

# BEAR RIVER COMMISSION

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## MINUTES

### BEAR RIVER COMMISSION REGULAR MEETING ONE-HUNDRED NINTH COMMISSION MEETING November 21, 2006

#### COMMISSION MEMBERS

##### Chair

Dee C. Hansen

##### Idaho Members

David R. Tuthill  
Rodney Wallentine  
Dean M. Mathews

##### Utah Members

Dennis J. Strong  
Blair Francis  
Charles W. Holmgren

##### Wyoming Members

Patrick T. Tyrrell  
Sam Lowham  
Gordon Thornock

#### ENGINEER-MANAGER

Jack A. Barnett  
Suite 101  
106 West 500 South  
Bountiful, UT 84010

The regular meeting of the Bear River Commission was called to order by Chairman Dee Hansen at 1:00 p.m. on Tuesday, November 21, 2006 at the Utah Department of Natural Resources building in Salt Lake City, Utah. This was the one-hundred and ninth meeting of the Commission. Hansen welcomed everyone to the meeting and asked all in the room to introduce themselves. An attendance roster is attached as Appendix A.

The Commission then reviewed and approved the proposed agenda for the meeting. A copy of the approved agenda is attached as Appendix B. The minutes of the April 19, 2006 Commission meeting were then discussed and Commissioner Karl Dreher requested that the approval of the minutes be deferred until after the break. This request was accepted.

Chairman Hansen moved to agenda item III, the report of the Secretary-Treasurer. Commissioner Dennis Strong asked Randy Staker to review the financial status of the Commission. Staker distributed and reviewed two income and expenditure sheets. A copy of these sheets is attached to these minutes as Appendix C. Staker indicated that FY 2006 ended with a cash balance of a little less than \$40,000. This is quite a bit lower than usual because the Commission paid the U.S. Geological Survey (USGS) twice during the last fiscal year. Staker reminded the Commission that the USGS changed its billing practices. The bills will now be received in the spring rather than the fall so when the next bill is received it will be held until July 1 and then it will be paid.

Dennis Strong then indicated that at the last Commission meeting there was a discussion regarding the possibility of increasing state dues in 2009. At the April 2007 meeting there will be a projection of the states' dues and the potential increase. It was pointed out that Idaho's state assessment had not been received and Commissioner Dreher indicated the payment was somehow lost in the system and a check would be sent immediately. It was moved that the Commission except the Secretary-Treasurer's report. The motion was seconded and carried.

The Commission then moved to agenda item IV, a report on the EPA outreach program. Jack Barnett reported that in the past the Commission has received three reports on the EPA grant effort. Nancy Mesner, a water quality specialist from Utah State University (USU), is responsible for the fourth component of the grant effort. The time was turned to Ms. Mesner for her report on the outreach program. Mesner used a Power Point presentation to explain the program. The concept is to address an issue in the Bear River Basin that has been identified for years, that being sharing information in a seamless way across state boundaries. There are three main efforts identified in the grant: 1) data gathering; 2) marketing; and 3) training. Most of the training will be associated with pollution trading. Mesner demonstrated the use of the website and the many tools available on the website (<http://www.bearriverinfo.org>). She noted there will be links to several digital libraries. People are encouraged to begin using the website, especially the resource page. USU is working with several entities to plan a Bear River symposium for September 2007 in Garden City.

Chairman Hansen then turned the time to Walt Baker for the Water Quality Committee report under agenda item V. Baker reported that the Water Quality Committee met on Monday, November 20. The committee received a report from USU on the outreach program. There was a discussion on pollution trading. The EPA was on the phone during the entire Water Quality Committee meeting. From the EPA perspective, pollution trading is a one-way street in that the EPA feels one needs to have a point source that is willing to make a financial investment in a nonpoint source project. The Water Quality Committee is not ready to think of this as a one-way street. There may be a point source to point source trading. Idaho reported in the meeting that Franklin and Preston are studying a regionalization concept. It is hoped that there will be some discussion with Richmond City in Utah. Richmond City received \$5 million of funding for an advanced treatment facility. There might be some regionalization that could occur with all these facilities.

Baker further reported that in Idaho the Bear River TMDL was approved in June. The Upper Bear River TMDL in Utah was approved in August. There will be a draft of the Cutler Reservoir TMDL in the spring of 2007. The committee is in the process of executing an agreement among the three states on water quality monitoring on the Bear River so that this monitoring can be more efficient. A question of concern relates to what will happen to the information and the data server (the WIS) once the grant period is over. The Water Quality Committee will look at options and will be prepared at the April 2007 Commission meeting to make recommendations. There was a question regarding a tri-state monitoring plan. Baker reported that by January that should be executed.

Jack Barnett then gave a brief report on the EPA grant administration noting that he prepares a quarterly report for the EPA. USU provides a quarterly report as well which helps in the preparation of the Commission's report to the EPA. The billing process has gone very smoothly. When the Commission receives billings from USU, the billings are reviewed and then sent to Dennis Strong's office and Randy Staker submits the bills to the EPA. The EPA administrator for the grant was on the phone during yesterday's Water Quality Committee meeting and one issue discussed was the final report to the EPA. The EPA is encouraging the Commission to extend the grant without additional funds. USU is interested in this and feels it can work ahead without additional dollars.

The Commission then turned its attention to agenda item VI, a photo presentation by Steve Sturgeon. Jack Barnett noted that through USU he became aware of the efforts to put together historic photographs of the Bear River. Steve Sturgeon, the Manuscript Curator of Special Collections and Archives at USU, introduced himself to the Commission and distributed a handout giving some basic information about the Bear River Watershed Historical Collection. A copy of this handout is attached to these minutes as Appendix D.

Sturgeon reported that USU has been working on the Bear River Historical Digital Collection which draws on resources that are in the USU libraries. This project began about 12 years ago. Bob Parsons, an archivist, filed a bibliography that was 20 pages long of Bear River related materials held in the special collections department. In the next 10 years they accumulated many additional materials. A generous grant was received and was used to hire a graduate researcher who went through special collection holdings and materials elsewhere in the library which were pertinent to the Bear River watershed. The bibliography grew from 20 pages to 112 pages. Highlights were selected from the bibliography to generate interest in these materials. A pool of 1,000 photos, 100 maps, 200 township plats and 200 manuscript pages were selected to be included on the website, in addition to the bibliography. Sturgeon then asked his colleague, Cheryl Walters, to show what can be found on the website via a Power Point presentation.

