The Colorado River Commission of Nevada (Commission) meeting was held at 1:31 p.m. on Tuesday, December 14, 2021, at the Clark County Government Center, Commission Chambers, 500 South Grand Central Parkway, Las Vegas, Nevada 89155.

COMMISSIONERS IN ATTENDANCE

Vice Chairwoman
Commissioner

Vice Chairwoman
Kara J. Kelley
Commissioner
Dan H. Stewart

COMMISSIONERS PRESENT VIA TELECONFERENCE

Chairwoman
Commissioner

Chairwoman
Puoy K. Premsrirut
Commissioner
Cody Winterton

COMMISSIONERS NOT PRESENT

Commissioner
Justin Jones
Commissioner
Marilyn Kirkpatrick
Commissioner
Allen J. Puliz

DEPUTY ATTORNEY(S) GENERAL

Special Counsel, Attorney General
Senior Deputy Attorney General

Special Counsel, Attorney General
Christine Guerci
Senior Deputy Attorney General
David W. Newton

COMMISSION STAFF IN ATTENDANCE

Executive Director
Senior Assistant Director
Chief of Finance and Administration
Assistant Director, Energy Information Systems
Assistant Director, Engineering and Operations
Assistant Director, Hydropower
Natural Resources Program Manager
Environmental Program Manager
Senior Accountant
Senior Energy Accountant
Senior Energy Accountant
Hydropower Engineering
System Coordinator
Office Manager
Administrative Assistant IV
Administrative Assistant IV

Executive Director
Eric Witkoski
Senior Assistant Director
Sara Price
Chief of Finance and Administration
Douglas N. Beatty
Assistant Director, Energy Information Systems
Kaleb Hall
Assistant Director, Engineering and Operations
Robert Reese
Assistant Director, Hydropower
Gail Bates
Natural Resources Program Manager
Angela Slaughter
Environmental Program Manager
Warren Turkett, Ph.D.
Senior Accountant
Gail L. Benton
Senior Energy Accountant
Stephanie Salleroli
Senior Energy Accountant
Ha N. Tran
Hydropower Engineering
Stevie Espinosa
System Coordinator
Chris Smith
Office Manager
Gina L. Goodman
Administrative Assistant IV
Kathryn Aguilar
Administrative Assistant IV
Kira Bakke
<table>
<thead>
<tr>
<th>Organization</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burns and McDonnell Engineering Company, Inc.</td>
<td>Shae Pelkowski</td>
</tr>
<tr>
<td>College of Southern of Nevada</td>
<td>Tina Dobbs</td>
</tr>
<tr>
<td>Moss Adams</td>
<td>Keith Simovic</td>
</tr>
<tr>
<td>Moss Adams</td>
<td>Laurel Stevens</td>
</tr>
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<td>NV Energy</td>
<td>Mike Hulin</td>
</tr>
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<td>Olin Chlor Alkali Products</td>
<td>Gilbert Doucet</td>
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<td>Olin Chlor Alkali Products</td>
<td>Lloyd Webb</td>
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<tr>
<td>Southern Nevada Water Authority</td>
<td>Laura Browning</td>
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COLORADO RIVER COMMISSION OF NEVADA
MEETING OF
DECEMBER 14, 2021

