



BEAR RIVER COMMISSION

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Bountiful, Utah 84010-6203
801-292-4662
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CHAIR
Jody Williams

**IDAHO
COMMISSIONERS**
Gary Spackman
Kerry Romrell
Curtis Stoddard

**UTAH
COMMISSIONERS**
Eric Millis
Blair Francis
Charles W. Holmgren

**WYOMING
COMMISSIONERS**
Pat Tyrrell
Adrian Hunolt
Tim Teichert

ENGINEER-MANAGER
Don A. Barnett

MINUTES

BEAR RIVER COMMISSION ANNUAL MEETING ONE HUNDRED THIRTIETH COMMISSION MEETING APRIL 18, 2017

I. Call to order – The annual meeting of the Bear River Commission was called to order by Chairwoman Jody Williams at 1:30 p.m. on Tuesday, April 18, 2017, at the Utah Department of Natural Resources building in Salt Lake City, Utah. This was the one-hundred thirtieth meeting of the Commission. Williams recognized Adrian Hunolt, a new commissioner from Wyoming, and welcomed him to the Commission. Williams asked the Commissioners and audience to introduce themselves. An attendance roster is attached to these minutes as Appendix A.

Pat Tyrrell then offered a Resolution of Appreciation for the service of Sam Lowham and read it to the group. The resolution was approved by acclamation of the Commission.

Williams then addressed the agenda for the meeting. There was a need to move the Water Quality Committee report to an earlier time, so it became item V on the agenda. The agenda was approved with this change. A copy of the agenda is attached to these minutes as Appendix B.

II. Approval of minutes of last Commission meeting – Williams asked if there were any changes to the draft minutes of the previous Commission meeting held on November 22, 2016, in Salt Lake City, Utah. A motion was made to approve the minutes with no changes. The motion was seconded and passed.

III. Reports of Secretary and Treasurer – Eric Millis reviewed the approved FY2017 budget and the proposed FY2018 budget. Included in the FY2018 budget was \$2,500 to cover a tour of the Central Bear River area in July 2017.

Randy Staker reviewed the financial statement for FY 2017. Expenditures to date were \$107,112.20 and the remaining cash balance was \$128,765.86. A motion to accept the financial reports was approved by the Commission. The budget and financial statements are attached as Appendix C.

There was a question regarding how the cost of meetings involved with the 20-year Review would be paid for. Millis suggested that he thought there would be enough in the budget to cover those costs. Pat Tyrrell added that the costs should not be high and that the states would cover the participation of their own people.

IV. Elections – Williams proceeded with the election of officers for the Bear River Commission. Nominations were made and the Commission voted for the following to continue in their positions: Blair Francis as Vice Chair, Eric Millis as Secretary and Randy Staker as Treasurer.

V. Water Quality Committee report – Chair Williams invited Walt Baker to make the report from the Water Quality Committee meeting. She noted that Baker was retiring soon and praised him for the good work he had done in his position as Director of the Utah Division of Water Quality and wished him the best. Baker reported that they were in the 12th year of their cooperative monitoring effort among the states and that it has been a worthwhile effort and will continue with Utah and Idaho now participating. He reported that Idaho is pursuing a delegation from EPA for the permitting program under the Clean Water Act. That program should be fully delegated to Idaho by July 2018. Idaho is in the process of rule-making with regard to selenium in the water, as well as fish tissue. Selenium can be a toxin for aquatic life, and each state has their own particular approach for addressing selenium issues. Wyoming is developing nutrient criteria for its basin lakes and is availing itself of variance provisions for its water quality standards, which should be happening this summer. Baker reported that there have been harmful algal blooms in some of Wyoming's reservoirs and they are having difficulty with some of the reservoir operators in getting health advisories out to the public. There have been more and more of these harmful algal blooms nationally. It has to do with temperature, the level of photosynthesis activity and the refreshing of the water. Reservoirs have a greater propensity for harmful algal blooms because they are more stagnant and don't have as much wind action that can put oxygen back into the water to keep things fresh. Baker noted that Utah Lake had a massive harmful algal bloom in 2016 that dwarfed anything they have seen in the past. Utah Lake was shut down for about a week, irrigation and stock watering were curtailed, along with recreational activities. It affected secondary irrigation systems in some communities, and they were without water for their irrigation systems. Baker reported that Utah is putting together a task force to study water quality in Utah Lake, which study will take about four years. This will be the most exacting study that Utah has ever performed on a lake and the study should be valuable in learning how to abate some of the harmful algal blooms that are occurring.

Baker talked about the President's budget, which calls for a 30.14 percent decrease in funding of many Clean Water Act programs, including the grants that come to the states to administer the Clean Water Act program for EPA. One of the elements of the President's recommendations was to zero out the non-point source grant program which helped to abate agricultural and non-point source pollutants. Some of the states depend on that money to address pollution issues that they otherwise would not be able to address. Understanding full well that the President's budget is not the Congress's budget, Baker commented that they will wait to see how things turn out.

Baker noted that flooding up and down the Bear River and in areas close by has had an impact on wastewater facilities. The wastewater treatment plants have had to bypass their treatment processes in some cases because they have insufficient capacity to treat those quantities of flows and the impacts create public health issues. Baker also reported that Utah has been working on a water strategy, looking towards the year 2060, to determine how it will be able to sustain its water resources, including water quantity and water quality. The Governor's task force has come up with 12 individual chapters looking at a wide variety of elements to develop a complete water strategy for the state. This effort should be finished sometime in the summer.

VI. 2017 Water Supply Outlook – Troy Brosten from NRCS Snow Survey presented the water supply outlook for the coming season (see Appendix D). He reported that it had been a great water year and that Bear River Basin had done very well, with a Snow Water Equivalent of 154 percent of

normal. Brosten showed future percentage projections depending upon the timing of the runoff, along with graphs of each sub-basin of the Bear River compared to the previous year. He noted that streamflow forecasts are 158-277 percent of average and that reservoirs will likely fill and Bear Lake will bank some much needed water.

VII. 20-Year Review of Compact – Don Barnett began by explaining that in the November Commission meeting an assignment was made for Barnett and the TAC to look at the 20-year review process and come with a recommendation to the April meeting. The Compact provides that at intervals not to exceed 20 years, a review should be made to determine whether or not there is a need for any changes to the Compact. Barnett gave a presentation showing the history of the 20-year review (see Appendix E). He explained that the first review began in the early 1970s, resulting in the Amended Compact being signed by President Carter in February 1980. Another review was completed in November 1997. Barnett reviewed the process that took place for that review. There were public meetings held at four locations providing an opportunity for people to make oral comments. People were also encouraged to provide written comments. All comments were kept and summarized in a book that was provided to the Commission. The Engineer-Manager then wrote a summary report tabulating all of the information that had been gained during the public meetings. Coming out of this effort, it was found that there was no present need to amend the Compact, but there were two changes implemented as a result of the review. The name of the Records Committee was changed to the Records and Public Involvement Committee. The second change was the creation of the Water Quality Committee.

Jack Barnett then reported on what has occurred over the past 20 years as a result of the two changes that were made. The new Records and Public Involvement Committee had a charge to find ways to become more proactive up and down the river and look for opportunities for public involvement in Commission activities. As a result of their efforts, there have been a number of symposiums and tours provided, as shown in Appendix E. The USGS gave reports of their Bear Lake studies at the symposiums and they were encouraged to prepare written publications from those reports, which amounted to 16 publications. The Commission approached the Utah Geological Survey about preparing a less technical publication that would appeal to the average person, using some of the information that had been learned from the USGS studies.

Jack Barnett reported that prior to the creation of the Water Quality Committee, the Commission had worked closely with the water quality leads from the three states. They welcomed the opportunity to participate as a committee of the Commission. The Commission provided instructions as to what they thought the Water Quality Committee should do. The members of the committee have worked well together and come to know each other better. One of the first things the Water Quality Committee did was to secure a grant from EPA and hire a consulting firm to look at how the three states were handling the TMDL efforts in each of the states. A report was prepared which was very enlightening to them. Another effort of the Water Quality Committee was to work through the Commission to secure another very large EPA grant to study various aspects of the Bear River. One of them was a general effort to reach out and understand what was known and what data were available on the Bear River. The second was to create a Water Information System (WIS) where people could go for information. The third was a study of how you might get engaged in water quality trading on the river, which EPA was particularly interested in. The last part was an outreach to the public to share with them what was known about the Bear River. The work was done by Utah State University under contract with the Commission, with some funding from the Commission. A final report was prepared. In addition, the three states decided it would be more cost effective and informative if they did water quality sampling on the river cooperatively. They moved ahead with 30 different procedures and eventually settled on the set of information they felt

they would need. They produced a report on the effort after five years and again at ten years. The information learned resulted in some modifications that were beneficial to the states. Wyoming then decided to opt out of the effort, but Utah and Idaho continue with the sampling. The Commission and those on the Water Quality Committee feel that this committee has been very worthwhile.

Don Barnett then addressed recommendations for moving ahead on the new review. These recommendations are included in his presentation and can also be found in Memorandum BR2017-11. They include moving ahead with the review process, getting out a notice, holding three public meetings in the Basin and a fourth meeting in Salt Lake City, preparing informational materials, putting a splash notice on the Commission's website along with informational materials, identifying a deadline, compiling any public comments received, and having the Management Committee report to the Commission a proposed direction or actions they would suggest. Barnett noted that much of the findings document created from the previous review was dedicated to answering the misinformation that was evident based on the comments that were received. There was a lot of confusion about what the Compact is, how it was created, how it is changed, what the Commission is and why it was created, and how commissioners are appointed. He suggested that some of this confusion might be avoided by sending out this basic information in advance, which may lead to comments that are more on point. Barnett then asked for questions or comments.

