



MINUTES

BEAR RIVER COMMISSION REGULAR MEETING ONE HUNDRED TWENTY-FIFTH COMMISSION MEETING NOVEMBER 25, 2014

BEAR RIVER COMMISSION

106 West 500 South
Suite 101
Bountiful, Utah 84010-6203
801-292-4662
801-524-6320 fax

CHAIR
Jody Williams

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

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

**WYOMING
COMMISSIONERS**
Sue Lowry
Sam Lowham
Gordon Thornock

ENGINEER-MANAGER
Don A. Barnett

I. Call to order – The regular meeting of the Bear River Commission was called to order by Vice Chair Kerry Romrell at 1:10 p.m. on Tuesday, November 25, 2014, at the Utah Department of Environmental Quality building in Salt Lake City, Utah. This was the one-hundred twenty-fifth meeting of the Commission. Romrell began by asking Jack Barnett to introduce the new Federal Chair. Barnett introduced Jody Williams and shared some information about her background and experience. The Commission gave her a warm welcome. Chair Williams said that she felt honored to have received this appointment and to have the opportunity to work with the Commission. Williams asked the Commissioners and audience to introduce themselves. An attendance roster is attached to these minutes as Appendix A.

Williams then addressed the agenda for the meeting. The agenda was approved without change, and a copy 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 April 15, 2014, in Salt Lake City, Utah. Sue Lowry made a motion to approve the minutes with a couple of small clarifying edits. The motion was seconded and passed.

III. Reports of Secretary and Treasurer – Randy Staker handed out sheets showing income and expenditures for FY2014 and for FY2015 to date (see Appendix C). Expenses for FY2014 totaled \$141,401.25, leaving a cash balance at the end of the fiscal year of \$109,266.42. Staker then turned to FY2015. He noted that the Commission will no longer be receiving funds from the U.S. Fish & Wildlife Service for stream gaging. He also noted that the payment for stream gaging has decreased. With income and expenditures to date, the cash balance in the account was \$153,106.23. A motion to accept the Treasurer's report was passed.

IV. The phenomenally wet August and September 2014 – Dr. Rob Davies from the Utah Climate Center at Utah State University shared numbers for the water year ending in September 2014. Though it had been a dry year, the precipitation received in August and September pushed the Bear River watershed to 110-150 percent of normal. Commissioner Francis reported that he had 14 inches of rain at his ranch during that time, which must have been some kind of record for that area.

Davies then addressed the subject of climate change. He noted a dichotomy in our society between the issue of climate change and the science of climate change. Those who work in climate science take climate change very seriously. He reported that for the seventh time, the Pentagon has listed climate change and its impacts this century as the single largest security threat to the United States. Climate change is not really “average weather,” but is actually the “statistics of the environment over time.” The temperature is definitely changing, which affects soil properties and water properties, as well as atmospheric properties. In dealing with climate predictions, it is necessary to untangle longer term trends (climate change) from short-term variabilities that can happen on year-to-year or multi-year time scales. Davies reported that they have identified three quite prominent cycles with their origins in the Atlantic, the Pacific and the Arctic that sometimes overlap to produce very strong precipitation years or very weak ones.

Davies showed some graphs of temperature change at different places in Utah. The slowest warming in Utah is taking place in the north, with the southern part of the state warming much faster. These temperature changes result in intensification of the water cycle, which means more intense precipitation and more evaporation. Drier areas become even drier. There has been more precipitation in northern Utah over the last 40 years, but less of it is coming as snow and more as rain. As a result, the snowpack has been decreasing, which is a strong trend. There is also a significant drop in snow cover, moving up in elevation. Winter storms are becoming less frequent, but more intense. This trend is expected to continue.

Davies explained that they use climate models as they look to the future. The models show an average temperature rise of around 10-12°F in Utah over the next 85 years, which is a pretty extreme scenario. For Utah this would mean increased air temperature over lands, increased precipitation as rain, and a declining snow pack. As we depend heavily on snowpack runoff, this change will have a very strong impact on our water issues. There will also be a dramatic change in groundwater as a result of increased evaporation. Davies concluded with a final question: Are these trends, particularly in the latter half of the century, a reflection of a change in climate state as a result of the warming climate, or is this simply an unusual event in our climate state and we can expect to drop back into something different in the not too distant future? The answer is that we do not know.

V. Utah’s Bear River Development plans – Eric Millis mentioned that Utah has been working on the Bear River Development Project for quite some time, even though it will not be built for many years. The project is important for Utah’s future due to the rapid growth in population along the Wasatch Front. Millis introduced Marisa Egbert who shared a PowerPoint presentation on the project (see Appendix D). Egbert explained that Utah is expected to double in population by 2060, which will require an additional 750,000 acre-feet of water. She explained three strategies they intend to use to come up with the needed water, which include conservation, expansion and optimization. Under the expansion category there are two large projects that the Division of Water Resources is currently overseeing, which are the Bear River Development Project and the Lake Powell Pipeline Project. Approximately 40 percent of the needed water for the future will come from these two development projects. They are presently in the planning stages for the Bear River Development Project. Egbert explained the allocation of the total project water rights of 220,000 acre-feet among the four participating agencies. This water must be captured during the winter and spring in reservoir storage to be used when it is needed during the summer. There will be a need for 240,000 to 250,000 acre-feet of storage. They have looked at a number of potential reservoir sites in the Basin, with seven on their short list. Depending on the location and size of the reservoirs, there will likely be two or three sites needed. This is a huge project requiring enormous pipelines which will be built in stages, based on the water being first needed by 2035.

