

**ABILITY TO FINANCE REPORT**  
*to the*  
**SOUTHERN NEVADA WATER AUTHORITY**



SOUTHERN NEVADA WATER AUTHORITY®

June 27, 2011

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# Ability to Finance Report *to the* Southern Nevada Water Authority

*Submitted to:*

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Department of Conservation & Natural Resources  
Division of Water Resources  
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*Pertaining to:*

Groundwater Applications 54003 through 54021 in  
Spring Valley  
and  
Groundwater Applications 53987 through 53992 in  
Cave, Dry Lake, and Delamar Valleys

*June 2011*

Prepared by:

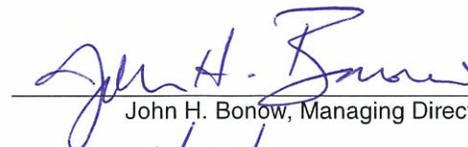
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Date



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## I. HISTORICAL OVERVIEW OF THE SNWA

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## I. HISTORICAL OVERVIEW OF THE SNWA

The Southern Nevada Water Authority (the “SNWA” or “Authority”) has engaged the services of Hobbs, Ong & Associates, Inc. and Public Financial Management, Inc. (individually, “Hobbs, Ong” and “PFM” and combined, the “Consultants” or “Consultant Team”) to prepare a report (the “Report”) to address issues relating to SNWA’s plan to import water from Lincoln and White Pine Counties in Nevada to Clark County (the “County”) (the “Importation Project” or “Project”). More specifically, the Report will address the SNWA’s ability to finance the Project as required by Nevada Revised Statutes 533.370(1)(c)(2). The Report will provide background information regarding the SNWA, its financial structure and considerations and opinions relating to its ability to finance the Project. It should be noted that Official Statements for prior bond issues of the debt issued on behalf of SNWA, including debt issued through the Las Vegas Valley Water District (“LVVWD” or the “District”) and the Clark County and State of Nevada Bond Banks, were part of the background source documents for this Report.

### OVERVIEW

The SNWA is a regional agency created in 1991 by seven governmental water and wastewater agencies in the County (the “Members”) to address water issues, develop additional water supplies, and build and operate water treatment and transmission facilities on a regional basis. The SNWA operates pursuant to a 1995 Amended Cooperative Agreement among the Members (the “Cooperative Agreement”), effective as of January 1, 1996. The SNWA is operated by the District through an Amended Facilities and Operations Agreement (the “Operations Agreement”), effective April 20, 2010.

The SNWA business model is centered on the provision of services to Members (see list below) who provide water and wastewater service to their customers. The Cooperative Agreement embodies the desire of the Members to create an organization to address mutual needs in managing the water resources of the metropolitan areas of Southern Nevada. The SNWA develops water resources and provides water to the purveyor Members who, in turn, deliver it to their customers. With the responsibility of SNWA to provide water to the purveyor Members came the responsibility to ensure that the water supply is reliable, safe and sufficient. Given the critical nature of the charge, significant effort was directed to the formative agreements that became the formal structure of the SNWA business model. The Cooperative Agreement mentioned above, the Transfer Act (hereinafter defined), the Operations Agreement and the Master Bond Repurchase Agreement (the “MBRA”) are the significant agreements which embody the enabling authority for the SNWA to conduct its business affairs.

Upon its formation, the SNWA assumed all assets and liabilities of the Southern Nevada Water System (“SNWS”) from the Colorado River Commission (“CRC”) and purchased all SNWS assets formerly owned by the federal government.

The SNWA is governed by a seven-member board of directors, composed of one director from each member agency (the “SNWA Board”). SNWA Board members serve at the will of the appointing Member. The Member Entities are the following:

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





### A. Financing history over the past five years

#### DEBT OBLIGATIONS

##### General

With the charge to the SNWA to address water issues, to develop additional water supplies, and to build and operate regional water treatment and transmission facilities, there are significant costs associated with the performance of these responsibilities. Substantial debt has been required to fund the capital investments in the infrastructure necessary to deliver sufficient and safe water supplies to the purveyor Members.

Over time, the SNWA has relied upon its authority pursuant to the Nevada Constitution and laws of the State of Nevada, particularly the County Bond Law, Nevada Revised Statutes (the "NRS") 244A.011 through 244A.065, and the Local Government Securities Law, NRS 350.500 through 350.720, inclusive, as amended, and Chapter 348 of the NRS, to issue debt in various forms to address its capital funding needs.

With its standing as a Municipality for purposes of the statutes governing finance and debt issuance, the SNWA has issued general obligation debt (additionally secured with pledged revenues) through the Clark County Bond Bank, the State of Nevada Bond Bank and the Las Vegas Valley Water District. The SNWA has also borrowed from the State of Nevada Revolving Fund in the form of low-interest loans for certain qualifying projects. The Authority has also entered into long-term leases and utilized other financing mechanisms.

As of May 26, 2011, the SNWA had outstanding financing obligations in the amount of \$3.1 billion, of which, more than 99% of the payments support the general obligation debt issued on behalf of the SNWA by the entities mentioned in the preceding paragraph. The table on page 3 lists each series of outstanding bonds as well as the issuer of each series. The debt issued on SNWA's behalf has been given strong credit ratings and has been well received by bond investors, as evidenced by the low average true interest cost of the bond issues. It is anticipated that similar debt instruments, primarily general obligation bonds (additionally secured with pledged revenues), will be issued on the SNWA's behalf as part of the financing plan for the Importation Project.

##### SNWA Outstanding Debt and Financing History in Last Five Years

The SNWA had outstanding debt in the amount of \$3.1 billion on May 26, 2011. The Authority issued \$2,465,690,000 in bonds (including \$400,000,000 in short-term Commercial Paper Notes) within the last five years either for new construction funding or to refinance prior debt obligations.

The table on the following page includes the outstanding debt of the SNWA as of May 26, 2011.





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## SNWA Obligations (As of May 26, 2011)

	Issue Date	Original Amount	Principal Outstanding
<b>SNWA Superior Obligations <sup>(1)</sup></b>			
CRC Refunding Bonds, Series 2003C	09/01/03	\$ 21,515,000	\$ 155,000
CRC Refunding Bonds, Series 2005H	04/13/05	36,130,000	31,620,000
CRC Refunding Bonds, Series 2006D	07/18/06	111,840,000	92,290,000
<u>CRC Refunding Bonds, Series 2010B</u>	<u>06/24/10</u>	<u>7,405,000</u>	<u>7,405,000</u>
Total SNWA Superior Obligations			\$131,470,000
<b>Parity Obligations</b>			
<u>MBRA Parity Obligations <sup>(2)</sup></u>			
Refunding Bonds, Series 2003B	01/01/03	250,000,000	188,880,000
Refunding Bonds, Series 2008B	02/19/08	171,720,000	116,335,000
Water Bonds, Series 2009A (Taxable BABS)	08/05/09	90,000,000	90,000,000
Water Bonds, Series 2009B	08/05/09	10,000,000	10,000,000
Water Bonds, Series 2009C (Taxable BABS)	12/23/09	348,115,000	348,115,000
Water and Refunding Bonds, Series 2009D	12/23/09	71,965,000	71,965,000
<u>Refunding Bonds, Series 2011A</u>	<u>05/26/11</u>	<u>58,110,000</u>	<u>58,110,000</u>
Total MBRA Parity Obligations			883,405,000
<u>Commercial Paper Notes <sup>(3)</sup></u>	<u>various</u>	<u>400,000,000</u>	<u>400,000,000</u>
Total MBRA Obligations			\$1,283,405,000
<u>SNWA Parity Obligations <sup>(4)</sup></u>			
SNWA Water Revenue Bonds, Series 2001	06/01/01	250,000,000	37,385,000
SNWA Water Revenue Bonds, Series 2002	11/01/02	200,000,000	69,730,000
CRC Refunding Bonds, Series 2005I	04/13/05	65,300,000	60,330,000
SNWA Water Revenue Refunding Bonds, Series 2006	06/13/06	242,880,000	237,225,000
SNWA Water Revenue Bonds, Series 2006	11/02/06	604,140,000	590,015,000
SNWA Water Revenue Bonds, Series 2008	07/02/08	400,000,000	385,960,000
<u>SNWA Revenue Refunding Bonds, Series 2009</u>	<u>11/10/09</u>	<u>50,000,000</u>	<u>50,000,000</u>
Total SNWA Parity Obligations			<u>1,430,645,000</u>
Total Parity Obligations			\$2,714,050,000
<b>Subordinate Obligations <sup>(5)</sup></b>			
SNWA Bonds, Series July 1, 1998 (State Bond Bank)	07/09/98	300,000,000	21,350,000
State of Nevada Safe Drinking Water Loan #1	09/01/99	12,269,695	6,609,291
State of Nevada Safe Drinking Water Loan #2	06/29/01	10,000,000	6,092,363
SNWA Rfdg. Bonds, Series 2005F (State Bond Bank)	05/17/05	249,365,000	225,855,000
<u>State of Nevada Loan <sup>(6)</sup></u>	<u>10/22/09</u>	<u>2,750,000</u>	<u>2,750,000</u>
Total			<u>\$ 262,656,654</u>
<b>Other Subordinate Obligations <sup>(7)</sup></b>			
Subordinate Lien Revenue Bonds (Clean Renewable Energy), Series 2008	<u>07/30/08</u>	<u>6,900,000</u>	<u>5,520,000</u>
<b>TOTAL OUTSTANDING SNWA OBLIGATIONS</b>			<b><u>\$3,113,696,654</u></b>

Footnotes on the following page.





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- (1) Payable from the SNWA Water Revenues prior to any payments under the MBRA. No SNWA Water Revenues become subject to the MBRA until all SNWA operation and maintenance expenses and all obligations with respect to the SNWA Superior Obligations are satisfied.
- (2) SNWA Water Revenues are available to fund the MBRA after the SNWA Superior Obligations are paid.
- (3) Payable from the SNWA Pledged Revenues after payment of the MBRA Parity Obligations. The District is authorized to have a maximum of \$400,000,000 in Notes outstanding at any time; all of which are outstanding.
- (4) The SNWA Parity Obligations are not payable from the MBRA, but do have a lien on the SNWA Water Revenues that is on parity with the lien thereon of the MBRA.
- (5) Payable from SNWA Water Revenues after payment of the SNWA Parity Obligations.
- (6) This loan is authorized in a maximum amount of \$2,750,000; not all of that amount has yet been drawn.
- (7) The SNWA Clean Renewable Energy Bonds (“CREBS”) have a lien on the SNWA Water Revenues that is subordinate to the lien thereon of the MBRA and the SNWA Parity Obligations and on parity with the obligations listed as “Subordinate Obligations” in the table above. The CREBS also are secured with a lien on the quarter-cent Sales Tax (discussed in Section 1D below).

*Source: Pages 54-55 of the Official Statement of the Las Vegas Valley Water District, Nevada, General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds Series 2011A (Taxable)*





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The debt issued in the last five years is comprised of bonds in the amount of \$119,245,000 issued through the State of Nevada; \$1,149,910,000 through the LVVWD; \$1,297,020,000 through the Clark County Bond Bank; \$2,750,000 in State Revolving Fund loans; and \$6,900,000 issued as revenue bonds by the SNWA. The following table summarizes the immediately preceding outstanding debt table by the issuer of the debt.

<b>SNWA Obligations By Credit Type</b>			
(As of May 26, 2011)			
	Issue Date	Original Amount	Principal Outstanding
<b>State of Nevada (Self Supporting)</b>			
CRC Refunding Bonds, Series 2003C	09/01/03	\$ 21,515,000	\$ 155,000
CRC Refunding Bonds, Series 2005H	04/13/05	36,130,000	31,620,000
CRC Refunding Bonds, Series 2005I	04/13/05	65,300,000	60,330,000
CRC Refunding Bonds, Series 2006D	07/18/06	111,840,000	92,290,000
CRC Refunding Bonds, Series 2010B	06/24/10	7,405,000	7,405,000
SNWA Bonds, Series July 1, 1998 (State Bond Bank)	07/09/98	300,000,000	21,350,000
<u>SNWA Rfdg. Bonds, Series 2005F (State Bond Bank)</u>	<u>05/17/05</u>	<u>249,365,000</u>	<u>225,855,000</u>
Subtotal			\$439,005,000
<b>LVVWD (Self Supporting)</b>			
Refunding Bonds, Series 2003B	01/01/03	250,000,000	\$ 188,880,000
Refunding Bonds, Series 2008B	02/19/08	171,720,000	116,335,000
Water Bonds, Series 2009A (Taxable BABS)	08/05/09	90,000,000	90,000,000
Water Bonds, Series 2009B	08/05/09	10,000,000	10,000,000
Water Bonds, Series 2009C (Taxable BABS)	12/23/09	348,115,000	348,115,000
Water and Refunding Bonds, Series 2009D	12/23/09	71,965,000	71,965,000
Refunding Bonds, Series 2011A	05/26/11	58,110,000	58,110,000
<u>Commercial Paper Notes</u>	<u>various</u>	<u>400,000,000</u>	<u>400,000,000</u>
Subtotal			\$1,283,405,000
<b>Clark County (Bond Bank Bonds)</b>			
SNWA Water Revenue Bonds, Series 2001	06/01/01	250,000,000	\$ 37,385,000
SNWA Water Revenue Bonds, Series 2002	11/01/02	200,000,000	69,730,000
SNWA Water Revenue Refunding Bonds, Series 2006	06/13/06	242,880,000	237,225,000
SNWA Water Revenue Bonds, Series 2006	11/02/06	604,140,000	590,015,000
SNWA Water Revenue Bonds, Series 2008	07/02/08	400,000,000	385,960,000
<u>SNWA Revenue Refunding Bonds, Series 2009</u>	<u>11/10/09</u>	<u>50,000,000</u>	<u>50,000,000</u>
Subtotal			\$1,370,315,000
<b>State of Nevada, State Revolving Fund Loans</b>			
State of Nevada Safe Drinking Water Loan #1	09/01/99	12,269,695	\$ 6,609,291
State of Nevada Safe Drinking Water Loan #2	06/29/01	10,000,000	6,092,363
<u>State of Nevada Loan</u>	<u>10/22/09</u>	<u>2,750,000</u>	<u>2,750,000</u>
Subtotal			\$15,451,654
<b>Southern Nevada Water Authority Revenue Bonds</b>			
Subordinate Lien Revenue Bonds (Clean Renewable Energy), Series 2008	07/30/08	6,900,000	5,520,000
Subtotal			\$5,520,000
<b>TOTAL OUTSTANDING SNWA OBLIGATIONS</b>			<b><u>\$3,113,696,654</u></b>



### Types of Debt Obligations

The SNWA can issue the following types of debt (definitions in this section of the Report relating to debt instruments are sourced to a white paper discussion provided by SNWA's bond counsel, Swendseid and Stern, entitled *Municipal Obligations in Nevada*):

#### Double Barreled General Obligation Bonds

"Double Barreled" Bonds in Nevada are revenue-backed general obligation debt securities. These are securities to which the full faith and credit and taxing power of the issuer is pledged for debt repayment, but the debt payments are expected to be paid from a designated revenue source other than *ad valorem* (property) taxes. While the taxing power secures the bonds, it would only be used for the bonds in a situation where the revenue generation mechanism becomes impaired and sufficient revenues are not available to make debt payments.

The Clark County Bond Bank, the State of Nevada Bond Bank and the Las Vegas Valley Water District have all issued debt on behalf of SNWA.

#### *County Bond Bank*

The County's Bond Bank Program was established in 2000 pursuant to the County Bond Law and the Bond Bank Ordinance for the purpose of financing a municipal bank to assist local governments in the County ("Municipalities") by funding "Lending Projects" for which the County can provide a Municipality a lower rate of interest or more efficient borrowing, provided that the project does not expose the County to any significant financial risk, as determined by the Board of County Commissioners in approving the Lending Project. The Bond Bank Ordinance states the County's policy that all County general obligations issued for a Lending Project shall pledge the revenues received from the Lending Project and that such bonds be issued as general obligation bonds additionally secured with pledged revenues. The Bond Bank may purchase revenue obligations of the SNWA that are payable from the SNWA water system or one or more of the Municipalities that are members of the SNWA, or any combination of the two. To use the County Bond Bank the SNWA would issue its SNWA Bond to the County evidencing the obligation to make debt payments.

The Bond Bank Ordinance establishes standards to be met prior to the County's purchase of Municipal Securities; standards vary according to the type of Municipal Security purchased. With respect to revenue obligations, the County must determine (i) that there is a rate maintenance covenant contained in the Municipal Securities to be delivered by the SNWA which requires the establishment and maintenance of rates and charges for water that will be sufficient to make payments on the Municipal Securities; (ii) that one or more of the Municipalities that are members of the SNWA, including at least the largest purveyor of water in the County, is contractually committed to pay the rates and charges required under the rate maintenance covenant described above; and (iii) that the revenue obligations do not otherwise pose significant credit risks to the County. The County Bond Law and the Bond Bank Ordinance establish a County debt limitation of 15% of assessed valuation for general obligation bonds issued through its Bond Bank. Based on the County's March 2011 final assessed valuation of \$57,879,246,265 as reported by the State of Nevada Department of Taxation, the debt limitation is \$8,681,886,940.

#### *State Bond Bank*

The State of Nevada has established a Bond Bank which offers an essentially similar borrowing option as that offered through the Clark County Bond Bank to qualified Municipalities in the State of Nevada. There are separate debt limitations for the State's general obligations and for bonds issued through the State's Bond Bank. Pursuant to NRS 350A.150(2), \$1.8 billion is the maximum principal amount of bonds that the State may have outstanding through the Bond Bank.

#### *Las Vegas Valley Water District*

At the request of the SNWA, the District may issue District general obligation bonds and loan the proceeds to the SNWA for the purpose of funding or refunding capital additions and expansions to the SNWS. The District has no legal debt limitation. As a practical matter, the District's policy is to pay debt service on its bonds from revenue sources rather than property taxes. Accordingly, the District's ability to issue and pay debt service is a function of its capital needs and revenues generated from District facilities.

The SNWA has entered into the Master Bond Repayment Agreement ("MBRA") with the District that places an irrevocable lien on the "SNWA Pledged Revenues" which are the revenues received by the District from the SNWA pursuant to the MBRA. The SNWA Pledged Revenues are paid by the SNWA from revenues derived from the operation of the SNWS, including all revenues, charges or fees for commodities and services rendered by or through the SNWS, including, without limitation, connection fees, tap fees, flat fees, meter charges and all other





## I. HISTORICAL OVERVIEW OF THE SNWA

charges made for services, water or other commodities furnished by the SNWS and all other amounts received directly or indirectly, under the Cooperative Agreement (the “SNWA Water Revenues”). As with its agreements with the County and State Bond Banks, the MBRA requires the SNWA to pay the District an amount sufficient to pay all debt service on the bonds or other obligations issued on behalf of the SNWA by the District.

The chart to the right illustrates the application of the SNWA Water Revenues, including the relative lien priority of the SNWA Superior Obligations, the Senior Lien Obligations and the SNWA Parity Obligations. In addition, the SNWA has issued the SNWA Clean Renewable Energy Bonds (“CREBS”) that have a subordinate lien on the SNWA Water Revenues.

### Revenue Bonds

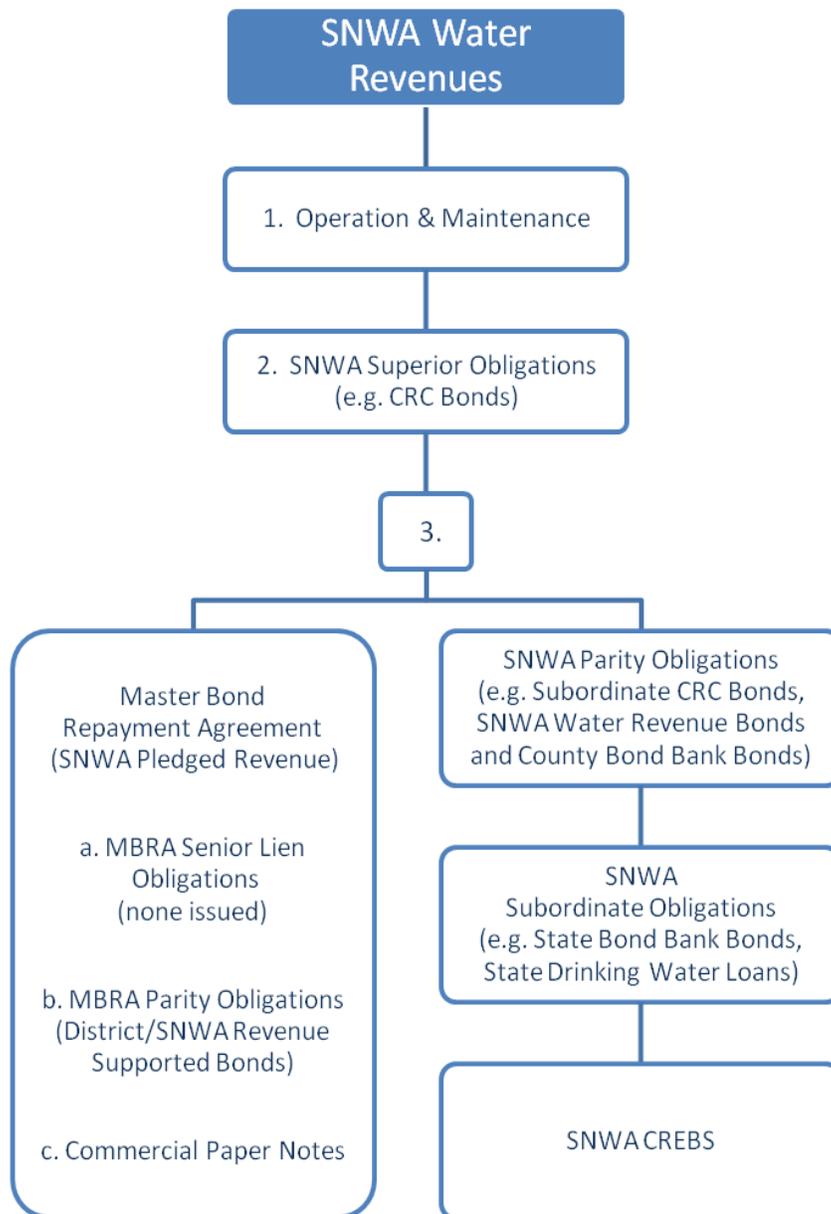
“Revenue” bonds are obligations secured only by a designated “special” fund, which consists of monies from a designated source not derived from *ad valorem* (property) taxation.

### Refunding Bonds

The Authority can pursue an economic refunding of an outstanding obligation by taking advantage of lower interest rates or refund debt as a means to manage cash outflow.

### Other Debt Instruments

Through the authorizations previously discussed above, the SNWA is able to issue and make use of certain other debt instruments. These include the issuance of medium-term bonds which must have a final maturity of ten years or less; notes which are generally the same as bonds but have shorter maturities; installment purchases which include agreements for the purchase of real or personal property by installment or lease as described in NRS 350.800, and certificates of participation (“COPs”) which are evidences of a right to participate in payments made under a lease or installment purchase agreement by a municipality. The SNWA can also enter into loans with the Nevada State Revolving Fund and other lenders, but as with all of SNWA’s debt obligations, it must first satisfy various financial tests and meet certain financial standards as discussed later in this Report before entering into additional debt obligations.



Source: Page 17 of the Official Statement of the Las Vegas Valley Water District, Nevada, General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds Series 2011A (Taxable)





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### B. Market performance of SNWA debt

In this section, this Report addresses how the SNWA's long-term debt issuances have been received by investors in the tax-exempt and taxable municipal debt markets. This section examines the various factors commonly used to evaluate the success of a municipal bond pricing which affect the spread, or difference, between the average yield on the SNWA's bonds and the rate of the Municipal Market Data General Obligation bond index ("MMD") of the maturity equivalent to the bond issue's average life in years ("spread to MMD"). The credit rating of an entity or of a bond issue's credit enhancer is the most influential factor in the spread to MMD. A higher credit rating indicates a lower perceived credit risk, and investors require a lower (risk) premium from the issuer, so bond yields are lower for highly rated credits. Other factors such as market supply, state income tax laws and general economic factors can affect how an entity's bonds price in the primary market. Stronger market demand generally results in a lower borrowing cost for an issuer.

The average weighted yield on a bond issue, which equates to an issuer's cost of capital, is measured by the True Interest Cost ("TIC"). The table below summarizes results of bond transactions of the LVVWD and the Clark County Bond Bank over the last five years. In the table below, the "Spread to MMD" of each issue is the difference between the "TIC" and the "Equivalent MMD Rate" columns. Since both the LVVWD and Clark County Bond Bank are rated in the AA category (discussed in the following section), the bonds are compared to the MMD bond index for AA rated general obligation bonds. The Equivalent MMD Rate is the rate from the AA General Obligation ("G.O.") MMD yield curve for each issue's Weighted Average Maturity ("WAM") in reference to the specific sale date. For example, the Equivalent MMD Rate for the LVVWD Refunding Bonds 2008A is the rate on the 2025 maturity (the pricing year of 2008 plus a WAM of 17 years) of the AA G.O. MMD yield curve. The following table demonstrates that bonds secured by the SNWA pledged revenues and the issuer's credit has been well received by investors. Bonds supported by SNWA's revenues have historically priced well.

Series	Sale Date	Rating(s)	Issue Amount	TIC	WAM	Equivalent MMD Rate*	Spread to MMD
<b>Las Vegas Valley Water District Tax-Exempt LTGO Bonds:</b>							
Refunding Bonds, Series 2008A	1/29/2008	Aa1/AA+	\$ 190,760,000	4.502%	17	4.150%	35 bps
Refunding Bonds, Series 2008B	1/29/2008	Aa1/AA+	\$ 171,720,000	3.929%	11	3.550%	38 bps
Water Bonds, Series 2009B	7/23/2009	Aa2/AA+	\$ 10,000,000	4.972%	15	3.880%	109 bps
Water & Refunding Bonds, Series 2009D	12/10/2009	Aa2/AA+	\$ 71,965,000	4.372%	13	3.270%	110 bps
Water & Refunding Bonds, Series 2010B <sup>x</sup>	5/25/2010	Aa1/AA+	\$ 31,075,000	4.426%	18	3.670%	76 bps
<b>Clark County Bond Bank Tax-Exempt LTGO Bonds:</b>							
Refunding Bonds, Series 2006 <sup>+</sup>	5/26/2006	Aa1/AA+	\$ 242,880,000	4.621%	15	4.320%	30 bps
Water Revenue Bonds, Series 2006 <sup>+</sup>	10/6/2006	Aa1/AA+	\$ 604,140,000	4.434%	19	4.140%	29 bps
Water Revenue Bonds, Series 2008	6/4/2008	Aa1/AA+	\$ 400,000,000	4.631%	19	4.370%	26 bps
Water Revenue Bonds, Series 2009	10/22/2009	Aa1/AA+	\$ 50,000,000	4.503%	13	3.540%	96 bps





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Series	Sale Date	Rating(s)	Issue Amount	TIC	WAM	Equivalent Treasury Rate**	Spread to Treasury ^
<b>Las Vegas Valley Water District Taxable LTGO Build America Bonds:</b>							
Water Bonds, Series 2009A	7/23/2009	Aa2/AA+	\$ 90,000,000	7.191%	29	4.530%	266 bps
Water Bonds, Series 2009C	12/10/2009	Aa2/AA+	\$ 348,115,000	7.146%	26	4.450%	270 bps
Water & Refunding Bonds, Series 2010A <sup>x</sup>	5/25/2010	Aa1/AA+	\$ 75,995,000	5.775%	26	4.070%	171 bps
<b>Las Vegas Valley Water District Taxable LTGO Bonds:</b>							
Water & Refunding Bonds, Series 2011A	5/11/2011	Aa2/AA+	\$ 58,110,000	4.879%	10	3.160%	172 bps

\*The AA G.O. MMD rate from the specified sale date for the maturity equivalent to the weighted average maturity of the issue.

\*\* The Treasury Bond rate from the specified sale date for the maturity equivalent to the weighted average maturity of the issue.

+ Indicates series are insured.

^ Per the industry standard, taxable Build America Bonds are compared to the (taxable) U.S. Treasury yield curve.

<sup>x</sup> Not backed by SNWA pledged revenues.

"LTGO" = Limited Tax General Obligation

Please note that the State of Nevada issued CRC Refunding Bonds, Series 2010B on behalf of SNWA. These bonds had a TIC of 3.695%. SNWA does not expect to issue additional bonds through the State or the State's Bond Bank.

In 2009, the SNWA priced two series of tax-exempt Limited Tax General Obligation ("LTGO") bonds through the LVVWD and one through the Clark County Bond Bank. The spreads on these bonds were uncharacteristically higher than the Authority had experienced in the past. A year before the Authority had priced three series of LTGO bonds with spreads to AA MMD ranging from 26 basis points to 38 basis points. The tax-exempt LTGO bonds priced in 2009 had spreads ranging from 96 basis points to 110 basis points. The increase can be attributed to the overall widening of credit spreads in the market. Following the 2008 financial crisis, the financial markets experienced a "flight to quality" as investors drifted to highly rated securities and demanded a higher risk premium for lower rated credits. In addition to the deterioration of the overall market, the LVVWD bonds which priced in July 2009 were assigned a lower credit rating from Moody's of "Aa2" down from "Aa1." Figure 1 below demonstrates the jump in credit spreads for AA G.O. credits compared to AAA G.O. credits from 2008 to 2009.

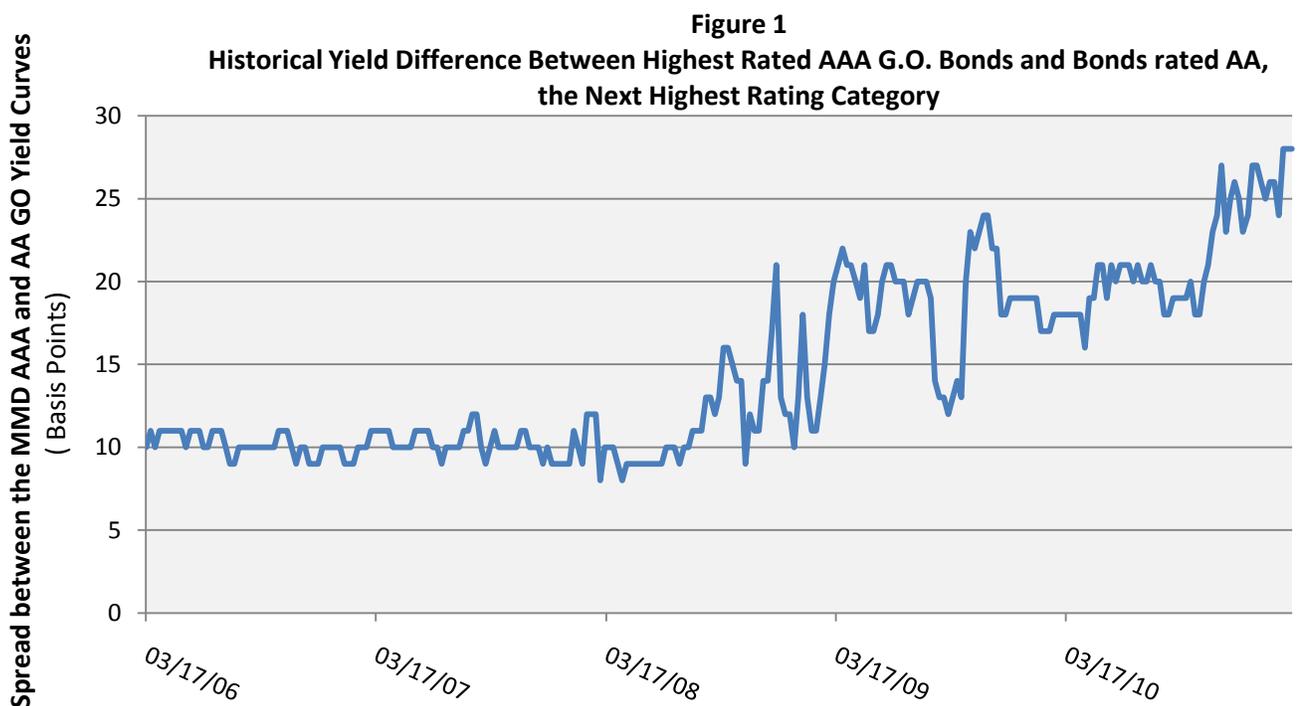


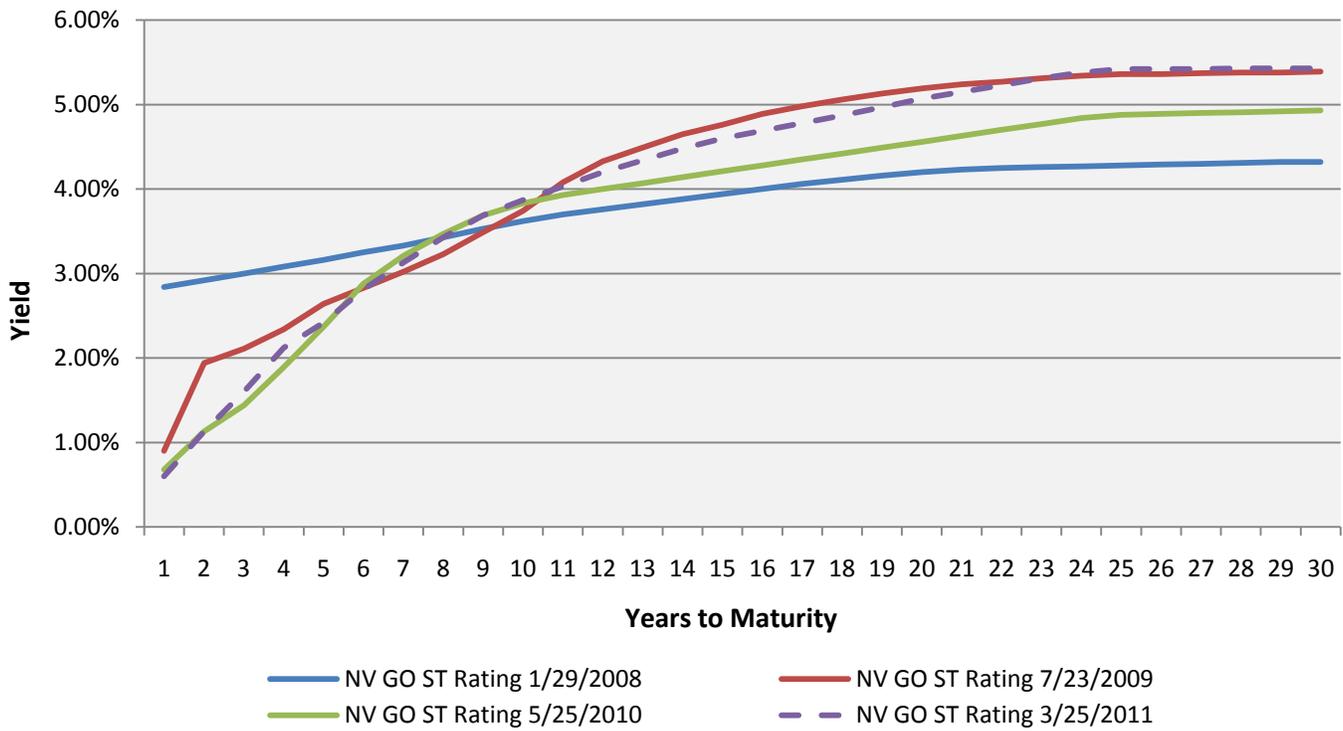
Figure 2 illustrates the yield curve shifts that Nevada issuers experienced throughout the pricing dates of the Series 2008, 2009 and 2010 LVVWD bonds. Issuers in the State generally faced increasing costs of capital financing in 2009, mainly



## I. HISTORICAL OVERVIEW OF THE SNWA

on the long end of the yield curve, as Nevada was one of the states hardest hit by the 2008 housing market meltdown and subsequent economic fallout. Investors were reluctant to invest in Nevada securities, worried about slowing population growth and one of the highest jobless rates in the nation. The difference at the 20-year maturity on the yield curve from January 29, 2008, the pricing date of the LVVWD 2008AB bonds, to July 23, 2009, the pricing date of the LVVWD 2009AB bonds is nearly 100 basis points. However, in 2010, these credit spreads tightened, while not returning to pre-financial crisis levels. This tightening in spreads in 2010 explains why the SNWA's 2010 LTGO bonds sold through LVVWD priced with a spread of 76 basis points – a narrower spread compared to the bonds sold in 2009. Nevada is considered a “specialty state,” as one of seven states that does not have a state income tax. Tax-exempt municipal bonds sold in states with a state income tax price better than those without, as tax-exempt municipal bonds investors are able to benefit from the additional tax-free interest income, which fuels higher demand and drives yields down.

