



## MINUTES

### BEAR RIVER COMMISSION ANNUAL MEETING ONE HUNDRED TWENTIETH COMMISSION MEETING APRIL 17, 2012

## BEAR RIVER COMMISSION

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

#### CHAIR

Dee C. Hansen

#### IDAHO

##### COMMISSIONERS

Gary Spackman  
Kerry Romrell  
Marcus J. Gibbs

#### UTAH

##### COMMISSIONERS

Dennis J. Strong  
Blair Francis  
Charles W. Holmgren

#### WYOMING

##### COMMISSIONERS

Patrick T. Tyrrell  
Sam Lowham  
Gordon Thornock

#### ENGINEER-MANAGER

Don A. Barnett

**I. Call to order** – The annual meeting of the Bear River Commission was called to order by Vice Chairman Charles Holmgren at 1:15 p.m. on Tuesday, April 17, 2012, at the Utah Department of Natural Resources building in Salt Lake City, Utah. This was the one-hundred and twentieth meeting of the Commission. Holmgren welcomed everyone to the meeting and asked them to introduce themselves. An attendance roster is attached to these minutes as Appendix A.

**I.C. Approval of agenda** – Vice Chairman Holmgren 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** – Holmgren asked if there were any changes to the minutes of the previous Commission meeting held on November 15, 2011, in Salt Lake City, Utah. As there were no changes, the minutes were approved.

**III. Reports of Secretary and Treasurer** – Randy Staker referred to handouts on income and expenditures for the Commission (see Appendix C). He noted that expenditures to date for the current fiscal year totaled \$115,051.97. With income of \$129,988.44 plus the carryover of \$98,788.15, the current cash balance was \$113,724.62. He explained that he had not yet received stream gaging funding from the three water quality agencies, and that the amount shown was Utah's portion from the previous year that was paid in November.

Dennis Strong reported that the Commission was within budget (Appendix D) and at the expected level for this time of year. He explained that the proposed budgets for 2013 and 2014 showed a 3 percent increase, but this was just a placeholder to show possible carryover amounts for future budgets. He invited discussion from the Commission on the proposed budget for 2013. Gary Spackman mentioned that the Management Committee had discussed a number of these budget items and saw no need for an increase in most of the line items. There was a discussion about the personal services contract as it relates to the amount of time spent for clerical duties. They recognized the value of Barnett Intermountain Water Consulting as they staff the Commission and felt it appropriate to increase the personal service contract by 3 percent, as shown in the proposed budget for FY2013, with the intent that it be used to help compensate for time spent in clerical services which has not been fully covered. He made a motion that the Commission adopt the

3 percent increase to \$60,500.00 for that purpose and that all the remaining items in the proposed budget remain as shown. The motion was seconded and passed.

**IV. Update/direction on depletion efforts** – Pat Tyrrell reported that depletion efforts are ongoing and that the update for the three states from 2009 was almost completed. There are a couple of other areas where depletions are still being studied or considered. Those include depletion estimates on an acre-foot/acre basis. The TAC is still studying this and is waiting on Drs. Hill and Allen for final numbers that are applicable. Tyrrell commented that because depletions are so important under the Compact, maybe a matrix could be developed for depletions. It could show a list of the things that have been done, as well as those items that are still outstanding which the Commission has wrestled with forever. This could include such things as using the correct numbers for supplemental depletions and highlighting any areas where procedures may need to be changed. This would involve the maps and calculations for annual depletion computations and looking at the use of common shortage rates among the states when it comes to depletion calculations. Tyrrell felt that while they are getting comfortable with correcting maps for the proper HUC codes and also getting comfortable with the acreages that have been developed since 1976, there is still some work to do down the road on supplemental depletions and those other areas.

Spackman wondered what assignments the Commission should give to the Technical Advisory Committee (TAC) or others so that the Commission could move forward to complete the depletion analysis, finish up the work and prepare the required five-year report. Tyrrell responded that the TAC should continue to look at the depletion rates in Appendix B and firm those for finalization. It would be important to dig into the history of supplemental depletions to understand where those numbers came from and assess the comfort of the Commission to either use those numbers moving forward or to change them. This would be a big job. Thirdly, he felt that areas should be highlighted where there is a need for changes in procedures. He had a note to clarify the supplemental charges where the original right is post-1976. The map in Appendix A needs to be updated. The last item would be the use of common shortage rates. Tyrrell noted that some of these things just need a little effort to complete while others would be longer-term efforts.

Spackman wondered about a time line for the work. Tyrrell suggested that the items which can be wrapped up quickly could be completed by the fall meeting of the Commission. For the longer-term items, a status report could be given at that time. He expressed appreciation from the Management Committee for the tremendous effort of all those who have put so much work into this study.

**V. 2012 Stream flow forecast** – Randy Julander showed a power point presentation (see Appendix E) and commented that the April 1<sup>st</sup> water supply outlook report was not good. He noted that about 30 percent of the snowpack was lost in 2 ½ weeks and that the resulting increase in stream flow was only 1,000 acre-feet at the state line and in other places hardly any increase was shown. The conclusion of these data is that most of the snow melt is going to recharge the soil profile. He reported that several hot dry wind events had sublimated some of the snowpack directly into the atmosphere. With the warm, dry conditions in the forecast, runoff will probably be over by mid-May. The only bright spot in all of this is that reservoir storage in the Bear River Basin this year is about 80 percent of capacity, compared to 40 percent the year before. There should be sufficient water for this year, but the following year could be a problem.

**VI. 2011/2012 Bear Lake flood control/storage operations** – Connelly Baldwin from PacifiCorp reported that their target elevation for Bear Lake for March 31<sup>st</sup> was 5916 – 5920 ft. with a default of 5918 ft. He compared the high runoff of the previous year to the low runoff for the

current year and noted that they are relying on irrigation releases from storage. The lake peaked last year at 5921.47 on August 14, 2011, which is the latest the lake has ever peaked. They kept their target of 5918 ft., adjusting releases as necessary. As the winter approached and the forecast became bleak, they changed the target elevation to 5920 ft., discontinued flood control releases and went into storage mode. Baldwin reported that, unless there was a significant rise in elevation, storage releases for the coming summer would be for irrigation purposes only. At the end of the irrigation season they will evaluate what needs to be done to meet their target elevation of 5918 ft.

Holmgren noted that everyone is grateful for the wise decisions that were made in early January to curtail flood control releases and preserve the water assets at Bear Lake.

**VII. Quagga mussel protection efforts** – Reports were given from the three states regarding their efforts to protect the waters from quagga mussels. Lloyd Knight from the Idaho State Department of Agriculture gave a presentation on their invasive species program (see Appendix F). He explained that their program is funded through an invasive species boat sticker which is required for both in-state and out-of-state boats. Their emphasis is based on prevention and they have been gathering information on the travel patterns of watercraft that enter and exit the state. They have 15 inspection stations around the state, most of which are on a route of travel into the state. They have found that the boats which pose the highest risk to their water bodies are usually larger boats or boats that have been moored for a significant period of time in an infested water body. They have worked with the transportation department to train those who staff the ports of entry to know what to look for in boats moving through the state. They have been very successful in catching fouled boats, with numbers rising significantly since they started the program in 2009. They feel like their outreach is working and, as they continue to improve their program, they are improving their success. The only worry is that they are not catching all of them. Knight shared information on where boats are coming from and where they are going. With 45,000 inspections done in 2011, they have found that boats come from almost every state in the U.S. and many are just passing through the State of Idaho. Most of the infested boats come from the Lower Colorado and the Great Lakes regions. Knight explained that they have done a lot of work in their outreach program and that all the states have tried to work together in the effort. He noted the areas in the Bear River Basin where they have sampling stations and inspect for invasive species. He also mentioned that this year they have put together prevention and contingency plans for their state. They identified necessary steps and options should they ever get an infestation in the state.

Larry Dalton from the Utah Division of Wildlife Resources shared a power point on their aquatic invasive species program (see Appendix G). He also passed out a handout (Appendix H) that was shared with the Utah State Legislature in January, including notations in red on Bear Lake in particular. Dalton explained that Utah launched its program in 2007 at which time they did a very complicated assessment which determined that the impact to Utah of just quagga and zebra mussels would amount to about \$15 million per year in extra maintenance by those industries which use water. The most important objective of their program involves outreach because they believe that if they can get the boaters and anglers educated on the subject, they can win the fight. A unique thing about Utah is that they have a decontamination certification form. It must be filled out before a boater is allowed to launch. It certifies, under threat of fraud, that the boat either has not been used on a mussel infested water or, if it has, that it has been properly decontaminated. As this must be filled out every time you launch a boat, it brings a greater awareness to every boater. Dalton explained that if they get an indication in their early detection process that there may be contamination in a body of water, they use all their resources to fight it. It is possible to crash the population before it gets a good hold in that area. He notes that Lake Powell went from

inconclusive in 2007 to not detected in 2010. Other areas have been upgraded as well. Dalton reported that all states in the west have reasonable laws about possession, but not all states have good programs to deal with it. He stressed that the most important people in the fight are the boaters themselves who need to be aware and clean, drain and dry their boats. Dalton explained that they are putting a lot of energy into Bear Lake. This year they negotiated an agreement with Utah State Parks & Recreation whereby they are going to do invasive species work under contract at their state parks. This will be a great help in the effort.