Pat Tyrrell commented that the timing would suggest that much of this would take place prior to the fall meeting of the Commission and he wondered if some kind of a draft review of what had come in might be available at that meeting. This could lead to an initial draft report and some direction at the April 2018 meeting. Barnett suggested that the meetings could take place in the September/October time frame and, depending on the volume of comments, the Management Committee may have something ready by April. Tyrrell wondered about how best to capture all the oral comments. Options include taking notes by hand, recording and transcribing the comments or hiring a court reporter to take care of it. He estimated a court reporter for the Evanston meeting might be \$500-\$600, and he would have to decide if he might offer that to the Commission as Wyoming's ante in to help pay for that first meeting. Other than that, he felt the cost for the meetings would just include travel for the facilitators and Barnett's time, with much of the talent coming from people involved with the Commission. He felt it would be very important to lay out at the beginning of each meeting why the meeting is being held so people would understand that the Commission is simply taking comments on operations under the Compact for the states to take back to the Commission to decide if any changes should be made. Barnett added that for the previous review there were those kinds of introductions, along with an overview of the operations by the Engineer-Manager. Tyrrell then made a motion that the Commission begin the formal process of the 20-year review immediately and then proceed as outlined in the discussion. The motion was approved by the Commission.

A suggestion was made that an additional public meeting be held in the Soda Springs/Grace area due to the long drive to Logan. Gary Spackman asked about how the instructions to the Engineer-Manager and the determinations of procedures would be coordinated over the next several months. Barnett responded that he would be working with the TAC and communicating back and forth with the Management Committee to receive direction as things proceed. He suggested that they discuss a few items that he had noted. As far as notice, he suggested that a notice should be put on the Commission's website the following day indicating that the Commission had begun their 20-year review process and to stay tuned. He asked if anything else should be communicated prior to the notice that would go out for each of the public meetings.

Spackman asked a more general question regarding what the involvement of the TAC should be. It was his perception that this was largely a procedural endeavor. He felt that the TAC should be involved with technical issues that may be considered in any amendments to the Compact, but he wasn't sure the TAC should be on the front line in determining procedural matters as the review moves forward. He wondered if this was something the Management Committee should take on directly.

Barnett responded that he anticipated working with the Management Committee as far as laying things out, but felt that the TAC members could be involved with the public meetings in their individual states. They could arrange for meeting space and for the public notice in the local papers, etc. Potentially the TAC member could be the person taking notes and writing a summary, though he thought the meetings would most likely be recorded. He added that he would work under the direction of the Management Committee and do whatever they thought best.

There was a question about whether the Commission had the ability going into the review to state which things are debatable and which are not. Tyrrell responded that he didn't think you could pick and choose which parts of the Compact could be commented on. He felt that the Commission should be willing to accept comments on all four corners of that document, for whatever they are worth. Barnett added that they might request written comments to be more specific to avoid vague suggestions such as to amend the Compact so Bear Lake has more water. Chairwoman Williams agreed that the Commission had an obligation to listen to the comments of those people who live in the Bear River Basin and care about the Bear River. Regarding roles, she saw the TAC as being helpful in setting up meetings and providing technical advice. The policy issues would be under the purview of the Management Committee and the Commission, and the Management Committee would be making recommendations to the Commission at the conclusion of the review.

Spackman added that though he hated to take on a greater involvement just because of time, he felt that because of the policy questions that would arise and the legal interpretations that may need to be determined, the Management Committee has to take on that responsibility. He suggested that he might consider assigning responsibilities to other staff outside of the TAC. He suggested that they should hold a series of telephone conferences along the way in the next month or two and commit to that. Barnett responded that he would be happy to organize those calls. He suggested reaching out to the TAC to assist in preparing written materials with facts about Bear Lake and Bear River and operations, etc. He said he could create an outline for the Management Committee to consider and get their input.

Williams added that there are a lot of people who would be interested in the review and it would be important to make sure the word gets out and it is posted on the Commission's website. She didn't want anyone to miss the chance to comment or to participate,

Going back to Tyrrell's comment about the possibility of involving court reporters at the public meetings, Commissioner Holmgren wondered if they should have a professional facilitator to conduct these meetings, or if the Engineer-Manager or members of the Records and Public Involvement Committee would conduct or facilitate the meetings. Williams replied that these decisions could be addressed in the Management Committee conference calls and then communicated to the group.

Spackman commented that some of these discussions might be of interest to the other Commissioners and he didn't want them to be left out if they had a desire to be involved in those discussions and decisions. Barnett responded that he would be happy to create a summary after

the call and, in anticipation of a call, send out a memo so that the Commissioners could give feedback to the Management Committee if they had suggestions or subjects that should be considered. Tyrrell wondered if all the Commissioners should be invited to participate in the conference calls if they are available. The group was not sure how this should be handled. Williams and Barnett indicated that they would look into it.

Williams wrapped up the discussion by saying that this would be an interesting and exciting time. She had no idea what would come out of the 20-year review, but she was excited to embark on the process and looked forward to the public's participation.

The Commission then took a short break.

VIII. Records and Public Involvement Committee report – Curtis Stoddard first reported that the Idaho group had discussed over lunch the question of having another tour during the summer and came to a consensus that they would support such a tour. He then turned the time over to Liz Cresto to make the Committee report.

Cresto reported that the Records and Public Involvement Committee had discussed the stream gaging program. The USGS gave their report, and they anticipate an active year with high runoff. Stream gaging costs for the future will go up in the range of 1.5-2 percent. The water quality agencies will continue to contribute 20 percent to the stream gaging costs. The Utah Upper Division anticipates getting four new pumps online. Wyoming is looking to reduce two gages. Idaho anticipates one new diversion to be online. Regarding the East Fork Hilliard Canal, the project to move the head gate has not been moving forward. A draft 2016 chapter of the Biennial Report was passed out for review and it was anticipated that the report would be completed by the end of June. It was suggested that the Overview section of the report include the 2016 tour of the Upper Basin. It was determined that photos of the refurbished Last Chance Canal would be included on the cover of the report, along with pictures of the summer tour. The committee discussed a tour for 2017 of the Central Division. They talked about the 20-Year Review and that the Commission's website would be used to convey information. It was reported that the WIS will continue to be financed and will be moved to a new platform soon. The committee also had reports on a couple of publications of interest.

Regarding the proposed 2017 tour, Commissioner Holmgren spoke for Utah in recommending the tour be postponed for a year due to the efforts that would be needed for the 20-Year Review. Pat Tyrrell from Wyoming noted that given Wyoming's fiscal situation, he would probably be unable to attend, but felt that others in Wyoming might be able to assist with the tour. He was unsure where they stood on this. Williams noted that the Bear River Water Quality Task Force would be having a tour during the summer in the same area, whether or not the Commission has a tour. Barnett added that it was Wyoming's turn to put on the tour for the Task Force and the question was whether or not the Commission would join with them to make it a bigger tour or if it would just involve those on the Water Quality Task Force. Spackman reiterated that Idaho would be supportive of the tour and mentioned that the ability to visit various sites on the Bear River system and familiarize staff with the water deliveries, with diversions and with the divisions was very important to him. He was anxious that his staff be better informed about what is happening and better prepared to participate in the program as roles change in the coming years. Tyrrell noted that since the water quality group would be having a tour anyway, it might be good to open up the invitation to the Commission. His Cokeville staff will be involved either way. He made a motion that the Commission go ahead with a one-day tour in the Cokeville area. The motion was seconded and passed by the majority, with Utah voting nay.

IX. Operations Committee report – Blair Francis reported that the Operations Committee reviewed the water situation on the river. Because of the extra water, they didn't believe there would be a need for regulation in 2017. Woodruff Narrows drew down the reservoir earlier in the year to make room for the additional water coming from the snowpack. Francis reported that Wyoming continues their work on a method to do appropriate depletion estimates on supplemental acres, but they are not finished with that effort. Jack Barnett reported to the committee that Paris Hills is on a stand-down right now due to the low price of the product, so there is nothing happening there currently. Connely Baldwin with PacifiCorp gave a presentation to the committee about some thoughts and ideas that PacifiCorp has in relation to Bear Lake and the water in general. The group threw around several ideas on the subject.

Baldwin then gave a report on operations at Bear Lake (see Appendix F). He reported that the water year began with water releases from the Outlet to support late-season irrigation demands and to refill Alexander Reservoir. He reported that Bear Lake was currently at 5916.57 feet, with the anticipation that it would reach 5922.6 feet. The allocation for the year was 245,000 acre-feet, but given the water conditions, they did not expect any irrigation storage releases. He noted that he had made a report at the fall meeting regarding increasing the channel capacity in Gentile Valley. During this wet year it got up to 2500 cfs, and the area that was impacted was much less than they anticipated. During the summer they will be making an attempt to gain either fee title or some kind of flowage easements to those lands so they can accomplish their Bear River capacity project increasing the temporary releases from Soda up to 2600 cfs.

X. Management Committee Report – Eric Millis reported that the Management Committee had principally discussed the budget and the 20-year Review, which were covered previously in the Commission meeting.

XI. Engineer-Manager's report – Don Barnett noted that all of the items he had to bring up were already discussed.

XII. State reports – Idaho – Gary Spackman noted that he was somewhat surprised at the statements of confidence by Connely Baldwin about having all of the easements in place and the right to flood to whatever degree they want to below Soda. He hoped that PacifiCorp was anticipating a vigorous fight, perhaps in court, over that particular issue. He also stated in jest that the State of Idaho will oppose any kind of petition for statehood by PacifiCorp as well! He anticipated, given what he knew about the history of PacifiCorp's and Utah Power & Light's attempts to flood other people's lands, including his father's years earlier, that there will be protracted litigation over that particular subject.

XII. State reports – Utah – Eric Millis noted that they had reported to the Commission a number of times regarding the State of Utah's proposed Bear River Development Project. As they look at water conservation efforts that are going on and other less expensive sources of water being developed, they have been continually pushing back the project. In February they put out a press release saying that they expected that project would be needed some time beyond 2040, and maybe as late as 2050. They will keep their eye on that, but feel it is important to keep that project in their pocket as it may eventually be an important part of meeting future municipal and industrial water needs in northern Utah. Millis reported that the Legislature had recently put a lot of money into municipal and industrial water conservation in the amount of about \$2.25 million. They are looking at devices that would help homeowners use less water on their lawns and looking at ways for state facilities to lead out and show a good example, as well as continuing their ongoing water

conservation campaigns. There was also money set aside for adjudication to the State Engineer's office, which is very important. They are trying to firm up their water use data and supply numbers and adjudication, being able to quantify what water is available in a given area. Millis reported that the Great Salt Lake had come up several feet already. In December the causeway that separates the north arm from the south arm was breached to allow water from the south arm to flow into the north arm. They were concerned about the possibility of the south arm drying up since the lake has been at near record low elevations in recent years. However, they were pleased to see that the north arm came up 4 feet and the south arm came up 3 feet since December.