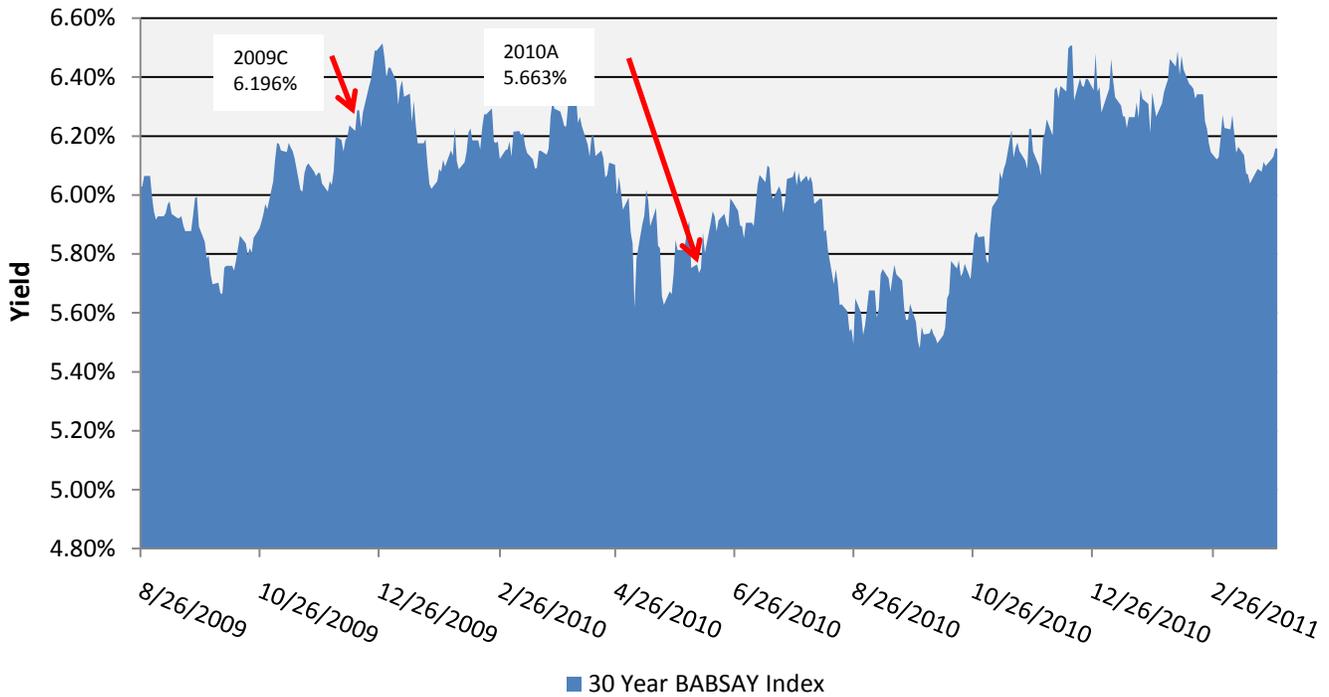
**Figure 2**  
**State of Nevada G.O. Yield Curve Comparison (2008-2011)**



In February 2009, the American Recovery and Reinvestment Act (ARRA) added Build America Bonds (BABs) as a financing option for municipalities. Direct-Pay BABs are bonds subject to federal income tax and the federal government pays a subsidy equal to 35% of the interest cost to the issuer. The intent of the BAB program was to expand municipal issuer reach into the global taxable bond market, enhancing overall market access and potentially lowering overall borrowing costs versus traditional tax-exempt debt. When the taxable yield net of the 35% federal subsidy is less than the tax-exempt yield of bonds with the same maturity, BABs result in a lower net cost of capital for issuers. Figure 3 charts the Wells Fargo Build America Bond 30-Year Index Average Yield (“BABSAY”) from August 2009 to March 2011. To be eligible for inclusion in the BABSAY Index, a BAB must be at least \$100 million in par value. In addition, it must mature in one year or more, pay a fixed-rate and must not be in default. Because the index does not take an issuer’s credit rating into consideration, the Index cannot be directly compared to pricing of the three SNWA’s Build America Bond series; however, it can be used as a reference point to explain the pricing variation of the three series. The BABSAY index was not created until after the first LVVWD BAB sale in July 2009, so that series will not be included in this analysis. Comparing the 2009C BABs and the 2010A BABs, the difference between True Interest Cost of each issue is approximately 140 basis points, in favor of the 2010A series that priced on May 25, 2010. This difference is explained in by the fact that the LVVWD received a Moody’s rating upgrade in 2010, from “Aa2” to Aa1,” as well as the favorable market for BABs at that time.

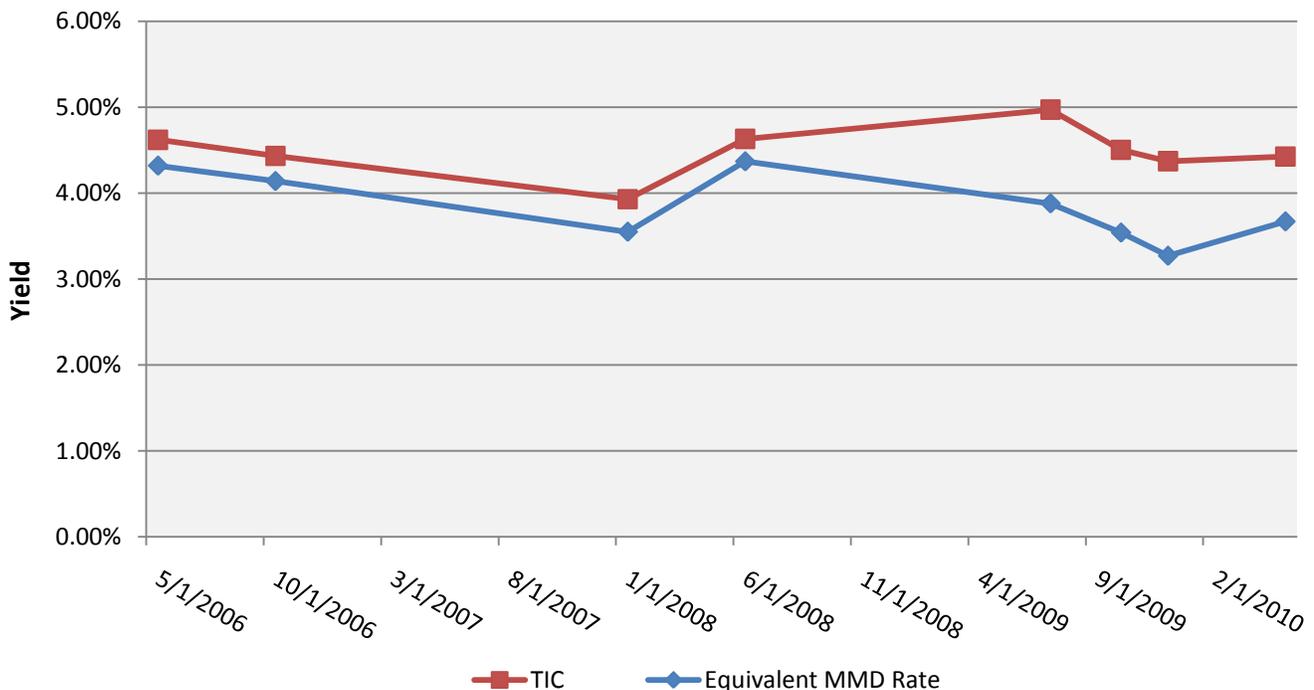


**Figure 3**  
**BABSAY Index - Average Yield of Build America Bonds from August 2009**

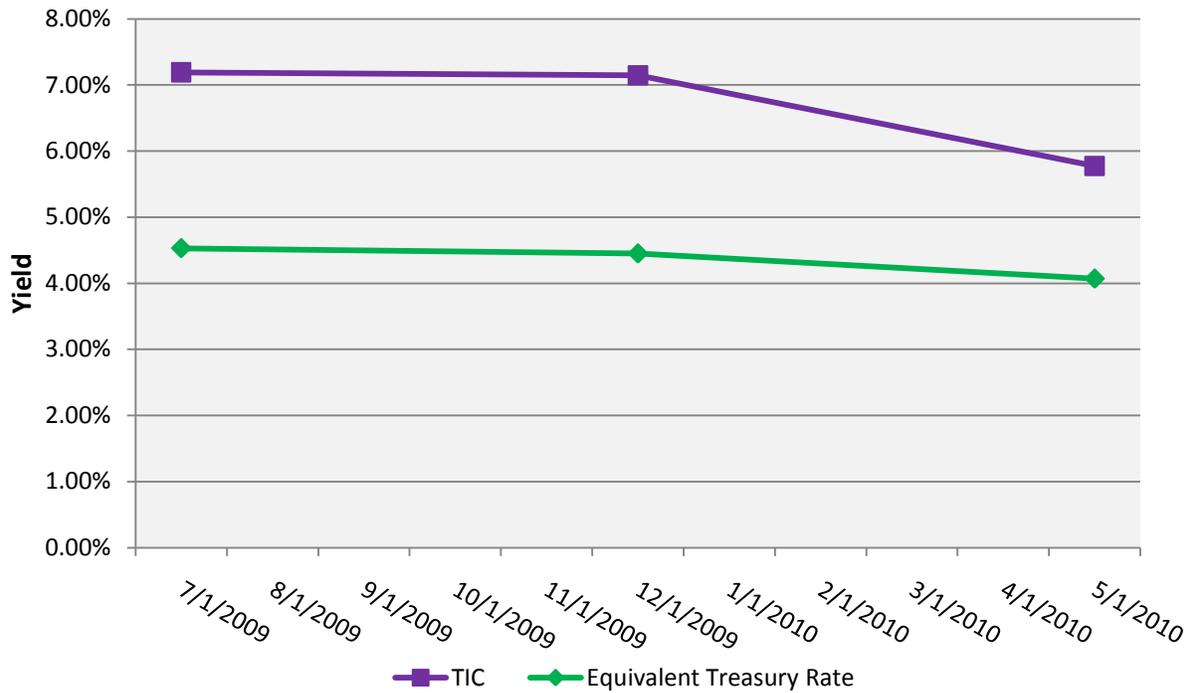


The following charts show the TIC of the LVVWD and Clark County Bond Bank tax-exempt LTGO debt as well as the “Adjusted TIC” net of interest subsidy for the BABs to equivalent AA G.O. MMD rates. Figure 4 illustrates that the SNWA priced bonds with similar spreads until 2009, when spreads widened significantly. Figure 5 demonstrates that both of the LVVWD’s 2009 BAB series performed satisfactorily in comparison to the 30 Year Treasury yield curve, and that the 2010 series priced very well, as the net TIC of that issue was approximately 100 basis points lower than the spreads of the July and December 2009 issues.

**Figure 4**  
**Pricing Comparison of SNWA LTGO Debt**



**Figure 5**  
**Year Pricing Comparison of Taxable SNWA Debt**



The above data substantiates the conclusion that bonds supported by the SNWA credit have priced well in the past five years. The past three years have brought a very turbulent economic climate to the State. However, the market has indicated that bonds sold on behalf of the SNWA have been acceptable to investors, and at rates attractive to the Authority. This evidence supports the conclusion that the SNWA credit would remain attractive to investors in the future.





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### C. Credit rating history

The SNWA has generally issued its bonds through the entity that will obtain the best rates in the financial markets and provide it with the most favorable financing terms. Key in making the best pricing determination is the credit rating that the rating agencies assign to the issuer. The ratings are provided by the rating agencies which specialize in evaluating the creditworthiness of municipal debt issuers. The credit rating is a relative indicator to potential bond investors of the likelihood that full and timely debt payments will be made. The ratings are assigned by credit rating agencies such as Moody's Investor Services ("Moody's") and Standard & Poor's ("S&P") to have letter designations to describe rating categories. Generally, the rating agencies evaluate the issuer based upon several factors including the economy, debt structure, financial condition, service area economic and demographic factors, management practices and experience, financial policies and the level of support from the issuer's governing body for the financing plan associated with the bond issue. Bond ratings below the Baa3/BBB- category are not considered to be investment grade. The following table summarizes the rating categories used by Moody's and S&P.

<b>Bond Credit Rating</b>						
<b>Moody's</b>		<b>Standard &amp; Poor's</b>		<b>Description</b>		
Long-term	Short-term	Long-term	Short-term			
Aaa	P-1	AAA	A-1+	Prime		
Aa1		AA+		High Grade		
Aa2		AA				
Aa3		AA-				
A1	P-2	A+	A-1	Upper medium grade		
A2		A				
A3		A-				
Baa1	P-3	BBB+	A-2	Lower medium grade		
Baa2		BBB				
Baa3		BBB-				
Ba1	Not prime	BB+	B	Non-investment grade speculative		
Ba2		BB				
Ba3		BB-				
B1		B+				
B2		B				
B3		B-				
Caa1		C		CCC+	C	Substantial risks
Caa2				CCC		Extremely speculative
Caa3				CCC-		In default with little prospect for recovery
Ca		CC				
C	C					
/		D	/	In default		
/						





## I. HISTORICAL OVERVIEW OF THE SNWA

The following chart illustrates the long-term ratings history of the Las Vegas Valley Water District, the Southern Nevada Water Authority and the Clark County Bond Bank.

	LVVWD		SNWA		CC Bond Bank	
	Moody's	Standard & Poor's	Moody's	Standard & Poor's	Moody's	Standard & Poor's
1991	A1	A	N/A	N/A	N/A	N/A
1992	A1	A	N/A	N/A	N/A	N/A
1993	A1	A	N/A	N/A	N/A	N/A
1994	A1	A	N/A	N/A	N/A	N/A
1995	A1	A+	N/A	N/A	N/A	N/A
1996	A1	A+	N/A	N/A	N/A	N/A
1997	A1	A+	N/A	N/A	N/A	N/A
1998	A1	A+	N/A	N/A	N/A	N/A
1999	A1	A+	N/A	N/A	N/A	N/A
2000	A1	A+	N/A	N/A	N/A	N/A
2001	A1	A+	N/A	N/A	N/A	N/A
2002	A1	AA	N/A	AA-	Aa2	AA
2003	A1	AA	N/A	AA-	Aa2	AA
2004	A1	AA	N/A	AA-	Aa2	AA
2005	A1	AA	N/A	AA-	Aa2	AA
2006	A1	AA+	N/A	AA-	Aa1	AA+
2007	Aa1	AA+	N/A	AA-	Aa1	AA+
2008	Aa1	AA+	N/A	AA-	Aa1	AA+
2009	Aa2 <sup>1/</sup>	AA+	N/A	AA-	Aa1	AA+
2010	Aa1 <sup>1/2/</sup>	AA+	N/A	AA-	Aa1	AA+
2011	Aa2 <sup>1/</sup>	AA+	N/A	A+	Aa1	AA+

<sup>1/</sup> Negative outlook

<sup>2/</sup> Recalibration

Only the commercial paper program issued through the LVVWD carries a short-term rating. The commercial paper program is rated P-1/A-1+. These short-term ratings reflect the credit quality of the program's letters of credit provided by J.P. Morgan Chase, N.A. and Wells Fargo Bank, N.A.

Future bond issues will be assigned ratings evaluative of the then-current circumstances of the issuing entity. While ratings cannot be predicted for future issues, it is noted that the LVVWD and Clark County Bond Bank ratings were updated and assigned when much of the current stress to the economy was underway. When assigning the rating of 'AA+' to the Clark County Bond Bank Refunding Bonds (Additionally Secured with SNWA Pledged Revenues) Series 2009 in October of that year, Standard & Poor's cited certain characteristics including, but not limited to, the following<sup>1</sup>:

- "A regional economy with very strong underlying credit fundamentals, including robust tax base and employment growth and strong income and wealth indicators;
- The County's continued very strong reserve position due to historically robust growth trends and strong financial management practices, and additional financial flexibility available to it in terms of discretionary transfers out of the general fund; and
- A moderate and manageable debt burden as well as a slowdown in growth within the County, which could ease capital pressures."

In assigning a rating of 'Aa1' to those same Series 2009 Bonds, Moody's indicated that their rating reflected<sup>2</sup>:

"...the County's favorable long-term credit characteristics including a continued healthy financial position despite more modest revenue growth in fiscal years 2008 and 2009, conservative budgeting practices and a notable level of spending flexibility which provides an ample financial cushion during the current recession, and a manageable level of debt, much of which is paid from dedicated revenue sources. Moody's notes that these strengths help mitigate the potential fiscal 2010 budgetary risks associated with the County's concentrated economy, which in

<sup>1</sup> Source: Standard & Poor's rating report: Clark County, Nevada; Appropriations; General Obligations from 10/12/2009

<sup>2</sup> Source: Moody's rating report: Moody's assigns Aa1 rating to Clark County, Nevada's General Obligation (Limited Tax) Bond Bank Refunding Bonds Additionally Secured with SNWA Pledged Revenues) Series 2009 from 10/13/2009





## I. HISTORICAL OVERVIEW OF THE SNWA

the current downturn is having a negative effect on certain tax revenues and a negative effect on the growth in taxable values.”

The SNWA has also benefitted from the strong credit ratings of the Las Vegas Valley Water District. In May 2011, when assigning a rating of ‘AA+’ (its second highest rating) to the District’s Limited Tax General Obligation Refunding Bonds (Additionally Secured by SNWA Pledged Revenues), Series 2011A, S&P indicated that their ratings reflect their view of certain characteristics including, but not limited to, the following<sup>3</sup>:

- “The District’s statutory authority to levy an ad valorem tax on property owners in the District’s service area, which provides substantial financial flexibility;
- A regional economy with very strong underlying credit fundamentals, including historically robust tax base and employment growth and strong income and wealth indicators;
- The District’s generally strong financial management, including maintenance of strong cash reserves; and
- The District’s critical role as the sole water wholesale entity serving Nevada’s largest metropolitan area.”

Moody’s assigned a rating of “Aa2” (its third highest rating) to the Series 2011A Bonds and indicated that their rating reflected<sup>4</sup>:

- “Critical roles of the District and SNWA in supplying water to the region
- Recent reductions implemented by management in operating and capital expenditures amid ongoing fiscal pressures”
- “Substantial and protracted tax base declines in Clark County stemming from economic and housing downturns
- Narrow debt service coverage for the district’s obligations”

The rating reports from which the above information was excerpted are included in their entirety in the Appendix A to this Report.

### D. SNWA debt covenants and funding sources

#### DEBT COVENANTS

For the outstanding SNWA bond obligations, the Authority pledges to charge its members to generate revenues sufficient to cover debt service at least 1.00 times, net of any SNWA fund balance available to pay debt service. The following section discusses the SNWA’s ability and obligation to charge its Members.

#### FUNDING SOURCES

The SNWA has entered into the Operations Agreement with the Members to meet its costs of operation and maintenance and to provide funds for debt service requirements of the SNWS. The Operations Agreement requires that the Members reimburse the SNWA for all operation and maintenance expenses (excluding depreciation), debt service and reserve requirements of the SNWS. Later in this Report there is a description of the various charges, fees and taxes in place to fund the various programs operated through the SNWA to benefit its Members.

To the extent that these revenue sources, in combination, ever become insufficient to cover the costs described above, the SNWA Board has the power to periodically assess the Members for operating and capital costs and for the satisfaction of its liabilities, charges and assessments made by the SNWA to the Members pursuant to a negotiated formula. The formula is primarily a function of new growth and existing customer revenues within the various Member jurisdictions. For fiscal year 2009-10, assessments for the SNWA operations and capital budget would be apportioned among the Members as follows: Las Vegas Valley Water District - 68%; Henderson – 16%; North Las Vegas – 13%; Boulder City – 3% and Others (Big Bend Water District, Nellis Air Force Base, City of Las Vegas and the Clark County Water Reclamation District) – less than 1%. To date, the SNWA has not had to implement this assessment authority to make up a revenue shortfall.

#### Transfer Act

In the 1995 Legislative session, the Nevada Legislature enacted the Transfer Act which transferred certain rights, powers, obligations and liabilities relating to the SNWS from the State and the CRC to the SNWA effective January 1, 1996. Pursuant to the Transfer Act, the SNWA holds in its own name and assumes all liabilities of the State and the CRC

<sup>3</sup> Source: Standard & Poor’s rating report: Las Vegas Valley Water District, Nevada; Appropriations; General Obligations; Water/Sewer from 5/9/2011

<sup>4</sup> Source: Moody’s rating report: Moody’s downgrades Las Vegas Valley Water District, Nevada’s General Obligation (Limited Tax) Bonds to Aa2 from Aa1; outlook remains negative from 5/9/2011





## I. HISTORICAL OVERVIEW OF THE SNWA

relating to the SNWS. The debt of the CRC related to the SNWS is composed of certain general obligation bonds of the State which have a lien on the SNWA Water Revenues that is superior to the lien of other debt subsequently issued by the SNWA. The SNWA has obtained title to all SNWS facilities originally constructed by the federal government.

Section 3 of the Transfer Act provides that the SNWA Water Revenues (as defined in the Transfer Act) must be applied generally in the following order:

1. The costs of operation and maintenance of the SNWS.
2. The payment of compensation and expenses to the SNWA and all other obligations incurred through performance by the SNWA of its duties under the Transfer Act.
3. The payment of the principal, interest and any other charges related to any obligations incurred to refund any general obligations of the State issued for the acquisition, construction, improvement or equipment of the SNWS.
4. The payment of the principal, interest and any other charges related to any obligations incurred by the SNWA for the acquisition, construction, improvement or equipment of the SNWS or other facilities designed to provide water to southern Nevada, including: any outstanding SNWA revenue bonds; obligations to the District and the State to repay money borrowed by the SNWA to provide funds to improve the SNWS; and any obligations incurred to refund any of those obligations.
5. The payment of expenses incurred by the SNWA related to the acquisition, construction, improvement or equipment of the SNWS or other facilities designed to provide water to southern Nevada.

SNWA does not anticipate issuance of additional CRC debt.

### Operations Agreement

The SNWA is obligated to impose rates and charges with respect to the use of the SNWS sufficient to pay the debt service and all other SNWA obligations. Through the authority granted pursuant to the Operations Agreement, the SNWA establishes charges designed to fund the following:

1. Reserves authorized or required by the Operations Agreement or required by any bond or other debt instrument for which the SNWA is responsible that relate to the SNWS.
2. Payment of all costs, expenses, capital outlays not otherwise funded, and liabilities including debt service of the SNWA relating to the SNWS.

Under the Operations Agreement, the SNWA currently assesses four types of charges:

1. The Wholesale Delivery Charge which is a delivery charge paid by Boulder City, Henderson, North Las Vegas and the District (the "Municipal Water Users") for each acre-foot of water delivered to the Municipal Water User; Nellis Air Force Base also pays a modified Wholesale Delivery Charge.
2. A Connection Charge which is a charge for each new connection within the service areas of Henderson, North Las Vegas, and the District to their customers.
3. A Commodity Charge which is a charge for each 1,000 gallons of potable water, from any source whatever, delivered and metered by Henderson, North Las Vegas and the District to their customers.
4. A Reliability Charge which is an excise tax on all residential customers at 0.25% of the total water bill and at 2.5% for all other customer classes within Henderson, North Las Vegas and the District.

The SNWA Connection Charge, the SNWA Commodity Charge, the Reliability Charge and certain payments due from Boulder City are to be used primarily to pay debt service on bonds issued for expansion of the SNWS ("New Expansion Debt"), 100% of the debt service on the obligations listed as "SNWA Parity Obligations" and "Subordinate Obligations" in the table entitled "SNWA Obligations" (on page 3 above), and any required debt service reserve and to pay the capital cost of improvements or expansions to the SNWS.

The SNWA is required to set the Connection Charge and Commodity Charge at levels sufficient to meet the obligations outlined in the above paragraph. To the extent practicable, the Connection Charge and the Commodity Charge are set after taking into account the proceeds of the sales tax revenues (described below), the Reliability Charge and certain other revenues at levels sufficient to meet debt service requirements of bonds issued to improve and expand the SNWS that has been allocated to service new connections within the service area of the Municipal Water Users. The Commodity Charge shall pay that portion of the total cost of construction of facilities to improve and expand the SNWS, including debt service related to the additional capacity that has been allocated to increase system reliability.

If revenues from the Connection Charge and Commodity Charge are insufficient to pay debt service and maintain the debt service reserve fund established under the Operations Agreement at a specified level required by any debt covenant, the





# I. HISTORICAL OVERVIEW OF THE SNWA

SNWA is required to equitably make assessments to Henderson, North Las Vegas and the District to pay such insufficiencies.

The Wholesale Delivery Charge is to be charged against the Municipal Water Users and is to be used for the purpose of providing, and set at levels to ensure that the SNWA at all times will have available sufficient funds to pay, the following:

1. operation, maintenance, and replacement costs of the SNWS, including water delivery and other charges of the United States;
2. capital outlays not related to the improvement or expansion of the SNWS;
3. the SNWA administrative expenses relating to the SNWS;
4. an appropriate part of the SNWA’s contribution to the CRC’s water administrative and operating budget;
5. maintenance of a reserve fund as required by the SNWA Federal Water Delivery Contract (which no longer is required);
6. maintenance of an operations and maintenance reserve fund at required levels;
7. debt service on any bonds or other obligations issued for the purpose of funding the repair, replacement, or reconstruction of SNWS facilities or to refund any such bonds or other obligations; and
8. any other cost, expense, capital outlay, or liability of the SNWA with respect to the SNWS, including liabilities of the CRC assumed by the SNWA pursuant to the Transfer Act, other than New Expansion Debt.

Generally, the Wholesale Delivery Charge is used to fund expenditures not related to the capital outlay for the improvement or expansion of the SNWS. However, this source can be used to pay debt service on any bonds issued for the purpose of funding the repair, replacement or reconstruction of SNWS facilities.

The Operations Agreement also includes procedures to be followed if any Member is delinquent in the payment of their respective financial obligations to the SNWA, such as stipulations that non-delinquent Members are required to make up any shortfalls from other delinquent Members. The Agreement further stipulates the recourse available to the SNWA and Members under such circumstances.

### Sales Tax

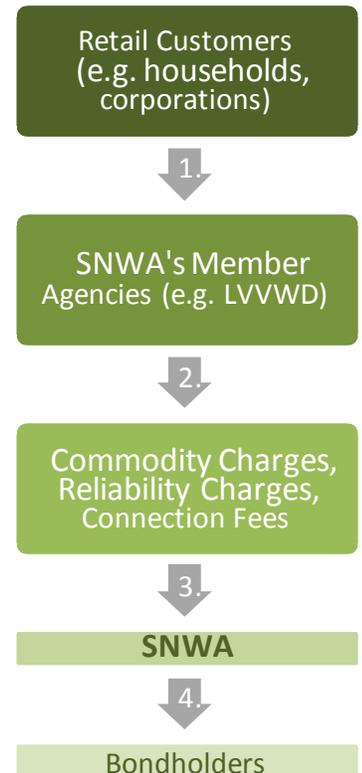
The SNWA also receives one-quarter of one cent per dollar of taxable sales in Clark County. The SNWA may collect this amount until either \$2.3 billion in aggregate sales tax are collected or until June 30, 2025, unless the County commission determines that cessation of the tax is not advisable. The sales tax proceeds are distributed to rural Clark County areas, the Las Vegas Wash, and wastewater agencies within Clark County with the remainder being retained by SNWA. Recent estimates by the Authority project \$2.1 billion will be collected by the SNWA by June 2025, of which \$1.3 billion will be used for payment of construction costs and debt service.

### Southern Nevada Public Lands Management Act

The Southern Nevada Public Lands Management Act (“SNPLMA”) is a 1998 federal law that gives the SNWA 10% of the sale price of certain public lands in Clark County to defray some of the cost of the SNWA Capital Improvements Plan. This revenue was not anticipated when the Major Construction and Capital Plan (the “MCCP”) Funding Plan was developed in 1997. Because which parcels of land will be sold and their sale prices are unknown, revenue is not predictable. Through December 2010, the SNWA has received \$288 million from the SNPLMA.

The chart on the right illustrates the flow of SNWA’s revenues, once received from SNWA member agencies, from the payment of operation and maintenance expenses to the repayment of SNWA debts.

### Origin and Application of SNWA's Revenues





# I. HISTORICAL OVERVIEW OF THE SNWA

## E. Summary of financials

### FINANCIAL SUMMARY

SNWA Water Revenues. The following table sets forth a history of the SNWA Water Revenues. As described herein, the SNWA Water Revenues do not include all revenues of the SNWA, but rather, generally includes only those revenues derived by the SNWA from the operation of the SNWS, which are the SNWA Pledged Revenues available under the Master Bond Repayment Agreement.

<u>Fiscal Year Ended June 30,</u>	<u>History of SNWA Water Revenues</u>				
	<u>2006</u> <u>(Actual)</u>	<u>2007</u> <u>(Actual)</u>	<u>2008</u> <u>(Actual)</u>	<u>2009</u> <u>(Actual)</u>	<u>2010</u> <u>(Actual)</u>
<b>Operating Revenues</b>					
Wholesale Delivery Charges	\$115,532,042	\$121,449,812	\$118,782,982	\$112,551,974	\$110,097,368
Regional Connection Charge <sup>(1)(2)</sup>	188,454,011	121,359,088	55,520,224	26,789,155	5,309,547
Regional Commodity (water) Charges	<u>14,213,843</u>	<u>18,829,058</u>	<u>18,777,117</u>	<u>18,791,878</u>	<u>22,884,780</u>
Total Revenues	<u>318,199,896</u>	<u>261,637,958</u>	<u>193,080,323</u>	<u>158,133,007</u>	<u>138,291,695</u>
<b>Operating Expenses</b> <sup>(3)</sup>	127,683,290	124,192,960	136,503,637	153,354,897	114,898,484
<b>SNWA Net Water Revenues</b>	<u>190,516,606</u>	<u>137,444,998</u>	<u>56,576,686</u>	<u>4,778,110</u>	<u>23,393,211</u>
<b>Annual Debt Service on the SNWA Superior Obligations</b>	<u>18,085,929</u>	<u>16,939,289</u>	<u>17,220,068</u>	<u>15,733,838</u>	<u>13,596,088</u>
<b>Remaining SNWA Water Revenues</b> <sup>(4)</sup>	172,430,677	120,505,709	39,356,618	(10,955,728)	9,797,123
<b>Unrestricted fund balance</b> <sup>(5)</sup>	<u>576,031,388</u>	<u>537,707,414</u>	<u>440,446,638</u>	<u>485,330,939</u>	<u>384,778,450</u>
Total	748,462,065	658,213,123	479,803,256	474,375,211	394,575,573
Annual Debt Service on Parity Obligations <sup>(6)</sup>	91,680,298	93,001,640	102,835,375	120,442,065	127,968,971
Less: capitalized interest <sup>(7)</sup>	<u>(28,518,601)</u>	<u>(33,521,745)</u>	<u>(39,264,991)</u>	<u>(50,870,180)</u>	<u>(61,361,707)</u>
<b>Net Annual Debt Service on SNWA Parity Obligations</b>	\$63,161,697	\$59,479,895	\$63,570,384	\$69,571,885	\$66,607,264

- (1) Beginning in fiscal 2008, SNWA adjusted actual collections of Connection Charges by the net effect of a pending regional Connection Charge refund liability account as prescribed by external auditors. The liability account attempts to estimate Connection Charges collected in past periods that have a reasonable chance to be refunded in future periods.
- (2) Regional Connection Charge revenues began to decrease significantly in 2007 due to slowing sales of new connections; that trend has continued downward due to the housing crisis and current economic conditions.
- (3) Excludes depreciation.
- (4) Represents SNWA Water Revenues that are available to pay debt service on the SNWA Parity Obligations, and to fund the MBRA.
- (5) The SNWA also may use other legally available moneys (including available fund balance) to pay debt service on its outstanding obligations. These figures represent unrestricted fund balances for each fiscal year provided by the SNWA. They are not presented using GAAP and as a result, are not directly comparable to the table entitled "SNWA Summary of Operating Revenues, Expenses and Changes in Fund Equity." Unrestricted fund balance increased between 2008 and 2009 due to the reclassification of approximately \$45 million in unspent sales tax revenues from restricted fund balance to unrestricted fund balance.
- (6) Includes debt service paid on the SNWA Parity Obligations and the MBRA Parity Obligations, but does not include debt service on the Notes.
- (7) Includes debt service paid from capitalized interest on prior bond issues. These figures include amounts that the SNWA capitalizes for accounting purposes; those amounts do not necessarily include amounts available to offset debt service payments.

Source: Derived from the SNWA's audited financial statements for the years ended June 30, 2006 through 2010.

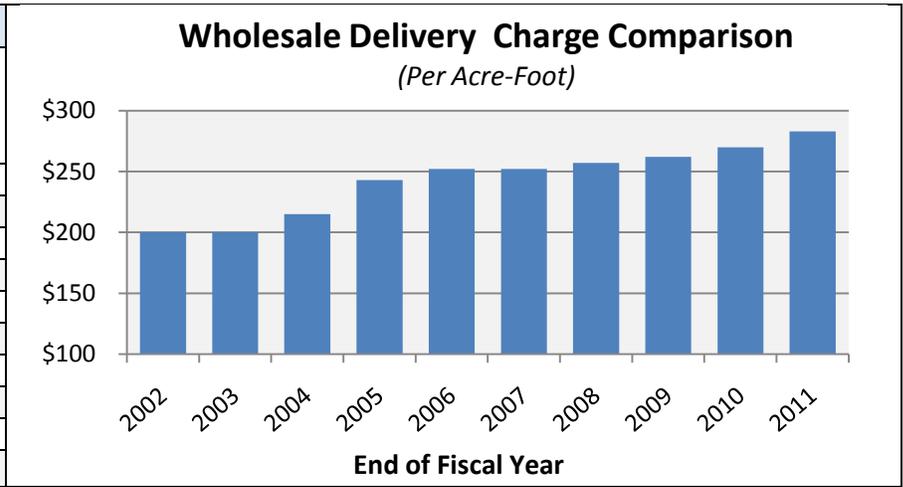




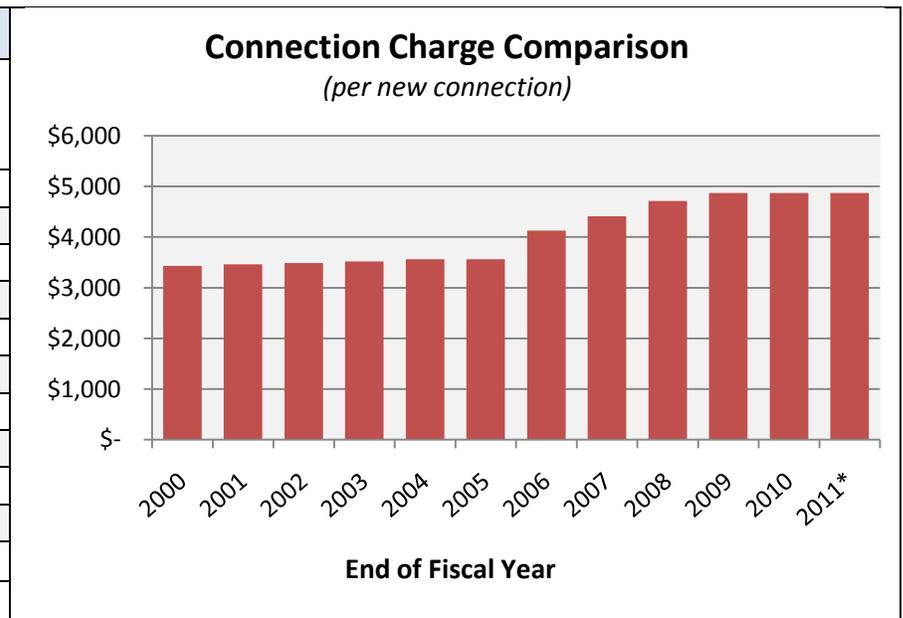
## I. HISTORICAL OVERVIEW OF THE SNWA

The following charts illustrate the history of the Authority's Wholesale Delivery Charge, Connection Charge and Commodity Charge collected from its member agencies from the end of fiscal year 2001 to January 1, 2011.

Wholesale Delivery Charge History		
End of Fiscal Year	Rate per Acre-Foot	Year over Year % Change
2002	\$ 200	
2003	\$ 200	0.0%
2004	\$ 215	7.5%
2005	\$ 243	13.0%
2006	\$ 252	3.7%
2007	\$ 252	0.0%
2008	\$ 257	2.0%
2009	\$ 262	1.9%
2010	\$ 270	3.1%
2011*	\$ 283	4.8%



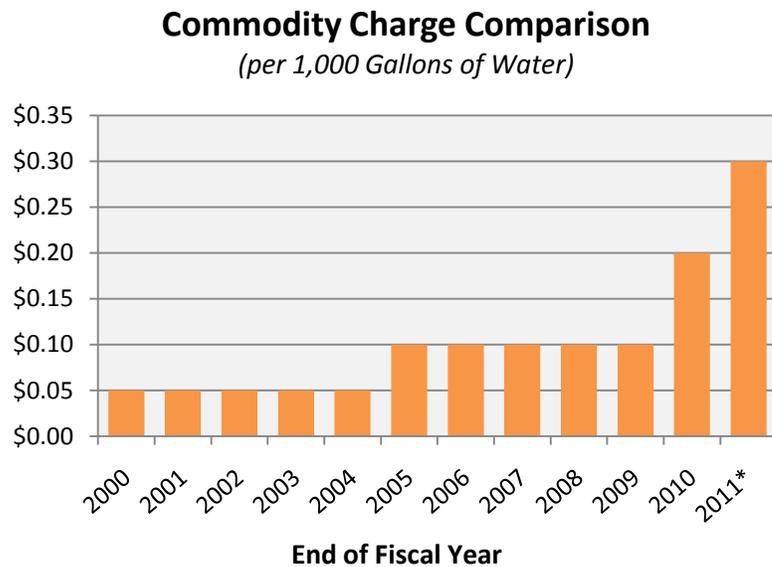
Connection Charge History		
End of Fiscal Year	Charge per connection	Year over Year % Change
2000	\$3,430	
2001	\$3,460	0.87%
2002	\$3,490	0.87%
2003	\$3,520	0.86%
2004	\$3,560	1.14%
2005	\$3,560	0.00%
2006	\$4,130	16.01%
2007	\$4,410	6.78%
2008	\$4,710	6.80%
2009	\$4,870	3.40%
2010	\$4,870	0.00%
2011*	\$4,870	0.00%





## I. HISTORICAL OVERVIEW OF THE SNWA

Commodity Charge History		
End of Fiscal Year	Charge per 1,000 Gallons	Year over Year % Change
2000	\$0.05	
2001	\$0.05	0%
2002	\$0.05	0%
2003	\$0.05	0%
2004	\$0.05	0%
2005	\$0.10	100%
2006	\$0.10	0%
2007	\$0.10	0%
2008	\$0.10	0%
2009	\$0.10	0%
2010	\$0.20	100%
2011*	\$0.30	50%



\* Effective January 1, 2011.