Sue Lowry from the Wyoming State Engineer's office was asked last minute to report on Wyoming's invasive species program. Much of her exposure to the program comes from update meetings held twice a year, so she was speaking from memory as to what she knew about the program. She was aware that many boats come to Jackson from Lake Mead in the summer time. As far as she knew, Wyoming was not focusing on boats in transit through the state, but more aimed at pullouts close to recreation facilities. The program is administered by the Wyoming Game & Fish Department and they have instituted a decal program. With this program, many boaters feel that they are bearing the brunt of funding the program when the "at risk" population is really the water managers, water purveyors and the cities. Most of the people who have been hired to promote the program are seasonal workers. The Wyoming reservoirs have been put into primary and secondary categories, the primary ones being the larger facilities that attract a lot of out-of-state boaters. These areas have a full time person at the inspection points who tries to educate boaters about the problem. The secondary places, where the likelihood of contamination is much slimmer, have more occasional visits by a roving inspector. Both the National Park Service and the Bureau of Reclamation have independent sampling criteria in their areas. The cooperation between these agencies, the Forest Service and BLM is positive and there is a great effort of outreach to educate the public on this threat. Wyoming Game & Fish has an allocation from the general fund for this program, and the boat decal program provides probably less than a third of the total funds.

The Commission then took a brief break.

**VIII. Paris Hills Aricom project** – Jack Barnett filled in for Dan Goicoechea who was eager to report to the Commission on the project, but couldn't attend due to family concerns. He will plan to come to the November meeting. Barnett reported that Paris Hills had just released their preliminary feasibility findings report, which report made it appear to be very economically feasible to proceed with the project. This phosphate mining project would be located near the town of Paris, Idaho. They have recently drilled to learn more about the water they might encounter while they are mining. They expect to encounter water about a year into the operation which they would have to pump, so they will have to get an Idaho water right and a discharge permit. Barnett mentioned that if this project goes, it is a very big deal. They will have problems to solve in the process, one being how to get that amount of ore to the railhead at Montpelier. He felt that it was a big enough development in the watershed that the Commission would be interested in following the project.

**IX. Records & Public Involvement Committee report** – Gordon Thornock mentioned that they had a report from Cory Angeroth of the USGS on 2013 water year projections. They discussed cooperative agreements with the water quality agencies, and they also discussed the Bear River gages. They had reports from each state on their real time gages. They continue to add equipment and information in maintaining these gages, and their efforts are greatly appreciated. Jack Barnett shared a little history on the biennial reports and Don Barnett discussed the 16<sup>th</sup> and 17<sup>th</sup> biennial reports. The 16<sup>th</sup> biennial report is out and they are collecting information for the 17<sup>th</sup> biennial

report. Don Barnett also reported that the Commission website is up and running and is compatible with the real time gage website which can be accessed through the Commission site. Thornock reported that they had also discussed the Water Information System (WIS) and mentioned that the EPA grant is about completed. Jack Barnett had mentioned a few publications of interest, one having to do with depletions and consumptive use.

**X.A. Operations Committee report** – Marc Gibbs reported that the Operations Committee reviewed their minutes from the previous meeting and patted each other on the back for the great job they did of taking care of all the water they had that year. They then lamented about the dismal water supply for 2012. They were grateful for the storage in the reservoirs and appreciative of the stream gaging and real time information that was available which will help in operations as they move forward. They discussed with Jack and Don Barnett what happens when the river needs to be regulated in the Central and Upper Divisions. There is a worksheet that is used for regulation. They determined that they would see how things go as the water year progresses and do what they could to maximize the beneficial use of the available water. They discussed the ability to move water between divisions and how that water is accounted for, and the Commission is challenged to find out how that happens and make allowances to utilize the water to its fullest extent. They discussed new water rights that may be pending and the status of rights they have been tracking. The pump-back project proposed for Bear Lake was withdrawn. The Black Bear water right has been for sale and is still up in the air. Paris Hills will have a water right issue if they proceed with their project, as was mentioned earlier. There was a filing for Idamont Farms that was returned and will have to be refiled. They also discussed the filing for the Twin Lakes Canal Company's reservoir project in Franklin County. There was a hearing on that and a ruling is expected in the next 60 days.

**X.B. PacifiCorp operations** – Connelly Baldwin gave a summary of Bear Lake operations for 2011 (see Appendix I). He noted that the storage allocation for irrigation from Bear Lake was set at 245,000 acre-feet on April 10<sup>th</sup>. The estimated spring maximum elevation is 5920.8 ft. and they expect Bear Lake to reach that peak around May 20<sup>th</sup>. Baldwin also reported on the Bear River FERC license. The typical activities go on and there are grants that are made on an ongoing basis to improve habitat for Bonneville cutthroat trout. There are also land easements that are ongoing in various locations, but nothing really of note. The boater flow program which releases water below Grace Dam in the Black Canyon stretch of the river that is historically dry has been modified a little bit. It was originally set up to be a forecasted release based on when water was available, but it didn't work out well. Now there will be a three-year study period where there will be scheduled releases. There will be additional studies going on related to the environmental impact. He noted that Bonneville cutthroat trout is the major thrust of the license in terms of environmental mitigation. There is a small spring below Grace Dam that was restored and they released fingerling Bonneville cutthroat trout there last spring. The Bear River Settlement agreement that led to the license is a very important document and it ties into the Twin Lakes Canal Company proposal for a new dam. That stretch would be inundated, and the stakeholders have emphasized that this is a very unique stretch of the river and are vigorous in defending the water rights, noting in the hearing the impacts it would have on that settlement agreement in terms of Bonneville cutthroat trout restoration.

**X.B.C. Activities of the Bear River Water Users Association** – Carly Burton referred to a handout as he gave a report on the Bear River Water Users Association. He was happy to report that the Idaho Small Irrigators Association has now been included in the Bear River Water Users Association and that the Association now includes all of the irrigators below Bear Lake who are under contract with PacifiCorp to receive Bear Lake storage water. With regard to Twin Lakes, he

reported that the Association had entered into a stipulation agreement with Twin Lakes Canal Company whereby Twin Lakes agreed to comply with all of the concerns of the Association noted in its protest, and the Association agreed to withdraw the protest. He commented on the water supply concerns for 2012 and expressed appreciation to Connelly Baldwin and PacifiCorp for their foresight and quick action in January in changing from flood control to a storage mode at Bear Lake. The Association membership has pledged their support in conserving water as much as possible.

**XI. Water Quality Committee report** – Jack Barnett gave the committee report in place of Walt Baker. He noted how important this committee has been and how well they work together. He reported that the committee had spent a great deal of time discussing the future of the WIS and determined that they would spend more time on this subject at the November meeting and would then report to the Commission. He mentioned that the Records Committee has issued a report as to the first six years of cooperative monitoring of water quality along the river system. They will continue for at least one more year and then assess what needs to be done from there. Barnett also reported that the three states were moving ahead independently on their TMDLs. Utah is about ready to revisit the TMDL in the lower area below Cutler Reservoir, which would be a process of about 2-3 years, to determine if it needs to be revised. Idaho revised their TMDL, noting that there has been improvement in the water quality of the river, and lessened their restrictions on discharges from municipalities, feeling that the river could carry more load than they previously allocated with respect to phosphates. That recommendation has gone to EPA, but there has been no response even though they have greatly exceeded the allowed time for a response. He noted that Wyoming DEQ has forestalled their approach to TMDL information gathering for many years, but they are expecting to get involved in the process soon. Holmgren mentioned that Bear River City and Corinne both use small lagoon systems for water treatment. Utah State DEQ is recommending that the cities go to a land application rather than discharging into the Malad or Bear River. He didn't know if the DEQ folks were aware of water rights issues when making those kinds of recommendations, but the cost factor for sewage effluent for cities with smaller populations is probably 100 times cheaper for land application than a mechanical system. Barnett added that Utah is now looking at a TMDL approach for the Great Salt Lake to come to better understand the health of the lake and what the issues might be there.