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| D.          | For Possible Action: Consideration of and possible action to approve individual Management and Power Supply Services (MAPSS) Agreements between the Colorado River Commission of Nevada (Commission) and each of the following industrial contractors located at or near the Black Mountain Industrial (BMI) Complex:  
  - BASIC WATER COMPANY  
  - EMD ACQUISITION, d.b.a. BORMAN SPECIALTY MATERIALS  
  - LHOIST NORTH AMERICA OF ARIZONA  
  - PIONEER AMERICAS LLC, d.b.a OLIN CHLOR ALKALI PRODUCTS  
  - TITANIUM METALS CORPORATION | 1        |
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<td></td>
<td>• BASIC WATER COMPANY</td>
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<td></td>
<td>• EMD ACQUISITION, d.b.a. BORMAN SPECIALTY MATERIALS</td>
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<td>• LHOIST NORTH AMERICA OF ARIZONA</td>
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<td>• PIONEER AMERICAS LLC, d.b.a OLIN CHLOR ALKAL PRODUCTS</td>
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<td></td>
<td>• TITANIUM METALS CORPORATION</td>
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</tr>
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<td>For Possible Action: Consideration of and possible action to approve Amendment No. 1 to the contract between Burns and McDonnell Engineering Company, Inc. (Burns and McDonnell) and the Colorado River Commission of Nevada (Commission) for engineering services increasing the not to exceed amount of the contract from $860,000 to $1,860,000</td>
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<tr>
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</tr>
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<td>12</td>
</tr>
<tr>
<td>N.</td>
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<td>12</td>
</tr>
<tr>
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<td>12</td>
</tr>
</tbody>
</table>
The Colorado River Commission of Nevada (Commission) meeting was called to order by Chairwoman Premsrirut at 1:31 pm.

A. Conformance to Open Meeting Law.

Executive Director Eric Witkoski confirmed that the meeting was posted in compliance with the Open Meeting Law.

B. Comments from the public. (No action may be taken on a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action will be taken.)

Chairwoman Premsrirut asked if there were any comments from the public. There were none.

C. For Possible Action: Approval of minutes of the September 14, 2021, meeting.

Vice Chairwoman Kelley moved for approval of the minutes. The motion was seconded by Commissioner Stewart and approved by unanimous vote.

D. For Possible Action: Consideration of and possible action to approve individual Management and Power Supply Services (MAPSS) Agreements between the Colorado River Commission of Nevada (Commission) and each of the following industrial contractors located at or near the Black Mountain Industrial (BMI) Complex:

- BASIC WATER COMPANY
- EMD ACQUISITION, d.b.a. BORMAN SPECIALTY MATERIALS
- LHOIST NORTH AMERICA OF ARIZONA
- PIONEER AMERICAS LLC, d.b.a OLIN CHLOR ALKALI PRODUCTS
- TITANIUM METALS CORPORATION

Assistant Director, Hydropower, Gail Bates, explained that each of the Commission’s contractors at the BMI Complex receive hydropower, transmission, and other related services from the Commission. Stating that there are times when the electricity needs of the contractor exceed the mentioned resources. Staff must then procure power from the market and other services to supplement the contractor’s hydropower resources.

The Commission currently holds, with each of its contractors, a contract for “Supplemental Electric Power Supply Services” which provides for the Commission to supply these supplemental resources. However, in 2017, with the termination of a scheduling
agreement with NV Energy, the Commission fundamentally changed the way it procures and manages supplemental power resources and scheduling services for the BMI Complex. As a result, the provisions in the current “Supplemental Electric Power Supply Agreement” do not accurately reflect the products and services being secured by the Commission on behalf of its contractors.

**MANAGEMENT AND POWER SUPPLY SERVICES (MAPSS):**

The MAPSS Agreement is intended to replace, in its entirety, each of the Supplemental Electric Power Supply Services Agreements. Pursuant to the MAPSS Agreement, the Commission will perform various services for the contractors and procure the various products and services that are needed to serve the contractor. These services include, but are not limited to, supplemental power, scheduling services, ancillary services, and other services that may be needed by the contractor in the future. The MAPSS agreement provides for the contractor to take and pay for the services provided by the Commission.

The MAPSS agreement has an initial term of 3 years and, at the end of the term, will be automatically extended by four (4) successive three (3) year terms, unless terminated earlier in accordance with the provisions of the agreement.

Commissioner Dan Stewart expressed concern over offloading additional hydropower due to the decrease in usage and the current circumstances.

Mr. Witkoski agreed with the concerns and stated that contractors are observant of the economic downturn and the hydropower necessities.