## **II. CURRENT STATUS OF SNWA AS A CREDIT**

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### A. Most recent rating reports and updates

While facing numerous challenges due to the current economic environment, the Southern Nevada Water Authority continues to be viewed as a good credit by the independent rating agencies. In addition to its own direct debt obligations, the Authority has historically issued debt through three issuers: Las Vegas Valley Water District, the State of Nevada Bond Bank, and the Clark County Bond Bank.

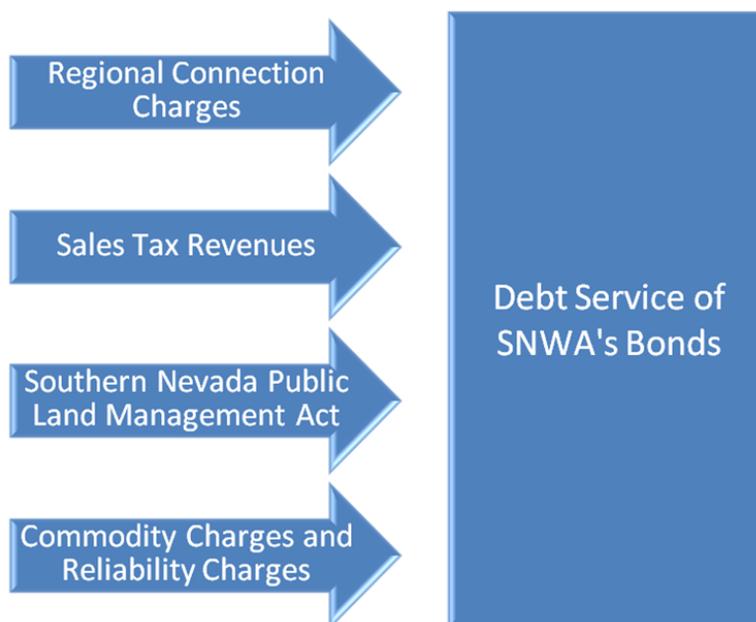
Standard & Poor's and Moody's have both placed the LVVWD in the high double-A rating category, AA+ and Aa2, respectively. Since the LVVWD is the largest member of the Authority and has issued debt on behalf of SNWA in the past, it is considered a good candidate to be an issuer of future SNWA obligations. The LVVWD's cash reserves are viewed as an important component of its credit worthiness. Furthermore, because of its unique combined pledge of water system revenues and *ad valorem* taxing power, the LVVWD has a solid security package to offer prospective bond investors. The District has never imposed a property tax, but its pledge to do so in the event of insufficient water system revenues gives SNWA access to a very highly rated issuer and a cost of capital that is typically low relative to the general bond marketplace. Similarly, the Clark County and State Bond Banks both have a similar double-barreled security structure to their debt, which is primarily supported by the borrower's (e.g., SNWA) revenue, but is supplemented by the commitment to levy a property tax to repay bondholders in the event that the primary revenue source becomes inadequate.

#### Current Credit Ratings (as of May 26, 2011)

	<u>Moody's</u>	<u>S&amp;P</u>
LVVWD	Aa2	AA+
State of Nevada	Aa2	AA+
Clark County	Aa1	AA+
SNWA	n/a	A+
Commercial Paper	P-1	A-1+

### B. Current plan of finance

SNWA typically funds projects through its commercial paper program for 10% of initial construction costs and through issuing new tax-exempt bonds with a repayment structure of level debt service over 30 years. During the initial two years of long-term debt payments, capitalized interest is used to gradually phase in net interest costs. Capitalizing interest means borrowing a portion of the interest due and it is a financing technique that can be evaluated with each financing. For many prior multi-year projects funded by the SNWA, bonds have been issued every two years to fund project costs. There are four major revenue sources for repaying SNWA's debt obligations as shown in the graph below.





## II. CURRENT STATUS OF SNWA AS A CREDIT

### *Regional Connection Charges*

While reduced to a modest \$5.3 million in fiscal year 2010 due to the recent economic downturn, regional Connection Charges had consistently been above \$95 million between fiscal year 2001 and fiscal year 2007. In 2010, the regional Connection Charge level was approximately \$4,870 per new equivalent residential connection.

### *Sales Tax Revenue*

Since April 1999, the Authority has received one quarter of one percent on taxable sales in Clark County. This revenue source will terminate when \$2.3 billion has been collected or on June 30, 2025, unless the County commission determines that cessation of the tax is not advisable. The Authority received about \$41.8 million in sales tax revenues in fiscal year 2010, and at current collection rates it will continue to receive the tax until at least 2025.

### *Southern Nevada Public Land Management Act (“SNPLMA”)*

According to the SNPLMA, SNWA receives 10% of the purchase price of certain public land sales. The SNPLMA revenues are hard to predict and are therefore not included in forecasting future revenues available for debt service. SNPLMA revenues were about \$0.7 million in fiscal year 2010 compared to a high of \$135.4 million in fiscal year 2006.

### *Commodity Charges and Reliability Charges*

Of the major charges currently available to generate SNWA revenues for debt service payments, the Commodity Charge and associated Reliability Charge are the ones with which the SNWA can most directly impact its revenues. The SNWA has no control over the revenues it receives from Sales Tax or from SNPLMA sales and it cannot control the number of new water connections in the region, but it can influence revenues by adjusting the Commodity Charge and/or the Reliability Charge. As of January 2011, SNWA was charging 30 cents per 1,000 gallons of water used. The SNWA may raise the current Commodity Charge as well as the Reliability Charge to compensate for a portion of the Connection Charge revenue decline. Commodity Charge revenue and Reliability Charge revenues were about \$18.4 million and \$4.1 million, respectively, in fiscal year 2010.

## CURRENT PLAN OF FINANCE

### **2011 Refinancing Plan**

Due to the impact of the recession on SNWA’s revenues, the Authority has undertaken a refinancing program to reduce near-term debt service obligations and to transfer such obligations to future years. The refinancing program provides time for SNWA to implement higher Commodity Charges or to make other changes to cover the current anticipated revenue shortfall brought about by the decline in Connection Charge revenue. The Authority plans to implement rate adjustments in several annual steps. Appendix B lists the bonds identified to be refinanced and the major refunding assumptions.

### **Major Construction and Capital Plan**

In the Authority’s M CCP, SNWA engineering identified funding needs for projects totaling approximately \$878.69 million in fiscal years 2012 through 2020. The M CCP includes the expansion of the Southern Nevada Water System (SNWS) to ensure capacity and reliability for the system to hold the 300,000 AF consumptive use allocation of the Colorado River. The M CCP also includes about \$464.2 million for the remaining construction of a third intake project for Lake Mead. A portion of this project (\$125.9 million) was funded in fiscal year 2011, resulting in approximately \$338.3 million of net remaining funding need. Please refer to the table on the right for the estimated capital funding needs for the M CCP per fiscal year.

Fiscal Year	Total M CCP Cost
2012	\$220,559,513
2013	184,174,442
2014	109,265,239
2015	57,777,007
2016	55,935,334
2017	53,943,220
2018	58,776,682
2019	71,152,775
2020	67,102,789
<b>Total</b>	<b>\$878,687,002</b>

Source: SNWA





### C. Ongoing and current projects

SNWA works to secure water resources for its current customers and for potential growth in the service area. Listed below is a description of major ongoing projects and project costs from the MCCP that were included in this Report. MCCP deferred projects and Arizona groundwater banking expenses are not included in this Report. The following project costs are adjusted for inflation.

**090B – Virgin and Muddy Rivers Water Resource Acquisition** -- These costs represent acquisition of water shares in the Muddy Valley Irrigation Company and other water rights on the Muddy River and Virgin River.

**090F – Water Resource Acquisition and Development** -- Funding is provided to acquire water rights and to develop the water resources needed to meet the needs of the Southern Nevada community. These water resources include the Colorado River and Nevada's in state water resources. For example, purchase of ranches in northern Nevada allows SNWA to acquire water rights to manage groundwater development in a manner that protects the environmental value of the area and the sustainability of the basin's aquifer. Funding is also provided for augmentation activities such as brackish and ocean desalination and Colorado River basin importation to help meet long-term future needs. Funding for this project was increased in 2009 to include the ongoing costs of the Water Smart Landscapes Rebate program which permanently removes high water use turf from residences and businesses in favor of low water use landscaping.

**090G – Clark, Lincoln, and White Pine Counties Groundwater Development** -- Activities for this project include hydrologic studies, drilling of aquifer test wells, preliminary facility planning and design, and environmental analysis required to secure permits and federal approvals for development of groundwater resources in Clark, Lincoln and White Pine counties. Current funding does not include funding for design and construction of facilities.

**310F - IPS-2 Test Pump Procurement and Installation** -- Existing pumping units at IPS-2 have not demonstrated reliable performance. Although repairs are being made to the most troublesome pumping units, a testing program to explore potentially better performing pumping units will improve the prospects for more reliable delivery of the community's critical water supply. Contracts for procurement of 15 additional pumping units were approved in 2007. Twelve of these pumps will have greater pumping capacity than the existing pumps. This greater capacity will provide a measure of protection in the event intake No. 1 should be out of service.

**340A – Coyote Springs Well and Moapa Transmission** -- Construct a 6,200 gpm pumping station with a 0.75 MG forebay, approximately 81,200 linear feet of 24-inch pipeline, a 0.75 MG regulating tank and associated appurtenances to convey water from the MX-5 well site in Coyote Springs Valley to Moapa Valley Water District facilities in Moapa. Equip the MX-5 well to produce approximately 6,500 acre-feet per year and connect supplies from other wells to the system to produce a total of approximately 9,000 acre-feet per year in Coyote Springs Valley. An arsenic treatment facility has been added at the MX-5 well site. The plan identifies both the authorized funding amount and a forecast of final costs of each facility or project.

**070F -- Lake Mead Intake No. 3** -- The project consists of the construction of a third water intake in Lake Mead to protect SNWA's access to Colorado River Water in the event that Lake Mead water levels fall low enough to put Intake No. 1 out of service. The full scope of Intake No. 3 will include a submerged water intake, intake tunnel, underground pumping forebay, pumping station, electrical power connections and discharge pipeline connecting to the Alfred Merritt Smith Water Treatment Facility.

**All Other Active Projects** -- Miscellaneous construction projects. For a detailed description of these smaller projects please see the MCCP, dated February, 2011.





## II. CURRENT STATUS OF SNWA AS A CREDIT

Project Code	Project Cost	Financed through FY 2010	Financing Need for Completion	Anticipated Completion
090B	\$134.8 million	\$101.8 million	\$33.0 million	Fiscal Year 2020
090F	\$389.4 million	\$116.0 million	\$273.4 million	Fiscal Year 2020
090G	\$254.8 million	\$119.4 million	\$135.4 million	Fiscal Year 2020
070F <sup>(1)</sup>	\$817.3 million	\$353.1 million	\$464.2 million	Fiscal Year 2014
All Other Active Projects	\$80.6 million	\$21.0 million	\$59.6 million	Fiscal Year 2020
<b>All Active Projects</b>	<b>\$1,676.9 million</b>	<b>\$711.3 million</b>	<b>\$965.6 million</b>	

<sup>(1)</sup> A portion of this project (\$125.9 million) was funded in fiscal year 2011, resulting in approximately \$338.3 million of net project cost budgeted for fiscal years 2012 through 2014.

Source: SNWA

Consistent with the assumptions in this Report, the MCCP projects included herein are necessary even with the modest population growth assumptions. In the event that population growth were to accelerate rapidly, the Authority may need to extend the water system and it is expected that all of those costs would be borne by future additional connection charges (i.e., by new customers). This assumption is made because the time period during which such capital cost-inducing growth may occur is many years in the future and existing SNWA facilities experience a current peak period demand that is 60-70% of current system capacity – it is, therefore, likely that such future growth would be associated with new development beyond the absorption of existing vacant homes, developed lots and unoccupied commercial space. According to SNWA Finance Department's estimates that inflate project costs to the year of expenditure, a total of \$878.69 million of the MCCP projects in this Report will need to be financed after fiscal year 2011. The expected construction costs needed per fiscal year from 2012 through 2020 are shown in Section III of this Report.





## II. CURRENT STATUS OF SNWA AS A CREDIT

### D. General discussion of public utilities in current credit market

As providers of essential services, public water utilities are strong credits, although they are not immune from the recent economic recession and sluggish recovery. The most significant impact of the recession was decreased water sales, which has resulted in a moderate drop of revenues.

In 2010, Fitch Ratings affirmed the credit ratings of 91% of the utilities it rated within the Water and Wastewater Sector. Among the remaining 9%, Fitch downgraded 6% while upgrading 3%.

Standard and Poor's (S&P) released a report on January 26, 2011 detailing the 2011 outlook for the water and sewer sector. S&P cites a key positive rating factor for water and sewer utilities is the fact that user charges make up almost all of the operating revenues, unlike school districts and universities, which rely on a substantial portion of their funding from federal and state monies. The report also refers to a number of challenges which could impact the water and wastewater sector going forward, including higher borrowing costs, an evolving regulatory process, and the geographic challenges entities could face in order to secure a long-term water supply. The S&P report states "these challenges, while potentially considerable, are not, in our view, beyond the utilities' ability to address" and concludes that with long term planning and timely adjustments, most water and wastewater municipalities should be able to weather any challenges they may face.

Compared to the majority of municipal water districts with similar credit ratings, SNWA is very unique in that its 2009 balance sheet was approximately 25 times larger than the median water credit rated Aa2 by Moody's. As its strong credit rating suggests, the SNWA financial metrics compare favorably to most other water agencies.

Below is a historical analysis of the Moody's Financial Ratio Analysis (MFRA) for SNWA, as well as a peer analysis, comparing the SNWA to similar water districts rated Aa2. The comparable entities were chosen because they are either similar in size financially to the SNWA, they are in the same geographic region and face a similar climate as the SNWA, and/or they are rated similarly. Although SNWA does not have a public credit rating from Moody's, the financial ratio analysis is only available from Moody's and the Aa2 rating is the lowest of the ratings Moody's has published for the potential issuers of the SNWA debt. Fiscal years 2008 and 2009 were chosen because those are the years for which Moody's water sector information is available.

Financial Data : Balance Sheet Data	Fiscal Year 2008	Fiscal Year 2009	Moody's 2009 Medians*		
			Aa1	Aa2	Aa3
Total Current Cash, Cash Equivalents and Investments (\$000)	335,976	438,886	8,355	13,938	4,070
Total Current Assets (\$000)	480,487	517,762	36,377	25,122	5,792
Total Non-Current Assets (\$000)	3,464,476	3,742,451	312,068	149,548	64,295
Total Assets (\$000)	3,944,963	4,260,212	331,506	174,694	69,267
Total Current Liabilities (\$000)	518,647	523,390	14,350	7,248	2,350
Total Non-Current Liabilities (\$000)	1,866,808	2,233,129	74,793	47,372	16,590
Total Revenue Bonds (\$000)	-	-	59,387	37,370	9,043
Total General Obligation-backed Bonds (\$000)	-	-	16,203	6,595	555
Total Long Term Debt (\$000)	1,898,506	2,256,035	78,023	49,127	16,256
Total Liabilities (\$000)	2,385,454	2,756,519	92,888	58,235	18,893
<b>Financial Data : Income Statement Data</b>					
Total Operating Revenues (\$000)	124,334	118,318	40,129	24,174	9,345
Connection Fees (\$000)	-	-	12,867	1,630	303
Gross Revenues (\$000)	149,778	128,902	41,689	26,541	9,873
Total Annual Debt Service (\$000)	154,927	165,948	7,819	4,622	1,824
<b>Financial Data : Operating Ratios</b>					
Operating ratio (%)	155.80	181.30	67.30	71.40	65.40
Debt Ratio (%)	56.10	61.60	26.40	28.30	23.10

\* Fiscal Year Ended 2009 is the most current MFRA data available.





## II. CURRENT STATUS OF SNWA AS A CREDIT

	Metropolitan Water District of Southern California, CA	Fairfax County Water Authority, VA	Las Vegas Valley Water District, NV	Denver Board Of Water Commissioners Water Enterprise, CA	Santa Clara Valley Water District, Water Enterprise, CA	Southern Nevada Water Authority, NV	Truckee Meadows Water Authority, NV
<b>Financial Data : Balance Sheet Data</b>	<b>Aaa</b>	<b>Aaa</b>	<b>Aa2</b>	<b>Aa1</b>	<b>Aa1</b>	<b>Aa2</b>	<b>Aa2</b>
Total Current Cash, Cash Equivalents and Investments (\$000)	1,765	71,570	94,169	176,119	124,712	438,886	95,734
Total Current Assets (\$000)	1,083,660	148,609	608,516	124,712	224,869	517,762	113,960
Total Non-Current Assets (\$000)	10,369,277	1,725,893	2,374,388	1,810,804	684,213	3,742,451	732,554
Total Assets (\$000)	11,452,937	1,874,502	2,982,904	2,011,698	909,082	4,260,212	846,513
Total Current Liabilities (\$000)	549,076	73,177	568,662	66,479	26,792	523,390	104,541
Total Non-Current Liabilities (\$000)	4,856,198	494,505	1,273,020	393,859	237,463	2,233,129	460,334
Total Revenue Bonds (\$000)	-	-	-	311,501	217,600	-	-
Total General Obligation-backed Bonds (\$000)	-	-	-	31,015	1,390	-	-
Total Long Term Debt (\$000)	4,729,823	497,885	1,311,380	392,659	237,592	2,256,035	537,451
Total Liabilities (\$000)	5,405,274	567,682	1,841,682	460,338	264,255	2,756,519	564,875
<b>Financial Data : Income Statement Data</b>							
Total Operating Revenues (\$000)	1,136,476	129,018	334,810	193,030	136,378	118,318	78,220
Connection Fees (\$000)	-	4,740	17,935	25,308	-	-	-
Gross Revenues (\$000)	1,166,465	138,252	355,493	242,065	174,498	128,902	90,650
Total Annual Debt Service (\$000)	224,000	34,327	-	50,600	11,856	165,948	32,466
<b>Financial Data : Operating Ratios</b>							
Operating ratio (%)	74.10	56.70	87.10	79.30	100.20	181.30	50.80
Debt Ratio (%)	47.80	26.90	67.20	19.80	26.60	61.60	64.30

\* Fiscal Year Ended 2009 is the most current MFRA data available.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN



### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

#### A. Pro-forma debt service coverage for existing debt

Through the issuers of its bonds, SNWA pledged to set rates such that annual debt service is covered by at least 1.00 times revenues. The Authority's pledged revenues provided debt service coverage of at least 2.69 times annual debt service during the last ten fiscal years as shown in the table below.

Fiscal Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Net Operating Surplus/Loss	(5,927,128)	(27,619,464)	(48,431,380)	(62,178,760)	(79,192,932)	(59,163,150)	(51,034,163)	(69,403,707)	(96,180,182)	(69,823,676)
Investment Earnings	17,694,243	15,169,429	8,861,989	9,613,713	19,548,835	13,474,740	41,088,297	30,676,718	13,607,423	1,324,866
Debt Service Billings	76,573	76,573	76,573	76,573	76,573	76,573	76,573	76,573	76,573	76,573
Regional Connection Charge	97,882,873	95,126,439	118,537,370	154,146,853	177,493,765	188,454,011	121,359,088	55,520,224	26,789,155	5,309,547
Regional Water Charges*	9,728,536	10,242,954	10,152,104	10,139,199	10,101,548	14,213,843	18,829,058	18,777,117	18,791,878	22,538,155
Southern Nevada Public Lands Management Act	4,209,667	7,742,511	21,731,600	34,465,520	68,933,594	135,441,776	3,708,440	3,388,500	0	684,294
Raw Water Facilities Charge			1,542,875	1,386,755	0	1,465,965	35,864,100	0	0	0
Clark County Sales Tax	48,265,477	34,319,533	36,899,502	42,835,002	49,945,593	54,158,795	55,060,027	53,315,770	46,333,942	41,833,183
Net Operating & Nonoperating Revenues	171,930,241	135,057,975	149,370,633	190,484,855	246,906,976	348,122,553	224,951,420	92,351,195	9,418,789	1,942,942
Add back Depreciation	21,487,976	26,452,890	28,554,840	38,380,146	48,259,934	50,389,946	53,032,871	57,234,105	61,143,048	69,499,630
Add Beginning Unrestricted Funds	177,927,088	257,463,450	302,761,700	325,075,175	408,083,814	490,946,146	470,805,706	335,975,548	438,885,842	366,951,904
Net available for debt service	371,345,305	418,974,315	480,687,173	553,940,176	703,250,724	889,458,645	748,789,997	485,560,848	509,447,679	438,394,476
Annual Debt Service	73,324,618	92,473,619	89,035,517	119,659,294	125,502,473	140,855,868	144,484,915	153,769,711	169,717,981	162,911,866
Debt Service Coverage Ratio	5.06	4.53	5.40	4.63	5.60	6.31	5.18	3.16	3.00	2.69

\* Commodity Charges and Reliability Charges

Source: SNWA 2010 Comprehensive Annual Financial Report

In this and the following sections, "Net Revenues available for Debt Service" reflects only Commodity Charge and Reliability Charge revenues and excludes all other revenue sources and the unrestricted fund balance. This approach results in very conservative estimates of the Commodity Charge level sufficient to service the SNWA's debt under the current debt structure, and with both the debt needed to fund the MCCP projects included in this Report as well as for the Project. During the actual rate setting process, the Authority will certainly include other revenue sources available such as sales tax revenues and, therefore, it may not require the entire Commodity Charge adjustments shown in the tables in this and the following sections.

Due to the economic recession and housing crisis, SNWA refinanced a portion of its debt due in the next several fiscal years and deferred the repayment to later fiscal years as described in Section II of this Report. Shown in the table below is the annual pro-forma debt service after the completion of the refinancing plan, the net revenues available for debt service based on the Commodity Charge shown in last column, and the implied debt service coverage. The "Net Revenues available for Debt Service" consist only of the Commodity Charge and Reliability Charge revenues and do not include the unrestricted fund balance. The Authority will use unrestricted funds to meet debt service but intends to maintain a minimum fund balance of approximately \$300 million to maintain financial flexibility, approximately one year of debt service, and a liquidity position needed to support its commercial paper program and to address any future revenue uncertainty. SNWA does not expect a quick or significant recovery in the housing market and associated Connection Charge revenues. The Authority plans to increase the Commodity Charge in several steps to ensure sufficient revenues to serve its obligations. In the following table, for general and refinancing planning purposes, an increase of the Commodity Charge to \$1.73 per 1,000 gallons of water and a per capita water consumption of 69,097 gallons per year (Level of Fiscal Year 2010) are assumed. This level of water consumption is equal to 189 gallons of water per capita per day and is below the SNWA's conservation goal of 199 gallons of water per capita per day by 2035.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

#### Pro-Forma Debt Service Coverage Post-2011 Refinancing

Period Ending	Aggregate Pre-Refinancing Debt	Debt Service for Commercial Paper Program (2)	Aggregate Pre-Refinancing Debt Service including Commercial Paper Debt Service	Aggregate Post-Refinancing Debt Service including Commercial Paper Debt Service	Net Revenues Available for Debt Service	Debt Service Coverage	Commodity Charge
	Service (1)						
6/30/2012	160,212,525	14,000,000	174,212,525	152,626,044	153,598,919	1.01	\$1.15
6/30/2013	192,391,507	14,000,000	206,391,507	168,852,469	170,395,484	1.01	\$1.27
6/30/2014	193,815,837	14,000,000	207,815,837	170,281,275	173,008,169	1.02	\$1.27
6/30/2015	193,915,762	14,000,000	207,915,762	170,579,525	173,939,700	1.02	\$1.27
6/30/2016	208,493,368	14,000,000	222,493,368	213,193,393	213,804,433	1.00	\$1.55
6/30/2017	205,937,556	14,000,000	219,937,556	240,715,306	240,954,882	1.00	\$1.73
6/30/2018	205,914,436	14,000,000	219,914,436	240,692,361	243,878,214	1.01	\$1.73
6/30/2019	205,903,461	14,000,000	219,903,461	240,680,261	246,748,237	1.03	\$1.73
6/30/2020	205,866,580	14,000,000	219,866,580	240,643,580	249,564,827	1.04	\$1.73
6/30/2021	203,766,682	14,000,000	217,766,682	238,542,557	252,328,107	1.06	\$1.73
6/30/2022	203,404,043	14,000,000	217,404,043	238,179,668	255,038,078	1.07	\$1.73
6/30/2023	203,069,686	14,000,000	217,069,686	237,847,936	257,694,987	1.08	\$1.73
6/30/2024	202,627,779	14,000,000	216,627,779	237,408,179	260,299,084	1.10	\$1.73
6/30/2025	202,619,367	14,000,000	216,619,367	237,398,017	262,850,242	1.11	\$1.73
6/30/2026	203,458,704	14,000,000	217,458,704	238,238,279	265,349,332	1.11	\$1.73
6/30/2027	182,874,123	14,000,000	196,874,123	217,653,248	267,796,476	1.23	\$1.73
6/30/2028	163,509,585	14,000,000	177,509,585	198,282,835	270,192,046	1.36	\$1.73
6/30/2029	126,500,185	14,000,000	140,500,185	161,273,010	272,536,414	1.69	\$1.73
6/30/2030	126,344,810	14,000,000	140,344,810	150,507,560	274,830,201	1.83	\$1.73
6/30/2031	110,809,985	14,000,000	124,809,985	130,160,685	277,143,328	2.13	\$1.73
6/30/2032	110,812,934	14,000,000	124,812,934	130,165,234	279,475,918	2.15	\$1.73
6/30/2033	110,810,859	14,000,000	124,810,859	130,162,934	281,827,973	2.17	\$1.73
6/30/2034	110,673,768	14,000,000	124,673,768	130,028,243	284,199,864	2.19	\$1.73
6/30/2035	110,672,687	14,000,000	124,672,687	130,026,362	286,591,715	2.20	\$1.73
6/30/2036	110,674,606	14,000,000	124,674,606	130,028,731	289,003,650	2.22	\$1.73
6/30/2037	110,676,116	14,000,000	124,676,116	124,676,116	291,435,917	2.34	\$1.73
6/30/2038	110,675,433	14,000,000	124,675,433	124,675,433	293,888,516	2.36	\$1.73
6/30/2039	110,674,622	14,000,000	124,674,622	124,674,622	296,361,818	2.38	\$1.73
Total	\$4,587,107,007	\$392,000,000	\$4,979,107,007	\$5,148,193,864	\$7,084,736,530		

(1) This reflects debt service on all outstanding obligations. The debt service is different to the debt service schedule shown on page 56 of the Official Statement of the Las Vegas Valley Water District, Nevada, General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds Series 2011A (Taxable) because it includes the Series 2008 CREBs and subsidy payments to be received from the federal government for outstanding Build America Bonds.

(2) Assumes an interest rate of 3.5% for the Commercial Paper Program

Appendix C shows the underlying assumptions for calculating the net revenue available for debt service and Appendix D shows the assumptions for the refinancing.

As previously described, the Commodity Charges shown in the above table and the following sections present a “worst case” scenario that does not include Connection Charge revenues, sales tax revenues or the existing fund balance as possible future sources of revenue. While it is not expected that Connection Charge revenue is going to be near zero for the next 30 to 40 years, it is difficult to predict and would require making several additional assumptions. Similarly, the current sales tax revenue level \$41.8 million is unlikely to substantially decline. If the sales tax revenue level and the Connection Charge level of fiscal year 2010 would remain the same for the coming years, then that would provide additional annual revenues of \$47.1 million. This potential revenue stream is equivalent to revenues of an approximate \$0.34 Commodity Charge and the related Reliability Charge revenues.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

#### B. Pro-forma debt service coverage for existing debt and ongoing projects

Under its current plan of periodic capital financing, the MCCP projects included in this Report will require SNWA to enter the tax-exempt bond market every two years to fund certain major projects. The table below shows the size of the project fund for each bond issue.

Fiscal Year	Total MCCP Cost	Bond Issue Project Fund
2012	\$220,559,513	\$404,733,956
2013	184,174,442	
2014	109,265,239	167,042,246
2015	57,777,007	
2016	55,935,334	109,878,554
2017	53,943,220	
2018	58,776,682	129,929,457
2019	71,152,775	
2020	67,102,789	67,102,789
Total	\$878,687,002	\$878,687,002

Source: SNWA

As described in Section II of this Report, the Water Authority will issue 30-year debt with level debt service. The total MCCP cost estimate of \$878.7 million requires selling bonds with total principal amount of approximately \$990.1 million due to assumed capitalized interest, financing costs and assumed net original issue discount (a bond structuring technique). For the purpose of this Report and consistent with the SNWA's planning and budgeting practices, all bond issues use conservative interest rate assumptions. The underlying financing assumptions are attached in Appendix E.

In 2012, SNWA proposes to sell bonds to finance costs of the third intake in Lake Mead and costs of other projects due in fiscal years 2012 and 2013. The table below reflects the debt service for existing debt and the debt to finance in 2012 and 2013 the remaining cost of the third intake and other MCCP projects included in this Report, as well as the Commodity Charge necessary to sufficiently cover aggregate debt service.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

**Coverage Calculation for Existing Debt and Debt to finance the 2012 Bond Issue  
MCCP project costs including third intake through Fiscal Year 2013**

Period Ending	Aggregate Debt Service *	Net Revenues Available for Debt Service	Debt Service Coverage	Commodity Charge
6/30/2012	\$156,046,531	\$156,205,308	1.00	\$1.17
6/30/2013	192,149,907	192,701,100	1.00	\$1.44
6/30/2014	203,838,475	204,980,319	1.01	\$1.51
6/30/2015	204,137,825	206,083,656	1.01	\$1.51
6/30/2016	246,749,093	247,661,382	1.00	\$1.80
6/30/2017	274,273,506	275,205,500	1.00	\$1.98
6/30/2018	274,251,361	278,543,777	1.02	\$1.98
6/30/2019	274,236,861	281,821,177	1.03	\$1.98
6/30/2020	274,203,080	285,037,560	1.04	\$1.98
6/30/2021	272,098,157	288,193,066	1.06	\$1.98
6/30/2022	271,738,068	291,287,697	1.07	\$1.98
6/30/2023	271,403,436	294,321,734	1.08	\$1.98
6/30/2024	270,963,279	297,295,462	1.10	\$1.98
6/30/2025	270,952,817	300,208,738	1.11	\$1.98
6/30/2026	271,795,479	303,062,554	1.12	\$1.98
6/30/2027	251,207,848	305,857,051	1.22	\$1.98
6/30/2028	231,837,435	308,592,654	1.33	\$1.98
6/30/2029	194,832,210	311,269,787	1.60	\$1.98
6/30/2030	184,062,660	313,889,159	1.71	\$1.98
6/30/2031	163,720,285	316,530,616	1.93	\$1.98
6/30/2032	163,724,034	319,194,300	1.95	\$1.98
6/30/2033	163,722,334	321,880,211	1.97	\$1.98
6/30/2034	163,585,743	324,588,774	1.98	\$1.98
6/30/2035	163,580,562	327,320,130	2.00	\$1.98
6/30/2036	163,584,031	330,074,420	2.02	\$1.98
6/30/2037	158,232,116	332,851,928	2.10	\$1.98
6/30/2038	158,231,933	335,652,655	2.12	\$1.98
6/30/2039	158,231,322	338,477,023	2.14	\$1.98
<b>Total through FY 2039</b>	<b>\$6,047,390,389</b>	<b>\$8,088,787,739</b>		

\* The debt service shown is net of capitalized interest.

The following table shows the debt service for SNWA's existing debt and the additional debt service to fund the MCCP projects included in this Report including the third intake as well as the Commodity Charge necessary to sufficiently cover aggregate debt service.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

Period Ending	MCCP - Debt Service			Existing and MCCP	Net Revenues Available for Debt Service	Debt Service Coverage	Commodity Charge
	Principal	Interest *	Debt Service *	Aggregate Debt Service			
6/30/2012	\$0	\$3,420,488	\$3,420,488	\$156,046,531	\$156,205,308	1.00	\$1.17
6/30/2013	6,195,000	\$17,102,438	23,297,438	192,149,907	192,701,100	1.00	\$1.44
6/30/2014	6,565,000	\$28,403,925	34,968,925	205,250,200	206,312,492	1.01	\$1.52
6/30/2015	9,515,000	\$33,656,925	43,171,925	213,751,450	214,119,646	1.00	\$1.57
6/30/2016	10,085,000	\$38,249,813	48,334,813	261,528,206	262,558,439	1.00	\$1.91
6/30/2017	12,370,000	\$41,359,163	53,729,163	294,444,469	295,755,871	1.00	\$2.13
6/30/2018	13,115,000	\$44,500,875	57,615,875	298,308,236	299,343,114	1.00	\$2.13
6/30/2019	15,890,000	\$48,106,275	63,996,275	304,676,536	305,670,776	1.00	\$2.15
6/30/2020	16,845,000	\$51,014,213	67,859,213	308,502,792	309,159,018	1.00	\$2.15
6/30/2021	18,880,000	\$52,271,963	71,151,963	309,694,520	312,581,239	1.01	\$2.15
6/30/2022	20,020,000	\$52,840,500	72,860,500	311,040,168	315,937,438	1.02	\$2.15
6/30/2023	21,215,000	\$51,639,300	72,854,300	310,702,236	319,227,922	1.03	\$2.15
6/30/2024	22,490,000	\$50,366,400	72,856,400	310,264,579	322,452,999	1.04	\$2.15
6/30/2025	23,830,000	\$49,017,000	72,847,000	310,245,017	325,612,515	1.05	\$2.15
6/30/2026	25,265,000	\$47,587,200	72,852,200	311,090,479	328,707,545	1.06	\$2.15
6/30/2027	26,780,000	\$46,071,300	72,851,300	290,504,548	331,738,242	1.14	\$2.15
6/30/2028	28,385,000	\$44,464,500	72,849,500	271,132,335	334,705,067	1.23	\$2.15
6/30/2029	30,095,000	\$42,761,400	72,856,400	234,129,410	337,608,481	1.44	\$2.15
6/30/2030	31,895,000	\$40,955,700	72,850,700	223,358,260	340,449,251	1.52	\$2.15
6/30/2031	33,815,000	\$39,042,000	72,857,000	203,017,685	343,313,973	1.69	\$2.15
6/30/2032	35,845,000	\$37,013,100	72,858,100	203,023,334	346,202,800	1.71	\$2.15
6/30/2033	37,990,000	\$34,862,400	72,852,400	203,015,334	349,115,733	1.72	\$2.15
6/30/2034	40,275,000	\$32,583,000	72,858,000	202,886,243	352,053,233	1.74	\$2.15
6/30/2035	42,685,000	\$30,166,500	72,851,500	202,877,862	355,015,451	1.75	\$2.15
6/30/2036	45,245,000	\$27,605,400	72,850,400	202,879,131	358,002,544	1.76	\$2.15
6/30/2037	47,960,000	\$24,890,700	72,850,700	197,526,816	361,014,816	1.83	\$2.15
6/30/2038	50,840,000	\$22,013,100	72,853,100	197,528,533	364,052,269	1.84	\$2.15
6/30/2039	53,890,000	\$18,962,700	72,852,700	197,527,322	367,115,363	1.86	\$2.15
Total through FY 2039	\$727,980,000	\$1,050,928,275	\$1,778,908,275	\$6,927,102,139	\$8,706,732,645		

\* The interest and debt service shown are net of capitalized interest.

The maximum annual debt service of \$311.1 million occurs in fiscal year 2026. Raising the Commodity Charge to \$2.15 would result in sufficient Commodity Charge and Reliability Charge revenues to service the debt on all outstanding bonds including the bonds issued to finance the \$878.69 million MCCP projects included in this Report. Note, however, that this analysis assumes that the Commodity Charge will bear the full brunt of the additional debt service funding responsibility – this is a very conservative assumption; one which does not take into account the probable re-emergence of growth-related charges. The table below shows what the Commodity Charge increase would mean for the monthly water bill of the average household. How this compares to similar metropolitan areas is discussed later in this Report.