**XII. Management Committee report** – Pat Tyrrell reported that he had shared information from the Management Committee meeting regarding depletions and budget earlier in the meeting. He added that because the budget is in relatively good shape, there is no need to increase dues at this time. They will revisit this issue yearly to make sure that the Commission remains operationally solid.

**XIII. Engineer-Manager's report** – Don Barnett mentioned that many of his items had already been discussed. He noted that at the Commission meeting a year earlier, one of the more important discussions of the Commission was relative to delivery of stored water from one division of Wyoming to another division of Wyoming. Ultimately the Commission determined that it wasn't a big deal and that this particular situation wasn't really a Commission issue. There was a lot of musing and discussion about where else this might go and if Compact waters could be moved between states. Within two weeks of that meeting, Barnett received a call from an individual wondering how far they might be able to move their waters and if they might be able to move them to other states, but nothing has come of that. So it is just a thought that is out there at this point. With regard to this subject, Barnett mentioned a situation he had heard about in Oklahoma which might be of interest. It is in no way an authoritative declaration of things or a legal opinion. There was a city in Oklahoma that was seeking to sell some water to a city in Texas, and the State of

Oklahoma was preventing that water from being sold outside the State of Oklahoma. They have a compact on their waters, so Oklahoma was saying this water was compacted to Oklahoma and could not be sold out of state. This decision was appealed to the U.S. District Court saying that it was in violation of the Commerce Clause. The U.S. District Court confirmed Oklahoma's ability to ban the water going to another state. The decision said:

"The compact here explicitly provides for the allocation of resources along a rational and consistent basis among the relevant states." It further said "the compact is openly and unapologetically protectionist. The Congress approved the compact and it is not subject to any dormant commerce clause challenge. That approval necessarily constituted Congress's consent to a legal scheme different from that which would otherwise survive commerce clause scrutiny."

Barnett was just sharing this because of the previous discussion and the possibility of facing something similar at some point down the road.

**XIV. State Reports - Wyoming** – Pat Tyrrell reported that the main thing in Wyoming would be the budget. They survived without any cuts, but Wyoming is struggling, mostly due to their dependence on the price of natural gas. All the state agencies will be reporting to the governor and legislative committees during the summer a proposed 4 percent reduction in the second year of the upcoming biennium standard budget. Those are difficult cuts to make and they will wait and see what happens as a result. Regarding Montana vs. Wyoming, an interstate lawsuit under another compact which has been going on for over five years, they have just entered the discovery phase and depositions will be starting soon. Tyrrell also reported on their snowpack statewide. Of course, the Bear is not good. Most of the southern tier of Wyoming is in about the same shape. It gets a little better further north, but not great. He mentioned that there are ongoing studies on Sublette Reservoir by Cokeville. He also noted that they have been working on a cloud seeding program for 6-8 years. It is probably the state-of-the-art cloud seeding, weather modification research ongoing perhaps anywhere in the world, certainly in the U.S. They just got more funding to continue the program, mostly because for the past couple of years they have had so few storms that they haven't had many clouds to work with and they need more data to provide valid statistical results. The initial results are positive, but more work needs to be done.

**XIV. State Reports - Idaho** – Gary Spackman requested that some time be reserved at the next Commission meeting to discuss the Twin Lakes application and how it comes out because he felt it would be significant in a number of ways for the State of Idaho for analyzing public interest, the application of Compact in these water right reviews and ultimately, the interaction of FERC with the state water process. He didn't have anything else to report to the Commission.

**XIV. State Reports - Utah** – Dennis Strong reported on Utah's work on the Bear River Development Project. In 2006, the Legislature provided funding from sales tax for two identified state projects. The first was the Bear River Development Act in which the State Legislature directed that they proceed with the development of 220,000 acre-feet of water rights. He reported that the majority of their time and money has been spent on the Lake Powell pipeline project investigations, but they are continuing work on the Bear River Development Act. They are looking at additional reservoir sites and meeting with the local districts involved to talk about options and opportunities. Although the project start is probably somewhere after 2030, they are still looking at the opportunity of purchasing rights-of-way so that they will be ready in the future to begin that project.

**XVI. Next Commission meeting** – As there was no additional comment, Holmgren reported that the next Commission meeting would be held on November 13, 2012.

The meeting was adjourned at 3:45 p.m.

# **ATTENDANCE ROSTER**

## **BEAR RIVER COMMISSION ANNUAL MEETING**

Utah Department of Natural Resources Building  
Salt Lake City, Utah  
April 17, 2012

### **IDAHO COMMISSIONERS**

Marc Gibbs  
Kerry Romrell  
Gary Spackman

### **WYOMING COMMISSIONERS**

Patrick Tyrrell  
Sam Lowham  
Gordon Thornock  
Jade Henderson (Alternate)  
Sue Lowry (Alternate)

### **UTAH COMMISSIONERS**

Dennis Strong  
Charles Holmgren  
Blair Francis  
Joe Larsen (Alternate)  
Norm Weston (Alternate)

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

Don Barnett  
Jack Barnett  
Donna Keeler

### **OTHERS IN ATTENDANCE**

#### **IDAHO**

Lloyd Knight, Department of Agriculture

#### **UTAH**

Mike Styler, Department of Natural Resources  
Will Atkin, Division of Water Rights  
Carl Mackley, Division of Water Rights  
Ben Anderson, Division of Water Rights  
Todd Adams, Division of Water Resources  
Randy Staker, Division of Water Resources  
Larry Dalton, Division of Wildlife Resources  
Ron Hoffman, Upper Utah Water Commission  
Fred Hayes, State Parks

#### **WYOMING**

Mike Johnson, State Engineer's Office  
Don Shoemaker, State Engineer's Office  
Kevin Payne, State Engineer's Office

#### **OTHERS**

Connely Baldwin, PacifiCorp Energy  
Claudia Conder, PacifiCorp Energy  
Randy Julander, NRCS Snow Survey  
Cory Angeroth, U.S. Geological Survey  
Ben Radcliffe, Bureau of Reclamation  
Carly Burton, Bear River Water Users Association  
David Cottle, Bear Lake Watch  
Dan Davidson, Bear River Canal Company  
Bob Fotheringham, Cache County  
Scott Clark, Barnett Intermountain Water Consulting

**BEAR RIVER COMMISSION ANNUAL MEETINGS**  
**April 16-17, 2012**

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

**Operations & Records Committee Meetings**  
**UGS Core Research Center**  
**240 North Redwood Road**  
**Salt Lake City, Utah**

**Bear River Commission Meeting**  
**Utah Department of Natural Resources**  
**1594 West North Temple**  
**Salt Lake City, Utah**

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**COMMISSION AND ASSOCIATED MEETINGS**

**April 16**

10:00 a.m. Water Quality Committee Meeting – Anasazi Conference Room, 2<sup>nd</sup> Floor

**April 17**

9:30 a.m.	Records & Public Involvement Committee Meeting	Thornock
10:30 a.m.	Operations Committee Meeting	Gibbs
11:30 p.m.	Informal Meeting of Commission	D. Barnett
11:45 p.m.	State Caucuses and Lunch	Spackman/Strong/Tyrrell
1:00 p.m.	Commission Meeting – Main Floor Auditorium (Rms. 1040/1050)	Holmgren

**PROPOSED AGENDA**  
**ANNUAL COMMISSION MEETING**

**April 17, 2012**

**Convene Meeting:** 1:00 p.m.

**Vice Chairman:** Charles Holmgren

- |              |  |               |
|--------------|--|---------------|
| I.           | Call to order  | Holmgren      |
|              | A. Welcome of guests and overview of meeting                       |               |
|              | B. Recognitions  |               |
|              | C. Approval of agenda  |               |
| II.          | Approval of minutes of last Commission meeting (November 15, 2011) | Holmgren      |
| III.         | Report of the Secretary/Treasurer                                  | Strong/Staker |
|              | A. 2012 Expenditures   |               |
|              | B. Adoption of 2013 budget   |               |
| IV.          | Update/direction on depletion efforts                              | Tyrrell       |
| V.           | 2012 stream flow forecast  | Julander      |
| VI.          | 2011/2012 Bear Lake flood control/storage operations               | Baldwin       |
| VII.         | Quagga Mussel protection efforts                                   | Three States  |
| <b>Break</b> |  |               |
| VIII.        | Paris Hills Agricom project  | Goicoechea    |
| IX.          | Records & Public Involvement Committee report                      | Thornock      |
| X.           | Operations Committee report  |               |
|              | A. Committee meeting   | Gibbs         |
|              | B. PacifiCorp operations   | Baldwin       |
|              | C. Activities of the Bear River Water Users Association            | Burton        |
| XI.          | Water Quality Committee report                                     | Baker         |
| XII.         | Management Committee report  | Tyrrell       |
| XIII.        | Engineer-Manager's report  | Barnett       |
| XIV.         | State reports  |               |
|              | A. Wyoming   | Tyrrell       |
|              | B. Idaho   | Spackman      |
|              | C. Utah  | Strong        |
| XV.          | Other / Public comment   | Holmgren      |
| XVI.         | Next Commission meeting (November 13, 2012)                        | Holmgren      |