Chairman Hansen then asked Jerry Olds to give his report on real time data collection under agenda item VII. Mr. Olds discussed the real time water measurements being made in the Bear River. Over the past few years, considerable effort has been made to improve overall water measurement. As a result of improving the accuracy of the measurements, there is better water management on the system. Conflicts are reduced between water users. There is automation on the Upper Bear River and on the Lower Bear River (Utah side) more than 100 diversions have been automated. There is still much work to be done but things are headed in the right direction. There have been great partnerships and cooperation within the states. The USGS, the Bureau of Reclamation, PacifiCorp and the water commissioners have been instrumental in the effort. The water users have been very supportive. Water measurement is a high priority within the Utah State Engineer's office.

Olds thanked Boyd Clayton and Aaron Hunt for their great work in the automation project. He then turned the time to Aaron Hunt to discuss the details of the automation project. A map was distributed to Commission members and the audience showing the location of the stations. A copy of the map is attached to these minutes as Appendix E. Hunt reported that 115 out of 124 potential real time stations are set up. The remaining nine stations are sites that are not diverting water at the present time. Out of the 124 stations, there are eight repeater sites that are used to collect and send data from individual diversions along the river. Seventy-eight have AC power and forty-six have solar power. Four types of sensors have been used. They are adding more sites on the tributaries to the Bear River. They are committed to have a real time station on all the diversions flowing to the Bear River. The real time flows can be found on a website, [www.BearRiverBasin.org](http://www.BearRiverBasin.org). Currently the Bureau of Reclamation is subsidizing the funding for the operation of the website. StoneFly Technologies currently runs the website. Commissioner Pat Tyrrell noted that Wyoming uses the website on a regular basis and it has saved much field time. It was noted that the Commission needs to find out the cost to manage the website. The TAC was asked to research this issue.

Chairman Hansen then turned the time to Connely Baldwin to report on Bear Lake storage in 2006 under agenda item VIII. Baldwin distributed a handout and reviewed the information with the Commission. A copy of Baldwin's handout is attached as Appendix F. Baldwin showed several Power Point slides regarding some of the prominent projects. The most important and historic event was the decommissioning of Cove. Baldwin also discussed Whitewater boating flows. Scheduled releases begin in 2008. It was noted that annual reports are available on the PacifiCorp website, [www.pacificorp.com](http://www.pacificorp.com).

Carly Burton was then asked to report on the activities of the Bear River Water Users Association under agenda item IX. Burton distributed and reviewed a handout. A copy of the Burton handout is attached as Appendix G. Three data loggers have been installed, two on Last Chance Canal Company diversion points and one on a West Cache Canal Company diversion point. The credit needs to be given to the Bureau of

Reclamation and Roger Hansen. A data logger will be installed on Cub River Irrigation Company's diversion pending installation of a piped conveyance system. Burton reported that a water mitigation workshop will be held in Logan on January 18, 2007.

Don Barnett then briefly reported that the Commission gave the TAC the assignment to look at compiling the information on reservoir studies conducted within the Bear River Basin. The TAC met and decided on the types of information it would like to gather. Four sites in Wyoming, five sites in Idaho and thirteen sites in Utah have been studied over the years and the compilation will begin at the next TAC meeting.

Clair Bosen then gave a brief background of the Twin Lakes Canal project. Many years ago the forefathers filed on water and started what was then the Oneida Canal Company. It is now the Twin Lakes Canal Company. There are company-owned canals of about 67 miles. The water is brought from the east mountains out of Mink Creek. The Canal Company applied for a \$100,000 loan from the Idaho Water Resource Board to do a feasibility study on building a dam in the Oneida Narrows on Bear River. The application was approved. FERC hearings will begin soon. The reservoir would hold approximately 16,000 af and would generate power. Bosen stated there is a siphon that goes across the Bear River at the mouth of the canyon and a mile up from that point is the proposed dam site. Water would be taken from the reservoir and put in the existing system. They would be holding back Bear River water but it would be supplemented from the Mink Creek water. Commissioner Dreher indicated that the Twin Lakes Canal Company has not applied for the proper water right. Mr. Bosen was encouraged to get the application for the water rights filed.

Jack Barnett then reported on the Hook Canyon pump storage project. A preliminary permit application has been filed by Northwest Power Services of Rigby, Idaho. It is unclear where the power plant pump back storage reservoir is to be but it looks like it is on the east side of Bear Lake near South Eden.

Jack Barnett introduced Tony Willardson of the Western States Water Council. Mr. Willardson distributed a handout regarding the Army Corps of Engineers and a proposed effort. A copy of this handout is attached to these minutes as Appendix H. The Corps of Engineers approached the Western States Water Council with a proposal to do a western watershed study. The Corps has funding to do some basinwide studies. The Corps has interest in data management and the Bear River Basin has been identified as a possible basin for a pilot study. Jack Barnett indicated he would keep the Commission informed of this possible study by the Corps.

Chairman Hansen then returned to agenda item II, the approval of the April 19, 2006 Commission meeting minutes. Commissioner Dreher indicated he had a few editorial changes to the minutes. There was a motion to approve the minutes with the editorial changes to be made. The motion was seconded and carried.

Commissioner Rodney Wallentine then gave a report from the Operations Committee. Wallentine indicated the committee met during the morning and discussed modifications to the Lower Division Water Delivery Schedule. The committee received a report from Connely Baldwin regarding the operation of Bear Lake. There were no regulations in the Upper or Central Divisions in 2006. There was a discussion in the committee meeting regarding the Twin Lakes Canal Company and the Hook Canyon pump storage project. The ongoing work of the TAC was discussed.

Commissioner Gordon Thornock gave a report from the Records & Public Involvement Committee. The biennial report was discussed and the report will be completed by the end of the year. The committee discussed symposiums and it was the recommendation of the committee that the Commission cosponsor a

symposium in the fall. There was a motion that the Commission be a cosponsor of a fall symposium but that the Commission staff would not have a heavy involvement. The motion was seconded and carried.

