WATER COMMITTEE Tuesday, May 21, 2024, 9:30 AM

SRP Administration Building 1500 N. Mill Avenue, Tempe, AZ 85288

Committee Members: Kevin Johnson, Chairman; Robert Arnett, Vice Chairman; and Casey Clowes, Mario Herrera, Kathy Mohr-Almeida, Mark Pace, and Paul Rovey

Call to Order Roll Call

- - Request for approval of the minutes for the meeting of April 23, 2024.
- 2. <u>2023 Roosevelt Lake Silt Survey</u> TIM SKARUPA

Informational presentation regarding the recently completed silt survey at Roosevelt Lake and the new storage eligibility levels resulting from the survey.

- Executive Session, Pursuant to A.R.S. §38-431.03(A)(3) and (A)(4), to Discuss or Consult with Attorneys for Legal Advice Regarding the Status of Negotiations and Other Efforts to Resolve Water Rights Claims of the Navajo Nation, Hopi Tribe, and the San Juan Southern Paiute Tribe in Northeastern Arizona

- 6. <u>Report on Current Events by the General Manager and Chief Executive Officer</u> <u>and Designees</u>.....JIM PRATT
- 7. Future Agenda Topics..... CHAIRMAN KEVIN JOHNSON

The Committee may vote during the meeting to go into Executive Session, pursuant to A.R.S. 38-431.03 (A)(3), for the purpose of discussion or consultation for legal advice with legal counsel to the Committee on any of the matters listed on the agenda.

The Committee may go into Closed Session, pursuant to A.R.S. §30-805(B), for records and proceedings relating to competitive activity, including trade secrets or privileged or confidential commercial or financial information.

Visitors: The public has the option to attend in-person or observe via Zoom and may receive teleconference information by contacting the Corporate Secretary's Office at (602) 236-4398. If attending in-person, all property in your possession, including purses, briefcases, packages, or containers, will be subject to inspection.



MINUTES WATER COMMITTEE SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT

DRAFT

April 23, 2024

A meeting of the Water Committee of the Salt River Project Agricultural Improvement and Power District (the District) convened at 9:30 a.m. on Tuesday, April 23, 2024, from the Hoopes Board Conference Room at the SRP Administration Building, 1500 North Mill Avenue, Tempe, Arizona. This meeting was conducted in-person and via teleconference in compliance with open meeting law guidelines. The District and Salt River Valley Water Users' Association (the Association) are collectively known as SRP.

Committee Members present at roll call were K.J. Johnson, Chairman; R.C. Arnett, Vice Chairman; and M.J. Herrera, A.G. McAfee, K.L. Mohr-Almeida, M.V. Pace, and P.E. Rovey; and L.D. Rovey of the Association.

Also present were Vice President C.J. Dobson; Board Members N.R. Brown, K.H. O'Brien, J.M. White Jr., S.H. Williams, and K.B. Woods; Council Chairman T.M. Francis; Council Vice Chairman J.R. Shelton; Council Liaisons M.A. Freeman and G.E. Geiger; Council Members M.L. Farmer, D.B. Lamoreaux, and M.C. Pedersen; Mmes. I.R. Avalos, K.R. Beranek, M.J. Burger, A.P. Chabrier, L.F. Hobaica, V.P. Kisicki, C.M. McJunkin, L.A. Meyers, G.A. Mingura, and D.D. Patterson; Messrs. K.J. Carlson, J.D. Coggins, C.E. Ester, J.M. Felty, I.A. Insua, B.J. Koch, K.J. Lee, M.J. O'Connor, B.A. Olsen, J.M. Pratt, and P.B. Sigl; Council Member elect Eric Gorsegner; and Andy McCoy of the Arizona Attorney General's Office.

In compliance with A.R.S. §38-431.02, Andrew Davis of the Corporate Secretary's Office had posted a notice and agenda of the Water Committee meeting at the SRP Administration Building, 1500 North Mill Avenue, Tempe, Arizona, at 9:00 a.m. on Friday, April 19, 2024.