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

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF JULY 1, 2011 TO APRIL 10, 2012

INCOME	CASH ON HAND	OTHER INCOME	FROM STATES	INCOME
Cash Balance 07-01-11	98,788.15			98,788.15
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 (No FY12 rec'd)		3,088.00		3,088.00
US Fish & Wildlife		6,228.78		6,228.78
Interest on Savings		671.66		671.66
TOTAL INCOME TO 10-Apr-12	98,788.15	9,988.44	120,000.00	228,776.59

DEDUCT OPERATING EXPENSES

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging/USGS Contract	54,520.00	-	54,520.00
SUBTOTAL	54,520.00	-	54,520.00
EXPENDED THROUGH COMMISSION			
Personal Services BIWC	58,700.00	9,783.30	48,916.70
Travel (Eng-Mgr)	1,200.00	729.44	470.56
Office Expenses	1,600.00	876.69	723.31
Printing Biennial Report	1,000.00	313.10	686.90
Treasurer Bond & Audit	1,400.00	1,300.00	100.00
Printing	1,600.00	1,165.50	434.50
Realtime Web Hosting	8,400.00	4,200.00	4,200.00
Clerical	5,000.00	-	5,000.00
Contingency	3,000.00	3,000.00	-
SUBTOTAL	81,900.00	21,368.03	60,531.97
TOTAL EXPENSES	136,420.00	21,368.03	115,051.97
CASH BALANCE AS OF 04-10-2012			113,724.62

BEAR RIVER COMMISSION

DETAILS OF EXPENDITURES

FOR PERIOD ENDING APRIL 10, 2012

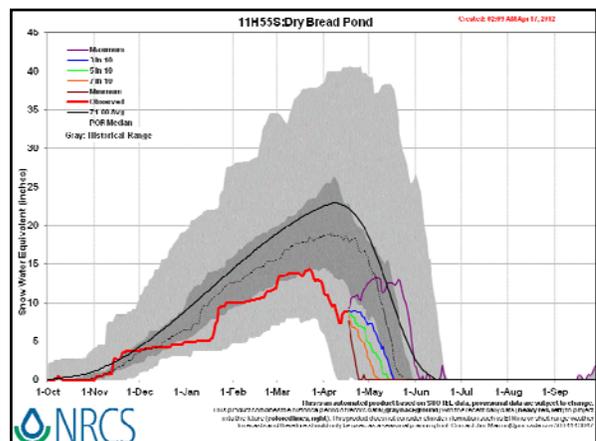
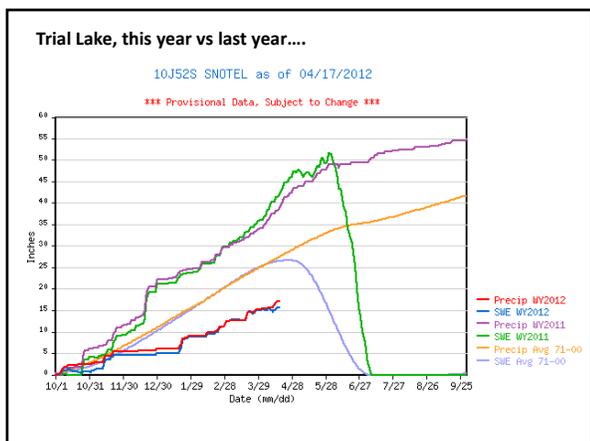
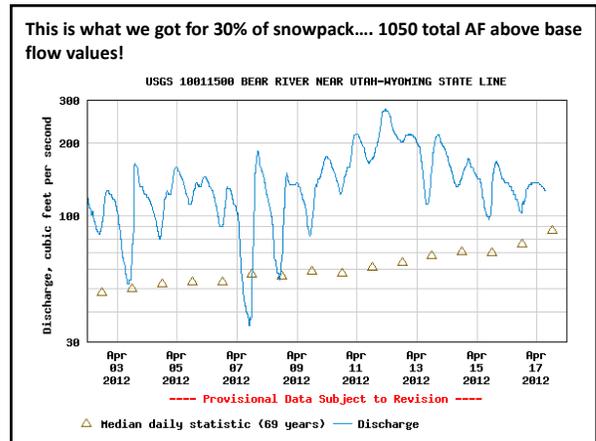
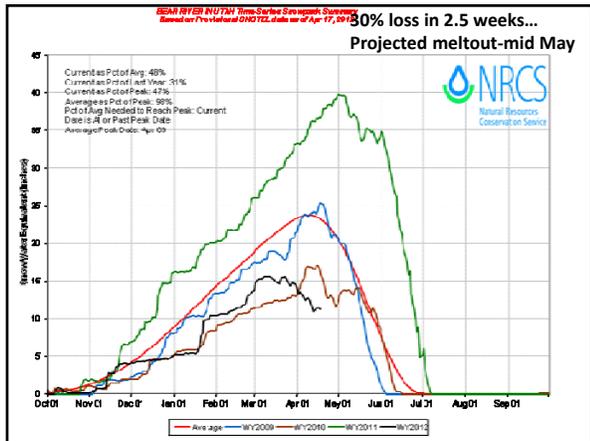
737	USGS	54,520.00
738	BIWC	4,891.67
739	BIWC	10,470.93
740	MOKI SYSTEMS	2,100.00
741	BIWC	5,363.31
742	MOKI SYSTEMS	2,100.00
743	BIWC	6,039.30
744	BIWC	5,481.16
745	VOID	
746	VOID	
747	VOID	
748	BIWC	14,116.53
749	BIWC	9,869.07
750	CNA SURETY	100.00