Average Household Water Consumption per Month	12,400
LVVWD Average Water Charges of \$2.62 per 1,000 Gallons *	\$ 32.49
SNWA Commodity Charges of \$2.15 per 1,000 Gallons	\$ 26.66
SNWA Reliability Charges of 0.25% of total water bill**	\$ 0.15
<b>Total Water Bill</b>	<b>\$ 59.30</b>

\* Calculated as average cost for a single-family home using effective rates as of 1/1/2011, see Appendix C. Includes Wholesale Delivery Charges.

\*\* Charge of 0.25% for residential customers of the total water bill.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

#### C. Pro-forma debt service coverage for existing debt, the MCCP and for the Project

Consistent with SNWA capital funding process, this Report assumes that SNWA will finance the Importation Project through biennial tax-exempt bond transactions. Each bond transaction will be sized for 30-year level debt service and will fund project cost due in the immediately following two fiscal years. The table below displays the project fund amounts for each bond transaction. The underlying financing assumptions are shown in Appendix F.

Fiscal Year	Project Costs	Commercial Paper Funding	Commercial Paper Aggregate Funding	Days CP Outstanding	Bond Issue Project Fund	Issue Date	First Interest Payment	First Principal Payment	10 Year Par Call date
2012	\$24,821,372	\$24,821,372	\$24,821,372	360	\$0				
2013	307,862,635	307,862,635	332,684,006	360	0				
2014	371,303,393	312,387,848	645,071,855	303	1,100,494,693	4/29/2014	12/1/2014	6/1/2016	6/1/2024
2015	396,507,294	0	0		0				
2016	791,308,904	0	0		1,713,875,074	7/1/2015	12/1/2015	6/1/2017	6/1/2025
2017	922,566,170	0	0		0				
2018	544,785,840	0	0		1,102,814,073	7/1/2017	12/1/2017	6/1/2019	6/1/2027
2019	558,028,233	0	0		0				
2020	166,947,556	0	0		217,200,391	7/1/2019	12/1/2019	6/1/2021	6/1/2029
2021	50,252,835	0	0		0				
2022	195,306,397	0	0		387,405,407	7/1/2021	12/1/2021	6/1/2023	6/1/2031
2023	192,099,010	0	0		0				
2024	199,782,970	0	0		241,686,489	7/1/2023	12/1/2023	6/1/2025	6/1/2033
2025	41,903,519	0	0		0				
2026	43,579,660	0	0		88,902,507	7/1/2025	12/1/2025	6/1/2027	6/1/2035
2027	45,322,847	0	0		0				
2028	47,135,760	0	0		47,135,760	7/1/2027	12/1/2027	6/1/2029	6/1/2037
2029	0	0	0		0				
2030	0	0	0		0				
2031	0	0	0		0				
2032	0	0	0		0				
2033	0	0	0		0				
2034	0	0	0		0				
2035	0	0	0		0				
2036	0	0	0		0				
2037	6,830,366	0	0		73,870,412	7/1/2036	12/1/2036	6/1/2038	6/1/2046
2038	67,040,046	0	0		0				
2039	69,721,647	0	0		142,232,161	7/1/2038	12/1/2038	6/1/2040	6/1/2048
2040	72,510,513	0	0		0				
2041	75,410,934	0	0		145,528,120	7/1/2040	12/1/2040	6/1/2042	6/1/2050
2042	70,117,186	0	0		0				
2043	87,148,953	0	0		291,925,691	7/1/2042	12/1/2042	6/1/2044	6/1/2052
2044	204,776,738	0	0		0				
2045	212,967,807	0	0		352,427,136	7/1/2044	12/1/2044	6/1/2046	6/1/2054
2046	139,459,329	0	0		0				
2047	128,394,031	0	0		261,923,824	7/1/2046	12/1/2046	6/1/2048	6/1/2056
2048	133,529,793	0	0		0				
2049	138,870,984	0	0		283,296,808	7/1/2048	12/1/2048	6/1/2050	6/1/2058
2050	144,425,824	0	0		0				
2051	0	0	0		0				
	\$6,450,718,545	\$645,071,855			\$6,450,718,545				

Source: SNWA, "Summary of Cost Estimate For Clark, Lincoln, and White Pine Counties Groundwater Development Project" document

The total Project costs estimate of about \$6.450 billion would require the total issuance of \$7.283 billion of associated bonds, with the difference due to assumed capitalized interest of \$522.80 million, financing cost of \$145.67 million and assumed net original issue discount (a bond structuring technique) of \$164.13 million. As shown in the table below, SNWA would need to raise Commodity Charges to \$4.67 per 1,000 gallons of water if the Commodity Charge and Reliability Charge had to fully fund the incremental debt service requirements associated with Importation Project. The financing numbers below indicate that the full Commodity Charge of \$4.67 per 1,000 gallons is not required until the beginning of fiscal year 2026 or approximately 14 years from now.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

Period Ending	Importation Project Debt			Existing and MCCP	Existing, MCCP and	Net Revenues	Debt Service Coverage	Commodity Charge
	Principal	Interest *	Debt Service *	Aggregate Debt Service	Importation Project Aggregate Debt Service	Available for Debt Service		
6/30/2012	\$0	\$868,748	\$868,748	\$156,046,531	\$156,915,279	\$157,508,502	1.00	\$1.18
6/30/2013	0	\$11,643,940	11,643,940	192,149,907	203,793,847	204,509,956	1.00	\$1.53
6/30/2014	0	\$18,995,090	18,995,090	205,250,200	224,245,290	224,962,913	1.00	\$1.66
6/30/2015	0	\$9,408,713	9,408,713	213,751,450	223,160,162	226,173,629	1.01	\$1.66
6/30/2016	17,035,000	\$61,527,750	78,562,750	261,528,206	340,090,956	341,106,561	1.00	\$2.49
6/30/2017	44,285,000	\$146,668,538	190,953,538	294,444,469	485,398,006	486,189,308	1.00	\$3.52
6/30/2018	46,940,000	\$196,734,025	243,724,025	298,308,236	542,032,261	543,388,675	1.00	\$3.89
6/30/2019	66,630,000	\$231,247,725	297,877,725	304,676,536	602,554,261	603,089,309	1.00	\$4.27
6/30/2020	70,630,000	\$257,045,588	327,675,588	308,502,792	636,178,380	636,927,074	1.00	\$4.46
6/30/2021	78,195,000	\$260,150,138	338,345,138	309,694,520	648,039,657	648,277,261	1.00	\$4.49
6/30/2022	82,885,000	\$264,239,213	347,124,213	311,040,168	658,164,380	659,583,826	1.00	\$4.52
6/30/2023	93,785,000	\$272,362,163	366,147,163	310,702,236	676,849,398	678,170,041	1.00	\$4.60
6/30/2024	99,415,000	\$278,599,650	378,014,650	310,264,579	688,279,229	689,457,071	1.00	\$4.63
6/30/2025	109,070,000	\$280,804,950	389,874,950	310,245,017	700,119,967	700,691,810	1.00	\$4.66
6/30/2026	115,620,000	\$281,139,750	396,759,750	311,090,479	707,850,229	708,586,823	1.00	\$4.67
6/30/2027	123,915,000	\$277,207,950	401,122,950	290,504,548	691,627,498	715,388,840	1.03	\$4.67
6/30/2028	131,350,000	\$272,425,463	403,775,463	271,132,335	674,907,798	721,783,195	1.07	\$4.67
6/30/2029	139,950,000	\$266,137,913	406,087,913	234,129,410	640,217,323	728,040,880	1.14	\$4.67
6/30/2030	148,350,000	\$258,936,000	407,286,000	223,358,260	630,644,260	734,163,550	1.16	\$4.67
6/30/2031	157,250,000	\$250,035,000	407,285,000	203,017,685	610,302,685	740,337,686	1.21	\$4.67
6/30/2032	166,685,000	\$240,600,000	407,285,000	203,023,334	610,308,334	746,563,720	1.22	\$4.67
6/30/2033	176,685,000	\$230,598,900	407,283,900	203,015,334	610,299,234	752,842,090	1.23	\$4.67
6/30/2034	187,290,000	\$219,997,800	407,287,800	202,886,243	610,174,043	759,173,234	1.24	\$4.67
6/30/2035	198,535,000	\$208,760,400	407,295,400	202,877,862	610,173,262	765,557,596	1.25	\$4.67
6/30/2036	210,435,000	\$196,848,300	407,283,300	202,879,131	610,162,431	771,995,625	1.27	\$4.67
6/30/2037	223,065,000	\$184,846,500	407,911,500	197,526,816	605,438,316	778,487,770	1.29	\$4.67
6/30/2038	237,575,000	\$173,959,800	411,534,800	197,528,533	609,063,333	785,034,480	1.29	\$4.67
6/30/2039	251,825,000	\$162,780,225	414,605,225	197,527,322	612,132,547	791,636,234	1.29	\$4.67
6/30/2040	269,110,000	\$152,478,825	421,588,825	86,849,300	508,438,125	798,293,474	1.57	\$4.67
6/30/2041	285,260,000	\$141,168,413	426,428,413	86,857,100	513,285,513	805,006,674	1.57	\$4.67
6/30/2042	304,605,000	\$128,973,263	433,578,263	53,293,800	486,872,063	811,776,304	1.67	\$4.67
6/30/2043	322,875,000	\$116,854,425	439,729,425	53,296,300	493,025,725	818,602,838	1.66	\$4.67
6/30/2044	346,725,000	\$107,350,425	454,075,425	39,453,400	493,528,825	825,486,754	1.67	\$4.67
6/30/2045	275,225,000	\$96,927,225	372,152,225	39,449,200	411,601,425	832,428,536	2.02	\$4.67
6/30/2046	155,025,000	\$92,329,425	247,354,425	16,331,200	263,685,625	839,428,668	3.18	\$4.67
6/30/2047	164,330,000	\$94,178,250	258,508,250	16,331,800	274,840,050	846,487,643	3.08	\$4.67
6/30/2048	86,760,000	\$93,172,650	179,932,650	5,562,000	185,494,650	853,605,954	4.60	\$4.67
6/30/2049	91,975,000	\$97,001,888	188,976,888	5,565,000	194,541,888	860,784,099	4.42	\$4.67
6/30/2050	83,810,000	\$101,060,138	184,870,138	0	184,870,138	868,022,584	4.70	\$4.67
6/30/2051	88,845,000	\$103,214,100	192,059,100	0	192,059,100	875,321,913	4.56	\$4.67
6/30/2052	62,055,000	\$97,883,400	159,938,400	0	159,938,400	882,682,599	5.52	\$4.67
6/30/2053	65,780,000	\$94,160,100	159,940,100	0	159,940,100	890,105,158	5.57	\$4.67
6/30/2054	49,675,000	\$90,213,300	139,888,300	0	139,888,300	897,590,109	6.42	\$4.67
6/30/2055	52,660,000	\$87,232,800	139,892,800	0	139,892,800	905,137,977	6.47	\$4.67
6/30/2056	48,460,000	\$84,073,200	132,533,200	0	132,533,200	912,749,292	6.89	\$4.67
6/30/2057	51,365,000	\$81,165,600	132,530,600	0	132,530,600	920,424,585	6.94	\$4.67
6/30/2058	50,540,000	\$78,083,700	128,623,700	0	128,623,700	928,164,396	7.22	\$4.67
6/30/2059	53,570,000	\$75,051,300	128,621,300	0	128,621,300	935,969,266	7.28	\$4.67
6/30/2060	56,785,000	\$71,837,100	128,622,100	0	128,622,100	943,839,742	7.34	\$4.67
6/30/2061	60,195,000	\$68,430,000	128,625,000	0	128,625,000	951,776,376	7.40	\$4.67
6/30/2062	63,800,000	\$64,818,300	128,618,300	0	128,618,300	959,779,723	7.46	\$4.67
6/30/2063	67,625,000	\$60,990,300	128,615,300	0	128,615,300	967,850,346	7.53	\$4.67
6/30/2064	71,675,000	\$56,932,800	128,607,800	0	128,607,800	975,988,808	7.59	\$4.67
6/30/2065	75,980,000	\$52,632,300	128,612,300	0	128,612,300	984,195,681	7.65	\$4.67
6/30/2066	80,550,000	\$48,073,500	128,623,500	0	128,623,500	992,471,539	7.72	\$4.67
6/30/2067	79,255,000	\$43,240,500	122,495,500	0	122,495,500	1,000,816,963	8.17	\$4.67
6/30/2068	84,005,000	\$38,485,200	122,490,200	0	122,490,200	1,009,232,536	8.24	\$4.67
6/30/2069	77,250,000	\$33,444,900	110,694,900	0	110,694,900	1,017,718,849	9.19	\$4.67
6/30/2070	81,885,000	\$28,809,900	110,694,900	0	110,694,900	1,026,276,497	9.27	\$4.67
6/30/2071	74,735,000	\$23,896,800	98,631,800	0	98,631,800	1,034,906,078	10.49	\$4.67
6/30/2072	79,220,000	\$19,412,700	98,632,700	0	98,632,700	1,043,608,199	10.58	\$4.67
6/30/2073	59,770,000	\$14,659,500	74,429,500	0	74,429,500	1,052,383,467	14.14	\$4.67
6/30/2074	63,355,000	\$11,073,300	74,428,300	0	74,428,300	1,061,232,499	14.26	\$4.67
6/30/2075	37,930,000	\$7,272,000	45,202,000	0	45,202,000	1,070,155,914	23.67	\$4.67
6/30/2076	40,205,000	\$4,996,200	45,201,200	0	45,201,200	1,079,154,337	23.87	\$4.67
6/30/2077	20,905,000	\$2,583,900	23,488,900	0	23,488,900	1,088,228,400	46.33	\$4.67
6/30/2078	22,160,000	\$1,329,600	23,489,600	0	23,489,600	1,097,378,737	46.72	\$4.67
Total	\$7,283,335,000	\$8,180,111,453	\$15,463,446,453	\$7,330,091,239	\$22,793,537,692	\$53,964,961,777		

\* The interest and debt service shown are net of capitalized interest and include interest cost on commercial paper issued to finance the Project.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

The table below shows what the Commodity Charge increase would mean for the monthly water bill of the average household. How this compares to similar metropolitan areas is discussed later in this Report.

Table – Average Residential Water Bill

Average Household Water Consumption per Month	12,400
LVVWD Average Water Charges of \$2.62 per 1,000 Gallons *	\$ 32.49
SNWA Commodity Charges of \$4.67 per 1,000 Gallons	\$ 57.91
SNWA Reliability Charges of 0.25% of total water bill**	\$ 0.23
<u>Total Water Bill</u>	<u>\$ 90.62</u>

\* Calculated as average cost for a single-family home using effective rates as of 1/1/2011, see Appendix C. Includes Wholesale Delivery Charges.

\*\* Charge of 0.25% for residential customers of the total water bill.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

#### D. Ability to modify rates and charges to provide coverage

SNWA works to manage existing water resources, to develop additional water supply and to promote water conservation efforts in the service area of its Members. According to SNWA’s Operations Agreement with its Members, SNWA has to set and collect charges from its Members at levels sufficient to pay for operations and maintenance expenses, debt service and reserve requirements of its bond obligations related to the SNWS. Of the four types of charges the SNWA can set and modify - the Wholesale Delivery Charge, a Connection Charge, the Commodity Charge and the Reliability Charge - the Commodity Charge and the Reliability Charge are considered to be the primary funding mechanisms in this Report due to the level of control maintained by the SNWA over these charges and the resulting revenues.

The table below shows the current water rates, as well as the water rate level for the different financing scenarios for the Importation Project in the LVVWD, Boulder City, Henderson and North Las Vegas service areas.

Residential Customers	LVVWD	Henderson	North Las Vegas	Boulder City
Average Household Water Consumption per Month	12,400	12,400	12,400	12,400
Municipal Water Users Water Charges 1,000 Gallons*	\$2.62	\$2.62	\$2.46	\$2.31
Municipal Water Users Water Charges per Avg Household	\$32.49	\$32.49	\$30.50	\$28.64
SNWA Commodity Charges of \$0.30 per 1,000 Gallons	\$3.72	\$3.72	\$3.72	\$3.72
SNWA Reliability Charges of 0.25% of total water bill**	\$0.09	\$0.09	\$0.09	\$0.08
<b>Total Water Bill</b>	<b>\$36.30</b>	<b>\$36.30</b>	<b>\$34.31</b>	<b>\$32.44</b>
<i>Scenario 1 (Commodity Charge for existing debt)</i>				
SNWA Commodity Charges of \$1.73 per 1,000 Gallons	\$21.45	\$21.45	\$21.45	\$21.45
SNWA Reliability Charges of 0.25% of total water bill**	\$0.13	\$0.13	\$0.13	\$0.13
<b>Total Water Bill - Scenario 1</b>	<b>\$54.07</b>	<b>\$54.07</b>	<b>\$52.09</b>	<b>\$50.22</b>
<i>Scenario 2 (Commodity Charge for existing debt and MCCP)</i>				
SNWA Commodity Charges of \$2.15 per 1,000 Gallons	\$26.66	\$26.66	\$26.66	\$26.66
SNWA Reliability Charges of 0.25% of total water bill**	\$0.15	\$0.15	\$0.14	\$0.14
<b>Total Water Bill - Scenario 2</b>	<b>\$59.30</b>	<b>\$59.30</b>	<b>\$57.31</b>	<b>\$55.44</b>
<i>Scenario 3 (Commodity Charge for existing debt, MCCP and Importation Project)</i>				
SNWA Commodity Charges of \$4.67 per 1,000 Gallons	\$57.91	\$57.91	\$57.91	\$57.91
SNWA Reliability Charges of 0.25% of total water bill**	\$0.23	\$0.23	\$0.22	\$0.22
<b>Total Water Bill - Scenario 3</b>	<b>\$90.62</b>	<b>\$90.62</b>	<b>\$88.63</b>	<b>\$86.77</b>

\* Calculated as average cost for a single-family home using effective rates as of 1/1/2011, see Appendix C. Includes Wholesale Delivery Charges.

\*\* Charge of 0.25% for residential customers of the total water bill.

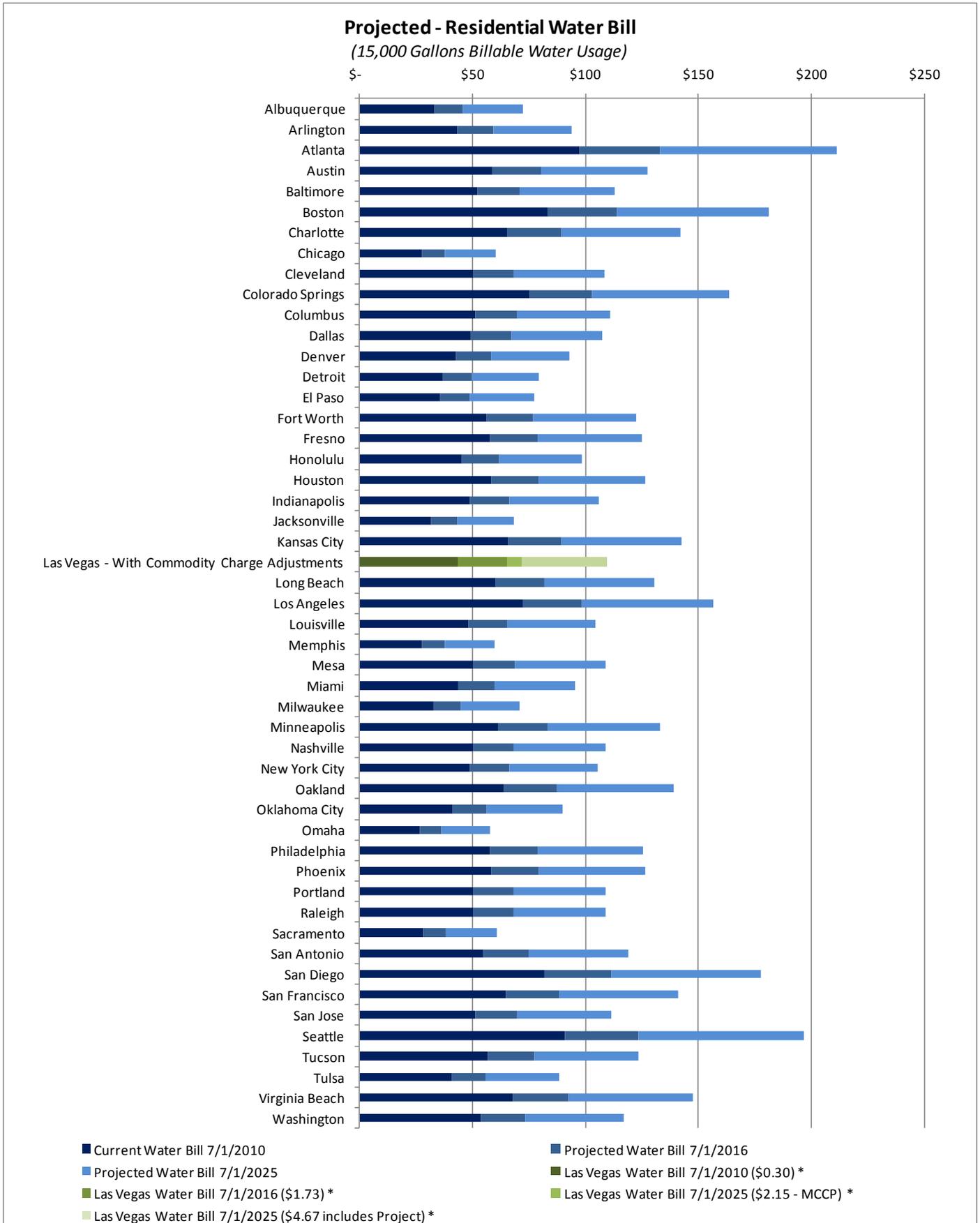
In the “2009/2010 50 Largest Cities Water/Wastewater Rates Survey” from Black and Veatch (the “Survey”), Las Vegas currently has the 10<sup>th</sup> lowest water rates for a residential customer’s water bill assuming 15,000 gallons of monthly water usage. The Black & Veatch report shows that residential water bills across the nation increased by 5.3% annually over the past decade and we see this trend continuing. This Report assumes that water consumption per connection is not going to decrease substantially as a reaction to price increases. The SNWA’s water conservation program and the economic conditions in the past two years have already resulted in modest per capita water consumption levels. As mentioned above, the 2010 per capita water consumption level of 69,097 gallons per year, is assumed in this Report to remain constant going forward.

The table on the following page compares the projected residential water bill charges over the next 14 years for households using 15,000 gallons of water per month for the 50 U.S. metropolitan areas shown in the Survey. The water bill levels reflect the bill levels in the Survey from June 30, 2009 adjusted for annual growth of 5.3%. For Las Vegas (the SNWA service area), the current water bill levels as well as the levels for the different financing scenarios are shown. Importantly, even if the SNWA were to raise the Commodity Charge tenfold in the future, the total Las Vegas residential water bill would still be less than the water bills in other major metropolitan areas. *Moreover, one must keep in mind the timing of the rate adjustments in the Scenario 3 funding case, where the Commodity Charge increases to \$4.67 per 1,000 gallons. This adjustment will not occur for several years, at which time SNWA’s service area is still expected to have rates comparable to other large water systems.*





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN



\* Dollar amounts in the parenthesis present the projected Commodity Charge per \$1,000 gallons.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

The following tables show the rate impact for commercial customers and industrial customers.

<b>Commercial Customers</b>	<b>LVVWD</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Boulder City</b>
Average Water Consumption per Month	100,000	100,000	100,000	100,000
Municipal Water Users Water Charges 1,000 Gallons	\$2.62	\$2.62	\$2.46	\$2.31
Municipal Water Users Water Charges per 100,000 Gallons	\$262.00	\$262.00	\$246.00	\$231.00
SNWA Commodity Charges of \$0.30 per 1,000 Gallons	\$30.00	\$30.00	\$30.00	\$30.00
SNWA Reliability Charges of 2.5% of total water bill*	\$7.30	\$7.30	\$6.90	\$6.53
<b>Total Water Bill</b>	<b>\$299.30</b>	<b>\$299.30</b>	<b>\$282.90</b>	<b>\$267.53</b>
<i>Scenario 1 (Commodity Charge for existing debt)</i>				
SNWA Commodity Charges of \$1.73 per 1,000 Gallons	\$173.00	\$173.00	\$173.00	\$173.00
SNWA Reliability Charges of 2.5% of total water bill*	\$10.88	\$10.88	\$10.48	\$10.10
<b>Total Water Bill - Scenario 1</b>	<b>\$445.88</b>	<b>\$445.88</b>	<b>\$429.48</b>	<b>\$414.10</b>
<i>Scenario 2 (Commodity Charge for existing debt and MCCP)</i>				
SNWA Commodity Charges of \$2.15 per 1,000 Gallons	\$215.00	\$215.00	\$215.00	\$215.00
SNWA Reliability Charges of 2.5% of total water bill*	\$11.93	\$11.93	\$11.53	\$11.15
<b>Total Water Bill - Scenario 2</b>	<b>\$488.93</b>	<b>\$488.93</b>	<b>\$472.53</b>	<b>\$457.15</b>
<i>Scenario 3 (Commodity Charge for existing debt, MCCP and Importation Project)</i>				
SNWA Commodity Charges of \$4.67 per 1,000 Gallons	\$467.00	\$467.00	\$467.00	\$467.00
SNWA Reliability Charges of 2.5% of total water bill*	\$18.23	\$18.23	\$17.83	\$17.45
<b>Total Water Bill - Scenario 3</b>	<b>\$747.23</b>	<b>\$747.23</b>	<b>\$730.83</b>	<b>\$715.45</b>

\* for non-residential customers

<b>Industrial Customers</b>	<b>LVVWD</b>	<b>Henderson</b>	<b>North Las Vegas</b>	<b>Boulder City</b>
Average Water Consumption per Month	10,000,000	10,000,000	10,000,000	10,000,000
Municipal Water Users Water Charges 1,000 Gallons	\$2.62	\$2.62	\$2.46	\$2.31
Municipal Water Users Water Charges per 100,000 Gallons	\$26,200.00	\$26,200.00	\$24,600.00	\$23,100.00
SNWA Commodity Charges of \$0.30 per 1,000 Gallons	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
SNWA Reliability Charges of 2.5% of total water bill*	\$730.00	\$730.00	\$690.00	\$652.50
<b>Total Water Bill</b>	<b>\$29,930.00</b>	<b>\$29,930.00</b>	<b>\$28,290.00</b>	<b>\$26,752.50</b>
<i>Scenario 1 (Commodity Charge for existing debt)</i>				
SNWA Commodity Charges of \$1.73 per 1,000 Gallons	\$17,300.00	\$17,300.00	\$17,300.00	\$17,300.00
SNWA Reliability Charges of 2.5% of total water bill*	\$1,087.50	\$1,087.50	\$1,047.50	\$1,010.00
<b>Total Water Bill - Scenario 1</b>	<b>\$44,587.50</b>	<b>\$44,587.50</b>	<b>\$42,947.50</b>	<b>\$41,410.00</b>
<i>Scenario 2 (Commodity Charge for existing debt and MCCP)</i>				
SNWA Commodity Charges of \$2.15 per 1,000 Gallons	\$21,500.00	\$21,500.00	\$21,500.00	\$21,500.00
SNWA Reliability Charges of 2.5% of total water bill*	\$1,192.50	\$1,192.50	\$1,152.50	\$1,115.00
<b>Total Water Bill - Scenario 2</b>	<b>\$48,892.50</b>	<b>\$48,892.50</b>	<b>\$47,252.50</b>	<b>\$45,715.00</b>
<i>Scenario 3 (Commodity Charge for existing debt, MCCP and Importation Project)</i>				
SNWA Commodity Charges of \$4.67 per 1,000 Gallons	\$46,700.00	\$46,700.00	\$46,700.00	\$46,700.00
SNWA Reliability Charges of 2.5% of total water bill*	\$1,822.50	\$1,822.50	\$1,782.50	\$1,745.00
<b>Total Water Bill - Scenario 3</b>	<b>\$74,722.50</b>	<b>\$74,722.50</b>	<b>\$73,082.50</b>	<b>\$71,545.00</b>

\* for non-residential customers

Appendix G shows the Survey's comparison to the 49 largest cities for commercial and industrial water bills.





### III. FUTURE SNWA PLAN OF FINANCE AND ABILITY TO IMPLEMENT THE PLAN

#### E. Anticipated market view of SNWA credit

As described in Section II. A. the SNWA has the option to issue bonds on its own credit, or enhance it with a general obligation pledge from the State, the County or the LVVWD.

The 2011 Refinancing is part of the Authority's strategy to address the revenue decline caused by the severe decrease in Connection Charge revenues. Before entering the bond markets for the 2011 Refinancing, the Authority plans to decide on the necessary Commodity Charge increases to ensure the proper funding of the debt service. While the Commodity Charge is not anticipated to be increased in one step to the necessary level (approximately \$1.73 per 1,000 gallons), the decision and timing of the rate increases before entering the bond market will be important. Rating agencies evaluated the Authority's credit not solely on the revenues it historically generated but on the Authority's ability to increase rates when necessary. If the Authority thus proves its ability to raise water rates to a sufficient level to service its debt, then the 2011 Refinancing should not have a material negative impact on the Authority's ability to market its bonds. Rating agencies have also noted that water rates in much of the service area of SNWA, the Las Vegas Valley Water District have been particularly low compared to other Western cities and that the District "... has plenty of headroom for additional rate increases, if necessary, under its current rate structure, which provides water to customers at some of the lowest rates among large western cities."<sup>5</sup> Moreover, the Authority anticipates issuing refunding bonds through entities such as LVVWD and Clark County, so SNWA will, therefore, continue to benefit from the general obligation pledge of these entities.

Similarly, the additional issuance of bonds to finance the MCCP projects included in this Report will require the Authority to approve Commodity Charge increases that are sufficient to finance the capital program (approximately \$2.15 per 1,000 gallons). The MCCP projects included in this Report would add approximately \$727.98 million in principal payments through 2039 (toward a total of \$990.14 million through 2049). As shown in Section III of this Report, even with the rate increase necessary to fund these MCCP projects, water rates in the Las Vegas metropolitan area would still compare favorably to rates in other western cities.

The Importation Project is expected to add approximately \$7.3 billion in debt, which includes inflation, capitalized interest and other cost of financing the Project. As described in this Report, the issuance of bonds to finance existing debt, the MCCP projects in this Report, and the Importation Project would require a Commodity Charge of approximately \$4.67 per 1,000 gallons. However, because this analysis does not include any future revenues from sales tax of Connection Charges, this is a conservative figure. If other sources of future revenue were to be available the Commodity Charge required to fund these projects could decrease. Even with the conservative assumptions used in this Report, the projected future Las Vegas water bill is expected to remain affordable as compared to projected water bills in 49 other major U.S. cities.

Summary, as required by the NRS 533.370(1)(c)(2), this Report shows that SNWA has the ability to finance the Project with the described adjustments to the Commodity Charge level.

<sup>5</sup> Source: Standard & Poor's rating report: Las Vegas Valley Water District, Nevada; Appropriations; General Obligations; Water/Sewer from 5/9/2011





**APPENDIX A – RATING REPORTS**

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**Summary:**

## Las Vegas Valley Water District, Nevada; CP; General Obligation; Water/Sewer

**Primary Credit Analyst:**

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## Summary:

# Las Vegas Valley Water District, Nevada; CP; General Obligation; Water/Sewer

Credit Profile		
US\$57.885 mil Ref rfdg bnds due 06/01/2026		
<i>Long Term Rating</i>	AA+/Stable	New
Las Vegas Vy Wtr Dist - ICR		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
<b>Las Vegas Vy Wtr Dist GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed

## Rationale

Standard & Poor's Ratings Services has assigned its 'AA+' long-term rating, and stable outlook, to Las Vegas Valley Water District, Nev.'s series 2011A (taxable) general obligation (GO) refunding bonds. Standard & Poor's also affirmed its 'A-1+' rating on the district's GO commercial paper (CP) notes (2004A and 2004B) and affirmed its 'AA+' unenhanced rating on the district's GO debt outstanding.

The ratings on both the short- and long-term debt reflect our view of:

- The district's statutory authority to levy an ad valorem tax on property owners in the district's service area, which provides substantial financial flexibility;
- A regional economy with very strong underlying credit fundamentals, including historically robust tax base and employment growth and strong income and wealth indicators;
- The district's generally strong financial management, including maintenance of very strong cash reserves; and
- The district's critical role as the sole water wholesale entity serving Nevada's largest metropolitan area.

In our opinion, factors limiting the ratings include the district's continued prolonged period of economic weakness--particularly in home prices, assessed valuation (AV), connection growth (and connection fees), employment, and taxable sales--as well as a slowdown in recurring water sales. We believe that, as a result, district management will need to continue to adjust rates as needed and to curb expenditures to compensate for a decrease in revenue growth, particularly nonrecurring connection fees. However, we expect that the district, consistent with 'AA+' rating on its GO debt, will manage through the current economic and financial challenges given its good financial management practices, water and tax rate flexibility, and ability to adjust discretionary spending. The cash reserves it has built up over several years of strong operating results act as an important credit cushion, in our opinion.

A pledge of the full faith and credit of the district secures the GO-backed debt, which is subject to Nevada's statutory limits on overlapping indebtedness to a maximum levy of \$3.64 per \$100 of AV, secures the district's debt outstanding. The bonds are also secured by a pledge of revenues from the Southern Nevada Water Authority (SNWA) to the district in amount sufficient to pay debt service on the bonds at no less than 1.0x, although the

district projects coverage to range from 1.0x-1.3x. We understand that the district will use the series 2011 bond proceeds to refund a portion of the district's series 2008B GO refunding bonds outstanding, providing near-term debt relief in fiscals 2011-2015 by reducing principal and interest payments, though there is not extension of maturities.

The district operates and maintains the Southern Nevada Water System as agent for the SNWA. Members of SNWA include the district; the cities of Boulder City, Henderson, Las Vegas, and North Las Vegas; Big Bend Water District, and Clark County Water Reclamation District. The district encompasses more than 99% of Clark County's tax base and serves all but a fraction of the county's 2.1 million residents, or about three-fourths of the state's 2.7 million residents. While the district's debt obligations are ultimately secured by its ability to levy an ad valorem tax on property, which it has never imposed, the bonds will be paid from water revenues from SNWA as described below. If the district were to levy a property tax, every one cent of property tax would generate approximately \$7.5 million to \$9.0 million in revenue.

District revenues consist of water sales, connection fees, regional commodity and surcharges, recharged water sales, and other revenues, which totaled \$347 million in audited fiscal 2010, down 3% from \$356 million in fiscal 2009. The district is budgeting for a 5% increase in revenues for fiscal 2011, due mostly to an implemented rate increase. In audited fiscal 2010, \$320.7 million, or 92% of total revenues, consisted of water sales and \$23 million, or 6% of total revenues, consisted of connection fees. As the economic downturn has grown more severe, residential growth has stalled and connection fees have decreased in recent years. The district is forecasting that connection fees will account for a much smaller portion of future revenues, but this is also due in part to recent large water rate increases. The ratepayer base is diverse, with the leading 10 customers representing just 7.5% of water revenues.

The district has raised rates in recent years with its most recent increases approved through fiscal 2011. These were at 4% in both fiscals 2010 and 2011. At this time, the district does not plan to increase rates through at least fiscal 2014. In response to the softness in revenues, the district had made previous budgetary reductions and continues to cost savings.

The district has a strong cash position that we consider sufficient to manage the current downturn in the economy, which has affected revenues--mainly connection fees. The district and the SNWA, which the district administers, had \$82.4 million and \$367 million, respectively, in unrestricted cash reserves on its balance sheets as of audited fiscal 2010. While the district has no formal reserves policy, the district's 2010 cash balance translated to a still-strong, in our view, 125 days' cash.

Despite recent rate increases, we believe the district has plenty of headroom for additional rate increases, if necessary, under its current rate structure, which provides water to customers at some of the lowest rates among large western U.S. cities. Current average residential water bills are just \$36 per month. Debt service coverage (DSC) was 1.07x in fiscal 2009 and 1.5x in fiscal 2010 and is projected at 0.93x-1.21x through fiscal 2015. All debt is paid from operating revenues rather than ad valorem taxes, but the tax base is ultimately pledged to bondholders. In years in which coverage is less than 1.0x, the district uses its strong cash balances on hand to cover any shortfall.

The district's financial management practices are considered "good" under Standard & Poor's Financial Management Assessment (FMA) methodology. An FMA of good indicates that financial management practices exist in most areas, although not all may be formalized or regularly monitored by governance officials.

The district has \$2.22 billion in GO debt outstanding. Debt payments are made with system net revenues, and,

because net system revenues and available reserves have always been sufficient to pay debt service, an actual ad valorem tax levy has never been necessary. Overall direct and overlapping debt, net of self-supported GO bonds with water revenues, is \$4.7 billion, or \$2,374 per capita and 2.6% of taxable value.