In response to a question on how to change public opinion on building reservoirs, Egbert explained that they are working on educating people about the need. As people become more informed about the need and the planning, they begin to understand. It is important to plan ahead instead of waiting for a crisis.

VI. Three Creeks rangeland efforts – Taylor Payne works in the Grazing Improvement Program at the Utah Department of Agriculture and Food. He discussed some grazing management practices they are trying to initiate in Rich County. He explained that the idea for this project originated in 1991 by Kevin Conway who was the State Director of Wildlife Resources at the time. Conway spent a lot of time at the Deseret Land and Livestock Ranch becoming familiar with their wildlife populations and their grazing management. He was impressed with their successful grazing management plan which allowed for growing season rest on 20 percent of the ranch each year, along with healthy riparian areas and better water quality. In spite of opposition from those who felt it couldn't be done on public lands and would be too expensive, he pushed for this type of a program on public ranges.

Payne explained that they were looking at challenging areas in Rich County and the allotments that different groups of grazing permittees operate under. These allotments were made by BLM and the Forest Service back in the 1960s and lumped different people together to graze in certain areas. These allotments provided boundaries, but not the necessary management or flexibility for good resource management. They didn't have the money to put capital improvement projects in place. The system also led to certain people doing the majority of the work, which caused social problems.

Payne noted that the project area they are working on includes 136,000 acres and encompasses BLM, Forest Service, SITLA and private lands. This is a large area to manage as they have to consider private property rights and preferences from the different entities, along with water rights. They came up with a number of allotments and figured out how to divide it into sub-pastures so they could rotate the herds. They found that there wouldn't be a need for a lot of additional fencing to make enough pasture to incorporate at least 10 percent of the area into growing season rest every year. They needed to come up with a plan to water all the livestock in the different locations. They evaluated the water rights that are held by different entities in the area and looked at water troughs, small reservoirs and storage tank sites to deal with the water needs. It would be necessary to put in about 90 additional miles of stock water pipeline, along with quite a few troughs. Much of the existing system can also be retrofitted to meet capacity needs.

There are 29 different permittees which need to work together to make this happen. They have created a business structure that allows the current people to have ownership over the project, so that they can proceed without always looking to BLM and the Forest Service to tell them what to do. These people will have to make sure the program is working as planned. The labor will be contracted, which would include cowboys, fence maintenance people and those who oversee the water situation. They have looked to Deseret Land and Livestock as an example in these areas.

Payne explained what is being done in the Three Creeks area as an example. The entities came together and formed an LLC. Everyone gave up their rights to a personal grazing permit to the LLC and each owns a share in the LLC. There are lease agreements written to private property owners so they still have their exchange of use permit. They got credit for their private ground being lumped together with the public ground, which made it possible for nothing to change except the business structure. This group uses all contracted labor and it has been an amazing change already.

They have been able to accomplish this with a group of 16 people, including their neighbors on the north and south, which has become a successful pattern to follow.

Payne noted that they have spent a lot of time going through the NEPA process and getting different agencies to agree to different aspects of the project. It has been a fight to get people to give a little and take a little, but he feels that they have come to a point where a Record of Decision should be close. He mentioned that some of the funding partners have been excellent, especially the Utah Department of Water Quality. The projected total cost of the project is estimated to be a little over \$25 per acre. Payne felt that this very novel idea would be a great model to use in other areas of the state and in other states.

VII. FWS – Initiation of CCP at the Bear River Migratory Bird Refuge – Bob Barrett from the Bear River Migratory Bird Refuge explained that the Refuge contains about 8,000 acres and is located at the end of the Bear River where it meets the Great Salt Lake. It is also one of the key locations for hundreds of thousands of birds important to the western hemisphere. These nesting and migrating birds are found at the Refuge in concentrations like nowhere else in the world. It is an amazing place with over 200,000 visitors a year visiting the Refuge.

Barrett explained that the Fish & Wildlife Service is beginning a planning effort to develop a 15-year vision for Bear River Migratory Bird Refuge. As all the water coming through the Refuge is from the Bear River system, they are anxious to include ideas and suggestions from the Bear River Commission into their planning effort. He invited the Commission to be a part of this process and to visit the Refuge.

The Commission then took a break, during which time they were able to see several displays from the Mud Lake Symposium which was held in May.

VIII. Records & Public Involvement Committee report – Charles Holmgren reported on the meeting of the Records & Public Involvement Committee held earlier in the day. He noted that they discussed stream gaging, in particular the Evanston gage which has been dropped. Cory Angerth added that the Evanston gage had traditionally been operated by the Wyoming office of the USGS cooperatively with the City of Evanston. As the City discontinued its funding of the gage, the gage is currently not in operation. He also mentioned that the Bear River above Woodruff Narrows Reservoir gage is now being fully funded by the USGS through the National Streamflow and Information Program and that the Corinne gage is now being funded by the U.S. Fish & Wildlife Service directly with USGS. Holmgren noted that the water quality agencies from the three states will continue to contribute to stream gage funding as they have been doing in the past. The group was to review the list of stream gages and note any changes that have occurred. It was reported that there were two new real-time data stations in Utah, as well as two in Idaho.