Jack Barnett was then asked to give his Engineer-Manager and TAC report. Barnett reported that the TAC has some ongoing assignments. The TAC will: 1) look at monitoring needs; 2) refine the storage reservoir table and have a listing ready for the April 2007 Commission meeting; 3) be involved with the symposium planning; and 4) will look at the cost for the real time data that StoneFly is now doing and inquire of the Bureau of Reclamation as to how much support it will give in the future.

The Commission then moved to agenda item XIV, items from the Management Committee. There being no items, the Commission moved to agenda item XV, the state reports. Commissioner Strong reported that Utah does not have many issues on the Bear River. Utah will be cloud seeding in the Bear River Basin this year. The Utah Division of Water Resources has been provided additional money to investigate the development of the Bear River for providing water to the Wasatch Front, as well as Box Elder and Cache Counties.

Commissioner Tyrrell then reported that Wyoming retained its governor. The Bear River is the best stream in the State of Wyoming in terms of water supply for this year. For five years it had been the worst, during the drought. The Colorado River is the #1 issue in Wyoming.

Commissioner Dreher then reported that Idaho will have a new governor. Congressman Otter is the governor elect. The issue that is shaping Idaho's future in terms of water is the ongoing litigation between holders of relatively senior priority surface water rights and holders of relatively junior priority ground water rights. There was a lawsuit filed against Dreher in his professional capacity claiming that the rules that Keith Higginson promulgated were unconstitutional. The judge decided partially in favor of the surface water right holders. The surface water right holders interpreted the order to mean that the judge decided on all of the issues entirely in their favor. The State filed an appeal with the Idaho Supreme Court, filed a motion for expedited scheduling and filed a motion to stay the District Court's order. The Supreme Court granted the motion for expedited scheduling and denied the motion for stay. The briefing for the appeal is complete. Oral argument is scheduled for December 8. The core of the argument is what is an Idaho water right. Is it a quantity entitlement or is it constrained by beneficial use principles? Not all the principles are enunciated in the Idaho constitution.

The Commission then moved to agenda item XVI, other items. There being no other items, it was determined that the next Bear River Commission meeting will be held on Tuesday, April 17, 2007. There was a motion to adjourn the meeting. The motion was seconded and carried and the meeting was adjourned at 3:30 p.m.

## ATTENDANCE ROSTER

**BEAR RIVER COMMISSION  
REGULAR MEETING**  
Utah Department of Water Resources  
Salt Lake City, Utah  
November 21, 2006

### **IDAHO COMMISSIONERS**

Rodney Wallentine  
Karl Dreher  
Dean Mathews

### **WYOMING COMMISSIONERS**

Patrick T. Tyrrell  
Sam Lowham  
Gordon Thornock  
Jade Henderson (Alternate)

### **FEDERAL CHAIR**

Dee C. Hansen

### **UTAH COMMISSIONERS**

Dennis Strong  
Blair R. Francis  
Charles Holmgren  
Norman Weston (Alternate)

### **ENGINEER-MANAGER & STAFF**

Jack A. Barnett  
Don A. Barnett  
Nola Peterson

### **OTHERS IN ATTENDANCE**

#### **IDAHO**

Hal Anderson, Department of Water Resources  
Pete Peterson, Water Master

#### **UTAH**

Todd Adams, Division of Water Resources  
Ben Anderson, Division of Water Rights  
Will Atkin, Division of Water Rights  
Walt Baker, Department of Environmental Quality  
Boyd Clayton, Division of Water Rights  
Bob Fotheringham, Division of Water Rights  
Aaron Hunt, Division of Water Rights  
Jerry Olds, Utah Division of Water Rights  
Randy Staker, Division of Water Resources

#### **WYOMING**

Kevin Payne, State Engineer's Office  
Don Shoemaker, Water Commissioner  
Kevin Wilde, State Engineer's Office

#### **OTHERS**

Larry Anderson, former Bear River Commissioner  
Connely Baldwin, PacifiCorp  
Clair Bosen, Twin Lake Canal  
Carly Burton, Bear River Water Users Association

**APPENDIX A**  
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Steve Clyde, Bear River Water Users Association  
Warren Colyer, Trout Unlimited  
Claudia Conder, PacifiCorp  
Claudia Cottle, Bear Lake Watch  
David Cottle, Bear Lake Watch  
Dan Davidson, Bear River Canal Company  
Amy Defreese, Utah Rivers Council  
Paul Douglass, Franklin County Waterways  
Joanna Endter-Wada, Utah State University  
Megan Estep, U.S. Fish & Wildlife Service  
Bruce Hodges, Franklin County Waterways  
Patrick Lambert, U.S. Geological Survey  
Jim Maya, visitor  
Nancy Mesner, Utah State University  
Willis Mosch, Franklin County Waterways  
Steve Noyes, U.S. Bureau of Reclamation  
Robert Palmer, visitor  
Rodney Pearce, Franklin County Fish & Game Assoc.  
Mitch Poulsen, Bear Lake Regional Commission  
George Ream, Idaho Water Users Association  
Jeff Seamons, Franklin County Fish & Game Assoc.  
Stephen Sturgeon, Utah State University  
Cheryl Walters, Utah State University  
Tony Willardson, Western States Water Council

**AGENDA**

Bear River Commission Annual Meeting  
November 21, 2006

Utah Department of Natural Resources  
Auditorium  
Salt Lake City, Utah

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**COMMISSION AND ASSOCIATED MEETINGS**

**November 20**

10:00 a.m.                      Water Quality Committee Meeting, Room 314

**November 21**

9:00 a.m.	Operations Committee Meeting, Room 314	Wallentine
10:30 a.m.	Records & Public Involvement Committee Mtg, Room 314	Thornock
11:30 a.m.	Informal Meeting of Commission, Room 314	J. Barnett
11:45 a.m.	State Caucuses and Lunch	Dreher/Tyrrell/Strong
1:00 p.m.	Commission Meeting, Auditorium	Hansen

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**REGULAR COMMISSION MEETING**