Chairman K.J. Johnson called the meeting to order.

Consent Agenda

Chairman K.J. Johnson requested a motion for Committee approval of the Consent Agenda, in its entirety.

On a motion duly made by Board Member M.J. Herrera and seconded by Board Member M.V. Pace, the Committee unanimously approved and adopted the following item on the Consent Agenda:

• Minutes of the Water Committee meeting on March 14, 2024, as presented

Corporate Secretary J.M. Felty polled the Committee Members on Board Member M.J. Herrera's motion to approve the Consent Agenda, in its entirety. The vote was recorded as follows:

| YES: | Board Members K.J. Johnson, Chairman; R.C. Arnett, Vice Chairman; and M.J. Herrera, A.G. McAfee, K.L. Mohr-Almeida, | (7) |
|------------|--|-----|
| | M.V. Pace, and P.E. Rovey | |
| NO: | None | (0) |
| ABSTAINED: | None | (0) |
| ABSENT: | None | (0) |

Leveraging Technology for Spillway Inspections

Using a PowerPoint presentation, Charlie E. Ester, SRP Director of Water Supply, stated that the purpose of the presentation was to provide information regarding the role of advanced technology in monitoring and inspecting SRP's water storage dams and meet SRP's obligation to maintain these critical facilities. He introduced Ivan A. Insua, SRP Director of Hydro Generation.

Continuing, Mr. I.A. Insua provided an overview of the technology roadmap at Hydro Generation from Fiscal Year 2022 (FY22) through FY25 and beyond, highlighting that the research was based on a collaborative effort by various key departments at SRP. He said that the dam structures are visually inspected on a continual basis via an ongoing visual inspection checklist, an annual inspection by the the Bureau of Reclamation (BOR), and an inaccessible features inspection by the BOR. Mr. I.A. Insua noted that these inspections are in addition to the more detailed inspections conducted by SRP. He presented images of a visual inspection and sounding that was performed at Horse Mesa Dam in 1999, along with images of spillway repairs with extensive scaffolding and visible equipment performed at Horse Mesa Dam in 2003.

Mr. I.A. Insua discussed leveraging technology from outside of SRP to assist with drone spillway inspections. He provided images of sounding being performed by drones on Horse Mesa Dam's spillway in July 2022. Mr. I.A. Insua said that this technology offers an interactive dashboard and enables accurate planning for repairs. He concluded with a discussion of the journey ahead regarding the adoption of new technologies and provided an image of a spill test conducted at Roosevelt Dam on May 10, 2023.

Messrs. C.E. Ester and I.A. Insua responded to questions from the Committee.

Copies of the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

Council Member A.S. Hatley entered the meeting during the presentation.

<u>Report on Current Events by the General Manager</u> and Chief Executive Officer or Designees

There was no report on current events by Jim M. Pratt, SRP General Manager and Chief Executive Officer.

Future Agenda Topics

Chairman K.J. Johnson asked the Committee if there were any future agenda topics. None were requested.

There being no further business to come before the Water Committee, the meeting adjourned at 10:01 a.m.

John M. Felty Corporate Secretary

2023 Roosevelt Lake Silt Survey Water Committee Meeting

Tim Skarupa | May 21, 2024



Modified Theodore Roosevelt 2023 Silt Survey

Sediment Survey in April 2023

Final Report Delivered in January 2024



Technical Report No. ENV-2024-021

Theodore Roosevelt Lake 2023 Sedimentation Survey

Salt River Project, Arizona Lower Colorado Basin Region



U.S. Department of the Interior

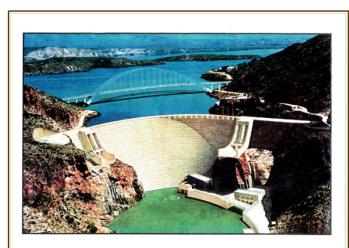
December 2023

05/21/2024 Water Committee Meeting, T. Skarupa

2023 Roosevelt Silt Survey

| History and Purpose | Process | Survey Results |
|---|--|--|
| <section-header>Modified Theodore Roosevelt Dam Operating Agreement Exhibit C• CAP Plan 6 Agreement, Exhibit C• Past Silt Surveys• Modified Theodore Roosevelt Dam Operating Agreement</section-header> | <section-header><section-header></section-header></section-header> | Agreement and Implementation 357' SAFETY OF DAMS SPACE 357' - 1,223,169 AF Discount of the second seco |
| | | ROOSEVELT DAM |