For more information on the Las Vegas Valley Water District, please view the report published Feb. 18, 2011, on RatingsDirect on the Global Credit Portal.

## Outlook

The stable outlook reflects our expectation that the district will continue to achieve its revenue requirements through timely adjustment of charges and prudent oversight of capital projects as the region weathers the current economic slowdown. The stable outlook also reflects our expectation that the district will continue to be self-sufficient in terms of covering its operating and capital budget with sustainable revenues and reserves, but also recognizes the district's taxing ability and substantial revenues it could collect, if a tax were levied. We also expect that the district's water planning efforts will address the critical importance of water infrastructure improvements to the southern Nevada regional economy. We do not expect that the rating will change within the two-year parameter of the stable outlook, as we anticipate the district continuing to maintain consistently strong reserve levels.

## Related Criteria And Research

- USPF Criteria: GO Debt, Oct. 12, 2006
- USPF Criteria: Key General Obligation Ratio Credit Ranges – Analysis Vs. Reality, April 2, 2008
- USPF Criteria: Standard & Poor's Revises Criteria For Rating Water, Sewer, And Drainage Utility Revenue Bonds, Sept. 15, 2008

<b>Ratings Detail</b> (As Of May 9, 2011)		
Las Vegas Vy Wtr Dist GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO wtr bnds ser 2009C&D		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (ltd Tax) wtr cml pap nts (Snwa Rev Supported) ser 2004 dtd 03/01/2004 due 01/01/2034		
<i>Short Term Rating</i>	A-1+	Affirmed
Las Vegas Vy Wtr Dist GO (wrap of insured) (FGIC & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) Adjustable Rate wtr Improv bnds ser 2006 B dtd 07/20/2006 due 06/01/2036		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) Adjustable Rate wtr Improv bnds ser 2006 C dtd 07/20/2006 due 06/01/2036		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
<b>Las Vegas Vy Wtr Dist GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

Complete ratings information is available to subscribers of RatingsDirect on the Global Credit Portal at

*Summary: Las Vegas Valley Water District, Nevada; CP; General Obligation; Water/Sewer*

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February 18, 2011

### Summary:

## Las Vegas Valley Water District, Nevada; CP; General Obligation; Water/Sewer

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**Summary:**

# Las Vegas Valley Water District, Nevada; CP; General Obligation; Water/Sewer

Credit Profile		
Las Vegas Vy Wtr Dist - ICR		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
<b>Las Vegas Vy Wtr Dist GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed

## Rationale

Standard & Poor's Ratings Services affirmed its 'A-1+' rating on Las Vegas Valley Water District, Nev.'s general obligation (GO) (2004A and 2004B) commercial paper (CP) notes. At the same time, we affirmed the 'AA+' unenhanced rating on the district's GO debt outstanding.

The ratings on both the short- and long-term debt reflect our view of:

- The district's statutory authority to levy an ad valorem tax on property owners in the district's service area, which provides substantial financial flexibility;
- A regional economy with very strong underlying credit fundamentals, including historically robust tax base and employment growth and strong income and wealth indicators;
- The district's generally strong financial management, including maintenance of very strong cash reserves; and
- The district's critical role as the sole water wholesale entity serving Nevada's largest metropolitan area.

In our opinion, limiting factors to the ratings include the district's continued prolonged period of economic weakness--particularly in home prices, assessed valuation (AV), connection growth (and connection fees), employment, and taxable sales--as well as a slowdown in recurring water sales. We believe that, as a result, district management will need to continue to adjust rates as needed and to curb expenditures to compensate for a decline in revenue growth, particularly nonrecurring connection fees. However, we expect that the district, consistent with its 'AA+' rating, will manage through the current economic and financial challenges given its good financial management practices, water and tax rate flexibility, and its ability to adjust discretionary spending. The cash reserves it has built up over several years of strong operating results act as an important credit cushion, in our opinion.

The affirmation of the short-term rating reflects the extension of the credit agreement for an additional three years with JPMorgan Chase Bank NA through Feb. 28, 2014, on the 2004A CP notes. The rating affirmation on the 2004B notes reflects the district extending its credit agreement through Feb. 28, 2014, and replacing its liquidity provider with Wells Fargo.

A pledge of the full faith and credit of the district secures the GO-backed debt, which is subject to Nevada's statutory limits on overlapping indebtedness to a maximum levy of \$3.64 per \$100 of AV, secures the district's debt outstanding. The bonds are additionally secured by a pledge of revenues from the Southern Nevada Water Authority

(SNWA) to the district in amount sufficient to pay debt service on the bonds at no less than 1.0x, although the district projects coverage to range from 1.0x-1.3x.

The district operates and maintains the Southern Nevada Water System as agent for the SNWA. Members of SNWA include the district, the City of Boulder City, the City of Henderson, the City of Las Vegas, the City of North Las Vegas, Big Bend Water District, and the Clark County Water Reclamation District. The district encompasses more than 99% of Clark County's tax base and serves all but a fraction of the county's 2.1 million residents, or about three-fourths of the state's 2.7 million residents. While the district's debt obligations are ultimately secured by its ability to levy an ad valorem tax on property, which it has never imposed, the bonds will be paid from water revenues from SNWA as described below. If the district were to levy a property tax, every one cent of property tax would generate approximately \$7.5 million-\$8.0 million in revenue (assuming an approximate 10%-15% decline in AV projected for 2011). The current highest overlapping tax rate in Clark County is \$3.43, which leaves at least 23 cents in tax rate flexibility for all jurisdictions in the district (under the \$3.66 per \$100 statutory limit), or approximately \$172 million in revenue-raising flexibility.

The district serves approximately 350,000 active customer accounts in the City of Las Vegas ('AA' GO rating) and portions of unincorporated Clark County ('AA+' GO rating). The district was created in 1947 to ensure an adequate water supply for the region, achieve regionally supported water conservation goals, and cooperate with member agencies and the SNWA on all regional water quality and resource issues facing the region. District revenues consist of water sales, connection fees, regional commodity and surcharges, recharged water sales, and other revenues, which totaled \$347 million in audited fiscal 2010, down 3% from \$356 million in fiscal 2009. The district is budgeting for a 5% increase in revenues for fiscal 2011, due mostly to a rate increase. In audited fiscal 2010, \$320 million, or 92% of total revenues, consisted of water sales and \$23 million, or 6% of total revenues, consisted of connection fees. As the economic downturn has grown more severe, residential growth has stalled and connection fees have declined in recent years. The district is forecasting that connection fees will account for a much smaller portion of future revenues; however, this is also due in part to recent large water rate increases. The ratepayer base is diverse, with the leading 10 customers representing just 7.5% of water revenues.

The district has raised rates in recent years with its most recent increases approved through fiscal 2011. These were at 4% in each fiscal 2010 and fiscal 2011. At this time, the district does not have plans to increase rates through at least fiscal 2014. In response to the softness in revenues, the district had made previous budgetary reductions and continues to cost savings. Through December 2010, budgetary expenses are down slightly from the same point in fiscal 2010.

Ninety percent of southern Nevada's water comes from Colorado River water held in Lake Mead--located at the state's border with Arizona--with the remaining water provided by groundwater from a shallow aquifer in Clark County. The county uses nearly all of its allotted Colorado River water and, along with SNWA, is in the process of developing additional water supplies or groundwater rights within Nevada. With the district's current growth profile and the available supplies under reasonable drought scenarios, the district is confident that there should be ample water to meet demand for about 10 years in the absence of additional supplies. The district represented 75% of the total SNWA water deliveries in 2010, and 60% of overall usage is residential.

The district has a strong cash position that we consider sufficient to manage the current downturn in the economy, which has affected revenues--mainly connection fees. The district and the SNWA, which the district administers, had \$82.4 million and \$367 million, respectively, in unrestricted cash reserves on their balance sheets as of audited fiscal

2010. While the district has no formal reserves policy, the district's 2010 cash balance translated to a still-strong, in our view, 125 days' cash.

Despite recent rate increases, we believe the district has plenty of headroom for additional rate increases, if necessary, under its current rate structure, which provides water to customers at some of the lowest rates among large western U.S. cities. Current average residential water bills are just \$36 per month. Debt service coverage (DSC) on district-supported bonds was 1.12x in fiscal 2007, but given declining connection fees and a delayed rate increase due to a protest, coverage fell to 0.96x in fiscal 2008 (including capitalized interest). DSC was 1.07x in fiscal 2009 followed by 1.5x in fiscal 2010, and is projected at 1.0x-1.3x through fiscal 2014. All debt is paid from operating revenues rather than ad valorem taxes, although the tax base is ultimately pledged to bondholders. In years in which coverage is less than 1.0x, the district uses its strong cash balances on hand to cover any shortfall.

SNWA superior obligation coverage was 3.6x in fiscal 2008, 1.01x for fiscal 2009, and 1.7x for fiscal 2010. Superior obligation DSC increased dramatically when including unrestricted cash levels available for debt service. Coverage of parity obligations was 0.67x in fiscal 2008, down from 1.11x in fiscal 2007 and 1.63x in fiscal 2006. As does the district, the authority has very large cash balances to draw from in support of debt service in years in which coverage is less than 1.0x.

The district's financial management assessment practices are considered "good" under Standard & Poor's Financial Management Assessment (FMA) methodology. An FMA of "good" indicates that financial management practices exist in most areas, although not all may be formalized or regularly monitored by governance officials.

The district has \$2.22 billion in GO debt outstanding. Debt payments are made with system net revenues, and because net system revenues and available reserves have always been sufficient to pay debt service an actual ad valorem tax levy has never been necessary. Overall direct and overlapping debt, net of self-supported GO bonds with water revenues, is \$4.7 billion, or \$2,465 per capita and 2.6% of taxable value. The district has \$62.7 million in remaining GO authorization that it may issue, but this depends heavily on growth. However, only 0.25% annual account growth is expected and consumption continues to be soft.

## Outlook

The stable outlook reflects our expectation that the district will continue to achieve its revenue requirements through timely adjustment of charges and prudent oversight of capital projects as the region weathers the current economic slowdown. The stable outlook also reflects our expectation that the district will continue to be self-sufficient in terms of covering its operating and capital budget with sustainable revenues and reserves, but also recognizes the district's taxing ability and substantial revenues it could collect, if a tax were levied. We also expect that the district's water planning efforts will address the critical importance of water infrastructure improvements to the southern Nevada regional economy. We do not expect that the rating will change within the two-year parameter of the stable outlook, as we anticipate the district continuing to maintain consistently strong reserve levels.

## Related Criteria And Research

- USPF Criteria: GO Debt, Oct. 12, 2006
- USPF Criteria: Key General Obligation Ratio Credit Ranges – Analysis Vs. Reality, April 2, 2008
- USPF Criteria: Standard & Poor's Revises Criteria For Rating Water, Sewer, And Drainage Utility Revenue

Bonds, Sept. 15, 2008

<b>Ratings Detail</b> (As Of February 18, 2011)		
Las Vegas Vy Wtr Dist GO		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO wtr bnds ser 2009C&D		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (ltd Tax) wtr cml pap nts (Snwa Rev Supported) ser 2004 dtd 03/01/2004 due 01/01/2034		
<i>Short Term Rating</i>	A-1+	Affirmed
Las Vegas Vy Wtr Dist GO (wrap of insured) (FGIC & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) Adjustable Rate wtr Improv bnds ser 2006 B dtd 07/20/2006 due 06/01/2036		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) Adjustable Rate wtr Improv bnds ser 2006 C dtd 07/20/2006 due 06/01/2036		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
<b>Las Vegas Vy Wtr Dist GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

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## Las Vegas Valley Water District, Nevada; General Obligation; Water/Sewer

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# Las Vegas Valley Water District, Nevada; General Obligation; Water/Sewer

Credit Profile		
Las Vegas Vy Wtr Dist - ICR		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) rfdg		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
<b>Las Vegas Vy Wtr Dist GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed

## Rationale

Standard & Poor's Ratings Services affirmed its 'AA+' rating on Las Vegas Valley Water District, Nev.'s \$75.9 million limited-tax general obligation (GO) water bonds, series 2010A (taxable direct-pay Build America Bonds, additionally secured by pledged revenues), and \$34.4 million limited-tax GO water and refunding bonds, series 2010B (additionally secured by pledged revenues). At the same time, Standard & Poor's affirmed its 'AA+' long-term rating and underlying rating (SPUR) on the district's outstanding GO bonds, and its AA+ issuer credit rating on the district.

The 2010A and 2010B bonds, whose ratings were originally assigned on March 4, 2010, were originally scheduled to be sold in March 2010 but the sale was delayed given the timing by which the district needed the bond proceeds. The par amount of each series has not changed.

The ratings reflect our view of:

- The district's statutory authority to levy an ad valorem tax on property owners in the district's service area, which provides substantial financial flexibility;
- A regional economy with very strong underlying credit fundamentals, including historically robust tax base and employment growth and strong income and wealth indicators;
- The district's generally strong financial management, including maintenance of very strong cash reserves; and
- The district's critical role as the sole water wholesale entity serving Nevada's largest metropolitan area.

In our opinion, limiting factors to the ratings include the district's continued prolonged period of economic weakness -- particularly in home prices, assessed valuation (AV), connection growth (and connection fees), employment, and taxable sales -- as well as a slowdown in recurring water sales. We believe that, as a result, district management will need to continue to adjust rates as needed and to curb expenditures to compensate for a decline in revenue growth, particularly nonrecurring connection fees. However, we expect that the district, consistent with its 'AA+' debt rating, will manage through the current economic and financial challenges given its good financial management practices, water and tax rate flexibility, and its ability to adjust discretionary spending. The cash reserves it has built up over several years of strong operating results act as an important credit cushion, in our opinion.

The district is issuing the series 2010A bonds to provide funding for various contracts in progress and other projects pending over the next several months related to its Major Construction Program. The projects include pumping stations, wells, reservoirs, land acquisitions, and distribution facilities. The district intends to issue the series 2010A bonds as Build America Bonds under the American Recovery and Reinvestment Act and to annually receive a cash subsidy from the U.S. Treasury equal to 35% of annual interest costs. However, the district is required to pay full principal and interest without regard to receipt of the subsidy, and the subsidy is excluded from the definition of pledged revenues and the additional bonds test. The bond resolution requires the subsidy to go into the bond fund to pay debt service or to reimburse the revenue fund for payments already made.

The 2010B bonds are being used to fund capitalized interest and to restructure various outstanding debt to provide the district with upfront savings by extending principal payments originally due in 2010-2012.

A pledge of the full faith and credit of the district secures the debt, which is subject to Nevada's statutory limits on overlapping indebtedness to a maximum levy of \$3.64 per \$100 of AV. The bonds are additionally secured by a pledge of revenues from the Southern Nevada Water Authority (SNWA) to the district in amount sufficient to pay debt service on the bonds at no less than 1.0x, although coverage is projected by the district to range from 1.0x-1.3x.

The district operates and maintains the Southern Nevada Water System as agent for the SNWA. Members of SNWA include the district, the City of Boulder City, the City of Henderson, the City of Las Vegas, the City of North Las Vegas, Big Bend Water District, and the Clark County Water Reclamation District. The district encompasses more than 99% of Clark County's tax base and serves all but a fraction of the county's 2.1 million residents, or about three-fourths of the state's 2.7 million residents. While the district's debt obligations are ultimately secured by its ability to levy an ad valorem tax on property, which it has never imposed, the bonds will be paid from water revenues from SNWA as described below. If the district were to levy a property tax, every one cent of property tax would generate approximately \$7.5 million-\$8.0 million in revenue (assuming an approximate 10%-15% decline in AV projected for 2011). The current highest overlapping tax rate in Clark County is \$3.43, which leaves at least \$0.23 in tax rate flexibility for all jurisdictions in the district (under the \$3.66 per \$100 statutory limit), or approximately \$172 million in revenue-raising flexibility.

The district serves approximately 350,000 active customer accounts in the City of Las Vegas ('AA' GO rating) and portions of unincorporated Clark County ('AA+' GO rating). The district was created in 1947 to ensure an adequate water supply for the region, to achieve regionally supported water conservation goals, and to cooperate with member agencies and the SNWA on all regional water quality and resource issues facing the region. District revenues consist of water sales, connection fees, regional commodity and surcharges, recharged water sales, and other revenues, which totaled \$356 million in audited fiscal 2009, down 3% from \$367 million in fiscal 2008. Overall revenues previously fell 7% in fiscal 2008 and 15% in fiscal 2007. The district is budgeting for a 1% drop in revenues for fiscal 2010. In audited fiscal 2009, \$318 million, or 89% of total revenues, consisted of water sales and \$18 million, or 5% of total revenues, consisted of connection fees. As the economic downturn has grown more severe, residential growth has stalled and connection fees have declined -- connection fees totaled a much larger \$83 million, or 22% of revenues, in fiscal 2007 and \$133 million, or 33% of revenues, in fiscal 2006. The district is forecasting that connection fees will account for a much smaller portion of future revenues; however, this is also due in part to recent large water rate increases. The ratepayer base is diverse, with the leading 10 customers representing just 7.5% of water revenues.

The district raised water rates by 23% in May 2008 and more recently 4.7% in January 2010, after increases of 10% in January 2007 and 29% in September 2003, with water usage rising just 3.2% from 2004-2008. The district has approved an additional water rate increase of 4.7% in 2011 and has planned for a 10% increase for 2013 -- no increases are planned for 2012. In response to the softness in revenues, the district has cut expenditures by \$36 million, or 10%, in its 2010 budget, including a 78% reduction in operating capital costs, a 15% reduction in nonpayroll operating expenses, \$2.9 million in staff reductions, and no cost-of-living increases.

Ninety percent of southern Nevada's water comes from Colorado River water held in Lake Mead -- located at the state's border with Arizona -- with the remaining water provided by groundwater from a shallow aquifer in Clark County. The county uses nearly all of its allotted Colorado River water and, along with SNWA, is in the process of developing additional water supplies or groundwater rights within Nevada. With the district's current growth profile and the available supplies under reasonable drought scenarios, the district is confident that there should be ample water to meet demand for about 10 years in the absence of additional supplies. The district represented 70% of the total SNWA water deliveries in 2009, and 60% of overall usage is residential.

The district has a strong cash position that we consider sufficient to manage the current downturn in the economy, which has affected revenues -- mainly connection fees. The district and the SNWA, which the district administers, had \$106 million and \$432 million, respectively, in unrestricted cash reserves on their balance sheets as of audited fiscal 2009. While the district has no formal reserves policy, management decisions reflect what we consider an adequate range of cash reserves. The district projects cash balances of \$100 million for fiscal 2010, equal to 131 days' cash. The SNWA projects a cash balance of \$388 million for fiscal 2010, equal to more than three years of operations.

Despite recent rate increases, we believe the district has plenty of headroom for additional rate increases, if necessary, under its current rate structure, which provides water to customers at some of the lowest rates among large western cities. Current average residential water bills are just \$34 per month. Debt service coverage (DSC) on district-supported bonds was 1.12x in fiscal 2007, but given declining connection fees and a delayed rate increase due to a protest, coverage fell to 0.96x in fiscal 2008 (including capitalized interest). DSC was 1.07x in fiscal 2009, and is projected at 1.0x-1.3x through fiscal 2014. All debt is paid from operating revenues rather than ad valorem taxes, although the tax base is ultimately pledged to bondholders. In years in which coverage is less than 1.0x, the district uses its strong cash balances on hand to cover any shortfall.

SNWA superior obligation coverage was 3.6x in fiscal 2008, 1.01x for fiscal 2009, and projected at fiscal 3.9x for 2010. Superior obligation DSC was a much higher 32x in fiscal 2009 when including unrestricted cash of \$487 million available for debt service. Coverage of parity obligations was 0.67x in fiscal 2008, down from 1.11x in fiscal 2007 and 1.63x in fiscal 2006, but when including unrestricted cash coverage is strong at 4.5x as of fiscal 2009. As does the district, the authority has very large cash balances to draw from in support of debt service in years in which coverage is less than 1.0x.

The district's financial management assessment practices are considered "good" under Standard & Poor's Financial Management Assessment (FMA) methodology. An FMA of "good" indicates that financial management practices exist in most areas, although not all may be formalized or regularly monitored by governance officials.

The district has \$2.25 billion in GO debt outstanding. Debt payments are made with system net revenues, and because net system revenues and available reserves have always been sufficient to pay debt service an actual ad

valorem tax levy has never been necessary. Overall direct and overlapping debt, net of self-supported GO bonds with water revenues, is \$5.3 billion, or \$2,673 per capita and 2.1% of taxable value. The district has \$65 million in remaining GO authorization that it may issue, but this depends heavily on growth. However, only 0.25% annual account growth is expected and consumption continues to be soft.

## Outlook

The stable outlook reflects our expectation that the district will continue to achieve its revenue requirements through timely adjustment of charges and prudent oversight of capital projects as the region weathers the current economic slowdown. The stable outlook also reflects our expectation that the district will continue to be self-sufficient in terms of covering its operating and capital budget with sustainable revenues and reserves, but also recognizes the district's taxing ability and substantial revenues it could collect, if a tax were levied. We also expect that the district's water planning efforts will address the critical importance of water infrastructure improvements to the Southern Nevada regional economy.

## District Economy Generally Strong Despite Current Recession

After several years of strong AV growth, district AV declined 19.7% to \$89 billion in fiscal 2010. For Clark County, the decline was virtually the same (virtually coterminous), but, given property tax abatement provisions, officials expect corresponding property taxes collected by the county to decline just 13%. The leading 10 taxpayers in the district represent a diverse 18% of total AV, although there is industry concentration in resort casinos (six of the 10).

An extended period of strong economic growth in the county tapered off considerably in 2007 and 2008, and data for 2009 and projections for 2010 indicate continued economic softness. Virtually all economic metrics that showed robust growth from 2003 to 2007 have since turned negative -- especially those related to the residential real estate market and consumer spending. Room rates, visitor volume, passenger counts, gaming revenues, residential and commercial development, and home prices have also dipped, while residential foreclosures have surged.

While tourism and taxable sales are down, the residential sector has cooled, and foreclosures have risen sharply, we believe important long-term economic fundamentals remain strong, but recovery may be gradual. Household incomes are 15% above the national average, and county employment grew further in 2008 before contracting in 2009. Unemployment, though, rose to 11.9% in 2009 from 6.6% in 2008 and 4.8% in 2007. Some concentration in employment remains, with about a third of the workforce employed in the hotel, gaming, and restaurant industries. After Clark County School District (employing more than 30,000) and the county itself (more than 10,000), employment is in our view concentrated, with Wynn Las Vegas, Bellagio, MGM Grand, and Mandalay Bay each providing between 7,000 and 9,000 jobs. The new CityCenter casino and hotel resort, which opened in December 2009, is also now a top 10 employer.

## The Project

The bonds are being issued to partially fund the district's Intake No. 3 Project, a third deep water intake in Lake Mead that is designed to protect municipal water customers from water quality issues and reduced system capacity issues related to water levels in Lake Mead that have declined. The new intake is expected to allow SNWA to draw

Colorado River water at lake levels below 1,000 feet, ensuring system capacity if lake levels fall below Intake No. 1. The total cost of the project is \$817 million and is scheduled for completion in 2012. The county bond bank issued \$400 million to fund the project at the onset, as well as an additional \$400 million in bonds in fall 2009 to fund the remainder of costs.

## Financial Management Assessment: 'Good'

The district's financial management assessment practices are considered "good." An FMA of "good" indicates that financial management practices exist in most areas, although not all may be formalized or regularly monitored by governance officials. For example, the district has no specific policy for cash reserves, although management generally strives for six months worth of operating expenditures. Capital planning is detailed, far-looking, and focused on the regional need to maximize scarce resources and eventually develop in-state water resources to accommodate growth. Financial projections are likewise detailed, and include assumed rate increases that are meant to achieve conservation goals as well as financial targets. The district has a debt management policy that, among other things, establishes that planned debt can be self-supported by net water revenues before the district's debt can be issued. Investment management is governed by the district's investment management policy and is reviewed as a part of the annual auditing process.

## Related Criteria And Research

- USPF Criteria: GO Debt, Oct. 12, 2006
- USPF Criteria: Key General Obligation Ratio Credit Ranges – Analysis Vs. Reality, April 2, 2008
- USPF Criteria: Standard & Poor's Revises Criteria For Rating Water, Sewer, And Drainage Utility Revenue Bonds, Sept. 15, 2008

<b>Ratings Detail</b> (As Of May 17, 2010)		
Las Vegas Vy Wtr Dist GO wtr bnds ser 2009C&D		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Ltd Tax) rfdg bnds ser 2005B		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Ltd Tax) wtr cml pap nts (Snwa Rev Supported) ser 2004 dtd 03/01/2004 due 01/01/2034		
<i>Short Term Rating</i>	A-1+	Affirmed
Las Vegas Vy Wtr Dist GO (wrap of insured) (FGIC & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) Adjustable Rate wtr Improv bnds ser 2006 B dtd 07/20/2006 due 06/01/2036		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
Las Vegas Vy Wtr Dist GO (Lmtd Tax) Adjustable Rate wtr Improv bnds ser 2006 C dtd 07/20/2006 due 06/01/2036		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
<b>Las Vegas Vy Wtr Dist GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Many issues are enhanced by bond insurance.		

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October 12, 2009

# Clark County, Nevada; Appropriations; General Obligation

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# Clark County, Nevada; Appropriations; General Obligation

## Credit Profile

US\$49.975 mil GO (Lmted Tax) bnd bnk rfdg bnds ser 2009 due 06/01/2030

Long Term Rating	AA+/Stable	New
Clark Cnty GO		
Long Term Rating	AA+/Stable	Affirmed
Clark Cnty GO		

## Rationale

Standard & Poor's Ratings Services assigned its 'AA+' rating to Clark County, Nev.'s \$49.975 million general obligation (GO) (limited-tax) bond bank refunding bonds (additionally secured by pledged revenues), series 2009. At the same time, Standard & Poor's affirmed its 'AA+' rating and underlying rating (SPUR) on the county's outstanding GO debt and its 'AA' rating on the county's lease revenue bonds.

The 'AA' lease revenue bond rating reflects:

- The county's covenant to budget and appropriate lease payments throughout the term of the lease,
- Annual appropriation risk, and
- The county's strong general credit characteristics ('AA+' GO rating).

The county's general credit characteristics include our view of the following credit strengths:

- A regional economy with very strong underlying credit fundamentals, including robust tax base and employment growth and strong income and wealth indicators;
- The county's continued very strong reserve position due to historically robust growth trends and strong financial management practices, and additional financial flexibility available to it in terms of discretionary transfers out of the general fund; and
- A moderate and manageable debt burden as well as a slowdown in growth within the county, which could ease capital pressures.

In our opinion, limiting factors to the rating include the county's current economic downturn that has impacted most sectors, including tourism, taxable sales, and residential real estate (which affects property tax revenues). We believe that, as a result, county management will need to continue to curb general fund expenditures to compensate for a decline in revenue growth. Additional financial uncertainty centers on the state's own financial challenges, which we believe could lead to additional effects beyond those of the state legislature's recent change to the operating tax rate (as discussed below). However, we expect the county, consistent with its 'AA+' rating, will manage through the current economic and financial challenges given its strong financial management practices and its ability to adjust discretionary spending. The reserves it has built up over several years of strong operating results provide substantial credit comfort, in our opinion.

Bond proceeds will be used to make a loan to the Southern Nevada Water Authority (SNWA) by purchasing its series 2009 water revenue bond, the proceeds of which will be used to refinance certain outstanding authority water

revenue bonds for savings. The county will take savings upfront to relieve the authority of its immediate need to raise rates, given the current economic downturn. The county uses the Bond Bank Program to assist in the financing of lending projects so that it can provide municipalities with lower borrowing costs for their various bond-funded projects.

The bonds are general obligations of the county, secured by a full faith and credit pledge. The 2009 bonds are additionally secured by an irrevocable pledge of net revenues of the authority from the operation of the Southern Nevada Water System. Pledged revenues consist only of those SNWA water revenues received by the county as payment on the SNWA bond; no other net water revenues are available by the county to pay debt service on the bonds. The pledge of SNWA water revenue is subordinate to superior SNWA obligations currently outstanding. Per the bonds ordinance, SNWA agrees to set rates sufficient to pay operating costs, superior obligations, and parity-lien obligations (the 2009 bonds). According to the county, SNWA pledged revenues, as well as all other legally available moneys of the authority, are estimated to provide no less than 3.0x coverage of all outstanding debt through at least 2013.

## Outlook

The stable outlook reflects our expectation that the county can weather its current period of economic softening -- particularly in the residential real estate sector -- by virtue of its strong employment market buoyed largely by commercial development along the Las Vegas Strip, and the enduring appeal of the area to tens of millions of visitors annually. If the local and national economic recession leads to a significantly weakened financial position (i.e., reserves are tapped to manage budgetary pressures), credit quality could suffer.

## The County's Economic Downturn Continues

An extended period of strong economic growth in the county tapered off considerably in 2007 and 2008, and data for 2009 and projections for 2010 indicate continued economic softness. Virtually all economic metrics that showed robust growth from 2003 to 2007 have since turned negative -- especially those related to the residential real estate market and consumer spending. County officials report a 19.6% decline in assessed value (AV) for fiscal 2010. Moreover, room rates, visitor volume, passenger counts, gaming revenues, residential and commercial development, and home prices have also dipped, while residential foreclosures have surged. In terms of the county general fund's exposure to these setbacks, property tax revenues were the leading general fund revenue source in 2008, representing 33% of general fund revenues, with consolidated tax at 31%. According to county estimates, median home prices in the county have fallen to less than \$170,000 after peaking at \$350,000 in August 2006, and have given back all gains since 2003, and in many cases 2002.

However, the Abatement Act, signed in 2005, limits increases in property tax revenues to approximately 3% per year on existing property (new construction is exempt), with larger increases allowed for nonresidential property. Because of this, property taxes did not surge as AV did during the local housing boom during 2003-2006, and the county had built up what we consider a sizeable cushion for the levy of future property taxes. Total accumulated county abatement stood at \$57 million as of fiscal 2009, although this cushion continues to deteriorate. Should property values continue to decline, possibly leading to an additional overall decline in county AV, property taxes will be likely be affected. We believe the commercial sector, particularly along the Las Vegas Strip, could serve to support the state's important construction sector: Although some projects have been halted, several new properties

and expansions valued at \$20 billion are currently in various phases of construction and should be completed in the next four years (and this will also provide jobs). After AV increased 5.4% to \$111.9 billion in fiscal 2009, AV for fiscal 2010 fell 19.6% to \$90.0 billion, a significant loss of \$22 billion. The county is projecting an 11% increase in property taxes in fiscal 2009 (after annual increases ranging from 11% to 15% during fiscals 2004-2008), but a 13% drop is budgeted for fiscal 2010 and a double-digit decline for fiscal 2011.

The county is also exposed to consolidated taxes allocated to it by the state, which include sales taxes, cigarette taxes, liquor taxes, government services taxes, and real estate property transfer taxes. Consolidated taxes in 2008 constituted 31% of general fund revenues, but have grown more slowly than property taxes in recent years -- the county reported 0% growth in 2007, a 4% decline in 2008, and an estimated 15% decline in 2009 after increases of 9% in 2006 and 19% in 2005. The county indicates that consolidated taxes are budgeted to decline an additional 10% in 2010, whereas a few months ago a slight 4% rebound was budgeted. July 2009 consolidated taxes were down 20% from July 2008, consistent with May and June figures. In response, the county is planning to make additional labor reductions, even layoffs.

While tourism and taxable sales are down, the residential sector has cooled, and foreclosures have risen sharply, we believe the county's important long-term economic fundamentals remain strong. Household incomes are 15% above the national average, and county employment grew further in 2008. Unemployment, though, rose to 7.9% in 2008 from 5.6% in 2007. Some concentration in employment remains, with about a third of the workforce employed in the hotel, gaming, and restaurant industries. After Clark County School District (employing more than 30,000) and the county itself (more than 10,000), employment is, in our view, concentrated, with Bellagio, Wynn Las Vegas, MGM Grand, and Mandalay Bay each providing between 7,000 and 9,000 jobs. The Las Vegas Strip's hotel and casino properties also dominate the leading 10 taxpayers in the county, although these 10 constitute only 14% of overall AV. The leading taxpayer is MGM Mirage at \$6 billion, or 5.4% of total AV.

## **Financial Pressures Exist, Although Reserves Are Robust**

Several years of strong revenue growth and prudent expenditure management have buttressed county finances, in our opinion. The county's unreserved fund balances during fiscals 2003 through 2008 have been no less than 24%. The county's fiscal 2007 financial performance was, in our view, strong for the rating category, as revenues exceeded expectations, and the county's historically strong reserve position remained intact at \$288 million, or 42% of expenditures. In that year, general fund revenues increased 9% to \$1.02 billion, but in fiscal 2008 revenue growth was limited at just 2%. On top of slower revenue growth in fiscal 2008 was an 11% increase in expenditures, not including transfers out, which rose by \$80 million. This led to an overall general fund deficit after transfers of \$91 million. The unreserved fund balance declined to \$180 million, or, in our view, a still very strong 24% of expenditures. Transfers out of the general fund are typically large and include transfers for detention, the metropolitan police department, and capital. According to the county, the general fund unreserved fund balance for fiscal 2009 is estimated at \$180 million or 22% of expenditures, revised upward from its estimate a few months ago of \$150 million, or 18% of expenditures. The county's unaudited fiscal 2009 results indicate a slight \$1.3 million surplus. The improvement was due to county expenditures for fiscal 2009 coming in at a better-than-anticipated \$44 million due to conservatism in budgeting and reduced spending.

Fiscal 2010 was budgeted to end with a general fund deficit of \$61 million. However, when accounting for revised (lowered) consolidated tax estimates of \$39 million -- offset by \$44 million savings realized in fiscal 2009 that will

carry forward into fiscal 2010, \$23 million in planned additional reductions, and \$57 million in discretionary transfers out of the general fund the county could curtail -- the general fund could remain virtually unchanged or slightly better (subject to revenue performance, which is highly uncertain) in fiscal 2010.

Clark County's management practices are considered "strong" under Standard & Poor's Financial Management Assessment (FMA). An FMA of "strong" indicates our view that practices are strong, well embedded, and likely sustainable. The county's board of commissioners has adopted thorough policies that govern the maintenance of reserves, expenditure growth, cash and investment practices, and the use of debt and derivatives. There are currently no swaps or other derivatives. The county intends to maintain reserves at no less than its 8.3% policy, but prefers to remain above this at a higher 10% reserve target.

The county's overall direct and overlapping debt burden is, in our view, moderate at 2.4% of market value and \$2,966 per capita. The county's overall general fund GO debt totals \$3.2 billion, but \$3.0 billion is in the form of GO bonds with self-supporting enterprise revenues. Amortization of the county's GO debt is average, with 36% amortizing in 10 years and 68% amortizing in 20 years. The county has no general fund-related variable-rate debt. According to county projections, debt service in fiscal 2010 including the bonds, net of self-supporting debt, is 10% of general fund revenues. Annual pension-related payments for the general fund are approximately \$70 million, or 7% of general fund revenues. According to the county, its other post-employment benefits (OPEB) liability is estimated at \$260 million, with its pay-as-you-go contribution at \$21.4 million, in fiscal 2008. The county has set aside three years' worth of OPEB payments that are available for use.

## **Economic And Financial Challenges Continue In Fiscals 2010 And 2011**

The state legislature has recently approved legislation in which the state would appropriate 4 cents of the county's operating tax rate, thereby reducing Medicaid and indigent accident revenues transferred to the county hospital. The gross estimated revenue loss, according to the county, is \$50 million per year for the next two fiscal years (2010 and 2011). However, net of various mitigation efforts -- including an increase in the governmental services tax and the county's using certain transportation-specific revenues over fiscals 2010 and 2011 -- the impact to each fiscal year is just \$15 million. The county has some flexibility available to it in terms of discretionary capital and OPEB transfers currently budgeted out of the general fund. The county could choose to discontinue these amounts, totaling a combined \$57 million, in fiscal 2010 if needed. The county has actually already made three years' worth of \$16.6 million OPEB transfers in a two-year time span, so officials believe that delaying 2010's payment would not cause the county to fall behind on its funding plan. The county also has a significant capital reserve fund of over \$300 million, of which \$100 million could be returned to the general fund upon board approval. The county has already implemented a hiring freeze, and has frozen 750 positions. The county is in the process of exploring additional budget adjustment opportunities. The more challenging fiscal year, per the county, is fiscal 2011, when it is expecting double-digit property tax declines for the second consecutive year. Given that the county is approaching its minimum reserve required for ongoing cash flow purposes, it will explore other savings opportunities and could curtail capital and OPEB transfers in fiscal 2011.