XII. State reports – Wyoming – Pat Tyrrell reported that their budget has been suffering. Beginning a year earlier, the Governor announced, with the drop in price of oil, gas and coal, that there would be an across-the-board 8 percent cut, which cost his office 12 positions. He was hoping to forestall further cuts by the Legislature, but that didn't slow them down. Additional cuts were made which took out another 2 positions, and a hard cap would be placed on hiring starting on May 1st. They hope the hard hiring freeze will not prevent them from filling future openings. Tyrrell reported that Brenna Mefford had moved on to the State of Colorado and her position was backfilled internally with Charlie Ferrantelli, a hydrogeologist. He is focusing on work with the Colorado River Basin, but may be involved in the Bear at some point. Tyrrell explained that Wyoming and Utah are involved in Colorado River Basin efforts. He reported that in November 2016 their office published a 70-page report just on the Colorado River and Wyoming's role in it, which is available on their website. They have been in a lawsuit with Montana over the Yellowstone River since 2007 and are very close to a final decree. They hope to have the final road map soon.

Tyrrell explained that their legislature put on their interim agenda a topic to review the prior appropriation doctrine to see if there are any changes that need to be made to it to make sure it remains the water management scheme in Wyoming. Everyone was amazed that they would do that because prior appropriation didn't go anywhere in Wyoming. He suggested that they have a few rough edges in their laws, which all states have, that come to bite them every now and then. Perhaps they want to identify those and see if there is any future work there. However, he didn't think the system as it stands would be going anywhere.

Tyrrell reported statewide Wyoming was in pretty good shape with snowpack in the western half at 150-200 percent of normal, and even more in a lot of places. The eastern part of the state is getting down to around normal. They figure they will be dealing with some major flooding in the spring.

XIII. Other/Public Comment – Charles Holmgren gave Carly Burton's report on the Bear River Water Users Association in his absence. He noted that in spite of the abundant water supply this year in the Bear River Basin, the Water Users Association will continue to promote conservation in order to promote stable water supplies in Bear Lake for future years. With regard to the Bear River Comprehensive Management Plan by the Utah Department of Forestry, Fire and State Lands, there have been several meetings held and continuous dialogue between the Association and PacifiCorp to identify areas of mutual concern. The Association is in the process of reviewing a draft permit application from State Lands. There are several issues of concern and the Association will continue to coordinate with PacifiCorp and State Lands to address the issues. Regarding PacifiCorp's Proposed Future Water Development Strategy, the Association emphasizes that any proposed modification of past operating practices has to be accomplished in a manner that will not alter or otherwise diminish existing irrigation contract deliveries.

Claudia Cottle from Bear Lake Watch commented that they were pleased with the Commission's commitment to move forward on the 20-year Review. They feel it will be beneficial to the watershed. She reported that they are looking at a lot of water in Bear Lake and are excited to see the lake fill. With regard to PacifiCorp's ideas, Bear Lake Watch is looking forward to some discussions and looking at the new ideas being considered. They just want to make sure that any new changes and developments will be an improvement for Bear Lake.

XIV. Next Commission meeting – Chairwoman Williams addressed the date for the next Commission meeting. It would normally be scheduled for Tuesday, November 14th. Due to some conflicts, a motion was made to move the meeting to Tuesday, November 21, 2017. The motion passed unanimously. Another motion was approved to adjourn the meeting.

ATTENDANCE ROSTER

BEAR RIVER COMMISSION ANNUAL MEETING

Utah Department of Natural Resources
Salt Lake City, Utah
April 18, 2017

IDAHO COMMISSIONERS

Gary Spackman
Kerry Romrell
Curtis Stoddard

WYOMING COMMISSIONERS

Pat Tyrrell
Adrian Hunolt
Tim Teichert
Kevin Payne (Alternate)

FEDERAL CHAIR

Jody Williams

UTAH COMMISSIONERS

Eric Millis
Charles Holmgren
Blair Francis
Norm Weston (Alternate)
Joe Larsen (Alternate)

ENGINEER-MANAGER & STAFF

Don Barnett
Jack Barnett
Donna Keeler

OTHERS IN ATTENDANCE

IDAHO

James Cefalo, Department of Water Resources
Liz Cresto, Department of Water Resources
Josh Hanks, Water Master

UTAH

Mike Styler, Department of Natural Resources
Walt Baker, Division of Water Quality
Will Atkin, Division of Water Rights
Ben Anderson, Division of Water Rights
Carl Mackley, Division of Water Rights
Todd Adams, Division of Water Resources
Randy Staker, Division of Water Resources
Feng Pan, Division of Water Resources
Ron Hoffman, Water Commissioner

WYOMING

Beth Callaway, State Engineer's Office
Mike Johnson, State Engineer's Office
Travis McInnis, State Engineer's Office
Levi Walker, State Engineer's Office

OTHERS

Connely Baldwin, PacifiCorp Energy
Buffi Morris, PacifiCorp Energy
John Mabey, PacifiCorp Counsel
Tom Marston, U.S. Geological Survey

Steve Kahl, U.S. Fish & Wildlife Service
Darin McFarland, Bear River Canal Company
Curtis Marble, Bear River Canal Company
Claudia Cottle, Bear Lake Watch
David Cottle, Bear Lake Watch
Bob Fotheringham, Cache County
Scott Clark, Barnett Intermountain Water Consulting
Jim DeRito, Trout Unlimited
Joanna Endter-Wada, Utah State University
Joan Degiorgio, The Nature Conservancy
Marcelle Shoop, National Audubon Society
David Ure

BEAR RIVER COMMISSION ANNUAL MEETINGS
April 10 and 18, 2017

Water Quality Committee Meeting
Utah Department of Environmental Quality
195 North 1950 West
Salt Lake City, Utah

All Other Meetings
Utah Department of Natural Resources
1594 West North Temple
Salt Lake City, UT

COMMISSION AND ASSOCIATED MEETINGS

April 10

9:00 a.m.	Water Quality Committee Meeting – Red Rock Conference Room	Burnell
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April 18

9:00 a.m.	Records & Public Involvement Committee Meeting – Room 314	Stoddard
10:00 a.m.	Operations Committee Meeting – Room 314	Francis
11:15 p.m.	Informal Meeting of Commission – Room 314	D. Barnett
11:30 p.m.	State Caucuses and Lunch	Spackman/Millis/Tyrrell
1:30 p.m.	Commission Meeting – Main Floor Auditorium (Rms. 1040/1050)	Williams

APPROVED AGENDA
ANNUAL COMMISSION MEETING

April 18, 2017

Convene Meeting: 1:30 p.m.

Chairman: Jody Williams

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| I. | Call to order | Williams |
| | A. Welcome of guests and overview of meeting | |
| | B. Recognitions | |
| | C. Approval of agenda | |
| II. | Approval of minutes of last Commission meeting (November 22, 2016) | Williams |
| III. | Reports of Secretary and Treasurer | Millis/Staker |
| | A. 2017 Expenditures to date | |
| | B. Adoption of 2018 budget | |
| | C. Other | |
| IV. | Elections | |
| | A. Vice Chair | Williams |
| | B. Secretary | |
| | C. Treasurer | |
| V. | Water Quality Committee report | Baker |
| VI. | 2017 Water Supply Outlook | Brosten |
| VII. | 20-Year Review of Compact | Barnett/Williams |

BREAK

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| VIII. | Records & Public Involvement Committee report | Stoddard |
| IX. | Operations Committee report | |
| | A. Committee meeting | Francis |
| | B. Anticipated Operations and Regulation in 2017 | |
| | C. PacifiCorp operations | Baldwin |
| X. | Management Committee report | Millis |
| XI. | Engineer-Manager's report | Barnett |
| XII. | State reports | |
| | A. Idaho | Spackman |
| | B. Utah | Millis |
| | C. Wyoming | Tyrrell |
| XIII. | Other / Public comment | Williams |
| | A. Activities of the Bear River Water Users Association | Burton |
| | B. Bear Lake Watch | Cottle |
| | C. Other | |
| XIV. | Next Commission meeting (Tuesday, November 14, 2017, at Utah DNR) | Williams |

Anticipated adjournment: 4:00 p.m.