Commissioner Stewart said the situation needed to be looked at on a consistent basis.

Ms. Bates stated the situation is monitored. Further stating that hydropower resources are still attractively priced, other Commission contractors have been able to use the laid off resources and there have been no issues, thus far.

Commissioner Stewart asked if the City of Henderson had availability to the laid off hydropower resources.

Ms. Bates responded the City of Henderson is a Commission contractor for Hoover power and typically Parker Davis power is laid off. The Parker Davis power has gone to other Parker Davis contractors first.

Christine Guerci, Special Counsel, added that the two agenda items set the ground rules for the described scenario of shifting loads and differing resources.
Chairwoman Puoy Premsrirut asked about the issuance of a termination notice from a contractor and how it coincides with predicting the demand and supply, after arrangements have been made to assist a contractor with their power needs.

Ms. Bates responded that the termination provision requires an agreed upon termination date between the Commission and the Contractor. The agreement allows for a reaction time. Typically, resources are only bought monthly but if the Commission had purchased power into the future, the agreed upon termination date would allow the Commission to unwind those purchases. The agreement allows for the addition of a new power resource supplier to replace the Commission.

Commissioner Stewart asked if there was a take or pay clause should any of the power not be used.

Ms. Bates confirmed there is. It is a fundamental part of the power supply contracts. Those agreements provide the ability to find another Contractor for the resources, however if the Commission is unable to find one, the original Contractors are still required to pay for the resources.

Commissioner Stewart moved for approval of a Management and Power Supply Services (MAPSS) Agreement between the Commission and each of the following contractors located at the Black Mountain Industrial (BMI) Complex:

- BASIC WATER COMPANY
- EMD ACQUISITION, d.b.a. BORMAN SPECIALTY MATERIALS
- LHOIST NORTH AMERICA OF ARIZONA
- PIONEER AMERICAS LLC, d.b.a OLIN CHLOR ALKALI PRODUCTS
- TITANIUM METALS CORPORATION.

The motion was seconded by Commissioner Winterton and approved by unanimous vote.

E. For Possible Action: Consideration of and possible action to approve a single Joint Management Agreement (JMA) between the Colorado River Commission of Nevada (Commission) and the following contractors located at or near the BMI Complex:

- BASIC WATER COMPANY
- EMD ACQUISITION, d.b.a. BORMAN SPECIALTY MATERIALS
- LHOIST NORTH AMERICA OF ARIZONA
- PIONEER AMERICAS LLC, d.b.a OLIN CHLOR ALKALI PRODUCTS
- TITANIUM METALS CORPORATION.

Assistant Director, Hydropower, Gail Bates, explained the Joint Management Agreement (JMA) is among the Commission and each of the Commission’s contractors at the BMI
Complex receiving hydropower, transmission, and other related services from the Commission. There are times when the electricity needs of the contractor exceed these resources and the Commission must procure power from the market and other services to supplement the contractor’s hydropower resources.

Some of the products and services are purchased to meet the collective need of all contractors at the BMI Complex and the costs of those services are shared among the contractors. Prior to September 30, 2017, the mechanism for sharing those costs was set forth in an Operational Agreement between the Commission and the affected contractors. That Operational Agreement was terminated effective September 30, 2017. The Joint Management Agreement (JMA) is intended to replace the prior Operational Agreement.

**JOINT MANAGEMENT AGREEMENT (JMA):**

The JMA provides for the contractors at the BMI Complex to share the cost of certain services provided by the Commission and specifies the methodology for the sharing of those costs. It also provides for an agreed-upon set of instructions for the pooling and sharing of hydropower resources among the BMI Contractors.

Pursuant to NAC 538.540, “A contractor that is not an electric utility and that purchases power provided by the Commission from the Boulder Canyon Project, Parker-Davis Project or Salt Lake City Area Integrated Projects may not share, resell, pool, lease or change the point of use of that power without the prior approval of the Commission. The Commission may approve the sharing, reselling, pooling, leasing, or changing the point of use of power pursuant to this subsection for a term of not more than 3 years.”