## **Related Research**

- USPF Criteria: "GO Debt," Oct. 12, 2006
- USPF Criteria: "Appropriation-Backed Obligations," June 13, 2007

<b>Ratings Detail (As Of October 12, 2009)</b>		
Clark Cnty go (ltd tax) transp bnds ser 1998 A dtd 12/01/1998 due 12/01/1999-2017 2019		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Clark Cnty GO ltd tax bnd Bank bnds ser 2002 dtd 11/01/2002 due 06/01/2005-2022 2026 2032		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Clark Cnty GO ltd tax bnds (Taxable Direct Pay Babs Flood Control Bnds) ser 2009B		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Clark Cnty GO rfdg bnds ser 2009A		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Clark Cnty GO Lmtd Tax ser 2008		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Clark Cnty GO (wrap of insured) (AMBAC & BHAC) (SEC MKT)		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
Clark Cnty GO (Lmtd Tax) Arpt bnds ser 2008A		
<i>Long Term Rating</i>	AA+/A-1/Stable	Affirmed
Clark Cnty Lmtd Tax GO bnds (Bond Bank Bonds) ser 2008		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Clark Cnty Local Improv bnds (Dist No. 127, 134, 140, 145)		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Clark Cnty Local Imp bnds (Special Improvement Dist No. 112) ser 2008		
<i>Long Term Rating</i>	AA+/Stable	Affirmed
Pima Cnty Indl Dev Auth lse rev bnds (Clark Cnty Detention Fac Project) ser 2008		
<i>Long Term Rating</i>	AA/Stable	Affirmed
<b>Clark Cnty go</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
<b>Clark Cnty GO</b>		
<i>Unenhanced Rating</i>	AA+(SPUR)/Stable	Affirmed
<b>Pima Cnty Indl Dev Auth, Arizona</b>		
Clark Cnty, Nevada		
Pima Cnty Indl Dev Auth (Clark Cnty) Metro Police Fac lse rev bnds (Nevada Proj) ser 2009A		
<i>Long Term Rating</i>	AA/Stable	Affirmed
Many issues are enhanced by bond insurance.		

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**New Issue: MOODY'S DOWNGRADES LAS VEGAS VALLEY WATER DISTRICT, NEVADA'S GENERAL OBLIGATION LIMITED TAX BONDS TO Aa2 FROM Aa1; OUTLOOK REMAINS NEGATIVE**

Global Credit Research - 09 May 2011

**\$1.8 BILLION OF DOUBLE-BARRELED LIMITED TAX GENERAL OBLIGATION DEBT AFFECTED, POST-REFUNDING**

Water/Sewer  
NV

**Moody's Rating  
ISSUE**

**RATING**

General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds, Series 2011A (Taxable)	Aa2
<b>Sale Amount</b>	\$57,845,000
<b>Expected Sale Date</b>	05/12/11
<b>Rating Description</b>	Limited Tax General Obligation (Additionally Secured by SNWA Pledged Revenues)

**Opinion**

NEW YORK, May 9, 2011 -- Moody's Investors Service has downgraded to Aa2 from Aa1 the rating on Las Vegas Valley Water District, Nevada's double-barreled, limited tax general obligation bonds in conjunction with the sale of General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds, Series 2011A (Taxable) in the approximate amount of \$57.8 million. The rating outlook on the district remains negative. The downgrade affects an estimated \$1.8 billion of outstanding parity debt secured by the district's limited tax general obligation pledge, post-refunding. The current offering is secured by the district's full faith and credit subject to the constitutional and statutory limitations of ad valorem taxes in Nevada; the bonds are additionally secured by pledged revenues of the Southern Nevada Water Authority. Bond proceeds will refund certain maturities of the district's outstanding General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds, Series 2008B in order to reduce total annual debt service requirements through fiscal 2015.

**SUMMARY RATING RATIONALE**

The downgrade to Aa2 primarily reflects the significant economic and housing downturns affecting the district's still large service area, and the district's somewhat pressured financial position that includes narrow cash levels and below average debt service coverage. The rating also incorporates the availability of pledged revenues to pay debt service and the use of cash resources to cover debt service requirements for obligations secured by the district's limited tax general obligation pledge.

**STRENGTHS**

- Critical roles of the district and SNWA in supplying water to the region
- Recent reductions implemented by management in operating and capital expenditures amid ongoing fiscal pressures

**CHALLENGES**

- Substantial and protracted tax base declines in Clark County stemming from economic and housing downturns
- Narrow debt service coverage for the district's obligations

**DETAILED CREDIT DISCUSSION**

**LARGE SERVICE AREA SIGNIFICANTLY IMPACTED BY ONGOING RECESSION AND HOUSING DOWNTURN**

The Las Vegas Valley Water District (LVVWD) serves virtually all of Clark County (Aa1 LTGO rating with stable outlook), which includes the City of Las Vegas (Aa2 LTGO rating with stable outlook) metropolitan area and features considerable gaming as well as other tourism attractions. The Clark County / Las Vegas metropolitan area was among the fastest growing areas in the nation prior to the current downturn. The region experienced a large housing boom for an extended period through 2009 when Clark County's tax base peaked at a substantial full valuation of \$317.0 billion; however, the county's tax base declined precipitously to a full value of \$163.7 billion for 2011 after considerable annual declines totaling 48.7% in the last two years. In particular, aggressive housing development prior to the ongoing downturn led to high foreclosure rates and significant decline in property values amid the subsequent and ongoing downturn. The region's economy has been reliant upon the gaming and construction industries, which have not been immune to broad economic downturns both locally and nationally. As of March 2011, the unemployment rate in Clark County was 13.3%, which was similar to state (13.2%) but well above national (9.2%) levels.

Of note, the state's Abatement Act was implemented beginning in fiscal 2006, which limits annual increases in property tax assessments for residential properties to 3.0% plus new development. Assessments for commercial properties and second homes are capped at to the lesser of 8.0% or the average annual change in taxable values over the last ten years, plus new development. Amid rapid tax base growth, many properties accumulated abatement that provided a cushion against future tax base declines. Following considerable annual tax base declines in 2010 and 2011, previously accumulated abatement was exhausted. For 2012, officials estimate that the county's tax base will decline by as much as 9.4%. All else being equal, the decline in assessed value will lead to a corresponding decline in property tax revenues given that abatement is exhausted. As of 2011, the cumulative tax rate for Clark County is \$3.43 per \$100 of assessed value, leaving the district with a taxing margin of \$0.23 per \$100 of assessed value under the statutory cap of \$3.66 per \$100 of assessed value, if necessary to pay annual debt service. A \$0.01 per \$100 property tax levy would produce an estimated \$9.0 million of revenues as of 2011. Importantly, Moody's notes

that the district has never levied a property tax to pay debt service for its limited tax general obligation debt, and also that levying such a tax would be politically challenging.

#### DISTRICT OPERATING PERFORMANCE CONTINUES TO DEMONSTRATE BELOW AVERAGE CASH LEVELS AND NARROW DEBT SERVICE COVERAGE

Prior to the ongoing housing and economic downturns, the district benefitted from an extended period of growth in customer accounts and demand for water. However, broad regional downturn and conservation efforts have curbed water usage since 2008. Management projects that customer accounts will grow only slightly at a rate of 0.2% annually through 2013, followed by 1.0% annually thereafter. This represents a significant slowdown in customer growth compared to the average annual growth rate 3.4% realized in years 2005 through 2009 during the regional housing boom.

The district's operations have been supported by irregular water rate increases of varying magnitudes. The district's board, which is comprised of Clark County's board of commissioners, approved a significant rate hike of 23.0% in fiscal 2008 and additional increases of 4.5% in fiscal years 2010 and 2011, respectively. While the district's water sales declined since 2008 at an average annual rate of 3.4% as of 2010, revenues from water sales grew at an average annual rate of 5.0% over the period largely as a result of enacted water rate increases. Management does not anticipate any additional water rate increases in the near-term. Management's willingness to implement prudent water rate increases will be a focus of future Moody's reviews of the district.

The district's operating performance remains narrow, though satisfactory, and is characterized by a somewhat thin cash position at LVVWD, but a much stronger cash position at SNWA. Management seeks to maintain four months (or approximately 120 days) of cash available to support operations. While it is estimated that the district's cash on hand will amount to 128 days for fiscal 2011, management projects that cash on hand will decline as low as 96 days by fiscal 2015. Officials noted that the district may need to pursue a water rate increase for fiscal 2014, given projections that cash levels will decline below its operating target. Further, the district's net working capital amounted to only 11.4% of operating expenditures (\$29.4 million) as of fiscal 2010, which is substantially below average compared to medians for similarly-rated water enterprises nationally and provides only a thin cushion to support operations. In response to operating declines of recent years, management implemented significant reductions to operations and capital projects. In particular, management reduced staff levels by 17% and compensation expenses declined to below 2009 levels, along with deferring \$520 million of costs attributed mostly to non-critical maintenance and growth-related capital projects.

Despite operating and capital expenditure reduction coupled with water rate increases, the district's debt service coverage levels calculated for covenant purposes fluctuated, and narrowed overall, in recent years. In fiscal years 1999 through 2003, coverage averaged an adequate 1.67 times average annual debt service for the district's obligations secured by its limited tax general obligation pledge and net revenues. In fiscal years 2004 to 2009, coverage declined significantly to an average of 1.09 times for the period. It is expected that coverage of annual debt service will remain narrow through at least fiscal 2015, absent water rate increase or other measures to enhance the district's operating performance.

For SNWA, management targets substantial unrestricted resources of about 18 months of operations (\$300.0 million). Net working capital is strong at 319.4% of operating expenditures as of fiscal 2010. However, net revenues have not been sufficient to fully cover annual debt service requirements in recent years, meaning that the authority relies on its cash resources to cover a portion of annual debt service requirements. The authority's net revenues and unrestricted cash resources for debt services are only required to be sum sufficient to pay annual debt service. Officials project that the authority's unrestricted cash will decline below management's target level approximately in fiscal 2012. In response, management plans to refund a portion of outstanding debt to reduce annual debt service requirements in order to boost the authority's cash levels, along with potentially implementing increases in regional water charges. Additionally, coverage for debt secured by SNWA's net revenues and other pledged resources (including those obligations additionally secured by LVVWD's limited tax general obligation pledge) declined in recent years, but coverage is projected to remain within an adequate range of 2.0 times to 3.0 times annual debt service.

The district operates a single-employer pension trust plan on behalf of its employees. All employees are eligible for benefits following six months of service, and retirees are eligible to receive a lifetime benefit of 60.0% of average monthly compensation, up to a maximum dollar amount. Moody's notes that the district's pension plan was only 52.1% funded as of fiscal 2010, and management plans to continue its practice of paying no more than the annual required contribution (ARC) into the plan; in all recent years, management fully funded the plan's ARC. Additionally, the district's other postemployment benefits (OPEB) have an unfunded liability of \$16.1 million as of fiscal 2010. The district funds 100.0% of health and life insurance premiums for retirees and 85.0% of such premiums for their dependents until retirees become eligible for Medicare coverage. OPEB benefits are funded on a pay-go basis and the current unfunded liability is modest.

#### SNWA PROVIDES WHOLESALE WATER TO NEARLY ALL OF CLARK COUNTY

SNWA is a joint powers authority comprised of the district, the cities of Boulder City, Henderson and North Las Vegas, the Big Bend Water District, and the Clark County Water Reclamation District. The authority was formed to develop water supplies for its members and to address regional water issues. SNWA owns the Southern Nevada Water System (SNWS), the region's supply system that features intake facilities at Lake Mead, pumping plants, pipelines, and water treatment facilities. Pursuant to an operating agreement, the district operates the SNWS on behalf of the SNWA. LVVWD and SNWA share the district's management team, which improves coordination between these critical entities that are intertwined for operating and financial purposes. LVVWD is obligated to pay a portion of capital and operating costs based upon its proportionate share of consumption from the SNWS. Additionally, the district occasionally issues debt on behalf of SNWA, which is secured by SNWA's pledge of net revenues and unrestricted resources that also benefits from the additional security of the district's limited property tax pledge.

The authority's water is supplied almost entirely from the Colorado River per a contractual agreement with the SNWA. The remaining minority of water is supplied from various groundwater sources. The regional system generally uses nearly all of its 300,000 acre-feet Colorado River water rights (not including the offsetting effect of water returned to the river). Dependence on the Colorado River for water supply may limit future water availability absent development of additional sources, particularly if growth returns to the Clark County / Las Vegas metro area. To address potential shortfalls in supply and also to diversify water resources, the district has imposed various conservation measures within its service area and SNWA continues to pursue additional water sources. Resources beyond the Colorado River include Arizona groundwater banking and development of in-state resources, which are beneficial components of its long-term water resources plan.

#### MANAGEABLE DEBT PROFILE; SIGNIFICANT ADDITIONAL DEBT PLANS

Moody's expects that debt secured by the district's limited tax general obligation pledge will remain fully supported by pledged revenues and

cash resources. Additionally, the district's limited tax general obligation debt additionally secured by the SNWA is expected to remain fully supported by the authority's pledged net revenues and unrestricted cash resources. The district's debt ratio was 47.7% as of fiscal 2010, which was above historic medians for similarly-rated peers nationwide, but similar to some other large water retail systems. The current refunding is structured to lower the district's annual debt service requirements through fiscal 2015.

Contemplated debt plans include an estimated \$410.0 million of additional debt in 2012 to be secured by the double-barreled pledge of SNWA's net revenues and unrestricted cash resources as well as the district's limited tax general obligation pledge; the offering will finance a portion of costs related to construction of a new water intake at Lake Mead. Additionally, the district may pursue a refunding of an estimated \$268.0 million of outstanding debt that is secured by SNWA's net revenues and the district's limited tax general obligation pledge, which is intended to minimize the magnitude of future water rate increases by lowering annual debt service requirements through fiscal year 2015.

The district's variable rate debt exposure consists of the district's Series 2006B and Series 2006C bonds that are outstanding in the combined amount of \$138.9 million, representing a modest 6.2% of the total debt secured by the district's limited tax general obligation pledge. The bonds are supported by standby bond purchase agreements provided by Dexia Credit Local (A1 long-term rating) that expires on July 20, 2016. The bonds are remarketed by Barclays Capital and are currently in daily mode.

#### WHAT COULD MAKE THE RATING GO UP

- Significant growth in operating revenues and improved coverage of annual debt service, stemming from increased water usage or prudent water rate increases
- Protracted improvement in the district's operating position, relative to similarly-rated peers and recent operating results
- A return to significant growth in customer accounts that increases demand for water

#### WHAT COULD MAKE THE RATING GO DOWN

- Continued deterioration of the district's operating position
- Unwillingness to implement prudent increases in water rates
- Significant decline in available water supplies for the region

#### Outlook

The negative outlook primarily reflects the ongoing housing and economic downturns facing the Clark County / Las Vegas metro area. The outlook also incorporates the district's continually narrow debt service coverage, despite the refinancing of outstanding debt to reduce annual debt service requirements for the medium-term. Subsequent rating reviews will consider the ability of the district and SNWA to generate adequate pledged revenues to cover annual debt service, and management's willingness to implement rate increases to improve debt service coverage.

#### KEY STATISTICS

Estimated population, Clark County: 2.0 million

2011 full value, Clark County: \$180.8 billion

Average annual growth in full value, Clark County (2006-2011): -0.2%

Debt ratio, LVWWD (2010): 47.7%

Direct debt burden, LVWWD: 1.2% for LTGO secured obligations

Overall debt burden, LVWWD: 3.8% LTGO secured obligations

Annual debt service coverage, LVWWD (2010): 1.5 times (bond ordinance presentation)

Days' cash on hand, LVWWD (2010): 117 days

Net working capital, LVWWD (2010): 11.4% of operating expenditures

Operating ratio, LVWWD (2010): 75.8%

Pension funding, fiscal 2010: 52.1% (LVWWD single-employer plan)

Other postemployment benefits (OPEB) liability: \$16.1 million (UAAL)

#### PRINCIPAL METHODOLOGY AND LAST RATING ACTION

The principal methodologies used in this rating were General Obligation Bonds Issued by U.S. Local Governments published in October 2009 and Analytical Framework for Water and Sewer System Ratings published in August 1999.

The last rating action with respect to the Las Vegas Valley Water District, Nevada was on May 18, 2010, when a rating of Aa1 with negative outlook was assigned to General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water Bonds Series 2010A (Taxable Direct Pay Build America Bonds) and General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water and Refunding Bonds, Series 2010B.

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**Rating Update: MOODY'S AFFIRMS P-1 RATINGS ON LAS VEGAS VALLEY WATER DISTRICT  
GENERAL OBLIGATION (LIMITED TAX) WATER COMMERCIAL PAPER NOTES**

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Global Credit Research - 10 Feb 2011

Water/Sewer  
NV

**Opinion**

NEW YORK, Feb 10, 2011 -- Moody's Investors Service affirms the P-1 ratings on the \$400,000,000 Las Vegas Valley Water District General Obligation (Limited Tax) Water Commercial Paper Notes (SNWA Revenue Supported), Series 2004A and 2004B (the Notes). The ratings are being affirmed in conjunction with (i) the amendment of the credit agreement provided by JPMorgan Chase Bank, N.A. for Series 2004A and (ii) the substitution of the BNP Paribas credit agreement with one provided by Wells Fargo Bank, N.A. for Series 2004B. The amendment and the substitution are scheduled to be effective on or before March 3, 2011. The P-1 rating for each series is based on the credit agreements provided by JPMorgan Chase Bank, N.A. and Wells Fargo Bank, N.A. (the Banks) and the likelihood of termination of the applicable credit agreement without payment of the Notes. Events, which would cause the credit agreements to terminate without payment of the Notes, are directly related to the credit quality of the Las Vegas Valley Water District (the District). The Notes are also supported by a lien on the pledged revenues of the Southern Nevada Water Authority (SNWA). SNWA is not rated by Moody's. The long and short term ratings of JPMorgan Chase Bank, N.A. are Aa1/P-1 and the long and short term ratings of Wells Fargo Bank, N.A. are Aa2/ P-1.

Each Bank may automatically terminate the applicable credit agreement upon any of the following events: (1) the District defaults in payment of a bank reimbursement obligation or the interest due on the commercial paper when due; (2) any provision of the credit agreement, the Notes, the Bank Note, the Issuing and Paying Agent Agreement or the Resolution related to the payment of principal and or interest on the Notes or bank reimbursement obligations or the general obligation pledge of the District ceases to be valid and binding on the District as determined by a court or governmental authority or such provisions are contested by the District or any governmental authority having jurisdiction; (3) any governmental authority having jurisdiction over the District rules or adopts legislation or enters a judgment that contests any provision of the SBPA, the Notes, the Bank Note, the Issuing and Paying Agent Agreement or the Resolution related to the payment of principal and or interest on the Notes, bank reimbursement obligations or the general obligation pledge of the District; (4) the District denies or repudiates its obligations under the SBPA, the Notes, the Bank Note, the Issuing and Paying Agency Agreement or the Resolution; (5) a court of competent jurisdiction shall enter a final, nonappealable order or judgment that any Notes are illegal or unenforceable; (6) the District fails to make any principal or interest payments when due on general obligation debt of the District or general obligation debt of the district secured by a lien on SNWA pledged revenues that are senior to or on parity with the lien on the SNWA pledged revenues securing the Notes; (7) the District or any governmental authority shall declare or impose a debt moratorium, debt restructuring, debt adjustment or comparable restriction on general obligation debt of the District or debt of the District secured by a lien on SNWA pledged revenues; (8) bankruptcy or insolvency events affecting the District; (9) debt of the District secured by the general obligation pledge of the district is downgraded below investment grade by each rating agency then rating such debt or such ratings are withdrawn or suspended by each rating agency for credit related reasons; or (10) one or more final, nonappealable judgment or judgments in an aggregate amount of \$10 million shall be entered or filed against the District and remains unapplied, unvacated, unbonded, or unstayed for a period of 60 days.

**THE COMMERCIAL PAPER PROGRAM**

The Issuing and Paying Agent (the IPA) for each series, The Bank of New York Mellon Trust Company, N.A., will issue Notes upon receipt of issuance instructions from either the District or the commercial paper dealers (J.P. Morgan Securities Inc. for Series 2004A and Merrill Lynch, Pierce, Fenner & Smith Incorporated for Series 2004B) on behalf of the District. Each Note will be interest bearing, will be of a denomination equal to \$100,000 and integral multiples of \$1,000 in excess thereof. The IPA may not issue Notes that mature later than 270 days from the date of issuance. No Notes of a series may be issued if such issuance would cause the aggregate principal amount of Notes outstanding to exceed the amount provided for under the applicable credit agreement. Additionally, each note issued shall mature no later than five days prior to the expiration date of the applicable credit agreement. The IPA shall stop issuing Notes of a series following its receipt of a no-issuance notice from the applicable Bank.

The IPA will draw on the applicable credit agreement in an amount equal to the maturing principal of the Notes to the extent monies from the District and proceeds from roll-over Notes are insufficient. The District is responsible for the payment of interest when due on Notes.

**LIQUIDITY FACILITY**

The 2004A credit agreement has been sufficiently sized to cover \$250 in principal amount of Notes and the 2004B credit agreement has been sized to cover \$150 in principal amount of Notes. Draws made on the credit agreement received by the Bank at or prior to 12:15 p.m. (New York time) will be honored by 2:45 p.m. (New York time) on the same business day. The commitment will be reinstated following the repayment of bank reimbursement obligations.

Each credit agreement will terminate upon the earliest to occur of: (a) stated expiration date; (i) March 1, 2014 for JPMorgan Chase Bank, N.A. and (ii) March 1, 2014 for Wells Fargo Bank, N.A.; (b) the business day following the receipt by the Bank of notice from the IPA stating that an alternate credit agreement in complete substitution for this credit agreement has been issued; (c) the date the obligation of the Banks terminates due to an event of default under the credit agreement; or (d) the date there is no Notes outstanding (other than commercial paper secured by an alternate credit agreement).

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**New Issue: MOODY'S ASSIGNS Aa1 RATING AND NEGATIVE OUTLOOK TO THE LAS VEGAS VALLEY WATER DISTRICT BONDS SERIES 2010**

Global Credit Research - 21 May 2010

**APPROXIMATELY \$1.85 BILLION IN DOUBLE-BARRELED GENERAL OBLIGATION/WATER REVENUE DEBT AFFECTED**

Water/Sewer  
NV

**Moody's Rating**

<b>ISSUE</b>	<b>RATING</b>
General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water Bonds Series 2010A (Taxable Direct Pay Build America Bonds)	Aa1
<b>Sale Amount</b>	\$75,860,000
<b>Expected Sale Date</b>	05/25/10
<b>Rating Description</b>	General Obligation - Revenue (Double Barrelled)
General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water and Refunding Bonds Series 2010B	Aa1
<b>Sale Amount</b>	\$32,410,000
<b>Expected Sale Date</b>	05/25/10
<b>Rating Description</b>	General Obligation - Revenue (Double Barrelled)

**Opinion**

NEW YORK, May 21, 2010 -- Moody's Investors Service has assigned a Aa1 rating and negative outlook to the Las Vegas Valley Water District, Nevada General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water Bonds Series 2010A (Taxable Direct Pay Build America Bonds) and General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water and Refunding Bonds Series 2010B being issued in the aggregate amount of approximately \$108.72 million. The outlook on the district's bonds is negative. The rating and outlook affects approximately \$1.85 billion in district and Southern Nevada Water Authority (SNWA) debt issued by the district on behalf of the authority. The current offerings are secured by the full faith and credit of the district subject to the constitutional and statutory limitations on the aggregate amount of ad valorem taxes in Nevada. The bonds are additionally secured by a pledge of net water system revenues from the district. The Series 2010A bonds will finance or reimburse the district for the costs of capital projects in the district's long-range capital plan known as the Major Construction Program (MCP). The Series 2010B bonds, together with other available funds, will be used to currently refund the district's Series 2006B (VRDO), and Series 2006C (VRDO) bonds maturing on June 11, 2011 and on June 1, 2012 and to advance refund the Series 2003A and Series 2006A bonds maturing on June 1, 2011 and June 1, 2012. The district is refunding these bonds in order to reduce total debt service payable over the next three years.

The Aa1 rating reflects a trend of lower annual debt service coverage on both district and authority debt, increased reliance on cash resources to make annual debt service payments, especially those attributable to the SNWA, and lower growth-related revenues resulting from the recession and accompanying contraction in the housing market. The rating also reflects the district's large customer base and the critical role played by the authority in supplying water in a large desert metropolitan area. The negative outlook indicates Moody's expectation that both the district's and the authority's debt service coverage levels will remain low, despite the refinancing of outstanding debt to reduce annual debt service in the near-term, and that the SNWA will continue to rely on cash resources to pay a portion of annual debt service on SNWA obligations over the next two years.

**WATER SERVICE AREA MUCH OF CLARK COUNTY; AREA ECONOMY HURT BY THE RECESSION**

The Las Vegas Valley Water District (LVWVD) encompasses virtually all of Clark County (limited tax general obligation bonds rated Aaa, stable outlook), which includes the City of Las Vegas (rated Aa1, negative outlook) and its considerable tourism and gaming attractions. The Clark County / Las Vegas metropolitan area has been among the fastest-growing in the nation for years, though the current recession has brought that growth rate down significantly. Clark County experienced a large housing boom in recent years, and has experienced a proportionate fall, experiencing high foreclosure rates and a decline in median prices. As a result of decreased travel to the Las Vegas metropolitan area and diminished spending once there, gaming and related industries are experiencing a serious downturn. According to the Las Vegas Convention and Visitors Authority (LVCVA), annual visitor volume to Las Vegas in calendar year 2009 declined by 3.0% to 36.35 million, the second largest decrease since 1970 (the earliest data available to Moody's) and the second consecutive annual decline; visitor volume contracted by 4.4% in calendar 2008. Current year-to-date figures for March 2010 show a 1.5% increase over the prior year period. Although this figure represents only three months of data, the January figure marks the seventh consecutive month of visitor volume matching or exceeding prior year levels, suggesting that visitor volume may be on the rebound in Las Vegas. Overall occupancy rates, while down from the 2007 level of 90.4%, were still high in 2010 at 81.5% though the March year-to-date figure was 77.7%.

The housing market downturn has been severe, although the non-residential real estate market buttressed taxbase growth in 2009. While over 8,000 new hotel rooms were constructed in 2008, commercial construction is tapered off in 2009 as a variety of large projects were completed, notably the City Center Project, which opened in December 2009. The district's full valuation for 2009 of \$317.0 billion represented a growth rate of 5.4%. Due to this slowing activity in the commercial sector, and the continued steep declines in the residential market, full value in 2010 declined by 19.7% to \$254.7 billion. Using this figure, average annual growth in full value was 12.4% from 2005 to 2010, as opposed to the 20.2% average annual growth rate achieved during the prior five year period.

**DISTRICT FINANCIAL OPERATIONS RESULT IN NARROWED DEBT SERVICE COVERAGE AND CASH RESERVES**

While the economy remains reliant upon gaming and tourism, the district's customer base is primarily residential with approximately 90% of the total active accounts being comprised of single-family residential customers. Steady consumption growth and somewhat irregular rate increases had fueled increasing water sales revenues, which increased at an average annual rate of 6.4% from fiscal 2004 to fiscal 2008. Connection fees, however, which peaked in 2006, declined substantially in 2007 and 2008. In May 2008 the district implemented a 23.0% water rate increase. As a result, fiscal 2009 water sales revenues, which were also impacted by conservation and the slowing economy, grew by an estimated 8.9%. For fiscal 2010, officials have budgeted a 1.2% decline in water sales revenues, although actual sales revenues may surpass this budgeted amount given recent rate increases. On December 1, 2009, the district board approved two 4.5% rate increases to go into effect on January 1, 2010 and January 1, 2011.

Despite growing revenues and the recent substantial rate increase, bond covenant debt service coverage by net pledged revenues has demonstrated a narrowing trend. For example, from the fiscal years 1999 to 2003, debt service coverage averaged a satisfactory 1.67 times, while over the period from 2004 to 2009 average coverage narrowed to 1.09 times. In fiscal 2009 coverage was a narrow 1.10 times. District projections show that coverage will continue to be narrow, averaging 1.07 times through 2014. The district's cash reserves have declined in recent years. Days cash on hand for the fiscal years 1999 to 2003 averaged a satisfactory 255 days, while over the period from 2004 to 2009 this figure averaged a more modest 115 days. In fiscal 2009 net working capital was \$16.3 million, or 4.6% of gross system revenues, and days cash on hand increased slightly to 118 (\$94.2 million). Projections show an improved days cash on hand of 149 in fiscal 2010 (\$113.4 million) and district projections indicate cash balances will meet or exceed this amount.

Although historically the district has not levied an ad valorem tax and has exclusively paid debt service from net revenues of either the district or SNWA or available cash resources, bondholders receive additional security based on the opportunity for the district to levy a property tax in the event one was necessary to service debt obligations. Based on the district's fiscal 2010 assessed valuation (AV), a one cent per \$100 of AV tax rate would generate \$9 million. Given the highest overlapping tax rate in Clark County of \$3.43, a \$0.23 per \$100 of AV tax rate (which would reach the \$3.66 statutory rate cap) would generate approximately \$207 million in property tax revenues, just enough to cover current debt service on the district's and SNWA's annual debt service. Moody's believes, however, that the district's ability to levy a property tax would be politically challenging, particularly in the current economic environment. For a more detailed discussion of SNWA's financial operations, please refer to Moody's Municipal Credit Research dated December 7, 2010.

#### MANAGEABLE DEBT POSITION

The district's limited tax bonds, including the current offerings, are self-supporting by district system revenues and cash reserves. Although the district's bonds carry a limited tax pledge, Moody's believes it is important to evaluate the enterprise debt ratio given that the bonds are fully supported by enterprise revenues. At 43.2%, the district's fiscal 2009 debt ratio is about average for a retail system. The district has authorization to issue an additional \$75 million in general obligation revenue bonds and has no firm plans to issue this remaining amount over the next four years. Given this limited future borrowing and the fact that the district has delayed approximately \$400 million in capital projects in response to the economic downturn, Moody's anticipates the system's debt ratio will remain manageable. The district's variable rate debt consists of the district's Series 2006B and Series 2006C bonds which will be outstanding in the aggregate amount of \$138.9 million following the refunding. The bonds are supported by standby bond purchase agreements provided by Dexia, which expire on July 20, 2016, and the bonds are remarketed by Barclays and are currently in daily mode.

The Series 2010A bonds will finance or reimburse the district for the costs of capital projects in the district's long-range capital plan known as the Major Construction Program (MCP). The Series 2010B bonds, together with other available funds, will be used to currently refund the district's Series 2006B (VRDO), and Series 2006C (VRDO) bonds maturing on June 11, 2011 and on June 1, 2012 and to advance refund the Series 2003A and Series 2006A bonds maturing on June 1, 2011 and June 1, 2012. The district is refunding these bonds in order to reduce total debt service payable over the next three years.

#### Outlook

Moody's has assigned a negative rating outlook based upon the district's continued narrowed debt service coverage, despite the refinancing of outstanding debt to reduce annual debt service in the near-term, and modest cash balances. The negative outlook also indicates the authority's reliance on cash resources to pay SNWA debt service in 2008 and over the next two years. Subsequent reviews will consider the authority's ability to generate adequate current net revenues to cover annual debt service and the authority's willingness to implement rate additional increases as required to buttress coverage in foreseeable future.

#### KEY STATISTICS:

Clark County 2009 population: 2,077,463

Clark County unemployment rate, November 2009: 12.1%

Las Vegas Valley Water District 2010 full valuation: \$254.7 billion

Las Vegas Valley Water District average annual growth in full value, 2005-2010: 12.4%

Las Vegas Valley Water District Enterprise Ratios, FY 2009:

Operating Ratio: 82.6%

Annual debt service coverage by pledged revenues (CAFR income statement): 0.92x

Annual debt service coverage by pledged revenues (bond ordinance): 1.10x

Net working capital as % of gross revenues: 4.6% (\$16.3 million)

Unrestricted days cash on hand: 118 (\$94.2 million)

Debt Ratio: 43.2%

Debt outstanding secured by pledged LVVWD revenues: \$961.4 million

The last rating action with respect to the Las Vegas Valley Water District, Nevada was on March 16, 2010, when a municipal scale rating of Aa2 with a negative outlook was assigned to the district's limited tax general obligation bonds (additionally secured by pledged revenues). That rating was subsequently recalibrated to Aa1 with a negative outlook on May 1, 2010.

The principal methodologies used in rating the Las Vegas Valley Water District, Nevada General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water Bonds Series 2010A (Taxable Direct Pay Build America Bonds) and General Obligation (Limited Tax) (Additionally Secured by Pledged Revenues) Water and Refunding Bonds Series 2010B was "Local Government General Obligation and Related Ratings" and "Analytical Framework for Water and Sewer System Ratings" published in December 2008 which can be found at [www.moody.com](http://www.moody.com) in the Rating Methodologies sub-directory under the Research & Ratings tab. Other methodologies and factors that may have been considered in the process of rating this issuer can also be found in the Rating Methodologies sub-directory on Moody's website.

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**New Issue: MOODY'S ASSIGNS Aa1 RATING TO CLARK COUNTY, NEVADA'S GENERAL OBLIGATION (LIMITED TAX) BOND BANK REFUNDING BONDS (ADDITIONALLY SECURED BY SNWA PLEDGED REVENUES), SERIES 2009**

Global Credit Research - 13 Oct 2009

**APPROXIMATELY \$1.6 BILLION IN BOND BANK DEBT AFFECTED**

County  
NV

**Moody's Rating  
ISSUE**

**RATING**

General Obligation (Limited Tax) Bond Bank Refunding Bonds (Additionally Secured by SNWA Pledged Revenue) Series 2009	Aa1
<b>Sale Amount</b>	\$50,000,000
<b>Expected Sale Date</b>	10/22/09
<b>Rating Description</b>	General Obligation, Limited Tax (Double-Barrelled)

**Opinion**

NEW YORK, Oct 13, 2009 -- Moody's Investors Service has assigned a Aa1 rating to Clark County, Nevada's General Obligation (Limited Tax) Bond Bank Refunding Bonds (Additionally Secured by SNWA Pledged Revenues), Series 2009 in the amount of \$50 million. The rating outlook is stable. The current offering is secured by revenues from the Southern Nevada Water Authority (SNWA) as well as by the county's limited tax pledge. Bond proceeds will be used to refund certain maturities of the Bond Bank's outstanding obligations secured by SNWA revenues. The Aa1 limited tax rating primarily reflects the county's favorable long-term credit characteristics including a continued healthy financial position despite more modest revenue growth in fiscal 2008 and 2009, conservative budgeting practices and a notable level of spending flexibility which provides an ample financial cushion during the current recession, and a manageable level of debt, much of which is paid from dedicated revenue sources. Moody's notes that these strengths help mitigate the potential fiscal 2010 budgetary risks associated with the county's concentrated economy, which in the current downturn is having a negative effect on certain tax revenues and a negative effect on the growth in taxable values.

**ECONOMY HURT BY THE RECESSION; PROPERTY TAX BASE EXPERIENCES SHARP DECLINE IN FISCAL 2010**

The Clark County / Las Vegas metropolitan area has been among the fastest-growing in the nation for years, though the current recession has brought that growth rate down significantly. Clark County experienced a large housing boom in recent years, and has experienced a proportionate fall, experiencing high foreclosure rates and a decline in median prices. As a result of decreased travel to the Las Vegas metropolitan area and diminished spending once there, gaming and related industries are experiencing a serious downturn. According to the Las Vegas Convention and Visitors Authority (LVCVA), annual visitor volume to Las Vegas in calendar year 2008 declined by 4.4% to 37.48 million, the largest decrease since 1970 (the earliest data available to Moody's) and which is roughly equivalent to visitor volume in 2004. Current year-to-date figures through August 2009 show a 5.8% decrease over the prior year period. As such, Moody's believes that calendar year 2009 visitor volume will decline once more, perhaps to a level approaching the 2001 volume which was impacted by the events of September 11, 2001. Clark County gaming revenues in calendar year 2008 were down 9.9% over the prior year and the August year-to-date figures are down 12.4% over the prior year. Although this figure indicates one component of diminished spending by visitors while in Las Vegas and has a negative effect on employment in the region's dominant industry, Moody's believes that it is important to note that local governments like the county, and unlike the State of Nevada, do not rely on gaming tax revenues to support operations. Hotel occupancy rates, while down from the 2007 level of 90.4%, were still high in 2008 at 86.0% though the year-to-date figure has dipped to 82.7%.

The housing market downturn has been severe, although the non-residential real estate market buttressed taxbase growth in 2009. While over 8,000 new hotel rooms were constructed in 2008, commercial construction is tapering off as a variety of large projects near completion, primarily the City Center Project. The county's full valuation for 2009 of \$319.7 billion represented a growth rate of 5.4%. Due to this slowing activity in the commercial sector, and the continued steep declines in the residential market, full value in 2010 declined by 19.6% to \$257.1 billion. Using this figure, average annual growth in full value was 12.4% from 2005 to 2010, as opposed to the 20.2% average annual growth rate achieved during the prior five year period.

Resident wealth levels are consistent with state and national norms, the county's 2010 full value per capita of \$123,752 is well above the median of \$75,857 for U.S. counties, as is the 2010 figure of \$123,752. The unemployment rate in the county has increased to 12.3% in June 2009, somewhat above the national rate of 9.5%.

