



Utah Lake Technical Committee Meeting  
Monday, October 22, 2007  
Historic Utah County Courthouse  
51 South University Avenue, Suite 211  
Provo, Utah 84601  
8:30 A.M.

**ATTENDEES:**

Bruce Chesnut, Orem, Chairman  
Reed Price, Utah Lake Committee  
Kris Buelow, CUWCD  
Jim Hewitson, Lehi  
Clyde Naylor, Utah County  
Dave Wham, UT Dept. of Environmental Quality  
Michael Mills, Dept. of Natural Resources  
Ty Hunter, Division of Parks & Recreation  
Chris Tschirki, Orem City  
Doug Sakaguichi, Division of Wildlife Resources  
Ben Anderson, Division of Water Rights  
Carol Mausser, Executive Assistant

Greg Beckstrom, Provo  
Adam Cowie, Lindon  
Deon Giles, Pleasant Grove  
Lee Hansen, Saratoga Springs  
Brad Stapley, Springville  
H. Barry Tripp, Forestry, Fire & State Lands  
Ann Merrill, Division of Water Resources  
Bob Fisher, Woodland Hills  
Chris Keleher, Dept. of Natural Resources  
Sarah Sutherland, CUWCD  
Ron Kidd, JWCD

**ABSENT:**

Howard Denney, American Fork  
Michael Vail, Genola  
James Linford, Santaquin  
Norman Holdaway, Vineyard

Scott Bird, Mapleton  
Don Blohm, Highland  
James McMillan, U.S. Army Corps. Of  
Engineers

**1. Welcome.**

Chairman Bruce Chesnut welcomed all to the Utah Lake Technical Meeting and called the meeting to order at 8:32 A.M. He asked everyone to introduce themselves and state what organization they were representing.

**2. Review and approve the Utah Lake Technical Committee minutes from September 24, 2007.**

Mr. Chesnut invited discussion of the minutes. There was a motion to approve the minutes which was seconded. The minutes were unanimously approved.

**3. Presentation on water rights issues in Utah Lake – Mr. Ben Anderson, Division of Water Rights.**

Mr. Anderson extended thanks for being invited to the meeting. He passed around a handout regarding Water Rights in Utah Lake. He began by saying he would like to start his presentation by going over some of the basics of water rights with discussion to follow. A water right is a property right that has

many characteristics. It is conveyed like real property with the records being in the county recorder's office. They have a priority date. It can be confusing that the water rights have a priority date associated with them. The oldest date has the greater priority when comparing water rights. A water right has a specified surface area where the water is used and it can be used for various purposes. The type of use is part of the right. Sometimes it is used for municipal uses; sometimes for irrigation usage or it can have multiple uses associated with it. The water right has a specified quantity. The period of use is important for irrigation purposes. The water rights can be moved from one area of use to another. One complex aspect is they can be moved to places that the water is diverted. That can only be done by application to the Office of the State Engineer where the application will be approved, rejected or held for review when more information is necessary.

In the state there are many distribution systems operating that are usually associated with the river systems. Utah Lake/Jordan River is a river distribution system organized under the direction of the State Engineer and the Water Users. There are many of these systems in the state. Typically there will be a person hired to be the River Commissioner and oversee water distribution on a system. When they do this it is by decree from the court.

Utah Lake is a unique lake. It's called a lake but is an inefficient reservoir for storage. The storage rights are early priority rights which means if one looks at the system in general from the Provo River, Spanish Fork River and other tributaries like American Fork Canyon, then all of the rights established on the Provo River, Deer Creek and Jordanelle are junior to the priority rights to storing on Utah Lake. Utah Lake Water is very low quality due to the various aspects of the system. Some figures of Utah Lake's Operation are as follows:

System Storage	585,000 ac-ft
Primary Storage	125,000 ac-ft
Inactive storage	160,000 ac-ft
Average annual discharge to Jordan River	346,000 ac-ft
Average annual Evaporation:	380,000 ac-ft
Direct Pumping	<10,000 ac-ft.

Compromise Elevation, the normal full elevation of the Lake, is 4489.045 ft. When the Lake rises above compromise, the gates from the Utah Lake to the Jordan River are opened to reduce flooding. The gates are operated by the Water Users under a court order. When the Lake rises above compromise the gates can be fully opened and when the Lake is below compromise they can be fully closed, storing water for the next irrigation season. Once the System Storage is used it dips into Primary Storage. Even when the Lake is considered empty as far as a storage reservoir, there is actually still 160,000 ac-ft of storage that cannot be pumped out by the water users. Because the surface area is so large, the evaporation of the Lake exceeds the discharge making Utah Lake an inefficient storage area. Mr. Price had asked Mr. Anderson to inform the Committee of the major water users of Utah Lake which are:

Jordan Valley Water Conservancy District	Central Utah Water Conservancy District
Kennecott Corporation	Draper Irrigation Company
East Jordan Irrigation Company	Salt Lake City
Utah & Salt Lake Canal Company	Jordan & Salt Lake Canal Company
South Jordan Canal Company	North Jordan Irrigation Company
Utah Lake Distributing Company	

Most of these water users divert water between Turner Dam and about a mile downstream of Turner Dam. All of the water in Utah Lake is diverted to Jordan River. Turner Dam is at the Jordan Narrows, close to Camp Williams. Responding to the question of what Turner Dam's purpose is, it was stated that it is the outlet for diversions and controls the water level of the Lake. When the Lake is very high the control gates on Turner Dam and on the reservoir at Lehi are opened. When the lake level is down the water has to be pumped into the stretch of river leading to Turner Dam. The pumps in Lehi and Turner Dam are coordinated. Mr. Anderson then explained the diversions for every water user. Mr. Fisher asked if anyone in Utah County uses the diverted water. It was answered that the water in the Utah Lake Distributing Canal should come from the Provo River. The other canal is Jacob Canal with exchange water which goes from Jordan Narrows to the south. Most of the 346,000 ac-ft of the annual discharge of water to the Jordan River is going up into Salt Lake County for irrigation purposes. Mr. Weeks asked if there had been any discussion about building a dyke. Mr. Anderson said that it had come up several times in the past and at one time there had been plans to dyke Provo Bay and Goshen Bay; however, if the outflow didn't exist Utah Lake would become like the Great Salt Lake. They were also looking at reducing the surface area as a way to reduce the evaporation. It was opposed by the State and it is not known how that came to be. It was questioned whether the Lake was full when the Lake is at the 585,000 ac-ft as listed as Storage System. Actually the Lake is full when you add all the storage levels together equaling 870,000-ac- ft. That number is the volume of the Lake at compromise. Mr. Beckstrom inquired what the lake elevation is when the pumps are required to be activated. It was answered that typically the pumps are operated if the Lake is much below the compromise level, even a couple of feet down. Chris Kelleher commented that when the senior water rights were established a lot of the water was used for agricultural purposes in the Salt Lake Valley. That has changed considerably with all the urbanization. He asked what Mr. Anderson sees changing in the future regarding exchanges between downstream and Utah Lake. It was questioned whether that irrigation use could be changed into more municipal uses. Mr. Anderson answered that in regard to exchange applications there has been about 70,000 ac-ft diverted from the canals to wells to date both in Salt Lake County and Utah County. If that trend continues there are a number of concerns. Applications are looked at individually and at what ground water is available to exchange. If you pump from a well eventually the inflow to the Lake is reduced. Utah Lake water quality might degrade in the future because more of the water is moved out of the Lake and would not be a water quality at its best. It was asked if the State takes water quality into consideration when looking at exchange applications. Dave Wham inserted that according to Utah Water Law the quality is not considered at this point. It was asked at what elevation the Lake is at when it is at the bottom of the System Storage. Mr. Anderson remarked that when it is empty it is at 8.7 ft. below compromise. Mr. Beckstrom asked how the annual evaporation compares with other state reservoirs' evaporation. Mr. Anderson answered that the reason it is so high is because the surface area is so large. When considering evaporation per acre it would not be much more than other reservoirs. If the surface area was reduced it would probably improve the water quality.

In response to questions regarding the relative percentages of all the eleven major waters users, Mr. Anderson suggested that the website [waterrights.utah.gov](http://waterrights.utah.gov) would answer many questions including listings of the primary and secondary water rights users. In relation to Mr. Keleher's inquiry about Utah County trends he emphasized that there has been more water used from wells for municipal usage and that trend will probably continue. Mr. Fisher asked if it means that more water is flowing up to Salt Lake. If they are diverting from a well, the return flow probably would make that true. Mr. Price inquired how irrigation water can be transferred to a well without putting it into the aquifer. It was answered that it requires looking at the aquifer and seeing what water is available. That is a good example of why the priority date is important. The overall balance of water nonetheless, would have to remain the same. The State Engineer's Office will not be opening any new applications at this point.

Mr. Naylor asked when water is low (below 300,000 ac-ft) what effect it has on the aqueducts. If the Lake is low there are certain conditions that would require upstream users to not store any water if Utah Lake has the right to it or they can have water diverted from other places. It is all regulated by priority. For example back in 2004 when the water level was low, Deer Creek and Jordanelle did not store any power water but sent the water down to Utah Lake. Bruce Chesnut clarified that Utah Lake can call upon other water rights to make Utah Lake whole. Mr. Naylor brought up the issue of dredging and how that would affect water rights. It seems that dredging wouldn't increase the amount of water as the surface area would remain the same and thus the evaporation would remain the same. Mr. Beckstrom suggested that the report mentioned by Mr. Keleher that came out in the late 70's from the Governor's office would be useful to review. The report addressed ecosystems related issues that might be helpful as the Master Plan is developed.