As a result, the JMA has a term of three (3) years and terminates after the initial three-year term unless renewed by the Commission and the contractors.

Vice Chairwoman Kelley asked about the agreement evaluation process.

Ms. Bates responded in 2017 when the contract with NV Energy terminated, which allowed for business to be done in a more simplistic fashion, work began with the industrial contractors. Over time, it took a while to get to the point where all the contractors together with their attorneys could be brought together. There were several different drafts and iterations. In the midst of things, there were also several changes in personnel at the industrial complex itself. The process has been ongoing since early 2018, it has taken a while to get there.

Chairwoman Premsrirut stated it appears that all parties agree.
Commissioner Stewart moved for approval of a single Joint Management Agreement (JMA) between the Colorado River Commission of Nevada (Commission) and the following contractors located at or near the BMI Complex:

- BASIC WATER COMPANY
- EMD ACQUISITION, d.b.a. BORMAN SPECIALTY MATERIALS
- LHOIST NORTH AMERICA OF ARIZONA
- PIONEER AMERICAS LLC, d.b.a OLIN CHLOR ALKAL PRODUCTS
- TITANIUM METALS CORPORATION.

The motion was seconded by Commissioner Winterton and approved by unanimous vote.

F. For Possible Action: Consideration of and possible action by the Colorado River Commission of Nevada (Commission) to adjust the amount of collateral posted by the Commission’s retail industrial contractors for Calendar Year 2022.

Assistant Director, Hydropower, Gail Bates, explained that NRS 538.181(2) requires certain of Commission’s power contractors to provide collateral “in such sum and in such manner as the Commission may require, conditioned on the full and faithful performance” of their power contracts. NAC 538.744 requires “during October of each operating year, and at any other time it deems necessary, the Commission will conduct a review to determine the creditworthiness of each of its contractors.” Based on that review, the Commission establishes the amount and prescribes the manner in which the contractor is required to furnish collateral pursuant to its contracts with the Commission.

To determine the collateral required for each industrial contractor for Calendar Year 2021, Staff calculated the minimum collateral requirement which is 25 percent of that contractor’s Gross Annual Purchases during the test period of October 1, 2020, through September 30, 2021. The Contractor’s “Gross Annual Purchase” reflects the Contractor’s power and related expenses during the test period and does not include uncertain revenues that might become available to the contractor to offset those expenses.

Based on its review of each customer’s payment history and financial risk, Staff recommends that the collateral requirement for each of its retail contractors, except for Borman Specialty Materials (BSM), be set at the minimum collateral requirement. Staff recommends keeping BSM’s collateral at its current level of $750,000 due to the uncertainty of BSM’s load forecast. Load forecast uncertainty results in staff potentially having to lay off BSM’s hydropower to another Commission contractor on a monthly basis which introduces financial risk to the Commission. Should BSM’s load forecast become more certain, staff will re-evaluate BSM’s collateral requirement and request Commission approval to revise the amount.
The proposed collateral amounts for the other industrial contractors, represent a decrease from the current collateral held by the Commission for each of those contractors due to the 57% decrease in electrical load experienced by the contractors resulting from COVID-19.

All of the Commission’s retail contractors have posted cash collateral except for Titanium Metals Corporation which has posted a letter of credit. The Staff recommends no change in the form of collateral being posted.