BEAR RIVER COMMISSION

APPROVED BUDGET FY2017, PROPOSED BUDGET FY2018, PROPOSED BUDGET FY2019

	FY2017 APPROVED BUDGET	FY2018 PROPOSED BUDGET	FY2019 PROPOSED BUDGET
	-INCOME-	-INCOME-	-INCOME-
BEGINNING BALANCE	109,238.53	107,647.53	101,581.53
IDAHO	40,000.00	40,000.00	45,000.00
UTAH	40,000.00	40,000.00	45,000.00
WYOMING	40,000.00	40,000.00	45,000.00
WATER QUALITY	8,254.00	8,254.00	8,254.00
INTEREST ON SAVINGS	800.00	800.00	800.00
TOTAL INCOME	238,292.53	236,701.53	245,635.53
	-EXPENDITURES-	-EXPENDITURES-	-EXPENDITURES-
STREAM GAGING-U.S.G.S.	40,755.00	41,270.00	42,095.00
PERSONAL SERVICES CONTRACT	64,350.00	65,640.00	66,953.00
TRAVEL	1,200.00	1,200.00	1,200.00
OFFICE EXPENSES	1,600.00	1,600.00	1,600.00
BIENNIAL REPORT	1,000.00	1,000.00	1,000.00
TREASURER'S BOND & AUDIT	1,400.00	1,400.00	1,400.00
PRINTING	1,600.00	1,600.00	1,600.00
REALTIME WEB HOSTING	8,400.00	8,400.00	8,400.00
CLERICAL	8,340.00	8,510.00	8,679.00
TOUR		2,500.00	
CONTINGENCY	2,000.00	2,000.00	2,000.00
TOTAL EXPENDITURES	130,645.00	135,120.00	134,927.00
	107,647.53	101,581.53	110,708.53

BEAR RIVER COMMISSION
STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF July 1, 2016 TO April 13, 2017

INCOME	CASH ON HAND	OTHER INCOME	FROM STATES	INCOME
Cash Balance 07-01-16	109,238.53			109,238.53
State of Idaho			40,000.00	40,000.00
State of Utah			40,000.00	40,000.00
State of Wyoming			40,000.00	40,000.00
Water Quality		5,468.00		5,468.00
Interest on Savings		1,171.53		1,171.53
 TOTAL INCOME TO				
13-Apr-17	109,238.53	6,639.53	120,000.00	235,878.06

DEDUCT OPERATING EXPENSES

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging/USGS Contract	40,755.00	-	40,755.00
SUBTOTAL	40,755.00	-	40,755.00
EXPENDED THROUGH COMMISSION			
Personal Services BIWC	64,350.00	10,725.00	53,625.00
Travel (Eng-Mgr)	1,200.00	331.29	868.71
Office Expenses	1,600.00	1,281.62	318.38
Printing Biennial Report	1,000.00	1,000.00	
Treasurer Bond & Audit	1,400.00	1,300.00	100.00
Printing	1,600.00	1,283.80	316.20
Realtime Web Hosting	8,400.00	2,984.01	5,415.99
Clerical	8,340.00	2,627.08	5,712.92
Tour	-	-	
Contingency	2,000.00	2,000.00	
SUBTOTAL	89,890.00	23,532.80	66,357.20
TOTAL EXPENSES	130,645.00	23,532.80	107,112.20
CASH BALANCE AS OF 04/13/17			128,765.86

BEAR RIVER COMMISSION
DETAILS OF EXPENDITURES

FOR PERIOD ENDING April 13, 2017

832	VOID	-
833	BIWC	10,725.00
834	VOID	-
	Bank Service Fees	27.00
835	BIWC	6,126.25
836	USGS	40,755.00
837	STONEFLY	1,800.00
838	BIWC	6,421.15
839	BIWC	5,559.13
840	BIWC	5,563.61
841	STONEFLY	1,800.00
842	BIWC	14,784.00
843	C N A SURETY	100.00
844	STONEFLY	15.99
845	STONEFLY	1,800.00
846	BIWC	11,635.07

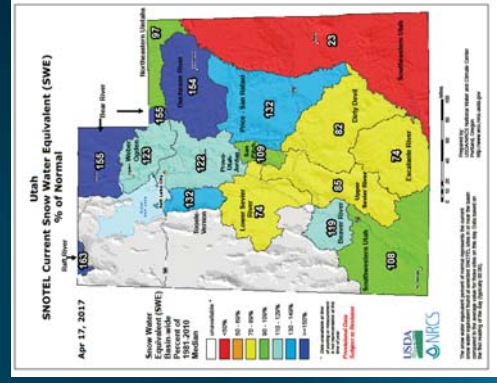
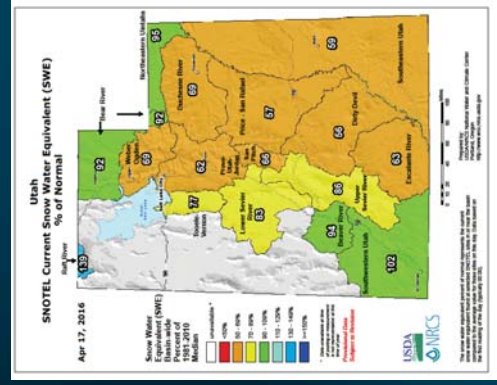
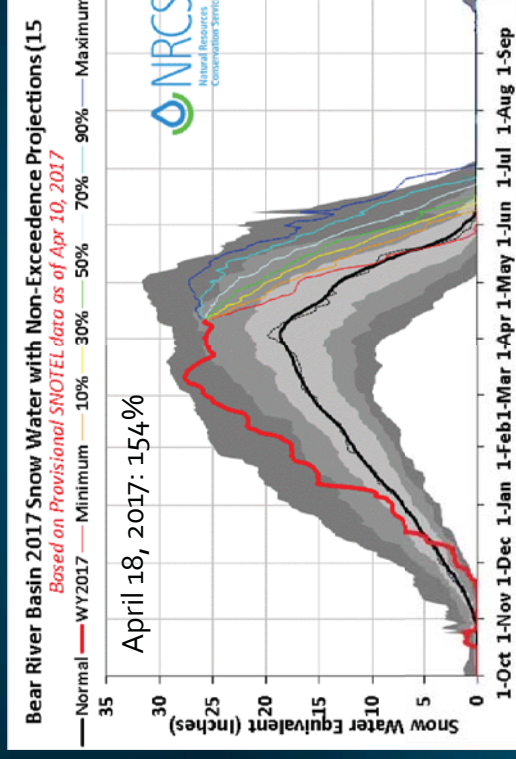
107,112.20

BANK RECONCILIATION

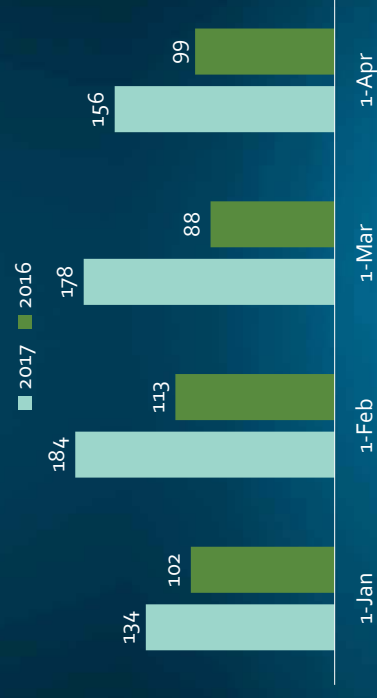
Cash in Bank per Statement 04/13/17	14,862.43
Plus: Intransit Deposits	
Less: Outstanding Checks	
Total Cash in Bank	14,862.43
Plus: Savings Account-Utah State Treasurer	113,903.43
CASH BALANCE AS OF 04/13/17	128,765.86

Bear River Basin Water Supply Outlook

April 18, 2017
Troy R. Brosten
NRCS –Snow Survey



Upper Bear (% normal SWE)

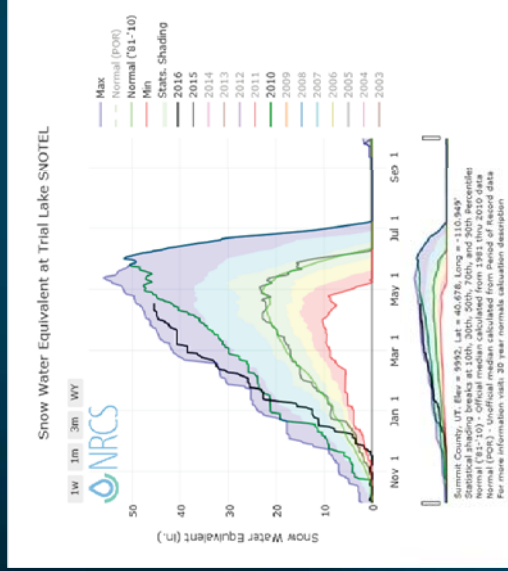


Elevation: 9992'

Current SWE: 44.9"

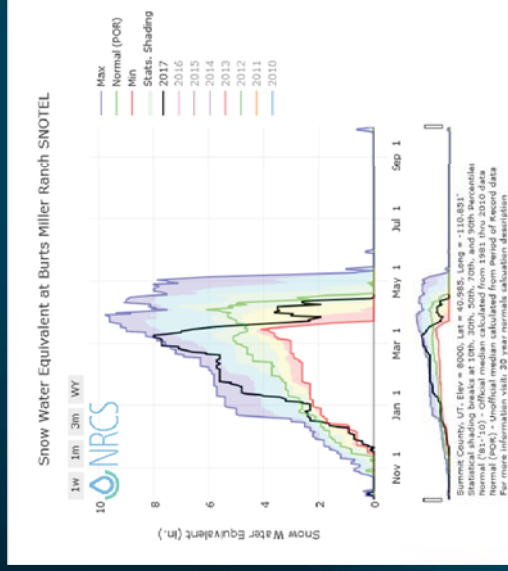
Normal SWE: 21.3"

211%



Elevation: 8000'

Current SWE: 0.0"

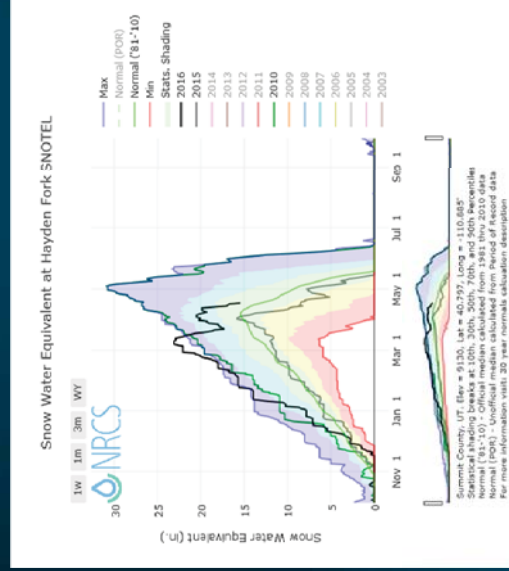


Elevation: 9130'

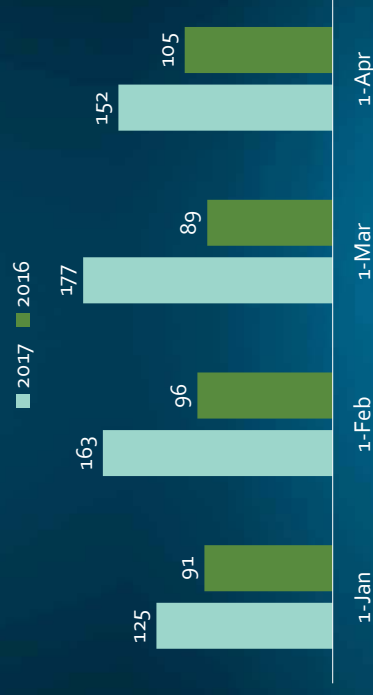
Current SWE: 14.9"