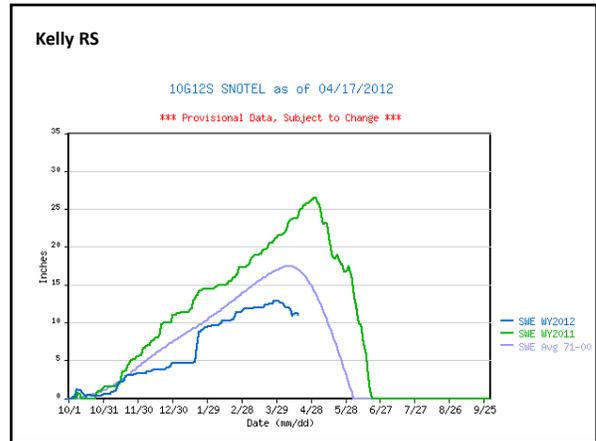
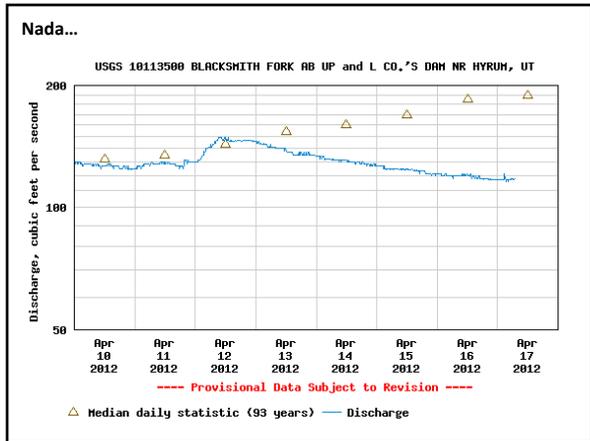
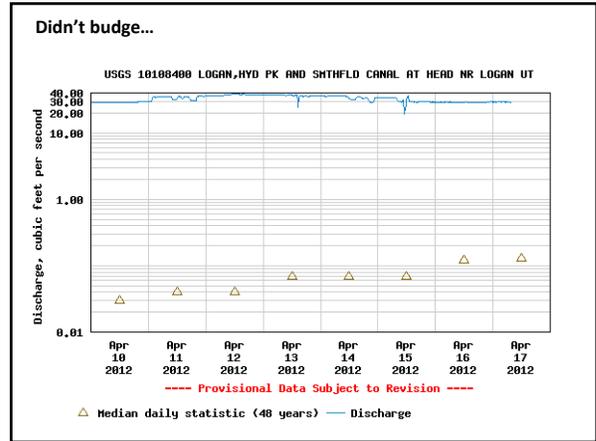
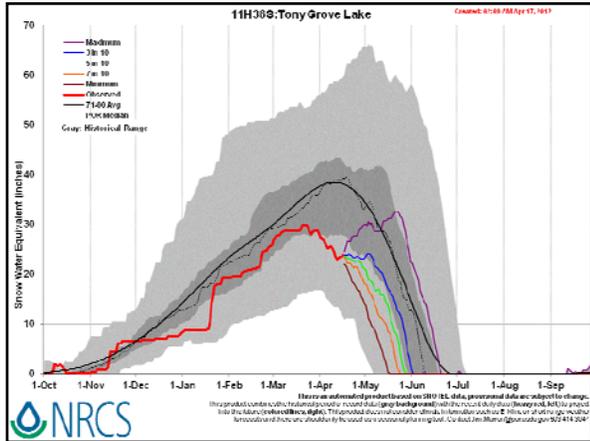
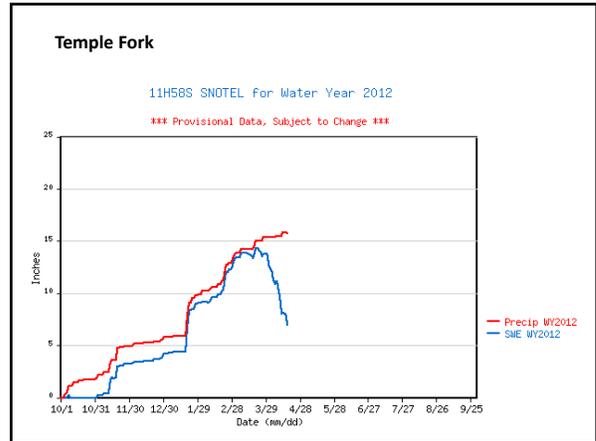
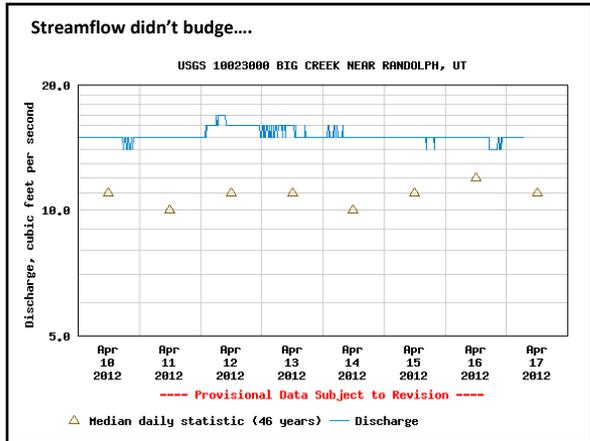
TOTAL EXPENSE 115,051.97

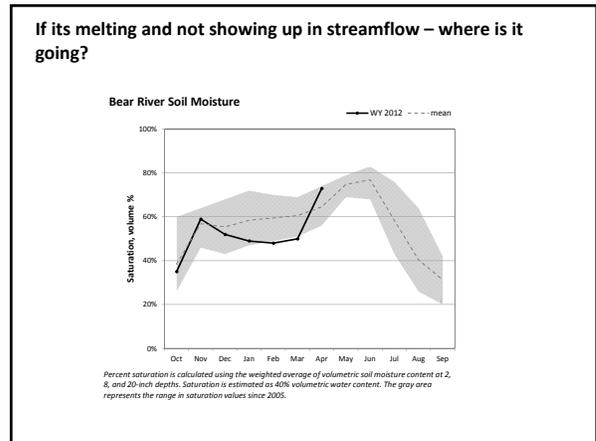
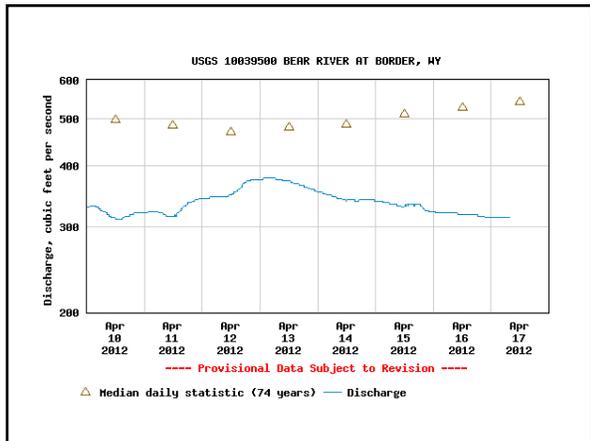
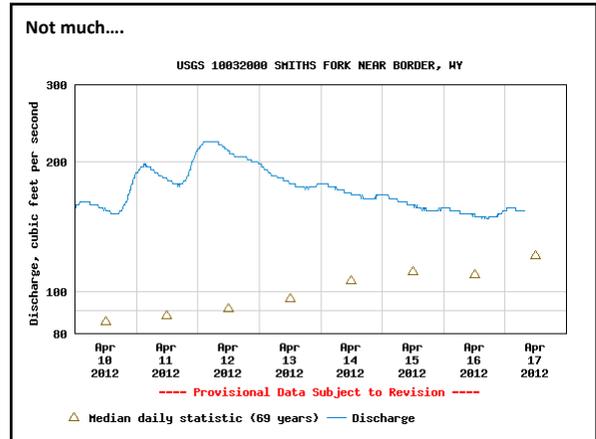
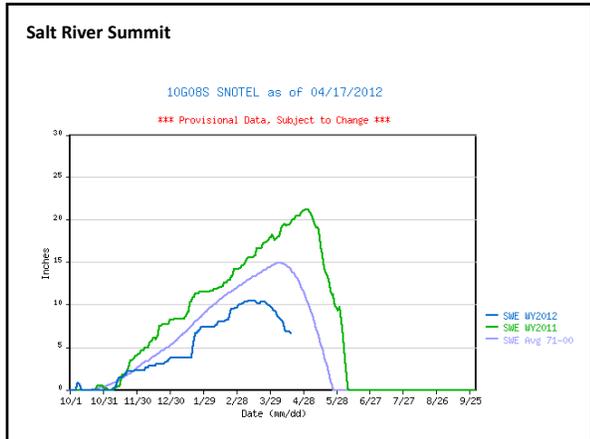
BANK RECONCILIATION

Cash in Bank per Statement 04-10-2012	4,467.72
Plus: Intransit Deposits	
Less: Outstanding Checks	
Total Cash in Bank	4,467.72
Plus: Savings Account-Utah State Treasurer	109,256.90
TOTAL CASH IN SAVINGS AND IN CHECKING ACCOUNT	113,724.62









Hot, dry wind events – 20 to 40 mph for 24 to 48 hours sublimates snowpack directly to the atmosphere – the area has had several over the past month...

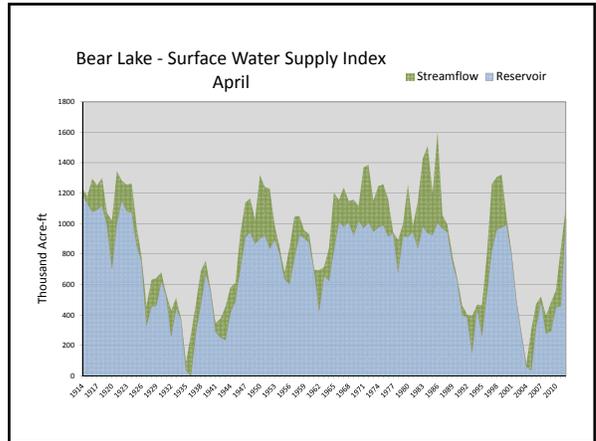
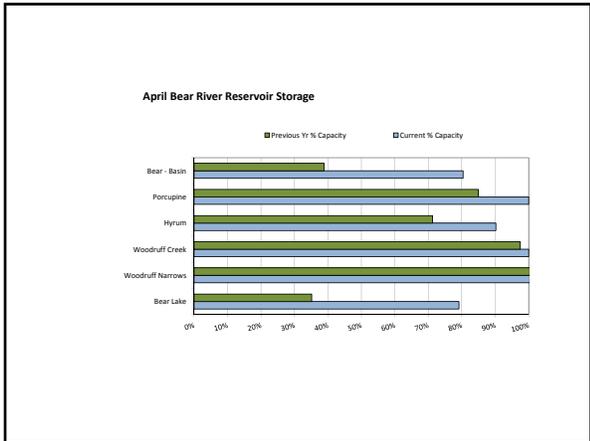
The outcome doesn't look good...