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Minimum Collateral Requirement</th>
<th>Recommended Collateral Requirement</th>
<th>Present Collateral</th>
<th>Change from Present</th>
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<tr>
<td>Basic Water Company</td>
<td>$170,077.56</td>
<td>$170,077.56</td>
<td>$275,211.50</td>
<td>($105,133.94)</td>
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<tr>
<td>Lhoist North America</td>
<td>$18,786.88</td>
<td>$18,786.88</td>
<td>$21,078.60</td>
<td>($2,291.72)</td>
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<tr>
<td>EMD Acquisition LLC</td>
<td>$606,103.38</td>
<td>$750,000.00</td>
<td>$750,000.00</td>
<td>$0</td>
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<tr>
<td>Olin Chlor Alkaline Products</td>
<td>$50,368.16</td>
<td>$50,368.16</td>
<td>$67,641.39</td>
<td>($17,273.23)</td>
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<tr>
<td>Titanium Metals Corporation</td>
<td>$376,784.95</td>
<td>$376,784.95</td>
<td>$2,022,197.30</td>
<td>($1,625,412.35)</td>
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<tr>
<td>Total</td>
<td>$1,222,120.93</td>
<td>$1,366,017.55</td>
<td>$3,116,128.79</td>
<td>($1,750,111.24)</td>
</tr>
</tbody>
</table>

Vice Chairwoman Kelley asked about the need for Commission approval for a reduction in customers collateral if all parties agree.

Christine Guerci, Special Counsel, answered that collateral items would still come to the Commission for approval if the collateral changed.

Commissioner Stewart stated the reason for the reduction is concerning.

Chairwoman Premsrirut asked if the calculation was a straightforward calculation dependent on the overall load reduction and the gross amount reduction.

Ms. Bates confirmed this understating.

Vice Chairwoman Kelley asked about the association between less power, less collateral, and less labor costs.

Gail Bates responded there is not too much of an association. The process of matching loads and resources and managing deliveries is not dependent on the amount of power used. The labor costs are primarily fixed and do not vary depending on the number of megawatts provided.
Commissioner Stewart explained that it is the same amount of power being provided, only the customers are different.

Vice Chairwoman Kelley moved for approval to adjust the amount of collateral the Commission’s retail industrial contractors are required to post for Calendar Year 2022 pursuant to their contracts with the Commission. The motion was seconded by Commissioner Stewart and approved by unanimous vote.

G. For Possible Action: Consideration of and possible action to approve Amendment No. 1 to the contract between Burns and McDonnell Engineering Company, Inc. (Burns and McDonnell) and the Colorado River Commission of Nevada for engineering services increasing the not to exceed amount of the contract from $860,000 to $1,860,000.

Assistant Director, Engineering and Operations, Robert Reese explained that Staff issued the original RFP for Engineering and Construction Management Services in December of 2019. Burns and McDonnell Engineering Company, Inc. (Burns and McDonnell) was the only respondent to the RFP and met the requirements of the RFP. A contract of $860,000 was awarded to Burns and McDonnell to provide these services as required by the Colorado River Commission of Nevada (Commission) at its December 2020 meeting.

The contract with Burns and McDonnell is to provide the necessary engineering and construction management for the Boulder Flats solar project. This project encompasses the construction of a 350 MW solar generating facility.

Amendment No. 1 would allow Burns and McDonnell to provide the engineering and construction management services for the 10-mile 230 kV transmission line that would intersect the Commission’s Mead-Newport 230 kV line with a newly constructed 230 kV three-breaker ring bus.

The original intent was to have Burns and McDonnell provide the necessary engineering and construction management services for the three-breaker ring bus and to award a separate contract via an RFP to another engineering firm to provide engineering and construction services for the 10-mile 230 kV transmission line. However, several factors have necessitated moving the 10-mile transmission line portion of the project to the Burns and McDonnell contract. Those factors include: 1) The inability to reach contract terms with a second engineering firm; 2) The critical nature of this project in relation to the states mandates to meet renewable energy targets as set forth by the Nevada Legislature and Governor’s office by passage of SB 358 in 2019; and 3) Scheduling requirements by both the Commission and Western Area Power Administration (WAPA).

These factors are key in requesting Amendment No. 1 that would allow for Burns and McDonnell to perform the design and construction services for the 10-mile 230 kV
transmission line. Assigning Burns and McDonnell the 10-mile transmission line design and construction project will necessitate an increase of the contract amount from $860,000 to $1,860,000.