Normal SWE: 12.6"

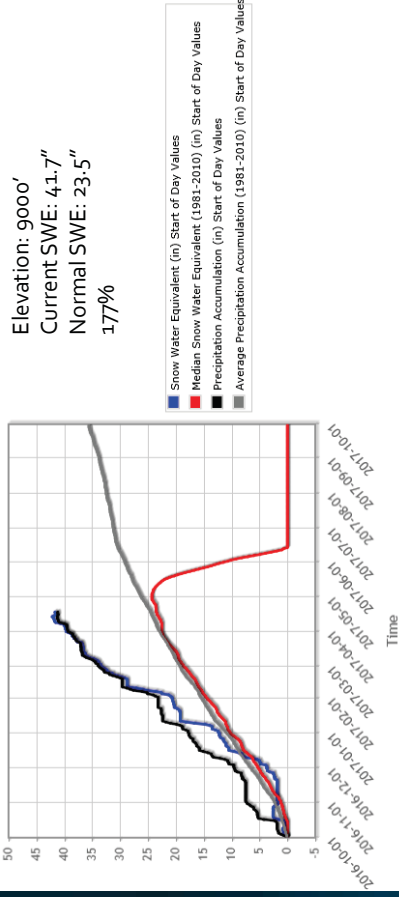
118%



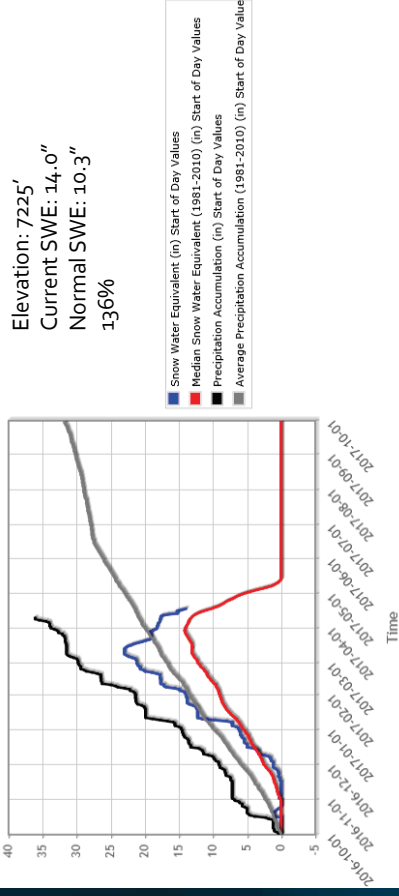
Middle Bear (% normal SWE)



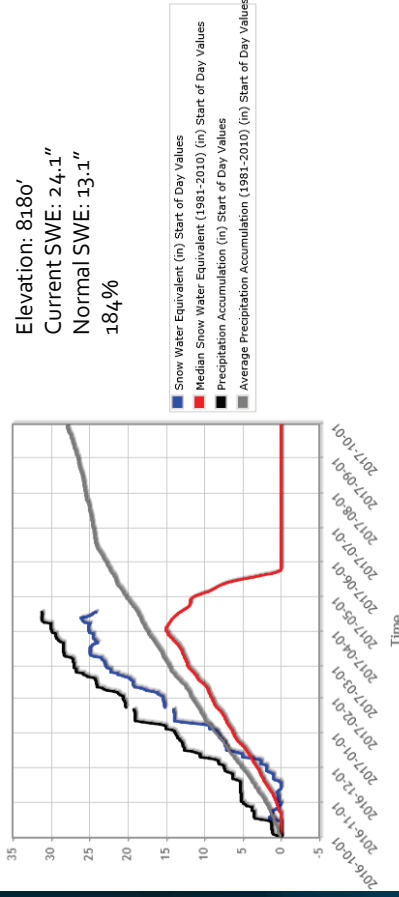
Spring Creek Divide (779) Wyoming SNOTEL Site - 9000 ft Reporting Frequency: Daily; Date Range: 2016-10-01 to 2017-



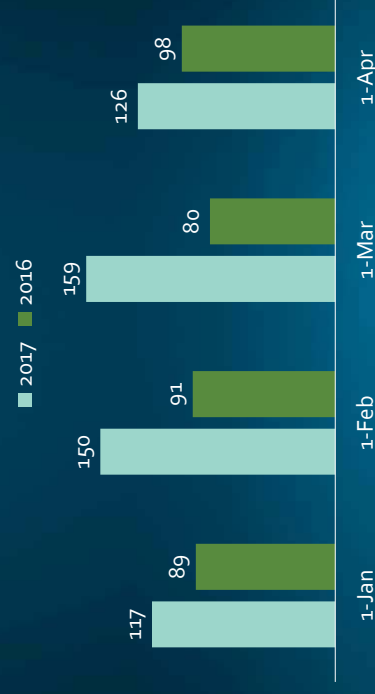
Slug Creek Divide (761) Idaho SNOTEL Site - 7225 ft Reporting Frequency: Daily; Date Range: 2016-10-01 to 2017-09-30



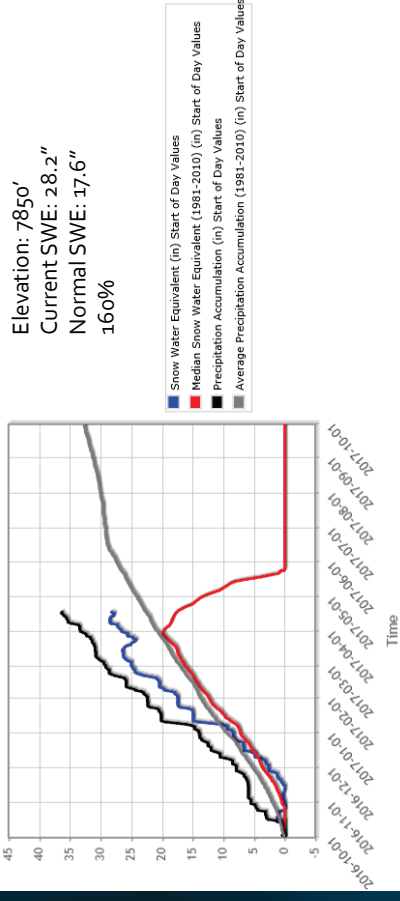
Kelley R.s. (554) Wyoming SNOTEL Site - 8180 ft Reporting Frequency: Daily; Date Range: 2016-10-01 to 2017-09-30



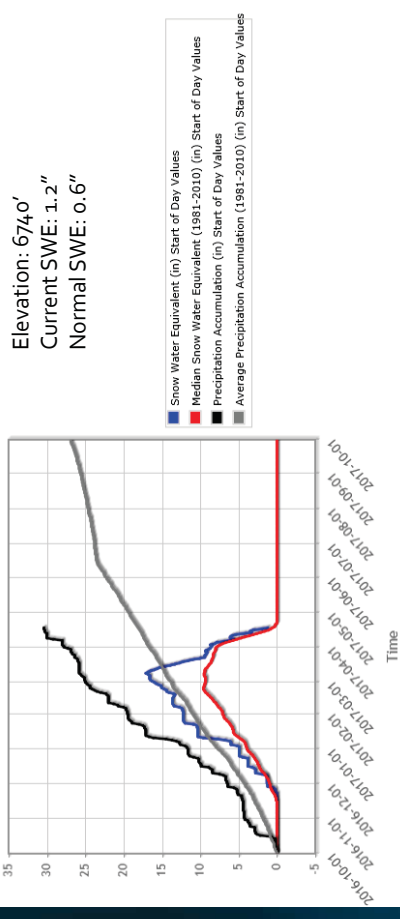
Lower Bear (% normal SWE)



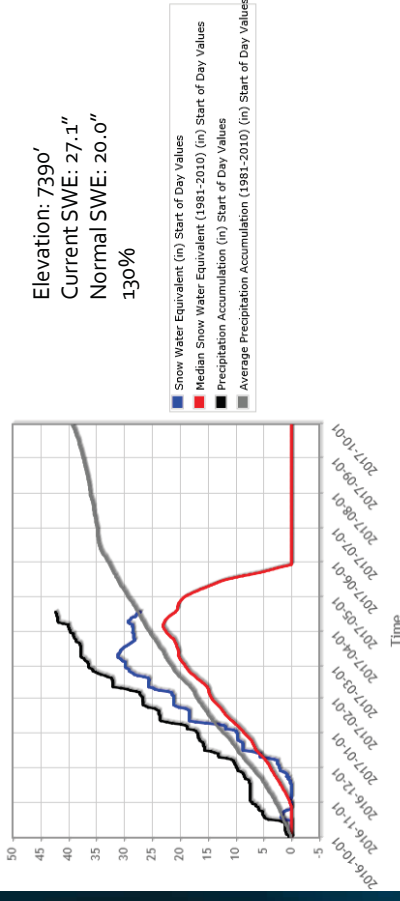
Sedgwick Peak (741) Idaho SNOTEL Site - 7850 ftReporting Frequency: Daily; Date Range: 2016-10-01 to 2017-09-30



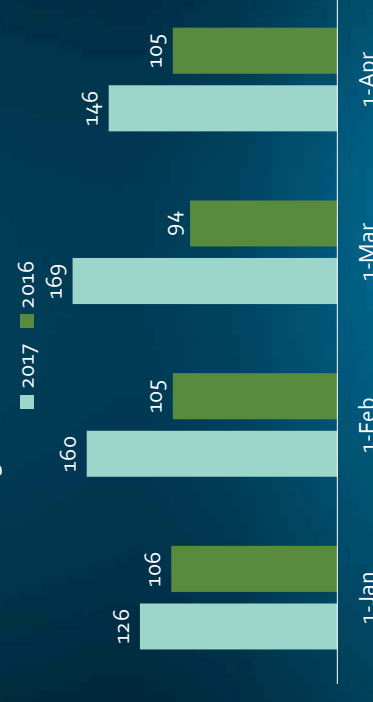
Oxford Spring (677) Idaho SNOTEL Site - 6740 ftReporting Frequency: Daily; Date Range: 2016-10-01 to 2017-09-30