April 1 Streamflow Forecasts ranged from 30% to 55%

Given observed snowmelt and resulting runoff...

These numbers may be overly optimistic....

Expect runoff to be over by mid May to early June.



## Idaho- Quick Review

- Program revenue is generated from Idaho Invasive Species Sticker (IDPR)
- Administered by Agriculture
- Budget is approximately \$850K/annually
- Idaho Stations are open ~7am – ~7pm, 7 days a week
- 2012 – Mandatory stations began opening February 3, most close after Labor Day.

## Prevention-based

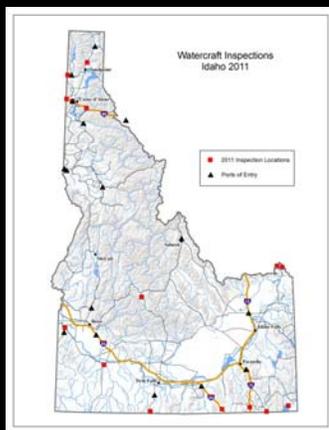


## 15 Inspection Stations

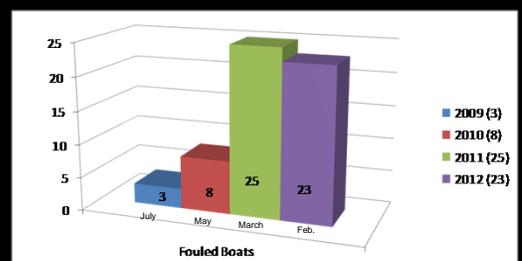


## Targeting "High Risk" Boats

- Large Moored Boats
  - Seasonal Idaho boats
  - Boats purchased out-of-state
  - Out-of-state boats that are being relocated to Idaho



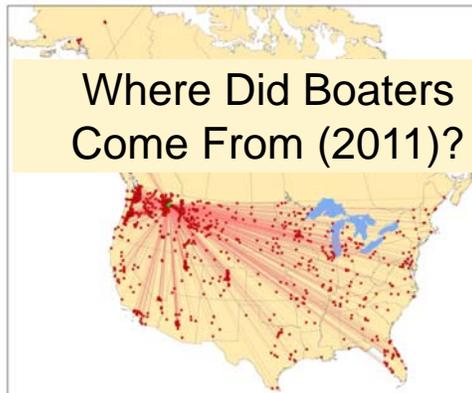
## Idaho mussel-fouled boat interceptions 2009-2012\*



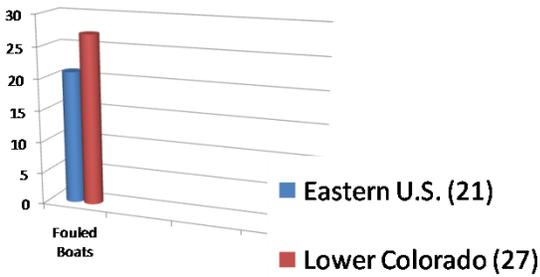
## 2012 Fouled boat destinations

- Of the 23 boats that have been intercepted in 2012 to date:
- 15 were destined for WA
- 2 were destined for Canada
- 1 was destined for WY
- 1 was destined for MT
- 4 were destined for ID

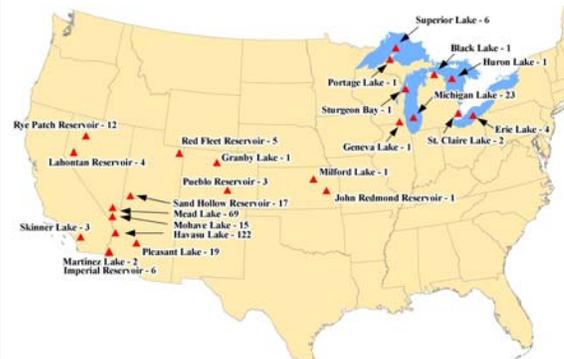
## Where Did Boaters Come From (2011)?



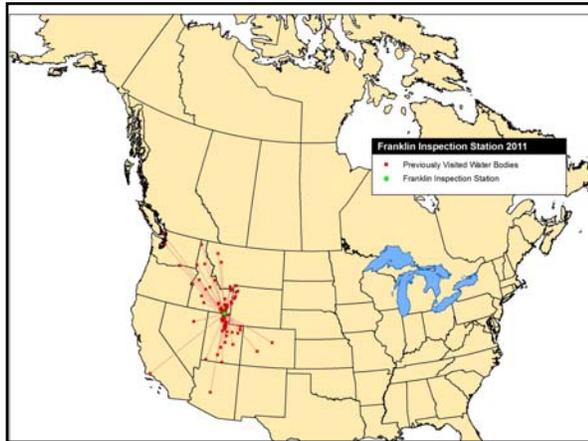
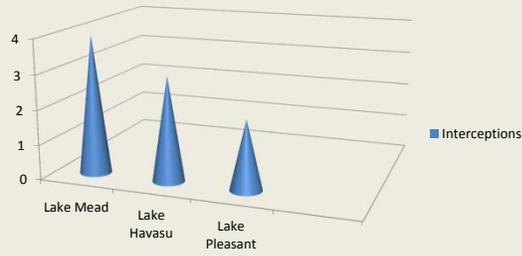
## Sources of Mussel-Fouled Boats (2011-2012)



## Infested Lakes Visited by Boaters Entering Idaho 2011

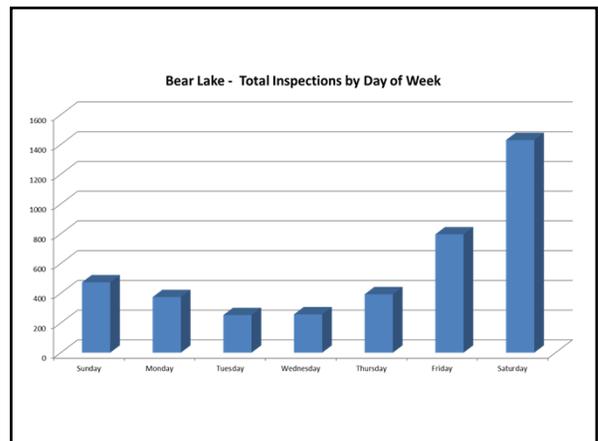
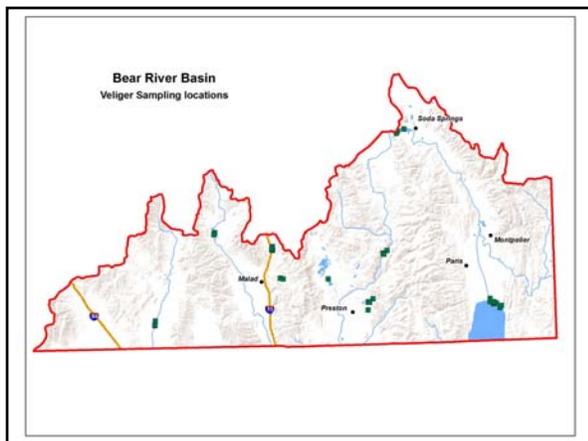