Funding will be provided via the operation and maintenance budgets as designated for the Commission’s support of the Southern Nevada Water Authority Power Delivery Project, Clark County Water Reclamation District, and the Basic Substation Project, and as directed by task authorizations set forth by the Commission and its Staff. The Commission will be funded by its customers for all expenditures incurred for this contractor under this agreement.

Chairwoman Premsrirut asked if housing the scope of work under one firm offered efficiencies with the increased amount.

Mr. Reese stated the amount could possibly be more if another engineering firm was used. The continuity is a large benefit for the customer as well as the Commission.

Vice Chairwoman Kelley moved for approval of Amendment No. 1 to the contract between Burns and McDonnell Engineering Company, Inc. (Burns and McDonnell) and the Colorado River Commission of Nevada (Commission) for engineering services increasing the not to exceed amount of the contract from $860,000 to $1,860,000. The motion was seconded by Commissioner Winterton and approved by unanimous vote.

H. **For Information Only:** Status update from Staff on the hydrological conditions, drought, and climate of the Colorado River Basin, Nevada’s consumptive use of Colorado River water, the drought contingency plan, impacts on hydropower generation, electrical construction activities and other developments on the Colorado River.

Dr. Warren Turkett, Environmental Program Manager, gave a status update on the hydrological conditions, drought, and climate of the Colorado River Basin, Nevada’s consumptive use of Colorado River water, and other developments on the Colorado River.

- Precipitation and Temperature
- Colorado Basin River Forecast Center – Lake Powell 104 Group
- Unregulated Inflow, Current and Projected Reservoir Status
- Water Use in Southern Nevada
- Summary

A copy of the report is attached and made a part of the minutes. (See Attachment A).
Vice Chairwoman Kelley asked if an estimate in terms of water conservation savings has been provided.

Executive Director, Eric Witkoski recalled an estimation of approximately 5,000-acre-feet.

Senior Assistant Director Sara Price stated while she did not have an exact number, it was still significant. Legislation that came out of Carson City, has 5 years of compliance. More encouraging was the number of businesses and municipalities moving forward on the legislation earlier than required. Additional significant water conservation resource efforts should be revealed in the new water resource plan from the Southern Nevada Water Authority (SNWA).

Chairwoman Premsrirut requested for the next meeting to have figures of the savings translated from the conservation efforts.

Commissioner Dan Stewart added to include not only acre-feet, but consumptive gallons used per person.

Chairwoman Premsrirut added that all intel is welcomed and encouraged.

I. For Possible Action: Consideration of and possible action to approve the Memorandum of Understanding (MOU) among, the United States acting through the Department of the Interior, Bureau of Reclamation, the State of Arizona acting through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, the State of Nevada acting through the Colorado River Commission of Nevada, and the Southern Nevada Water Authority to facilitate near-term actions necessary to maintain the elevation of water in Lake Mead and direct the Executive Director to sign the MOU on behalf of the Commission.

Ms. Price presented for the Commissioners consideration the Memorandum of Understanding (MOU) that will facilitate near-term actions necessary to maintain the elevation of water in Lake Mead.

August 24-Month Study and Consultation Mandate

On August 16, 2021, Reclamation released the August 24-Month Study in which Lake Mead is projected to be at less than 1,075 feet elevation on January 1, 2022, triggering the first Tier 1 Shortage reduction in the Lower Basin under the 2007 Colorado River Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (2007 Interim Guidelines).
The August 24-Month Study also showed the Minimum Probable projection for Lake Mead falling below 1,030 feet in the next two years. This projection triggered a mandatory consultation requirement between the Lower Basin states and the United States per the Lower Basin Drought Contingency Plan Agreement.

The Lower Basin parties, Nevada, California, Arizona, and the United States have been meeting since August to develop additional steps and actions to take to bolster the lake levels at Lake Mead. As a result of those discussions, the “500+Plan” was developed that would provide for the parties to contribute and conserve 500,000 acre-feet or more per year in 2022 and 2023, with a commitment for continued action in 2024 through 2026.