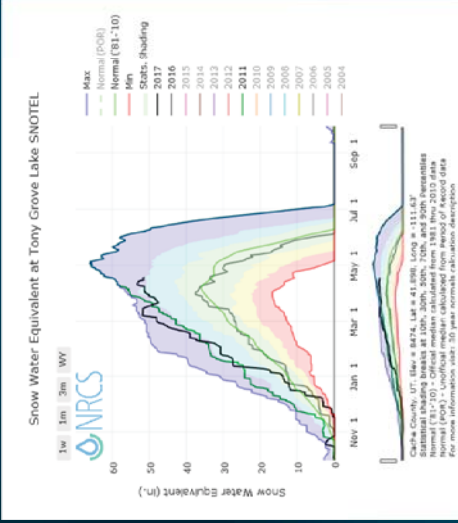


Emigrant Summit (471) Idaho SNOTEL Site - 7390 ftReporting Frequency: Daily; Date Range: 2016-10-01 to 2017-09-30



Logan River (% normal SWE)



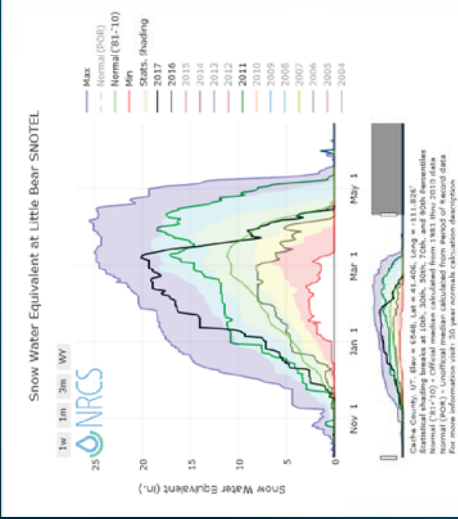


Elevation: 8474'

Current SWE: 51.3"

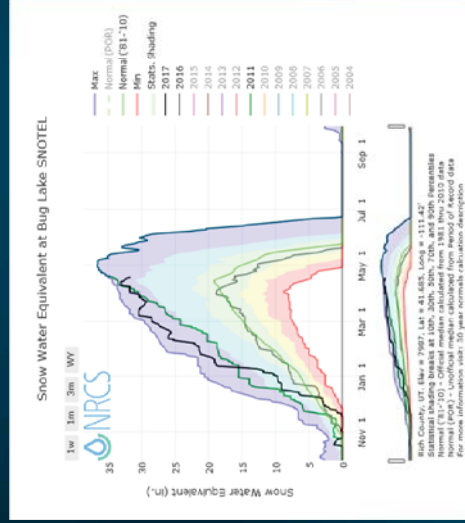
Normal SWE: 32.9"

156%



Elevation: 6548'

Current SWE: 0.0"

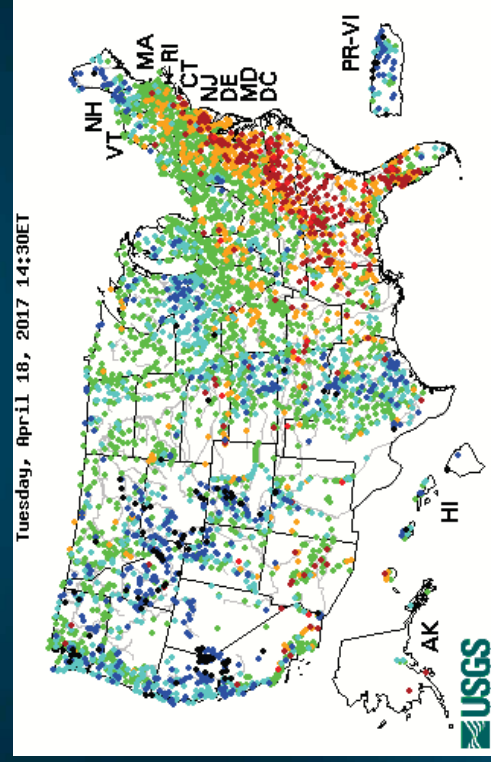


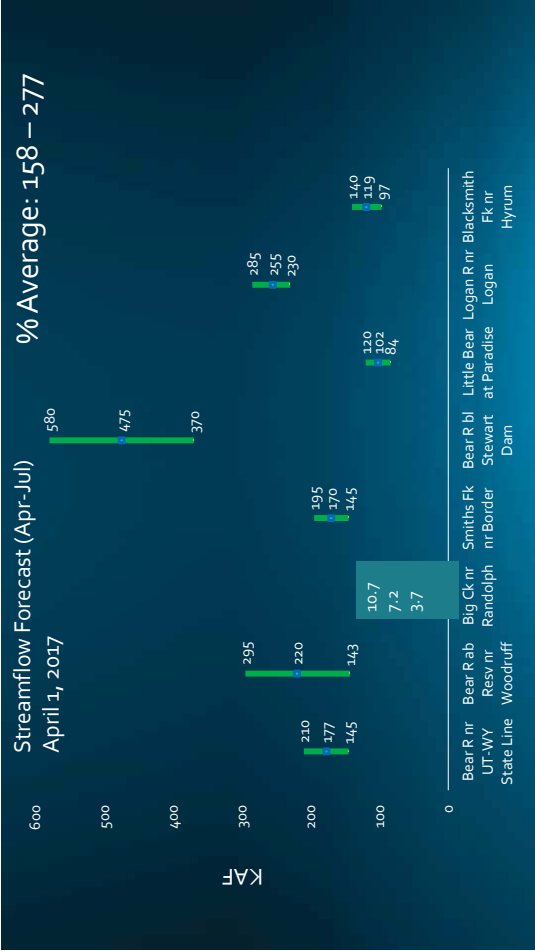
Elevation: 7987'

Current SWE: 31.7"

Normal SWE: 18.0"

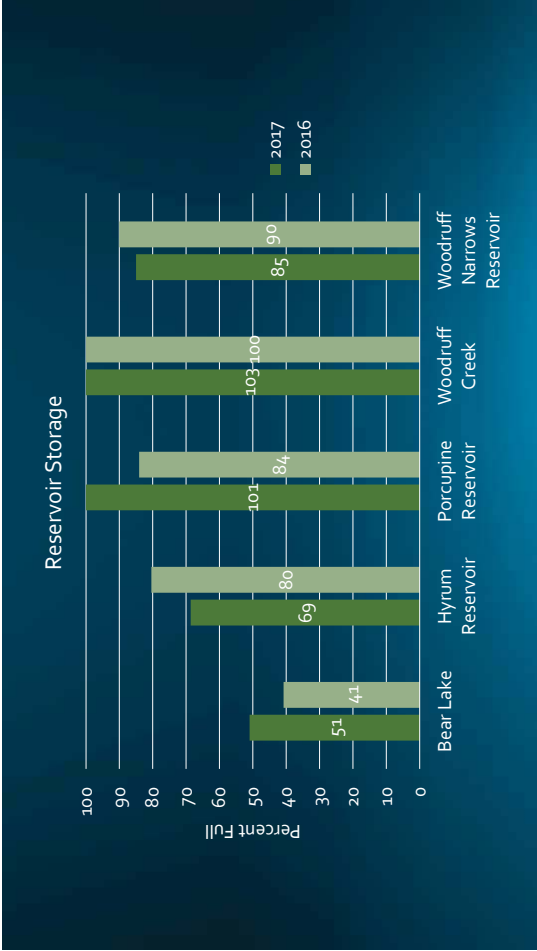
176%





Summary

- Bear River Basin SWE: 154%
 - Maintaining a good Snowpack at high elevations (> 8500').
 - Mid-elevation sites are coming off (7200-8500').
 - Low-elevation sites are nearly melted out (< 7200').
- Apr – July runoff forecasts: 158 – 277%
- Reservoirs will likely fill and Bear Lake will bank much needed water.
 - Bear Lake inflow for March 120,000 AF.
 - April 1 to April 17: 143,000 AF
 - 51% to 65% in 17 days!



Bear River Commission 20-Year Review - Options

Don & Jack Barnett
Bear River Commission

Bear River Commission Meeting
April 18, 2017
SLC, UT



**BEAR RIVER
COMMISSION**
EST. 1997




**BEAR RIVER
COMMISSION**

Compact 20-Year Review

At intervals not exceeding twenty years, the Commission shall review the provisions hereof, and after notice and public hearing, may propose amendments to any such provision, provided, however, that the provisions contained herein shall remain in full force and effect until such proposed amendments have been ratified by the legislatures of the signatory States and consented to by Congress.

Article XIV



**BEAR RIVER
COMMISSION**



**BEAR RIVER
COMMISSION**

History: 20-Year Review

- March 17, 1958 – President Eisenhower signed the original Compact
- Early 1970s – The states began reviewing the Compact and negotiating proposed revisions
- Spring 1979 – State legislatures approved the Amended Compact
- February 8, 1980 – President Carter signed the congressional consent bill
- April 16, 1996 – The Commission formally determined to begin the 20-year review process
- November 18, 1997 – The Commission formally, by resolution, concluded its review of the Compact.