**ABATEMENT ACT HAS NOT HAD A SIGNIFICANT NEGATIVE IMPACT ON CLARK COUNTY**

The Abatement Act, which is comprised of Assembly Bill 489 and Senate Bill 509 and became effective in fiscal 2006, limits annual increases in property tax bills for residential properties to 3% plus new construction. Commercial properties and second home owners have a tax cap equal to the lesser of 8% or the average annual change in taxable values over the last ten years, plus new construction. The legislation has not had a significant financial impact on Clark County given its ability under the Abatement Act to capture new growth on the tax rolls. During 2009, the act provided an estimated \$188.4 million cushion in the event of declines in assessed value. With the 19.6% drop in assessed value in 2010 the effect of this cushion, the county reports that fiscal 2010 property tax revenues will drop by only 5.3%.

**FINANCIAL OPERATIONS FEATURE CONSERVATIVE REVENUE AND EXPENDITURE PROJECTIONS, DECLINING GENERAL FUND RESERVES OFFSET BY AMPLE RESERVES OUTSIDE THE GENERAL FUND AND CONTINUED SPENDING FLEXIBILITY**

The county's financial operations benefit from conservative revenue and expenditure projections, which the county routinely outperforms, satisfactory general fund reserves, and notable spending flexibility, which is bolstered by a typically large transfers out for capital projects. Following a build-up of general fund reserves through fiscal 2007, the county budgeted a portion of general fund reserves in fiscal 2008 and received lower than expected consolidated tax revenues which, combined with large transfers out, resulted in a decreased general fund balance of \$218.5 million, or 16.3% of revenues. The undesignated, unreserved fund balance was \$176.4 million (13.2% of revenues). The county maintains substantial reserves outside the general fund, however, which are legally available for general fund purposes. Indeed, these reserves, which comprise the unreserved county capital projects fund, were increased to \$440.1 million in fiscal 2008 due, in part, to a large transfer of over \$200 million from the general fund. Including these reserves, the county's available fund balance in fiscal 2008 was a sizable \$620.3 million, or a healthy 46.3% of general fund revenues.

County estimates for fiscal 2009 show new weakness in certain county revenues, particularly the consolidated tax, which declined by approximately 14.6% over the prior year. However, officials note that growth in other revenues, largely the property tax, which is expected to grow at 11.4%, will help offset the loss of consolidated tax revenues. As such, total general fund revenues (not including transfers) are estimated to decrease by a more modest 3.0%. The county's general fund balance is estimated to increase slightly above the fiscal 2008 level despite substantial budgeted transfers out to other funds of approximately \$425 million. Moody's therefore expects that the unreserved general fund reserve levels will continue to exceed the 10% policy level particularly given the county's conservative approach to forecasting revenues and expenditures. Additionally, given the approximately \$418 million in the unreserved county capital projects fund and other capital funds, it is anticipated that the available fund balance will equal 51.4%, or \$678 million. Moody's also notes that management benefits from its ability to easily adjust expenditures through its centralized controls. Should the recession prove to be longer and deeper than prior economic downturns, which appears likely, the county could be challenged to maintain balanced operations in preparation for its 2010 budget and beyond.

Subsidies to the county-owned University Medical Center (UMC) had moderated somewhat in 2008 but are expected to increase. In fiscal 2008 the county provided a \$44.8 million subsidy to UMC, and management anticipates that this figure will be approximately \$60 million in 2009, and has tentatively budgeted \$65.4 million in 2010, a figure which approximates the \$65.6 million transferred for operations in 2007. Moody's expects that county management will be challenged in its efforts to contain the growth in the county's subsidy to the medical center in the current environment.

#### THE COUNTY WILL FACE BUDGETARY CHALLENGES IN FISCAL 2010

The county will face challenges over the course of fiscal 2010. The county disclosed an initial deficit of \$115 million by reducing expenditures by approximately \$75 million and drawing on unreserved general fund balance down to 8.5% policy level, within the county policy level. Total general fund reserves are budgeted to be approximately 10% of total expenditures and transfers.

The budget incorporates the elimination of vacant positions, including 60 voluntary separations, and other planned staff reductions. Staff has identified a possible additional \$15 million general fund deficit, due in part to state budgetary actions (see below) and the reduction of the \$40.0 million budgeted discretionary capital transfer, and could tap the county's ample capital fund reserves if necessary.

The state legislature has approved legislation in which the state would appropriate revenues attributable to 4 cents of the county's operating tax rate; using the county's fiscal 2010 tax base this would result in a loss to the county of \$35 mm annually or approximately \$70 million over the biennium. The state legislature mitigated this impact by increasing the governmental services tax through modification of vehicle depreciation schedules and by allowing the county to utilize certain transportation-specific revenues over the biennium. Included in these revenues that are allowed to be moved to the county general fund are master transportation pledged revenues, including strip resort corridor room taxes, after debt service requirements have been met. The county intends to move approximately \$5 million in each of the two years of these room tax revenues that would have been used for pay as you go projects. The net impact to the county general fund is estimated to be \$15 million per year as a result of this legislation, or \$30 million over the biennium.

Additionally, the state would appropriate revenues attributable to the county's 5 cent capital levy which funds Regional Transportation Commission projects, local government projects, as well as certain county projects. This would result in about a \$15 million annual loss for the county or approximately \$30 million over the biennium. These monies are dedicated to capital programs and are not pledged revenues for any borrowing program or available to the county general fund.

#### DEBT SERVICE COVERAGE OF SNWA OBLIGATIONS HAS SIGNIFICANTLY NARROWED AND INTENDS TO CONTINUE TO RELY ON CASH TO PAY A PORTION OF DEBT SERVICE

Like the district, the authority's debt service coverage by net pledged revenues has demonstrated a narrowing trend. This has been primarily due to declines in wholesale delivery charges and steep declines in regional connection charges. Although the SNWA increased wholesale delivery charge from \$8 acre-foot (AF) to \$270 per AF, no additional rate increases have been implemented or approved. In fiscal 2008, superior lien and parity lien debt service coverage dropped to well below sum-sufficient levels to 0.77 times (including the effect of capitalized interest) and in 2009 is estimated at a 0.69 times (also including capitalized interest). These figures are well below the coverage figures of over 1.5 times in fiscal years 2005 and 2006. The authority will use cash resources to pay debt service not covered by annual revenues. SNWA projections show that coverage will continue to be less than sum-sufficient in 2010 at 0.83 times, thus continuing to use cash to pay annual debt service. Annual revenues are expected to cover debt service by 1.50 times or better from 2011 onward. Moody's notes that these projected coverage figures do not include the planned issuance of an additional \$400 million in parity debt as early as 2010.

The authority's cash reserves remain healthy, even after draws on cash to pay debt service. In fiscal 2008 net working capital was \$421.6 million, or 116.9% of gross system revenues, while days cash on hand was 898 days (\$336.0 million). Preliminary estimates show days cash on hand of 891 in fiscal 2009 (based on \$425.2 million of ending cash balances) and district projections indicate cash balances will be maintained at a minimum of \$355 million.

#### SOUTHERN NEVADA WATER AUTHORITY PROVIDES WHOLESALE WATER TO NEARLY ALL OF CLARK COUNTY

The Southern Nevada Water Authority (SNWA) is a joint powers authority comprised of the district, the cities of Boulder City, Henderson and North Las Vegas, the Big Bend Water District, and the Clark County Water Reclamation District. The authority was formed to develop additional water supplies for its members and to address water issues on a regional basis. The SNWA owns the Southern Nevada Water System (SNWS), a regional water system consisting of intake facilities at Lake Mead, pumping plants, pipelines, and water treatment facilities. The authority delivers water to the district through the SNWS. Pursuant to an operating agreement, the district operates the SNWS on behalf of the SNWA. In addition, the LVWWD and SNWA share the same management team, improving coordination between these important entities which are operationally and financially intertwined.

The district receives water primarily from the Colorado River, approximately 90% of the total supply, through a contractual agreement with the SNWA. The remaining 10% of water is primarily from various groundwater sources. The district is obligated to pay a portion of the SNWS construction and operating costs over the 50-year contract period based upon its share of the overall annual consumption. The regional system generally uses nearly all of its 300,000 acre feet Colorado River entitlement and groundwater rights, so future development in Clark County could be at risk if additional resources are not developed. To address the potential shortfall in supply, the district has imposed various conservation measures and is identifying potential additional water sources, which include interim Colorado River surplus, Arizona groundwater banking, and development of other in-state resources. The authority is also currently developing a new water resource in White Pine County, 250 miles to the north, a critical component of its long-term water resource plan.

#### LOW LEVEL OF DIRECT DEBT

The current offering represents the county's second lease obligation, although the vast majority of the county's other obligations are comprised of general obligation limited tax bonds while are additionally secured by additional revenues. While the overall debt burden of 1.5% is largely due to the issuance of Clark County School District debt (rated Aa2, negative outlook) which has had substantial capital needs in recent years, the county's direct, general fund supported debt level is a moderate 0.2% (net of self-supporting debt secured by a variety of alternate revenue sources). The county's lease burden as percent of its fiscal 2009 general fund revenues is modest at 1.9%. When incorporating the operating fund of the Las Vegas Metropolitan Police, which will pay a portion of the debt service on the lease revenue bonds which financed the new police headquarters, this lease burden is approximately 1.5%.

Most of the county's future tax-supported capital needs are expected to be funded on a pay-as-you-go basis with annual revenues and accumulated reserves, although the county now anticipates deferring a number of capital projects given current economic conditions. The county's aggregate unreserved capital projects fund balance was approximately \$1.1 billion in fiscal 2008.

Bond proceeds will be used to refund certain maturities of the Bond Bank's outstanding obligations secured by SNWA revenues. Moody's believes it is important to evaluate the authority's enterprise debt ratio given that the bonds are fully supported by SNWA revenues. At 49.1%, the authority's fiscal 2008 debt ratio is below average for a wholesale system. The district has been authorized by the Clark County Debt Management Commission to issue an additional \$400 million secured by SNWA revenues.

The authority's variable rate debt consists of \$400 million in commercial paper issued by the district on behalf of the authority. J.P. Morgan provides a credit facility expiring in June 2010 for \$200 million of the authority's CP, and BNP Paribas provides a credit facility expiring in March 2010 for the remaining \$200 million. For a more detailed discussion of the commercial paper program, please refer to Moody's Municipal Research dated May 1, 2009.

#### Outlook

The stable rating outlook is based on Moody's expectation that the county will continue to engage in conservative financial management practices and budget adjustments in order to achieve sound financial results given the challenges posed by the recession which is resulting in flat to declining revenue growth. The coming 2010 and 2011 fiscal years will be particularly challenging for the county as it may experience flat to declining growth rates in its major revenues, and subsequent credit reviews will focus on management's ability to adjust its expenditures accordingly.

#### KEY STATISTICS:

2009 population: 2,077,463

Clark County unemployment rate, August 2009: 13.4%

2010 full valuation: \$257.1 billion

Full value per capital, 2010: \$123,752

Average annual growth in full value, 2005-2010: 12.4%

2006 per capita income: \$38,281 (98.2% of state)

Direct debt burden: 0.2%

Overall debt burden: 1.5%

FY 2008 total general fund balance: \$218.5 million (16.3% of general fund revenues)

FY 2008 unreserved general fund balance: \$180.2 million (13.4% of general fund revenues)

FY 2008 available general fund balance: \$620.3 million (46.3% of general fund revenues)

FY 2009 estimated total general fund balance: \$300.5 million (22.8% of general fund revenues)

FY 2009 estimated undesignated, unreserved general fund balance: \$259.9 million (19.7% of general fund revenues)

FY 2009 estimated available general fund balance: \$677.7 million (51.4% of general fund revenues)

#### Southern Nevada Water Authority Enterprise Ratios:

Operating Ratio, 2008: 87.9%

Debt Ratio, 2008: 45.3%

Annual superior & parity debt service coverage by pledged revenues, 2008 (net of capitalized interest): 0.77x

Annual superior & parity debt service coverage by pledged revenues, 2009: 0.69x

Net working capital as % of gross revenues, 2008: 116.9% (\$421.6 million)

Fiscal 2008 unrestricted days cash on hand: 898 (\$336.0 million)

Fiscal 2009 estimated unrestricted days cash on hand: 891 (\$425.2 million)

Long-term debt outstanding issued by district secured by pledged SNWA revenues: \$489.3 million

Aggregate long-term SNWA obligations: \$2.3 billion

SNWA commercial paper outstanding: \$400 million

The last rating action with respect to Clark County, Nevada was on August 3, 2009, when the county's Aa1 General Obligation, Limited Tax rating was affirmed.

The principal methodology used in rating Clark County, Nevada General Obligation (Limited Tax) Bond Bank Refunding Bonds (Additionally Secured by SNWA Pledged Revenues), Series 2009 was "Local Government General Obligation and Related Ratings" published in December 2008 which can be found at [www.moody's.com](http://www.moody's.com) in the Rating Methodologies sub-directory under the Research & Ratings tab. Other methodologies and factors that may have been considered in the process of rating this issuer can also be found in the Rating Methodologies sub-directory on Moody's website.

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**New Issue: MOODY'S ASSIGNS Aa2 RATING AND NEGATIVE OUTLOOK TO LAS VEGAS VALLEY WATER DISTRICT, NEVADA GENERAL OBLIGATION (LIMITED TAX) BONDS**

Global Credit Research - 07 Dec 2009

**APPROXIMATELY \$1.8 BILLION IN DOUBLE-BARRELED G.O.L.T. WATER REVENUE DEBT AFFECTED**

Water/Sewer  
NV

**Moody's Rating**

<b>ISSUE</b>	<b>RATING</b>
General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Water Bonds, Series 2009C (Taxable Direct Pay Build America Bonds)	Aa2
<b>Sale Amount</b>	\$348,775,000
<b>Expected Sale Date</b>	12/09/09
<b>Rating Description</b>	General Obligation - Revenue (Double Barrelled)
General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Water Bonds, Series 2009D	Aa2
<b>Sale Amount</b>	\$71,390,000
<b>Expected Sale Date</b>	12/09/09
<b>Rating Description</b>	General Obligation - Revenue (Double Barrelled)

**Opinion**

NEW YORK, Dec 7, 2009 -- Moody's Investors Service has assigned a Aa2 rating to the Las Vegas Valley Water District, Nevada General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Water Bonds Series 2009C (Taxable Direct Pay Build America Bonds) and General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Water and Refunding Bonds Series 2009D being issued in the aggregate amount of approximately \$420.2 million. The outlook on the district's bonds is negative. The rating and outlook affects approximately \$1.77 billion in district and authority debt. The current offerings are secured by the full faith and credit of the district subject to the constitutional and statutory limitations on the aggregate amount of ad valorem taxes in Nevada. The Series 2009C and 2009D bonds are additionally secured by a pledge of revenues from the Southern Nevada Water Authority. The rating and outlook does not affect the obligations of the Southern Nevada Water Authority (SNWA) issued through the Clark County Bond Bank outstanding in the amount of approximately \$1.39 billion and rated Aa1 with a stable outlook. For a more detailed discussion of Clark County, Nevada, please refer to Moody's Municipal Credit Research dated November 12, 2009. The Series 2009C bonds will fund the construction of a third intake into Lake Mead and the Series 2009D bonds will be used to fund capitalized interest for three years and to restructure the 2010 - 2012 maturities of the district's General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Refunding Bonds Series 2003B. The Aa2 rating reflects a trend of lower annual debt service coverage on both district and authority debt, increased reliance on cash resources to make annual debt service payments, especially those attributable to the SNWA, and lower growth-related revenues resulting from the recession and accompanying contraction in the housing market. The rating also reflects the district's large customer base and the critical role played by the authority in supplying water in a large desert metropolitan area. The negative outlook indicates Moody's expectation that both the district's and the authority's debt service coverage levels will remain low, and that the SNWA will continue to rely on cash resources to pay a portion of annual debt service on SNWA obligations in 2009 and over the next two years.

**WATER SERVICE AREA MUCH OF CLARK COUNTY; AREA ECONOMY HURT BY THE RECESSION**

The Las Vegas Valley Water District (LVVWD) encompasses virtually all of Clark County (limited tax general obligation bonds rated Aa1, stable outlook), which includes the City of Las Vegas (rated Aa2, negative outlook) and its considerable tourism and gaming attractions. The Clark County / Las Vegas metropolitan area has been among the fastest-growing in the nation for years, though the current recession has brought that growth rate down significantly. Clark County experienced a large housing boom in recent years, and has experienced a proportionate fall, experiencing high foreclosure rates and a decline in median prices. As a result of decreased travel to the Las Vegas metropolitan area and diminished spending once there, gaming and related industries are experiencing a serious downturn. According to the Las Vegas Convention and Visitors Authority (LVCVA), annual visitor volume to Las Vegas in calendar year 2008 declined by 4.4% to 37.48 million, the largest decrease since 1970 (the earliest data available to Moody's) and which is roughly equivalent to visitor volume in 2004. The rate of the decline in visitor volumes during 2009 appears to be moderating. Current year-to-date figures through September 2009 show a 4.7% decrease over the prior year period, as compared to the 6.8% decline as of June 2009. Indeed, Las Vegas hosted nearly 3.1 million visitors in September, an increase of 4.3% compared to September 2008 which is the first year-over-year monthly increase since May 2008. Nonetheless, Moody's believes that calendar year 2009 visitor volume will decline once more, but at a lower than anticipated rate than previously thought, and at the current rate will likely exceed calendar year 2003 visitor volume of over 35 million.

Hotel occupancy rates, while down from the 2007 level of 90.4%, were still high in 2008 at 86.0% though the year-to-date figure has dipped to 82.8%, although Moody's notes that this is well-above the national average of 56.6%.

The housing market downturn has been severe, although the non-residential real estate market buttressed taxbase growth in 2009. While over 8,000 new hotel rooms were constructed in 2008, commercial construction is tapering off as a variety of large projects near completion, primarily the City Center Project, which just began to open. The district's full valuation for 2009 of \$317.0 billion represented a growth rate of 5.4%. Due to this slowing activity in the commercial sector, and the continued steep declines in the residential market, full value in 2010 declined by 19.7% to \$254.7 billion. Using this figure, average annual growth in full value was 12.4% from 2005 to 2010, as opposed to the 20.2% average annual growth rate achieved during the prior five year period.

## DISTRICT FINANCIAL OPERATIONS RESULT IN NARROWED DEBT SERVICE COVERAGE AND CASH RESERVES

While the economy remains reliant upon gaming and tourism, the district's customer base is primarily residential with approximately 90% of the total active accounts being comprised of single-family residential customers. Steady consumption growth and somewhat irregular rate increases had fueled increasing water sales revenues, which increased at an average annual rate of 6.4% from fiscal 2004 to fiscal 2008. Connection fees, however, which peaked in 2006, declined substantially in 2007 and 2008. In May 2008 the district implemented a 23.0% water rate increase. As a result, fiscal 2009 water sales revenues, which were also impacted by conservation and the slowing economy, grew by an estimated 8.9%. For fiscal 2010, officials have budgeted a 1.2% decline in water sales revenues, although actual sales revenues may surpass this budgeted amount given recent rate increases. On December 1, 2009, the district board approved two 4.5% rate increases to go into effect on January 1, 2010 and January 1, 2011.

Despite growing revenues and the recent substantial rate increase, bond covenant debt service coverage by net pledged revenues has demonstrated a narrowing trend. For example, from the fiscal years 1999 to 2003, debt service coverage averaged a satisfactory 1.75 times, while over the period from 2003 to 2008 average coverage narrowed to 1.14 times. In fiscal 2008 coverage dropped to 0.96 times (including the effect of capitalized interest) and in 2009 is estimated at a slightly improved, but still narrow 1.07 times. District projections show that coverage will continue to be narrow, averaging 1.07 times through 2014.

The district's cash reserves have declined in recent years. Days cash on hand for the fiscal years 1999 to 2003 averaged a satisfactory 255 days, while over the period from 2004 to 2008 this figure averaged a more modest 115 days. In fiscal 2008 net working capital was \$38.1 million, or 10.6% of gross system revenues, and days cash on hand declined to 95 (\$81.5 million). Estimates show an improved days cash on hand of 132 in fiscal 2009 (\$105.7 million) and district projections indicate cash balances will be maintained at approximately \$91 million.

Although historically the district has not levied an ad valorem tax and has exclusively paid debt service from net revenues of either the district or SNWA or available cash resources, bondholders receive additional security based on the opportunity for the district to levy a property tax in the event one was necessary to service debt obligations. Based on the district's fiscal 2010 assessed valuation (AV), a one cent per \$100 of AV tax rate would generate \$9 million. Given the highest overlapping tax rate in Clark County of \$3.43, a \$0.23 per \$100 of AV tax rate (which would reach the \$3.66 statutory rate cap) would generate approximately \$207 million in property tax revenues, just enough to cover current debt service on the district' and SNWA's annual debt service. Moody's believes, however, that the district's ability to levy a property tax would be politically challenging, particularly in the current economic environment.

## DEBT SERVICE COVERAGE OF SNWA OBLIGATIONS HAS SIGNIFICANTLY NARROWED AND INTENDS TO CONTINUE TO RELY ON CASH TO PAY A PORTION OF DEBT SERVICE

Like the district, the authority's debt service coverage by net pledged revenues has demonstrated a narrowing trend. This has been primarily due to declines in wholesale delivery charges and steep declines in regional connection charges. The SNWA increased wholesale delivery charge from \$8 acre-foot (AF) to \$270 per AF, and in September 2009 approved two ten-cent commodity charge increases which will each go into effect in January 2010 and January 2011. In fiscal 2008, superior lien and parity lien debt service coverage dropped to well below sum-sufficient levels to 0.77 times (including the effect of capitalized interest) and in 2009 is estimated at a 0.68 times (also including capitalized interest). These figures are well below the coverage figures of over 1.5 times in fiscal years 2005 and 2006. The authority will use cash resources to pay debt service not covered by annual revenues. SNWA projections show that coverage will continue to be less than sum-sufficient in 2010 at 0.72 times, and 0.93 times in 2011 thus continuing to use cash to pay annual debt service. Annual revenues are expected to cover debt service by 1.10 times or better from 2011 onward.

The authority's cash reserves remain healthy, even after draws on cash to pay debt service. In fiscal 2008 net working capital was \$421.6 million, or 116.9% of gross system revenues, while days cash on hand was 898 days (\$336.0 million). Preliminary estimates show days cash on hand of 1,105 in fiscal 2009 (based on \$432.5 million of ending cash balances) and district projections indicate cash balances will be maintained at a minimum of \$377 million.

## SOUTHERN NEVADA WATER AUTHORITY PROVIDES WHOLESALE WATER TO NEARLY ALL OF CLARK COUNTY

The Southern Nevada Water Authority (SNWA) is a joint powers authority comprised of the district, the cities of Boulder City, Henderson and North Las Vegas, the Big Bend Water District, and the Clark County Water Reclamation District. The authority was formed to develop additional water supplies for its members and to address water issues on a regional basis. The SNWA owns the Southern Nevada Water System (SNWS), a regional water system consisting of intake facilities at Lake Mead, pumping plants, pipelines, and water treatment facilities. The authority delivers water to the district through the SNWS. Pursuant to an operating agreement, the district operates the SNWS on behalf of the SNWA. In addition, the LVWWD and SNWA share the same management team, improving coordination between these important entities which are operationally and financially intertwined.

The district receives water primarily from the Colorado River, approximately 90% of the total supply, through a contractual agreement with the SNWA. The remaining 10% of water is primarily from various groundwater sources. The district is obligated to pay a portion of the SNWS construction and operating costs over the 50-year contract period based upon its share of the overall annual consumption. The regional system generally uses nearly all of its 300,000 acre feet Colorado River entitlement and groundwater rights, so future development in Clark County could be at risk if additional resources are not developed. To address the potential shortfall in supply, the district has imposed various conservation measures and is identifying potential additional water sources, which include interim Colorado River surplus, Arizona groundwater banking, and development of other in-state resources. The authority is also currently developing a new water resource in White Pine County, 250 miles to the north, a critical component of its long-term water resource plan.

## MANAGEABLE DEBT POSITION

The district's limited tax bonds, including the current offerings, are self-supporting by district system revenues and cash reserves. Although the district's bonds carry a limited tax pledge, Moody's believes it is important to evaluate the enterprise debt ratio given that the bonds are fully supported by enterprise revenues. At 45.3%, the district's fiscal 2008 debt ratio is about average for a retail system. The district has authorization to issue an additional \$150 million in general obligation revenue bonds and expects to issue approximately \$50 million during fiscal 2010. Given this limited future borrowing and the fact that the district has delayed approximately \$400 million in capital projects in response to the economic downturn, Moody's anticipates the system's debt ratio will remain manageable. The district's variable rate debt consists of the district's Series 2006B & 2006C bonds. The bonds are supported by standby bond purchase agreements provided by Dexia, which expire on July 20, 2016, and the bonds are remarketed by Barclays and are currently in daily mode. The district has board authorization to refinance these

bonds with fixed rate obligations if necessary

The current offerings are being issued for the benefit of the SNWA capital program. The Series 2009C bonds will fund the construction of a third intake into Lake Mead and the Series 2009D bonds will be used to fund capitalized interest for three years. As with the district's debt, Moody's believes it is important to evaluate the authority's enterprise debt ratio given that the bonds are fully supported by SNWA revenues. At 49.1%, the authority's fiscal 2008 debt ratio is below average for a wholesale system.

The authority's variable rate debt consists of \$400 million in commercial paper issued by the district on behalf of the authority. J.P. Morgan provides a credit facility expiring in June 2010 for \$200 million of the authority's CP, and BNP Paribas provides a credit facility expiring in March 2010 for the remaining \$200 million. For a more detailed discussion of the commercial paper program, please refer to Moody's Municipal Research dated May 1, 2009.

### **Outlook**

Moody's has assigned a negative rating outlook based upon the district's continued narrowed debt service coverage and modest cash balances. The negative outlook also indicates the authority's reliance on cash resources to pay SNWA debt service in 2008 and over the next two years. Subsequent reviews will consider the authority's ability to generate adequate current net revenues to cover annual debt service and the authority's willingness to implement rate additional increases as required to buttress coverage in foreseeable future.

### **KEY STATISTICS:**

Clark County 2009 population: 2,077,463

Clark County unemployment rate, February 2009: 10.1%

Las Vegas Valley Water District 2010 full valuation: \$254.7 billion

Las Vegas Valley Water District average annual growth in full value, 2005-2010: 12.4%

Las Vegas Valley Water District Enterprise Ratios:

Operating Ratio, 2008: 87.9%

Debt Ratio, 2008: 45.3%

Annual debt service coverage by pledged revenues, 2008 (net of capitalized interest): 0.96x

Annual debt service coverage by pledged revenues, 2009: 1.07x

Net working capital as % of gross revenues, 2008: 10.6% (\$38.1 million)

Fiscal 2008 unrestricted days cash on hand: 95 (\$81.5 million)

Fiscal 2009 estimated unrestricted days cash on hand: 132 (\$105.7 million)

Debt outstanding secured by pledged LVVWD revenues: \$884.4 million

Southern Nevada Water Authority Enterprise Ratios:

Operating Ratio, 2008: 87.9%

Debt Ratio, 2008: 45.3%

Annual superior & parity debt service coverage by pledged revenues, 2008 (net of capitalized interest): 0.77x

Annual superior & parity debt service coverage by pledged revenues, 2009: 0.68x

Net working capital as % of gross revenues, 2008: 116.9% (\$421.6 million)

Fiscal 2008 unrestricted days cash on hand: 898 (\$336.0 million)

Fiscal 2009 estimated unrestricted days cash on hand: 1,105 (\$432.5 million)

Long-term debt outstanding issued by district secured by pledged SNWA revenues: \$886.1 million

Aggregate long-term SNWA obligations: \$2.7 billion

SNWA commercial paper outstanding: \$400 million

The last rating action with respect to Las Vegas Valley Water District, Nevada was on July 20, 2009, when a Limited Tax General Obligation (Additionally Secured by Pledged Revenues) rating of Aa2 was assigned.

The principal methodology used in rating the Las Vegas Valley Water District, Nevada General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Water Bonds Series 2009C (Taxable Direct Pay Build America Bonds) and General Obligation (Limited Tax) (Additionally Secured by SNWA Pledged Revenues) Water and Refunding Bonds Series 2009D was "Local Government General Obligation and Related Ratings" published in December 2008 which can be found at [www.moody.com](http://www.moody.com) in the Rating Methodologies sub-directory under the Research & Ratings tab. Other methodologies and factors that may have been considered in the process of rating this issuer can also be found in the Rating Methodologies sub-directory on Moody's website.

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## **APPENDIX B – SUMMARY OF REFINANCED BONDS**

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SUMMARY OF BONDS REFUNDED

Southern Nevada Water Authority  
Clark County G.O. Bond Bank Refunding Bonds, Series 2011A (Taxable)

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Clark County 2006 Water Revenue Bonds - Refunding:					
REFUND	11/01/2012	5.000%	55,000.00		
	11/01/2013	5.000%	7,200,000.00		
	11/01/2014	5.000%	7,575,000.00		
	11/01/2015	5.000%	10,000.00		
			<u>14,840,000.00</u>		
Series 2006 Clark County Refunding Bonds:					
SERIALS	06/01/2012	4.000%	6,010,000.00		
	06/01/2013	4.000%	6,255,000.00		
	06/01/2014	4.250%	6,505,000.00		
	06/01/2015	4.250%	6,785,000.00		
			<u>25,555,000.00</u>		
			<u>40,395,000.00</u>		

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SUMMARY OF BONDS REFUNDED

Southern Nevada Water Authority  
Clark County G.O. Bond Bank Refunding Bonds, Series 2011B (Tax-Exempt)

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Clark County 2001 Water Revenue Bonds:					
SERIALS	06/01/2013	5.500%	6,580,000.00	06/01/2011	100.000
Clark County 2002 Water Revenue Bonds:					
SERIAL	06/01/2013	5.000%	4,995,000.00	12/01/2012	100.000
	06/01/2014	5.250%	5,245,000.00	12/01/2012	100.000
	06/01/2015	5.250%	5,510,000.00	12/01/2012	100.000
			15,750,000.00		
Clark County 2006 Water Revenue Bonds - New Money:					
NEW	11/01/2011	5.000%	7,610,000.00		
	11/01/2012	5.000%	8,000,000.00		
	11/01/2013	5.000%	8,410,000.00		
	11/01/2014	5.000%	8,840,000.00		
	11/01/2015	5.000%	9,295,000.00		
			42,155,000.00		
			64,485,000.00		

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SUMMARY OF BONDS REFUNDED

Southern Nevada Water Authority  
LVVWD G.O. Water Refunding Bonds, Series 2011B (Taxable)

Bond	Maturity Date	Interest Rate	Par Amount	Call Date	Call Price
Water Revenue Refunding Bonds, Series 2005F:					
SERIALS	12/01/2011	5.000%	9,445,000.00		
	12/01/2012	5.000%	9,935,000.00		
	12/01/2013	5.000%	10,440,000.00		
	12/01/2014	5.000%	10,975,000.00		
	12/01/2015	5.000%	<u>11,540,000.00</u>	06/01/2015	100.000
			52,335,000.00		
CRC Refunding Bonds, Series 2005I:					
SERIALS	09/15/2011	5.000%	2,270,000.00		
	09/15/2012	5.000%	2,395,000.00		
	09/15/2013	5.000%	2,505,000.00		
	09/15/2014	5.000%	2,640,000.00		
	09/15/2015	5.000%	<u>2,765,000.00</u>		
			12,575,000.00		
2006D Refunding Bonds:					
SERIALS	07/01/2012	5.000%	4,960,000.00		
	07/01/2013	5.000%	5,205,000.00		
	07/01/2014	5.000%	5,470,000.00		
	07/01/2015	5.000%	<u>5,735,000.00</u>		
			21,370,000.00		
			<u>86,280,000.00</u>		

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**APPENDIX C – ASSUMPTIONS FOR "NET REVENUES AVAILABLE FOR DEBT SERVICE"**

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### Appendix C – Assumptions for "Net Revenues available for Debt Service"

The table below shows how Net Revenues available for Debt Service was calculated for debt service coverage in fiscal year 2010.

Fiscal Year	2010
Net Operating Surplus/Loss	(69,823,676)
Investment Earnings	1,324,866
Debt Service Billings	76,573
Regional Connection Charge	5,309,547
Regional Water Charges*	22,538,155
Southern Nevada Public Lands Management Act	684,294
Raw Water Facilities Charge	0
Clark County Sales Tax	41,833,183
Net Operating & Nonoperating Revenues	1,942,942
Add back Depreciation	69,499,630
Add Beginning Unrestricted Funds	366,951,904
Net available for debt service	438,394,476
Annual Debt Service	162,911,866
Debt Service Coverage Ratio	2.69
Debt Service Coverage Ratio w/o Fund Balance	0.44

\* Commodity and Reliability Charge

Source: 2010 CAFR page 3-16.

For purpose of this report, a conservative approach is applied by estimating the Commodity Charge level necessary to finance the debt service for SNWA's existing and future obligations.

This approach does not project future revenues from other sources such as Sales Taxes or Connection Charges, nor does it incorporate the unrestricted fund balance. It is therefore providing a very conservative approach.



### Calculating revenues from Commodity Charges and Reliability Charges

Assumed are the following population estimates in Clark County and the SNWA service area for fiscal years 2012 through 2030 as projected by Applied Analysis. For fiscal years 2031 and beyond this calculation assumes population growth of 0.8%.

Fiscal Year	Population 2012 - 2030	
	Clark County	SNWA Service Area
2012	1,917,747	1,851,412
2013	1,930,845	1,864,057
2014	1,950,391	1,892,581
2015	1,970,925	1,902,751
2016	1,992,920	1,923,985
2017	2,016,093	1,946,356
2018	2,040,518	1,969,936
2019	2,064,497	1,993,086
2020	2,088,030	2,015,805
2021	2,111,118	2,038,094
2022	2,133,760	2,059,953
2023	2,155,959	2,081,384
2024	2,177,716	2,102,389
2025	2,199,032	2,122,967
2026	2,219,912	2,143,125
2027	2,240,358	2,162,864
2028	2,260,373	2,182,187
2029	2,279,961	2,201,097
2030	2,299,126	2,219,599

Assumed is a 69,097.1 gallons per capita annual water consumption. This presents consumption level of fiscal year 2010 according to SNWA. The water consumption level is held constant for the calculation.

Water rates of LVVWD, Henderson, Boulder City and North Las Vegas are used to calculate the average water bill for single-family households.

<u>Major Water Purveyors (for 12 months ending June 2009)</u>	
Las Vegas Valley Water District	71%
Henderson	15%
North Las Vegas	12%
Boulder City	2%
Nellis Air Force Base	>1%

Source: OS Series 2009C and 2009D, page 36



Calculation of average charge for 1,000 gallons of water by water purveyors excluding SNWA's Commodity and Reliability Charges. Assumes an average single-family household water consumption of 12,400 gallons. (Source SNWA)

Average Household Water Consumption per Month	12,400		
<b>LVVWD</b>			
Average Household Meter Sizes of 5/8 and 3/4 Inch			
Tiered LVVWD Billing Structure:			
<i>Meter Size 5/8 Inch</i>			
			Rate per 1,000
Monthly Service Charge (30 days)	Gallons used		Gallons
\$10.07	1 - 5,000	\$	1.16
	5,001 - 10,000	\$	2.08
	10,001 - 20,000	\$	3.09
	20,001 and over	\$	4.58
<hr/>			
Average Cost per Month for 12,400 Gallons	\$	33.68	
 <i>Meter Size 3/4 Inch</i>			
			Rate per 1,000
Monthly Service Charge (30 days)	Gallons used		Gallons
\$11.59	1 - 6,800	\$	1.16
	6,801 - 13,500	\$	2.08
	13,501 - 27,000	\$	3.09
	27,001 and over	\$	4.58
<hr/>			
Average Cost per Month for 12,400 Gallons	\$	31.13	
<hr/>			
Blended Avg. Cost per Month for 12,400 Gallons	\$	32.40	
<hr/>			
Blended average Cost per 1,000 Gallons	\$	2.62	

Source: [http://www.lvvwd.com/custserv/billing\\_rates\\_thresholds.html](http://www.lvvwd.com/custserv/billing_rates_thresholds.html) as of January 1, 2011  
 The blended average cost per 1,000 Gallons is also assumed for non-residential customers.