**November 21, 2006**

**Convene Meeting:** 1:00 p.m., Chair Dee Hansen

I.	Call to order	Hansen
	A. Welcome of guests and overview of meeting	
	B. Approval of agenda	
II.	Approval of minutes of last Commission meeting (April 19, 2006)	Hansen
III.	Report of Secretary/Treasurer	Strong
IV.	Report on EPA Grant Outreach Program	Mesner
V.	Report of the Water Quality Committee	
	A. Activities of Water Quality Committee	Baker
	B. EPA Grant Administration	J. Barnett
VI.	Historic photo presentation	Sturgeon



**APPENDIX B**  
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|-------|--|------------|
| VII.  | Real time data collection                            | Olds       |
| VIII. | Report on Bear Lake storage and use in 2006          | Baldwin    |
| IX.   | Activities of the Bear River Water Users Association | Burton     |
| X.    | New Bear River storage issue                         |            |
|       | A. Efforts of the TAC                                | D. Barnett |
|       | B. Twin Lakes Canal Project                          | Bosen      |
|       | C. Bear Lake pump back storage power project         | J. Barnett |
| BREAK |  |            |
| XI.   | Report of the Operations Committee                   | Wallentine |
| XII.  | Report of the Records & Public Involvement Committee | Thornock   |
| XIII. | Engineer-Manager and TAC report                      | J. Barnett |
| XIV.  | Items from the Management Committee                  | Strong     |
| XV.   | State Reports  |            |
|       | A. Utah  | Strong     |
|       | B. Wyoming   | Tyrrell    |
|       | C. Idaho   | Dreher     |
| XVI.  | Other Items  | Hansen     |
| XVII. | Next Commission Meeting<br>(April 17, 2007)          | Hansen     |

**Anticipated adjournment: 4:00 p.m.**

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF JULY 1, 2005 THRU JUNE 30, 2006

INCOME	CASH ON HAND	OTHER INCOME	FROM STATES	TOTAL REVENUE
Cash Balance 07-01-04	93,046.34			93,046.34
State of Idaho			35,000.00	35,000.00
State of Utah			35,000.00	35,000.00
State of Wyoming			35,000.00	35,000.00
US Fish & Wildlife		0.00		0.00
Interest on Savings		4,094.15		4,094.15
 TOTAL INCOME TO JUNE 30, 2006	 93,046.34	 4,094.15	 105,000.00	 202,140.49

DEDUCT OPERATING EXPENSES

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging/USGS Contract	109,025.00	0.00	109,025.00
SUBTOTAL	109,025.00	0.00	109,025.00
EXPENDED THROUGH COMMISSION			
Personal Services Jack	52,095.00	2,965.23	49,129.77
Travel (Eng-Mgr)	1,200.00	299.97	900.03
Office Expenses	1,600.00	758.11	841.89
Printing Biennial Report	2,000.00	800.00	1,200.00
Treasurer Bond & Audit	1,400.00	1,300.00	100.00
Printing	1,600.00	516.00	1,084.00
Contingency	5,000.00	5,000.00	0.00
SUBTOTAL	64,895.00	11,639.31	53,255.69
EPA WATER QUALITY GRANT	0.00	0.00	0.00
TOTAL EXPENSES	173,920.00	12,908.65	162,280.69
CASH BALANCE AS OF 06-30-06			39,859.80

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF JULY 1, 2006 THRU NOV 1, 2006

INCOME	CASH ON HAND	OTHER INCOME	FROM STATES	TOTAL REVENUE
Cash Balance 07-01-06	39,859.80			39,859.80
State of Idaho			0.00	0.00
State of Utah			35,000.00	35,000.00
State of Wyoming			35,000.00	35,000.00
US Fish & Wildlife		6,500.00		6,500.00
Interest on Savings		1,007.06		1,007.06
 TOTAL, INCOME TO NOV 1, 2006	 39,859.80	 7,507.06	 70,000.00	 117,366.86

DEDUCT OPERATING EXPENSES

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging/USGS Contract	0.00	0.00	0.00
SUBTOTAL	0.00	0.00	0.00

EXPENDED THROUGH COMMISSION

Personal Services	Jack	53,920.00	31,453.35	22,466.65
Travel (Eng-Mgr)		1,200.00	915.87	284.13
Office Expenses		1,600.00	1,481.11	118.89
Printing Biennial Report		2,000.00	2,000.00	0.00
Treasurer Bond & Audit		1,400.00	1,400.00	0.00
Printing		1,600.00	1,502.30	97.70
Contingency		5,000.00	5,000.00	0.00
SUBTOTAL		66,720.00	43,752.63	22,967.37

TOTAL EXPENSES	66,720.00	43,752.63	22,967.37
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CASH BALANCE AS OF 11-01-06	94,399.49
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## Bear River Watershed Historical Collection