Holmgren reported that the Water Information System at USU will continue to have funding for the next few years. It is anticipated that the 18th biennial report will be ready by the spring meeting, and Don Barnett is waiting for information to finish the 2014 chapter. The report will include an update of the depletion values in the Basin.

Jack Barnett reported that the Mud Lake Symposium held in May was very successful. Reports had been given in committee meetings earlier on particular parts of the symposium. Don Barnett shared some information about the ancient geology of the Bear Lake and Mud Lake area and what it was like when man found it. There is a lot of evidence that the lake was much bigger at times, and it

has also been smaller at certain times. It is believed that Bear Lake may be the oldest lake in North America. Barnett talked about the faults on both sides of the lake, the movement of which has enabled the lake to deepen and continue to hold water in spite of sediment buildup. There has been a significant water supply from Bear River, which has fed the lake most of the time. Claudia Cottle then reported that they could not find a book that compiled information about the story of the marsh and how it was discovered and used by man. She was able to learn, however, that there were trappers and explorers who came to the area, and eventually surveyors who were sent by the government to discover the resources available in the west, including John Wesley Powell. The government pursued ways to use reservoirs and channel the water for use by those who settled the area. Eventually Utah Power & Light became involved in a project there, resulting in the construction of the diversion dam on Bear River, the Rainbow Canal and the Lifton pumping station. Don Barnett and Connely Baldwin then showed some very old photographs of the early construction projects at Bear Lake. Barnett expressed appreciation to Dave and Claudia Cottle and others who helped with the symposium.

IX. Operations Committee report – Blair Francis reported on the meeting of the Operations Committee. He noted that they spent some time discussing the operations of the Bear River during this unusual water year. There was no interstate water emergency declared in the Upper Division, and they actually ended up with a significant increase of water in the reservoirs from the previous year. He noted that in the last several years there has been more cooperation in working things out with the water distribution. He noted that due to the elevation of Bear Lake, there will be no upstream storage restrictions in 2015. Francis reported that no regulation took place in either the Central or the Lower Divisions.

Connely Baldwin passed out a summary of Bear Lake operations for water year 2014 (attached as Appendix E). He noted that the primary indicator for Bear Lake showed a 56 percent of average year, but with the rains and runoff and snow from Wyoming, they ended up not needing as much storage water. They actually ended up with a higher lake elevation than the previous year. He felt the outlook for irrigation allocation in 2015 was good.

Francis reported that the committee had reviewed the depletion update effort and noted that there were a few items that they wanted to move ahead on. They also wanted to review procedures with respect to the Lower Division water delivery schedule and make some minor changes to Idaho section water rights. They also heard a report on several new water use proposals in the three states.

X. Water Quality Committee report – Walt Baker gave a report of the Water Quality Committee meeting held the previous day. He noted that good stream gage information is essential for TMDLs, water quality studies and the computation of pollutant loadings, so the water quality departments in each of the states are pleased to support this effort by contributing 20 percent of the funding for the stream gages. He also mentioned that they are in the ninth year of the cooperative monitoring effort where the three states pool their resources in monitoring on the Bear River. There is an economy of scale in the cooperative effort and they have found it to be very valuable. They originally committed to ten years, so they will evaluate after one more year to determine if the program will be continued. Baker noted that in Wyoming a TMDL is being conducted on a reach of the Bear River between Sulphur Creek and Woodruff Narrows for 36 miles. This implementation holds the prospect for the agricultural community to enlarge and improve the water they have in reservoirs by impeding the amount of sediment going in, which not only improves water quality, but also water quantity. In Idaho there are continued TMDL implementations on projects in Grace

and Preston. In Utah there is a TMDL at Cutler Reservoir in Cache Valley. Funding has been secured for Logan City to construct a \$115 million wastewater treatment plant that will treat for ammonia and phosphorus and potentially nitrogen, abandoning the lagoon system in Logan that has served the communities there for 50 years. The project hinges on an agreement between seven communities that will be served by the wastewater treatment plant, and they are working through some issues there. Idaho has been one of only four states in the nation that have not been delegated in the NPDES program. Idaho is now looking to remove itself from that list and is seeking that delegation.

XI. Management Committee report – Gary Spackman explained that they are now in the post-depletion analysis period of time, and the Management Committee discussed in detail how to go forward from this point. They wondered how earnest to be in moving forward with trying to determine some parallel and agreeable methods on analyzing depletions as there were some methods that were disparate between the Bear River states on the analysis. They talked about three areas. The first is the analysis of supplemental acreage in irrigation depletions. In that area the states are probably farther apart in their methods of analysis. They talked about looking at evapotranspiration numbers because there was some discussion about which numbers should be used and which is the best method. Last was a discussion about municipal and industrial use. The Management Committee felt it best to be zealous in moving forward on these issues, so they are asking the TAC to be more active and perhaps meet more often during the next year. They would like the TAC to come back to them with some recommendations. With respect to supplemental depletions, the TAC should discuss how the three states can find a uniform method to the degree possible in determining those supplemental depletions. Each of the states' methods had some value and perhaps there could be some kind of a hybrid solution. They felt this effort could probably be conducted without a lot of additional funding. Second, they would like the TAC to make some recommendations on possible ways of evaluating ET. Part of the reason for urgency is that there is a budget cycle coming up for one of the states where they could consider additional funds, if needed. Third, they would like the TAC to give them some recommendations about municipal and industrial depletions.