**BEAR RIVER
COMMISSION**

- 
- BEAR RIVER
COMMISSION**

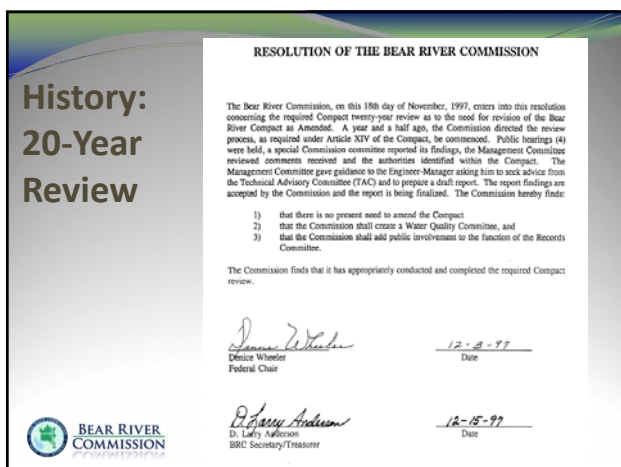
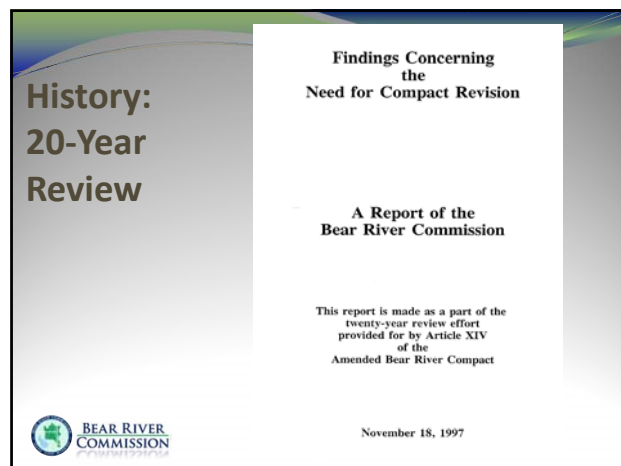
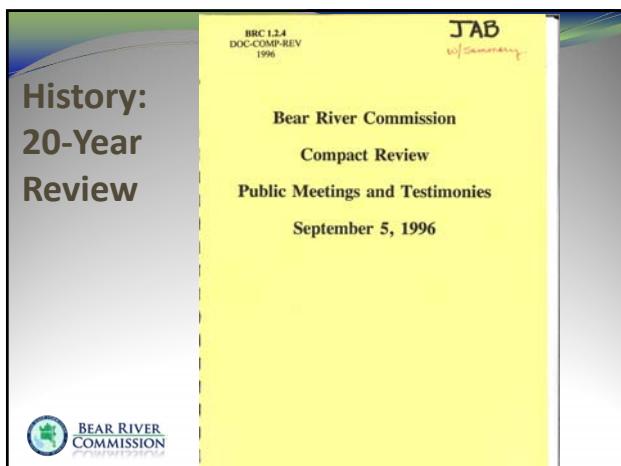
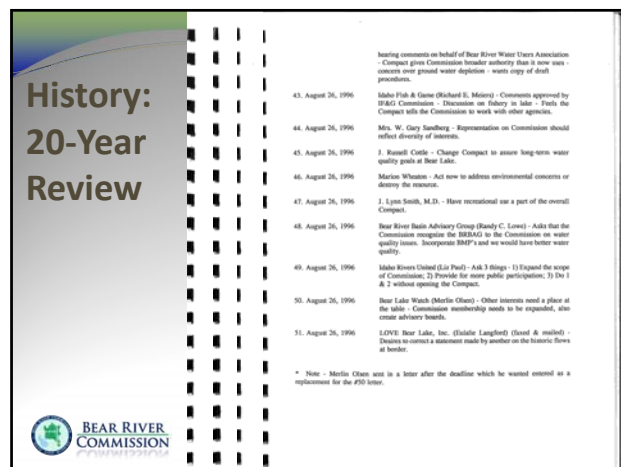
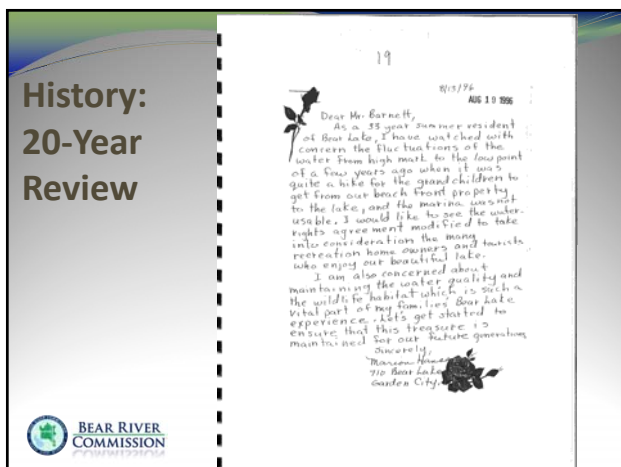
History: 20-Year Review

[illegible]

BEARING
CAPACITY
COMMITTEE

History: 20-Year Review

Page




Records and Public Involvement Committee

FINDINGS AND ACTIONS

After an 18-month period in which the Bear River Commission was involved in meetings, hearings, and research concerning the Bear River Compact, it finds that there is not now a need to amend the Compact. Many helpful suggestions and ideas have been advanced by Commission members, technical staff of the states, water user groups, and the general public. It is apparent that many new voices desire to be heard with respect to the management and operation of the Bear River and Bear Lake. The Compact gives authority to the Commission to get involved in a wide range of issues relating to the river. The Commission is the only formally constituted body with responsibility and jurisdiction over the entire river and because of this unique position, the Commission should provide leadership and a forum for discussion on issues that affect the entire river basin or major portions thereof. The Commission will create a Water Quality Committee with representation from the three State Departments or Divisions of Environmental Quality.

The Commission will rename the long-standing Records Committee, designating it as the Records and Public Involvement Committee, and instruct that committee to look for more opportunity for public involvement in Commission activities.

The Commission met on November 18, 1997 and, by formal action and resolution, implemented the above findings. The Commission's resolutions are attached to this report as Appendix A. The Bylaws of the Commission are a part of Appendix B of this report, and the Bylaws have been amended to include the actions of the Commission on November 18, 1997 and as set forth in Appendix A.




Symposiums and Tours

**BRC 2.2
EVENT-CONF
1999 - Duplicate**

**Bear Lake:
The State of Our Knowledge**

September 24, 1999
Canyon Cove Conference Center
Garden City, Utah

Co-sponsored by:
R. Harold Barnes Foundation
Bear Lake Regional Commission
Bear River Commission
U.S. Geological Survey
PacifiCorp
Bear River Water Users Association



Documents


Home Real-Time Data Documents Meeting Notices Links Contact About

Other Reports
19 documents on file:

USGS Bear Lake Reports

Notes:
In the 1960s and continuing into the early 2000s, the USGS undertook a detailed study of Bear Lake sediments and the Bear Lake catchment to better understand past climatic. Bear Lake was recognized as having unique attributes which make it a good repository of sedimentary records which, through study, would give insight into past climate change in the whole region. The efforts of the USGS personnel resulted in the writing of 14 technical papers, plus an introduction, which were subsequently published in GSA Special Paper 465. These additional papers were prepared but not published by GSA. All of these papers were provided to the Bear River Commission by the USGS for posting on this website. They can be accessed below, along with a summary of each of the papers prepared by Commission staff as a guide in understanding these papers.


[A Bear River Commission Staff Summary of the USGS Studies of Bear Lake and its Catchment - USGS studies bear lake summary](#)
[Introduction to Paleoenvironments of Bear Lake, Utah and Idaho, and its Catchment - USGS studies bear lake](#)
[Climate and Limnology of Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Geology and Geomorphology of Bear Lake Valley and Upper Bear River, Utah and Idaho - USGS studies bear lake](#)
[Late Quaternary Sedimentary Facies of Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Isotope and Major-ion Chemistry of Groundwater in Bear Lake Valley, Utah and Idaho, with Emphasis on the Bear River Range - USGS studies bear lake](#)
[Radiocarbon Ages and Age Models for the Last 30,000 Years in Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Allogenic Sedimentary Components of Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Endogenic Carbonate Sedimentation in Bear Lake, Utah and Idaho, Over the Last Two Glacial-Interglacial Cycles - USGS studies bear lake](#)
[Clasticoid Lendons in Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[A 13,000-year Vegetation and Climate Record for Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[A 19,000-year Record of Hydrologic and Climatic Change Inferred from Outcrops from Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[The Glacial-De-glacial History of Sedimentation in Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Sedimentary Constraints on Late Quaternary Lake Level Fluctuations at Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Heterogeneous and Environmental Magnetics of GSA-2000 Sediment Cores from Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[A Quarter Million Years of Paleoenvironmental Change at Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[A Continuous 250,000-Year Record of Organic and Carbon Isotopes in Outcrops and Bulk-Sediment Carbonate from Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[A Model for a Continuous, ca 250-ka Quaternary Lacustrine Record from Bear Lake, Utah and Idaho - USGS studies bear lake](#)
[Unusual Holocene and Late Pleistocene Carbonate Sedimentation in Bear Lake, Utah and Idaho, USA - USGS studies bear lake](#)



Symposiums and Tours

WHY IS BEAR LAKE SO BLUE?
and other commonly asked questions

by Jim Davis and Mark Milligan



Symposiums and Tours


**BRC 2.3
EVENT-CONF
1999 - Duplicate**

**Bear Lake:
The State of Our Knowledge**

**Tour
Lower Division of the Bear River**

August 9-10, 2000

Sponsored by:
Bear River Commission
Bear Lake Regional Commission
PacifiCorp
Denise Wheeler
Forsgren & Associates
Bear River Water Users Association





Symposiums and Tours

**BRC 2.1
EVENT-TOUR
2001**

Lower Division of the Bear River

Sponsored by:
Bear River Commission
Bear Lake Regional Commission
PacifiCorp
Denise Wheeler
Forsgren & Associates
Bear River Water Users Association

Symposiums and Tours

BEAR LAKE SYMPOSIUM

November 7, 2002
Harbor Village Resort
Garden City, Utah

Co-sponsored by:
 Bear Lake Regional Commission
 PacificCorp
 Bear River Commission
 Bear Lake Water Users Association
 Bear Lake Watch, Inc.
 Love Bear Lake, Inc.