Memorandum of Understanding

To memorialize the parties’ agreement to implement the 500+Plan, the United States, the Arizona Department of Water Resources, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, the Colorado River Commission of Nevada, and the Southern Nevada Water Authority drafted a Memorandum of Understanding (MOU) to carry-out the plans to conserve water in Lake Mead. The MOU includes the following key terms:

- The Non-Federal parties to provide up to $100 million to fund Additional Water projects for 2022-2023 in the following amounts:

<table>
<thead>
<tr>
<th>Party</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona Department of Water Resources</td>
<td>$40,000,000</td>
</tr>
<tr>
<td>Central Arizona Water Conservation District</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>Metropolitan Water District of Southern California</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>Southern Nevada Water Authority</td>
<td>$20,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$100,000,000</strong></td>
</tr>
</tbody>
</table>

- The United States, subject to budgeted availability and approvals, will seek to match the non-federal parties' contributions with a goal of an additional $100 million to bring the total to expend toward Additional Water Resources to $200 million for 2022-2023.

- The parties are targeting at least 1 million acre-feet of Additional Water in 2022 and 2023, and such additional water as may be available in this timeframe.

- The parties will comply with applicable environmental law as part of implementing the MOU.

- The parties agree to consult at least semi-annually to continue to evaluate the hydrological conditions and may make further prudent and reasonable adaptations to this 2021 MOU to meet such conditions.
This MOU is reflective of the collaborative and coordinated efforts of the Lower Basin and United States in protecting the long-term sustainability of the Colorado River system against the continued impacts of a 21-year drought coupled with an increasingly drier and warmer climate.

Chairwoman Premsrirut asked if a party does not comply would it cause an issue.

Ms. Price responded the MOU is in the best interest of all parties. The infrastructure bill put in place was quite significant in providing funds towards money-saving projects. Those benefits should be revealed over the next couple of years. Collaboration has been essential and preferable to make decisions on how to best regulate drought, lake levels and actions. There is no embedded enforcement process.

Chairwoman Premsrirut agreed that collaboration is key.

Mr. Witkoski stated his sense is that there is hopeful participation to a common goal.

Ms. Price agreed with his assessment.

Commissioner Stewart moved for approval of the Memorandum of Understanding (MOU) among, the United States acting through the Department of the Interior, Bureau of Reclamation, the State of Arizona acting through the Arizona Department of Water Resources, the Central Arizona Water Conservation District, the Metropolitan Water District of Southern California, the State of Nevada acting through the Colorado River Commission of Nevada, and the Southern Nevada Water Authority to facilitate near-term actions necessary to maintain the elevation of water in Lake Mead and direct the Executive Director to sign the MOU on behalf of the Commission. The motion was seconded by Vice Chairwoman Kelley and approved by unanimous vote.

J. **For Information Only.** Update on current audit of Fiscal Year 2021, being performed by Moss Adams.

Chief of Finance and Administration, Douglas Beatty gave a brief summary of the current audit of Fiscal Year 2021, due to the Financial and Audit Subcommittee meeting taking place directly after the commission meeting.

K. **For Information Only:** Update on pending legal matters, including Federal Energy Regulatory Commission or Public Utilities Commission of Nevada filings.

Special Counsel Christine Guerci stated there were no significant developments to report.
L. Comments from the public. (No action may be taken on a matter raised under this item of the agenda until the matter itself has been specifically included on an agenda as an item upon which action may be taken.)

There were none.

M. Comments and questions from the Commission members.

Chairwoman Premsrirut offered her thanks to Staff for their hard work.

N. Selection of the next possible meeting date.

The next meeting is tentatively scheduled for 1:30 p.m. on Tuesday, January 11, 2022, at the Clark County Government Center, Commission Chambers, 500 South Grand Central Parkway, Las Vegas, Nevada.