Spackman then mentioned that Idaho is looking very seriously at commencing an adjudication. He suggested to the Management Committee that he felt the Commission was the right place for coordination, particularly with the State of Utah which is in the middle of an adjudication. He felt that if they could match up values and approaches and have two separate decrees, that the Commission could sponsor a venue for those discussions. He asked Commissioner Williams to give some thought to how they might organize a forum for this purpose.

XII. Engineer-Manager's report – Don Barnett reported that he had no particular items to report beyond what had already been discussed.

XIII. State Reports – Wyoming – Sue Lowry reported that there had been some personnel changes in Wyoming. She welcomed Travis McGinnis as their new river commissioner in the Evanston area. She noted that Jodee Pring, who was serving on the TAC, had moved from the State Engineer's office to the Water Development Commission. Lowry explained that Governor Mead had unveiled an energy strategy a couple of years earlier and that he was now working on a water strategy, and they are anxious to see what that document contains when it is released in January. Lowry also reported that Wyoming has been funding to the tune of about \$9 million a multi-year analysis of whether weather modification works and is statistically significant. Results of that study will be revealed in December.

XIII. State Reports – Idaho – Gary Spackman gave a fun welcome to the new Commission Chair, Jody Williams. He had nothing else to report from Idaho.

XIII. State Reports – Utah – Eric Millis noted that Marisa Egbert had already covered the main item from Utah, which was the Bear River Development Project. He reported that Utah has put together a quagga mussel steering committee to deal with the issue in the waters of the state. He noted that the snow pack in the Bear River drainage was looking better than other areas of the state and that they were starting their cloud seeding program, hoping for some good storms through the winter.

XIV. Other/Public comment – Carly Burton reported from the Bear River Water Users Association. He commented on the wonderful turnaround in the water situation from January to April. He also noted some new water right applications in Cache County which they have some concerns about. He felt that the keys to successful water right transfers are a solid mitigation plan and accurate monitoring plans for future water use.

David Cottle from Bear Lake Watch mentioned that they would work to get information from the Mud Lake Symposium online for everyone to access. He noted that the Merlin Olson Summer Classic golf tournament continues to raise funds for the data collection and research on Bear Lake. He expressed appreciation for all the cooperation and coordination that has benefited the Bear River and Bear Lake. He also mentioned that the Bear Lake Settlement Agreement would have its 20-year anniversary the following year.

XV. Next Commission meeting – Chair Williams noted that the next Commission meeting would be held on Tuesday, April 21, 2015, and they were still working on the location for those meetings. The meeting was then adjourned.

ATTENDANCE ROSTER

BEAR RIVER COMMISSION REGULAR MEETING

Utah Department of Environmental Quality Building
Salt Lake City, Utah
November 25, 2014

IDAHO COMMISSIONERS

Gary Spackman
Kerry Romrell
Curtis Stoddard

WYOMING COMMISSIONERS

Sue Lowry
Gordon Thornock
Jade Henderson (Alternate)

FEDERAL CHAIR

Jody Williams

UTAH COMMISSIONERS

Eric Millis
Charles Holmgren
Blair Francis
Joseph Larsen (Alternate)

ENGINEER-MANAGER & STAFF

Don Barnett
Jack Barnett
Donna Keeler

OTHERS IN ATTENDANCE

IDAHO

Josh Hanks, Watermaster
James Cefalo, Department of Water Resources

UTAH

Walt Baker, Department of Environmental 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
Marisa Egbert, Division of Water Resources
Taylor Payne, Department of Agriculture and Food
Nathan Schwebach, Department of Natural Resources

WYOMING

Mike Johnson, State Engineer's Office
Kevin Payne, State Engineer's Office
Travis McInnis, State Engineer's Office

OTHERS

Connely Baldwin, PacifiCorp Energy
Claudia Conder, PacifiCorp Energy
John Mabey, PacifiCorp Energy
Cory Angerth, U.S. Geological Survey
Ben Radcliffe, Bureau of Reclamation
Bob Barrett, U.S. Fish & Wildlife Service
Sharon Vaughn, U.S. Fish & Wildlife Service
Robert Davies, Utah Climate Center
Darin McFarland, Bear River Canal Company

Claudia Cottle, Bear Lake Watch
David Cottle, Bear Lake Watch
Carly Burton, Bear River Water Users Association
Randy Budge, Bear River Water Users Association
Brent Rose, Bear River Water Users Association
Bob Fotheringham, Cache County
Mike Collins, Bowen Collins
Scott Clark, Barnett Intermountain Water Consulting

**BEAR RIVER COMMISSION REGULAR MEETINGS
November 24-25, 2014**

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

**Records & Public Involvement and Operations Committee Meetings
Utah Department of Natural Resources
1594 West North Temple
Salt Lake City, UT**

**Bear River Commission Meeting
Utah Department of Environmental Quality
195 North 1950 West
Salt Lake City, Utah**

COMMISSION AND ASSOCIATED MEETINGS

November 24

10:00 a.m. Water Quality Committee Meeting – Red Rock Conference Room Burnell

November 25

9:00 a.m. Records & Public Involvement Committee Meeting – Room 314 Holmgren

10:00 a.m. Operations Committee Meeting – Room 314 Lowham

11:15 p.m. Informal Meeting of Commission – Room 314 D. Barnett

11:30 p.m. State Caucuses and Lunch Spackman/Millis/Lowry

1:00 p.m. Commission Meeting – DEQ Board Room, Main Floor Williams

PROPOSED AGENDA
REGULAR COMMISSION MEETING

November 25, 2014

Convene Meeting: 1:00 p.m.