Lee Hansen pointed out that the reduction of the phragmites would help reduce the evaporation of the Lake. They are interlocked. Mr. Wham asked who manages the compromise level. It was answered that Brad Gardner is the River Commissioner and has forty years of experience. Mr. Wham wondered if there could be some forecasting discharges by the Commissioner when the compromise level is approaching. Ty Hunter commented that he received lots of heated calls a few years past from people living by the Jordan River and would like to know who to refer these calls to in the future. It was answered that it would be the River Commissioner. Mr. Keleher asked if there is a possibility of revisiting the State Engineer's Distribution Plan since it is fifteen years old and making some adjustments. Mr. Anderson answered that the numbers may change but the overall concept is basic water law. Numbers may change but the overall concept is the same. Discussion continued. Mr. Chesnut thanked Mr. Anderson for coming and fielding so many questions. The Technical Committee will continue to look at some of these questions as they assist with the Master Plan.

#### **4. The Utah Lake Watershed**

Mr. Price attended the Utah Lake Symposium a few weeks. At the symposium one gentleman present suggested that the Commission should address some watershed concerns in our Master Planning process. Mr. Price opened discussion on what Committee members felt should be the Commission's position in that regard. Chris Keleher confirmed that watershed concern is valid but he thought it best for the Commission to coordinate with other already existing programs. It was offered that there is a group called the Spanish Fork River Coordinated Resource Management Plan (CRMP). Mr. Wham said he works with this group and can report back on their projects. The Provo River Watershed Council is another group that meets regularly and there are others already involved. Mr. Naylor said he thought it is an important point to define the area of concern as stated in the Interlocal Agreement and focus on the areas that are just a short distance around the shore of the Lake and not extend beyond. Mr. Wham commented that he thought the man was speaking more to the storm water impacts from other municipalities around the Lake and suggested that by including just a sentence or two in the Master Plan to be aggressive in dealing with storm water management may be sufficient. Mr. Beckstrom asked how these watershed interest groups get started and inquired as to their motivation. Mr. Wham commented that there are different issues that arise that motivate their formation. Sometimes it's from the Department of Environmental Quality and sometimes the citizens form their own to solve a problem they are concerned about. In Provo, the water users formed a group. It was decided that the watershed issue that be added to the Master Plan but that Mr. Price will communicate with Spanish Fork, Provo and others and see what they are doing involving their watershed issues. The Commission will stay with the scope as outlined by the Interlocal Agreement and any other issues that arise will be forwarded to the Natural Resources Subcommittee.

#### **5. Report on the PCB fish advisory released earlier this month.**

Mr. Price reviewed that at the Utah Lake Symposium earlier in the month there was a presentation by Christina McNaughton who is a PhD with the Utah Department of Health. Earlier that week there had been a press release giving a health advisory about consumption of two fish in the Utah Lake; channel catfish and carp. The channel catfish advisory was new this year and the carp advisory was a continuance of a previous advisory. Apparently the PCBs are in the sediments of the Lake and the carp, being bottom feeders, have ingested those PCBs and have them in their system. The baby carp are consumed by the channel catfish and then they transfer the PCBs to the catfish. The advisory came out to suggest limiting the consumption of those fish to about one four ounce serving per month. The offal part of these fish, all other tissue, should not be consumed at all. There were questions at the symposium about how these fish can be commercially sold on the open market with a health advisory. The Health Department and the U.S. Food and Drug Administration use different levels of PCBs that they consider dangerous. The Department of Health and the EPA use the more stringent standards and the levels found in these fish exceeded their levels. The FDA uses a lower level (less stringent) for commercial fisherman in comparison to the EPA level set for recreational fishermen. Mr. Jensen questioned where the data that is used for these advisories could be located. It was answered that it would be on the Fisheries website and Christina McNaughton will be making a presentation at the Governing Board meeting this Thursday. The studies that provide this information are jointly funded by the Department of Health and the Natural Resources Department. Mr. Beckstrom commented that he feels red flags get raised about problems in Utah Lake without addressing what is being done about them and and this becomes a Public Relations problem. He expressed concerns that the issues being raised be addressed with the appropriate magnitude to the problem. Mr. Chesnut suggested that further questions could be discussed after the presentation is heard on Thursday. Mr. Price added that the goal with having Christina come and make her presentation is to clarify what has gone on and try to determine who has the lead responsibility. The Commission can then decide what type of interaction the Commission and the Technical Committee have in assisting to help solve the problem. There was further discussion regarding funding. It is probable that the Commission will prepare a formal resolution.

#### **6. Report on the Master Planning Process.**

Mr. Price reviewed that following the last Governing Board meeting the Selection Committee met and narrowed the applicants to three firms. Those firms are now working on their final RFPs that are due on Monday, October 29<sup>th</sup> and then the firms will make oral presentations on November 8<sup>th</sup>. Following those presentations, the Selection Committee will make a recommendation to the Governing Board on November 15<sup>th</sup> of their choice. The three firms that were selected are Bio-West (Logan), URS Corporation (Salt Lake City), and Landmark Design (Salt Lake City). There were initially six submissions in the Selection process and three firms were selected. All of these firms are great candidates. It was confirmed that a price quote will be included in each RFP.

#### **7. Report on the Utah Lake Symposium - Kris Buelow, JSRIP.**

Kris Buelow reported on the Utah Lake Symposium that was held on October 5<sup>th</sup> at UVSC. Approximately 50-90 people attended at any given time. There were more students that attended this year. In the morning there was a Lake session and in the afternoon there was a Planning session. During the Lake session the topics that were covered included carp management, recovery, research, PCBs, recreational fishing and invasive plant species at Utah Lake. In the afternoon the Utah Lake

Commission gave a presentation and the Utah Department of Natural Resources presented. Other topics included the Master Plan, Transportation Planning, and Public Involvement in Watersheds. There were affirmations expressed that the Symposium was well put together. Chris Keleher suggested that in the future the June Sucker Recovery Program and the Utah Lake Commission could coordinate on some activities with mutual interests. Mr. Price affirmed that the Utah Lake Commission would certainly be willing to lend a hand and will help out with the Symposium next year.

#### **8. Review Subcommittees.**

Mr. Chesnut thanked those who had signed up on the Subcommittees and encouraged everyone to continue to invite others to sign up for the Subcommittees. In the next couple of weeks there will be a lot of activity on the Subcommittees. He emphasized that the upcoming meeting on November 5<sup>th</sup> for the Transportation Subcommittee will be very important. Mr. Chesnut requested that all members be assigned by this Friday. Jim Hewitson submitted Lee Barnes name to be added to the Natural Resources Committee and Kim Struthers to the Transportation Subcommittee. Mr. Price responded that he had already spoken with Kim Struthers. Mr. Price stressed that a representative doesn't have to be on every subcommittee, but if someone can contribute it would be good for them to participate.

#### **9. Other Business.**

Mr. Hansen restated that he would like to see the data on the PCBs to review.

Mr. Price opened discussion on an issue that was brought up in the Executive Committee on what is the best procedure to screen proposals that come to the Utah Lake Commission. One suggestion from the Executive Committee was that the proposal first needs to be in written form. It was brought out that there will be many public meetings in the planning process and that might be the best forum. Mr. Beckstrom emphasized the value in knowing what ideas are around and suggested that there be short 10-12 minute presentations before the Technical Committee. It was decided that written proposals be sent with the minutes so the Committee can begin the sifting process and invite those to present from their written proposals. Mr. Keleher noted that those requesting to make presentations be instructed that the Technical Committee is not a funding board but more of an information entity. Mr. Fisher asked who would make the decision of what party would be heard. After discussion it was decided that Mr. Price would accept the written proposals and send them to the members and they, in turn, would email their responses and suggestions back to Mr. Price. Ty Hunter agreed that the Committee cannot decline to hear anyone, but can certainly weed some out. Mr. Wham mentioned that at the Symposium one man voiced criticism that there is a lack of general public input so the Committee needs to be careful not to sponsor feelings of exclusion. Mr. Price commented that after the Master Plan is done many proposals can be sent to the municipality and they can make the ultimate final decision. It was added that eventually the Utah Lake Commission is going to have more weight with the municipalities and they will be coming to the Commission for feedback and advice.

#### **10. Confirm that the Transportation Subcommittee will be meeting on Monday, November 5 at 2:30 PM in Suite 211 of the Historic Utah County Courthouse.**

Mr. Chesnut reminded the Committee of the Transportation Subcommittee coming up on November 5<sup>th</sup>.

#### **11. Remind Technical Committee Members that the next meeting will NOT be held as previously scheduled on Monday, November 5.**

The next Technical Committee will be held on Monday, December 17<sup>th</sup>. If there are any changes they will be sent via email. Mr. Price added that if anyone does not have a representative on

Transportation Subcommittee but wants to have one they are welcome to come to the meeting on November 5<sup>th</sup> which will commence at 2:30 P.M. in Suite 211. It is an Executive Committee meeting as well.

**12. Adjourn.**

Mr. Chesnut thanked everyone for coming and the meeting was adjourned at 9:58 A.M.