Parties to the Agreement



Modified Theodore Roosevelt Dam Operating Agreement

- SRP (Association and District)
- United States Bureau of Reclamation
- Flood Control District of Maricopa County
- Chandler
- Glendale
- Mesa
- Phoenix
- Scottsdale
- Tempe

CAP Plan 6 Agreement, Exhibit C (4-15-1986)

| | CAP Plan 6 Agreement, Exhibit C (4-15-1986) | |
|----------------------------------|--|--|
| Principles: Reservoir Allocation | | |
| Art | ticle 5.1 Parties entitled to Existing Active Conservation Capacity will retain such entitlements. | |
| Art | ticle 5.2 The Cities shall be entitled to the Additional Water Conservation Yield. | |
| Pri | nciples: Sedimentation | |
| Art | ticle 5.7 Reservoir capacities allocated to flood control and to Surcharge Capacity shall remain constant throughout the life o | |
| | the dam regardless of the distribution of sediment which will accumulate during that time. | |
| Art | ticle 5.8 Capacity losses resulting from sedimentation shall be allocated between Existing and Additional Active conservation Capacity as follows: | |
| a. | Existing Active Conservation Capacity shall be reduced by all actual capacity losses up to the historic average annual sedimentation rate of 2,680 AF per year. | |
| b. | Sedimentation losses exceeding 2,680 AF per year shall be allocated among the interests in Active Conservation Capacity in proportion to those interests. | |
| c. | Once Existing Active Conservation Capacity has been reduced by a total of 268,000 AF in sedimentation losses, all future sedimentation losses shall be allocated to Additional Active Conservation Capacity. | |
| d. | Any decrease in Additional Active Conservation Capacity shall be allocated among the Cities in proportion to their entitlements. | |

Past Silt Surveys

1995 Baseline Silt Survey

| Elevation (feet) | Total Storage (acre-feet) | Delta Storage (acre-feet) | Remarks |
|------------------|------------------------------|------------------------------|---|
| 1989 | 18,652 | 18,652 | Dead Storage |
| 2136 | 1,348,314 | 1,329,662 | SRP Conservation Storage |
| 2151 | 1,653,043 | 304,729 | Additional Active Conservation Capacity |
| 2175 | 2,209,239 | 556,196 | Flood Control Space |
| 2218 | 3,432,408 | 1,223,169 | Safety of Dams Space |

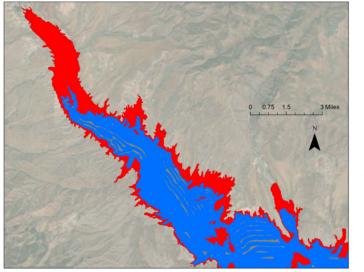
2013 Silt Survey – 21,511 acre-feet accumulation of silt compared to 1995 Baseline Survey.

2023 Silt Survey – 10,229 acre-feet accumulation of silt compared to 1995 Baseline Survey.

Survey Methodology

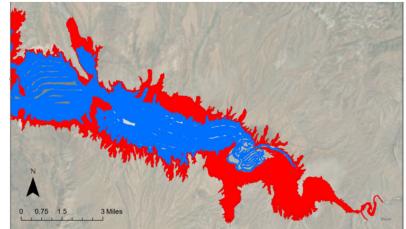
Bathymetric Survey conducted from April 17-22, 2023. The lake elevations increased from 2150.3 ft to 2151.1 ft during the survey.

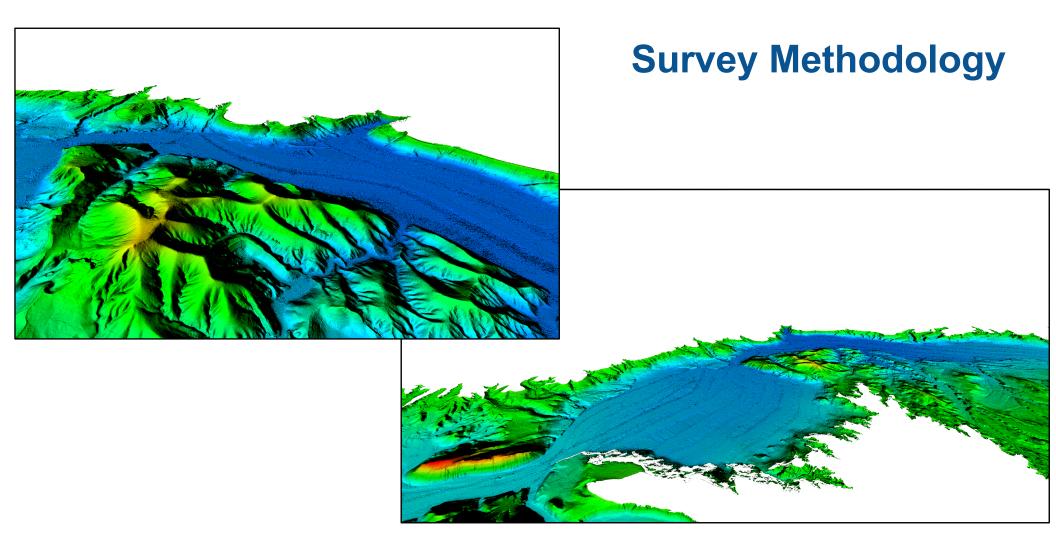
LiDAR (Light detection and ranging) data from June, 2021 was provided by SRP to represent topography elevations between elevation from 2128 to 2220 ft.



Survey coverage of the Tonto Creek arm. Blue dots are bathymetry and red dots are lidar-derived topography up to elevation 2,218 ft.

Survey coverage of the Salt River arm. Blue dots are bathymetry and red dots are lidar-derived topography, up to elevation 2,218 ft.





Capacities Based on 2023 Sedimentation Survey

| El. 2218 | 3,432,408 AF | 3,410,897 AF | 3,422,179 AF | Total Storage - El. 2218 |
|----------|----------------|--------------------------------|----------------|--|
| | | 1,223,169 AF | | Safety of Dams |
| | | 556,196 AF | | Flood Control |
| | 304,729 AF | 287,703 AF | 289,689 AF | Additional Active Conservation Capacity |
| | 1,329,662 AF | 1,326,803 AF | 1,338,085 AF | SRP Roosevelt Conservation Space |
| | 18,652 AF | 17,026 AF | 15,040 AF | Dead Capacity El. 1989 |
| EI. 1963 | 1995 Survey | 2013 Survey Not To Scale | 2023 Survey | |

Principles and Calculations Applied (2023 Silt Survey)

| Elevation | Total Storage Capacity Acre Feet | Top of Storage Zone | Storage Capacity for Each Storage Zone Acre Feet |
|-----------|--|---|---|
| 1989 | 15,040 | Dead Capacity | 15,040 |
| 2137.39 | 1,353,125 | SRP Roosevelt Conservation | 1,338,085 |
| 2151.46 | 1,642,814 | Additional Active Conservation Capacity (AACC) | 289,689 |
| 2175.27 | 2,199,010 | Flood Control | 556,196 |
| 2218.00 | 3,422,179 | Safety of Dam | 1,223,169 |

NOTE: Adding Dead Capacity and AACC= 15,040+289,689 = 304,729 AF= Baseline NCS

Modified Theodore Roosevelt 2023 Silt Survey



Sediment Survey in April 2023 Final Report Delivered in January 2024 Implementation Scheduled for January 1, 2025

05/21/2024 Water Committee Meeting, T. Skarupa