Chair: Jody Williams

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|------|---|---------------|
| I. | Call to order | Romrell |
| | A. Introduction of Federal Chair | J. Barnett |
| | B. Welcome of guests and overview of meeting | Williams |
| | C. Recognitions | |
| | D. Approval of agenda | |
| II. | Approval of minutes of last Commission meeting | Williams |
| III. | Reports of Secretary and Treasurer | Millis/Staker |
| | A. 2014 budget closeout | |
| | B. 2015 expenditures to date | |
| | C. Other | |
| IV. | The phenomenally wet August and September 2014 | Davies |
| V. | Utah's Bear River Development plans | Egbert |
| VI. | Three Creeks rangeland efforts | Taylor Payne |
| VII. | FWS – Initiation of CCP at the Bear River Migratory Bird Refuge | Barrett |

BREAK

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| VIII. | Records & Public Involvement Committee report | Holmgren |
| | A. Report on Mud Lake Symposium | Barnett/Cottle |
| IX. | Operations Committee report | |
| | A. Committee meeting | Lowham |
| | B. Operations in 2014 | |
| | C. PacifiCorp operations | Baldwin |
| X. | Water Quality Committee report | Baker |
| XI. | Management Committee report | Spackman |
| XII. | Engineer-Manager's report | Barnett |
| XIII. | State reports | |
| | A. Wyoming | Lowry |
| | B. Idaho | Spackman |
| | C. Utah | Millis |
| XIV. | Other / Public comment | Williams |
| | A. Activities of the Bear River Water Users Association | Burton |
| | B. Bear Lake Watch | Cottle |
| | C. Other | |
| XV. | Next Commission meeting (Tuesday, April 21, 2015, location?) | Williams |

Anticipated adjournment: 4:00 p.m.

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF July 1, 2013 to June 30, 2014

INCOME	CASH ON HAND	OTHER INCOME	FROM STATES	INCOME
Cash Balance 07-01-13	114,174.96			114,174.96
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		12,944.00		12,944.00
US Fish & Wildlife		2,860.00		2,860.00
Interest on Savings		688.71		688.71
 TOTAL INCOME TO				
30-Jun-14	114,174.96	16,492.71	120,000.00	250,667.67

DEDUCT OPERATING EXPENSES

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging/USGS Contract	57,120.00	-	57,120.00
SUBTOTAL	57,120.00	-	57,120.00
 EXPENDED THROUGH COMMISSION			
Personal Services	61,100.00	(4,127.76)	65,227.76
Travel (Eng-Mgr)	1,200.00	(509.85)	1,709.85
Office Expenses	1,600.00	586.25	1,013.75
Printing Biennial Report	1,000.00	1,000.00	-
Treasurer Bond & Audit	1,400.00	1,300.00	100.00
Printing	1,600.00	(1,413.90)	3,013.90
Realtime Web Hosting	8,400.00	1,184.01	7,215.99
Clerical	6,000.00	-	6,000.00
Contingency	2,000.00	2,000.00	-
SUBTOTAL	84,300.00	18.75	84,281.25
 TOTAL EXPENSES	 141,420.00	 18.75	 141,401.25
 CASH BALANCE AS OF 06/30/14			 109,266.42

BEAR RIVER COMMISSION

DETAILS OF EXPENDITURES

FOR PERIOD ENDING June 30, 2014

776	BIWC	10,183.34
777	STONEFLY TECH	1,800.00
778	BIWC	5,639.22
779	USGS	57,120.00
780	STONEFLY TECH	1,800.00
781	BIWC	6,328.46
782	BIWC	5,783.58
783	STONEFLY TECH	1,800.00
784	BIWC	21,131.06
785	STONEFLY TECH	1,815.99
786	C N A SURETY	100.00
787	BIWC	10,636.89
788	BIWC	12,607.00
789	BIWC	4,655.71

TOTAL EXPENSE 141,401.25

BANK RECONCILIATION

Cash in Bank per Statement 06/30/14	(1,779.27)
Plus: Intransit Deposits	
Less: Outstanding Checks	
Total Cash in Bank	(1,779.27)
Plus: Savings Account-Utah State Treasurer	111,045.69
TOTAL CASH IN SAVINGS AND IN CHECKING ACCOUNT	109,266.42

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF July 1, 2014 to November 24, 2014

INCOME	CASH ON HAND	OTHER INCOME	FROM STATES	INCOME
Cash Balance 07-01-14	109,266.42			109,266.42
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		2,717.00		2,717.00
Interest on Savings		246.84		246.84
 TOTAL INCOME TO				
24-Nov-14	109,266.42	2,963.84	120,000.00	232,230.26