O. Adjournment.

The meeting was adjourned at 2:50 p.m.

Eric Witkoski, Executive Director

APPROVED:

Puoy K. Premsrirut, Chairwoman
Colorado River Commission of Nevada

Hydrology and Water Use Update

Warren Turkett

December 14, 2021

Precipitation and Temperature

Above Lake Powell November precipitation: 45%
Above Lake Powell water year 2022 cumulative precipitation: 84%
Unregulated Inflow, Current and Projected Reservoir Status

Projected unregulated inflow to Lake Powell | Acre-Feet | % Average
---|---|---
Water Year 2022 | 6,272,000 | 65%
April thru July 2022 | 4,120,000 | 58%

Reservoir | Current Elevation | Current Storage Acre-Feet | Current % Capacity | Projected Elevation on 1/1/2023
---|---|---|---|---
Lake Mead | 1,065.1 | 8,813,000 | 34% | 1,051.8
Lake Powell | 3,541.1 | 6,966,000 | 29% | 3,536.4

Data retrieved December 7, 2021

1 Based on Reclamation’s November 2020 24 Month Study Most Probable Inflow.
### Water Use In Southern Nevada

#### Southern Nevada Water Use

<table>
<thead>
<tr>
<th></th>
<th>2020 Actual Use in Acre-Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada Annual Allocation</td>
<td>300,000</td>
</tr>
<tr>
<td>Diversion</td>
<td>478,969</td>
</tr>
<tr>
<td>Return Flows</td>
<td>223,401</td>
</tr>
<tr>
<td>Consumptive Use</td>
<td>255,568</td>
</tr>
<tr>
<td>Unused Allocation Available for Banking</td>
<td>44,432 (15%)</td>
</tr>
</tbody>
</table>

#### Southern Nevada Water Use

<table>
<thead>
<tr>
<th></th>
<th>Diversions</th>
<th>Return Flows</th>
<th>Consumptive Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>January - October 2021</td>
<td>419,001</td>
<td>197,743</td>
<td>221,259</td>
</tr>
</tbody>
</table>

#### Banked Water (through end of 2020)

<table>
<thead>
<tr>
<th></th>
<th>Acre-Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Water Recharge in So. Nevada</td>
<td>357,643</td>
</tr>
<tr>
<td>Banked in Lake Mead</td>
<td>865,741</td>
</tr>
<tr>
<td>Banked in California and Arizona</td>
<td>944,071</td>
</tr>
<tr>
<td>Total</td>
<td>2,167,455</td>
</tr>
</tbody>
</table>

### Summary

#### Lake Powell
- Water Year 2022\(^1\) is off to a dry start after very little November precipitation.
- Upper Basin snowpack accumulation is currently 71% of the seasonal median.
- Unregulated inflow for water year 2022 is forecasted to be 65% of average.

#### Lake Mead
- In calendar year 2022, there will be a Tier 1 shortage under the 2007 Guidelines and required DCP contributions for Nevada and Arizona.
- In August 2021, Reclamations 24 Month Study model projected Lake Mead below elevation 1,030 feet requiring the Lower Division states to consult to determine additional measures to prevent reaching 1,020 feet.

#### Nevada Water Supply
- Southern Nevada has about 9 years of water supply banked. \(^2\)
- In 2020, Southern Nevada used 44,432 af less than our annual allocation.

#### Storage

<table>
<thead>
<tr>
<th>Storage</th>
<th>Elevation (f)</th>
<th>% Capacity</th>
<th>Change since last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lake Mead</td>
<td>1,065.1</td>
<td>34%</td>
<td>-16.7 ft</td>
</tr>
<tr>
<td>Lake Powell</td>
<td>3,541.1</td>
<td>29%</td>
<td>-45.4 ft</td>
</tr>
</tbody>
</table>

\(^1\) Water year is defined as October through September.
\(^2\) Based on 2020 consumptive use and storage volumes through 2020.