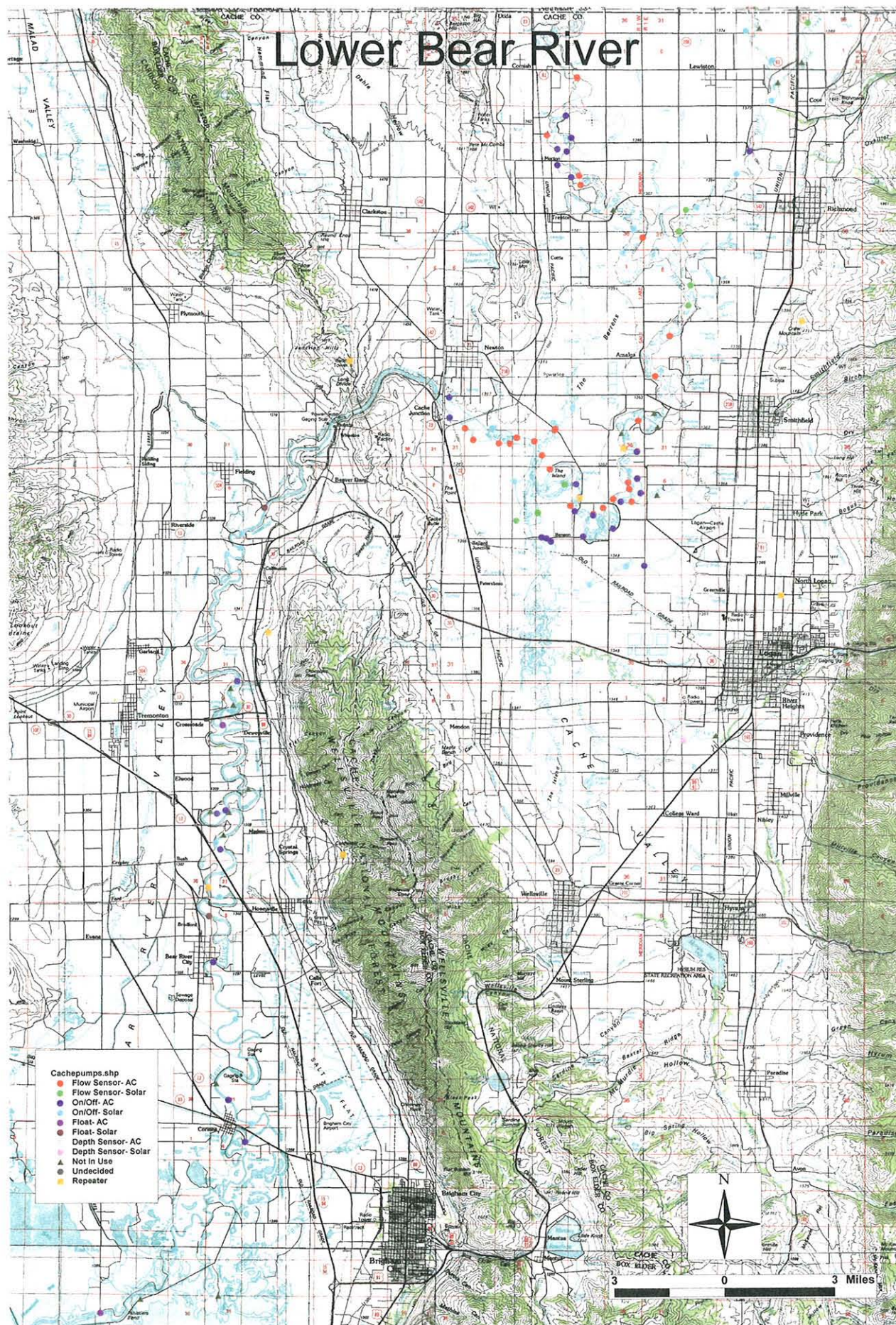
Website: <http://digital.lib.usu.edu/bear.php>

The Bear River Watershed's geography, history, and development are the primary focus of this collection of images, maps, papers, and reports. Funded by grants from the Utah State University Water Initiative, this project digitizes selected materials cited in the Bear River Watershed Historical Bibliography, including photographs, slides and maps of the Bear River Watershed in Utah, Idaho, & Wyoming from the 1860s to the 1990s; pertinent Utah State University theses; records of local irrigation companies; historically significant legal decrees on water rights; research on the societal impact of reclamation development in the Bear River Basin; state and federal documents; and related manuscripts such as the papers of Utah Governor George Dewey Clyde, who as a former USU Engineering Dean collected documentation on Bear River water conditions as far back as the 1920s. Originals are housed in Utah State University Libraries' Special Collections and Archives.

For more information, please contact: [usudigital@library.lib.usu.edu](mailto:usudigital@library.lib.usu.edu)









**SUMMARY OF BEAR LAKE/BEAR RIVER OPERATION FOR WATER YEAR 2006**Bear Lake Operation

Low elevation (fall of 2005)	5907.72'	November 2, 2005
High elevation	5911.96'	June 27, 2006
Low elevation	5909.97'	October 12, 2006
Bear Lake Irrigation Allocation	225,000 Ac. Ft.	
Rainbow Inlet Canal Apr. 1 runoff forecast (April-July)	310,000 Ac. Ft. (133% of normal)	
Rainbow Inlet Canal Actual (April-July)	147,132 Ac. Ft. (63% of normal)	
Outlet Canal-period of release	9 June to 15 September	
Bear Lake Net Runoff	245,066 Ac. Ft.	
Outlet Canal total release	98,816 Ac. Ft.	
Outlet Canal storage release	62,256 Ac. Ft.	
Storage Saved	167,595 Ac. Ft.	
"System Loss" volume	7,092 Ac. Ft.	
Current Bear Lake Elevation	5910. <sup>15</sup> <sub>33</sub>	November 19, 2006

**BEAR RIVER WATER USERS ASSOCIATION  
REPORT TO THE BEAR RIVER COMMISSION  
NOVEMBER 21, 2006**

Installation of Data Loggers

Finally, after a great deal of discussion with Verizon Wireless and thanks to the Bureau of Reclamation and Roger Hansen for their assistance, three data loggers were installed in 2006. They were installed on the two diversion points for Last Chance Canal Company and West Cache Canal Company. The data loggers performed flawlessly during the 2006 season. Flow information can be viewed at the website [www.bearriverbasin.org](http://www.bearriverbasin.org) and click on Lower Bear River. An additional data logger will be installed on Cub River Irrigation Company's diversion during 2007, depending on the completion of a piped conveyance system on their canals.

2006 Irrigation Season Operation

The 2006 irrigation season was excellent in terms of overall system water supply, especially below Bear Lake. The Bear Lake allocation was 225,000 acre feet based on the projected Bear Lake high elevation of 5914. The actual high was disappointing at 5911.96 feet and was influenced by two major factors which was very low soil moisture conditions in the fall of last year and a very warm and dry spring. The resulting Bear Lake net runoff was only 245,000 acre feet or 79% of average. In spite of below average runoff conditions above Bear Lake the Association only diverted about 62,256 acre feet of storage water or only 27% of the 2006 allocation. This low storage water storage use was due to a number of factors including abundant spring runoff from Cache Valley streams and timely rainfall in mid-September. However, conservation by the irrigators played a key role in the decreased storage water use this past irrigation season. The accompanying weather information shows that for Laketown and Logan, mean monthly temperatures were above normal for April through July and below normal for August and September. Precipitation was near average for April and significantly below average for May through August in the Logan area and average to above average for September. So in spite of higher temperatures and lower precipitation for most of the irrigation season, the storage use was significantly below the allocation. The attached graph shows historical comparisons of Bear Lake net runoff to storage water use. The actual storage use was significantly below the expected storage use based on historical comparisons. The actual storage use was about 50% of expected use and about 31% of the maximum historical use. The best news is that about 163,000 acre feet of storage water is preserved for lake recovery going into 2007.