DEDUCT OPERATING EXPENSES

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging/USGS Contract	48,540.00	-	48,540.00
SUBTOTAL	48,540.00	-	48,540.00
 EXPENDED THROUGH COMMISSION			
Personal Services	61,700.00	35,991.65	25,708.35
Travel (Eng-Mgr)	1,200.00	1,056.08	143.92
Office Expenses	1,600.00	1,537.44	62.56
Printing Biennial Report	1,000.00	1,000.00	-
Treasurer Bond & Audit	1,400.00	1,400.00	-
Printing	1,600.00	1,530.80	69.20
Realtime Web Hosting	8,400.00	4,800.00	3,600.00
Clerical	8,000.00	7,000.00	1,000.00
Contingency	2,000.00	2,000.00	-
SUBTOTAL	86,900.00	56,315.97	30,584.03
 TOTAL EXPENSES	 135,440.00	 56,315.97	 79,124.03
 CASH BALANCE AS OF 11/24/14			 153,106.23

BEAR RIVER COMMISSION

DETAILS OF EXPENDITURES

FOR PERIOD ENDING November 24, 2014

790	BIWC	10,283.34
791	VOID	
792	Stonefly Tech	1,800.00
793	BIWC	5,459.34
794	VOID	
795	VOID	
796	USGS	48,540.00
797	Stonefly Tech	1,800.00
798	BIWC	5,949.93
799	BIWC	5,291.42

TOTAL EXPENSE	79,124.03
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BANK RECONCILIATION

Cash in Bank per Statement 11/24/14	6,813.70
Plus: Intransit Deposits	
Less: Outstanding Checks	
Total Cash in Bank	6,813.70
Plus: Savings Account-Utah State Treasurer	146,292.53
	153,106.23

Bear River Development Project

Providing Northern Utah's Future Water Supply

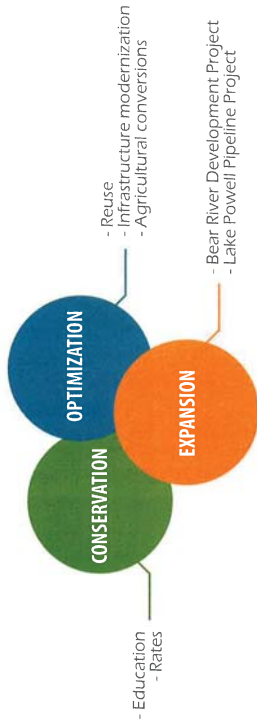


Bear River Development Project, August 2014. All information subject to change.

Why Are We Planning for the Bear River Project?

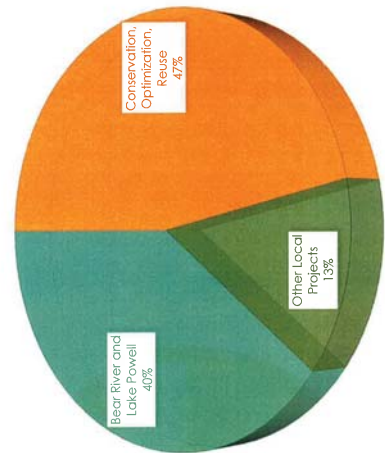


- Utah's population will double by 2060
- Additional 750,000 acre-feet of water is needed
- This will require three strategies to be successful:



Bear River Development Project, August 2014. All information subject to change.

Components of Utah's Future Water Supply



Bear River Development Project, August 2014. All information subject to change.

Bear River Project Participants



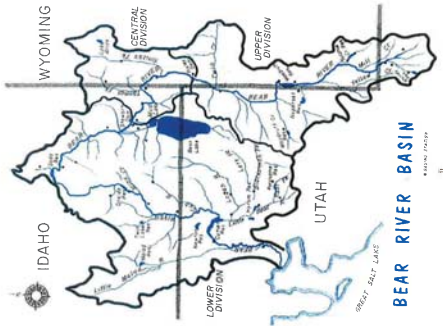
- State of Utah Division of Water Resources
- Participating Agencies
 - Bear River Water Conservancy District
 - Cache County
 - Jordan Valley Water Conservancy District
 - Weber Basin Water Conservancy District
- Study Team
 - Bowen Collins, HDR, Gerhart Cole



Bear River Development Project, August 2014. All information subject to change.

Bear River Development Project, August 2014. All information subject to change.

5 Bear River Watershed



Bear River Development Project, August 2014. All information subject to change.

6 Bear River Compact

- Agreement between Utah, Idaho, and Wyoming in 1958
- Amended in 1980
- Allocates water between the three states



Bear River Development Project, August 2014. All information subject to change.

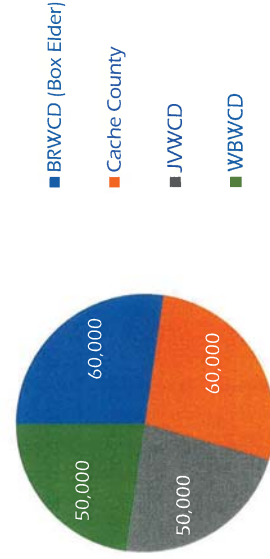
7 Bear River Development Act -1991

“The Division shall develop the surface waters of the Bear River and its tributaries through the planning and construction of reservoirs and associated facilities as authorized and funded by the Legislature; own and operate the facilities constructed; and market the developed waters”

Bear River Development Project, August 2014. All information subject to change.