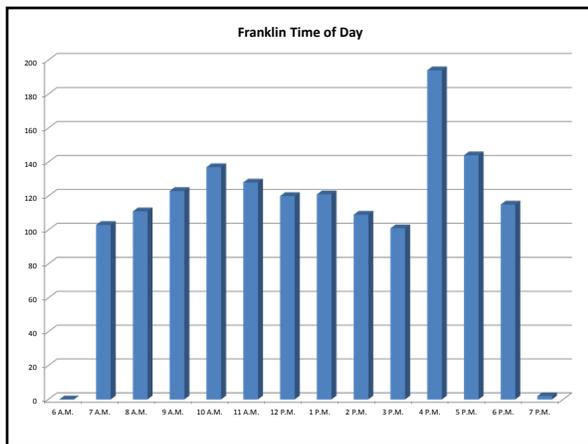
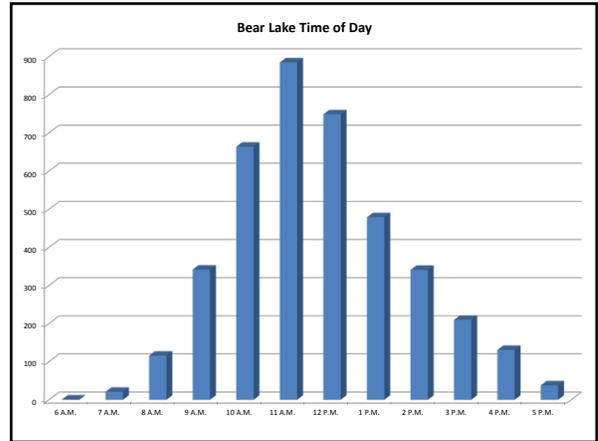
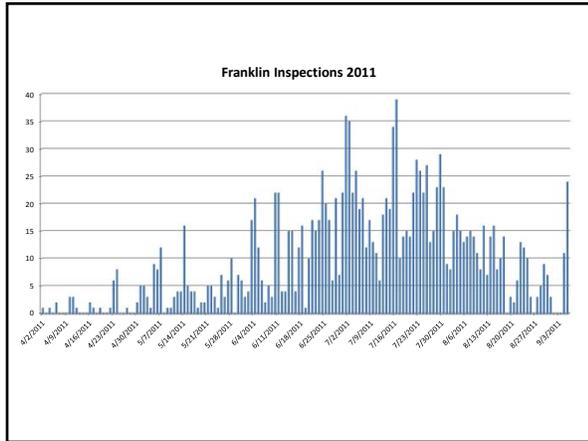
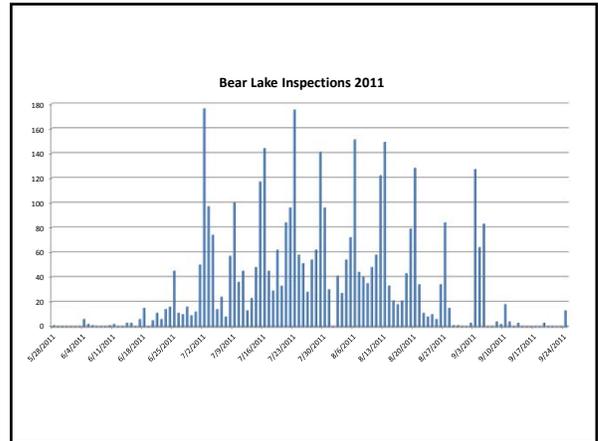
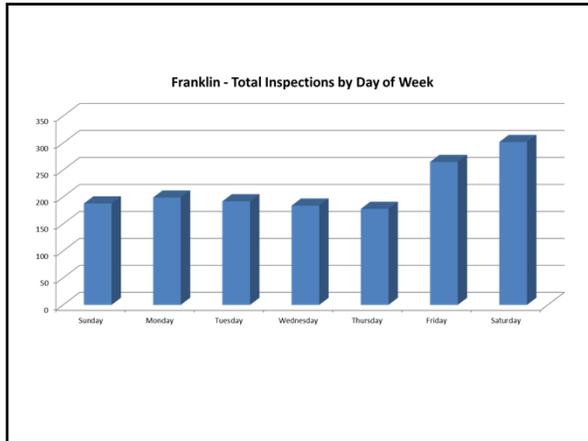
### 2011 Lower Colorado Interceptions



**CLEAN DRAIN DRY YOUR BOAT**  
HELP STOP THE SPREAD OF INVASIVE SPECIES

**IDAHO BOATERS DON'T FORGET**  
INVESTED WATERS IN THE WESTERN US INCLUDE:  
Lake Mead, Lake Havasu, Lake Mohave, Lake Pleasant





Idaho's inspection stations offer a unique opportunity for face-to-face contact.

100K "contacts" to date (2009-2012)

## Key Changes - 2012

- Open earlier
- Targeting  
Commercially hauled  
boats
  - Seasonal Idaho boats
  - Boats purchased out-  
of-state
  - Moored Boats



## Utah's Fight Against The Invasion

**Partners are Key to Success**



**“Forever Keep Them Out”**  
 or  
**“Forever Live With Them”**

## AIS THREATENING UTAH

<p><b>AIS TYPES</b></p> <p>FUNGUS ALGAE PLANTS MOLLUSKS CRUSTACEANS FISH AMPHIBIANS REPTILES</p>	<p><b>PATHWAYS / VECTORS</b></p> <p>Aquarium Discards FAUNA &amp; FLORA RELEASES Aqua-scape Plantings NURSERY SALES &amp; ESCAPES Bait Releases DISEASE, AIS &amp; UNLAWFUL FISH Aquaculture (Hatcheries) PATHOGENS (Fish Health Board) &amp; AIS Recreation AIS: BOATERS, ANGLERS &amp; SCUBA DIVERS Industry AIS: WATER MOVEMENT &amp; TRANSPORT AIS: CONSTRUCTION AIS: BRIDGE INSPECTIONS</p>
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## Utah AIS Program Launched 2007

- Assess Impacts (\$15M/yr): Emergency Plan: Budget: **Law**
- Hired & Trained 78 Staff:
 

1 Coordinator (1 FTE)	6 Biologists (5.05 FTE)
1 Outreach Specialists (1 FTE)	65 Seasonal Technicians (20.1 FTE)
5 Enforcement Officers (2.75 FTE)	
- Acquired Equipment (trucks & 41 decontamination units)
- 2009 Utah AIS Plan--Quagga/Zebra, NZMS & Watermilfoil
  - Primary Management Method: Public Education
  - Preferred Decontamination Method: Clean, Drain & Dry





## Utah AIS Plan's Purpose

Develop and Document AIS Program for Utah

**GOAL:** Keep AIS Out or Contained to Existing

**OBJECTIVES:**

1. **Outreach**  
**Ongoing Strategies:** \* Market to radio, TV, newspapers  
 \* Boater Education via brochures, web, signs & boat ramp contacts
2. **Boat Interception**  
**Ongoing Strategies:** \* Inspect & Decontaminate Boats
3. **AIS Management**  
**Ongoing Strategies:** \* Plan Implementation & Evaluation  
 \* AIS Monitoring  
 \* AIS Control & Restoration  
 \* Research & Technology

## Utah's AIS Funding FY07 Thru FY12

**General Funds & UDWR License Sales for AIS**

- FY08 thru FY10 \$3.9M GF & \$136K License Sales
- **FY11 \$1.35M GF (lost \$50K GF & \$68K Restricted)**
- **FY12 \$1.35M GF**

**Utah Partner In-Kind Services or Funds for AIS**  
 (NPS, BOR, USFWS, BLM, USFS, NRCS, USP, Water Conservancy Districts, Provo River Watershed Council, PacifiCorp)

- FY08 thru FY10 \$489,376
- **FY11 \$327,923**
- **FY12 \$291,409 GF**

**GRAND TOTAL : \$7,844,708**

## What's Unique About Utah?

### Decontamination Certification

<p><b>All Boats Launching in Utah Must Display A Decontamination Certification Form in Their Launch Vehicle</b></p>	<ul style="list-style-type: none"> <li>■ <b>Self Certification</b></li> <li style="text-align: center;">or</li> <li>■ <b>Mussel Aware Boater Certification</b></li> <li>■ Document Violators in Statewide Database (2x=Citation)</li> </ul>
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### UDWR's Protocol for Dreissena Discovery

Find a juvenile or adult mussel

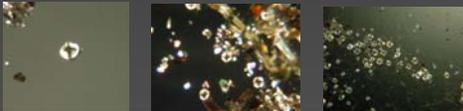
or

Find veligers by microscopy/FlowCam

in either case

Verify by PCR via two independent methods

- \* not detected
- \* inconclusive (+ microscopy or + PCR)
- \* detected (+ microscopy; + 2xPCR)
- \* infested: juvenile or adult present  
(Utah Wildlife Board Listing in Rule)



### Pre-2007: Quagga & Zebra Mussels Not in West. Utah's Dreissena History:

- 2007: Quagga Discovered in Lake Mead
  - Lake Powell—**inconclusive** Dreissena
- 2008: Dreissena Discovered in UT
  - Red Fleet Reservoir—**detected** quagga (Uintah County)
  - Electric Lake—**detected** zebra (Emery County)
  - Pelican Lake, Midview Reservoir, Joe's Valley Reservoir & Huntington Reservoir—**inconclusive** Dreissena
- 2010: Continued Spread in UT
  - Sand Hollow Reservoir—**infested** quagga (Washington County)

### December 31, 2011

#### Utah's Successes with Dreissena Management

- Quagga Still in Lake Mead
  - Lake Powell—reclassified as **not detected** in late 2010
- 3 years following Dreissena Discovery in Utah
  - Red Fleet Reservoir—reclassified as **inconclusive**
  - Electric Lake—reclassified as **inconclusive**
  - Pelican Lake, Midview Reservoir, Joe's Valley Reservoir & Huntington Reservoir—reclassified as **not detected**
- Sand Hollow Reservoir—remains **infested** (DNA detections)  
Note: will not reassess until the end of 2014, but only if samples remain negative.