### City of Henderson

Average Household Meter Sizes of 3/4 Inch

Tiered Henderson Billing Structure:

*Meter Size 3/4 Inch*

Monthly Service Charge (30 days)	Gallons used	Rate per 1,000 Gallons
\$11.45	1 - 6,000	\$ 1.46
	6,001 - 16,000	\$ 1.90
	16,001 - 30,000	\$ 2.47
	30,001 and over	\$ 3.46
<hr/>		
Average Cost per Month for 12,400 Gallons	\$	32.37
Average Cost per 1,000 Gallons	\$	2.62

Source: [http://www.cityofhenderson.com/utility\\_services/docs/service\\_rules.pdf](http://www.cityofhenderson.com/utility_services/docs/service_rules.pdf) as of January 1, 2011

### City of North Las Vegas

Average Household Meter Sizes of 3/4 Inch and 5/8 Inch

Tiered Henderson Billing Structure:

*Meter Size 3/4 Inch and 5/8 Inch (no pricing difference)*

Monthly Service Charge (30 days)	Gallons used	Rate per 1,000 Gallons
\$8.40	1 - 6,000	\$ 1.54
	6,001 - 15,000	\$ 2.00
	15,001 - 24,000	\$ 2.60
	24,001 and over	\$ 3.37
<hr/>		
Average Cost per Month for 12,400 Gallons	\$	30.44
Average Cost per 1,000 Gallons	\$	2.46

Source: <http://www.cityofnorthlasvegas.com/Departments/Utilities/TopicWaterRates2008.shtm> as of October 1, 2009



**Boulder City**

Average Household Meter Sizes of 3/4 Inch and 5/8 Inch

Tiered Henderson Billing Structure:

*Meter Size 5/8 Inch and 1 Inch (no pricing difference)*

Monthly Service Charge (30 days)	Gallons used	Rate per 1,000 Gallons
\$7.50	1 - 8,000	\$ 1.54
	6,001 - 25,000	\$ 2.00
	25,001 - 60,000	\$ 2.60
	60,001 and over	\$ 3.37
<hr/>		
Average Cost per Month for 12,400 Gallons	\$ 28.62	
Average Cost per 1,000 Gallons	\$ 2.31	

Source: <http://www.bcnv.org/utility/ResidentialRates.asp> as of July 1, 2010

The Reliability Surcharge is an excise tax on all residential customers at 0.25% of the total water bill and at 2.5% for all other customer classes. SNWA estimates that at the current customer mix of residential and non-residential customers the revenue increase of \$1 in commodity charges translates to \$.0187 (1.87%) in additional reliability revenues.

Reliability Charge Revenue per Capita 2010	2.20
Blended Reliability Charge/ Commodity Charge	1.87%
Commodity Charge Revenue 2010	18,434,662

The following table shows the calculation on "Net Revenues available for Debt Service"

Population Fiscal Year 2012	Per Capita Water Consumption in 1,000 gallons	Total Water Consumption in 1,000 gallons	Commodity Charge per 1,000 gallons	Commodity Charge Revenue	Reliability Charge Revenue	Net Revenues available for Debt Service
1,851,412	69.0971	127,927,200	\$ 0.30	\$ 38,378,160	\$ 4,449,236	\$ 42,827,396



## **APPENDIX D – REFINANCING ASSUMPTIONS**

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## Appendix D – Refinancing Assumptions

The refinancing assumes current market rates of tax-exempt and taxable revenue bonds as of 2/28/2011. In addition to this is conservative approach of using higher cost revenue bonds instead of general obligation bond yields the refinancing numbers use an additional spread of 100 basis points. The refinancing assumes a four year interest only period. In year 5 after the issuance at least \$100,000 are amortized.

Maturity	Taxable Aa/AA	Additional	SNWA Taxable	Tax-Exempt		SNWA Tax-
	Revenue Yields			Spread	Aa/AA Revenue	
2012	1.44%	1.00%	2.44%	0.50%	1.00%	1.50%
2013	2.05%	1.00%	3.05%	0.91%	1.00%	1.91%
2014	2.69%	1.00%	3.69%	1.32%	1.00%	2.32%
2015	3.29%	1.00%	4.29%	1.80%	1.00%	2.80%
2016	3.81%	1.00%	4.81%	2.06%	1.00%	3.06%
2017	4.27%	1.00%	5.27%	2.35%	1.00%	3.35%
2018	4.66%	1.00%	5.66%	2.65%	1.00%	3.65%
2019	4.95%	1.00%	5.95%	2.89%	1.00%	3.89%
2020	5.14%	1.00%	6.14%	3.12%	1.00%	4.12%
2021	5.29%	1.00%	6.29%	3.34%	1.00%	4.34%
2022	5.43%	1.00%	6.43%	3.58%	1.00%	4.58%
2023	5.57%	1.00%	6.57%	3.78%	1.00%	4.78%
2024	5.68%	1.00%	6.68%	3.96%	1.00%	4.96%
2025	5.79%	1.00%	6.79%	4.12%	1.00%	5.12%
2026	5.89%	1.00%	6.89%	4.25%	1.00%	5.25%
2027	5.98%	1.00%	6.98%	4.35%	1.00%	5.35%
2028	6.07%	1.00%	7.07%	4.45%	1.00%	5.45%
2029	6.15%	1.00%	7.15%	4.53%	1.00%	5.53%
2030	6.21%	1.00%	7.21%	4.61%	1.00%	5.61%
2031	6.26%	1.00%	7.26%	4.69%	1.00%	5.69%
2032	6.30%	1.00%	7.30%	4.79%	1.00%	5.79%
2033	6.33%	1.00%	7.33%	4.88%	1.00%	5.88%
2034	6.33%	1.00%	7.33%	4.93%	1.00%	5.93%
2035	6.33%	1.00%	7.33%	4.99%	1.00%	5.99%
2036	6.33%	1.00%	7.33%	5.03%	1.00%	6.03%
2037	6.33%	1.00%	7.33%	5.05%	1.00%	6.05%
2038	6.33%	1.00%	7.33%	5.06%	1.00%	6.06%
2039	6.33%	1.00%	7.33%	5.06%	1.00%	6.06%
2040	6.33%	1.00%	7.33%	5.07%	1.00%	6.07%
2041	6.33%	1.00%	7.33%	5.07%	1.00%	6.07%



## **APPENDIX E – FINANCING ASSUMPTIONS FOR MCCP PROJECTS**

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## Appendix E - Financing Assumptions for MCCP Projects

No additional commercial paper funding since all projects have paid out more than 10% of project costs already

Capitalized Interest First two years of interest as follows: capitalizing 100% of first interest payment, 75% of second interest payment, 50% of third interest payment and 25% of fourth interest payment

No debt service reserve fund

Debt Service 30 year level debt service (not wrapped around existing)  
Serial Bonds

Bond Structure only

Project Fund Gross Funded - Equal to funding needs in next two fiscal years

Investment Rate 0%

Cost of Issuance 1% of Par

Underwriter

Discount 1% of Par

### *Bond Structure - Project Funds, Issue Date and First Interest Payment*

Fiscal Year	Total MCCP Cost	Bond Issue Project Fund	Issue Date	First Interest Pmt
2012	\$220,559,513	\$404,733,956	7/1/2011	12/1/2011
2013	184,174,442			
2014	109,265,239	167,042,246	7/1/2013	12/1/2013
2015	57,777,007			
2016	55,935,334	109,878,554	7/1/2015	12/1/2015
2017	53,943,220			
2018	58,776,682	129,929,457	7/1/2017	12/1/2017
2019	71,152,775			
2020	67,102,789	67,102,789	7/1/2019	12/1/2019
Total	\$878,687,002	\$878,687,002		



*Bond Structure - Couponing and Yields*

Maturity	Coupon	Average MMD Since 1990	Credit Spread	Yield
1	6.00%	2.87%	0.85%	3.72%
2	6.00%	3.22%	0.90%	4.12%
3	6.00%	3.43%	0.95%	4.38%
4	6.00%	3.62%	1.10%	4.72%
5	6.00%	3.79%	1.10%	4.89%
6	6.00%	3.95%	1.12%	5.07%
7	6.00%	4.09%	1.12%	5.21%
8	6.00%	4.22%	1.15%	5.37%
9	6.00%	4.33%	1.15%	5.48%
10	6.00%	4.43%	1.15%	5.58%
11	6.00%	4.53%	1.15%	5.68%
12	6.00%	4.63%	1.15%	5.78%
13	6.00%	4.72%	1.15%	5.87%
14	6.00%	4.80%	1.15%	5.95%
15	6.00%	4.87%	1.15%	6.02%
16	6.00%	4.94%	1.15%	6.09%
17	6.00%	5.00%	1.15%	6.15%
18	6.00%	5.05%	1.15%	6.20%
19	6.00%	5.09%	1.15%	6.24%
20	6.00%	5.13%	1.15%	6.28%
21	6.00%	5.16%	1.15%	6.31%
22	6.00%	5.19%	1.15%	6.34%
23	6.00%	5.21%	1.15%	6.36%
24	6.00%	5.22%	1.15%	6.37%
25	6.00%	5.24%	1.15%	6.39%
26	6.00%	5.25%	1.15%	6.40%
27	6.00%	5.26%	1.15%	6.41%
28	6.00%	5.26%	1.15%	6.41%
29	6.00%	5.27%	1.15%	6.42%
30	6.00%	5.27%	1.15%	6.42%



## **APPENDIX F – FINANCING ASSUMPTIONS FOR THE PROJECT**

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## Appendix F - Financing Assumptions for the Project

CP funding 10% of total project costs

Capitalized Interest

First two years of interest as follows: capitalizing 100% of first interest payment, 75% of second interest payment, 50% of third interest payment and 25% of fourth interest payment

No debt service reserve fund

Debt Service

30 year level debt service (not wrapped around existing)

Bond Structure

Serial Bonds only

Project Fund

Gross Funded - Equal to funding needs in next two fiscal years

Investment Rate

0%

Cost of Issuance

1% of Par

Underwriter Discount

1% of Par

### Bond Structure - Project Funds, Issue Date and First Interest Payment

Fiscal Year	Totals	Commercial Paper Funding	Commercial Paper Aggregate Funding	Days CP Outstanding	Bond Issue Project Fund	Issue Date	First Interest Pmt	First Principal Pmt	10 Year Par Call date
2012	24,821,372	24,821,372	24,821,372	360	0				
2013	307,862,635	307,862,635	332,684,006	360	0				
2014	371,303,393	312,387,848	645,071,855	303	1,100,494,693	4/29/2014	12/1/2014	6/1/2016	6/1/2024
2015	396,507,294	0	0	0	0				
2016	791,308,904	0	0	0	1,713,875,074	7/1/2015	12/1/2015	6/1/2017	6/1/2025
2017	922,566,170	0	0	0	0				
2018	544,785,840	0	0	0	1,102,814,073	7/1/2017	12/1/2017	6/1/2019	6/1/2027
2019	558,028,233	0	0	0	0				
2020	166,947,556	0	0	0	217,200,391	7/1/2019	12/1/2019	6/1/2021	6/1/2029
2021	50,252,835	0	0	0	0				
2022	195,306,397	0	0	0	387,405,407	7/1/2021	12/1/2021	6/1/2023	6/1/2031
2023	192,099,010	0	0	0	0				
2024	199,782,970	0	0	0	241,686,489	7/1/2023	12/1/2023	6/1/2025	6/1/2033
2025	41,903,519	0	0	0	0				
2026	43,579,660	0	0	0	88,902,507	7/1/2025	12/1/2025	6/1/2027	6/1/2035
2027	45,322,847	0	0	0	0				
2028	47,135,760	0	0	0	47,135,760	7/1/2027	12/1/2027	6/1/2029	6/1/2037
2029	0	0	0	0	0				
2030	0	0	0	0	0				
2031	0	0	0	0	0				
2032	0	0	0	0	0				
2033	0	0	0	0	0				
2034	0	0	0	0	0				
2035	0	0	0	0	0				
2036	0	0	0	0	0				
2037	6,830,366	0	0	0	73,870,412	7/1/2036	12/1/2036	6/1/2038	6/1/2046
2038	67,040,046	0	0	0	0				
2039	69,721,647	0	0	0	142,232,161	7/1/2038	12/1/2038	6/1/2040	6/1/2048
2040	72,510,513	0	0	0	0				
2041	75,410,934	0	0	0	145,528,120	7/1/2040	12/1/2040	6/1/2042	6/1/2050
2042	70,117,186	0	0	0	0				
2043	87,148,953	0	0	0	291,925,691	7/1/2042	12/1/2042	6/1/2044	6/1/2052
2044	204,776,738	0	0	0	0				
2045	212,967,807	0	0	0	352,427,136	7/1/2044	12/1/2044	6/1/2046	6/1/2054
2046	139,459,329	0	0	0	0				
2047	128,394,031	0	0	0	261,923,824	7/1/2046	12/1/2046	6/1/2048	6/1/2056
2048	133,529,793	0	0	0	0				
2049	138,870,984	0	0	0	283,296,808	7/1/2048	12/1/2048	6/1/2050	6/1/2058
2050	144,425,824	0	0	0	0				
2051	0	0	0	0	0	1/0/1900	1/0/1900	1/0/1900	1/0/1900
	6,450,718,545	645,071,855			6,450,718,545				



*Bond Structure - Couponing and Yields*

Maturity	Coupon	Average MMD Since 1990	Credit Spread	Yield
1	6.00%	2.87%	0.85%	3.72%
2	6.00%	3.22%	0.90%	4.12%
3	6.00%	3.43%	0.95%	4.38%
4	6.00%	3.62%	1.10%	4.72%
5	6.00%	3.79%	1.10%	4.89%
6	6.00%	3.95%	1.12%	5.07%
7	6.00%	4.09%	1.12%	5.21%
8	6.00%	4.22%	1.15%	5.37%
9	6.00%	4.33%	1.15%	5.48%
10	6.00%	4.43%	1.15%	5.58%
11	6.00%	4.53%	1.15%	5.68%
12	6.00%	4.63%	1.15%	5.78%
13	6.00%	4.72%	1.15%	5.87%
14	6.00%	4.80%	1.15%	5.95%
15	6.00%	4.87%	1.15%	6.02%
16	6.00%	4.94%	1.15%	6.09%
17	6.00%	5.00%	1.15%	6.15%
18	6.00%	5.05%	1.15%	6.20%
19	6.00%	5.09%	1.15%	6.24%
20	6.00%	5.13%	1.15%	6.28%
21	6.00%	5.16%	1.15%	6.31%
22	6.00%	5.19%	1.15%	6.34%
23	6.00%	5.21%	1.15%	6.36%
24	6.00%	5.22%	1.15%	6.37%
25	6.00%	5.24%	1.15%	6.39%
26	6.00%	5.25%	1.15%	6.40%
27	6.00%	5.26%	1.15%	6.41%
28	6.00%	5.26%	1.15%	6.41%
29	6.00%	5.27%	1.15%	6.42%
30	6.00%	5.27%	1.15%	6.42%



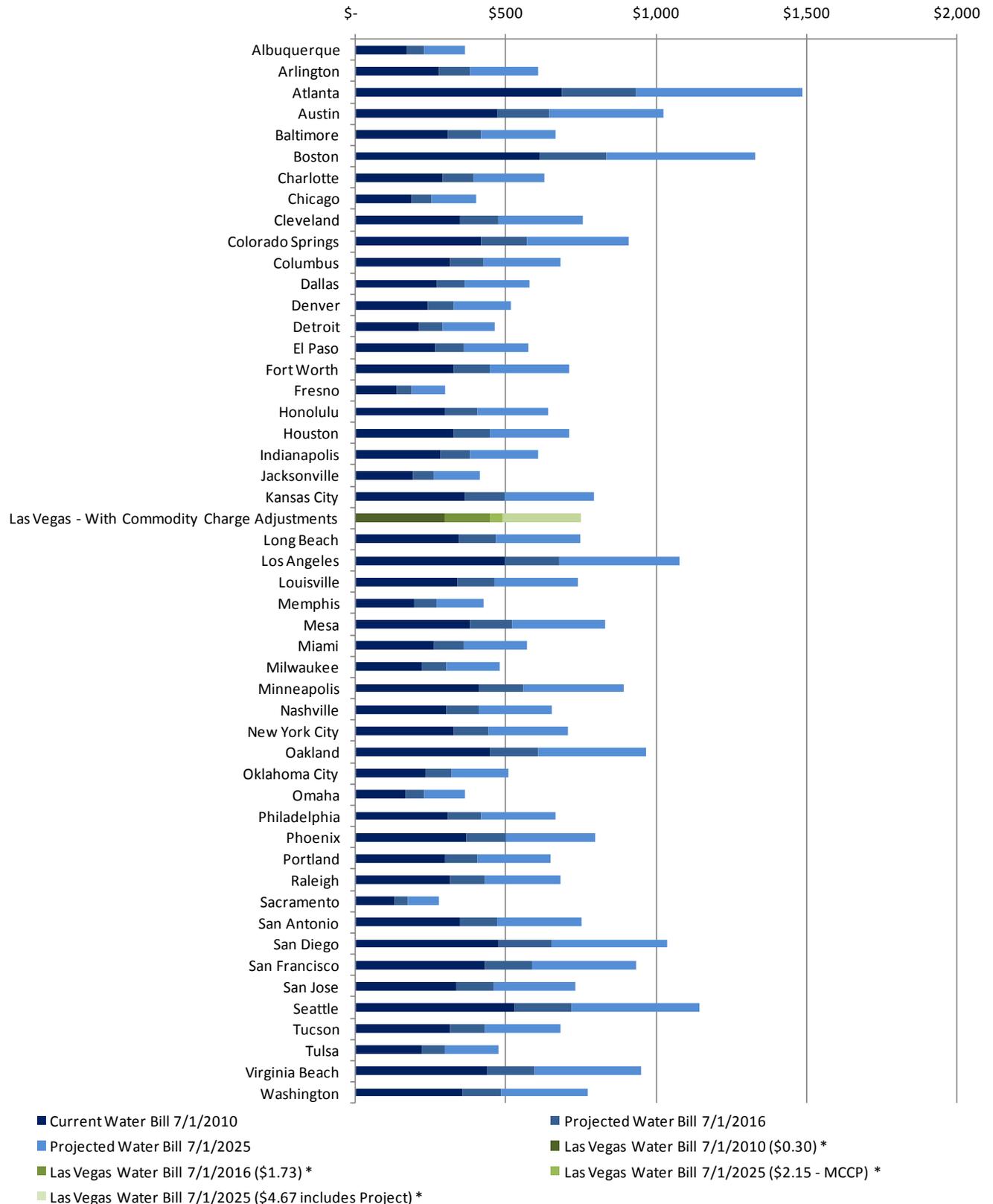
**APPENDIX G – PROJECTED NON-RESIDENTIAL WATER BILL COMPARISON**

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### Projected - Commercial Customers Water Bill

(100,000 Gallons Billable Water Usage)



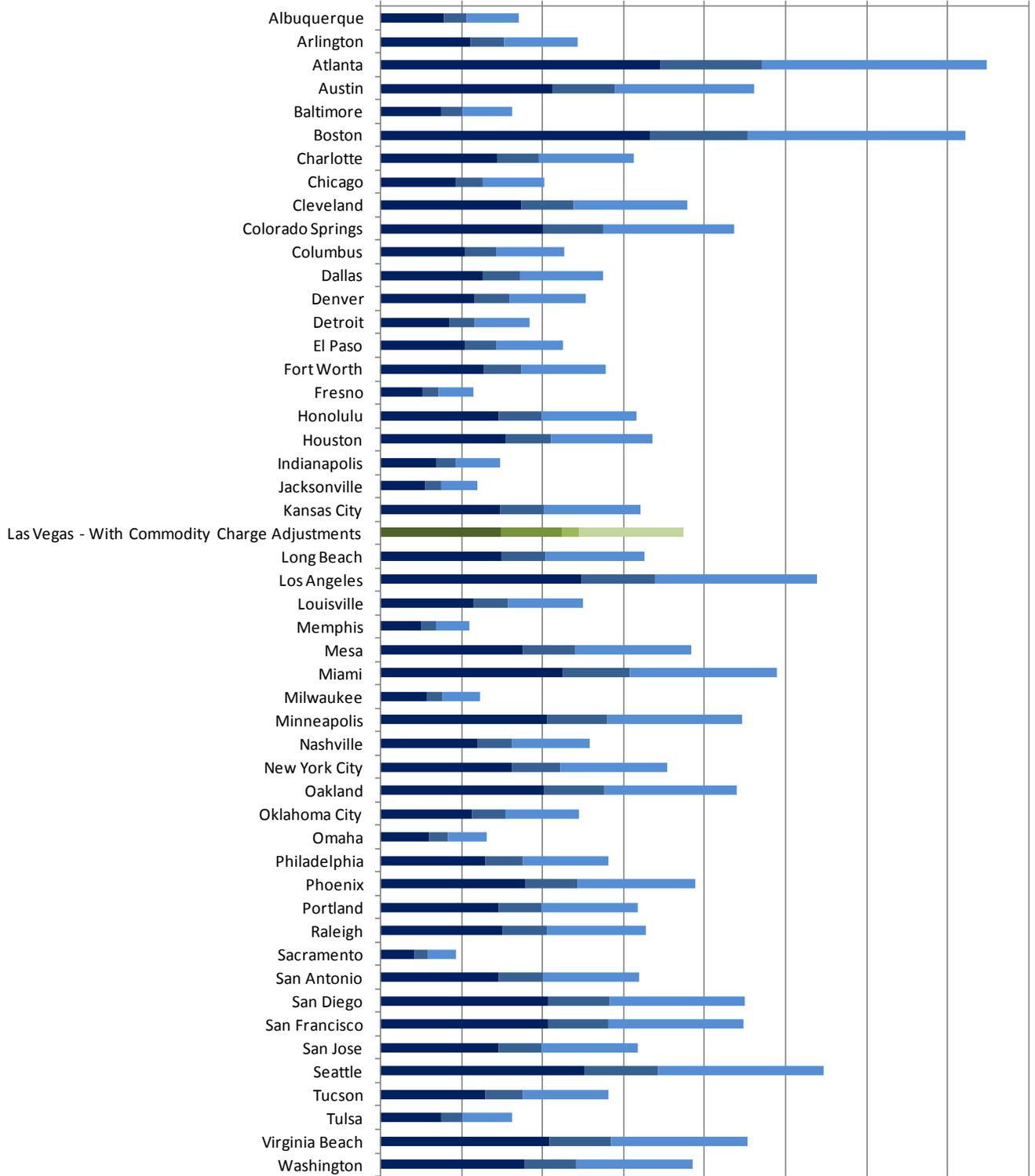
\* Dollar amounts in the parenthesis present the projected Commodity Charge per \$1,000 gallons.



### Projected - Industrial Customers Water Bill

(10,000,000 Gallons Billable Water Usage)

\$- \$20,000 \$40,000 \$60,000 \$80,000 \$100,000 \$120,000 \$140,000 \$160,000



- Current Water Bill 7/1/2010
- Projected Water Bill 7/1/2016
- Projected Water Bill 7/1/2025
- Las Vegas Water Bill 7/1/2010 (\$0.30) \*
- Las Vegas Water Bill 7/1/2016 (\$1.73) \*
- Las Vegas Water Bill 7/1/2025 (\$2.15 - MCCP) \*
- Las Vegas Water Bill 7/1/2025 (\$4.67 includes Project) \*

\* Dollar amounts in the parenthesis present the projected Commodity Charge per \$1,000 gallons.

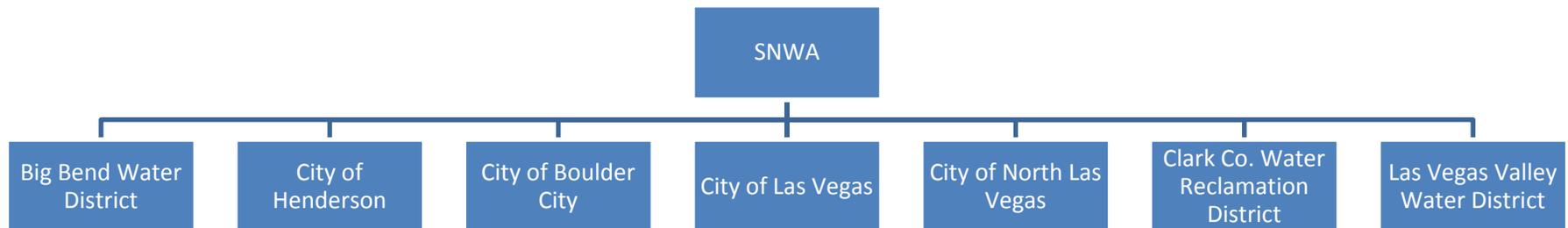


## **APPENDIX H – REPORT OVERVIEW**

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# Introduction of the Southern Nevada Water Authority

- Created in 1991 by Member Agencies to address water issues, develop additional water supplies, and build and operate water treatment and transmission facilities on a regional basis



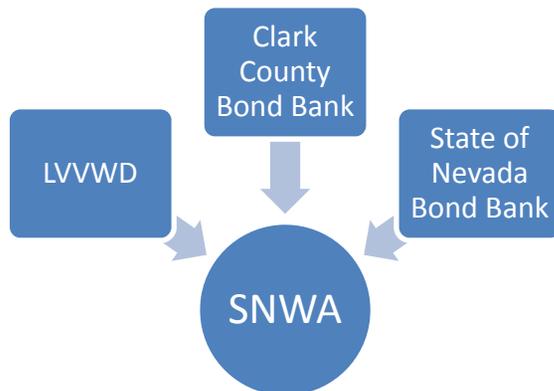
- Operated by LVVWD via an Operations Agreement
- Provides safe and reliable water supply to its Members through operation and maintenance of the developed infrastructure (pipelines, pumps, wells, etc.) and by securing additional water resources for current and new customers
  - Results in substantial infrastructure investments

# How SNWA Raises Funds for Capital Projects

- SNWA borrows money by issuing/selling bonds
  - A **bond** is proof of a loan, in which the investor loans money to an entity that borrows the funds for a defined period of time at a fixed or variable interest rate.

Forms of Borrowing						
Type of Bond:	General Obligation Bonds "G.O."	Revenue Bonds	G.O. Bonds with Additional Pledged Revenues	Other forms:	State Revolving Fund (SRF) Loan	Commercial Paper (CP)
Bonds in which the issuer's payments are backed by the pledge of:	The power to levy a tax (e.g., on real property).	The monies produced from the operation of an enterprise (e.g., a water utility)	Revenues from an enterprise. If those funds are insufficient to repay the debt, taxes are levied to fund the difference.		A loan with an interest rate that is partially subsidized by the State.	Short-term bonds/notes with a maturity of 1 to 270 days.

## SNWA Incurs Debt Through:



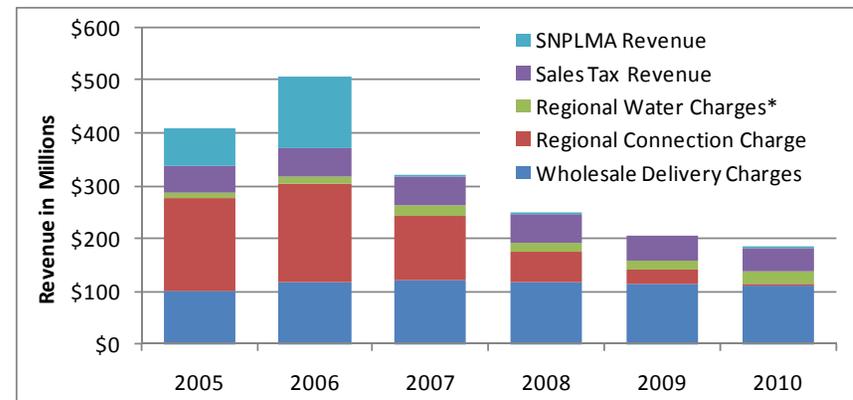
There are two general methods of funding capital projects: Pay-As-You-Go or Financing/Borrowing with Bonds.

Type of Financing:	Pay-As-You-Go	Bond Financing
Financing capital projects by:	Paying for needs as they arise with funds that are on reserve or generated annually	Selling/issuing bonds to borrow funds for a project

# Security for SNWA Bonds

- How does SNWA repay its debt? – It charges its Members
  - Connection Charges: \$4,870 per new service connection
  - Commodity Charge: \$0.30 per 1,000 gallons consumed
  - Reliability Charge: 0.25% of the total residential water bill and at 2.5% for all other customer classes
  - Wholesale Delivery Charge: \$269 per acre-foot water (Note: for operating costs of the SNWA)
- SNWA also receives revenues
  - Sales Tax Revenues: 0.25% of taxable sales in Clark County
  - So. NV Public Lands Management Act Revenues (SNPLMA): SNWA receives 10% of the sale price of certain public lands in Clark County
- Bond Covenants (Binding Promises)
  - Rate Covenant: SNWA pledges to set rates and charges that, together with available fund balance, provide sufficient revenue to pay debt service.
  - Additional Bonds Test: Limits the amount of new debt that can be incurred.

## Origin and Application of SNWA's Revenues



# Credit Ratings and Credit Issues in the Market

Credit Rating Spectrum\*



The chart above illustrates the relationship between credit ratings and borrowing rates. As credit ratings decline, interest rates increase because investors demand a higher yield as compensation for greater risk.

\* Rates are for a 20-year maturity as of 5/11/2011.

- Credit Rating Agencies assign ratings to issuers based on their ability to repay a debt. Various factors influence this rating, including but not limited to:
  - financial resources and flexibility
  - management capabilities and willingness of the governing board to adjust rates as necessary
  - general and regional economic conditions
- These ratings are used by investors to help evaluate their risk.
- Rating Agencies also monitor an Issuer after the sale of bonds to decide whether any change in a rating is warranted.
  - Ratings can change (upgrades or downgrades)
  - Rating outlooks can change (positive, stable or negative)

# Credit Ratings and Credit Issues in the Market (Continued)

- The three municipal credit rating agencies are: Moody's, Fitch and Standard and Poor's (S&P)

Bond Rating History						
	LVVWD		SNWA		CC Bond Bank	
	Moody's	Standard & Poor's	Moody's	Standard & Poor's	Moody's	Standard & Poor's
1991	A1	A	N/A	N/A	N/A	N/A
1992	A1	A	N/A	N/A	N/A	N/A
1993	A1	A	N/A	N/A	N/A	N/A
1994	A1	A	N/A	N/A	N/A	N/A
1995	A1	A+	N/A	N/A	N/A	N/A
1996	A1	A+	N/A	N/A	N/A	N/A
1997	A1	A+	N/A	N/A	N/A	N/A
1998	A1	A+	N/A	N/A	N/A	N/A
1999	A1	A+	N/A	N/A	N/A	N/A
2000	A1	A+	N/A	N/A	N/A	N/A
2001	A1	A+	N/A	N/A	N/A	N/A
2002	A1	AA	N/A	AA-	Aa2	AA
2003	A1	AA	N/A	AA-	Aa2	AA
2004	A1	AA	N/A	AA-	Aa2	AA
2005	A1	AA	N/A	AA-	Aa2	AA
2006	A1	AA+	N/A	AA-	Aa1	AA+
2007	Aa1	AA+	N/A	AA-	Aa1	AA+
2008	Aa1	AA+	N/A	AA-	Aa1	AA+
2009	Aa2 <sup>1/</sup>	AA+	N/A	AA-	Aa1	AA+
2010	Aa1 <sup>1/2/</sup>	AA+	N/A	AA-	Aa1	AA+
2011	Aa2 <sup>1/</sup>	AA+	N/A	A+	Aa1	AA+

<sup>1/</sup> Negative outlook  
<sup>2/</sup> Recalibration

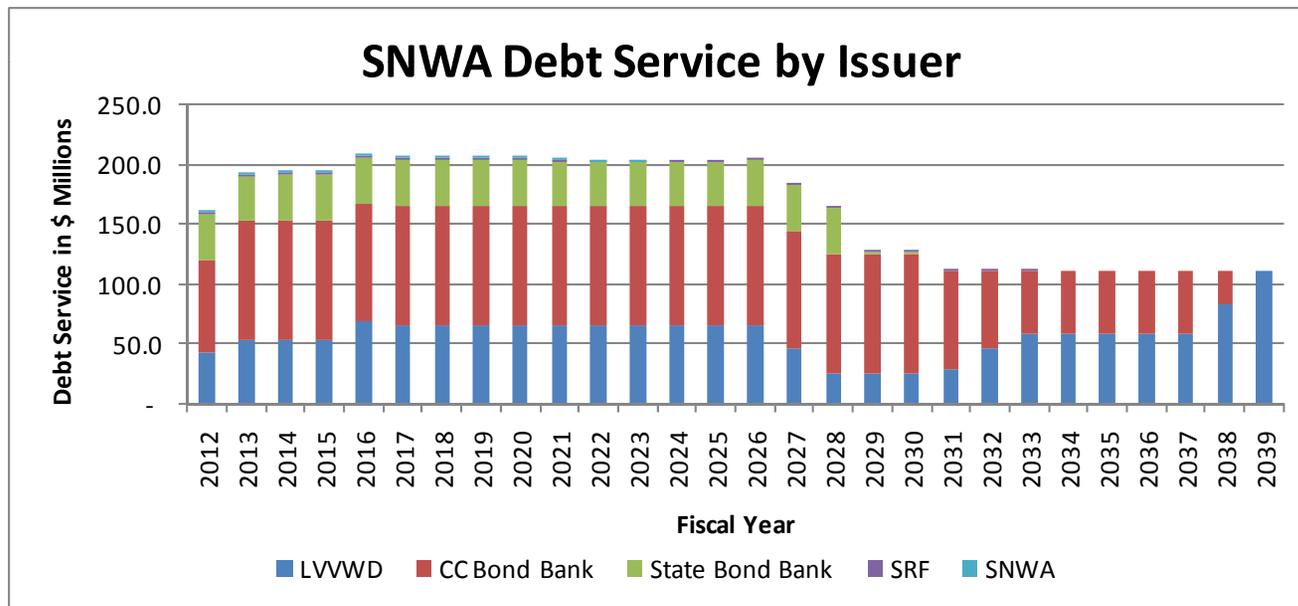
## Current Ratings Rationale (LVVWD)

- Poor general economic conditions in the region resulting in tax base declines (negative)
- LVVWD's authority to levy an ad valorem tax on property owners (positive)
- Rates are below national averages - ample room to adjust rates to generate required revenues. (positive)

- CP issued by LVVWD is rated P-1 by Moody's and A-1+ by S&P.
- SNWA does not expect to issue through the State of Nevada.

# Profile of SNWA debt

SNWA is obligated to make payments for debt issued by the LVVWD, the Clark County Bond Bank, the State Bond Bank, the SRF and itself.

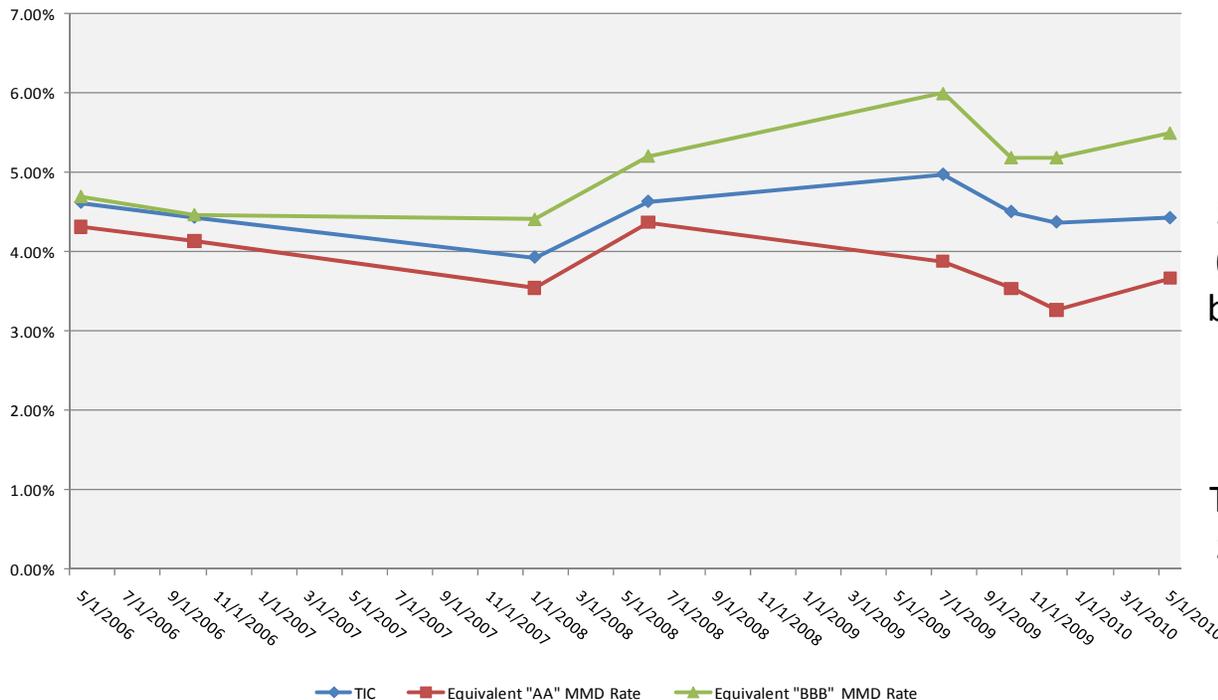


# Market Performance of SNWA Debt

- **Market performance terms:**

- **Yield Spreads or “Spreads”:** Difference between the actual interest rate (or yield) on a bond and the equivalent benchmark rate
- **True Interest Cost or “TIC”:** Average weighted yield of a bond issue, adjusted for time and the amount of bonds maturing in each year.
- **MMD:** Refers to the Thomson Reuters **Municipal Market Data** General Obligation bond index – a collection of rates that serves as the benchmark for the municipal market.

**5 Year Pricing Comparison on SNWA Debt**



This chart illustrates how debt sold for SNWA has fared in the capital markets in the past five years.

Spreads between the Authority’s TIC (the blue line) and the Equivalent AA benchmark MMD rates have widened in the past two years, which is in keeping with the general market.

The issuers selling bonds on behalf of SNWA continue to receive very good investor interest.