

# AGENDA

## SOUTHERN NEVADA WATER AUTHORITY BOARD OF DIRECTORS

REGULAR MEETING  
9:00 A.M. – OCTOBER 15, 2020

BOARD CHAMBERS, SOUTHERN NEVADA WATER AUTHORITY  
100 CITY PARKWAY, SEVENTH FLOOR, LAS VEGAS, NEVADA  
(702) 258-3100

### Board of Directors

Marilyn Kirkpatrick, Chair  
Dan Stewart, Vice Chair  
Claudia Bridges  
Cedric Crear  
Jim Gibson  
Justin Jones  
John Lee

John J. Entsminger,  
General Manager

Date Posted: October 8, 2020

SOUTHERN NEVADA  
WATER AUTHORITY



The Southern Nevada Water Authority makes reasonable efforts to assist and accommodate persons with physical disabilities who desire to attend the meeting. For assistance, call the Agenda Coordinator at (702) 258-3939 at least 24 hours prior to the meeting.

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### THIS MEETING HAS BEEN PROPERLY NOTICED AND POSTED IN THE FOLLOWING LOCATIONS:

*City of Boulder City, City Hall*  
401 California Street  
Boulder City, Nevada

*City of Henderson, City Hall*  
240 Water Street  
Henderson, Nevada

*City of North Las Vegas, City Hall*  
2250 Las Vegas Boulevard North  
North Las Vegas, Nevada

*City of Las Vegas, City Hall*  
495 South Main Street  
Las Vegas, Nevada

*Clark County Government Center*  
500 S. Grand Central Parkway  
Las Vegas, Nevada

*Clark County Water Reclamation District*  
5857 E. Flamingo Road  
Las Vegas, Nevada

*Southern Nevada Water Authority*  
100 City Parkway, Suite 700  
Las Vegas, Nevada

*Las Vegas Valley Water District*  
1001 S. Valley View Boulevard  
Las Vegas, Nevada

All items on the agenda are for action by the Board of Directors, unless otherwise indicated. Items may be taken out of order. The board may combine two or more agenda items for consideration, and the board may remove an item from the agenda or delay discussions relating to an agenda item at any time.

Visit our website at <http://www.snwa.com> for Southern Nevada Water Authority agenda postings, copies of supporting material and approved minutes. To receive meeting information, including supporting material, contact Mitch Bishop at (702) 249-3206 or [agendas@snwa.com](mailto:agendas@snwa.com).

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### CALL TO ORDER

### COMMENTS BY THE GENERAL PUBLIC

**NO ACTION MAY BE TAKEN:** This is a period devoted to comments by the general public pertaining to items on this agenda. If you wish to speak to the Board about items within its jurisdiction, but not appearing on this agenda, you must wait until the “Comments by the General Public” period listed at the end of this agenda. Please limit your comments to three minutes or less and refrain from making comments that are repetitious, offensive, or amounting to personal attacks. No action may be taken upon a matter not listed on the posted agenda. Public comment can also be provided in advance of the meeting and submitted to [publiccomment@snwa.com](mailto:publiccomment@snwa.com). Public comment received through September 17, 2020, will be included in the meeting’s minutes.

### ITEM NO.

1. *For Possible Action:* Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items, and approve the minutes from the regular meeting of September 17, 2020.

### CONSENT AGENDA Items 2 - 3 are routine and can be taken in one motion unless a Director requests that an item be taken separately.

2. *For Possible Action:* Approve an interlocal agreement among the Regional Transportation Commission, Southern Nevada Regional Planning Coalition, and the Authority to provide funding for the Center for Business and Economic Research at the University of Nevada Las Vegas’ Clark County population forecasts for an amount not to exceed \$13,500 annually, per party, with the option to renew for two additional one-year periods at a total cost not to exceed \$40,500.
3. *For Possible Action:* Appoint Richard Avila, Justin Harrison, John Hiatt, Stacey Lindburg, Rob McLaughlin, Krystle Oridaniza and Brittany Walker to the Advisory Committee for Groundwater Management in the Las Vegas Valley Groundwater Basin for a two-year term.

**BUSINESS AGENDA**

4. *For Possible Action:* Determine that the proposed changes to the Authority's Connection Charge, Infrastructure Charge and Commodity Charge are not likely to impose a direct and significant economic burden upon a business or directly restrict the formation, operation or expansion of a business; consider and approve the attached Business Impact Statement; and direct staff to set a public hearing for possible adoption of the proposed charges for November 19, 2020.
5. *For Possible Action:* Adopt the 2020 Lower Las Vegas Wash Stabilization Plan.
6. *For Possible Action:* Approve and authorize the General Manager to sign a cooperative management agreement between the National Park Service and the Authority that defines project management roles for erosion control projects to be conducted by the Authority on the Lower Las Vegas Wash and accept funds in an amount not to exceed \$6,190,070.

**COMMENTS BY THE GENERAL PUBLIC**

NO ACTION MAY BE TAKEN: At this time, the Board of Directors will hear general comments from the public on matters under the jurisdiction of the Southern Nevada Water Authority. Please limit your comments to three minutes or less and refrain from making comments that are repetitious, offensive, or amounting to personal attacks. No action may be taken upon a matter not listed on the posted agenda.

**SOUTHERN NEVADA WATER AUTHORITY  
BOARD OF DIRECTORS  
REGULAR MEETING  
SEPTEMBER 17, 2020  
MINUTES**

CALL TO ORDER 9:00 a.m.

BOARD MEMBERS PRESENT Marilyn Kirkpatrick, Chair  
Dan Stewart, Vice Chair  
Claudia Bridges  
Cedric Crear  
Jim Gibson  
Justin Jones  
John Lee

BOARD MEMBERS ABSENT None

STAFF PRESENT John Entsminger, Dave Johnson, Colby Pellegrino, Doa Ross, Kevin Bethel and Greg Walch

OTHERS PRESENT Integrated Resources Planning Advisory Committee 2020 (IRPAC) members  
– Tom Morley, Ken Evans, Virginia Valentine and Phil Ralston

*Unless otherwise indicated, all members present voted in the affirmative.*

**COMMENTS BY THE GENERAL PUBLIC**

*For full public comment, visit [snwa.com/apps/snwa-agendas/index.cfm](http://snwa.com/apps/snwa-agendas/index.cfm)*

Ed Uehling spoke concerning the IRPAC process and provided handouts to the Board. He said that water conservation reduces water revenues. He said that the Authority should be finding ways to sell more water instead of trying to curb water use. A copy of his handouts is attached to these minutes.

**ITEM NO.**

1. ***For Possible Action: Approve agenda with the inclusion of tabled and/or reconsidered items, emergency items and/or deletion of items, and approve the minutes from the regular meeting of July 16, 2020.***

FINAL ACTION: Director Gibson made a motion to approve the agenda for this meeting, and to approve the minutes from the regular meeting of May 21, 2020. The motion was approved.

2. ***For Possible Action: Receive a presentation on the Integrated Resource Planning Advisory Committee 2020 process and adopt the recommendations set forth in the committee's recommendations report.***

John Entsminger, General Manager, gave a summary presentation regarding the IRPAC 2020 process and the committee's recommendations. A copy of his presentation is attached to these minutes.

Vice Chair Stewart thanked the committee for its efforts. Director Jones thanked the committee, especially for its recommendations regarding conservation. Director Bridges thanked the committee and said she was pleased to see a strategic plan based on conservation rather than simply raising rates.

Director Crear asked if the proposed fee infrastructure fee increase would be earmarked for the capital projects recommended by IRPAC. Mr. Entsminger said that based on IRPAC recommendations, connection charge revenues and infrastructure fees were designated for capital projects.

Director Gibson asked about the timeline for the proposed partnership in Southern California for a water treatment facility. Mr. Entsminger said that the Authority entered into a letter of intent in early 2020. Due to the pandemic, talks with Metropolitan Water District of Southern California (MWD) have slowed; however, MWD has recently begun the permitting process for the facility. The next steps for the Authority involve working out a formal agreement with MWD. Currently, MWD has slated the completion of the project by 2029.

IRPAC members, Tom Morley, Ken Evans and Virginia Valentine, spoke in favor of the IRPAC recommendations as presented. Other IRPAC members submitted letters of support to the Board. Copies of their letters are attached to these minutes.

FINAL ACTION: Vice Chair Stewart made a motion to approve staff's recommendation. The motion was approved.

**CONSENT AGENDA**

3. ***For Possible Action:*** Approve a resolution authorizing the submission of a grant proposal to the Bureau of Reclamation's WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2021, seeking \$2,000,000 and outlining the Authority's ability to contribute an equal or greater amount up to \$4,883,077, if awarded.
4. ***For Possible Action:*** Approve and authorize the General Manager to sign a joint funding agreement between the U.S. Geological Survey and the Authority for hydrologic data collection for an amount not to exceed \$183,088.
5. ***For Possible Action:*** approve and authorize the General Manager to sign Change Order No. 1 to the contract with AMRZ Construction LLC for drainage swale replacement, which extends the final completion date by 83 calendar days.
6. ***For Possible Action:*** Approve and authorize the General Manager to sign an agreement between Spring Valley Associates, LLC and the Authority for professional staffing services for the Authority's Northern Resources properties, for an amount not to exceed \$1,400,000 annually for a three-year term, with an option to renew for another three-year term.
7. ***For Possible Action:*** Adopt a resolution that delegates additional administrative authority to the General Manager and his designees, and ratifies previous actions taken in accordance therewith.

FINAL ACTION: Director Jones made a motion to approve staff's recommendations. The motion was approved.

**BUSINESS AGENDA**

8. ***For Possible Action:*** Approve an agreement between the City of North Las Vegas and the Authority, to convert up to approximately 118,738 square feet of turfgrass with an estimated rebate of up to \$193,107, with an option to convert up to 323,333 square feet of turfgrass through the Water Smart Landscapes Program for an amount not to exceed \$500,000.

FINAL ACTION: Director Lee made a motion to approve staff's recommendation. The motion was approved.

9. ***For Possible Action:*** Ratify the Authority's intervention in Public Utility Commission of Nevada Docket #20-07023 regarding NV Energy's requested approval of the fourth amendment to its 2018 Joint Integrated Resource Plan.

FINAL ACTION: Director Gibson made a motion to approve staff's recommendation. The motion was approved.

10. ***For Possible Action:*** Adopt a resolution consenting to the refunding of certain Las Vegas Valley Water District General Obligation (Limited Tax) Bonds that are additionally secured by SNWA Pledged Revenues and requesting the Board of Directors of the Las Vegas Valley Water District to issue general obligation (limited tax) (additionally secured by SNWA Pledged Revenues) refunding bonds in the maximum principal amount of \$534,705,000, in one or more series to refinance all or any portion of the Bonds.

FINAL ACTION: Director Gibson made a motion to approve staff's recommendation. The motion was approved.

11. ***For Information Only:*** Receive a presentation from staff on the Low Lake Level Pumping Station project and recent award recognition.

Dave Johnson, Deputy General Manager, Operations, gave a presentation. A copy of his presentation is attached to these minutes.

NO ACTION REQUIRED



12. ***For Information Only:*** Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, conservation programs and activities, activities on the Colorado River, and water resource acquisition and development.

Colby Pellegrino, Deputy General Manager, Resources, said that conservation programs were performing behind benchmarks as activities were shutdown due to the pandemic. However, approximately 1.5 million square feet of turf at single family residences had been converted to water smart landscaping, and approximately 1.7 million square feet of non-residential turf had been converted.

She said that in the Colorado River Basin weather conditions had been incredibly hot and dry. The Authority continued to work with its partners on the Colorado River to keep water in Lake Mead.

NO ACTION REQUIRED

#### **Public Comment**

Ed Uehling said he supported the Authority's proposed infrastructure projects, but he did not support overestimating the cost of those projects and the Authority's financial mismanagement. He said that the Authority should encourage residents to increase indoor use to improve its revenues. He said that the Authority should increase tiered rates to penalize outdoor water waste.

#### **Adjournment**

There being no further business to come before the Board, the meeting adjourned at 9:58 a.m.

**Copies of all original agenda items and minutes, including all attachments, are on file in the General Manager's office at the Las Vegas Valley Water District, 1001 South Valley View Boulevard, Las Vegas, Nevada.**

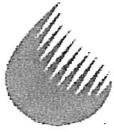
Ed Uehling

Public Comment

SNWA Board Meeting 9/17/2020

**Southern Nevada Water Authority**  
**Operating and Capital Budget**  
**General Manager's Information Report**  
Fiscal Year Ending June 30, 2021

SNWA's fiscal years 2018-19, 2019-20 and 2020-21.



**Budget Summary**  
(\$ in millions)

	Actual 2018-19	Budget 2019-20	Budget 2020-21	Budget-to-Budget Variance	
				\$	%
<b>Sources</b>					
Wholesale Delivery Charge	\$ 133.3	\$ 148.5	\$ 142.0	\$ (6.5)	-4%
Infrastructure Charge	162.9	163.4	166.9	3.5	2%
Commodity Charge	69.6	71.8	66.8	(5.0)	-7%
Connection Charge	75.6	71.3	19.1	(52.2)	-73%
Reliability Surcharge	5.7	5.9	5.4	(0.4)	-7%
Sales Tax	68.0	67.6	44.7	(22.9)	-34%
Investment Income	31.0	8.8	7.2	(1.6)	-19%
Groundwater Management Fees	0.9	0.9	0.9	(0.0)	0%
LV Wash Program Fees	0.4	0.4	0.4	-	0%
Grant Proceeds	0.8	0.3	2.0	1.7	
Other Sources	8.2	5.5	6.8	1.3	24%
<b>Subtotal</b>	<b>556.3</b>	<b>544.3</b>	<b>462.3</b>	<b>(82.0)</b>	<b>-15%</b>
Debt Issuance Proceeds	-	-	-	-	
<b>Total Sources</b>	<b>556.3</b>	<b>544.3</b>	<b>462.3</b>	<b>(82.0)</b>	<b>-15%</b>
<b>Uses</b>					
Water Resource Investments	6.7	13.9	7.9	(6.0)	-43%
Energy	36.4	36.0	38.2	2.2	6%
Payroll & Related	82.5	88.5	97.5	9.0	10%
Operating Expenses	51.7	75.7	75.8	0.1	0%
Capital Expenditures	167.9	140.1	124.2	(15.9)	-11%
Debt Service	260.2	265.6	289.1	23.6	9%
<b>Total Uses</b>	<b>605.3</b>	<b>619.8</b>	<b>632.8</b>	<b>13.0</b>	<b>2%</b>
<b>Total Net Surplus/(Deficit)</b>	<b>\$ (49.0)</b>	<b>\$ (75.5)</b>	<b>\$ (170.5)</b>	<b>\$ (95.0)</b>	

*combined \$300,000,000 loss*  
primarily attributable to projected impacts from the COVID-19 pandemic.

**Sources.**

The 2020-21 Budget Plan's total sources of funds are projected to be \$462.3 million, or a 15 percent decrease compared to the 2019-20 Adopted Budget Plan. The decrease is

The Wholesale Delivery Charge and Connection Charge are budgeted to decrease \$6.5 million and \$52.2 million respectively, as compared to the 2019-20 Adopted Budget

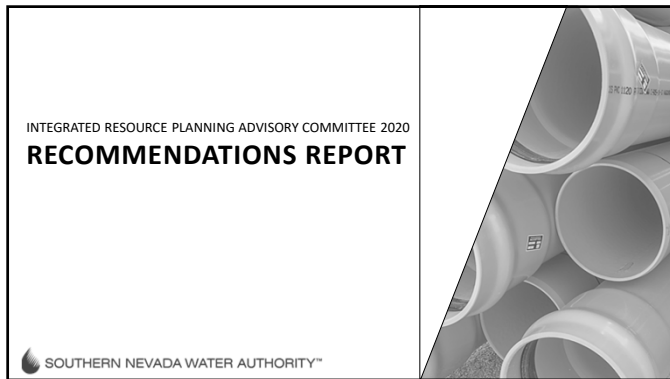
## APPENDIX B

### Rate Models

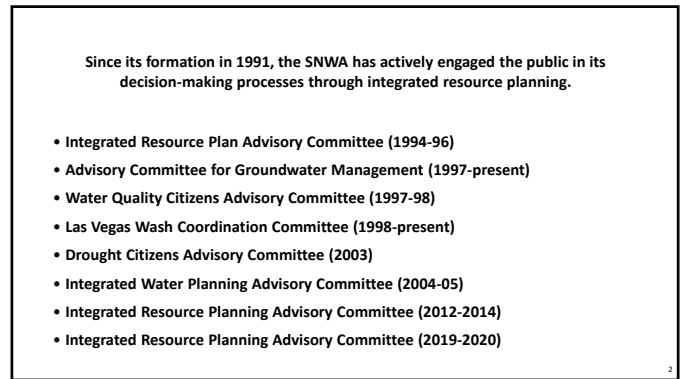
Pursuant to the committee's recommendation no. 17, they suggested a flexible approach to funding the MCCP with a combination of debt and pay-go capital to manage unrestricted reserve balances at adequate levels consistent with the Reserve Policy. The committee was shown a number of financial model scenarios. In August 2020, they were presented with a revised scenario that included an updated financial forecast with revised revenue projections, a result of the Covid-19 impact.

### Revised Base Scenario: 90% Debt / 10% Pay-go

	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
<b>Sources</b>										
Wholesale Delivery Charge	\$ 142,032,734	\$ 151,054,569	\$ 159,997,507	\$ 169,139,321	\$ 178,472,142	\$ 183,837,022	\$ 189,046,936	\$ 194,581,133	\$ 200,999,698	\$ 207,350,154
Infrastructure Charge	166,934,981	172,406,642	181,849,073	192,414,768	204,005,022	216,049,955	228,592,687	239,810,540	249,417,084	259,246,049
Commodity Charge	66,773,853	64,712,078	70,647,220	75,607,114	82,146,496	86,939,629	91,681,593	94,900,603	98,556,045	102,183,408
Connection Charge	19,108,425	17,225,998	33,363,222	50,611,541	65,208,884	65,339,225	66,248,816	65,609,151	62,089,064	59,678,120
Reliability Surcharge	5,448,046	5,584,247	5,723,853	5,866,950	6,013,623	6,163,964	6,318,063	6,476,015	6,637,915	6,803,863
Sales Tax	44,678,049	59,409,554	76,243,776	79,032,781	82,085,469	85,161,076	88,273,297	91,420,458	94,600,730	97,829,763
Investment Income	7,154,023	7,713,427	7,459,364	8,527,883	8,905,659	8,819,021	9,182,550	9,916,110	10,789,769	11,903,296
Groundwater Management Fee	894,208	894,208	894,208	894,208	894,208	894,208	894,208	894,208	894,208	894,208
LV Wash Program Fees	443,863	443,863	443,863	443,863	443,863	443,863	443,863	443,863	443,863	443,863
Grant Proceeds	1,988,014	1,988,014	1,988,014	1,988,014	1,988,014	1,988,014	1,988,014	1,988,014	1,988,014	1,988,014
Other Sources	6,819,897	6,819,897	6,819,897	6,819,897	6,819,897	6,819,897	6,819,897	6,819,897	6,819,897	6,819,897
<b>Subtotal</b>	<b>462,276,092</b>	<b>488,252,498</b>	<b>545,429,995</b>	<b>591,346,340</b>	<b>636,983,277</b>	<b>662,455,872</b>	<b>689,489,924</b>	<b>712,859,992</b>	<b>733,236,287</b>	<b>755,140,634</b>
Debt Issuance Proceeds	-	339,941,318	-	563,668,596	-	778,312,684	-	603,290,460	-	640,030,849
<b>SNWA Sources</b>	<b>462,276,092</b>	<b>828,193,816</b>	<b>545,429,995</b>	<b>1,155,014,936</b>	<b>636,983,277</b>	<b>1,440,768,556</b>	<b>689,489,924</b>	<b>1,316,150,452</b>	<b>733,236,287</b>	<b>1,395,171,484</b>
<b>Uses</b>										
Water Resource Investments	17,914,000	8,111,850	8,314,646	8,522,512	8,735,575	8,953,965	9,177,814	9,407,259	9,642,441	9,883,502
Energy	38,222,458	39,300,000	39,000,000	32,000,000	34,400,000	35,260,000	36,141,500	37,045,038	37,971,163	38,920,443
Payroll & Related	88,229,311	83,605,551	84,252,383	87,335,188	82,747,273	79,007,343	95,079,264	99,048,024	103,180,502	107,483,396
Operating Expenses	62,181,852	63,736,398	65,329,808	66,963,053	68,637,130	70,353,058	72,111,884	73,914,682	75,762,549	77,656,612
Capital Expenditures	89,125,693	168,208,653	228,833,295	243,679,396	414,998,374	572,538,447	337,149,489	347,263,973	357,681,893	368,412,349
Debt Service	289,141,521	306,339,907	305,656,804	336,928,067	326,812,567	371,987,079	364,060,006	384,187,571	348,329,110	385,665,701
<b>SNWA Uses</b>	<b>584,814,835</b>	<b>669,302,359</b>	<b>731,386,937</b>	<b>775,428,216</b>	<b>936,330,919</b>	<b>1,138,099,892</b>	<b>913,719,956</b>	<b>950,866,547</b>	<b>932,567,658</b>	<b>988,022,003</b>
<b>Annual Surplus/(Deficit)</b>	<b>\$ (105,894,720)</b>	<b>\$ (28,707,567)</b>	<b>\$ (13,530,707)</b>	<b>\$ 39,158,848</b>	<b>\$ 23,646,688</b>	<b>\$ 59,738,303</b>	<b>\$ 698,758</b>	<b>\$ 82,285,578</b>	<b>\$ 62,961,077</b>	<b>\$ 105,533,260</b>
Reserve Balance	\$ 573,177,795	\$ 544,599,462	\$ 530,814,691	\$ 571,042,059	\$ 595,066,522	\$ 654,718,187	\$ 655,780,474	\$ 738,799,613	\$ 802,634,349	\$ 909,281,137
Reserve Target	670,958,239	694,395,743	701,687,706	734,835,920	730,857,577	770,548,075	745,306,224	762,093,562	720,896,672	750,290,418
Excess/(Deficit) of Reserve Target	(97,780,443)	(149,796,281)	(170,873,015)	(163,793,861)	(135,791,055)	(115,829,888)	(89,525,750)	(23,293,949)	81,737,677	158,990,719
% of Reserve Target	85%	78%	76%	78%	81%	85%	88%	97%	111%	121%
Debt Coverage Ratio	3.21	2.80	2.89	2.72	3.04	2.78	3.06	2.95	3.53	3.39



1



2

Committee Members	IRPAC 2020
Ken Evans Peter Guzman Carol Jefferies Andy Maggi Paul Moradkhan Tom Morley Bob Murnane Jonas Peterson Phil Ralston John Restrepo Virginia Valentine	SNWA Board appointed committee in October 2019 <ul style="list-style-type: none"> <li>• All committee work conducted in public meetings</li> <li>• Agendas were publicly noticed and posted</li> <li>• All committee materials are available on SNWA.com for review, including audio recordings</li> <li>• Recommendations were drafted by the committee at its public meetings</li> <li>• A neutral facilitator was utilized to coordinate meetings</li> </ul>


3

### COMMITTEE FOCUS

The committee was tasked with evaluating regional water system improvements needed to meet demands into the future.

The committee considered existing challenges and made recommendations to provide for a reliable water system, with focus on:

- Infrastructure
- Water Resources
- Water Conservation
- Funding



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### COVID-19 IMPACTS

- Recommendations were approved by the committee in March, but were never presented to SNWA Board as a result of Covid-19 shutdowns
- The committee reconvened for two meetings in August
- Assessed projected Covid-19 impacts on revenue sources
- Revised funding-related recommendations

5

The committee supported an amendment to the Major Construction and Capital Plan that totals \$3.2 billion.

Horizon Lateral	\$1,596.7 million	
Garnet Valley Water System	129.8	
Garnet Valley Wastewater System	120.0	
Water Recycling Projects	26.0	
Solar PV Project	20.8	
Asset Management	229.7	
<b>Total MCCP Facility Projects</b>		<b>\$2,123.0</b>
Future Water Supplies	587.7	
Virgin & Muddy River Water	98.4	
Minute 323	36.4	
Arizona Water Banking	5.5	
<b>Total MCCP Water Supplies</b>		<b>\$728.0</b>
Water Smart Landscaping		152.3
Resources/Conservation Contingency		162.3
<b>TOTAL MCCP EXPENDITURES AS PROPOSED</b>		<b>\$3,165.6 million*</b>

\*in today's dollars

6



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### MEETING FUTURE DEMANDS

**Southern Nevada's existing regional water system cannot support Southern Nevada's future demands.**

- 40% of existing water deliveries have no redundant system
- Inability to accommodate future capacity and new services
- Lack of wastewater infrastructure means valuable return-flow credits are lost

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### NEW LATERAL: HORIZON

An additional lateral is needed to support the regional water system.

**Existing South Valley Lateral:**

- Provides 40% of existing in-valley deliveries
- Projected to be nearly fully subscribed by 2034
- Single feed with no redundant facilities

**New Horizon Lateral would:**

- Offer redundancy to existing customers
- Provide new capacity to customers

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### NEW CONSTRUCTION: HORIZON LATERAL

407 MGD of Transmission Capacity • ~24 miles of 72"-120" diameter pipeline (includes tunneling) • ~7 miles of 114" diameter tunnel north of Sloan Canyon National Conservation Area • Pumping stations, reservoirs & rate-of-flow control stations

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### NEW CONSTRUCTION: APEX WATER & WASTEWATER SYSTEMS

Infrastructure is needed to meet the water and wastewater demands of the Apex industrial park in North Las Vegas.

- The water system will offer a way to support diversifying the community's economic development opportunities.
- A wastewater system is needed to ensure Colorado River supplies are recycled.

Cost: ~\$250 million for water and wastewater systems

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### NEW POWER RESOURCES: LARGE SCALE SOLAR PV PROJECT

8-mile expansion to SNWA's existing transmission system

When completed, the transmission expansion would interconnect a new solar photovoltaic system (Boulder Flats Solar) that can convey at least 50 MW

**RESOURCE COST COMPARISON**

	2022	2047 (2% annual escalation)
Hoover Power	\$22.82	\$37.44
Market Power	\$38.61	\$63.34
SNWA Solar PPA (fixed price)	\$24.14	\$24.14

12

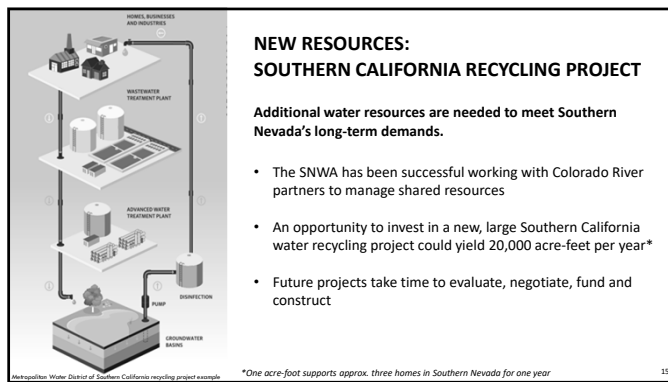
### FACILITY RECOMMENDATIONS

- Maintain current asset management funding levels and practices to ensure reliable water treatment and transmission in Southern Nevada
- Pursue projects to meet Nevada's Renewable Portfolio Standard
- Include candidate projects presented to IRPAC 2020, totaling \$3.166 billion, in the SNWA's Major Construction and Capital Plan (MCCP)

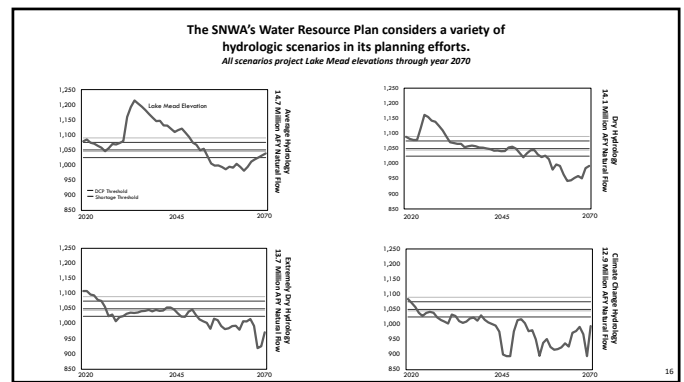
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### RESOURCES

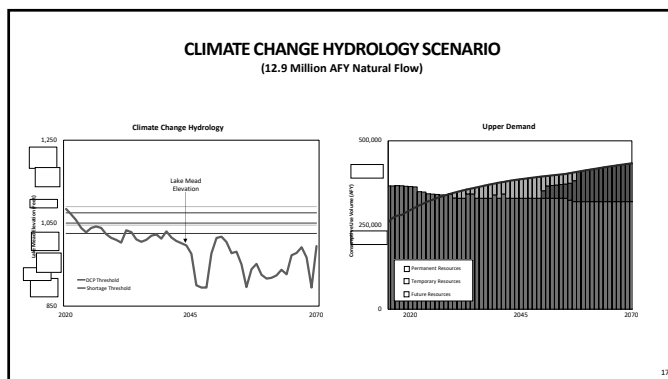
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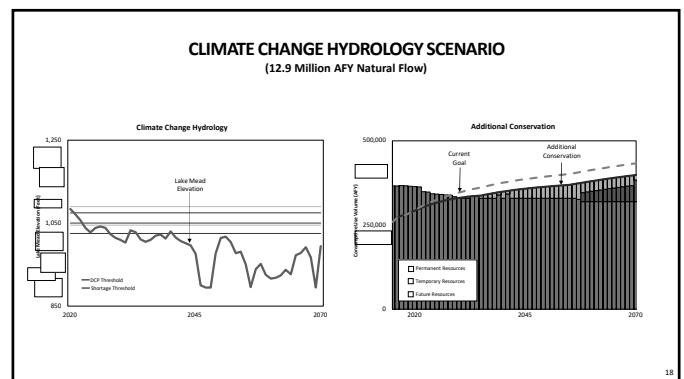
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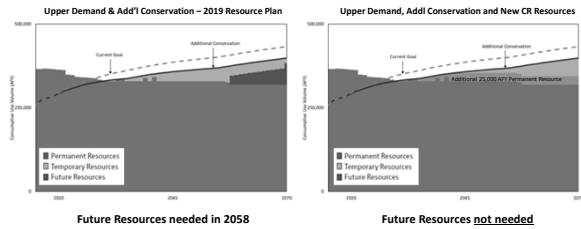
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18

## CLIMATE CHANGE HYDROLOGY SCENARIO

W/UPPER DEMAND & ADD'L CONSERVATION  
Additional 25,000 AFY, online in 2029



19

## WATER RESOURCE RECOMMENDATIONS

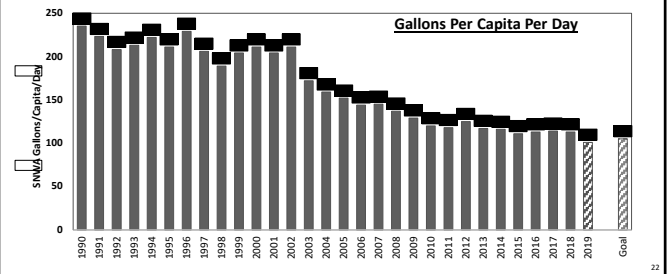
- Pursue emerging water resource opportunities with Colorado River partners to increase Nevada's water supplies, as presented to IRPAC on December 18, 2019
- Require out-of-valley development to return wastewater to Lake Mead and embed the principles of the SNWA's Out-of-Valley Water Use Policy within municipal codes and Las Vegas Valley Water District (LVVWD) Service Rules

20



21

After the recession, the community lost momentum reaching the SNWA Conservation Goal.



22

Water managers will have to work harder to reduce use with upward pressure from climate change and system age.

Climate Change & Aging System

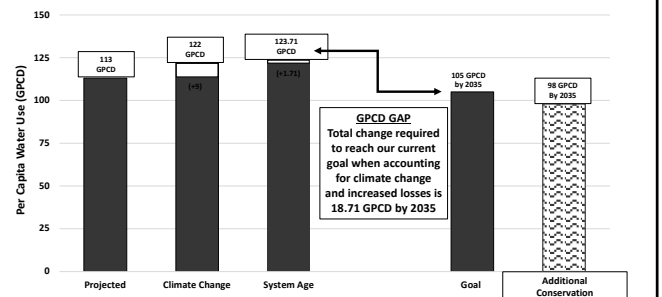
Increasing consumptive water demands due to warmer temperatures, drier soils lower precipitation, and increased system loss due to aging infrastructure

Adaptive Management

Significant additional effort will be required to reduce consumptive water use to meet our conservation goal and maximize the availability of water supplies

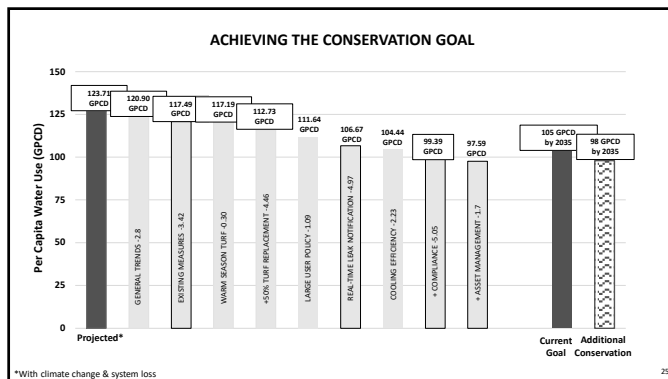
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## CONSERVATION GOAL CONSIDERATIONS



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**CONSERVATION RECOMMENDATIONS**

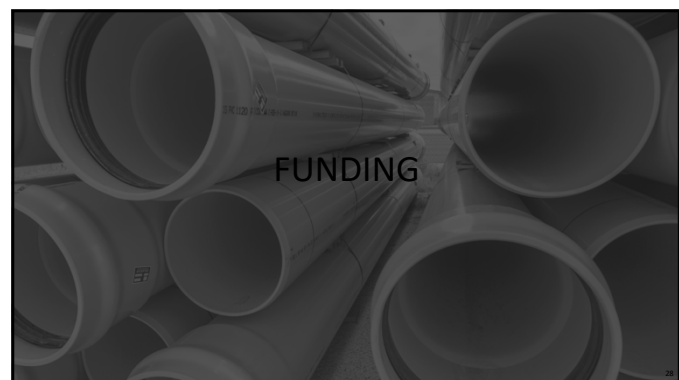
- Pursue changes necessary to achieve the SNWA's current water conservation goal of a minimum of 105 GPCD by 2035 and further efforts to achieve additional conservation thereafter
- Reduce existing non-functional turf acreage by 50% by 2035
- Embed the principles of the SNWA's Non-Functional Turf Resolution in municipal codes and LVVWD Service Rules
- Limit future installations of cool-season turf in public spaces and expedite the conversion of cool-season turf to warm-season turf at existing public facilities
- Implement smart controller technology to automate landscape watering compliance and increase outreach and enforcement efforts

26

**CONSERVATION RECOMMENDATIONS**

- Pursue implementation of advanced metering infrastructure and develop partnerships and programs to improve the speed of customer leak repairs
- Evaluate changes necessary to reduce current and future consumptive water losses associated with evaporative cooling technology
- Establish an efficiency review policy and process for new large water users to encourage efficient development and disincentivize consumptive use
- Continue to make investments that will maintain or improve the existing water loss rates among wholesale and retail water purveyors
- Continue outreach efforts to engage the public and effectuate the changes needed to meet the community's regional conservation goal

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**FUNDING THE MCCP**

The committee evaluated how to fund the MCCP using revenue derived from Connection Charge fees and SNWA charges on customer water bills with the following recommendations:

- Rates have not kept pace with inflation.** Catch the existing charges up with inflation and phase in over 6 years
- Maintain inflationary increases.** Annually adjust the charges with inflation
- Collar the inflationary increases on water bill charges.** Limit increases to 1.5% - 4.5%
- Maintain reserves.** Fund the Capital Plan with a mix of debt and pay-go to maintain reserves at adequate levels consistent with the Reserve Policy
- Connection Charge revenue.** Use Connection Charge revenues to fund pay-go capital or debt service, but exclude it from funding recurring operating expenses

29

**COVID-19: SNWA BUDGET RESPONSE**

Like other entities, SNWA adjusted its proposed budget to reflect Covid-19 impacts to revenue sources.

2020-21 SNWA Budget Response:

- Projected revenue and other sources of funds impact of (\$107.2) million
- Water sale revenues estimated to decline by 8%
- Sales tax revenues down 37%
- Connection Charge revenues down 75%
- IRPAC-recommended increases to the Infrastructure Charge and Commodity Charge not included in 2020-21 budget

30

## ECONOMIC RESPONSE

In August, the committee considered revised funding scenarios that responded to anticipated Covid-19 economic impacts:

- Delay implementation of new rates to 2022
- Adjust phase-in rates to reflect inflation through December 2021
- Reduce revenue projections (Covid-19)
- Reduce operating expenses (Covid-19 response)
- Refine capital cash flows
- Adjust Debt/Pay-Go ratio to 90%/10%

31

31

## ECONOMIC RESPONSE – REVISED IRPAC SCENARIO

Revenue impacts to IRPAC model scenario funding (10 year):

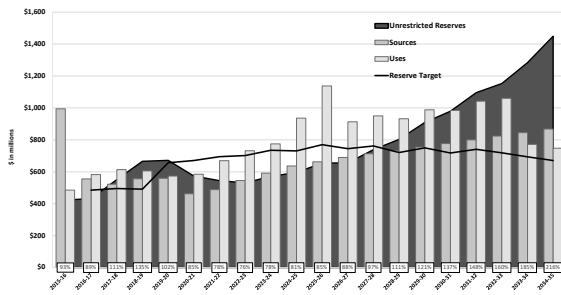
Revenue Item	Cumulative Dollar Impact (All rate adjustments in 2022)
Wholesale Delivery Charge	(\$28,519,779)
Infrastructure Charge	(91,390,835)
Commodity Charge	(111,827,797)
Connection Charge	(168,034,114)
Sales Tax	(49,106,068)
Total	(\$448,878,593)

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## ECONOMIC RESPONSE – REVISED IRPAC SCENARIO

90%/10% funding; Rate Increases implemented 2022



22

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## MANAGING CAPITAL SPEND

Each MCCP project has a number of opportunities to defer spending. These options allow SNWA to manage spending to maintain appropriate reserves.

		Horizon Lateral Example					
Activity	Schedule (months)	Cost	FY2021	FY2022	FY2023	FY2024	FY2025
			\$1,400,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00
Right of Way Research and Acquisition	24	\$28,500,000.00					
Environmental & Permitting	36	\$22,600,000.00					
Utility Planning	7	\$3,300,000.00					
Preliminary Design	24	\$63,800,000.00					
Final Design	30	\$125,000,000.00					
Construction	77	\$1,385,500,000.00					

34

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## RECOMMENDED INCREASES

The committee revised its initial recommendations to implement increases in 2022.

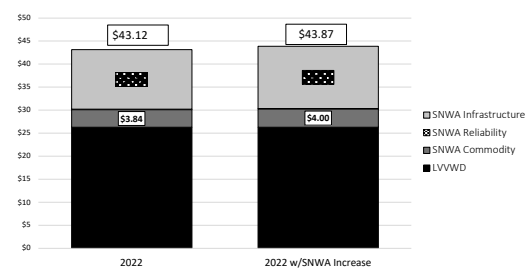
		6 YEAR PHASE-IN STARTING 2022						INDEXING
		2022	2023	2024	2025	2026	2027	2028 →
Connection Charge (ENR) Last increased in 2008	Catch-Up Inflation	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	0.0%
	Current Year Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
	Total	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	3.0%
Commodity Charge (CPI) Last increased in 2017	Catch-Up Inflation	2.3%	2.3%	2.3%	2.3%	2.3%	2.3%	0.0%
	Current Year Inflation	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
	Total	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	2.5%
Infrastructure Charge (ENR) Last increased in 2018	Catch-Up Inflation	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	0.0%
	Current Year Inflation	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
	Total	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	3.0%

ENR: Engineering News-Record – Construction Cost Index, 20 city average  
CPI: Consumer Price Index; all items for Urban Consumers (CPI-U) – West Size Class A

35

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## SAMPLE CUSTOMER: TYPICAL SINGLE FAMILY RESIDENTIAL



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### SAMPLE CUSTOMER IMPACT

Current											
Type	2020	2021	2022	2023	2024	2025	2026	2027	2028		
Single Family Residential - 5/8" - Typical Use											
2021 Phase-In \$	41.88	43.20	44.57	45.97	47.45	49.03	50.70	52.11	53.52		
2022 Phase-In \$	41.88	42.49	43.87	45.28	46.78	48.40	50.09	51.82	53.23		
Variance (\$)	-	0.71	0.70	0.89	0.67	0.63	0.61	0.29	0.29		
Office Park - Desert Canyon											
2021 Phase-In \$	1,820.48	1,847.56	1,874.84	1,902.36	1,930.33	1,942.47	1,945.09	2,024.06	2,053.15		
2022 Phase-In \$	1,820.48	1,838.74	1,864.15	1,893.79	1,921.92	1,954.34	1,987.07	2,020.18	2,044.23		
Variance (\$)	-	8.82	8.69	8.57	8.41	8.23	8.02	3.87	3.92		
College - UNLV											
2021 Phase-In \$	113,115.55	116,337.21	119,581.17	122,848.25	126,163.36	129,490.58	133,858.36	137,301.41	140,739.12		
2022 Phase-In \$	113,115.55	115,321.84	116,882.81	121,864.94	125,199.35	129,044.57	132,954.77	136,835.09	140,507.35		
Variance (\$)	-	1,015.37	998.36	983.31	965.81	946.01	923.49	446.32	451.77		
Warehouse - Bolden Motorsports											
2021 Phase-In \$	566.49	570.51	574.65	578.88	583.27	588.20	593.26	597.34	601.51		
2022 Phase-In \$	566.49	567.86	572.06	576.36	580.93	585.85	590.99	596.28	600.42		
Variance (\$)	-	2.65	2.59	2.52	2.44	2.35	2.23	1.06	1.09		
Resort and Hotel - Bellagio											
2021 Phase-In \$	127,312.22	130,883.19	134,463.28	138,053.05	141,644.55	145,892.72	150,139.63	154,006.28	157,876.95		
2022 Phase-In \$	127,312.22	130,055.16	133,640.72	137,336.76	140,855.52	145,091.96	149,348.22	153,617.01	157,487.40		
Variance (\$)	-	827.97	822.56	816.29	809.03	800.76	791.41	389.27	391.55		
School - Palo Verde											
2021 Phase-In \$	12,485.93	12,818.98	13,154.06	13,491.20	13,833.11	14,228.05	14,627.92	14,983.19	15,343.81		
2022 Phase-In \$	12,485.93	12,719.18	13,055.44	13,393.93	13,737.42	14,134.14	14,536.06	14,940.87	15,299.78		
Variance (\$)	-	99.80	98.62	97.27	95.69	93.91	91.86	44.32	45.03		

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### FUNDING THE MCCP

- If approved, a typical residential customer will see an increase of 75 cents on their monthly water bill in 2022. No increases in 2021.
- Increases affect both fixed and volumetric charges to maintain revenue reliability and conservation signals
- Avoids rate shock
- Helps businesses plan for future increases
- Rate increase pushed to 2022 to allow time for economy to stabilize

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### FUNDING RECOMMENDATIONS

- Fund the MCCP with a combination of debt capital and pay-go to manage unrestricted reserve balances at adequate levels consistent with the Reserve Policy.
- Implement a six-year annual increase to SNWA charges to:
  1. Phase in an inflationary catch up, and
  2. Adjust for subsequent annual inflation within the six-year period:
    - Increase the Connection Charge by 9.5% annually for six years effective Mar. 2022
    - Increase the Infrastructure Charge by 4.6% annually for six years effective Jan. 2022
    - Increase the Commodity Charge by 4.8% annually for six years effective Jan. 2022
- Implement an indexed rate component to the SNWA Connection Charge annually in accordance with the Engineering News Record (ENR) index, effective March 2028.

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### FUNDING RECOMMENDATIONS

- Implement an indexed rate component to the SNWA Infrastructure and Commodity charges annually, effective January 2028, and limit future increases to a floor of 1.5% and a ceiling of 4.5% each year.
  - Infrastructure Charge in accordance with Engineering News Record (ENR) index
  - Commodity Charge in accordance with the Consumer Price Index (CPI)

Do not implement inflationary increases in a year in which the five-year forecast unrestricted reserve balance is projected to be greater than 150% of targeted reserve balances.
- Eliminate the \$16.1 million Connection Charge threshold, require SNWA Connection Charge revenues to fund the pay-go portion of capital expenditures and related debt service, and exclude from funding recurring operating expenses.

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### OTHER RECOMMENDATIONS

- Work with community stakeholders to implement IRPAC recommendations
- Provide IRPAC 2020 with an annual update of the funding model and convene the committee as necessary

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### OTHER RECOMMENDATIONS

- Work with community stakeholders to implement IRPAC recommendations
- Provide IRPAC 2020 with an annual update of the funding model and convene the committee as necessary

42

**NEXT STEPS: APPROVALS****SEPT – OCTOBER 5:**

Business Impact Statement public comment period

**OCTOBER 15:**

SNWA Board considers Business Impact Statement

SNWA Board considers Major Construction and Capital Plan

**NOVEMBER 19:**

SNWA Board considers increases to water rates

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**NEXT STEPS: OUTREACH ACTIVITIES**

- Business Impact Statement
- Civic/Chamber outreach
- Trade and professional association outreach
- Web information (SNWA + member agencies)
- Social Media
- Water Smart Living Newsletter (all customers)
- Bill Insert information
- SNWA Water Ways programming
- Speakers Bureau

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**LATIN CHAMBER  
OF COMMERCE NEVADA, INC.**

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September 14, 2020

Marilyn Kirkpatrick, Chair  
Southern Nevada Water Authority  
100 City Parkway, Suite 700  
Las Vegas, Nevada. 89106

Dear Chairwoman Kirkpatrick,

It has been my pleasure to represent the Latin Chamber of Commerce on the SNWA Integrated Water Resources Planning Advisory Committee 2020, and to participate in the significant task of ensuring the economic future of southern Nevada through the provision of critical infrastructure.

Your staff, as always, was thorough and encouraged discussion, debate and understanding of the long term needs of the valley. While we may be undergoing significant changes at the moment, we believe the 22 recommendations provided by our committee take the long view and chart a course for future delivery of water to businesses and citizens of this valley.

On behalf of the Latin Chamber of Commerce NV, I wholeheartedly endorse the recommendations.

Sincerely,

Peter Guzman  
President and CEO  
Latin Chamber of Commerce Nevada

cc: Councilman Dan Stewart, Vice Chair  
Councilwoman Claudia Bridges  
Councilman Cedric Crear  
Commissioner James Gibson  
Commissioner Justin Jones  
Mayor John Lee  
John Entsminger, General Manager



September 8, 2020

Marilyn Kirkpatrick, Chairwoman  
Board of Directors  
Southern Nevada Water Authority  
100 City Parkway, Suite 700  
Las Vegas, NV 89106

**Re: Proposed Changes to Regional Water Rates**

Chair Kirkpatrick and members of the SNWA/LVVWD Board of Directors,

In October 2019, the SNWA Board of Directors established the Integrated Resource Planning Advisory Committee (IRPAC) to evaluate and make recommendations on issues of critical interest to the organization's long-term planning efforts. The committee is comprised of 11 stakeholders representing a broad spectrum of community interests including business, gaming, development, conservation, and residents. The Southern Nevada Home Builders Association (SNHBA) was one of those stakeholders.

We would like to extend our appreciation for the opportunity to participate in this process and directly provide builder feedback on new and redundant infrastructure needed to continue to build homes for the community across the Valley as well as service existing homeowners and residents in the Southwest part of the Valley through mitigation measures funded through the proposed increase presented to you today. We would like to personally thank General Manager John Entsminger for coming to the SNHBA office to discuss the proposed regulations and recommendations before you today with our membership and answer the questions they have on affordability concerns.

In February 2020, IRPAC finalized recommendations that had to be updated in August 2020 to acknowledge the economic challenges for existing and future ratepayers due to the COVID-19 pandemic. SNHBA and its membership appreciate the delayed implementation of the inflation/indexing catch-up and fee increase so we can better prepare for the many increases we anticipate from other jurisdictions and agencies over the coming months.

Although we understand the critical need for the increase, I would like to mention, like all additional regulations, adopting this new rate structure before you today puts additional pressure on homebuilders to increase prices, because the cost of construction increases. However, the mitigation measures approved and the vital need to conserve water for our Valley were a good-faith effort to responsibly mitigate the impact of new and existing development and preserve access to the market for homebuyers.

Sincerely,

Nat Hodgson, Chief Executive Officer  
Southern Nevada Home Builders Association

September 14, 2020

Marilyn Kirkpatrick, Chair  
Southern Nevada Water Authority  
100 City Parkway, Suite 700  
Las Vegas, Nevada. 89106

Dear Chairwoman Kirkpatrick:

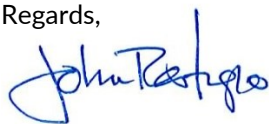
Over the years, I have been privileged to be an independent economist on several of the SNWA's Integrated Water Resources Planning Advisory Committees ("IRPAC"), including 2019-20 committee. I can state without reservation that the 22 recommendations developed by IRPAC over the last several months represent the result of a lot of thoughtful debate and discussion among a diverse group of dedicated citizens, as well as a responsible and meaningful effort by the SNWA staff and its advisors.

Engaging in collaborative long-term planning for critical infrastructure is an essential function of government, and this current effort has been thorough and deliberate. Importantly, the recommendations IRPAC developed have a meaningful conservation component – which has been and continues to be the least expensive source of new water for the Las Vegas Valley and is critical for our community's economic and social wellbeing.

As we move to rebuild from the economic "pandemic" caused by Covid 19, investing in a capital improvement plan that ensures a reliable future potable water infrastructure is critical. It not only makes sense from a long-term planning standpoint, but it makes economic sense since it will act as a catalyst to business investment and job creation at the most historically challenging time in the Valley's history. Even more importantly, this kind of investment is an essential part of the economic reinvention that Southern Nevada must undertake to become more economically diverse, secure and resilient.

And finally, a key part of the recommendations developed by IRPAC is the requirement that the SNWA periodically check back with the committee as the recommendations are implemented. Accordingly, the community will have a chance to weigh in about the prudent implementation of the recommendations. Therefore, it is my pleasure to endorse the final set of IRPAC recommendations; and I am comfortable with the transparency and thoroughness of the process.

Regards,



John Restrepo, Principal  
RCG Economics

cc: Councilman Dan Stewart, Vice Chair  
Councilwoman Claudia Bridges  
Councilman Cedric Crear  
Commissioner James Gibson  
Commissioner Justin Jones

Mayor John Lee  
John Entsminger, General Manager



September 14, 2020

Attention: Southern Nevada Water Authority Board of Directors

Regarding: Integrated Resource Planning Advisory Committee 2020 (IRPAC) recommendations of March 4th, 2020 and August 19th, 2020

I was a member of the IRPAC Committee 2020. After learning through presentations, hearings and statistics, the long range plans and needs of our valley's water system, I supported the Capital Improvement Projects' funding and the necessary rates changes presented by the SNWA.

With the current economic situation I know SNWA has made the right decision to postpone initiating the approved changes until January 2021. I am in agreement with our committee's recommendations and the SNWA's decisions.

Carol Jefferies,  
Boulder City resident



## Nevada Conservation League

8540 S Eastern, Suite 200  
Las Vegas, NV 89123  
(702) 505-9477  
[www.NevadaConservationLeague.org](http://www.NevadaConservationLeague.org)

SNWA Board of Directors  
Southern Nevada Water Authority  
P.O. Box 99956  
Las Vegas, NV 89193-9956

Chairwoman Marilyn Kirkpatrick,

Thank you for this opportunity to comment on the recommendations from the Integrated Resource Advisory Committee of SNWA of which we which I was proud to serve.

The Nevada Conservation League supports the recommendation put forward by IRPAC. The recommendations made to you represent the hard work of many community members and stakeholders who came together to learn about the issues facing our water resources and infrastructure in Nevada and make recommendations that are not only beneficial to the people and businesses that call Southern Nevada home but to the environment as well.

I would like to thank and commend John Entsminger and his team and SNWA for the process they ran. It was inclusive and every person working with IRPAC was always willing to answer any questions to ensure each member was up to speed to better understand the recommendations we were making and questions we were being asked to consider. I would also like to thank the other members of IRPAC for their service and for the opportunity to learn and hear the perspectives of the voices and groups represented.

The recommendations you are considering make clear that Southern Nevada can meet the water needs of those that live, work, and visit here through smart investments in infrastructure and conservation without the need to developing new resources. The investments and policy recommendation outlined in these recommendations will help address the water needs of the communities of Southern Nevada while helping make our water system more resilient to the ongoing threats and challenges created by the climate crisis.

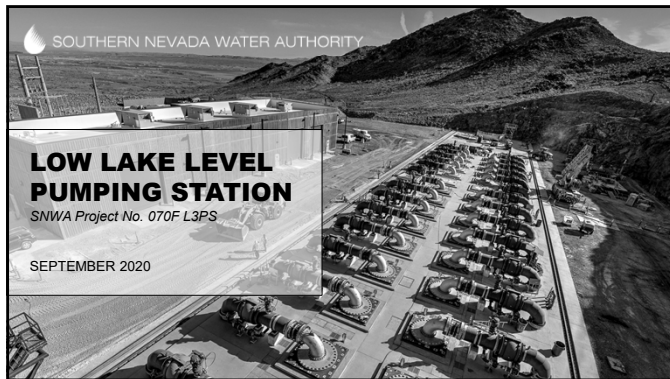
Thank you again for the opportunity to comment and for the opportunity to serve on the IRPAC. The Nevada Conservation supports the recommendations put forth by IRPAC.

Andy Maggi, NCL

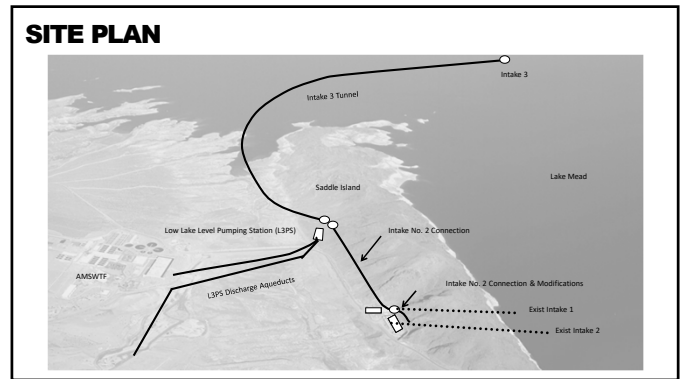
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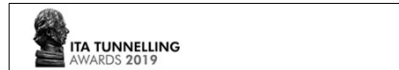
## OVERVIEW

- Board Approved L3PS as recommended by IRPAC in December 2014
  - ✓ Project Budget \$650 M
  - ✓ Actual Construction Cost \$473 M
  - ✓ Actual Program Administration Cost \$ 49 M
  - ✓ Total Actual Project Cost \$522 M
- Project Completed \$128 M under Budget (\$650 M - \$522 M)
- Project Completed on Schedule – April 2020

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## PROJECT AWARDS

(thus far...)



- 2019 Award Finalist for “Innovative Underground Space Concept of the Year” from the International Tunneling and Underground Space Association
- Based in Switzerland, ITA comprises 75 member nations and 310 affiliate members



4

## PROJECT AWARDS

(thus far...)

### ENRSouthwest

- 2020 Best Projects Award from Engineering News-Record Southwest (Winner: Best Project – Water/Environment)
- ENR is a weekly magazine providing news, data and opinion for the construction industry worldwide



5



6

**SOUTHERN NEVADA WATER AUTHORITY**  
**BOARD OF DIRECTORS**  
**AGENDA ITEM**

October 15, 2020

**Subject:**

Interlocal Agreement

**Petitioner:**

Colby N. Pellegrino, Deputy General Manager, Resources

**Recommendations:**

That the Board of Directors approve an interlocal agreement among the Regional Transportation Commission, Southern Nevada Regional Planning Coalition, and the Authority to provide funding for the Center for Business and Economic Research at the University of Nevada Las Vegas' Clark County population forecasts for an amount not to exceed \$13,500 annually, per party, with the option to renew for two additional one-year periods at a total cost not to exceed \$40,500.

**Fiscal Impact:**

Funds requested for current year expenditures are available in the Authority's Operating Budget. Funds for future year expenditures will be budgeted accordingly.

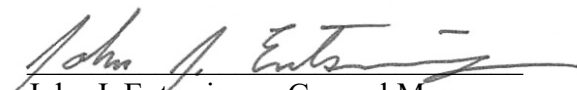
**Background:**

The Authority has collaborated to fund the Center for Business and Economic Research (CBER) at the University of Nevada Las Vegas' long-term Clark County population forecasts since 1996. CBER generates the forecasts using a regional econometric forecasting model, Regional Economic Models, Incorporated. CBER's population forecasts are a critical factor used by the Authority to conduct annual reviews and updates to the Authority's 50-year water resource plan.

This agreement among the Southern Nevada Regional Transportation Commission (RTC), Southern Nevada Regional Planning Coalition (SNRPC), CBER and the Authority provides funding for CBER to prepare a Clark County population forecast during fiscal year 2020/2021. This agreement also includes the option to renew for two additional one-year periods (fiscal years 2021/2022 and 2022/2023). If approved, the Authority will contribute an amount not to exceed \$13,500 during fiscal year 2020/2021. If the Authority, RTC and SNRPC choose to exercise the two one-year options, the Authority's total cost under this agreement would not exceed \$40,500.

This agreement is being entered into pursuant to NRS 270.180 and Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:



John J. Entsminger, General Manager

JJE:CNP:ZLM:AB:TM:lmv:nh

Attachment

AGENDA  
ITEM #

**2**

**AGREEMENT**  
**FOR THE PRODUCTION OF AN ANNUAL LONG-RANGE POPULATION FORECAST**  
**BY THE UNIVERSITY OF NEVADA, LAS VEGAS, CENTER FOR BUSINESS AND**  
**ECONOMIC RESEARCH**

**THIS AGREEMENT**, effective as of the \_\_\_\_\_ day of \_\_\_\_\_, by and among the Southern Nevada Regional Planning Coalition ("SNRPC"); the Regional Transportation Commission of Southern Nevada ("RTC"); the Southern Nevada Water Authority ("SNWA"), a political subdivision of the State of Nevada; and the Board of Regents of the Nevada System of Higher Education on behalf of the University of Nevada, Las Vegas, Center for Business and Economic Research ("UNLV"), a public institution of higher education.

**WHEREAS**, SNRPC, RTC, and SNWA are undertaking certain activities necessary for the planning execution of a project; and

**WHEREAS**, SNRPC, RTC, and SNWA desire to engage UNLV to render certain professional advice and assistance in connection with such undertakings of the SNRPC, RTC, and SNWA; and

**WHEREAS**, Regional Economic Models, Inc. ("REMI") publishes a computer software program entitled "Policy Insight" (the "Software") that can be used to generate year-by-year estimates of the regional effects of certain policy initiatives. Reports created using the Software have been used in SNRPC, RTC, and SNWA regional planning and analysis documents and are widely used and accepted throughout the United States; and

**WHEREAS**, UNLV conducts research and collects data (collectively, "Data") that may be used to generate certain reports using the Software.

**NOW, THEREFORE**, the parties hereto mutually agree as follows:

1. **Scope of Services.** UNLV shall produce one (1) annual forecast (the "Forecast") using the most current version of the Software publicly available. The Forecast will address population and employment in Clark County, Nevada and will include projections in yearly increments for a period of thirty (30) years, or other time period as agreed by the parties. UNLV will consult with SNRPC, RTC, SNWA, and others as UNLV deems necessary to produce the Forecast and shall provide copies in electronic form to all parties.
2. **Agreement Period.** The period covered by this Agreement shall commence on the effective date and end June 30, 2021. SNRPC, RTC, and SNWA shall have the option to renew for two additional one-year periods and shall exercise the option by providing written notice to UNLV at any time before the expiration of the term of the agreement and subsequent renewal options.
3. **Performance Time Frame.** UNLV shall exercise reasonable efforts to produce the Forecast within six (6) months following the annual update of the Software by REMI.

**4. Key Personnel**  
UNLV

Principal Investigator (PI)	Contractual Contact	Financial Contact
Dr. Stephen Miller	Contracts & Grants	Quentin Murrel
Director, CBER	Office of Sponsored Programs	Financial Research Administrator
Phone: 702-895-3969	Phone: 702-895-1357	Phone: 702-895-0528
stephen.miller@unlv.edu	ospcontracts@unlv.edu	quentin.murrel@unlv.edu

- 5. Method of Payment & Total Project Amount.** The SNRPC, RTC, and SNWA shall compensate UNLV for its services, however, it is expressly understood and agreed that in no event will the total to be paid exceed the sum of **\$40,500** for any one-year period. SNRPC, RTC, and SNWA will each be responsible for one third (1/3) of the total amount due.

Upon notification from UNLV's PI that the Forecast has been completed and received by SNRPC, RTC and SNWA, UNLV's Financial Contact agrees to generate separate invoices to SNRPC, RTC, and SNWA for one-third (1/3) of the total Agreement amount (\$40,500), an amount not to exceed \$13,500 per funding entity, no later than 30 days following delivery of the final draft of the Forecast. The SNRPC, RTC, and SNWA will individually make payment to UNLV within 30 days of receipt of the invoice.

Payments shall be made payable to the University of Nevada, Las Vegas and make reference to the Principal Investigator (Miller) and the Title of the Research (FY21 CBER Population Forecast). Payments must be submitted to:

Office of Sponsored Programs  
University of Nevada, Las Vegas  
4505 S. Maryland Parkway, Box 451055  
Las Vegas, NV 89154-1055

**6. General Terms and Conditions.**

- A. Termination of Agreement.** The SNRPC, RTC, SNWA or UNLV shall have the right to terminate this Agreement, with or without cause, upon thirty (30) days written notice to the other Parties. In the event of an early termination of this Agreement in its entirety, UNLV shall be entitled to receive compensation from SNRPC, RTC, and SNWA equal to \$40,500 multiplied by the percentage of the current Forecast completed as of the termination date.
- B. Changes.** The SNRPC, RTC, and SNWA may, from time to time, request changes in the scope of services of UNLV to be performed hereunder. Such changes, including the increase or decrease in the amount of UNLV's compensation, which are mutually agreed upon between the SNRPC, RTC, SNWA, and UNLV, shall be in writing and upon execution shall become part of the Agreement.

- C. Assignability. Any assignment or attempted assignment of this Agreement by UNLV without the prior written consent of SNRPC, RTC, and SNWA shall be void; provided, however, that claims for money due or to become due to UNLV from the SNRPC, RTC, or SNWA under this Agreement may be assigned to a bank, or other financial institution, without such approval. Notice of any such assignment or transfer shall be made prior to or concurrent with submitting any invoice for payment and shall be furnished in writing to the SNRPC, RTC, and SNWA.
- D. Audit. UNLV agrees to comply with the requirements of the Uniform Guidance 2 CFR Part 200. Notwithstanding any other conditions of this Agreement, the UNLV records which pertain to this Agreement will be made available upon reasonable request for audit by authorized personnel of SNRPC, RTC, and SNWA. The records will be retained for a period of three (3) years following final deliverable(s).
- E. Ownership of Data. UNLV shall retain all rights associated with its data. UNLV grants to SNRPC, RTC, and SNWA a non-exclusive license to make use of any data gathered or generated in connection with this Agreement.
- Nothing in this Agreement grants to any Party any rights or interest in the other Parties' Background Intellectual Property. "Background Intellectual Property" means (1) all works of authorship created outside the scope of this Agreement and (2) potentially patentable discoveries conceived or first reduced to practice outside the scope of this Agreement.
- F. Governing Law. This Agreement shall be governed by the laws of the State of Nevada.
- G. Subcontractors. UNLV shall not subcontract this project without prior written approval by the SNRPC, RTC, and SNWA.
- H. Notices. Any notice concerning the terms and conditions of this Agreement from UNLV to the SNRPC, RTC, or SNWA shall be in writing and delivered, either personally or by mail (postage prepaid), by telegram or facsimile transmission and shall be addressed as follows:

SNRPC     Southern Nevada Regional Planning Coalition  
             500 S. Grand Central Pkwy  
             Las Vegas, Nevada 89155  
             Attn: Jennifer Penny  
             Phone: 455-5019     Fax: 380-9947

RTC        Regional Transportation Commission of Southern Nevada  
             600 S. Grand Central Parkway, Suite 350  
             Las Vegas, NV 89106-4512  
             Attn: Beth Xie  
             Phone: 676-1722     Fax: 676-1518

SNWA      Southern Nevada Water Authority  
             100 City Parkway, Suite 700  
             Las Vegas, NV 89106  
             Attn: Ayoub Ayoub  
             Phone: 862-3709     Fax: 875-7010

UNLV            Office of Sponsored Programs  
4505 S. Maryland Parkway, Box 451055  
Las Vegas, NV 89154-1055  
Attn: Lori M. Ciccone, Executive Director  
Phone: 895-1357      Fax: 895-4379  
Email: ospcontracts@unlv.edu

Notices shall be deemed effective upon delivery in the event of personal delivery, and after three (3) days when mailed, postage prepaid; if transmitted by facsimile or telegram, upon verified receipt of the electronic transmission. Any party may change its address in reference to notices by written notification to the other parties.

7. **Severability.** In the event that any provision of this Agreement shall be held to be invalid or unenforceable, the remaining provisions of this Agreement shall remain valid and binding upon the parties hereto.
8. **Independent Contractor.** UNLV is an independent contractor. Notwithstanding any provision appearing in this Agreement, all personnel assigned by UNLV to perform work under the terms of the Agreement shall be and remain at all times, employees of UNLV for all purposes. UNLV, its agents and employees, in the performance of this Agreement, shall act in an independent capacity and not as officers or employees of SNRPC, RTC, or SNWA. It is acknowledged by UNLV that SNRPC, RTC, and SNWA shall not:
  - A. Withhold income taxes, social security, or any other amount of any nature whatsoever.
  - B. Provide Industrial Insurance Coverage;
  - C. Provide sick or vacation leave, holiday pay, retirement benefits, or health, life, dental, long-term disability, or workers compensation insurance benefits, to UNLV, its agents or employees; or
  - D. Provide unemployment Compensation Coverage if the requirements of NRS 612.085 for Independent Contractors are met.
9. **Force Majeure.** Neither party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, epidemics, quarantines, pandemics or acts of God, including, without limitation, earthquakes, floods, winds, or storms. In such an event, the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases to exist. The parties agree to promptly notify the other party of any condition that might interfere with performance of this Agreement. Notification shall not relieve the parties of any responsibilities hereunder.
10. **Extent of Agreement.** This Agreement represents the entire and integrated agreement between SNRPC, RTC, SNWA, and UNLV and supersedes all prior negotiations, representations or agreement, either written or oral. This Agreement may be amended only by written agreement signed by SNRPC, RTC, SNWA, and UNLV.



11. **Applicable Law and Venue.** Nevada law shall govern the interpretation of this Agreement, without reference to its choice of law provisions. The Parties agree that venue for any dispute arising from the terms of this Agreement shall be Clark County, Nevada.
12. **No Third-Party Rights.** This Agreement shall not be deemed to be for the benefit of, and does not create any causes of action for, any person or entity who is not a party hereto.
13. **Counterpart Signatures.** The parties hereby acknowledge that this Agreement may be executed in counterpart originals with like effect as if executed in a single original document.

BOARD OF REGENTS, NEVADA SYSTEM OF HIGHER  
EDUCATION ON BEHALF OF THE UNIVERSITY OF  
NEVADA, LAS VEGAS

BY:   
Lori M. Ciccone, Executive Director  
Office of Sponsored Programs

Date:

09/03/2020

ACKNOWLEDGED & READ

BY:   
Stephen M. Miller, Ph.D., Principal Investigator  
Director, Center for Business & Economic Research

Date:

9/13/20

SOUTHERN NEVADA REGIONAL PLANNING COALITION

BY: \_\_\_\_\_  
Justin Jones, Chair

Date:

\_\_\_\_\_

REGIONAL TRANSPORTATION COMMISSION OF  
SOUTHERN NEVADA

BY: \_\_\_\_\_  
M.J. MAYNARD, CHIEF EXECUTIVE OFFICER

Date:

\_\_\_\_\_


SOUTHERN NEVADA WATER AUTHORITY

BY: \_\_\_\_\_  
John J. Entsminger  
General Manager

Date:

\_\_\_\_\_

Approved as to form:

  
Tabitha D. Fiddymont  
Director, Legal Services

BOARD OF REGENTS, NEVADA SYSTEM OF HIGHER  
EDUCATION ON BEHALF OF THE UNIVERSITY OF  
NEVADA, LAS VEGAS

Date: \_\_\_\_\_

BY: \_\_\_\_\_  
Lori M. Ciccone, Executive Director  
Office of Sponsored Programs

ACKNOWLEDGED & READ

Date: \_\_\_\_\_

BY: \_\_\_\_\_  
Stephen M. Miller, Ph.D., Principal Investigator  
Director, Center for Business & Economic Research

SOUTHERN NEVADA REGIONAL PLANNING COALITION

BY: \_\_\_\_\_  
Justin Jones, Chair

Date: \_\_\_\_\_

Sept. 24, 2020

REGIONAL TRANSPORTATION COMMISSION OF  
SOUTHERN NEVADA

Date: \_\_\_\_\_

BY: \_\_\_\_\_  
M.J. MAYNARD, CHIEF EXECUTIVE OFFICER

SOUTHERN NEVADA WATER AUTHORITY

Date: \_\_\_\_\_

BY: \_\_\_\_\_  
John J. Entsminger  
General Manager

Approved as to form:

\_\_\_\_\_  
Tabitha D. Fiddymment  
Director, Legal Services

**BOARD OF REGENTS, NEVADA SYSTEM OF HIGHER  
EDUCATION ON BEHALF OF THE UNIVERSITY OF  
NEVADA, LAS VEGAS**

**Date:**

**BY:**

\_\_\_\_\_  
**Lori M. Ciccone, Executive Director  
Office of Sponsored Programs**

**ACKNOWLEDGED & READ**

**Date:**

**BY:**

\_\_\_\_\_  
**Stephen M. Miller, Ph.D., Principal Investigator  
Director, Center for Business & Economic Research**

**SOUTHERN NEVADA REGIONAL PLANNING COALITION**

**Date:**

**BY:**

\_\_\_\_\_  
**Justin Jones, Chair**

**REGIONAL TRANSPORTATION COMMISSION OF  
SOUTHERN NEVADA**

**Date:**

9/17/2020

**BY:**

DocuSigned by:  
  
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\_\_\_\_\_  
**M.J. MAYNARD, CHIEF EXECUTIVE OFFICER**

**SOUTHERN NEVADA WATER AUTHORITY**

**Date:**

**BY:**

\_\_\_\_\_  
**John J. Entsminger  
General Manager**

**Approved as to form:**



\_\_\_\_\_  
**Tabitha D. Fiddymment  
Director, Legal Services**

**SOUTHERN NEVADA WATER AUTHORITY  
BOARD OF DIRECTORS  
AGENDA ITEM**

October 15, 2020

**Subject:**

Groundwater Advisory Committee Appointments

**Petitioner:**

Colby N. Pellegrino, Deputy General Manager, Resources

**Recommendations:**

That the Board of Directors appoint Richard Avila, Justin Harrison, John Hiatt, Stacey Lindburg, Rob McLaughlin, Krystle Oridaniza and Brittany Walker to the Advisory Committee for Groundwater Management in the Las Vegas Valley Groundwater Basin for a two-year term.

**Fiscal Impact:**

None by approval of the above recommendation.

**Background:**

Chapter 572, Statutes of Nevada 1997, authorizes the Authority to establish an Advisory Committee for Groundwater Management (Committee). This Committee is comprised of seven well user representatives throughout the Las Vegas Valley who consider local groundwater issues. Representatives from the Nevada State Engineer's Office and the Nevada Division of Environmental Protection also sit on the Committee as ex-officio members.

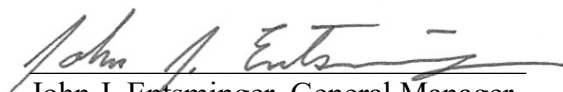
The Authority solicited nominations for well user representatives through public notice in the *Groundwater Update* newsletter, which is distributed to more than 7,000 well owners in the Las Vegas Valley. Three responses were received from groundwater users interested in serving.

At this time, the Board of Directors is being asked to appoint seven well user representatives to two-year terms expiring in 2023. An asterisk denotes that the individual previously served and is interested in being reappointed to the Committee.

<u>Name</u>	<u>Represents</u>
Brittany Walker*	Municipal Rate Payers
Krystle Oridaniza	Commercial and Industrial Well Users
Justin Harrison*	Community Well Users
Rob McLaughlin*	Municipal Well Operators
Richard Avila*	Private Water Companies
John Hiatt*	Domestic Well Users
Stacey Lindburg*	Domestic Well Users

These appointments are authorized pursuant to Chapter 572, Statutes of Nevada 1997, and Section 5(p) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:

  
John J. Entsminger, General Manager  
JJE:CNP:AMB:KH:ccd

AGENDA  
ITEM #

**3**

**SOUTHERN NEVADA WATER AUTHORITY**  
**BOARD OF DIRECTORS**  
**AGENDA ITEM**

October 15, 2020

**Subject:**

Business Impact Statement

**Petitioner:**

John J. Entsminger, General Manager

**Recommendations:**

That the Board of Directors determine that the proposed changes to the Authority's Connection Charge, Infrastructure Charge and Commodity Charge are not likely to impose a direct and significant economic burden upon a business, or directly restrict the formation, operation or expansion of a business; consider and approve the attached Business Impact Statement; and direct staff to set a public hearing for possible adoption of the proposed charges for November 19, 2020.

**Fiscal Impact:**

None by approval of the above recommendation.

**Background:**

On October 17, 2019, the Board of Directors established the 11-member Integrated Resource Planning Advisory Committee (Committee) to evaluate various issues critical to the Authority's mission and develop formal recommendations for the Board's consideration. The Committee met nine times in public meetings to review and develop recommendations on funding, infrastructure, water resources, water conservation, and water use outside the Las Vegas Valley.

Recognizing the efforts needed to continue reliable water delivery to its customers into the future, staff presented the committee with a proposed amendment to the Authority's Major Construction and Capital Plan (MCCP) to include facilities, water resources and water conservation projects and activities totaling \$3.166 billion.

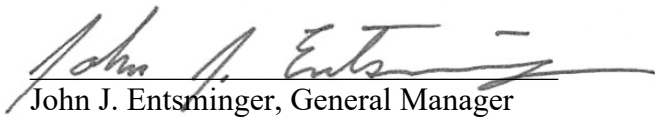
The Committee developed 22 recommendations, which were approved by the Board on September 17, 2020, and include recommendations related to funding the proposed MCCP amendment. The funding recommendations included an increase to the Authority's Connection Charge, Infrastructure Charge and Commodity Charge, which are passed through to the customers of certain purveyor members. Pursuant to the Business Impact Statement (BIS) statutes set forth in NRS Chapter 237, on September 3, 2020, a notice of the proposed changes to the Authority's charges was published in the *Review-Journal* and provided to 80 local trade associations and interested parties, soliciting their input. The comment period ran through October 5, 2020. The comments received as a result of this notification, as well as anticipated impacts to businesses, were evaluated and are summarized within the attached BIS.

Based on the analysis performed by the committee, together with the incorporation and evaluation of public comments received during the BIS comment period, staff recommends that the Board find that the proposed increases are not likely to present a direct and significant economic burden on, or directly restrict the formation, operation or expansion of a business. Staff further recommends that the Board approve the attached BIS and direct staff to set a public hearing for

November 19, 2020, at 9:00 a.m. at the Southern Nevada Water Authority, SNWA Board Chambers, 100 City Parkway, Las Vegas, Nevada, to consider and adopt the proposed increases. Upon Board approval to set the Public Hearing, the Authority will notice the Public Hearing in the Legal Notices section of the Las Vegas Review-Journal on November 8, 2020. If the proposed changes are approved at the public hearing, they will be effective on January 1, 2022.

This action is authorized pursuant to NRS 237.030 through 237.150, Section 6(c) of the SNWA 1995 Amended Cooperative Agreement and Article 7 of the SNWA 2019 Amended Facilities and Operations Agreement. The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:

A handwritten signature in dark ink, appearing to read "John J. Entsminger", is written over a horizontal line.

John J. Entsminger, General Manager

JJE:CNP:AMB:KH:JB

Attachment



## **BUSINESS IMPACT STATEMENT**

**Southern Nevada Water Authority**

***Review of the proposed increase to rates and fees proposed for adoption.***

### **EXECUTIVE SUMMARY**

Nevada law requires that local governments develop a Business Impact Statement (BIS) to gather and evaluate financial information informing whether a proposed rule increasing water rates imposes a direct, significant economic burden on a business, or directly restricts the formation, operation or expansion of a business.

The Southern Nevada Water Authority (SNWA) is a wholesale water provider comprised of seven local water and wastewater agencies. As such, SNWA is responsible for water treatment and delivery, acquiring and managing long-term water resources for Southern Nevada, and implementing regional water conservation initiatives. Collectively, SNWA member agencies serve more than 2.2 million residents in Southern Nevada. Recognizing the facilities, resources, and conservation efforts needed to reliably deliver water supplies to its customers for decades to come, the SNWA presented an Integrated Resource Planning Advisory Committee (committee) with a proposed amendment to its Major Construction and Capital Plan (MCCP) to include projects and activities totaling \$3.166 billion. Proposed projects and activities within the MCCP amendment include:

To fund the MCCP amendment, the committee reviewed SNWA's existing funding sources and concluded that the SNWA Connection Charge, the SNWA Infrastructure Charge and the SNWA Commodity Charge were the most appropriate funding sources to adjust. These charges are assessed by SNWA and passed through to its purveyor members who collect them on SNWA's behalf.

### **THE BUSINESS IMPACT STATEMENT**

**A. The following constitutes a description of the manner in which comment was solicited from affected businesses, a summary of their responses, and an explanation of the manner in which other interested persons may obtain a copy of the summary.**

In October 2019, the SNWA Board of Directors convened an advisory committee to evaluate various issues critical to SNWA's mission and develop formal recommendations for Board consideration. The committee held nine publicly-posted meetings between October 17, 2019 and August 26, 2020, completing a process that consisted of information gathering; evaluation of funding scenarios; and formulation of recommendations for Board consideration.

The Committee developed 22 recommendations, which were approved by the SNWA Board of Directors on September 17, 2020, and include recommendations related to funding the proposed MCCP amendment. These recommendations include an increase to SNWA's Connection Charge, Infrastructure Charge and Commodity Charge. These recommendations were included on the SNWA's website.

Pursuant to NRS 237.080, the SNWA published a public notice of the proposed increases on September 3 and 13, 2020; sent notices to more than 80 businesses, trade associations and interested parties; and collected comments through October 5, 2020. Interested persons could make public comments to SNWA via telephone, mail and email.

During the public comment period, four responses were received and are included in the appendices of this document. Generally, one response—from the Southern Nevada Homebuilders Association—supported the proposed rate change. The other three comments did not specifically address the impact that the rate increase would have on businesses, but made suggestions regarding new service connections, salaries for Information



Technology staff and SNWA's participation in the Metropolitan Water District of Southern California's water recycling project.

To obtain a copy of this document, including the foregoing summary of responses, please e-mail Jordan.Bunker@snwa.com.

**B. The estimated economic effect of the proposed rule on the businesses which it is to regulate, including, without limitation: Both adverse and beneficial effects, and both direct and indirect effects.**

The Committee recommended annual increases to SNWA's Connection, Commodity and Infrastructure Charges between 2022 and 2027. To avoid additional future rate increases that could result in rate shock to customers, the Committee recommended tying future increases to the Consumer Price Index (CPI) for a long-term sustainable revenue source. As a result, the Committee recommended that in 2028, and each year thereafter, these charges would be adjusted for inflation according to the appropriate indexed rates and would be limited to between 1.5 percent and 4.5 percent. For the Connection Charge and Infrastructure Charge, the Engineering News Record would be the indexed rate; for the Commodity Charge, the Consumer Price Index would be the rate.

	6 YEAR PHASE-IN STARTING 2022						INDEXING
	2022	2023	2024	2025	2026	2027	2028 →
<b>Connection Charge</b>	9.5%	9.5%	9.5%	9.5%	9.5%	9.5%	ENR
<b>Commodity Charge</b>	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%	CPI
<b>Infrastructure Charge</b>	4.6%	4.6%	4.6%	4.6%	4.6%	4.6%	ENR

Identified effects are as follows.

Adverse Effect	The business may not be able to save as much as needed on a monthly basis for expansion, operating and planning goals.
Beneficial Effect	The business knows what the fixed monthly charges are.
Beneficial Effect	Planned rate increases can be anticipated and managed in the business' annual budget.
Adverse Effect	Conservation caused by higher rates may affect daily business operations and expenses (irrigation, cooking, pool use, vehicle washing).
Beneficial Effect	The business may adjust consumption to balance its annual operating budget.
Beneficial Effect	Smaller rate increases that occur over time avoid rate shock impacts to customers.
Indirect Effect	Developers may pass the increased costs of water connections to home buyers and businesses.
Direct Effect	The cost of doing business will increase on a specific date as rate increases are phased in over time.
Indirect Effect	The change in rates may lead a business to increase prices to cover additional operating costs.

- C. **The following constitutes a description of the methods that the governing body of the local government or its designee considered to reduce the impact of the proposed rule on businesses and a statement regarding whether the governing body or its designee actually used any of those methods. These methods include: Simplifying the proposed rule; establishing different standards of compliance for a business; and modifying a fee or fine set forth in the rule so that a business is authorized to pay a lower fee or fine.**

The General Manager—the SNWA’s designee—through the IRPAC committee, simplified the rate increases by not creating a new charge, but simply increasing existing rates and establishing a fixed percentage for six years to allow businesses to budget and plan accordingly. The General Manager and the committee did not establish different standards of compliance for a business or modify a fee or fine set forth in the rule so that a business is authorized to pay a lower fine or fee, as the committee elected to keep rates equitable across users.

**1. Modifying a fee:**

SNWA’s Connection Charge, Commodity Charge and Infrastructure Charge have not been increased since 2008, 2017 and 2018, respectively. Since those adjustments, these charges have not kept pace with inflation. To that end, the Committee recommended the phasing in of inflationary increases to these charges to (1) catch the existing rates of the Connection, Commodity and Infrastructure charges up to what they would be today had they kept pace with inflation and (2) begin charging today’s inflation to ensure that its buying power isn’t reduced. By bringing these charges up to current inflation and then indexing them, customers can more easily

**2. Phase-in the increases to the Connection Charge, Commodity Charge and Infrastructure charge over a six-year period:**

The committee recognized that many ratepayers, including small businesses, will find incremental increases easier to absorb and account for than larger one-time increases, and therefore recommended phasing in the increases to provide the community time to adjust to the new rates. After the tiered rates and charges are brought current, the Committee recommended tying future increases to an indexed rate for a long-term sustainable revenue source.

**3. Create equitable rates for all customers:**

Following an evaluation of different funding alternatives, the Committee recommended adjusting charges that are uniformly assessed to residents and businesses because the benefit of having access to water is equal among all customers.

- D. **The estimated cost to the local government for enforcement of the proposed rule:**

The proposed rate change will not result in material administrative costs to enforce or implement.

- E. **If the proposed rule provides a new fee or increases an existing fee, the total annual amount the local government expects to collect and the manner in which the money will be used is:**

The 6-year implementation of adjustments to the Connection Charge, Commodity Charge and Infrastructure Charge, coupled with the flexible issuance of debt is estimated to generate an average of \$65.8 million annually. The revenue collected will be used to fund facilities, water resources and water conservation projects and activities as recommended by the committee and set for within SNWA’s M CCP.

- F. **If the proposed rule includes provisions that duplicate or are more stringent than federal, state, or local standards regulating the same activity, an explanation of why such duplicative or more stringent provisions are necessary:**

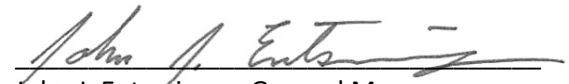
Not applicable.

- G. **The reason for the conclusions regarding the impact of the proposed rule on businesses:**

The proposed rate changes do not impose a direct and significant burden on businesses and will likely not restrict the formation, operation or expansion of a business because the revised rate structure will provide for conditions of implementation that address incremental changes in rates and create an equitable rate for all customers. Water rates for businesses remain competitive to western cities of comparable size.

On October 15, 2020 the SNWA Board will consider the BIS, prior to setting a Public Hearing to consider implementing the proposed rate adjustments. The BIS is available for public review and comment prior to a final Board decision. Also at the October 15, 2020 Board meeting, staff is recommending that the Board set a Public Hearing for November 17, 2020 as required by NRS 237.090 to consider increases to rates and charges.

I certify that to the best of my knowledge or belief, the information contained in this statement was prepared properly and is accurate.

  
John J. Entsminger, General Manager

**APPENDIX**

**COMMENTS RECEIVED DURING PUBLISHED BUSINESS IMPACT STATEMENT COMMENT PERIOD**



September 8, 2020

Marilyn Kirkpatrick, Chairwoman  
Board of Directors  
Southern Nevada Water Authority  
100 City Parkway, Suite 700  
Las Vegas, NV 89106

**Re: Proposed Changes to Regional Water Rates**

Chair Kirkpatrick and members of the SNWA/LVVWD Board of Directors,

In October 2019, the SNWA Board of Directors established the Integrated Resource Planning Advisory Committee (IRPAC) to evaluate and make recommendations on issues of critical interest to the organization's long-term planning efforts. The committee is comprised of 11 stakeholders representing a broad spectrum of community interests including business, gaming, development, conservation, and residents. The Southern Nevada Home Builders Association (SNHBA) was one of those stakeholders.

We would like to extend our appreciation for the opportunity to participate in this process and directly provide builder feedback on new and redundant infrastructure needed to continue to build homes for the community across the Valley as well as service existing homeowners and residents in the Southwest part of the Valley through mitigation measures funded through the proposed increase presented to you today. We would like to personally thank General Manager John Entsminger for coming to the SNHBA office to discuss the proposed regulations and recommendations before you today with our membership and answer the questions they have on affordability concerns.

In February 2020, IRPAC finalized recommendations that had to be updated in August 2020 to acknowledge the economic challenges for existing and future ratepayers due to the COVID-19 pandemic. SNHBA and its membership appreciate the delayed implementation of the inflation/indexing catch-up and fee increase so we can better prepare for the many increases we anticipate from other jurisdictions and agencies over the coming months.

Although we understand the critical need for the increase, I would like to mention, like all additional regulations, adopting this new rate structure before you today puts additional pressure on homebuilders to increase prices, because the cost of construction increases. However, the mitigation measures approved and the vital need to conserve water for our Valley were a good-faith effort to responsibly mitigate the impact of new and existing development and preserve access to the market for homebuyers.

Sincerely,

Nat Hodgson, Chief Executive Officer  
Southern Nevada Home Builders Association

**From:** [acpa4u](#)  
**To:** [Jordan Bunker](#)  
**Subject:** {EXTERNAL} Impact Statement Response  
**Date:** Tuesday, September 29, 2020 2:01:52 PM

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Please state why the Board has not considered terminating new connections for water to stabilize the water supply.

Employees of SNWA dont understand why more housing developments are being built along with the associated retail establishments.

Increasing cost does not increase or conserve the existing water supply.

Your written response will be appreciated.

Michael Leslie, CPA  
909-489-8109

## **SNWA – Water Update feedback**

First name: John

Last name: Blanken

Company: self

Email: john.blanken@gmail.com

Comments/feedback: The report states: "The committee agreed that funding should be made available for SNWA to capitalize on partnership opportunities with other Colorado River users to secure additional water supplies for the community. SNWA Integrated Resource Planning Advisory Committee 2020 Recommendations Report Page 12 of 22 Potential projects include a large-scale water recycling project in Southern California or desalination plants, and these projects were presented to IRPAC at the December 18, 2019 meeting. Given the success of similar projects, this committee felt like this is a worthwhile opportunity that would yield important water resources to meet future demands."

My feedback/comment: California should live within their original negotiated treaty share of Colorada river water. California should NOT get any support from Nevada to fund California water projects.

**From:** [tim.potter](#)  
**To:** [Jordan Bunker](#)  
**Subject:** (EXTERNAL) Possible Inflationary-based Increases  
**Date:** Saturday, March 14, 2020 8:22:41 PM

---

Dear Jordan,

I am writing to you regarding SNWA's contemplated increase to ratepayers listed in the RJ legal notices last week.

Here is what I think...Prior to SNWA proposing any cost increases that further burden us ratepayers, you really need to evaluate your head count of current SNWA employees as costs appear rather bloated at SNWA. For example, in IT you have a total of 41 employees that hold various positions in SNWA IT. The total annual cost in SNWA-IT salaries exceed \$5.1M based on the 2018 salary information in Transparent Nevada, (and \$7.9M per year when you calculate the total of salaries, benefits, etc.). In addition, 15 of the 44 employees have a title of either Director, Manager or Supervisor; there is one management-type position for every three SNWA employees which is an extremely inefficient ratio of employees to manager.

Now, here are the items that SNWA is doing that I take issue with:

- There are only three IT employees reporting to a manager. This is half of what we see in most operations.
- SNWA has a total of 41 IT people supporting 1500 total employees. Again, this is excessive.
- SNWA IT has 41 IT Employees that carry an average burdened cost of \$192K/year (based on 2018). This is nuts is when you consider what could be done by outsourcing at least some of the more important IT functions.
- You have one IT Director, two Sr Managers, one IT Manager and eleven IT Supervisors. What in the heck do all of these people do on a daily and weekly basis?

What SNWA should do prior to imposing further rate increases:

- Audit each department and ask yourselves if this was my business, would I have this many people at these high costs.
- If you think you cannot do an objective audit internally, then the audit should be done by an outside company that is totally independent of SNWA.
- Reduce the number of total employees in IT as it is excessive.
- Reduce the number of SNWA IT managers as the count is excessive.
- Take action on cutting your internal costs--at a minimum, look at all of the "low hanging fruit" to reduce costs. (and there is a lot of low hanging fruit at SNWA).

Look at the cost savings that outsourcing will provide to SNWA and your ratepayers.

If it is SNWA's intention to burden your ratepayers (aka customers) with multiple rate increases, regardless of your current mode of operation, then you better be prepared to answer some hard questions and address the tough issues similar to what I have laid out to you in the above.

I don't think you want to have others start looking at, and then questioning your internal costs as this could end up taking a life of its own. If I would have studied your engineering head count, I am confident it would have been a similar high cost situation to your IT high cost situation. It could be hard to explain that the engineering performed on your larger projects is outsourced to external firms--not engineered by your internal engineers.

Thanks, Tim Potter

Timothy D. Potter

**SOUTHERN NEVADA WATER AUTHORITY  
BOARD OF DIRECTORS  
AGENDA ITEM**

October 15, 2020

**Subject:**

Lower Las Vegas Wash Stabilization Plan

**Petitioner:**

Doa J. Ross, Deputy General Manager, Engineering

**Recommendations:**

That the Board of Directors adopt the 2020 Lower Las Vegas Wash Stabilization Plan.

**Fiscal Impact:**

None by approval of the above recommendation. Costs associated with specific projects will be identified and presented to the Board of Directors for consideration at future meetings.

**Background:**

The Lower Las Vegas Wash (Wash) in Clark County, Nevada, is the primary urban runoff, wastewater and floodwater outlet from the Las Vegas Valley into Lake Mead and the Colorado River. The Wash is considered a critical component in the many environmental and water resource issues facing Southern Nevada today. The Authority's Lower Las Vegas Wash Stabilization Plan presents a summary of planned capital expense activities necessary to support long-term enhancement and management of the Wash.

This action is authorized pursuant to Section 6(j) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved this agenda item.

Respectfully submitted:



John J. Entsminger, General Manager

JJE:DJR:PJJ:RCP:kd

Attachment

AGENDA  
ITEM #

**5**





**OCTOBER 2020**

# **LOWER LAS VEGAS WASH STABILIZATION**

## **CAPITAL IMPROVEMENTS PLAN**



SOUTHERN NEVADA WATER AUTHORITY®

# **Lower Las Vegas Wash Stabilization Plan**

**October 2020**



## ***Board of Directors***

***Marilyn Kirkpatrick, Las Vegas Valley Water District, Chair***

***Dan Stewart, City of Henderson, Vice Chair***

***Claudia Bridges, City of Boulder City***

***Cedric Crear, City of Las Vegas***

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***Justin Jones, Clark County Water Reclamation District***

***John Lee, City of North Las Vegas***

***John J. Entsminger***

***General Manager***

***David L. Johnson***

***DGM:***

***Operations***

***Doa J. Ross***

***DGM:***

***Engineering***

***Colby Pellegrino***

***DGM:***

***Resources***

***Gregory J. Walch***

***General Counsel***

***E. Kevin Bethel***

***Chief Financial***

***Officer***

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# **Lower Las Vegas Wash Stabilization Plan**

## **1.0 Introduction**

### **1.1 Background**

The Las Vegas Wash (Wash), in Clark County, Nevada, is the primary drainage of the Las Vegas Valley, carrying urban runoff, treated wastewater and floodwater into Lake Mead and the Colorado River. The Wash is a critical component in water resource management for southern Nevada, as it serves as a return flow conveyance, increasing the amount of water Nevada can withdraw from Lake Mead. It is also an important environmental resource, providing wetland habitat that sustains plants and animals that would not otherwise be found in a dry, desert environment.

The Southern Nevada Water Authority (SNWA) estimates the current rate of channel erosion in the Lower Wash to be two to three vertical feet per year, and the Federal Highway Administration (FHWA) estimates between 150,000 and 460,000 cubic yards of sediment is transported to Lake Mead each year at current low lake levels. The produced by erosion is discharging directly into Las Vegas Bay at Lake Mead, only six miles upstream of SNWA's drinking water intakes. Water quality sampling and analysis completed by SNWA has indicated a considerable increase in concentrations of total suspended solids and phosphorus in Wash flows between Northshore Road bridge and Lake Mead. These parameters are indicators of the severity of on-going erosion and support the need for action. Additionally, ongoing erosion is likely to affect the structural integrity of the existing weirs, Northshore Road bridge and the Lake Las Vegas dam, placing these structures in jeopardy within the foreseeable future.

### **1.2 Purpose**

SNWA is implementing this Lower Las Vegas Wash Stabilization Plan (Lower Wash Stabilization Plan) in coordination with the National Park Service (NPS) to protect existing infrastructure and improve water quality at SNWA's drinking water intakes. This plan presents a summary of planned capital expense activities necessary to support stabilization of the Lower Wash.

## 1.3 History

The threat of erosion damage to Northshore Road was first noted in 1969 when two concrete box culverts under the road collapsed due to channel erosion. Two larger concrete box culverts were installed and they, in turn, collapsed in July of 1975 following major storm flooding.

In 1978, the U.S. Department of Transportation, Federal Highway Administration (FHWA) provided engineering and construction assistance to the NPS, whereby box culverts were replaced with a bridge spanning the Wash. Within several years following construction, ongoing channel erosion exposed the pier and abutment foundations of the bridge. During the 1980s and 1990s, various efforts were made by the NPS and the FHWA to protect the bridge from further damage by reinforcing the channel bed and banks.

In 2002, the FHWA completed construction of three concrete channel bed weirs (known as Drops 1, 2 and 3) immediately downstream of the Northshore Road bridge to assist in protecting the bridge's foundations (see Appendix A). By 2007, the Wash had eroded an additional twenty vertical feet, causing the furthest downstream structure, the Drop 3 weir, to partially collapse. A full collapse of this facility would have potentially led to the collapse of the Drop 1 and 2 weirs and additional foundation damage to the Northshore Road bridge and the Lake Las Vegas dam. FHWA and the NPS, using construction crews from the U.S. Department of the Interior, Bureau of Reclamation (BOR), quickly completed temporary repairs to the Drop 3 weir, allowing the time to investigate and comprehensively plan for remaining required downstream erosion control.

In 2010, FHWA produced the "Lower Las Vegas Wash Planning Study". As a part of the study, FHWA concluded that without erosion mitigation, the Lower Wash channel could erode up to 100 vertical feet at the Northshore Road Bridge within the next 20 years. FHWA noted that as the Lake Mead water surface elevation declines, the rate of channel erosion would accelerate, and the cost of bridge and dam protection would significantly increase.

FHWA concluded the study by recommending that the Northshore Road bridge be relocated and that six or more rock riprap type channel weirs be installed from Northshore Road bridge to Lake Mead.

In early 2017, the NPS and the FHWA competed construction of the Drop 4 weir, the first of the additional six structures identified in the 2010 FHWA study. However, securing additional funding for completion of the remaining weirs has not been feasible due to federal budgetary constraints.

Based on current field observations, it is expected that the Drop 3 weir will need to be substantially repaired and/or replaced. The Drop 2 weir, also installed in the year 2002 and directly upstream of Drop 3, has proved to be misaligned to the Wash flow path, causing sediment to deposit upstream of the Drop 3 weir, while forcing the majority of flow to discharge over the southern half of the structure. This geometric phenomenon has caused unwanted downstream channel bed scour. Realignment of the Drop 2 weir is necessary to mitigate unwanted sedimentation and channel scour.

## **2.0 Plan Scope**

### **2.1 General Scope**

This Lower Wash Stabilization Plan covers the geographical area of the Las Vegas Wash from the western boundary of the Lake Mead National Recreational Area to the confluence of the Wash with Lake Mead. The Lower Wash Stabilization Plan is intended to describe all presently identified design, design support, construction and construction support efforts to support the stabilization of the Lower Wash. The efforts required to complete the program include the following:

- Program Initiation, Agreement Development and Data Acquisition
- National Environmental Policy Act compliance and permitting
- Survey Control and Topographic Mapping
- Geotechnical Investigation
- Access Road Design and Construction
- Weir Design and Construction
- Revegetation

### **2.2 Project Management**

A Design Manager in conjunction with a Construction Manager At-Risk (CMAR) approach is planned to be employed to complete the Lower Wash Stabilization Plan. This delivery method will allow for a programmatic approach to the design and construction, resulting in the most efficient and cost-effective completion.

### **3.0 Organization**

General information regarding the background, scope, approval process, current revenues, anticipated expenditures, prioritization, and funded Project Work Plan are presented in this Lower Wash Stabilization Plan. Specific details defining anticipated projects, project costs, implementation schedules, prioritization analysis, and other information are included as appendices to this Lower Wash Stabilization Plan.

All identified, individual projects requiring expenditure of capital funds are described in the Appendix A as Candidate Projects to this Lower Wash Stabilization Plan. A unique project number and letter designation and a location name describe each project. Channel bank protection and revegetation projects are named and project numbers are assigned with a letter designation which conforms to the name of the next downstream channel bed stabilization facility to which they are associated.

### **4.0 Plan Implementation**

#### **4.1 Cooperative Management Agreement**

In 2020, SNWA and the NPS entered into a Cooperative Management Agreement pertaining to the design and construction of planned erosion control structures in the Lower Wash. The Agreement establishes roles and responsibilities in managing the Lower Wash Stabilization Plan.

#### **4.2 Annual Plan Review**

The SNWA will annually review, reaffirm, or revise the Lower Wash Stabilization Plan, as necessary to meet the goals and requirements of the Cooperative Management Agreement. In performing the annual review, the SNWA will consult with the NPS.

SNWA's consultation with the NPS and revisions to the Lower Wash Stabilization Plan will focus upon changes in priority, planning, design, cost, funding, and/or capital needs associated with the elements of the Lower Wash Stabilization Plan. Revisions to the Lower Wash Stabilization Plan reflect the elimination of capital items previously completed or proposed revisions.



Upon revision by SNWA, the annual Lower Wash Plan update will be submitted to the SNWA Board of Directors for review and action.

## **5.0 Funding and Expenditures**

### **5.1 Funding**

**Sales Tax and Grant Funding:** The Lower Wash Stabilization Plan will be mainly funded through receipt of local sales tax revenues. The Wash currently receives four percent (4%) of a quarter cent sales tax allocated for funding water and wastewater projects in Clark County. The Lower Wash has also received capital grant funding commitments from the Southern Nevada Public Lands Management Act (SNPLMA).

**Interfund Loans:** Projected capital expenses for construction of stabilization facilities in the Wash will exceed available cash on hand generated from sales tax and grant funding. The Lower Wash Stabilization Plan will borrow money at five (5) percent interest compounded annually from SNWA's New Expansion Debt Service fund account, as available.

Funding and funding sources to-date are shown in Table 1 below:

**Table 1  
Funding-to-Date**

<b>Funding Source</b>	<b>Estimated Funding-to-Date</b>	<b>%</b>
Sales Tax	\$ 0	0
US Bureau of Reclamation Grants	\$ 0	0
SNPLMA Funding (Actuals through FY 18 and Estimate for FY19)	\$ 6,190,070	100
Miscellaneous State and Federal Grants	\$ 0	0
Other Local Agency Funding	\$ 0	0
Estimated Outstanding Interfund Loan as of June 30, 2020	\$ 0	0
<b>Total:</b>	<b>\$ 6,190,070</b>	<b>100.0</b>

## 5.2 Expenditures

Estimated capital expenditures are summarized in Table 2 below:

**Table 2**  
**Projected Expenditures**

Component	Projected Expenditures	%
Program Initiation	\$ 180,000	0.1
Survey	\$ 780,000	0.6
Access Road Design and Construction	\$ 10,260,000	8.4
Geotechnical Investigations	\$ 780,000	0.6
Weir Design and Construction	\$ 105,671,000	86.3
Revegetation	\$ 4,840,000	4.0
Interest Expense	\$ TBD	
<b>Total Projected Expenditures:</b>	<b>\$ 122,511,000</b>	<b>100.0</b>

## 6.0 Ownership

The planned Lower Wash erosion control facilities lie within the boundaries of the Lake Mead National Recreation Area, which is managed by the NPS. Consistent with the Cooperative Management Agreement, SNWA will transfer ownership of stabilization facilities, including weirs and bank protection, access roads, revegetated areas, and other facilities to the NPS when deemed appropriate.

## 7.0 Operations and Maintenance

In accordance with the Cooperative Management Agreement, the NPS will operate and maintain Lower Wash stabilization facilities in perpetuity.

# **Appendix A**

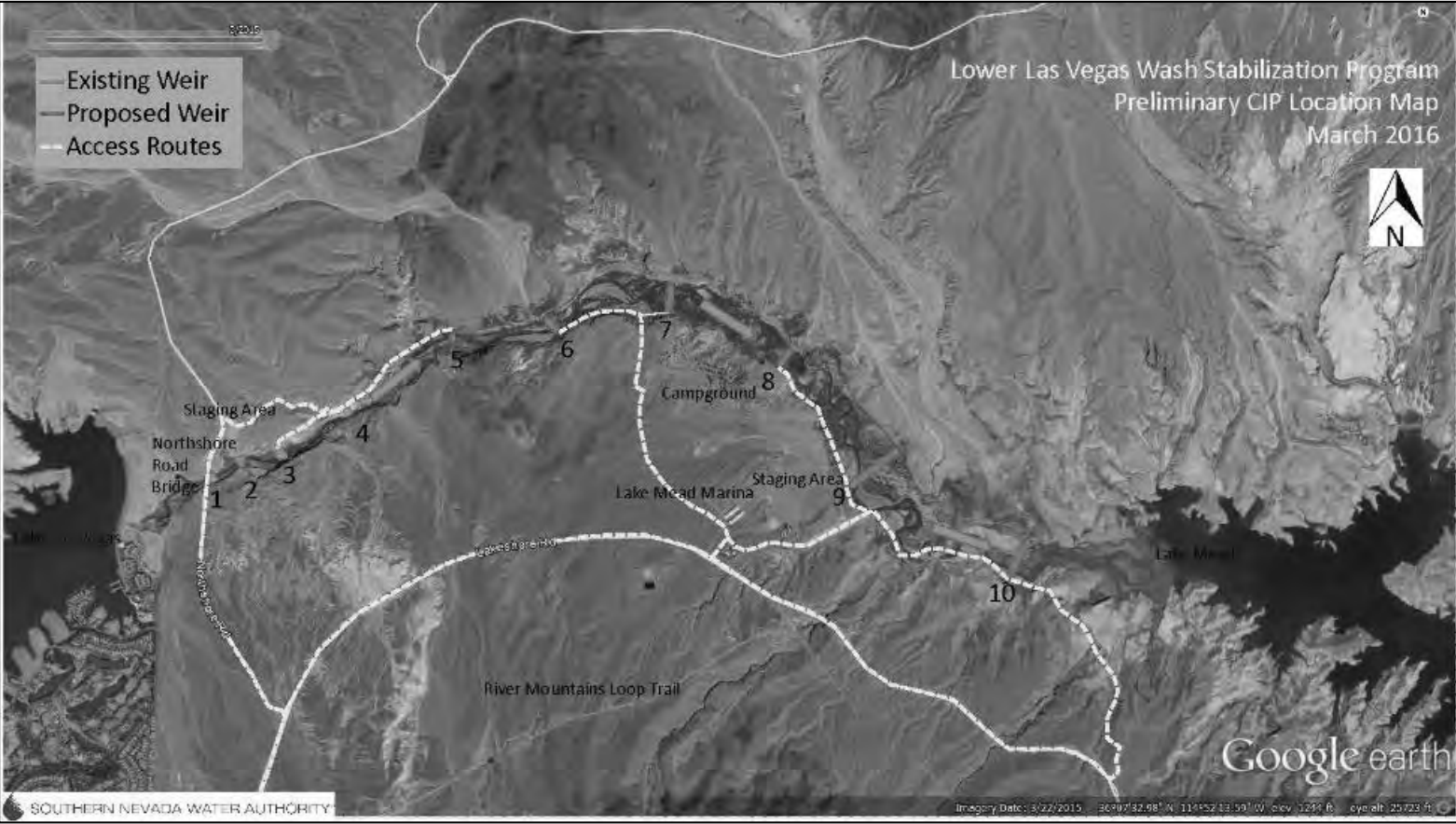
## **Program Schedule**

Lower Wash - 7 yr Schedule (w/ additional 3 yrs for Revegetation)

Activity	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Program Initiation										
Survey										
Access Roads Design and Construction										
Geotechnical Investigation										
Weir Design and Construction										
Revegetation										

## **Appendix B**

### **Location Map**



**SOUTHERN NEVADA WATER AUTHORITY**  
**BOARD OF DIRECTORS**  
**AGENDA ITEM**

October 15, 2020

**Subject:**

Cooperative Management Agreement

**Petitioner:**

Colby N. Pellegrino, Deputy General Manager, Resources

**Recommendations:**

That the Board of Directors approve and authorize the General Manager to sign a cooperative management agreement between the National Park Service and the Authority that defines project management roles for erosion control projects to be conducted by the Authority on the Lower Las Vegas Wash and accept funds in an amount not to exceed \$6,190,070.

**Fiscal Impact:**

If the above recommendation is approved, the National Park Service will provide \$6,190,070 to the Authority to apply towards construction costs of Lower Las Vegas Wash erosion control.

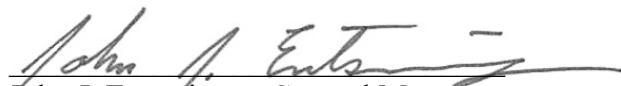
**Background:**

In 2002, three grade-control structures were constructed to combat significant channel erosion in the Lower Las Vegas Wash (Lower Wash) within the boundaries of the Lake Mead National Recreation Area. A fourth structure was completed in 2017. Continued high flows in the Lower Wash and significant drawdown of Lake Mead have exacerbated erosion problems, necessitating construction of additional structures. The Authority anticipates that up to six additional structures are needed to adequately protect the Northshore Road Bridge, and the Lake Las Vegas Dam and outlet works. In addition, the three original structures, built in 2002, need repair to ensure continued operation.

If approved, the attached cooperative management agreement will help ensure the continued success of the Lower Wash erosion control program through the cooperative efforts of the National Park Service (NPS) and the Authority. Based on the Authority's highly successful Las Vegas Wash erosion control program upstream of Lake Las Vegas, the Authority is well equipped to lead the design and construction of the additional structures on the Lower Wash. The NPS will, among other things, review and approve project design and construction and contribute \$6,190,070 in Southern Nevada Public Lands Management Act funding to the Authority's Lower Wash erosion control efforts. Once completed, NPS will own, and be responsible for the maintenance of, the structures within the Lake Mead National Recreation Area.

This agreement is being entered into pursuant to NRS 277.180 and Section 6(o) of the SNWA 1995 Amended Cooperative Agreement. The office of the General Counsel has reviewed and approved the agreement.

Respectfully submitted:



John J. Entsminger, General Manager

JJE:CNP:ZLM:KKC:JE:bc:nh

Attachments

AGENDA  
ITEM #

**6**

**COOPERATIVE MANAGEMENT AGREEMENT G14081200001  
BETWEEN  
UNITED STATES DEPARTMENT OF INTERIOR  
NATIONAL PARK SERVICE  
AND  
SOUTHERN NEVADA WATER AUTHORITY**

---

Project Title: Lower Las Vegas Wash Erosion Control within National Park Service (NPS) Boundaries

Amount of Federal Funds Obligated: \$6,190,070

**Total Period of Performance:** 03/16/2020 – 06/30/2029 for the overall scope of Erosion Control along the Lower Las Vegas Wash within NPS Boundaries, unless prior thereto it is terminated pursuant to the provisions of Article VIII hereof or of any applicable Federal or State law or regulation.

SNPLMA Round 17 N103 Project will begin performance on 3/16/20 and extend through 8/16/24, unless prior thereto it is terminated.

THIS COOPERATIVE MANAGEMENT AGREEMENT is made and entered into by and between the Southern Nevada Water Authority (SNWA), and the UNITED STATES OF AMERICA, acting through the National Park Service (NPS). Throughout this agreement, both the NPS and the SNWA may be jointly referred to as the "Parties."

#### **ARTICLE I – BACKGROUND AND OBJECTIVES**

The objective of this Cooperative Management Agreement is to allow the SNWA to work cooperatively on the design and construction of multiple erosion control structures along the Las Vegas Wash within the boundaries of the Lake Mead National Recreation Area (Lake Mead NRA) and for NPS to transfer a portion of Southern Nevada Public Lands Management Act (SNPLMA) funding to SNWA specifically for the purposes of design and construction of Drop Structure Number 5 within the Las Vegas Wash area.

#### **ARTICLE II – AUTHORITY**

- A. NPS enters into this Cooperative Management Agreement pursuant to the following authorities:

**54 U.S.C. §101703 (a and b)** – The Secretary of the Interior is authorized to enter into an agreement with a State to provide for the cooperative management of the Federal and State park areas where a System unit is located adjacent to or near a State park area, and cooperative management between the NPS and a State will allow for more effective and efficient management of the System unit and State, provided that the Secretary does not transfer administration responsibilities for any System unit. Under a cooperative management agreement, the Secretary may acquire from and provide to a State agency goods and services to be used by the Secretary and the State in the cooperative management of land.

- B. SNWA enters into this agreement pursuant to:



1. **NRS 277.180 – Interlocal Contracts**, authorizes political subdivisions of the state of Nevada “contract with any one or more other public agencies to perform any governmental service, activity or undertaking which any of the public agencies entering into the contract is authorized by law to perform” provided the governing body of such political subdivision approves the contract through official action.
2. **SNWA 1995 Amended Cooperative Agreement, Section 6(o)** permits SNWA to obtain “federal or local licenses, permits, grants, loans, or aid from any agency of the United States . . . necessary or convenient for the performance of any Conferred Function or the exercise of any of [SNWA’s] powers.”

### ARTICLE III – STATEMENT OF WORK

#### A. Background:

The Las Vegas Wash is experiencing significant channel erosion from perennial flows of storm water and wastewater effluent from the Las Vegas Valley. Scouring of the channel within the boundaries of Lake Mead NRA pose a threat to the bridge at North Shore Road as well as to infrastructure upstream of the Lake Mead NRA boundaries, specifically the Lake Las Vegas Dam and associated outlet works in Henderson, NV. In 2002, three grade control structures were constructed in the Wash to slow the flow and protect the North Shore Road Bridge. A fourth structure was completed in 2017 for the same purpose. Continued high flows, along with the rapid and significant drawdown of Lake Mead, have exacerbated the problem to a point where as many as six additional structures are needed to curtail the erosion and protect this infrastructure. In addition, the three original structures need repair to ensure continued operation.

The SNWA has substantial experience in constructing the types of erosion control structures that are proposed for the Las Vegas Wash within the Lake Mead NRA boundaries, having built 21 similar structures on the Las Vegas Wash upstream of Lake Las Vegas. The NPS does not have the allocated funding or personnel to complete the structures in the timeframe needed to ensure the protection of vital infrastructure. SNWA would be the lead agency in this project with NPS providing cooperation with available funding, regulatory compliance, and professional in-kind services.

NPS has received \$6,190,070 from the SNPLMA, which will be transferred to SNWA specifically for the construction of the erosion control structure number 5 (SNPLMA Round 17 Project N103) within the greater Las Vegas Wash area described previously.

#### B. SNWA will provide the following:

- Funding and project management for the design and construction of up to six additional erosion control structures.
- Funding and project management for the design and construction of repairs to existing erosion control structures.
- Assistance in preparing and formatting documents for SNPLMA fund reporting to the BLM for funds NPS received from SNPLMA.
- SNWA will provide reports on expenditures and deliverables as per the nomination scope for SNPLMA Round 17 Project N103 (see Appendix A), the directives outlined in

the Authorization to Expend Funds SNPLMA Funds dated 02-20-20 (see Appendix B) and the SNPLMA Project Work Plan (Appendix C).

- Preparation of compliance documents, including but not limited to, those related to the National Environmental Policy Act (NEPA), Endangered Species Act (ESA), and National Historic Preservation Act (NHPA).
- Completed design and construction of Drop structure number 5 within the Secondary period timeline.
- Maintenance Plan for completed erosion control structures.

C. NPS will provide the following:

- Review and approval, as the lead federal agency, of compliance documents for the project including, but not limited to, those related to NEPA, ESA, and NHPA.
- Grant funding from SNPLMA and other sources, if obtained, to help offset project costs.
- Locations for contractor office trailer(s), equipment staging, and other similar accommodations for construction activities.
- Project oversight and approval of the design and construction of up to six additional erosion control structures and potential repairs of existing structures.
- Management and maintenance of all erosion control structures upon completion of the project.
- All reporting and correspondence with SNPLMA program managers and the SNPLMA reporting site.

#### **ARTICLE IV – TERM OF AGREEMENT**

This Agreement shall become effective on 03/16/2020 through 06/30/2029 for the overall scope of Erosion Control along the Lower Las Vegas Wash within NPS Boundaries, unless prior thereto it is terminated pursuant to the provisions of Article VIII hereof or of any applicable Federal or State law or regulation.

SNPLMA Round 17 N103 Project will begin performance on 3/16/20 and extend through 8/16/24, unless prior thereto it is terminated.

#### **ARTICLE V – KEY OFFICIALS**

A. Key officials are essential to ensure maximum coordination and communications between the parties for the work. They are:

1. For the NPS:

- a. Audrey Asselin  
Lake Mead National Recreation Area  
601 Nevada Hwy  
Boulder City, NV 89005-2426  
audrey\_asselin@nps.gov  
(702) 293-8925
- b. Toshihiko Yoshida  
Lake Mead National Recreation Area

601 Nevada Hwy  
Boulder City, NV 89005-2426  
toshi\_yoshida@nps.gov  
(702) 293-8849

- c. Michael Boyles  
Lake Mead National Recreation Area  
601 Nevada Hwy  
Boulder City, NV 89005-2426  
michael\_j\_boyles@nps.gov  
(702) 293-8752

2. For SNWA:

- a. Zane Marshall  
Southern Nevada Water Authority  
Resources and Facilities Department  
100 City Parkway, Suite 700  
Las Vegas, NV 89106  
zane.marshall@snwa.com  
(702) 862-3713
- b. Keiba Crear  
Southern Nevada Water Authority  
Resources and Facilities Department  
100 City Parkway, Suite 700  
Las Vegas, NV 89106  
keiba.crear@snwa.com  
(702) 822-3388

- B. **Communications.** The Parties shall address any communication regarding this Agreement to the key officials.
- C. **Changes in Key Officials.** The Parties may not make any permanent change in a key official without written notice to the other party.

**ARTICLE VI – EXPENDITURE OF FUNDS**

- A. **Funding:** The NPS will provide funding to the Southern Nevada Water Authority, Attn: Accounts Receivable, 1001 S. Valley View, Las Vegas, NV 89153 in an amount not to exceed \$6,190,070 over the period of performance for the work described in Article III and in accordance with the approved budget and SNPLMA special accounts funds notice dated June 27, 2019. In addition, if NPS receives additional funds through SNPLMA or other grants for the work described in Article III, then NPS agrees to provide those funds to SNWA subject to the availability and conditions of those funds.
- B. SNWA shall request payment in accordance with the following:
  - 1. **Method of Payment:** Reimbursement through electronic fund transfer.

2. **Requesting Reimbursement:** Requests for reimbursements must be submitted via mail or email – see addresses below. Invoices should not be submitted more than once monthly. Requests for reimbursement should coincide with normal billing patterns. Each request must be limited to the amount of disbursements made for the Federal share of direct project costs and the proportionate share of allowable indirect costs incurred during that billing period.

Mail or Email Invoices to:  
Lake Mead National Recreation Area  
Attn: Budget Office  
601 Nevada Way  
Boulder City, NV 89005  
[wendy\\_foster@nps.gov](mailto:wendy_foster@nps.gov)  
(702) 293-8926

3. **Adjusting payment requests for available cash:** Funds that are available from repayments to, and interest earned on, a revolving fund, program income, rebates, refunds, contract settlements, audit recoveries, credits, discounts, and interest earned on any of those funds must be disbursed before requesting additional cash payments.
4. **Bank Accounts:** All payments are made through electronic funds transfer to the bank account identified in the U.S Treasury system.

## ARTICLE VII – PROPERTY UTILIZATION AND DISPOSITION

Any tools, equipment, material or other property supplied by an agency shall remain its own. Each agency agrees to properly maintain and safeguard each other's property. Reimbursement or replacement for loss or damage to the other agency's property shall be handled in accordance with the responsible employee's agency policy.

## ARTICLE VIII – MODIFICATION AND TERMINATION

- A. This Agreement represents the entire understanding of the Parties. No prior oral or written understanding shall be of any force or effect with respect to those matters specifically covered in this Agreement. This Agreement may be modified only in writing executed by the Parties.
- B. Either party may terminate its participation in this Agreement by providing sixty days written notice to the other party.

## ARTICLE IX –GENERAL AND SPECIAL PROVISIONS

### A. Non-Discrimination

All activities pursuant this Agreement shall be in compliance with the requirements of Executive Order 11246; Title VI of the *Civil Rights Act of 1964*, as amended, (78 Stat. 252; 42 U.S.C. §§ 2000d et seq.); Title V, Section 504 of the *Rehabilitation Act of 1973*, as amended, (87 Stat. 394; 29 U.S.C. §794); the *Age Discrimination Act of 1975* (89 Stat. 728; 42 U.S.C. §§ 6101 et seq.); and with all other federal laws and regulations prohibiting

discrimination on grounds of race, color, sexual orientation, national origin, disabilities, religion, age, or sex.

B. Lobbying Prohibition

18 U.S.C. § 1913, Lobbying with Appropriated Moneys - No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation; but this shall not prevent officers or employees of the United States or of its departments or agencies from communicating to Members of Congress on the request of any Member or to Congress, through the proper official channels, requests for legislation or appropriations which they deem necessary for the efficient conduct of the public business.

C. Anti-Deficiency Act

31 U.S.C. § 1341 - Nothing contained in this Agreement shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of appropriations made by Congress for the purposes of this Agreement for that fiscal year, or other obligation for the further expenditure of money in excess of such appropriations.

D. Employees, Consultant, Agents, Contractors and Subcontractors

1. Either party may engage consultants or contract administration personnel as subcontractors to perform, administer, or coordinate any task governed by this Agreement and the attachments hereto. Nothing in this Agreement shall be construed as preventing either party from utilizing as many employees as deemed necessary for the proper and efficient execution of this Agreement.
2. All third-party contracts and or subcontracts executed in furtherance of this Agreement shall follow any and all Federal or State laws regarding contracting.

E. Liability

1. The United States shall be liable, to the extent allowed by law, including the Federal Tort Claims Act, for claims for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the United States while acting within the scope of his or her employment, arising out of this Agreement.
2. The SNWA shall be liable, to the extent allowed by law, including the Federal Tort Claims Act, for claims for personal injuries or property damage resulting from the negligent or wrongful act or omission of any employee of the SNWA while acting within the scope of his or her employment, arising out of this Agreement.

F. Severability

If any one or more of the terms, provisions, promises, covenants or conditions of this Agreement shall to any extent be adjudged invalid, unenforceable, void or voidable, for any

reason whatsoever by a court of competent jurisdiction, each and all of the remaining terms, provisions, covenants, promises, and conditions of this Agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

G. Disputes

1. This Agreement shall be construed and interpreted, as to both validity and performance of the Parties, in accordance with the laws of the United States.
2. In the event of any dispute arising under this Agreement, the injured party shall notify the injuring party in writing of its contentions by submitting a claim therefore.

**ARTICLE X – ATTACHMENTS**

If there are attachments, they are incorporated into this Agreement. In the event of any apparent conflict between the terms of the Agreement and the attachments, the terms of the Agreement, including its designations and modifications, will prevail.

**ARTICLE XI – AUTHORIZED SIGNATURES**

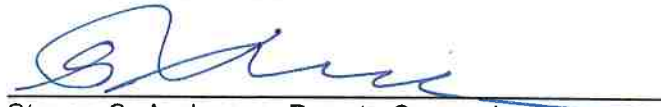
**IN WITNESS WHERE OF**, the Parties hereto have signed their names and executed this Cooperative Management Agreement.

**FOR THE SOUTHERN NEVADA WATER AUTHORITY**

\_\_\_\_\_  
**John J. Entsminger, General Manager**  
**Southern Nevada Water Authority**  
**100 City Parkway, Suite 700**  
**Las Vegas, NV 89106**

Date \_\_\_\_\_

Approved as to From

  
\_\_\_\_\_  
**Steven C. Anderson, Deputy Counsel**  
**Southern Nevada Water Authority**

Date 3/11/2020

**FOR THE NATIONAL PARK SERVICE**

  
\_\_\_\_\_  
**Margaret L. Goodro, Superintendent**  
**Lake Mead National Recreation Area**  
**National Park Service, Interior Region 8**

Date 3/5/2020

**Appendix A - Nomination Scope for SNPLMA Round 17 Project N103**

**United States Department of the Interior**  
**National Park Service**  
Lake Mead National Recreation Area



SNPLMA Round 17  
Capital Improvement Program

**Construct Grade Control Structure  
In Las Vegas Wash**

Nevada Congressional District #3

Project location  
N 36° 07' 37.65"  
W 114° 53' 34.56"

**Amount Requested \$6,190,070**

Project Manager: John S. Harris PE, PMP, Chief of Maintenance

Email address: John S. Harris@nps.gov  
Lake Mead National Recreation Area  
601 Nevada Highway  
BouldereCity, Nevada 89005  
Phone: (702) 293-8669  
Fax: (702) 293-8967

Nomination reviewed and approved by:

/s/

Lizette Richardson  
Title

May 5, 2017

Date



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### **Executive Summary:**

This project will construct a new grade control structure on the Lower Las Vegas Wash, downstream of Lake Las Vegas and southeast of Northshore Road in the Lake Mead National Recreation Area. The Lower Las Vegas Wash runs until it eventually spills into Lake Mead. Because Lake Mead has been going through a drawdown over the past 16 years, due to the extended drought conditions in the West, this has caused significant erosion and possible head-cutting of the Wash channel. There is a need for a series of grade control structures along the Wash to stabilize and control the erosion. This project will construct the 5<sup>th</sup> structure. Ultimately, if the lake levels stay this low or goes lower, additional structures will be needed.

Since the 1960's, the Wash has transitioned from an ephemeral drainage to a perennial stream due to the development of the Las Vegas Area and the resulting storm water runoff and treated wastewater effluent discharge. In 2002, Central Federal Lands Highway Division (CFLHD) designed and constructed four roller compacted concrete grade control structures downstream of the SR 147 Bridge on Northshore Road. The function of the grade control structures is to reduce flow velocities and erosion potential by flattening the channel slope and dissipating energy within the limits of the structures. Grade Control Structure No. 5 is the next structure along the Wash and is required to prevent erosion and channel degradation. Left unchecked, channel erosion below the existing grade control structures will ultimately "head-cut" (a vertical drop in grade change in the channel) and that cut will move up-stream ultimately undermining the existing grade control structures. Grade drops must be controlled or the millions of dollars invested in previous structures is in jeopardy.

**Purpose Statement:**

1. **Who:** Lake Mead National Recreation Area, National Park Service
2. **What:** Construct Grade Control Structure #5 in the lower Las Vegas Wash, downstream from existing Grade Control Structure #4.
3. **Where:** Lake Mead National Recreation Area, about 1 mile northeast of the intersection of Northshore Rd and Lakeshore Rd.
4. **Why:** Reduce erosion within Las Vegas Wash to protect bridge piers from scour damage and the threat of loss of the bridge and natural resource of the Las Vegas Wash channel.

**Project Deliverables**

## Primary deliverables

- New grade control structure in the Las Vegas Wash (5<sup>th</sup> in the series starting from the bridge on Northshore Rd.)

## Anticipated deliverables

- Reduced erosion within the Las Vegas Wash which will help reduce threat to the bridge on Northshore Rd.
- Improved access for visitors hiking along the Wash.
- Improved habitat for various bird species

## Standard deliverables

- NEPA compliance – Conduct Environmental Assessment (EA),
- NHPA consultation with Nevada SHPO – expect minimal work,
- Construction documents including design and specifications,
- Construction,
- Project closeout.

**Background Information:**

Currently, 100-150 million gallons per day of reclaimed water from the Clark County Water Reclamation District, the City of Las Vegas Pollution Control Facility and the City of Henderson Water Reclamation Facility, as well as urban and storm water from Las Vegas Valley all flow into the Las Vegas Wash, that ultimately discharges into Lake Mead. Because of these discharges, Las Vegas Wash was transformed from an ephemeral wash to a perennial stream in the late 1960's, which has caused a significant amount of channel erosion within Las Vegas Wash. In Lake Mead National Recreation Area, this channel erosion has resulted in a drop in channel grade of more than 100 ft since 2002, which seriously threatens the structural integrity of the highway bridge that crosses the Wash on Northshore Road.

Measures have been taken to slow the rate of erosion, but have not matched the magnitude of the problem. In 2002, three grade control structures were completed below the bridge and further downstream, to reduce the scouring action around the bridge pier and at the base of the abutments (constructed in 1978). However, as the lake levels dropped, the rate of erosion below the 3<sup>rd</sup> grade control structure increased drastically, threatening the grade control structure system. With the lake elevation remaining low, the need for additional grade control structures to preserve the system were identified. In 2012, the Secretary approved reallocation of funds from a Lake Mead NRA project from Round 6 to mitigate lowering lake levels to a Round 13 project to construct the 4<sup>th</sup> grade control structure, NP95. It should be noted that channel erosion has also plagued the reach of Las Vegas Wash upstream of Lake Las Vegas, where the Southern Nevada

Water Authority (SNWA) has already constructed 16 of 22 planned grade control structures to preserve the channel and protect adjacent infrastructure, much of which has largely been funded through the SNPLMA program.

Engineers from the Central Federal Lands Highway Division of the Federal Highway Administration conducted a study in 2009/2010 to identify the alternatives for long term management of the Lower Las Vegas Wash, primarily with the purpose of preserving the integrity of the bridge on Northshore Road over the Lower Las Vegas Wash. The preferred alternative was to construct six additional grade control structures downstream from the 3<sup>rd</sup> grade control structure, spaced approximately 2000 to 3000 feet apart. The other alternative is to replace the bridge with a single span bridge, eliminating the bridge piers. The alternative to do nothing was not reviewed because with erosion continuing at a rate of 3' to 5' a year, a point would be reached where the existing three grade control structures would fail and loss of the bridge would be imminent. Further erosion would also likely threaten the integrity of the Lake Las Vegas Dam. The other consideration is that continual erosion also transports sediment (150,000-460,000 cubic yards per year) into Lake Mead, degrading water quality within the Las Vegas Bay area.

**Project Timeframe:**

The NPS intends to use staff resources within the Lake Mead NRA to prepare documentation needed to complete the NEPA compliance and the consultation with the Nevada SHPO. The milestones include the following:

- Complete conceptual design
- Conduct NEPA Environmental Analysis
- Complete construction documents including plans and specifications
- Complete construction

Schedule for completion	Description of work
Year 1	<p>The NPS intends to use staff resources within the Lake Mead NRA to prepare documentation needed to complete the NEPA compliance and the consultation with the Nevada SHPO. The milestones include the following:</p> <ul style="list-style-type: none"> <li>• Complete conceptual design.</li> <li>• Conduct NEPA Environmental Analysis.</li> <li>• Complete construction documents including plans and specifications.</li> </ul>
Year 2	<ul style="list-style-type: none"> <li>• Contract preparation, solicitation and award</li> <li>• Initiate construction.</li> <li>•</li> </ul>
Year 3	<ul style="list-style-type: none"> <li>• Construction continues.</li> <li>•</li> </ul>
Year 4	<ul style="list-style-type: none"> <li>• Construction continues through full build-out.</li> <li>•</li> </ul>
Year 5	<ul style="list-style-type: none"> <li>• Final acceptance – The project will be accepted by the NPS following</li> </ul>

	<p>completion of all construction elements.</p> <ul style="list-style-type: none"> <li>• Final invoice and release of claims – Following official acceptance, the contractor will submit a final invoice and a release of claims. Deliverable will be completed upon clearing of the invoice payment.</li> <li>• Project closure – The request for project closure will be submitted following clearing of all invoices, and all financial documentation of NPS labor. The closeout package will be made available for review. Final site inspection</li> <li>• Final review of project file/ expenditures</li> <li>• Request for close out</li> <li>• SNPLMA close out of the funding authorization</li> </ul>
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### **Location of the project**

- The project is located in Lake Mead National Recreation Area just east of Lake Las Vegas, north of the North Shore Road bridge and east of North Shore Road (36° 7'37.65"N, 114°53'34.56"W).
- Located 8.7 miles from Henderson, NV and 22 miles from downtown Las Vegas, NV.
- Located in Nevada's 3<sup>rd</sup> congressional district
- Nevada – Clark County
- Users can arrive from Henderson, NV to this site in less than 15 minutes.

### **Relevant Performance Measures process**

The mission of the SNPLMA program is to “provide the public with naturally functioning, sustainable landscapes and recreation opportunities for their enjoyment, education, benefit and stewardship.” The proposed Construction of a Fifth Grade Control Structure in the Las Vegas Wash supports the SNPLMA FY2015 to FY2019 Strategic Plan goals and the anticipated performance measures.

**Goal 2.** Improve the Quality of life for all Publics in Urban and rural communities by enhancing recreation opportunities that connect people with the outdoor environment.

- 2.3 Enhance Recreational Opportunities (Responsibly improve access to recreational opportunities on Federal lands and increase the availability of local parks and trails)

Outcome: Maintain bridge pier allowing continued access on Northshore Rd without disruption.

Output: Continued use of the Las Vegas Wash trail at, above and below the area of the new grade control structure.

- 2.5 Promote Education (Improve the public's connection with natural, cultural, and recreation resources with an emphasis on youth education)

Outcome: Continue guided hikes down to the Las Vegas Wash with opportunity to explain to visitors the erosion factors occurring within the Wash.

2.6 Promote Project Connectivity and Sustainability (Integrate projects across agencies and prior rounds that are connected and sustainable within their environment)

Outcome: Actually continues similar work done by SNWA upstream of Lake Las Vegas within the Wash, much of it funded under SNPLMA. This also supports the activities within the Las Vegas Valley area under the Clark County Regional Flood Control District.

**Other Performance Measures.** Support the three values of sustainability, connectivity and community

Creates a foundation of lasting value by developing sustainable partnerships which enhance communication, coordination, and accountability among Federal, State, and local governments and other program partners)

Output: Partner with other organizations to continue to combat Las Vegas Wash erosion. Agencies involved include Federal, State and Local government, including FHWA, ACOE, Reclamation, Nevada, Clark County and Lake Las Vegas.

**Description of the implementation process**

The project will harden and construct grade control devices from concrete and large rock specifically designed and placed in the wash channel for the purpose of controlling erosion and dissipating energy. The project will be complete when the structures are complete and the stream is re-diverted back into the design channel (it will be diverted out of the design channel, constructed and then returned when complete).

**Level of Readiness for Project Implementation**

The design and construction of the project will be contracted through the NPS Denver Service Center, experts in this type of sophisticated design and construction work.

- The Agency has the manpower and resources to accomplish the project by leveraging Regional and National expertise along with our current ID/IQ contracts already in place.

**Operations and Maintenance:**

This project will reduce the O&M costs for maintaining and monitoring the Las Vegas Wash impact on the bridge pier. In past years, NPS has had to place additional riprap within the Las Vegas Wash channel to prevent head-cut erosion leading to failure of the existing grade control structures.

**Partnerships and contributed funding**

- Conceptual design locations for the grade control structures was developed by FHWA.
- The location for the grade control structure was determined by FHWA.
- The Environmental Analysis was conducted by the NPS.

**Relationship to previous phases and anticipated future phases**

There are 5 more grade control structures planned. The number of grade control structures needed is directly relational to the water level in Lake Mead. If the lake continues to drop in elevation, there will be future needs.

- The Wash diversion structures has been strongly supported by the SNPLMA program in phases 1-4, continuing this support will insure the continued protection of upstream resources which are critical to public access to the Park and connection to Lake Mead Boulevard along with Valley of Fire and north amenities such as Calville Bay, Echo Bay and more.
- This project is a stand-alone project and will be designed and constructed in this Round. The project is connected, however, to all previous and subsequent Grade Control Structures until the divergent levels are equalized or protected completely down to the level of Lake Mead (projected for 1080 this summer).

**Proposed Project Budget**

The budget for this project is \$6,190,070

**Capital Improvement Project Proposal**  
**Estimated Necessary Expenses**

Project Name:	Las Vegas Wash Grade Control Structure #5	Date:	
Agency:	National Park Service		
Project #:		Priority #	
Prepared by:	John S Harris		
Phone #	702-293-8669		%

**1 Planning, Environmental Compliance & Preconstruction Engineering and Design (Not to exceed 27% of total project costs)\***

(pre-design sketches and conceptual drawings; environmental assessment and permitting, specialist surveys/reports for archaeology, wildlife, biology, etc.; architectural and engineering analysis, design survey & field investigations; construction drawing, specifications, cost estimates, and engineering technical reports.)

\$985,150 15.9%

**2 Construction Contract Costs**

(including labor, supplies & materials, construction management, etc.; sampling/testing; site restoration; and government furnished supplies and materials.

\$5,025,000 81.2%

**3 Project Equipment**

(pg. 89 of the Implementation Agreement) SNPLMA funds can only be used for "project related necessary expenses" and SNPLMA can reimburse only for those equipment costs directly associated with completion of the approved project. Does not include office furnishings or equipment necessary for operations or maintenance of the project).

\$0

**4 Travel**

(including per diem where official travel status is required to carry out the project, such as to serve as COR, experts to review reports, etc.)

\$0

**5 Official Vehicle Use**

(pro rata cost for use of Official Vehicles when required to carry out the project)

\$3,120 0.1%

**6 Other Direct and Contracted Labor**

Agency payroll for the Contracting Officer to do project procurements, COR Project Inspector, Section 106 Consultation, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, design/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project costs.

\$176,800 2.9%

**7 FWS Consultation - Endangered Species Act**

\$0

**8 Federal Direct Labor (direct agency labor for construction, PI, CO, and COR work)**

\$0

**9 Other Necessary Expenses (See IA Appendix B-3)**

\$0

**Total Requested/Estimated Budget**

\$6,190,070 100.00%

**10 Total Estimated contributed funds**

\$0

**Total Estimated Project Value**  
*(Requested funding plus contributed funds)*

\$6,190,070

**1 Estimated project start date:**

**2 Planning, NEPA, and design phase complete**

4/1/2019

**3 Construction and build-out complete**

11/1/2021

**4 Project close-out (allow 120 days to process)**

2/1/2022

**General Comments:**



<b>1 Estimated costs for Planning, Conceptual Design, Environmental Compliance and Field Work/Surveys, NEPA &amp; Pre-construction Architectural and Engineering Design Services</b>					
	Description	Units	Unit of measure	Unit Cost	Est. Cost
Professional Contracts and Services	Contract for aerial photography/photogrammetry		Job		\$0
	Contract for boundary survey and monumentation		Job		\$0
	Contract for topographic mapping and control	1	Job	\$10,000	\$10,000
	Contract for test well drilling and pumping	1	Job	\$25,000	\$25,000
					\$0
A&E Services	Conceptual design development	1	Job	\$250,000	\$250,000
	Estimated probable cost report	1	Job	\$25,000	\$25,000
	Geotechnical reports	1	Job	\$50,000	\$50,000
	Construction specifications	1	Job	\$100,000	\$100,000
	Construction design development	1	Job	\$500,000	\$500,000
					\$0
Permitting	Building permits		ea		\$0
	Dust Permits	1	ea	\$5,000	\$5,000
	Dewatering Wells Permit	1	ea	\$10,000	\$10,000
					\$0
NEPA compliance	Archaeological surveys and reports	70	hrs.	\$73	\$5,075
	Biological/wildlife surveys and reports	70	hrs.	\$73	\$5,075
	FONSI and decision documentation		hrs.		\$0
					\$0
<b>Estimated total</b>					<b>\$985,150</b>

<b>2 Estimated Costs for Construction Contracts (Agency costs)</b>					
	Description	Units	Unit of measure	Unit Cost	Est. Cost
Construction Management Contract Services	Contract for project management services		ea		\$0
	Contract for project inspector services				\$0
	Contract for construction	1	Job	\$5,000,000	\$5,000,000
	Contract for demolition				
	Contract design and fabrication of interpretive displays/panels	1	ea	\$25,000	\$25,000
					\$0
<b>Estimated total</b>					<b>\$5,025,000.00</b>

3 Estimated costs for Equipment necessary to complete the project (purchased or leased)					
<i>Lease of equipment for the period necessary to complete the project is the preferred alternative. Purchase of heavy equipment requires justification that purchase is more cost effective over leasing over the period the equipment is needed. See the Implementation Agreement for justification. Justification must be submitted for written approval prior to purchase of equipment.</i>					
	Description	Units	Unit of measure	Unit Cost	Est. Cost
Equipment	Case 412 excavator (lease)		Mo		\$0
	Case 412 excavator (purchase - requires prior approval)		ea		\$0
	Rental dump truck		Mo		\$0
	Rental water tank for dust abatement		Days		\$0
			ea		\$0
Estimated total					\$0

4. Estimated travel (not associated with construction contract administration)					
<i>Identify by title/position and purpose of travel</i>					
	Description	Units	Unit of measure	Unit Cost	Est. Cost
Government Travel	Entity Planning/Design/Coordination meetings		ea		\$0
	Progressing meeting with A&E contractor(s)		ea		\$0
	Management oversight and coordination		ea		\$0
					\$0
Estimated total					\$0

5 Estimated costs for use of Government vehicles and equipment (FOR or hourly rate)					
	Description	Units	Unit of measure	Unit Cost	Est. Cost
Heavy Equipment and government vehicles	GSA Vehicles	6240	Hrs/Mi	\$0.50	\$3,120
	Motor grader		Hrs		\$0
	Caterpillar (specify)		Hrs		\$0
	Dump truck		Hrs		\$0
					\$0
					\$0
Estimated total					\$3,120

6 Labor costs for developing, managing and implementing contracts to complete the project.					
<i>This is an estimate of the total hours. Identify by Specialist title and role. Recommend use of Reimbursable Project Log to monitor and track agency labor charged to the project</i>					
	Description	Units	Units of measure	Unit Cost	Est. Cost
Federal and contract personnel involved with developing and executing contracts	Contracting Officer (CO)	208	Hrs	\$50	\$10,400
	Contracting Officer Representative (COR)	5200	Hrs	\$30	\$156,000
	Agency Project Manager	208	Hrs	\$50	\$10,400
	Agency Project Inspector (PI)		Hrs		\$0
	Agency Project Supervisor		Hrs		\$0
	Agency Project Engineer (s)		Hrs		\$0
					\$0
					\$0
					\$0
Estimated total					\$176,800

6 Labor costs for developing, managing and implementing contracts to complete the project.					
<i>This is an estimate of the total hours. Identify by Specialist title and role. Recommend use of Reimbursable Project Log to monitor and track agency labor charged to the project</i>					
	Description	Units	Units of measure	Unit Cost	Est. Cost
Federal and contract personnel involved with developing and executing contracts	Contracting Officer (CO)	208	Hrs	\$50	\$10,400
	Contracting Officer Representative (COR)	5200	Hrs	\$30	\$156,000
	Agency Project Manager	208	Hrs	\$50	\$10,400
	Agency Project Inspector (PI)		Hrs		\$0
	Agency Project Supervisor		Hrs		\$0
	Agency Project Engineer (s)		Hrs		\$0
					\$0
					\$0
					\$0
Estimated total					\$176,800

7 Estimated costs for consultation with the FWS for endangered species review					
Identify by title/position					
	Description	Units	Units of measure	Unit Cost	Est. Cost
Agency personnel involved	Agency Biologist(s)	1	Hrs.		\$0
	FWS Biologist(s)	1	hrs.		\$0
					\$0
					\$0
					\$0
Estimated total					\$0

**8 Federal Direct Labor for project construction***Note: Identify by title/position and role.**Recommend use of Reimbursible Project Log to track actual labor hours charged to the project.*

	Description	Units	Units of measure	Unit Cost	Est. Cost
Federal personnel performing construction of the project	Heavy Equipment Operator		Hrs		\$0
	Force Account Laborer (title/position - role)		Hrs		\$0
	Laborer 1		Hrs		\$0
	Electrician		Hrs		\$0
	Civil Engineer		Hrs		\$0
			Hrs		\$0
			Hrs		\$0
Estimated total					\$0

**9 Other Necessary Expenses***Includes the cost of permit fees or other cost not directly related to the execution of the project but a necessary expense.*

	Description	Units	Units of measure	Unit Cost	Est. Cost
See B-11 for approved expenses	Dust permit		ea		\$0
	Tortoise mitigation fee		ea		\$0
	Hazardous materials/waste disposal fee				\$0
					\$0
					\$0
Estimated total					\$0

**Capital Improvement Ranking Criteria:**

- 1. SUSTAINABILITY: The project promotes sustainability by conserving resources to ensure availability to future generations, or restores or maintains natural processes. The project will remain relevant and continue to provide a benefit in the face of changing demographics and/or environmental conditions. The project minimizes the human impact on the environment.**

- A. Conserves the quality of the outdoor environment and mitigates future potential negative impacts by conserving, preserving or protecting the natural and/or cultural resources of the project area by controlling the rate of drop in drainage elevation and by hardening those areas where the drop is designed the reduction of erosion both vertically and horizontally will preserve the natural wash channel, thus minimizing the human impact on the area.
- B. Enhances or Restores the quality of the outdoor environment by reducing or eliminating existing impacts to the natural and/or cultural resources of the project area by controlling the rate of drop in drainage elevation and by hardening those areas where the drop is designed the reduction of erosion both vertically and horizontally will preserve the natural wash channel, thus reducing or eliminating impacts to the natural resources and improving the quality of the outdoor environment.
- C. Project will enhance stewardship and shared support for the O&M over the life of the project. This is ultimately the primary purpose of the project to preserve the O&M costs of the upstream structures (the bridge and the dam for Lake Las Vegas) by mitigating the erosion potential of the drainage processes and thereby curtailing the inevitable undercutting of the existing assets.
- D. Project employs sustainable or "green construction" practices using recycled or renewable materials, improves energy efficiency or utilizes low-maintenance products in construction. Conserves resources during the manufacture and life-cycle of the project. This project will utilize natural rock/stone and some concrete in its construction. Manmade products such as steel and cabling will be used primarily as construction measures for controlling of the stream during construction and will be removed prior to final implementation leaving only the sustainable/natural construction materials.
- E. Las Vegas Wash provides a quality habitat for many species of birds and plants. By slowing the water flow within the Wash channel, an abundance of water type plants, native to the Mohave Desert water areas are flourishing, creating an excellent environment for birds. Adding another grade control structure enhances that quality environment and habitat.

- F. Reducing erosion also reduces the amount of sediment flowing into Lake Mead. The continual flow and deposition of sediment into Las Vegas Bay has a detrimental effect on the water quality within Lake Mead.

**2. CONNECTIVITY: The project provides recreational opportunities that link population centers, recreation facilities and natural landscapes. It encourages people to meaningfully connect with their natural environment, thus helping them appreciate and care for the environment.**

- A. Project provides access and/or amenities to previously undeveloped recreation areas and/or new recreation opportunities to enjoy public lands. This fifth structure will construct new access to previously inaccessible areas of the wash downstream of the 4th structure. This and future structures will likely complete new public access down to the lake where the lower elevation has provided inaccessible barriers to public travel that far.
- B. Project improves access to previously developed recreation areas and sites on the public lands and/or upgrades site amenities. This structure will continue to improve the access to the existing 4<sup>th</sup> structure from the upper public parking lot and continue it down stream.
- C. Project contains an outreach and education component to improve public awareness and engage the public in the conservation and protection of the surrounding natural environment through the use of resource interpretation (information signage, kiosks, educational programs, etc.). This project will include public signing/improved kiosks and improved road-front access to the public trail-head.
- D. There are many visitors hiking along the Wash. The environment, as a bird habitat, makes it ideal for visitors who enjoy observing birds to hike along the Wash. Each grade control structure provides an enhanced area for birding. With the water levels so low in Lake Mead, there has been a distinct change in visitor usage in the Las Vegas campground. Present day campers spend have transitioned to more of those who appreciate the active birds within the Wash area.

**3. COMMUNITY: This project provides outdoor recreation opportunities to improve the quality of life, especially for underserved communities. It conserves or restores the functionality, resiliency and integrity of biological communities. The project encourages partnerships, which in turn also builds community.**

- A. Project provides new or enhances existing recreation opportunities for under-served or under-represented communities that cannot be addressed or met with current funding by I improving access to the resources in an area frequented by the Las Vegas day-use community which is heavily proportioned to the underserved who do not have the resources for long-distance vacationing.

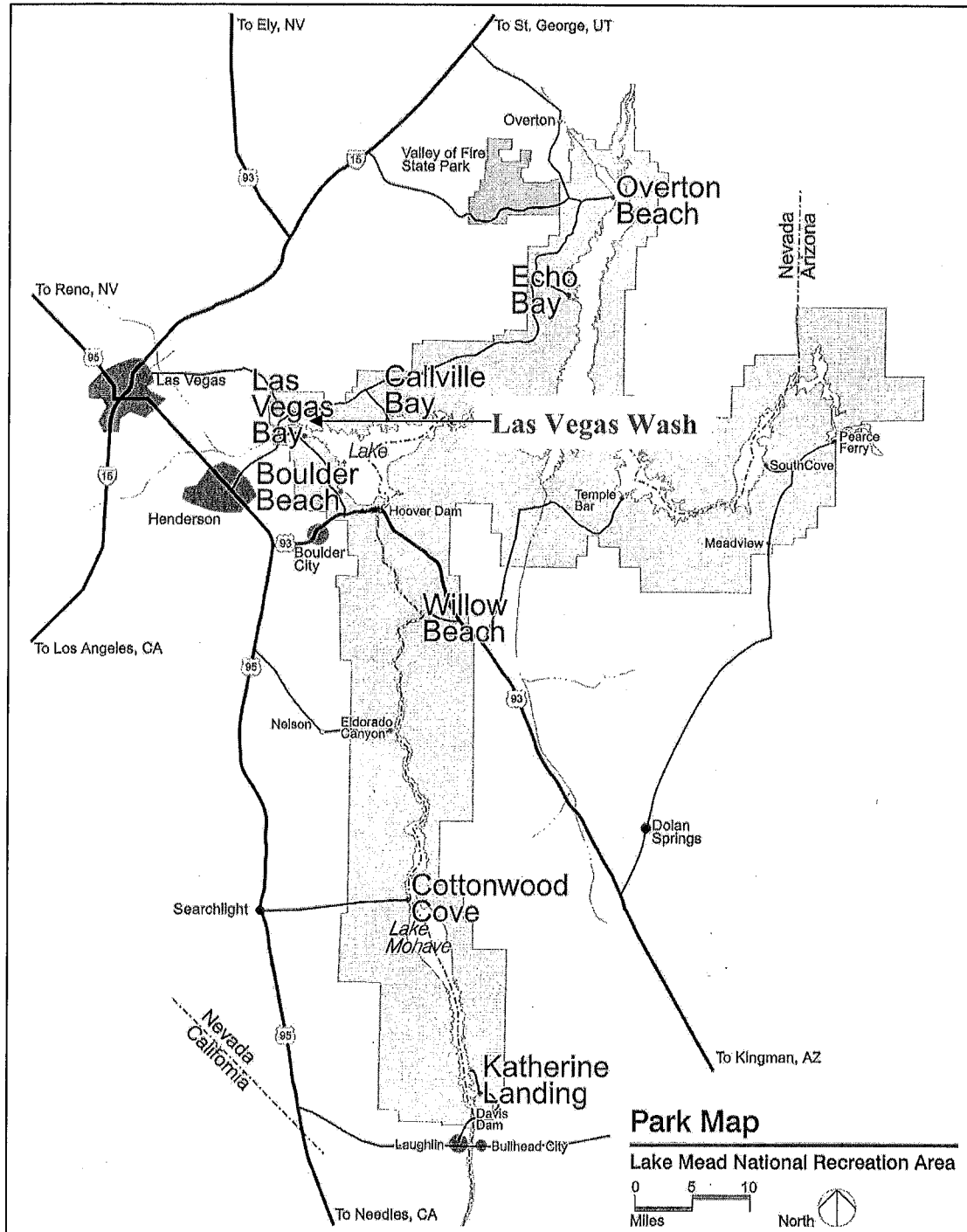
- B. Project has identified committed non-SNPLMA sources of funding or in-kind contribution for the development of the project when the Phase 4 structure was taken on by the Federal Highways program, managed by them and significantly augmented while under their management.
- C. Project has identified committed non-SNPLMA sources of funding or in-kind contribution for the implementation of the project. The Park will be completing NEPA and will perform PM work on the project.

**4. MAINTENANCE AND OPERATIONAL COSTS.**

- A. O&M costs will be reduced by alleviating flood scouring repairs which is routinely embraced by our O&M crews under severe and emergency conditions. Ultimately, left unchecked, the progression of head-cutting and erosion would out-pace any O&M efforts and work up to the bridge and dam structures. Certainly the latest structure #4 is at immediate risk if downstream grades are left un-checked.
- B. Constructing the 5<sup>th</sup> grade control structure will reduce erosion within the Las Vegas Wash. It will have an immediate impact on lowering the risk of losing the Northshore Rd bridge crossing the Wash. The bridge is not only needed by visitors to enjoy Lake Mead NRA, but it is also necessary for ranger staff, as well as medical provider to quickly respond to accidents, both on the highway, as well as locations like Callville Bay.
- C. Over the past 6 years, the NPS has enlisted the support from the Reclamation crew to place additional riprap within the Las Vegas Wash downstream from grade control structure no. 3 to keep channel cutting from destroying it. This grade control structure (no. 5) will reduce the need for additional riprap placement by virtually eliminating the grade cutting that has been occurring.

## Maps and Figures

### Project Area Map – Lake Mead National Recreation Area



Project is in the Boulder Beach Campground on Lakeshore Rd  
36° 7'37.65"N, 114°53'34.56"W



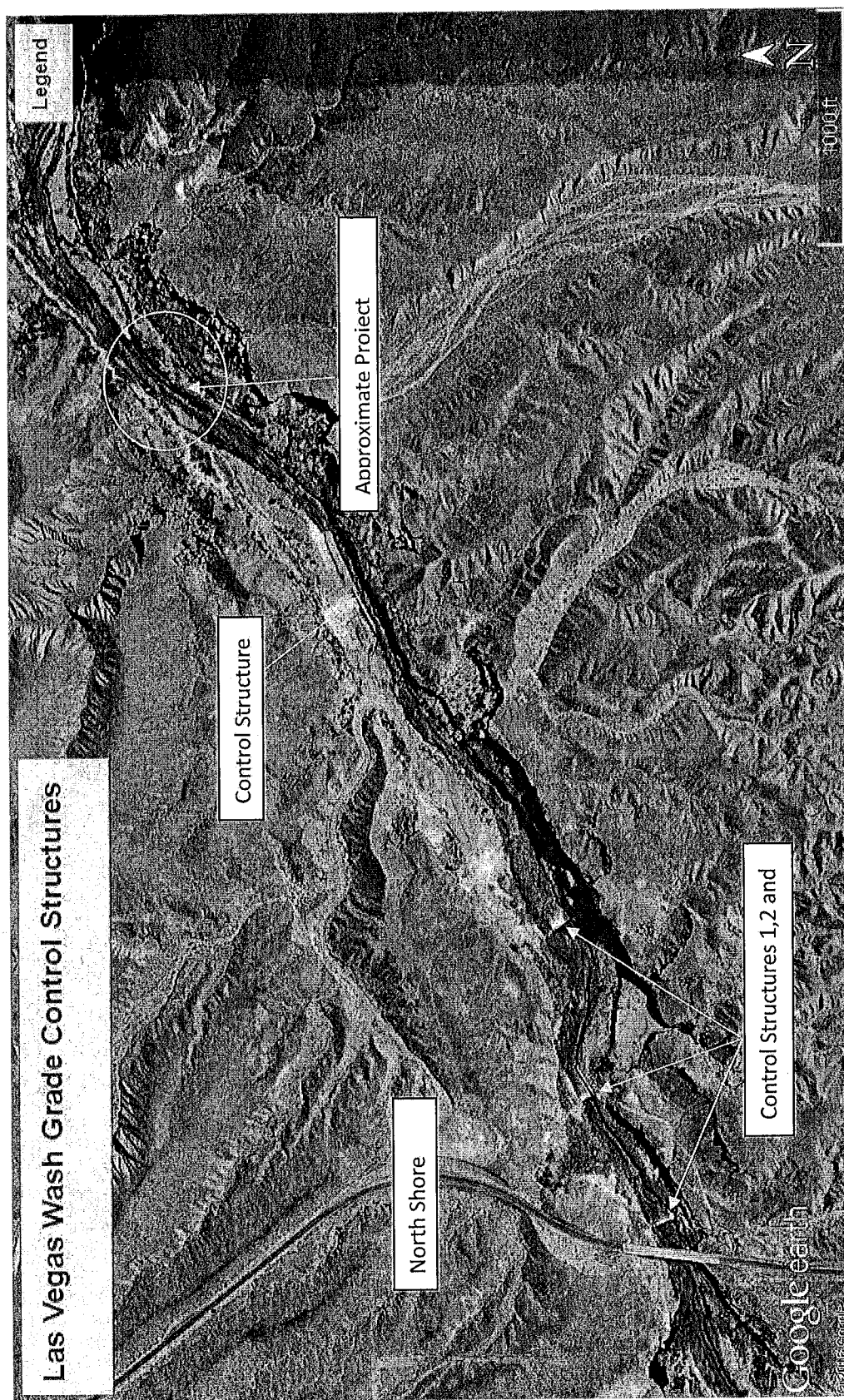


Figure 1: Location of Grade Control Structure No. 5

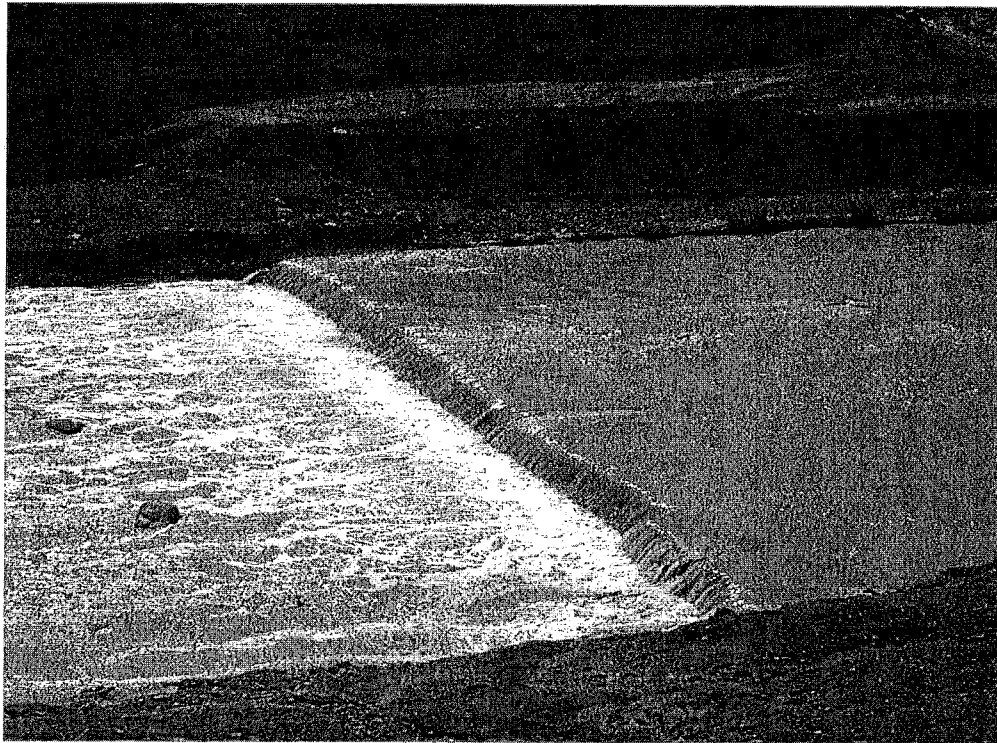


Figure 2: Grade Control Structure No. 3 in 2012 (after construction)

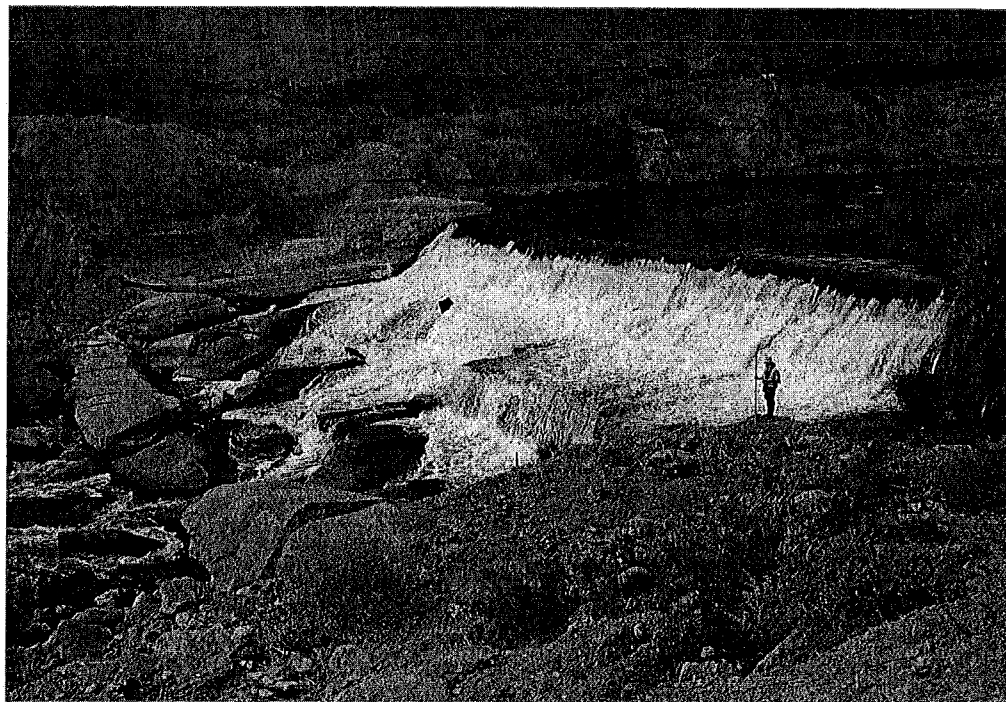


Figure 3: Grade Control Structure No. 3 in 2006

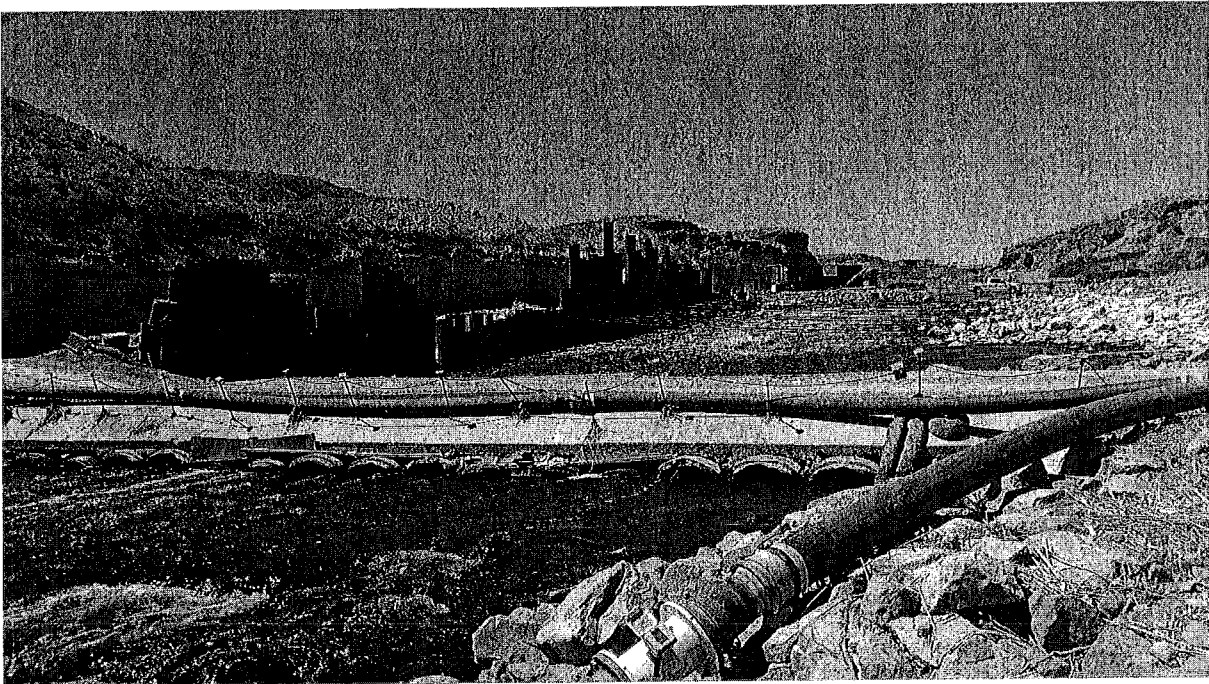


Figure 4: Grade Control Structure No. 4 April 2017

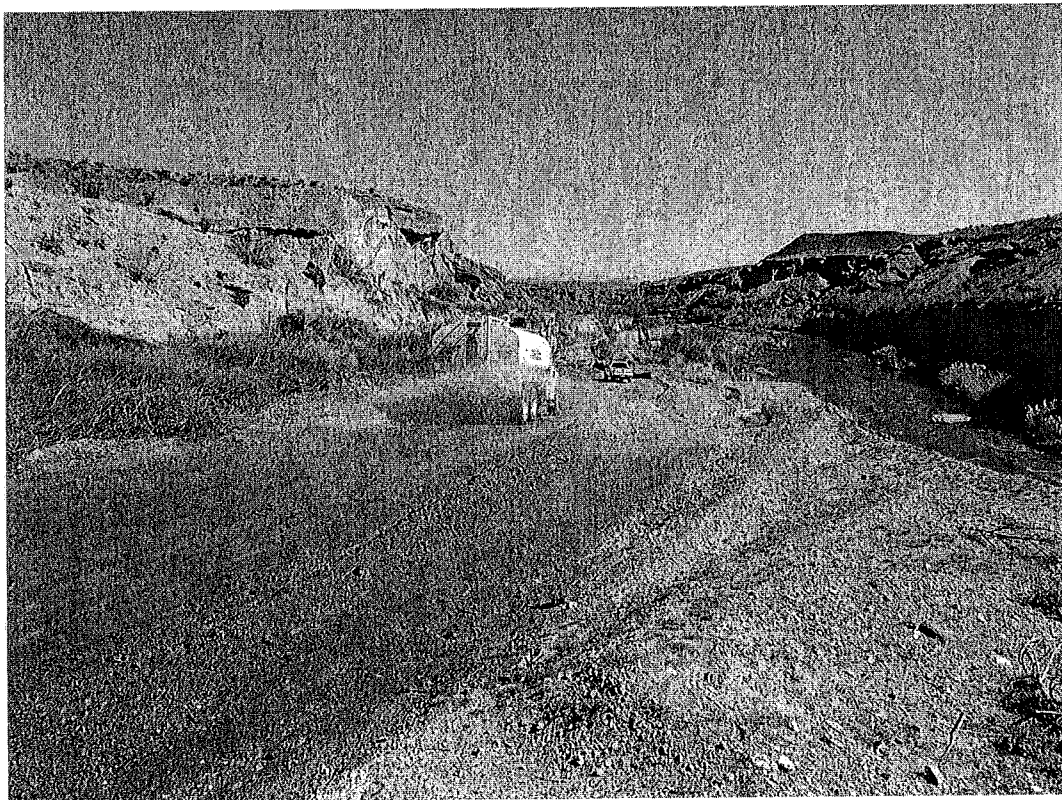


Figure 5: Grade Control Structure No. 4 prior to construction





Figure 6: Northshore Bridge and Grade Control Structures No. 2 and No.



**Appendix B** - Authorization to Expend SNPLMA Project Funds dated 02-20-20 for SNPLMA Round 17 Project N103





# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Southern Nevada District Office  
Las Vegas Field Office  
4701 N. Torrey Pines Drive  
Las Vegas, Nevada 89130  
<http://www.blm.gov/nv>

In Reply Refer To:  
2710 (NVS0055)

**FEB 20 2020**

To: Margaret L. Goodro  
Superintendent, National Park Service, Lake Mead National Recreation Area

From: Michelle Leiber *ML* 2/20/2020  
SNPLMA Capital Improvement Program Manager

Subject: Authorization to Expend Southern Nevada Public Land Management Act (SNPLMA)  
Project Funds by 1151 Direct Transfer and Confirmation of Period of Performance

SNPLMA Implementation Agreement Date: November 20, 2018	Check appropriate box: <input checked="" type="checkbox"/> Original Notification <input type="checkbox"/> Modification Notification #: _____
Under the authority of: <input checked="" type="checkbox"/> DOI Secretary Decision Document Approving Project Dated <u>May 20, 2019</u> <input checked="" type="checkbox"/> PL 105-263, SNPLMA <input checked="" type="checkbox"/> Other: <u>OMB Circular A-11</u>	
<b>CONSTRUCT GRADE CONTROL STRUCTURE IN LAS VEGAS WASH</b> SNPLMA Project #N103 SNPLMA Priority #17-11  The purpose of this notification is to initiate direct transfer funding to accomplish the purpose of the subject SNPLMA capital improvement project as described in the nomination approved by the Secretary of the Interior on 5/20/2019, and further detailed in the SNPLMA project workplan. The purpose of the project is to construct grade control structure #5 in the lower Las Vegas Wash, downstream from existing grade control structure #4 for the purpose of reducing erosion within Las Vegas Wash to protect bridge piers from scour damage and the threat of loss of the bridge and natural resources of the Las Vegas Wash channel.	

**SECRETARY REQUIREMENTS FOR EXPENDITURE OF FUNDS:** The U.S. National Park Service, Lake Mead National Recreation Area has requested a direct transfer of funds for the SNPLMA project described above. Upon approval by the Secretary of the Interior, SNPLMA funds are appropriated for the approved project and are to be expended in conformance with appropriation law including the "purpose statute" and "necessary expense" doctrine. The Secretary's decision document includes requirements applicable to Federal projects as a prerequisite before funds are "authorized for expenditure." These requirements are:

1. adherence to all requisite procedures . . . in the SNPLMA Implementation Agreement;



2. work plans that include a schedule of periodic expenditures reflecting logical phases of the project and "associated deliverables."
3. "...projects will be implemented within the time frame specified in the project nomination, with appropriate time allocated for project startup and closeout as agreed upon in the work plan approved by the BLM. The Executive Committee will determine an appropriate process to approve exceptions to the timeframes specified in the nomination where special circumstances warrant a time extension. Such extension requests should be considered exceptions to the expected practice of timely implementation of projects and therefore limited in number and scope."

Funding is provided by the BLM to the recipient agency as requested on a quarterly basis. Supplemental or off-cycle transfers will be done on a case-by-case basis, and subject to the agencies compliance with the aforementioned requirements. This direct transfer documentation will be updated each time the subject project is modified through an approved decision memorandum for a change in time, scope, or funding.

Total funding made available through the Secretary's decision and other processes contained in the SNPLMA Implementation Agreement is:

a.	Total Amount Approved and Allocated to the Project:	\$ 6,190,070.00
b.	Approved Contingency:	\$0.00
c.	Total Allocation not to exceed:	\$ 6,190,070.00

Period of Performance: Start Date: 2/20/2020 End Date: 2/20/2025

**THE BLM CONFIRMS THAT:**

- The recipient Federal agency has complied with the three Secretarial requirements listed above.
- The BLM accepts the project workplan submitted for the subject project as (1) accurately reflecting the purpose of the project and project deliverables as described in the nomination and approved by the Secretary, (2) containing target start and end dates for deliverables that will lead to completion of the project within the timeframe specified in the nomination and the period of performance identified above, and (3) containing sufficient detail in terms of tasks and subtasks for the deliverables.
- Funds will be provided through the direct transfer process outlined in the SNPLMA Implementation Agreement.
- Because the Secretary's requirements have been met and the workplan has been accepted by BLM as confirmed above, funds are, therefore, authorized for expenditure upon the agency's receipt of funds from the U.S. Treasury.

- The start date of the project's period of performance is the date the BLM SNPLMA Division signs the transfer request document and submits the request to the BLM's National Operations Center.
- The end date of the project's period of performance is derived from the duration of the project as contained in the project nomination submitted by the agency and approved by the Secretary of the Interior.
- The BLM will diligently carry out its oversight duties and responsibilities for implementation of the SNPLMA program.
- The BLM shall adhere to all policies, procedures, and business rules in the SNPLMA Implementation Agreement as currently written and as revised from time to time by approval of the Executive Committee, and in compliance with other applicable Federal laws and regulations.

**BY ACCEPTING THE PROJECT FUNDS THE RECIPIENT AGENCY AGREES:**

- To adhere to all policies, procedures, and business rules in the SNPLMA Implementation Agreement as currently written and as revised from time to time by approval of the Executive Committee.
- To implement and complete the project as described in the project nomination approved by the Secretary of the Interior generally in the manner detailed in the project workplan accepted by BLM.
- To the accuracy of the amount of funding available outlined above.
- That the period of performance accurately reflects the duration of the project as described in the approved nomination and reflected in the project work plan.
- To report quarterly and annually on the project accomplishments as approved in the SNPLMA work plan.
- To provide documentation that 95% of all previous funding transferred is spent or a justification is provided, before requesting additional transfer funding.
- That all funds will be expended in accordance with appropriations law and regulations, including the necessary expense doctrine, for those costs necessary to complete the project as described in the nomination approved by the Secretary subject to any approved changes in scope, as appropriate.
- That funds will be expended in accordance with Federal Acquisition Regulations (FAR), agency contracting and construction policies; in the case of projects in the Lake Tahoe Basin with the agency "Memorandum of Understanding concerning SNPLMA Lake Tahoe Restoration Projects"; and, in the case of environmentally sensitive land acquisitions, with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (PL-91-646), and all other applicable agency real property acquisition policies.
- That obligations and expenditures which are determined by the SNPLMA Division not to meet the criteria of a "necessary expense" or which otherwise do not adhere to appropriations law and regulations will be rejected and any funds already reimbursed, transferred, drawn down, or charged directly to the SNPLMA special account subactivity for inappropriate charges must be returned by the agency/entity.
- Unresolved disputes between the BLM SNPLMA Division and the recipient agency over whether or not a specific cost qualifies as a "necessary expense" to complete the project

or whether a specific cost adheres to appropriations law and regulations will be resolved by the SNPLMA Executive Committee.

- Agency funds expended after Secretarial approval, but prior to meeting the three requirements in the Secretary's decision memo, including approval of the project workplan are not reimbursable by SNPLMA.
- As of January 1, 2011, no obligations and expenditures for project work will be reimbursed by SNPLMA if created or incurred outside the period of performance defined in this memorandum or defined in an approved time extension, if the project is in on-hold status, or if the obligation or expenditure is for work outside the purpose of the project in advance of approval of a change of scope. If any transferred funds are obligated or expended by the agency prior to obtaining an approved time extension, project reactivation, or change in scope, the amount so expended must be offset by other allowed expenses, offset against future transfer needs, or be returned to the SNPLMA special account by the agency.
- Requests for time extensions will be submitted at least 120 days in advance of the expiration date of the period of performance to ensure a decision regarding the request can be processed prior to the expiration date.
- Requests for use of contingency funds for projects in Round 10 and beyond, if provided for in the Secretarial decision, will be requested at least 120 days in advance of the agency's need to obligate or expend funds in accordance with the requirements in the IA.

**Appendix C - N103 Approved SNPLMA Project Work Plan dated 02/20/20**



## SNPLMA Project Work Plan

National Park Service  
Capital Improvements

17-11: Construct Grade Control Structure in Las Vegas Wash(N103)

APPROVED

Michelle Leiber, SNPLMA Program Manager  
2/20/2020



Del #	Deliverable	Target Start Date	Target End Date
1	Funding Instrument (1151 Direct Transfer Authorization)	08/01/2019	02/21/2020

Comments:

Authorization to Expend SNPLMA Project Funds by 1151 Direct Transfer and Confirmation of Period of Performance

Responsible  
Entity

National Park Service

Task #	Task Description	
1	Issue Special Account Funds Notice	SNPLMA
Comments:	The Special Accounts Funds Notice official funding notification date is 8/1/2019, which initiated a one-year time frame to begin working on Round 17 approved projects.	
Task #	Task Description	National Park Service
2	Work plan data entry in SMART	
Comments:	Draft work plan entry in SMART for SNPLMA Program Manager review and approval	
Task #	Task Description	National Park Service
3	Request to Initiate	
Comments:	Submit request to initiate on letterhead signed by authorized officer to the SNPLMA Program Manager	
Task #	Task Description	National Park Service
4	Initial Project Site Visit	
Comments:	Coordinate initial project site visit and/or meeting with the SNPLMA Program Manager	
Task #	Task Description	SNPLMA
5	Work Plan Approval	
Comments:	SNPLMA Program Manager review and approve agency/entity work plan	
Task #	Task Description	SNPLMA
6	Execute Funding Instrument (1151 Direct Transfer Authorization)	
Comments:	SNPLMA Program Manager executes the Authorization to Expend SNPLMA Project Funds by 1151 Direct Transfer and Confirmation of Period of Performance	

2	Conceptual Design/Public Scoping	04/01/2020	09/01/2021
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Comments:

Concept, Compliance, Geotech and Survey Services. This deliverable is not funded by SNPLMA; NPS still needs to track and report progress.

Responsible  
Entity

National Park Service

Task #	Task Description	
1	Planning and scoping	National Park Service
Comments:		
Task #	Task Description	National Park Service
2	Environmental Assessment and Compliance	
Comments:		

**APPROVED**

## SNPLMA Project Work Plan

National Park Service

Capital Improvements

17-11: Construct Grade Control Structure in Las Vegas Wash(N103)

Sub Task #	Sub Task Description	National Park Service
1	Conduct 106 consultation in order to obtain public input	
Comments		

Sub Task #	Sub Task Description	National Park Service
2	Coordinate NEPA & State Historic Preservation Office (SHPO) requirements	
Comments		

Sub Task #	Sub Task Description	National Park Service
3	Finalize NEPA / Record of Decision	
Comments		

Task #	Task Description	National Park Service
3	Topographic Survey and Geotechnical Investigation	
Comments:		

Sub Task #	Sub Task Description	National Park Service
1	Topographic and Land Survey	
Comments		

Sub Task #	Sub Task Description	National Park Service
2	Geotechnical Investigation	
Comments		

Task #	Task Description	National Park Service
4	Conceptual Design Phase	
Comments:		

### Design Drawings

09/01/2021 06/01/2022

Comments:

Design Development, Construction Documents, and Finalize Permits. This deliverable is not funded by SNPLMA; NPS still needs to track and report progress.

Responsible

Entity

National Park Service

Task #	Task Description	National Park Service
1	Procurement/Contracting Engineering Services Award	
Comments:		

Task #	Task Description	National Park Service
2	Engineering, Specifications and Cost Estimate 50%	



**APPROVED****SNPLMA Project Work Plan**

National Park Service

Capital Improvements

17-11: Construct Grade Control Structure in Las Vegas Wash(N103)

Comments:

Task # Task Description

3 Permitting

National Park Service

Comments: Coordination with ACOE

Sub Task # Sub Task Description

1 401 Permit Submittal

Comments

National Park Service

Sub Task # Sub Task Description

2 404 Permit Submittal

Comments

National Park Service

Task # Task Description

4 Engineering, Specifications and Cost Estimate 90%

National Park Service

Comments:

Task # Task Description

5 Engineering, Specifications and Cost Estimate 100%

National Park Service

Comments:

Task # Task Description

6 Prepare Statement of Work for Construction Contract Solicitation

National Park Service

Comments:

4	Cooperative Management Agreement with SNWA	02/01/2020	03/30/2020
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Comments:

No SNPLMA funds transfer needed at this time

Responsible  
Entity

National Park Service

Task # Task Description

1 Draft of Coop Management Agreement between NPS and SNWA

National Park Service

Comments:

Task # Task Description

2 NPS Solicitor Review

National Park Service

Comments:

Task # Task Description

3 SNWA Review

Southern Nevada  
Water Authority

Comments:

Task # Task Description

4 Agreement Signed

National Park Service





**APPROVED****SNPLMA Project Work Plan**

National Park Service

Capital Improvements

17-11: Construct Grade Control Structure in Las Vegas Wash(N103)

Comments: Provide copy of agreement to SNPLMA Program Manager

5	Contract for Engineering/Construction	06/01/2022	12/01/2022
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## Comments:

Award of Construction Contract through SNWA. NPS plans to have the full amount of the SNPLMA project funds to help pay for the construction of the weir structure. The cost breakdown by percentage to cover the cost of the weir structure is SNWA 66% (\$12,197,130) and SNPLMA 34% (\$6,190,070). NPS must provide BLM/SNPLMA at least five business days advance notice for SNPLMA funds transfer request for obligating funds for contracting.

Responsible

Entity

National Park Service

Task # Task Description

1 Solicitation for Construction Contract

Southern Nevada  
Water Authority

Comments: Per cooperative agreement with NPS, the SNWA will solicit for construction contract

Task # Task Description

2 Award construction contract

Southern Nevada  
Water Authority

Comments: Per cooperative agreement with NPS, the SNWA will award the construction contract

6	Construction of Project	12/01/2022	02/01/2024
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## Comments:

Work to be completed by SNWA; NPS is still responsible for SNPLMA reporting requirements and progress

Responsible

Entity

National Park Service

Task # Task Description

1 Project Kick-off Meeting

Southern Nevada  
Water Authority

Comments: Send invite to SNPLMA Division

Task # Task Description

2 Construction of Access Road

Southern Nevada  
Water Authority

Comments:

Task # Task Description

3 Construction of Temporary Diversion Channel

Southern Nevada  
Water Authority

Comments:

Task # Task Description

4 Construction of Weir Structure

Southern Nevada  
Water Authority

Comments:

Task # Task Description

5 Revegetation of Site

Southern Nevada  
Water Authority

Comments:

7	Final Construction/Build-out	03/01/2024	09/01/2024
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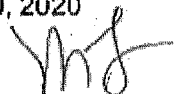
## Comments:

SNWA Final inspection and acceptance by NPS. Close out with Southern Nevada Water Authority.

Responsible

Entity

National Park Service



**APPROVED****SNPLMA Project Work Plan**

National Park Service

Capital Improvements

17-11: Construct Grade Control Structure in Las Vegas Wash(N103)


Task #	Task Description	Southern Nevada Water Authority
1	Site Completion	
Comments:		
Task #	Task Description	National Park Service
2	Final Site Inspection with NPS	
Comments:		
Task #	Task Description	National Park Service
3	Final Submittal of Final Invoices	
Comments:		
Task #	Task Description	National Park Service
4	Final Review of Files by NPS	
Comments:		

8	Project Closeout	10/01/2024	02/20/2025
Comments:	Allow 90 to 120 days after completion of Deliverable #7 to prepare and submit completion reports, request final site inspection and file review, update SMART database to show deliverables #2 through deliverable #7 are 100 percent complete. Includes time for the SNPLMA Division to process final modification to the authorization to expend SNPLMA project funds for close out. (This period is for administrative costs to prepare close out packages, reconcile expenditures, and does not include any labor for construction.)		
		Responsible Entity	National Park Service

Task #	Task Description	National Park Service
1	Notice of project completion to BLM/SNPLMA for file review/site visit scheduling	
Comments:	All contracts or obligations must be closed and unexpended funds de-obligated prior to requesting review of the financial record. Request final site inspection by SNPLMA to verify compliance with the approved work plan and project completion. Disapproved/disallowed expenditures must be adjusted off prior to approval for close out.	
Task #	Task Description	National Park Service
2	Prepare final close out report (Refer to IA, Part 2 – Appendix J(F))	
Comments:		

Sub Task #	Sub Task Description	National Park Service
1	Update SMART to show deliverables 100% complete	
Comments:		

Sub Task #	Sub Task Description	National Park Service
2	Complete annual accomplishments and performance measures in SMART	
Comments:		



**APPROVED**

## SNPLMA Project Work Plan

National Park Service

Capital Improvements

17-11: Construct Grade Control Structure in Las Vegas Wash(N103)

Sub Task #	Sub Task Description	National Park Service
3	Complete quarterly reporting in SMART	
Comments		

Sub Task #	Sub Task Description	National Park Service
4	Complete final form SF-425 "Federal Financial Report" and cost worksheet	
Comments	NPS will need to have completely closed out the cooperative agreement with SNWA; ensure all final federal financial reports are completed consistent with the cooperative agreement and filed; to include notice of completion or similar.	

Task #	Task Description	National Park Service
3	Submit final close out to BLM/SNPLMA	
Comments:	Refer to IA Part Two, Appendix J - Part F for "request for project close out" - which must be submitted on agency letterhead and signed by the agency authorized officer and include required attachments.	

Task #	Task Description	SNPLMA
4	BLM/SNPLMA Final "Official" Project Closeout	
Comments:	The SNPLMA Program Manager (PM) will approve the final modification to the authorization to expend SNPLMA project funds and submit same to the BLM National Operations Center to de-obligate unexpended funds, if any, and close out the project. The PM will update the financial database to officially record project completion and close out, and update SMART to reflect this deliverable as 100 percent complete.	