Monitoring of New Water Applications

The Association has worked closely with the power company and Bear Lake Watch this past year in tracking new water applications. The three groups have protested and have attended numerous hearings in an effort to protect the interests and water rights of the three groups. The biggest obstacle in getting new applications approved is the lack of appropriate mitigation plans

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of the applicants, which delays the process and increases the costs to both the applicants and the protestants. We are therefore co-sponsoring a workshop on January 18, 2007 in Logan which will address the concerns of all parties. Large new developments are popping up throughout the Bear River Basin and appropriate mitigation plans which conform to the Idaho and Utah Groundwater Management Plans will be essential to getting proper and timely approvals. This workshop is targeted for developers, local planning and zoning commissions, attorneys, irrigation companies and others who would be impacted by development. We are hopeful that this workshop will streamline the approval process for all parties.



## LAKETOWN

2006	Mean Temp (F)	Normal Mean Temp	Departure From Normal	Total Precip. (in)	Normal Total Precip.	Percent of Normal
APR	42.9	41.1	1.8	1.05	1.29	81.4
MAY	51.6	49.8	1.8	0.46	1.45	31.7
JUN*	60.5	58.2	2.3	0.48	1.05	45.7
JUL*	69	65.1	3.9	0.25	0.85	29.4
AUG*	63.4	64	-0.6	1.14	0.93	122.6
SEP*	51.4	55.2	-3.8	2.13	1.23	173.2

\* Preliminary Climate Data for 2006 Temperature and Precipitation

## LOGAN 5SW

2006	Mean Temp (F)	Normal Mean Temp	Departure From Normal	Total Precip. (in)	Normal Total Precip.	Percent of Normal
APR	47.5	45.4	2.1	1.98	1.97	100.5
MAY	55.2	53.5	1.7	0.97	2.14	45.3
JUN*	65	62.3	2.7	0.74	1.27	58.3
JUL*	73.9	69.5	4.4	0.29	0.89	32.6
AUG*	67	68.2	-1.2	0.95	0.96	99.0
SEP*	55.8	58.2	-2.4	2.94	1.31	224.4

\* Preliminary Climate Data for 2006 Temperature and Precipitation

## LOGAN RADIO KVNU

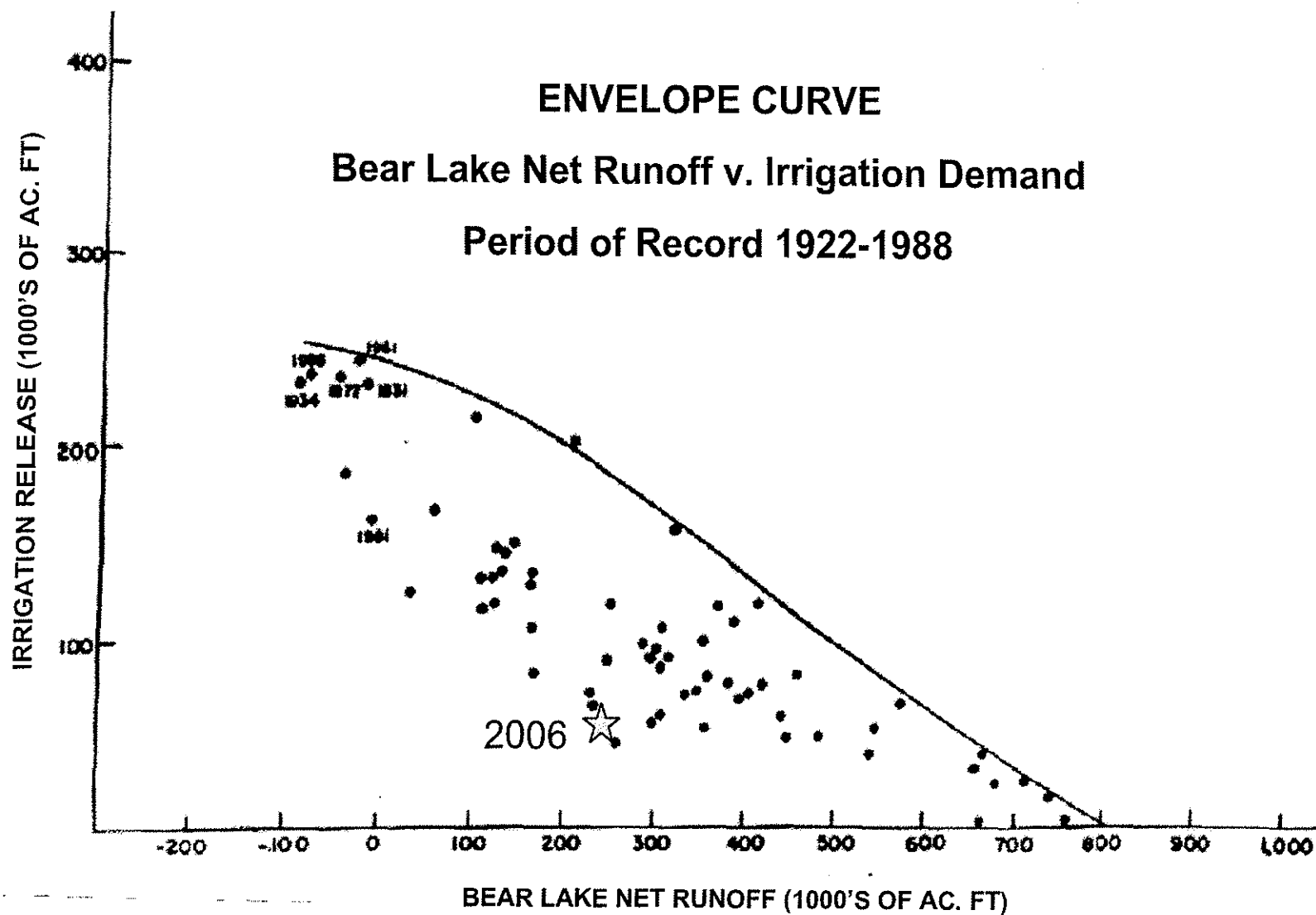
2006	Mean Temp (F)	Normal Mean Temp	Departure From Normal	Total Precip. (in)	Normal Total Precip.	Percent of Normal
APR	48.4	46.1	2.3	1.05	2	52.5
MAY	57.4	54.7	2.7	0.61	2.12	28.8
JUN*	66.8	63.5	3.3	0.56	1.27	44.1
JUL*	75.7	71.2	4.5	1.03	0.89	115.7
AUG*	69.2	70	-0.8	0.62	0.94	66.0
SEP*	57.5	59.9	-2.4	2.72	1.55	175.5

