planning	-	-				46,000
	Subtotal	**96,831**	**4,309**	**24,743**		**27,074**	**46,000**
WATER TREATMENT PROJECTS							
320A	RMWTF Water Quality Laboratory and Pilot Plant	41,321	16,387	20298		6,000	-
320B	Remodel Former AMSWTF Laboratory Spaces	1,584	-	-		-	-
320E	AMSWTF Cathodic Corrosion Protection System Repairs and Upgrades	400	142	-		200	-
320F	AMSWTF Filtration System Valve Repairs	1,500	-	750		-	-
320I	AMSWTF Pilot Plant	10,170	-	-		-	-
320J	Chloramine Disinfection Study	500	-	-		-	-
320K	Surface Water Treatment Pilot Studies	1,500	-	1,029		200	-
320L	AMSWTF Electrical Disconnect Switch Replacements	265	-	-		-	-
320M	Spare Filter Backwash Control Valve	150	-	-		-	-
320N	AMSWTF A and B Clearwells Slide Gate Actuators	480	-	-		720	-
320O	AMSWTF Filter Improvements Demonstration	-	-	-		-	800
320P	AMSWTF Chlorine Building I Rehabilitation	-	-	-		-	750
320Q	AMSWTF Process Drainage Improvements	-	-	-		-	1,170
	Subtotal	**57,870**	**16,529**	**22,077**		**7,120**	**2,720**
WATER TRANSMISSION PROJECTS							
340A	Coyote Spring Valley Well and Moapa Transmission System	31,484	2,277	480		21,979	-
40B	PS 1A, 2A, 1B and 2B Pump Repairs and Flow Meter Installation	2,700	327	29		-	-
40C	Hacienda Pumping Station Improvements	4,850	318	516		690	-
340D	PS 1C, 2C, Sloan, Lamb, BPS1A, and BPS2 VFD Enhancements	2,700	-	-		-	-
340E	Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations	600	-	-		-	-
340F*	Transmission Pipelines Cathodic Corrosion Protection System Repairs	1,151	1,116	-		(35)	-
340G	Transmission Pipelines Discharge Modifications Study	500	40	9		(100)	-
340H	Pumping Plant No. 7 Upgrades	810	1	-		-	-
340I	McCullough Lateral Planning	-	-	-		-	45,500
340J	Ductile Iron Pump Inspection and Evaluation	-	-	-		-	782
340K	Reservoir Vent Modifications	-	-	-		-	1,055
340L	Hemenway ROFC Improvements	-	-	-		-	1,500
340M	Air Vacuum and Relief Valve Piping Adjustments	-	-	-		-	838
340N	Stage II ROFC Isolation Valve Replacements	-	-	-		-	3,000
340O	Pumping Station 6 Forebay Relining	-	-	-		-	400
340P	Charleston Heights Lateral Repair and Valve Installation	-	-	-		-	3,886
	Subtotal	**44,795**	**4,079**	**1,034**		**22,534**	**56,961**
POWER PROJECTS							
360C	Electric Power Transmission Facilities	44,800	-	-		-	-
360D	Energy Supplier Conversion	1,400	70	-		-	-
360F	ROFC Energy Recovery	6,450	324	588		-	-
360G	Intermountain Power Project Unit 3 - Predevelopment	2,800	288	1,733		-	-
360H	Pumping Station Electrical Transformer Repairs	850	-	-		-	-
360I	Hacienda Pumping Station Electrical Substation Upgrades	1,500	29	-		-	-
	Subtotal	**57,800**	**711**	**2,321**		**-**	**-**
SUPPORT FACILITY PROJECTS							
370A	Production Group Satellite Facility	3,980	-	63		-	-
370B	Security System Upgrades	3,500	1,381	2,970		-	-
370C	RMWTF Fleet Maintenance & Electrical Maintenance Facility	1,067	-	-		1,074	-
370D	Fiber-Optic Network Improvements	1,440	477	520		320	-
370E	AMSWTF Mechanic Maintenance Shop Addition	5,800	23	59		3,620	-
370G	AMSWTF Computer Room HVAC Replacement	95	-	-		-	-
370H*	Flame Detection Equipment for High Pressure Hydraulic Systems	250	204	-		(46)	-
370I	Evaporative Cooler Upgrades	2,730	-	-		-	-
370J	SNWA Office Tenant Improvements	12,025	98	603		15,000	-
370K	AMSWTF Warehouse Storage System Improvements	250	-	-		-	-
370L	SCADA Communications Upgrades	-	-	-		-	250
	Subtotal	**31,137**	**2,183**	**4,215**		**19,968**	**250**
	Subtotal other commitments not appropriated to a specific project	**-**	**-**	**7,659**		**-**	**-**
	Totals	**722,333**	**207,505**	**311,046**	**	**77,831**	**179,021**

* Recently completed projects

** Commitments do not include SNWA administrative costs, land acquisition, legal and miscellaneous purchase order costs not specifically budgeted to a project