

**SOUTHERN NEVADA WATER AUTHORITY
BOARD OF DIRECTORS
REGULAR MEETING
JULY 17, 2014
MINUTES**

CALL TO ORDER 9:07 a.m., SNWA Board Chambers, Southern Nevada Water Authority
100 City Parkway, Seventh Floor, Las Vegas, Nevada

BOARD MEMBERS PRESENT Mary Beth Scow, Chair
Bob Coffin
Duncan McCoy
Steve Sisolak
Anita Wood

BOARD MEMBERS ABSENT Sam Bateman, Vice Chair
Susan Brager

STAFF PRESENT John Entsminger, Greg Walch, David Wright, Dave Johnson, Julie Wilcox,
Marc Jensen, Zane Marshall

OTHERS PRESENT None

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

COMMENTS BY THE GENERAL PUBLIC

For complete comments, audio is available online at snwa.com

Ed Uehling, Las Vegas, said that he felt his statements from the previous meeting were not accurately characterized in the minutes. He said that he criticized the Board of Directors for expressing sympathy for laid-off employees, but not apologizing to the 2,000 other individuals who were laid off in Southern Nevada. He also criticized the agency for making dire drought predictions in the past.

1. *For Possible Action: Approval of Agenda & Minutes*

Prior to accepting a motion, Chairman Scow reminded members of the public that they are welcome to provide written comments for inclusion with the minutes. Director Sisolak asked that the minutes for this meeting include Mr. Uehling's comments about the previous meeting's minutes.

FINAL ACTION: A motion was made by Director Coffin to approve the agenda for this meeting and the meeting minutes of May 15, 2014. The motion was approved.

2. *For Possible Action: Appoint a chairman and vice chairman to preside over the Board of Directors for fiscal year 2014/2015, and appoint three directors to serve as commissioners of the Colorado River Commission for one-year terms.*

FINAL ACTION: A motion was made by Director McCoy to appoint Mary Beth Scow as Chairman; Sam Bateman as Vice Chairman; and Steve Sisolak, Bob Coffin and Duncan McCoy to serve as commissioners of the Colorado River Commission. The motion was approved.

BUSINESS AGENDA

3. *For Possible Action: Approve and authorize the General Manager to enter into an assistance agreement between the Bureau of Reclamation and the Authority, to accept a grant for an amount not to exceed \$59,663 to conduct bird surveys in the Las Vegas Wash, and authorize the General Manager to approve future modifications only if the future modifications do not fiscally impact the Authority.*

At the request of Director Sisolak, Zane Marshall, Director of Water and Environmental Resources, outlined how the bird surveys are conducted in the Las Vegas Wash and how the information is utilized by the Authority.

FINAL ACTION: A motion was made by Director Wood to follow staff's recommendations. The motion was approved.

4. **For Possible Action: Approve an agreement between the Water Environment Research Foundation and the Authority for the “Evaluating Fate Mechanisms for Contaminants of Concern in BNR Treatment Systems” study, and accept funds in the amount not to exceed \$125,000 for this research work.**

Dave Johnson, Deputy General Manager of Engineering and Operations, provided a brief overview of the Authority’s history of working with partners to conduct water quality studies. Director Coffin sought clarification of the study, and Mr. Johnson confirmed the study will evaluate how to better treat the discharge that enters Lake Mead. He also noted that this study specifically looks at how phosphorus, nitrogen and other constituents are affected by the treatment process.

FINAL ACTION: A motion was made by Director Wood to follow staff’s recommendations. The motion was approved.

5. **For Possible Action: Approve an agreement between the University of Cincinnati and the Authority for the University of Cincinnati’s participation as Co-Principal Investigator in the Water Environment Research Foundation’s “Evaluating Fate Mechanisms for Contaminants of Concern in BNR Treatment Systems” study in an amount not to exceed \$75,000.**

FINAL ACTION: A motion was made by Director Sisolak to follow staff’s recommendation. The motion was approved.

6. **For Possible Action: Approve Project Services Agreement No. 2A: Eastern Nevada Transmission Project Development Agreement among the Silver State Energy Association and its specified members: City of Boulder City, Lincoln County Power District No. 1, Overton Power District No. 5, and the Authority.**

John Entsminger, General Manager, gave a short overview of the agenda item, noting that the Authority is seeking a right-of-way out of the Las Vegas Valley to the Silverhawk Power Generation Facility in Apex, NV. If the right-of-way is secured, the Authority would begin evaluating the cost of constructing the transmission systems and the resulting cost savings saved from the tariffs the Authority incurs from moving the power from that generation facility.

FINAL ACTION: A motion was made by Director McCoy to follow staff’s recommendation. The motion was approved.

7. **For Possible Action: Approve a Solar Project Power Purchase Agreement between River Mountains Solar LLC and the Authority to purchase electrical power from a solar photovoltaic generation facility located at the River Mountains Water Treatment Facility.**

David Wright, Chief Financial Officer, gave an overview of the item. A copy of his presentation is attached to these minutes. Mr. Entsminger recognized that while the Authority is currently not required to abide by Nevada’s renewable energy requirements, there might be a time when the Authority is required to do so and the market may not be as favorable at that time. Director Sisolak asked if other states require a renewable energy portfolio requirement. Mr. Wright noted that California’s requirement made it very difficult for utilities to make cost-effective business decisions, often times mothballing non-renewable, but cost-effective power supplies. Director McCoy noted Boulder City’s efforts and recognized how the price of renewable energies have decreased over time.

FINAL ACTION: A motion was made by Director McCoy to follow staff’s recommendation. The motion was approved.

8. **For Possible Action: Approve an agreement, in substantially the same form, between the Wyoming Water Development Office and the Authority to provide supplemental funds for the Wyoming Weather Modification Program.**

Following Mr. Entsminger’s brief summary of the agreement, Director Wood asked for clarification of the Modification Program. Greg Walch, General Counsel, noted that since 2007, Wyoming has conducted weather modification efforts with its partners throughout the Colorado River Basin. During that time, its results were tracked

and evaluated. This agenda item and agreement calls for a scaling up from a research program to an operations program to provide for larger resource gains.

FINAL ACTION: A motion was made by Director Coffin to follow staff's recommendation. The motion was approved.

9. ***For Possible Action:*** Approve an agreement, in substantially the same form, among the Bureau of Reclamation, the Arizona Department of Water Resources, the (California) Six Agency Committee, the Colorado Water Conservation Board, the New Mexico Interstate Stream Commission, the Utah Division of Water Resources, the Wyoming State Engineer's Office, and the Authority to fund the Next Steps Phase I Activities Related to the Colorado River Basin Water Supply and Demand Study.

FINAL ACTION: A motion was made by Director Sisolak to follow staff's recommendation. The motion was approved.

10. ***For Information Only:*** Receive an update from staff on water resources including, but not limited to, drought conditions in the Colorado River Basin, the results of the implementation of the Authority's Water Resource and Conservation Plans, activities on the Colorado River, the development of in-state water resources, and the status of the third intake project.

Mr. Walch gave a presentation on drought conditions, which is attached to these minutes. Marc Jensen, Director of Engineering, provided a brief update on Lake Mead Intake No. 3, also attached to these minutes.

NO ACTION NECESSARY

Public Comment

Ed Uehling, Las Vegas, mentioned that he was informed by another Las Vegas resident that there's a location where the Missouri River Basin is very close to the Colorado River Basin and asked if anyone has ever explored the possibility of moving water between the two basins.

Adjournment

There being no further business to come before the board, the meeting adjourned at 9:53 a.m.

APPROVED:

Mary Beth Scow, Chair

John J. Entsminger, General Manager

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



Proposed Solar Project
at
River Mountains Water Treatment Facility

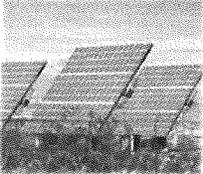
 SOUTHERN NEVADA WATER AUTHORITY

PROPOSED SOLAR PROJECT | Nevada's Renewable Energy Goal

Nevada Renewable Portfolio Standard (RPS):
25 percent by 2025

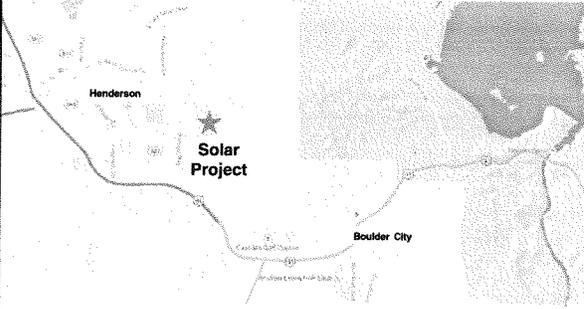
- Government entities exempt from the RPS
- The SNWA has generally adhered to the goal
 - Renewable Energy Credits (RECs) market sales to reduce costs
- Potential 14 megawatt (MW) solar power project

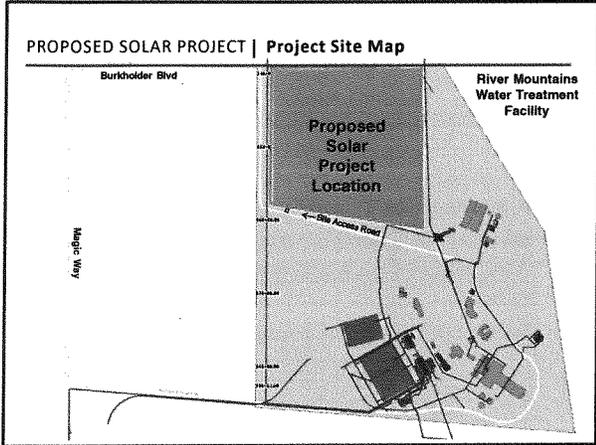
PROPOSED SOLAR PROJECT | SNWA Renewables Summary



SNWA RENEWABLES	% of LOAD
Federal Hydropower	12.0%
In-Conduit Hydropower	0.7%
Solar	0.1%
Conservation	0.4%
Proposed Solar PPA	5.0%
Total	18.2%

PROPOSED SOLAR PROJECT | Project Vicinity Map





- PROPOSED SOLAR PROJECT | Previous Solar Efforts**
- Analyzed many proposals over the years
 - Historically, prices have been too high
 - Solar prices have decreased substantially
 - Use of the River Mountains site allows for cost savings
 - Permitting costs
 - SNWA-owned land
 - On-site usage eliminates transmission costs
 - PPA structure has advantages over SNWA ownership
 - No construction or operation risk
 - Federal Investment Tax Credit of 30 percent for private ownership

PROPOSED SOLAR PROJECT | Proposals

In August 2013, SNWA solicited offers and received four proposals. After review and evaluation, SunEdison's proposal was considered the best proposal.

Company	Price (per MWh)	Escalator	20-Year Average Price
SunEdison	\$64.65	2%	\$78.54
Proposal 2	\$72.75	1.25%	\$82.07
Proposal 3	\$77.00	2.5%	\$98.35
Proposal 4	\$95.00	5%	\$160.33

- PROPOSED SOLAR PROJECT | SunEdison Proposal**
- SunEdison designs/owns/operates solar project
 - SNWA has option to purchase after seventh year
 - SNWA receives energy and Renewable Energy Credits (REC)
 - Anticipate continued sale of RECs

PROPOSED SOLAR PROJECT | Economic Analysis (20-yr average)

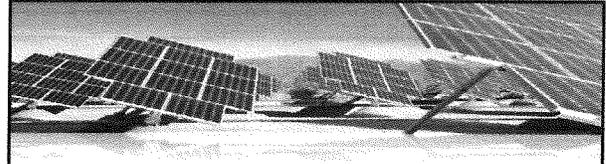
Solar Contract Price: \$78.54

Non-Solar Market Price: \$64.13

Sale of RECs reduces net cost to SNWA

	Worst Case	Breakeven	High Case
PPA Price	\$78.54	\$78.54	\$78.54
REC Price	\$-0.00	\$-14.41	\$-61.25
Net Price	\$78.54	\$64.13	\$17.29

Impact on Energy Cost	0.9%	0%	-2.8%
Impact on Wholesale Delivery Charge	0.4%	0%	-1.1%



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Update on Drought Conditions and Water Use

July 17, 2014

Drought Monitor

(July 8, 2014)

Drought Monitor Legend:
 D0 - D0 (Lightest Drought)
 D1 - D1 (Moderate Drought)
 D2 - D2 (Severe Drought)
 D3 - D3 (Extreme Drought)
 D4 - D4 (Exceptional Drought)
 D5 - D5 (Exceptional Drought)

Author:
 Anthony Aruffo
 KHM@WSNCEP/CPC

USDA

<http://droughtmonitor.unl.edu>

Drought Outlook

(Valid June – September, 2014)

KEY:
 Drought persists or intensifies
 Drought remains but improves
 Drought removal likely
 Drought development likely

Author: David Mikus, Climate Prediction Center, NOAA

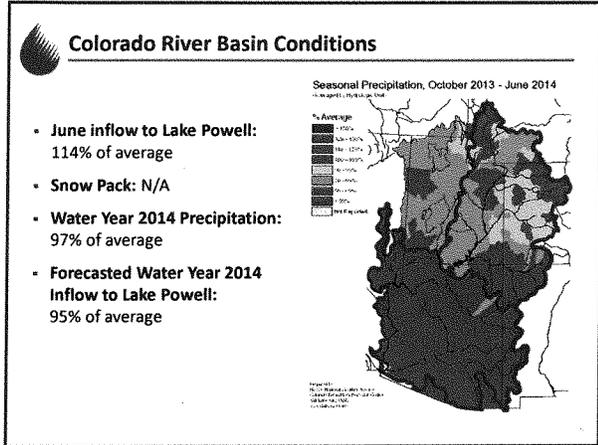
Source: National Oceanic Atmospheric Administration and the U.S. Department of Commerce

Colorado River Basin Conditions

Monthly Precipitation for June 2014

June 2014 precipitation:
 30% of average

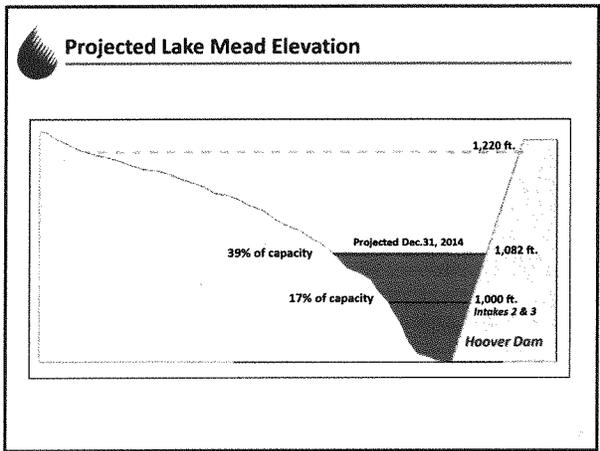
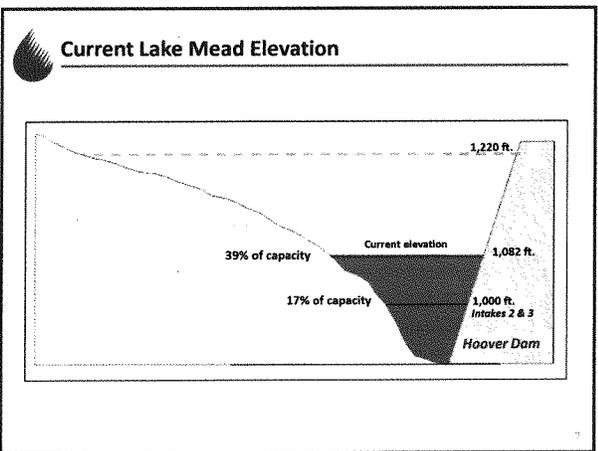
Legend:
 150%+
 120-150%
 90-120%
 60-90%
 30-60%
 0-30%
 0% Precipitation



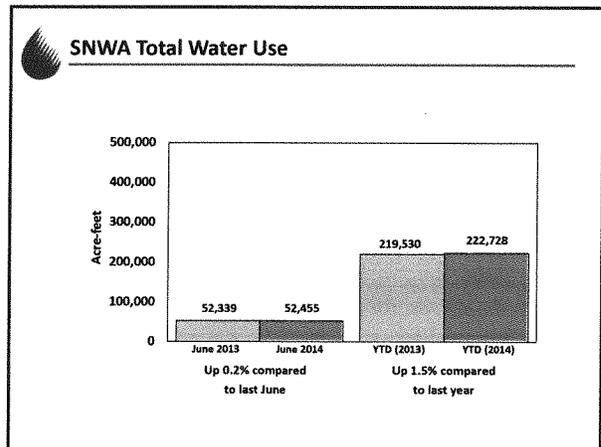
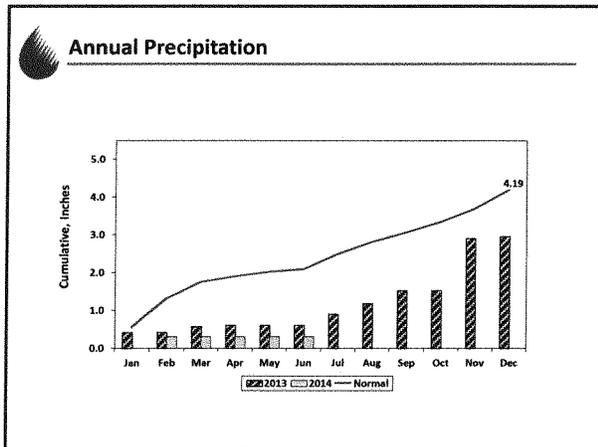
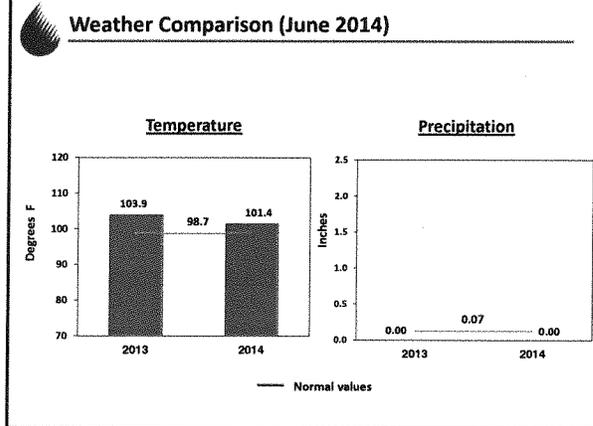
Precipitation and Inflow Forecast – Lake Powell

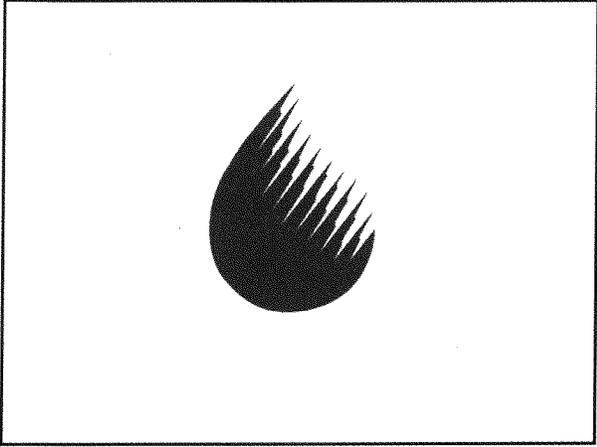
2013 Water Year			2014 Water Year	
Month	Actual Precipitation	Inflows Forecast	Actual Precipitation	Inflows Forecast
Jan	72%	61%	96%	93%
Feb	78%	54%	102%	96%
Mar	76%	49%	103%	105%
Apr	78%	42%	103%	103%
May	80%	45%	101%	100%
Jun	77%	44%	97%	95%
Jul	80%	41%		
Aug	81%	40%		
Sept	90%	46%		
Actual	91%	47%		

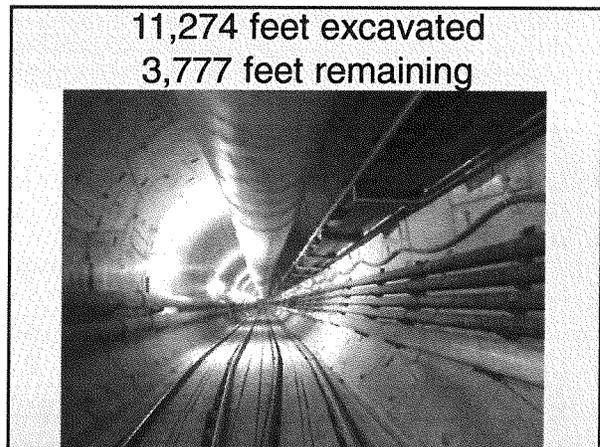
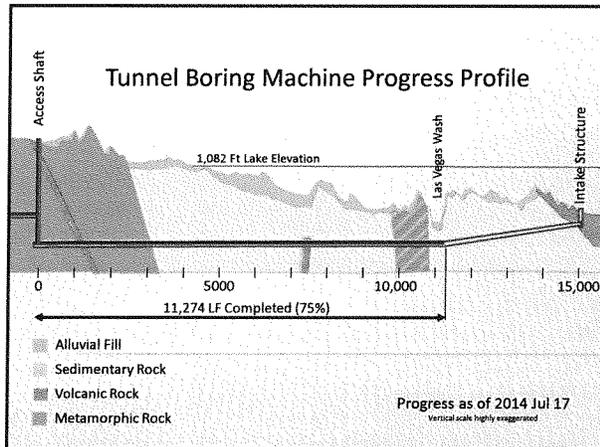
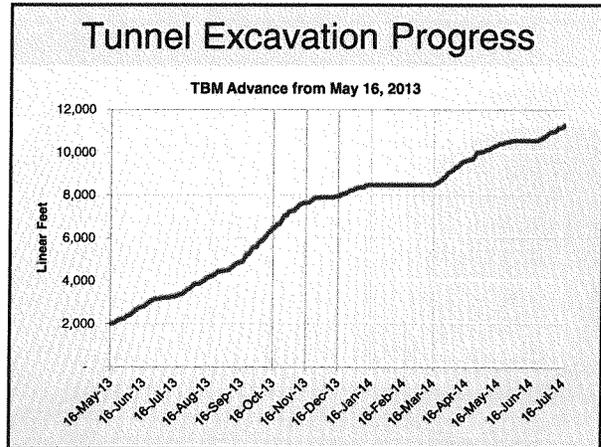
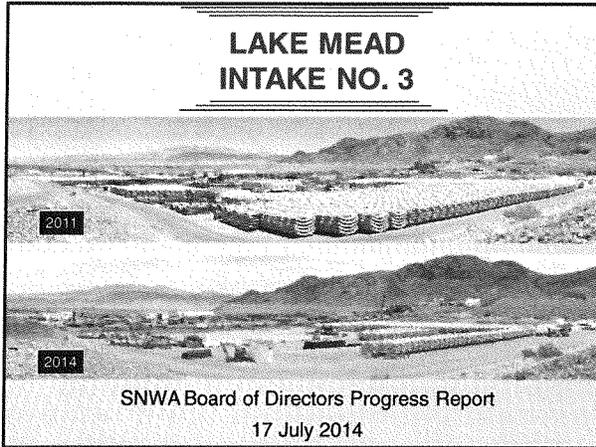
Source: Bureau of Reclamation, Lower Colorado Water Supply Reports



SNWA Water Use







Lake Mead Intake No. 3 Current Progress – July 2014