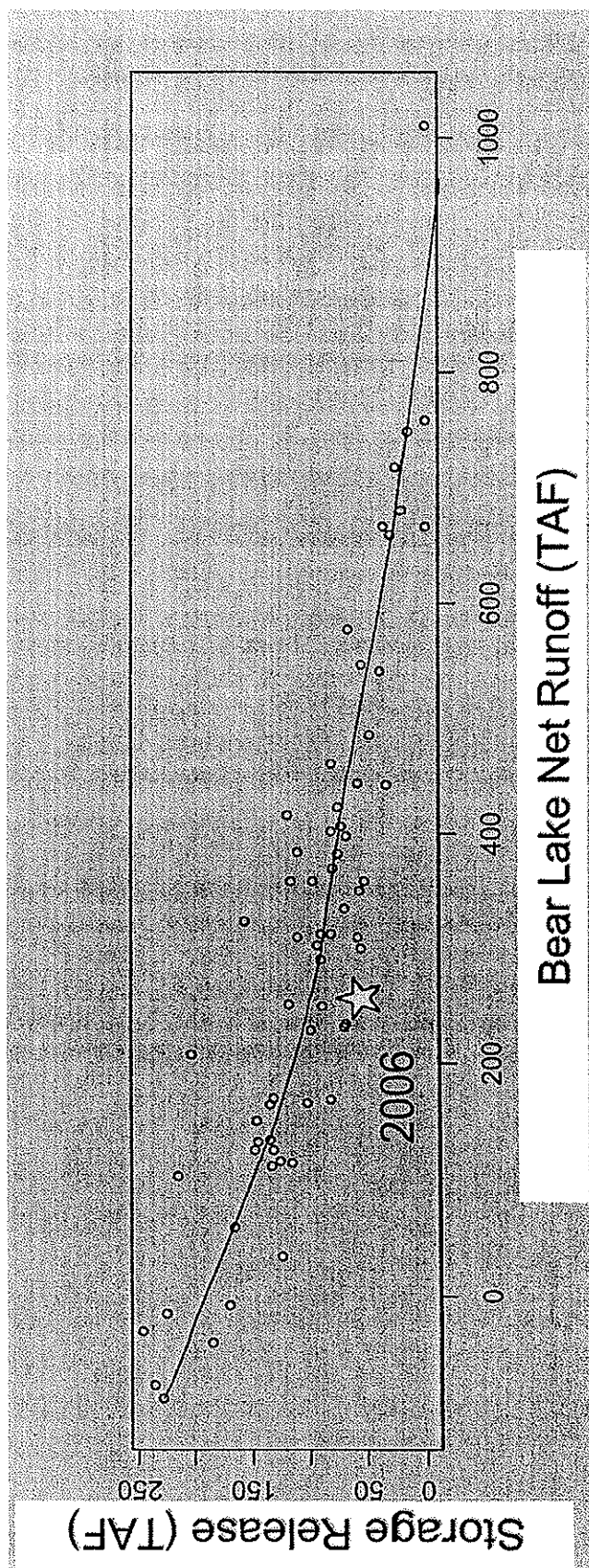
\* Preliminary Climate Data for 2006 Temperature and Precipitation

## LOGAN USU

2006	Mean Temp (F)	Normal Mean Temp	Departure From Normal	Total Precip. (in)	Normal Total Precip.	Percent of Normal
APR	48.1	46.7	1.4	2.3	2.14	107.5
MAY	58.3	55.5	2.8	0.98	2.41	40.7
JUN*	68.1	64.8	3.3	0.79	1.36	58.1
JUL*	77.5	72.9	4.6	0.22	0.99	22.2
AUG*	71.4	72	-0.6	0.89	1	89.0
SEP*	58.7	61.9	-3.2	3.54	1.56	226.9

\* Preliminary Climate Data for 2006 Temperature and Precipitation





**Workshop**  
**Water Mitigation in the Bear River Drainage**  
**In Southern Idaho and Northern Utah**

*January 18, 2007*

*10:00 a.m. to 5:00 p.m.*

*Bridgerland Applied Technology Center*

*1301 N. 600 W., Logan, UT*

*Cost: \$50.00 if paid before January 5, 2007*

*\$75.00 if paid after January 5, 2007*

*(includes lunch and breaks)*

*Space is limited Please register early*

**How do I mitigate for new water depletion for development?**

The state of Idaho recently adopted a Ground Water Management Plan for the Bear River Ground Water Management Area (GWMA). This area includes all of Bear Lake, Franklin, and the majority of Caribou counties. Similarly, Cache and Rich counties in Utah require water mitigation for development. A mitigation plan requires water that was historically depleted for irrigation uses be retired to compensate for the depletion of the new use. The workshop will focus on mitigation requirements, water rights, depletion, legal issues, state law, engineering (related to calculating depletion and water management), and all aspects of development related to water. The goal is to help those involved in development understand what is required to be able to submit a satisfactory application and accompanying Mitigation Plan.