8 Bear River Development Act -1991

Project Allocation
State of Utah Water Rights (acre-feet)



Total project water rights: 220,000 ac-ft

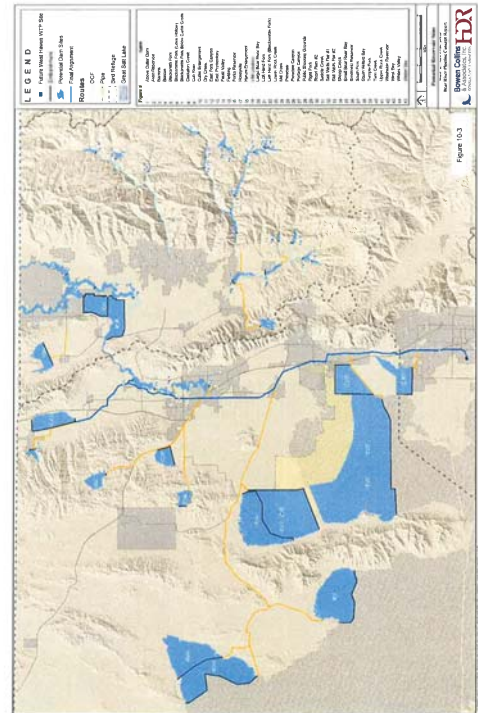
Bear River Development Project, August 2014. All information subject to change.

Previous Studies

- Studies on the Bear River began in the 1960s by USBR
 - Various reservoir sites in the basin
- State of Utah has studied project since 1970s
 - JWWCD and WBWCD
 - Routing studies on pipelines from state project to their service areas
 - Purchase of right-of-way
- Ongoing State of Utah studies
 - Bear River water quality sampling, 1996-present
 - Bear River Project preliminary studies, since 2006-2014

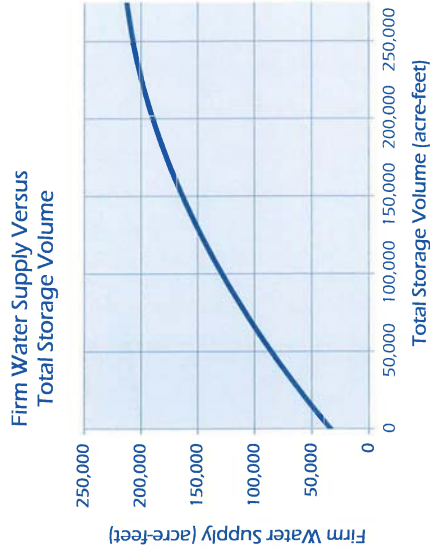
Bear River Development Project, August 2014. All information subject to change.

Potential Reservoir Sites in the Basin



Bear River Development Project, August 2014. All information subject to change.

Water Supply Development

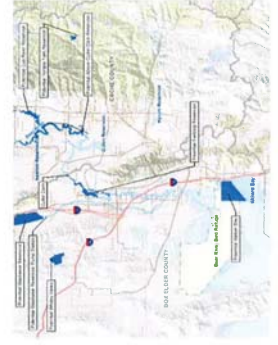


Bear River Development Project, August 2014. All information subject to change.

Current Project Study Areas

- Storage is required to develop the 220,000 ac-ft
- Project has examined numerous storage sites within the Bear River Basin
- State of Utah studied Washakie site in 2006
- Project has shortlisted six other potential reservoir sites for further study:

- Whites Valley
- Above Cutler
- Cub River
- Temple Fork
- Fielding
- Weber Bay



Bear River Development Project, August 2014. All information subject to change.

Project Features

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- ▶ Multiple reservoirs
- ▶ Diversions from the Bear River
- ▶ Cache County delivery
- ▶ Raw water pipelines to West Haven WTP
- ▶ Box Elder County delivery facilities
- ▶ Finished water pipeline/storage reservoir/pump stations to Weber, Davis, and Salt Lake Counties
- ▶ Potential multi-purpose benefits
 - ▶ Fisheries
 - ▶ Recreation
 - ▶ Late season water supply
 - ▶ Trails

Bear River Development Project, August 2014. All information subject to change.

Study Activities

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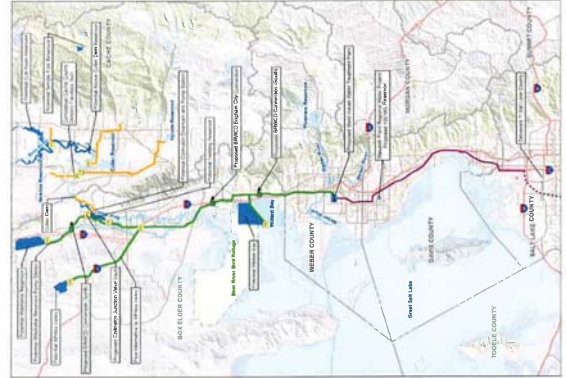
- ▶ Perform site investigations at six potential reservoir locations
- ▶ Further refine overall project facilities
- ▶ Prepare updated cost estimates
- ▶ Begin environmental permitting process
- ▶ Agency coordination

Bear River Development Project, August 2014. All information subject to change.