Symposiums and Tours

Mud Lake Symposium

The Phases, Facets, and Functions of the Dingle Marsh
 May 22 + 23, 2014
 Bear Lake Area

Illustrating the
Mystery of the Marsh

Presented by:
 Bear Lake Watch
 Bear River Commission
 Bear Lake National Wildlife Refuge
 Bear River Water Users Association
 PacificCorp

Symposiums and Tours

Bear River Commission Upper Bear River Tour

June 29, 2016

Symposiums and Tours

BEAR RIVER TOURS AND SYMPOSIUMS

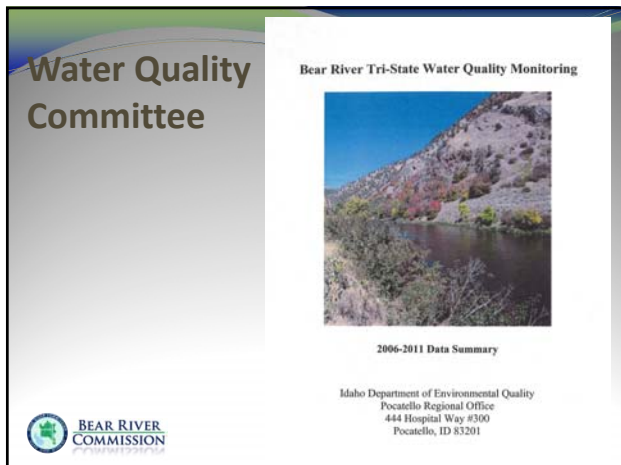
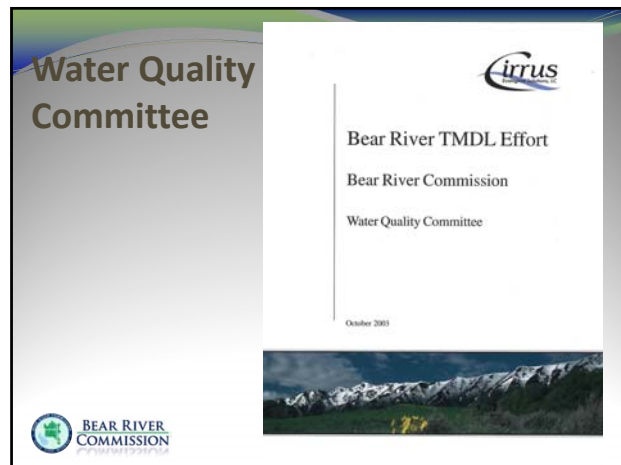
1. September 24, 1999 – Symposium
 Garden City, Utah
 "Bear Lake: The State of our Knowledge"
 Co-sponsored by Bear River Commission
 Jack Barnett spoke on Regulations and was a facilitator
2. August 9-10, 2000 – Tour
 Lower Division of the Bear River
 Two days – Lifton to Willard Bay
 Sponsored by Bear River Commission and others
3. August 13-14, 2001 – Tour
 Upper and Central Divisions of the Bear River
 Two days – Headwaters to Colville
 Sponsored by Bear River Commission and others
4. November 7, 2002 – Symposium
 Bear Lake Symposium – Garden City, Utah
 Co-sponsored by Bear River Commission
5. May 22-23, 2014 – Symposium
 Mud Lake Symposium
 Two days – at Bear Lake County Airport
 Co-sponsored by Bear River Commission
6. June 29, 2016 – Tour
 Upper Bear River
 Headwaters to Woodruff
 Sponsored by Bear River Commission

Water Quality Committee

The functions of the Water Quality Committee would be: 1) to coordinate priorities, activities, funding and standards; 2) to provide water quality input to the Commission; 3) to provide a forum for local water quality groups to interact with the Commission through the committee as an easy place to come and talk to all three states in one spot; and 4) to support coordinated local watershed management planning. The membership of the committee would include the three state DEQ leads. The committee would liberally invite other interested groups to participate on a routine basis with the committee. The Bear River Water Quality Task Force and other local watershed management groups are examples of groups to be invited on a routine basis. The chairmanship for the committee would be rotated. The committee would meet at least twice a year in conjunction with the Commission meetings but would meet at other times as necessary. Chair Wheeler asked who would be paying for the expenses of the committee. Ostler indicated that the committee would like a member of the Commission staff to attend the Water Quality Committee meetings and help with agendas and summaries of the meetings. Other expenses would be covered by the three individual states. Larry Anderson expressed the appreciation of the Commission for the willingness of the three state DEQ leads to serve on this committee.

Water Quality Committee

ORIGINAL WATER QUALITY COMMITTEE	CURRENT WATER QUALITY COMMITTEE
Idaho – Mark Lowe	Idaho – Barry Burnell
Utah – Don Ostler	Utah – Walt Baker
Wyoming – Gary Beach	Wyoming – David Waterstreet



Options: 20-Year Review

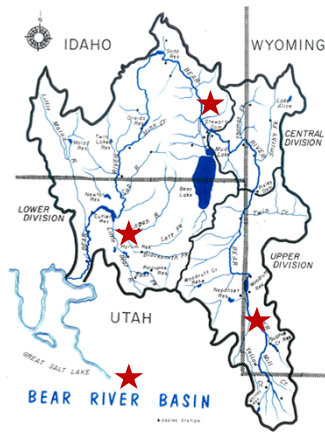


Options: 20-Year Review

- At the April Commission meeting the Commission formally enter into the 20-year Compact Review process,
- the Commission direct that the Engineer-Manager and the TAC find ways to provide notice of such action,
- potentially under the direction of the Records Committee, with the assistance of the Engineer-Manager and the TAC, the Commission schedule three public meetings in the late summer/early fall,



History: 20-Year Review



Options: 20-Year Review

- at the April Commission meeting the Commission formally enter into the 20-year Compact Review process,
- the Commission direct that the Engineer-Manager and the TAC find ways to provide notice of such action,
- potentially under the direction of the Records Committee, with the assistance of the Engineer-Manager and the TAC, the Commission schedule three public meetings in the late summer/early fall, one in each of the three states, with the object of answering questions relative to the Compact and receiving public input,
- the Commission schedule a special additional public meeting Salt Lake City,



Options: 20-Year Review

- prior to the public meetings, informational materials on the Compact and Commission (materials might include some kind of fact sheet or brochure, as well as information which can be posted on the Commission's website),

Findings Concerning the Need for Compact Revision

A Report of the Bear River Commission

This report is made as a part of the
twenty-year review effort
provided for by Article XIV
of the
Amended Bear River Compact

November 18, 1997



Options: 20-Year Review


- prior to the public meetings, the TAC prepare some type of informational materials on the Compact and Commission (materials might include some kind of fact sheet or brochure, as well as information which can be posted on the Commission's website),
- the Commission be directed to put a splash notice on its webpage notifying the public of the 20-year Review process, provide information relative to the Compact and Commission, provide information about public meetings, and provide information on how individuals or entities can provide public comment,





Options: 20-Year Review

- the Commission identify a deadline for submittal of public comments, which is potentially 30 days after the last public meeting,
- after the close of the public comment period, the Engineer-Manager and/or the TAC compile the comments and forward such to the Management Committee, and
- the Management Committee consider the comments and report back to the Commission proposed direction and/or actions.



Direction: 20-Year Review

- Questions –
- Action – Commence 20-Year Review?
- Notice –
- Materials –
- Commission's website –
- Public meetings –
- Written comments –
- Tabulation of comments –
- Review by Management Committee –



SUMMARY OF WATER YEAR 2016 BEAR LAKE OPERATIONS AND IRRIGATION ALLOCATION FOR 2017

Date	Hydrologic Information/Event	Contents (% of Full) Discharge (% of Normal)
10-01-15	Bear Lake Beginning Elevation - 5,911.55 ft.	592,476 acre-feet (42%)
12-09-15	Bear Lake Low Elevation - 5,911.18 ft. (see note 1)	568,444 acre-feet (40%)
	Rainbow Inlet Canal Discharge	188,000 acre-feet (72%)
	Bear River Discharge Below Stewart Dam	2,300 acre-feet
	Bear Lake Net Runoff (Computed Total Inflow less Lake Evaporation)	188,000 acre-feet (58%)
06-24-16	Bear Lake High Elevation - 5,914.44 ft.	783,421 acre-feet (55%)
	Outlet Canal Releases: 10/1/15 - 10/6/15; 11/13/15 - 11/18/15; 6/2/16 - 9/23/16	244,000 acre-feet
07-01-16	Outlet Canal Maximum Release - 1,566 cfs	
	Bear Lake Storage Release (see note 2)	166,000 acre-feet
09-30-16	Bear Lake Ending Elevation - 5,910.68 ft.	536,093 acre-feet (38%)
	Bear Lake Settlement Agreement "System Loss" Volume (see note 3)	12,900 acre-feet

Notes

1 Low contents prior to start of storage.

2 Net irrigation storage release from Bear Lake, subtracting Rainbow inflow and the decreed adjustment for the natural yield of Bear Lake and Mud Lake area.

3 Due to uncontrolled flow from (welcome) rain events. Whenever water flows below Cutler during the irrigation season any storage water in the system at Cutler is the first water out. Natural flow goes to irrigators.

Water Year 2016

The water year began with water releases from the Outlet to support on-going late-season irrigation demand downstream. Releases from the outlet canal were made in November to refill Alexander Reservoir after completion of spill gate replacements. The volume released from the Bear Lake Outlet Canal was equivalent to the water released from Alexander Reservoir for irrigation purposes. The Bear Lake Outlet Canal was opened June 2, 2016 and was closed September 23, 2016.

Current Status

Bear Lake elevation as of April 17, 2016 was 5,916.57 feet (927,497 acre-feet, 65% of maximum volume) and the Rainbow inlet canal is flowing at 2,800 cfs. The Bear Lake Outlet Canal is closed.

The seasonal low elevation of Bear Lake of 5,910.69 feet occurred on October 2, 2016. This was a bit earlier than usual because water was transferred from Mud Lake to Bear Lake beginning September 30, 2016 to draw down Mud Lake for LiDAR elevation data acquisition mid-October 2016.

Irrigation

The anticipated spring maximum elevation of Bear Lake is 5,922.6 feet. Bear Lake Storage Irrigation Allocation of 245,000 acre-feet was declared on April 12, 2017. It is anticipated that because of the plentiful runoff, no water will be needed for irrigation purposes this season. Flood control releases are anticipated to begin August 1st.