

SECTION 6

CAPITAL PLANS

Capital Budget..... 6-1



SOUTHERN NEVADA WATER AUTHORITY®

FISCAL YEAR 2016-17

OPERATING AND CAPITAL BUDGET

Capital Budget

The Southern Nevada Water Authority (SNWA) maintains a long-range valley-wide facility planning process to determine the type, size and location of water distribution and treatment capital facilities needed to meet the water services demands of the areas in Clark County served by the member agencies – Las Vegas Valley Water District, City of Henderson, City of North Las Vegas, City of Boulder City and the Big Bend Water District (Member Agencies). As water system facilities are defined they are incorporated into the SNWA’s construction program. The ongoing construction program is a dynamic program, with projects added, changed, or deleted as necessary to meet the changing conditions of the Member Agencies.

The construction program consists of the new Low Lake Level Pumping Station at Lake Mead, groundwater development, weir improvements and expansion, pumping stations, water resources acquisition and development, reservoirs and wells, new water pipelines, and other distribution facilities. The capital equipment budget consists of vehicles, information technology equipment, water works and diverse industrial equipment.

Impact of Construction Program on Operation and Maintenance Expenses

For the SNWA water distribution facilities, in the near term, the SNWA does not anticipate any impact on maintenance expenses and only minimal expenses associated with the operation of the new facilities added to the SNWA’s water distribution system through its

ongoing construction program. This is due to a variety of factors:

- First, the facilities being added to the SNWA’s system are new and require little or no maintenance.
- Second, the facilities are designed and constructed with the latest available technology, and are not accepted by the SNWA until they are fully inspected and tested and ready for operation.
- Third, over the past several years the SNWA has conducted numerous process improvement investigations and adopted recommendations that have resulted in significant on-going operational and maintenance efficiencies and savings.

In the long term, the SNWA anticipates incurring maintenance expenses for the rehabilitation of facilities such as reservoirs, pump stations, and pipelines. However, these costs are minimized through the SNWA’s use of state-of-the-art diagnostic equipment and testing procedures, which significantly lower maintenance costs and reduces the rate of catastrophic (100%) failures. Finally, these facilities were and are being constructed for member agencies who generate additional operating revenues. These revenues in the past have offset, and in the future are anticipated to continue to offset, the added long-term maintenance expense.

Projecting long-term additional operating expenses driven by the addition of capital

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assets to the SNWA’s water system is not easily quantified.

and construction projects included in the SNWA’s construction program for the next fiscal year.

The tables below show a listing of all the capital equipment and specific active design

SNWA: CAPITAL BUDGET 2016-17

Department	COST
CAPITAL EQUIPMENT	
<u>2100 - Finance</u>	
Heavy Truck Diagnostic Equipment	\$ 12,000
48 Volt Electric Golf Cart	13,000
Gas Powered Off Road UTV	15,000
24' Goose Neck Equipment Trailer	16,000
Tire Repair Equipment	16,000
Mechanics Tool Set and Box	16,000
Used Belly Dump Semi Trailer	24,000
Mid Size SUV/Crossover	33,000
Mid size Pick-UP, Reg. Cab 4X2	33,000
Compact Sedan	33,000
Compact Cargo Van	33,000
Mid size sport utility 4X4	35,000
1/2 Ton Crew Cab Sort Bed Pick-Up 4X4	35,000
1/2 Ton Regular Cab Pick-UP 4X4	35,000
1/2 Ton Extended Cab Short Bed Pick-Up 4X4	35,000
Mid Size Cargo Van 4X4	38,000
1/2 Ton Crew Cab, Diesel Pick-Up, 4X4	40,000
3/4 Ton, Regular Cab Diesel Pick-Up with Utility Body	40,000
Used 4000 Gal. Water Truck	40,000
3/4 Ton Crew Cab, Short Bed, Diesel Pick-Up	42,000

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Cutaway Cargo Van	45,000
1-Ton Crew Cab Long Bed 4X4 Pick-Up With Flat Bed	46,000
3500 Crew Cab, Flat Bed, Diese Pick-Up 4X4	47,000
Used Cat D-5 Bull Dozer	60,000
2 Each: Mid Size Sport Utility 4X2	66,000
3 Each: Full Size Sport Utility Vehicle 4X4	114,000
5th Wheel Truck/Tractor Reg. Cab	135,000
Used Harsh Feed Truck Mixer	135,000
3 Each: 1-Ton Regular Cab Long Bed 4X4 Pick-Up With Flat Bed	138,000
3 Each: 1-Ton Crew Cab Long Bed 4X4 Pick-Up With Flat Bed	138,000
Hesston Self propelled Swather	150,000
Utility Truck with Crane and Welder 34,000 Lb. GVWR	220,000
Industrial Mechanics Truck	220,000
7250R John Deere Tractor 4X4	250,000
2 Each: 6170M John Deere Tractors 4X4	300,000
2 Each: 8295 R John Deere Tractors 4X4	600,000
4 Each: 1.5 Ton Utility Truck With Crane, 19.500 lbs GVWR	860,000

2300 - Information Technology

Netbotz equipment	7,500
Network security system upgrades	10,000
ADVA and Fiber Path Redundancy	17,500
Network Switches	20,000
Netbotz equipment	22,500
Network security system upgrades	30,000
Intel Servers	42,500
Backup infrastructure	45,000
Upgrade the Northern Resources Office satellite connection	50,000
ADVA and Fiber Path Redundancy	52,500
Network Switches	60,000
Intel Servers	127,500
Backup infrastructure	135,000

3600 - Resources & Facilities

Domestic Wells	50,000
Infrastructure - Wahoo Shop Renovations	75,000
Infrastruture - Harbecke House II Renovations	80,000
Pivot Irrigation System Installation	200,000
Livestock Purchases	675,000

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4500 - Water Quality & Treatment

Replacement For Alignment Analyzer at River Mountains	17,000
TECTA B16 Microbiology Instrument	19,500
Cyanotoxin Automated Assay System (CAAS)	32,000
Replacement of Reverse Osmosis Units at River Mountains	36,500
Discrete Chemistry Analyzer (DCA) Seal Analytical AQ400	55,050
Laboratory Information Management System (LIMS) Contingency	60,000
EZ1 Advanced XL DNA Extraction System	62,000
Automated Solid Phase Extraction Units (ASPE)	63,280
Safe Drinking Water Act Compliance Monitoring and Tracking Software	100,000
Gas Chromatograph Mass Spectrometric Dector GC-MSD	115,000
Raindrop Digital Polymerase Chain Reaction (PCR) System	150,000
R&D Necessary Unforseen Projects	150,000

TOTAL CAPITAL EQUIPMENT	\$ 6,668,330
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MAJOR CONSTRUCTION, PLANT REPLACEMENT, IMPROVEMENTS

1200 - Legal

Water Resource Acquisition and Development	\$ 1,300,000
Interim Colorado River Supplies	10,224,000

2300 - Information Technology

Water Resource Acquisition and Development	264,000
Clark, Lincoln, and White Pine Counties Groundwater Development	287,023

3400 - Engineering

AMSWTF Campus Pavement Restoration	50,000
Las Vegas Lateral Relocation, Hollywood Drive at Vegas Valley	55,000
AMS Asphalt Repair and Resurface - Phase II	200,000
Tropicana Outfall Weir	200,000
Sunrise Mountain Weir and Historical Later Weir Expansion	11,300,000
Lake Mead Intake No. 3 (Low Lake Level Pumping Station at Lake Mead)	142,610,162

3600 - Resources & Facilities

Upgrade AMSWTF Admin. Bldg North Soffitt Insulation	20,000
SNWA Replace Defective Lab HVAC Units	25,000
SNWA AMSWTF Restoration Project	25,000
AMS Entry Gate Upgrade	35,000

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Equipment Wash Bay Wahoo Shop	40,000
Gravel Screen	45,000
Huntsman Feedlot Processing Building/Hospital	100,000
AMSWTF Miscellaneous Facilities Improvements	100,000
Sloan Pumping Station Foundation Repairs	100,000
AMS Exterior Renovation	100,000
Pump Station HVAC Upgrades	100,000
SNWA HVAC Upgrades	120,000
Upgrade Deficient Evaporative Coolers and AC Units	135,000
AMS Warehouse Office Reconfiguration	150,000
SNWA Miscellaneous Projects	170,000
SNWA Paint Pump Stations	185,000
SNWA Energy Management System Expansion	200,000
SNWA Pump Train Maintenance (Painting)	200,000
SNWA Hay Barn	220,000
Install Buoy Barrier around Intake 1	225,000
Pump Station and Pipe Train Painting	250,000
SNWA Water Treatment Facility Roadway Lighting	285,000
Clark, Lincoln, and White Pine Counties Groundwater Development	1,396,668
Virgin and Muddy Rivers Water Resource Acquisition	3,298,130
Water Resource Acquisition and Development	16,111,800

3700 - Infrastructure Management

Oakey ROFCS Site - Oakey/Broadbent Radio link Project (MEPS 7435)	10,000
Pumping Station 5 Site - PP5 Forebay Drain Valve Replacement (MEPS 7164)	20,000
Repair EQ Basin Mixer Lifting Systems	30,000
Flamingo ROFCS Site - Equip Storage/Welding Building (MEPS 7339)	30,000
Pumping Stations 6 Site - PS-6 Septic Tank conversion to City Sewer system (MEPS 7360)	30,000
Multi-site - Intake 3 Tunnel to IPS2 Isolation Gate Corrections Project (MEPS 7380)	35,000
Software support for OMI and hydraulic panel conversions (300H)	45,000
5S007 - AMSWTF SCADA Computer Room A/C Upgrade	50,000
AMSWTF Site - Chlorine Scrubber Secondary Containment Improvement Project (MEPS 7309)	50,000
RMWTF Site - Rectifier Room Ventilation Rework (MEPS 7172)	50,000
Twin Lakes Pumping Station Site - Twin Lakes Tower Removal Project (MEPS 7434)	50,000
Multi-site - Forebay Hatch Repairs - PP3, PP4, PP5, PP7 Forebays, and Reg Tank 6 (MEPS 7161)	50,000
Chlorine Building A/C Upgrade	55,000
Vault Modifications (MEPS 7511)	60,000
Return Wash Water Reduction	71,000
Drain Installations	75,000
AMSWTF Site - Drying Bed Influent Valve Access Vaults (MEPS 7117)	100,000
RMWTF Site - Lab Flooring Replacement (MEPS 7351)	100,000
PP1A Flooring (MEPS 7498)	100,000
C Lateral (Main Aqueduct C) Site - C-Lateral Motor Field Application Panel Upgrade (MEPS 7431)	100,000

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District Service Area - Flow Transmitter Upgrade project (MEPS 7432)	100,000
Gibson Lateral Cathodic Protection System	130,000
West Valley Lateral Site - West Valley Lateral Anode Bed Replacement (MEPS 7081)	150,000
Install CP System	160,000
AMSWTF Site - Treatment Chemical Storage Tank Repairs (MEPS 7301)	200,000
Chiller and Sewer Pipe Replacement	250,000
AMSWTF Site - Auxiliary Chlorine Scrubber (MEPS 7307)	250,000
RMWTF Site - Replacement of Hypo tank liner (MEPS 6891)	250,000
Twin Lakes Pumping Station Site - Motor Control Center upgrade project (MEPS 7433)	300,000
Hacienda ROFC Valve Replacement (MEPS 7430)	500,000
Control System Improvements	2,200,000

4100 - Operations

5S014 - Hitachi Motor Relay Replacements	16,500
River Mountains 108" Flow Meter Upgrade	31,500
Flamingo ROFC Fence	60,000
R-8 Equestrian Pump Replacement	80,000
5S006 - Recoat Pump Casings at BPS1A and BPS2	125,000
Electrical Equipment Inspection Windows	150,000
Stage I and II Facilities PLC Upgrades	210,000
"A" Lateral Motor Refurbishment	400,000
Motor Refurbishment	500,000
PS 1A, 2A, 1B and 2B Pump Repairs and Flow Meter Installation	500,000
Hitachi Motor Retrofit (formerly Hacienda Pump Repairs)	500,000
Sleeve Valve Installation at Galleria, Simmons and Carlton ROFC Stations	500,000
Sleeve and Miscellaneous Valve Repairs	550,000
Machine Shop Equipment	750,000
PS 1C, 2C, BPS1A, and BPS2 Variable Frequency Drive Enhancements	900,000
5S013 - Stage 2 ROFC Valve & Venturi Flow Control Unit Replacements	1,180,000
Pumping Station Electrical Transformer Repairs	3,100,000

4500 - Water Quality & Treatment

Ozone System Related Needs	150,000
Fluoride Tank Replacement	250,000
AMSWTF Filter Bed Improvements	400,000
SNWA Necessary Unforeseen Projects	500,000
Sodium Hypochlorite System Upgrades at River Mountains Water Treatment Facility	2,580,000
AMSWTF Filter Improvements Demonstration	3,426,282

TOTAL CAPITAL PROJECTS	\$ 212,587,065
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TOTAL CAPITAL BUDGET	\$ 219,255,395
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