### WHAT IS HAPPENING IN WEST

*Most AIS Efforts Target  
Quagga & Zebra Mussels  
Some Effort on other AIS*

- All States Have Reasonable Laws About Possession
- Many Western States Have Pro-active Programs
  - Intercept Boats
  - Inspect Pre-launch Boats to Ensure No Hitchhiking AIS
  - Decontaminate Boats When Necessary
  - Provide AIS Education to Boaters and Water Users
- Other States Trying To Secure Operational Funds

### Quagga & Zebra = West-wide Risk

Affected: Headwater Lakes of Colorado River  
\* Trans-basin Diversion to South Platte River

Affected: Lower Colorado River  
\* Trans-basin Diversion to southern CA  
\* Trans-basin Diversion to central AZ

Affected: Multiple Waters in UT, CO, CA, AZ, NV

- Destinations of Water
  - **DOWNSTREAM**
- Destinations of Boaters
  - **EVERY WHERE**

Infestation in WY worrisome; headwaters to much of West

### Cooperation & Partnerships Key to Success

1. Local Partners Provide \$\$ & Political ++
  - Tribes, Federal, State, Local Governments & Industry
2. Western Interstate Partnerships
  - WRP of Aquatic Nuisance Species Task Force
    - Facilitates Cooperation & Partnerships
  - 100<sup>th</sup> Meridian Initiative
    - Many partners working together to fight the invasion
3. Boaters Across the Continent
  - Clean, Drain & Dry

## YOU CAN HELP !

### Decontaminate After Every Excursion

#### 1. Clean, Drain & Dry

(7 days summer, 18 days spring/fall, 30 days winter)

#### 2. Professional--Scalding Hot Water (140F)

- Boats & Trailers
- Wetted Equipment
  - Anchor & Ropes
  - Water Toys—skis & Vests
  - Fishing Equipment
  - Scuba Gear
  - Construction Equipment





# Utah's Efforts to Stop Invasive Mussels

## Status report for 2011

During the 2008 legislative session, Utah lawmakers learned about a significant threat to the state's water supplies, irrigation systems, hydroelectric plants, recreation areas and aquatic wildlife. The Legislature took swift action to protect these critical resources from invasive quagga and zebra mussels. Lawmakers passed the Aquatic Invasive Species Interdiction Act and funded a multipronged education, detection and prevention effort.



Mussels will attach to surfaces in a contaminated water. They travel from one water to another on boats and other equipment. To remove them, boaters must use the Clean, Drain & Dry self-decontamination method or have their boats professionally cleaned with 140° F water.



It took only three months for mussels to completely cover and block this once-clean pipe. One breeding pair of invasive mussels produces more than a million offspring each season.

### Funding, partnerships and progress in 2011

To continue fighting the invasive mussel threat, the 2011 Legislature approved \$1,350,000 in General Funds for FY 2012. Federal, corporate and water conservancy district partners also supported this effort and provided more than \$271,000 in additional funding. Using those funds, the Utah Division of Wildlife Resources (DWR) and its partners focused on inspection, education, decontamination and enforcement during the 2011 boating season. Working together, they:

UT Bear Lake  
2010 2011  
2,964 3,000+  
4/0 4/0  
yes yes  
yes yes

- Screened 373,243 boats—and educated their owners—before they launched in Utah lakes and reservoirs.
- Decontaminated 9,114 boats that had recently boated in affected waters. Nineteen of those boats were encrusted with mussels, many of which were alive.
- Issued 8,249 informal notices of violation, 1,592 written warnings and 49 formal citations. Law-enforcement personnel had more than 18,700 contacts with boaters on this issue.
- Continued a coordinated, aggressive outreach and education effort, involving news media, Web content, brochures, boat-ramp signs and recreation area posters.

37% to 64% of Bear Lake boats seem to consistently use the lake. Other waters they originate from are Lake Powell (7%), Willard (7%), Utah Lake (7%) & DeChick (7%).

- Assigned and equipped a mix of seasonal and full-time personnel (primarily biologists, inspection technicians and conservation officers) to educate boaters and to inspect watercraft.
- Coordinated hundreds of volunteers, who donated thousands of hours toward education and prevention efforts.
- Provided an online Mussel-Aware Boater course that more than 4,200 boaters completed, 17 percent more than in 2010. They received a certificate that streamlined the launch process throughout the 2011 season.
- Sampled 92 waterbodies for the presence of invasive mussels and other invasive species.

### **Winning the fight against mussels**

The DWR has made substantial progress in the state's fight against invasive mussels. Since 2008, mussel test results have ranged from "inconclusive" to "infested" at only eight Utah waterbodies. All of the other waterbodies remain unaffected.

Five of the affected waters have tested free of mussels for three years, so their status changed from "inconclusive" to "not detected" at the end of 2011. Two other waters—Red Fleet Reservoir and Electric Lake—tested clean this year for the third year in a row. Their status changed from "detected" to "inconclusive." Only Sand Hollow Reservoir continues to show evidence of quagga mussel DNA, although no mussels (in any stage of development) have been found since the original discovery of a single adult mussel in 2010.

Aquatic organisms sometimes need multiple transfers into a lake or reservoir in order to establish a thriving, reproducing population. The DWR believes that its aggressive containment efforts likely prevented mussels from entering the affected waterbodies.

### **Boater compliance and future efforts**

In 2010, two online surveys revealed that the DWR's outreach and education work has been effective. More than 96 percent of boaters were aware of the mussel threat. The survey also revealed the following:

- Most boaters (85–100 percent) report that they completed and displayed their Decontamination Certification forms.
- Approximately 84–87 percent of boaters report that they decontaminated their boats.

The DWR wants to improve boaters' compliance, possibly through targeted law-enforcement efforts and additional media outreach. To fund this work—and to continue protecting Utah's waters, diversion structures and aquatic wildlife—the DWR hopes to maintain program funding in FY 2013.

— Published January 25, 2012

## SUMMARY OF BEAR LAKE OPERATION FOR WATER YEAR 2011 AND IRRIGATION ALLOCATION FOR 2012

Date	Hydrologic Information/Event	Contents (% of Full) Discharge (% of Normal)
10-01-10	Bear Lake Beginning Elevation - 5,910.25 ft.	508,382 af (36%)
11-09-10	Bear Lake Low Elevation - 5,909.96 ft. (see note 1)	489,754 af (34%)
	Rainbow Inlet Canal Discharge	727,000 af (311%)
	Bear River Discharge Below Stewart Dam	3,626 af
	Bear Lake Net Runoff (Computed Total Inflow less Lake Evaporation)	841,000 af (260%)
08-14-11	Bear Lake High Elevation - 5,921.47 ft.	1,267,873 af (89%)
	Outlet Canal Releases; 7/7-9/30 (86 Days)	183,000 af
07-22-11	Outlet Canal Maximum Release - 1,540 cfs	
	Bear Lake Storage Release (see note 2)	83,400 af
09-30-11	Bear Lake Ending Elevation - 5,919.96 ft.	1,162,192 af (82%)
	Bear Lake Settlement Agreement "System Loss" Volume	Not Applicable - Flood Control operations

**Notes:**

1 Low contents prior to start of storage.

2 Only flood control, no storage release for irrigation .

**Notable Events**

2011 saw a complete recovery from drought conditions at Bear Lake. Spring runoff was very high and the water level of Bear Lake increased more in 2011 than in any other water year on record. The large volume of available storage allowed a very simple operation at Bear Lake, store all available inflow. Rainbow Inlet Canal flow was bypassed through the Bear Lake Outlet Canal beginning July 7<sup>th</sup>. Bear Lake pumping began August 4<sup>th</sup> after the PacifiCorp Target Elevation was set at 5,918 feet for March 31, 2012. The PacifiCorp Target Elevation was changed on January 6, 2012 to 5,920 feet and remained unchanged for the remainder of the season.

**Current Status**

Bear Lake elevation as of April 15, 2012 was 5920.14' (1,175 TAF, 83% full).

Rainbow Inlet canal 600 cfs and storing in Bear Lake.

The Bear Lake Outlet Canal is currently closed.

Bear Lake Storage Irrigation Allocation of 245,000 acre-feet was declared on April 10, 2012.

**Scenarios**

There are two relevant scenarios of future Bear Lake levels based on water supply forecasts. The 50% exceedance forecast, which calls for a spring maximum elevation of 5920.8 of Bear Lake; and the 30% exceedance forecast which calls for a 5921.4' spring maximum elevation of Bear Lake.

The PacifiCorp Target Elevation will be re-evaluated in August 2012. The typical target of 5,918 feet is the default and likely target for March 31, 2013.