Conceptual Design

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- ▶ Seven shortlisted reservoir sites
- ▶ Raw water pipeline system to West Haven WTP
- ▶ Finished water pipeline from West Haven to Weber, Davis, and Salt Lake Counties
- ▶ Cache County delivery facilities

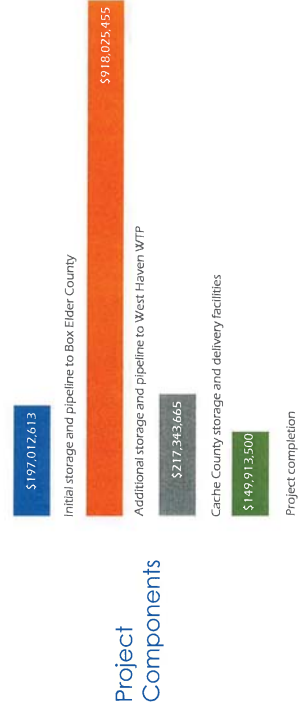


Bear River Development Project, August 2014. All information subject to change.

Preliminary Project Investment

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Bear River Project Costs by Phase

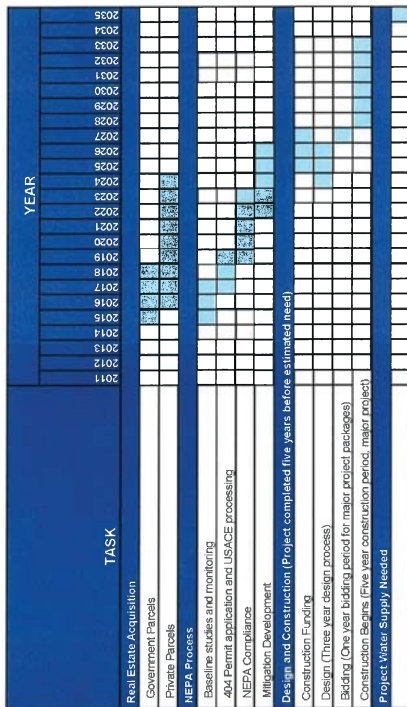


Total investment over four phases: \$1.5 billion

Bear River Project, August 2014. All information subject to change.

Preliminary Project Schedule

(Based on First Water Needed by 2035)



Bear River Development Project, August 2014. All information subject to change.

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Questions?

Marisa Egbert, Division of Water Resources, Project Manager

- Phone: 801-538-7230
- Email: marisaegbert@utah.gov

Bear River Development Project, August 2014. All information subject to change.

SUMMARY OF WATER YEAR 2014 BEAR LAKE OPERATIONS AND IRRIGATION ALLOCATION FOR 2015

Date	Hydrologic Information/Event	Contents (% of Full) Discharge (% of Normal)
10-01-13	Bear Lake Beginning Elevation - 5,912.65 ft.	664,460 af (47%)
11-16-13	Bear Lake Low Elevation - 5,912.32 ft. (see note 1)	642,778 af (45%)
	Rainbow Inlet Canal Discharge	163,000 af (62%)
	Bear River Discharge Below Stewart Dam	2,160 af
	Bear Lake Net Runoff (Computed Total Inflow less Lake Evaporation)	180,000 af (56%)
06-11-14	Bear Lake High Elevation - 5,914.14 ft.	763,335 af (54%)
	Outlet Canal Releases; 10/1/13-10/4/13, 10/24/13-10/26/13, 5/24/2014 - 9/26/2014	202,000 af
07-14-14	Outlet Canal Maximum Release - 1,543 cfs	
	Bear Lake Storage Release (see note 2)	108,000 af
09-30-14	Bear Lake Ending Elevation - 5,912.28 ft.	640,155 af (45%)
	Bear Lake Settlement Agreement "System Loss" Volume (see note 3)	15,500 af

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. **Includes system loss volume.**

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.

Current Status

Bear Lake elevation as of November 24, 2014 was 5912.49 feet (even higher than last year at this time). The recent seasonal low elevation of 5912.10' occurred in September 27, 2014. The causeway is open and water is entering Bear Lake. The Bear Lake Outlet Canal is closed.

Summary Water Year 2014

Despite relatively low snowpack amounts, the higher amounts in the Smiths Fork basin and well-timed rain and runoff reduced the need for storage water. Timely rains in August and September allowed the Lifton pumps to be shut off August 25.

Scenario for 2015

The irrigation allocation could still be the maximum possible if spring runoff results in a spring maximum Bear Lake elevation above 5914.7, the elevation at which the allocation begins to be decreased. A full allocation for Irrigators is 245,000 AF less delivery losses for a total of 236,303 AF. Under a worst-case scenario, assuming a one-foot increase from the fall low, around 220,000 AF would be the irrigation allocation for 2015.

Operational Notes

- *2014 Cutler Reservoir Drawdown* – Spill gate coating and seal repair. Began end of October, refill will begin late December 2014.
- *2015 Alexander Reservoir Drawdown* – Alexander Reservoir will be drawn down later in the irrigation season to replace the spill gates. The water released from storage will be delivered for irrigation purposes in place of Bear Lake storage. The reservoir will be refilled after irrigation season with exchange water from Bear Lake.