10:00- 10:30 a.m.	Introduction, How the Bear Lake and Bear River system works- Carly Burton, Bear River Water Users Association
10:30 – 11:00 a.m.	Bob Fotheringham, Regional Engineer for Northern Region, Utah Water Rights – Cache Valley Groundwater Mgmt Plan, & Rich Co. issues
11:00- 11:15 a.m.	BREAK
11:15- 12:00 p.m.	Roger Warner, Water Right Supervisor for Eastern Region, IDWR- Groundwater Management Plan for the Bear River in Idaho
12:00 – 1:00 p.m.	LUNCH - Mitch Poulsen, Bear Lake Regional Commission- Development around Bear Lake- impacts and issues
1:00 – 2:30 p.m.	Elements of a successful mitigation plan- calculating depletion, using state procedures, finding replacement water- Dr. Bob Hill, Utah State University, USU Extension Irrigation Specialist
2:30 - 2:45 p.m.	BREAK
2:45 - 3:30 p.m.	Review of depletion calculations and mitigation plan
3:30 – 4:30 p.m.	Workshop evaluation, feedback, Q&A with all speakers

## **Watershed Tools**

### **Project Delivery Team Scope of Work**

Background. One of the primary goals of the Western States Watershed Study is to work with the Western States Water Council (WSWC) and help them, to the extent possible, implement several recommendations documented in their June 2006 Water Needs and Strategies for a Sustainable Future Report. The WSWC has developed a comprehensive summary scope of work to implement all of the June 2006 Report recommendations (refer to Appendix B). Within that comprehensive scope of work WSWC has identified a Task that they would like the Corps to accomplish regarding the following June 2006 report recommendation: **The WSWC should encourage states to develop and implement strong state water plans and compile a state-by-state and Westwide summary of existing water uses, water plans and planning efforts, current ground and surface water supplies, and anticipated future demands, then identify and evaluate common trends and common themes. The focus should be on a grassroots, watershed approach to identifying water problems and potential solutions.**

#### **Technical Team Activities**

The following Task is numbered and worded consistent with the comprehensive summary scope of work shown in Appendix B:

**Task 2D (3)** The Corps will identify the future potential utility of various watershed management tools, including Geographical Information Systems databases and Multi Criteria Decision Analysis models, and other various watershed models, identifying associated data requirements for these tools, and assess how these tools could augment existing watershed management tools in the West.

#### **Introduction**

Recent initiatives for sustainable water resource management in the 17 Western States have emphasized the need for implementation of various tools for watershed planning and management. Many of the tools, e.g., Geographic Information Systems (GIS), are already being applied in water resources assessments at the state and river basin (multi-state) levels. Many of these applications are used for multi-disciplinary and multi-agency management needs primarily for specific needs of individual states or river basins. While extremely useful for these selected applications, each system is built differently and upward reporting of information for larger scale applications (e.g., larger or multi-river basins) management decision support as needed by the WSWC is not currently possible with a standardized approach. However, there are some commonalities in many of the selected applications in use and an interagency Information Management Work Group (IMWG) in place that would allow a forum for the development of a standardized approach. The usefulness and effectiveness of these tools must also consider the availability of data and issues to be addressed at the larger geographical, multi-state

levels. The diversity in the types of water resource management data, varied formats and availability of these data, and complexity of issues at multi-disciplinary and multi-state levels requires a strategic approach for effective decision making.

### Objective

The objective of this proposed work is to develop a strategic plan for the upward reporting of water resource management information for WSWC decision-making needs. Because statewide or basin plans are the basis for most decisions and effort, a single basin or state will likely be identified to develop a prototype or pilot study for an approach to water data gathering. The pilot study will serve as a proof of concept for the approach outlined here for water data gathering activities. The ability to readily integrate tools and utilize available data is greatly improved through the tools such as the prototype GIS toolbar for data retrieval and display. All aspects of this work will be coordinated with the State/EPA Information Management Work Group (<http://www.epa.gov/oei/imwg/>).

### Approach

The work consists of three major components

1. Identification of representative decisions made in water resource management relevant to the western states (e.g., water quantity allocations) and level (e.g. local, state, region) of the decision-maker and data user. Compilation of existing data sources and types and existing capabilities used in water resource management by the western states (coordinated with the IMWG).
2. Development a prototype water data application for use by a state or basin using a modification of the GIS toolbar.
3. Development of a strategic plan for water resource management.

### Coordination:

Local Corps District personnel will assist in the coordination with WSWC and all related working groups for the identification of water management issues for decisions, compilation of existing conditions, selection of a prototype basin, and the development of a strategic plan for water resource management information. Coordination with District capabilities is important to accurately identify required data and for development of District effective applications.

Coordination with related tasks (e.g., Shared Vision Planning and Multi Criteria Decision Analysis) SWT, and HQUSACE will be conducted to ensure compatibility among related efforts.

### Products:

#### **1. Water Management Decisions and Data Requirements Catalog and Report**

The data requirements and actions to acquire the data for Federal and state water plans will be compiled into an annotated bibliography. Representative water management decisions will be listed. Data and data sources to support those decisions will be listed.

These compilations will be published as a working catalog to serve as a reference for future management tool development.

Data requirements for potential watershed tools, e.g., Multi Criteria Decision Analysis, will be compared to existing data gathering efforts. Identification of water management decisions and required data will be coordinated with the structure and composition of the SVP process. Data gathering for coordination of Drought and Flood Preparedness and Endangered Species Act activities will also be considered. Based on these findings, an existing conditions status report will be prepared identifying: a. existing water data gathering activities to support water management decisions, b. data required and data sources, and c. data gaps for implementing water data actions and potential watershed tools.

## **2. Water Data Application**

For the state or basin used for the pilot study, the necessary databases or data sets will be placed on a single computer platform, configured to support access of both GIS Toolbar and non-GIS data requests. This computer source will serve as a prototype to demonstrate the assembly of the required data and the access protocol by state water plan users.

## **3. Strategic Plan for Ensuring Available Data for the Water Supply and Water Quality Activities**

Based on the findings of the status report and the Water Data Application, a strategic plan for data gathering will be prepared. The major components of the Strategic Plan are:

- a. Recommended available tools for water data gathering; tools will be compatible with requirements of the Water Data Application.
- b. Recommended configuration of the Water Data Application for deployment in all western states.
- c. Recommendations for adaptation of the GIS toolbar
- d. Identification of recommended arrangements for water data gathering, including cost savings opportunities, funding sources, and other arrangements.

The following Table provides a summary of activities, funding requirements and sources and Technical Team members: