

MINUTES  
BEAR RIVER COMMISSION  
ANNUAL MEETING

April 18, 1989

9:00 a.m.

Room 205-207  
Eccles Conference Center  
Utah State University  
Logan, Utah

THOSE PRESENT

WYOMING COMMISSIONERS

Gordon W. Fassett  
S. Reed Dayton  
J. W. Myers  
John Teichert (Alternate)

UTAH COMMISSIONERS

D. Larry Anderson  
Blair R. Francis  
Calvin Funk  
J. Glen Nelson (Alternate)

IDAHO COMMISSIONERS

R. Keith Higginson  
Don W. Gilbert  
Rodney Wallentine  
Floyd Jensen

ENGINEER-MANAGER

Wallace N. Jibson

SECRETARY

Nancy Fullmer

CHAIRMAN

Kenneth T. Wright

OTHERS IN ATTENDANCE

UTAH

Jack A. Barnett, new Engineer-Manager  
Robert L. Morgan, State Engineer, Division of Water Rights  
Robert M. Fotheringham, Division of Water Rights  
William Atkin, Division of Water Rights  
Bert Page, Division of Water Resources  
Lloyd Austin, Division of Water Resources  
Norman Stauffer, Division of Water Resources  
Darrell Carlson, U.S. Geological Survey/Utah Dist.  
Carly Burton, Utah Power & Light  
Les Dixon, Corps of Engineers  
Dennis Funk, Cache County Council & Water Development Committee  
Mickey Jibson

WYOMING

John W. Shields, State Engineer's Office  
Sue Lowry, State Engineer's Office  
Mike Ebsen, Board of Control

IDAHO

Hal N. Anderson, Department of Water Resources  
Pete Peterson, Watermaster - Dist. #11  
Allen Harrison, Bear Lake Regional Commission/Idaho-Utah

MINUTES

BEAR RIVER COMMISSION MEETING

Logan, Utah

April 18, 1989

9:00 a.m.

CHAIRMAN WRIGHT: Let's call the meeting to order. We've got a full plate. You've all received the Minutes of the last meeting. If there are any additions or corrections or comment please make it now. If not is there a Motion for approval of the Minutes.

CALVIN FUNK: I so move we approve the Minutes.

KEITH HIGGINSON: Second.

CHAIRMAN: All in favor.

MOTION CARRIED.

CHAIRMAN'S REPORT

CHAIRMAN WRIGHT: As the Chairman I have only one comment that has nothing to do with the Commission. If anyone knows of a cattle scale that can weigh up to 10 to 20 head of cattle please see me after class. Used preferably.

We are now going into the election of officers.

## ELECTION OF OFFICERS

CHAIRMAN: The current Vice Chairman is Blair Francis and the Secretary-Treasurer is Larry Anderson, and do we have to re-elect them or consider another choice at this point. Wally do you have any comment on this?

WALLY JIBSON: Well if we follow precedent Blair will be in for another year.

CHAIRMAN: That's right.

RODNEY WALLENTINE: I so move we do as in the past and Blair gets to have that opportunity one more year.

CALVIN FUNK: Second.

CHAIRMAN: All those in favor.

MOTION CARRIED.

CHAIRMAN: Secretary-Treasurer Larry has served for 2 years and the consensus of the Board is we'd like to have him continue so is there a Motion to that effect.

CALVIN FUNK: I move we continue Larry as the Secretary-Treasurer.

WES MYERS: Second.

CHAIRMAN: All those in favor.

MOTION CARRIED.

#### TREASURER'S REPORT

BERT PAGE: You should have a copy of the report in front of you. This report is for the period July 1, 1988 through April 1, 1989. You will notice about the only thing that has changed on the income is we have added more interest from our investments, bringing the total income of cash available to \$214,400. We have paid our streamgaging bill for the USGS and for some reason we budgeted \$15 too much. You can also see the other Commission expenditures on the handout. The personal services are partial and there will be more money spent out of there as Wally finishes out the year and trains his replacement. The travel is pretty close. Office supplies have been overexpended. The advertising for Wally's replacement was expensive and included in this expense item. There is \$3,000 left in the contract with the states but I have been assured that will be expended before the end of the year, which leaves \$139,000 in the bank.

CHAIRMAN: What is Commission approved procedures that is listed for \$25,000.

BERT PAGE: That was an item included in last year's budget in case you as a Commission wanted to enter into a contract with a consultant. You have said don't spend it yet so it is still sitting there, but if for some reason you want to spend it, you could do it.

On the back the checks are listed that have been issued. The bank reconciliation at the bottom is \$139,000, which we have in the bank and the savings account.

CALVIN FUNK: I move we adopt the Treasurer's Report.

RODNEY WALLENTINE: I second.

CHAIRMAN: The motion carried.

CHAIRMAN: Ed Skeen called and asked to be excused from the meeting today so let the minutes reflect that. He is in South America on vacation. We would like to welcome Mrs. Jibson who is in attendance today. Thank you for joining us.

LARRY ANDERSON: Wally said this is the first time in 40 years that you have been to one of these meetings.

WALLY JIBSON: Before I start, I might say Mickey and I went into the wee hours last night reading those individual letters. They were choice. I am sure we will read them many times and remember.

#### ENGINEER-MANAGER REPORT

WALLY JIBSON: This is our regular annual meeting where I report on what we

might expect on water supply this year. Lately it has always been bad. This year is not much of an exception.

(Mr. Jibson read from the attached Engineer-Manager Report)

CHAIRMAN: Any comments?

MIKE EBSEN: On the first page of your report under Streamflow in Acre-Feet, April-July predictions, Upper Bear River, at what location is that?

WALLY JIBSON: Are you referring now to the 82%? There are a number of sites up there and the SNOTEL sites include Trial Lake, Hayden Fork, mostly the higher sites. That is the 94%. The 82% is based on the SCS method of predicting runoff based on antecedent conditions in addition to the snow water equivalent at all of these sites up there. Right off hand I would say the measurements primarily would be on Hayden Fork site, Trial Lake, Lilly Lake site, etc.

BLAIR FRANCIS: Over the years what has your experience been with the correlation between predictions and accuracy in relation to the upper division?

WALLY JIBSON: Generally in the upper division it has been pretty good. Smith's Fork hasn't been so good until last year and they hit it within one percent and yet they were way high in the upper division last year. They had forecast about 75 and our measured runoff was 61. They hit it way high last year, hopefully they won't this year.

BLAIR FRANCIS: Maybe I just remember all the bad ones.

WALLY JIBSON: I don't discredit the surveys because they are good, but so much can happen between April 1 and May 31 that the whole complexion of a year can turn around, either down or better. This has happened in many years and that upsets the applecart on the April 1 forecast.

CARLY BURTON: I would just like to add some information on Wally's prediction of Bear Lake level of 5917.63. Our computer model that predicts the Bear Lake elevation based on the Bear River flow as well as tributaries is showing a lake level about 5917.4 in July so that is pretty close to yours. That prediction is about one foot lower than the March 1 prediction because what you have said here is the low intermediate elevation snowpack is gone.

WALLY JIBSON: I had a conversation with Richard the other day and he said you had dropped your prediction too. I think we will be looking at a little below or a little above one million acre-feet. We can get a big change but it could be down.

KEITH HIGGINSON: Your prediction is that at the end of the season you would not be down below the irrigation reserve elevation.

WALLY JIBSON: That is a wild guess but I am guessing if we peaked around one million acre-feet and had a smaller draft than last year. You can see last year we had a much larger than usual draft, but we will be peaking 100,000.



acre-feet below that. I sort of predicted we would come back about the same place at the end of September.

KEITH HIGGINSON: We would have to have a lot smaller draft than last year in order to stay above the irrigation reserves.

WALLY JIBSON: If we have last year's draft, we will drop below the reserve.

CARLY BURTON: Last year because of the weather conditions, the hot dry spring, we started releasing out of Bear Lake in early May. Normally we don't start releasing until June, it just depends on the weather. If we have the same draft as last year, we are going to be considerably below.

CHAIRMAN: Carly, what year was like last year? Are there records?

CARLY BURTON: It is probably one of the three or four driest years on record. It compares with the 61, 77 and 34.

CHAIRMAN: Have they ever been consecutive?

CARLY BURTON: Oh yes.

WALLY JIBSON: Our graph there for 1988, if you look on that, you can see what kind of a year it was. Much lower than average inflow, the peak was only 100,000 better than what we went into March with and much greater than average outflow. So that really gives the picture of 1988, a year of extremes on the hydrograph.

CHAIRMAN: Any other questions?

HAL ANDERSON: What was the problem you could experience in storage conflict, anything in particular you were thinking about?

WALLY JIBSON: I don't want to cry wolf on this because we are expecting a better water year in 1989 than last year and it would be very unusual if we dropped to 61% between now and July. What I was trying to illustrate, with the large reservoir now at Sulphur Creek, when that 1988 type year comes along and we hope not very often, we could experience a year in which both reservoirs would not be full and we have no closing date under terms of Compact as far as storage except that it cannot take place if any direct flow irrigation or direct flow rights for consumptive use are being violated. When you project by putting 1988 year onto this year's situation as of today, we would have to go to May 31 and then we would be in conflict with some direct flow irrigation rights and storage would have to be cut off. That is our concern but we don't expect it right now and hopefully both reservoirs will fill with no problem. Last year was an unusual situation because the runoff from Sulphur Creek got away before the outlet works were finished so we didn't get the advantage of Sulphur Creek in there. It came a long ways from filling. It was a little easier to compare this year in case 1988 repeated.

JOHN TEICHERT: When the snow surveys were taken on about March 24, between then and April 4, we picked up an inch and a half to two inches of moisture, which put the snow courses above normal on Smiths Fork.

WALLY JIBSON: Of course this is the odd thing this year. Even on the Upper Bear you notice I said the SNOTEL courses which are the automatic ones at the higher elevation are showing 94%. I get that report once a week. A week ago that was about 99%, both of them very high. You would say how could they be forecasting 82% and 70% streamflows with the kind of water in the snow. But the methods they use and their experience with what they call antecedent conditions, which are the soil moisture conditions, they feel justified in dropping the runoff forecast way down. If you look at their lower elevation snow courses, Little Bear was down to about 3% so the lower elevation is gone. That is why the SNOTEL courses which are all above 7500 that I used here may not be indicative of what we are going to expect.

JOHN TEICHERT: I realize the soil moisture conditions can make quite a difference.

WALLY JIBSON: We did drop in the last week or ten days according to our SNOTEL.

CHAIRMAN: Is there a motion to approve Wally's report.

LARRY ANDERSON: So move.

BLAIR FRANCIS: Second.

WALLY JIBSON: This is our budget year, but I would suggest that rather than approve the budget as of now, we wait until further events in the meeting before we approve it.

CHAIRMAN: We have the budget at the end. Motion passed to approve the Engineer-Managers Report excluding the budget portion.

#### REPORT ON COMMITTEES

LARRY ANDERSON: Six months ago after Wally announced he was serious about retiring, and we questioned him three or four times that day to make sure he was serious, a committee was appointed consisting of Jeff Fassett, Keith Higginson, and myself to begin the process of advertising and selecting a new engineer-manager for the Bear River Commission. We worked very closely with Wally and asked him to give us a job description. We all reviewed the job description and made some modifications. We then advertised throughout the Basin in most of the local newspapers. As explained by Bert during his report, this is one of the reasons our cost went up. We received about 40 applications. We each reviewed the applications and came up with our list of who we thought were the top five candidates. We combined our lists and invited seven applicants in to be interviewed for the position. The applicants were equally divided into three different categories. There were a group of consulting engineers, a group of non-engineering who had interest or background in natural resources or hydrology, and a group who were either retired or semi-retired and many of those had a background in engineering. As we developed the process of interviewing, we met in Salt Lake and invited all of the seven candidates to come in. Six of the candidates came in and we interviewed them each for thirty plus minutes. We then met again as a group at the end of the day and decided we had excellent candidates to choose from. It was a very difficult decision to make and we decided that we would not make

a final decision that day but to give it two or three days of additional thought and get back together.

After a few days of additional thought, we got back together and unanimously selected Jack Barnett as the candidate that we would recommend to the Commission to be hired to replace Wally. Mr. Barnett is here. Jack, if you would now come up to the front. I don't know if all these folks know you. As it turns out Keith, Jeff, and I all know Jack very well. We have been dealing with Jack for a number of years in different ways. He lives in Bountiful, Utah and has an office in Bountiful. He is a private consultant and is currently the executive director of the Colorado River Basin Salinity Control Forum. He has a contract with that group that consists of the seven basin states of the Colorado River and he is the staff for that group. He has seven bosses, of which Jeff and I are two of those seven. Keith does not have any water in the Colorado River drainage. We have dealt with Jack for a long time and are very comfortable with him. He has done an excellent job in his relationship with all of us in the Salinity Control Forum. We envision his work with the Bear River Commission to be very similar. He is excellent in keeping everyone informed of what is happening. As a committee, we strongly recommend Jack to be selected as the new engineer-manager of the Bear River Commission. Jack, I told them if you were selected, I didn't think you were good for 42 years like Wally. I would like to ask Jack to give a little resume of his background and what he is doing and then answer any questions the commission members may have.

JACK BARNETT: Thank you, Larry, I appreciate the opportunity to address the Commission. I would have been embarrassed if I would not have been able to

find this location. I spent many times out on the quad standing in an Air Force uniform looking around and getting my early education. I spent two years at Utah State in 1954-56 and studied agriculture. I went to the University of Utah after that where I studied geology and got a bachelors degree in groundwater geology. I went on to do a little bit of work in the oil industry and came back and got a masters degree in groundwater geology. I can't tell you my background without telling you Keith Higginson's influence on my career. He was the one that hired me from a USGS position I had while I was going through graduate school and he was the one that taught me how to be a hydro-politician, which is the best caption of what I do. Keith hired me to work with the State of Utah when Keith was in the State Engineer's office. Initially I was involved in processing water rights and water right hearings and field examinations to determine what might be done with those desiring to acquire new water rights. Later on with the reorganization of the office I had the responsibility for the Utah Lake-Jordan River area of the State Engineer's office. Keith Higginson left the state and returned to his home in Idaho and came back and convinced me I should accompany him to Idaho where I had the opportunity of serving as his deputy state reclamation engineer. Keith and I worked for a number of years in Idaho before I decided to try some consulting when I started a consulting business in Boise that specialized in water resources. After a period of time in that position, the Western States Water Council offered me an opportunity to return to Utah and become their executive director. At that time it was an organization of 11 western states dealing in interstate water matters. I really enjoyed those years. It became a time of the Carter water policy reforms that were suggested in Washington and I spent alot of time representing the states in various matters relating to those reforms. As an aside, Keith Higginson had left Idaho and was in

Washington as the Commissioner of the Bureau of Reclamation.

I was approached by the seven Colorado River basin states to change my employment and come on full time as the first executive director of the Colorado River Basin Salinity Control Forum. I did that and shortly after beginning that work, Keith called to say he was returning to the West because of the change in administration in Washington. We decided to open up a consulting business in the Salt Lake area and had a number of enjoyable years doing that. In the process I had convinced the seven Colorado River basin states that I could work for them under a contractual relationship as a consultant rather than as a full-time employee. So that is what I am currently doing now. Keith has again returned to Boise and is no longer a part of the small firm in Bountiful. I consult on other matters as the basin states have agreed that I might. They have a major portion of my time, but they have allowed enough time for me to do other matters, and I feel very excited about the opportunity of taking on the assignment of the engineer-manager for the Bear River Commission. I have been contemplating opportunities to become better acquainted and reacquainted with the Bear River and its many intrigues. I am very enthused about that. I hope that if you employ me, you don't try and measure me by Wally. I was sitting back there trying to calculate and he was raised in the Bear River professionally when he was a kid. Wally knows the Bear River backwards and forwards and I would need to rely heavily on him in the weeks ahead to try and bring me up to speed so I could use some of his knowledge to help me serve you in this position. I appreciate that chance to introduce myself.

LARRY ANDERSON: Are there any questions from any of the Commission members that you may have of Jack? Let me summarize. We have as a group worked with Jack and have prepared a draft contract with him. The contract would be for one year and it is a standard contract. It is how we have contracted with Wally in the past for a year at a time. The first contract would be for 14 months since we have proposed Jack would begin work on May 1 and have a 2 month overlap with Wally.

We have indicated we would like 20% of his time as the new engineer-manager for the Bear River Commission. One of the serious questions we had was whether or not Jack could give the Commission 20% of his time because of his commitment of 70% to the Salinity Control Forum in addition to the consulting work on the side. Jack has convinced us he will give the Commission a high priority. If there is any conflict in his schedule as far as his private consulting business, Bear River Commission will be number one. He must also give Salinity Control number one and we questioned how he would give them both number one. He said since you and Jeff are both on the Salinity Control Forum, if you don't have a conflict in schedules I don't see how I possibly can either. So he had an answer for us.

Jack has an office in Bountiful. He has a secretary there and will supply secretarial staff as part of his contract. His office will be available to contact him during working hours. Therefore, everything will come out of Jack's office. Nancy would not provide the secretarial services any longer for the Commission as Jack's secretary would do that. If we find that we need him more than 20%, he will provide us the time we need and we would be billed accordingly. If we need less than 20%, Jack would also reduce



his bill accordingly. His fee is \$53 per hour. The Commission would pay Jack on a monthly basis, at \$2,074 per month and Jack would keep a running tabulation of the total hours he has spent. At the end of the year the appropriate adjustments would be made in the last check. The estimated cost for 20% of Jack's time would be \$24,887.

It is also suggested we add another item to the budget to allow Jack to use a less costly technical person if there was some work a technical person could do. Jack has other people who are available at a lower hourly rate, and it is suggested we have a separate item for \$3,000 per year for contractual services. This person could prepare or run computer programs the Commission may need run and the cost would be \$21 per hour. The Commission would get a reduction in cost for those technical services.

The bottom line is Jack would take over the management of the Bear River Commission, would be responsible for preparing minutes and doing all of the work that Wally has done in the past with collecting data, providing the reports, meeting with Commission committees and subcommittees and keeping Commission members informed of what is happening. Jack is very good about keeping people informed and we know from the Salinity Control Forum he generally gets out a monthly report of what has happened during the past month and what he expects to be doing in the next month. We would expect Jack to provide that same type of service to the Commission. He will keep a library within his office of valuable Commission publications and documents and will be available for any Commission meetings.

With that report, I would like to make the motion that we hire Mr. Jack Barnett as the new engineer-manager of the Bear River Commission and that we authorize the signing of the contract for services with Mr. Barnett for the next 14 months.

JEFF FASSETT: Second that motion.

KEITH HIGGINSON: I would like to comment. Obviously from what Jack has reported to you I have had a long association with Jack and it goes back to 1958 when he came to work for the State Engineer's office in Utah. Because of that, when I saw the list of candidates that Larry sent me and all of the resumes of the 30 plus individuals we were reviewing and I saw Jack's among them, I said I am in trouble. Obviously without knowing much about these other people I already have a prejudice and I was happy to see that both Jeff and Larry felt the same way when their lists were prepared independently. We then had the interviews and it appeared to us he was the best candidate to take over this. I hope my long association has not unduly influenced my Idaho colleagues here and the rest of you but I wholeheartedly support this action.

CHAIRMAN: Are there any additional comments? There has been a second. All those in favor. Motion passed. Welcome aboard.

RODNEY WALLENTINE: Does this require a bylaw change to change office space?

KEITH HIGGINSON: It seems to me the bylaw does provide the principal office of the Commission will be in Logan, Utah. It has been in Wally's home. I would think we might record in the minutes of this meeting the sense of the

Commission that a formal change in the bylaw be prepared for consideration at the next Commission meeting, and in the meantime it is appropriate for our new Engineer-Manager to establish his office as the Commission office in the interim.

CHAIRMAN: Is that a motion, Keith?

KEITH HIGGINSON: I would so make it.

CALVIN FUNK: Second it.

CHAIRMAN: Motion passed.

#### REPORT ON BASE MAP DEPLETION STUDY

BOB FOTHERINGHAM: I will comment on the Depletion Study, of which Bob Hill did. He asked me last night if I would announce to the Commission he prepared 50 copies of the report for each state and 50 for the Commission. He asked that a representative from each state go to his office today and pick up the remainder of the reports that weren't sent out. His office is in the engineering building.

As far as the base map, we met as a task committee on March 28 and discussed the things that needed to be done to complete the map. At the meeting it was determined all the annotations had been put in the computer and Utah was prepared to output the maps and tabular data, that Wyoming was near that point and gave us the information in the meeting to do that, and Idaho at

that point was having some difficulty in determining what the changes were from 1976 to 1980 of the irrigated acres part of the base map. I expected some of the maps would come with Bob Morgan. Apparently they didn't get punched out of the computer in time. Our recommendation would be at this point that when we complete the maps, that we send copies of those to the Commission or to the states and have them distribute copies to the representatives or field people for review and comments. I don't know the exact date we will be sending them out. Part of it will depend on how soon Idaho can get us their information but it should be between this meeting of the Commission and the next meeting of the Commission. We would like those review comments to come back to the Technical Advisory Committee so we can make whatever changes need to be made on the map based on input from the field people in the respective states. There should be some kind of a window of input from field people, irrigation companies could review them and whomever you would like to do that.

LARRY ANDERSON: The purpose of the review would be to determine the accuracy of the map as to what lands were irrigated prior to January 1, 1976.

BOB FOTHERINGHAM: Right, this is an initializing map. It is to let those who are calculating depletions see what the conditions were as far as irrigated land and dry land, wetlands, water, and other types of uses were in 1976.

LARRY ANDERSON: If somebody found an error in the map, then they need to get hold of a representative from their state and give them the information.

BOB FOTHERINGHAM: Right, we have to reconcile the map. We would ask for the documentation from the person that made the statement so we can go back and review it. On all of the questions we have had when we did the change in Utah, we basically visited all of the people we could think to visit on those, sometimes the farmers and the ASCS. If you have additional comments, they should write a statement so we can follow up on that.

JEFF FASSETT: Bob, do you expect to have the map available by the end of the month.

BOB FOTHERINGHAM: I don't think it will be that quickly. I was talking to Idaho last night and the adjudication of the lands in their areas is not what they thought it might be and people are not revealing what they would like them to. Maybe the members of the Commission can help out with that.

HAL ANDERSON: This is a draft map we are putting together. We are having a couple of areas in Idaho that we are having problems with because there were a number of groundwater pumps put in between 1975 and 1980. We are going to take our best shot at what we have on our records and what shows as irrigated lands. That is where we could use some assistance from our commissioners. We developed this draft map for you to look at and say yes these lands were irrigated and these lands were not or no this field was not put in production until after 1976.

KEITH HIGGINSON: Which area is that?

HAL ANDERSON: The area north of Grace right along the Soda Springs highway and also towards Malad.

KEITH HIGGINSON: Don Gilbert is from that Last Chance Canal area. We have a meeting scheduled in that area on the 20th which we will be discussing some of the groundwater development. It is possible we can get that area resolved at that meeting.

BOB FOTHERINGHAM: That has been one of the later challenges we hadn't anticipated. But I don't know when it will be ready.

JEFF FASSETT: I was going to suggest that you send us our map as soon as possible and perhaps we could begin some of our field review and ground proofing interviews with the folks that have been around. I don't need a complete set today but I can use the ones in Wyoming to begin that process. We want to do more of that researching with the ranchers and locals, etc. and would like to get that going during this season while people are out and about. We don't need to wait for the entire set of maps.

BOB FOTHERINGHAM: To my knowledge, Wyoming's will be complete within the next couple of weeks.

HAL ANDERSON: The only real missing piece is a couple of those questionable areas in Idaho as far as change from 1976 to 1980. We have all of the information at the AGR and they are having a problem getting it all out because there is a lot of data.

LARRY ANDERSON: As soon as you have a state's maps ready, you will send them to that state.

BOB FOTHERINGHAM: Yes, we will do that.

LARRY ANDERSON: Has the process that was used to put the maps together been documented.

BOB FOTHERINGHAM: We haven't put it together in any report form, no. We could do that.

LARRY ANDERSON: I am wondering since the 1976 map becomes so critical for the Amended Compact, if we shouldn't have a written documentation (a short report) that would accompany the maps and document the procedure that was used in putting the maps together. Did each state use the same procedure or did each state develop their own procedure?

BOB FOTHERINGHAM: Each state would have used the data they had available so the procedures wouldn't be exactly the same in each state. The basic process was the same.

LARRY ANDERSON: Would it be necessary for each state to prepare their own report on exactly how they came up with the map?

BOB FOTHERINGHAM: It would seem we could put them together in one report but I think each state would have to provide separate input.

HAL ANDERSON: What we used is the same base information and satellite data so we wouldn't be dealing with different types of photography from different states and trying to put it together. What we allowed each state to do was we gave basically a general set of guidelines as to what procedures would be necessary to separate irrigated lands from wetland areas, etc. and then allowed each of the states to delineate the boundaries of an area we were calling a strata which is a type of land cover. Then we classified all that information within that strata based on what we got from the states. So each state used the same general procedure but each state did it themselves individually so each state would need to document exactly how they went about it. Then we made sure all of our boundaries matched. That was pretty straightforward. The real area of difference is how to map the 1976 to 1980 changes. Each state approached that a little bit differently but basically the same by looking at the water rights information versus what was known about what occurred in a particular area.

BOB FOTHERINGHAM: I would not know exactly how Hal did it or how John did it. We know how we did it so we have to document it separately.

LARRY ANDERSON: It seems to me it is such an important item that 30 years from now when none of us are around and the question comes up as to how the base depletion maps were developed, that it would be wise to have a short report that could accompany the maps, and document the procedure used. Therefore, I would make a motion requesting the subcommittee, and if that has to be individual states, prepare a short report to go along with the depletion maps indicating the procedures that were followed in each state. If possible



the report would be submitted along with the depletion maps for final approval and acceptance by the Commission at the next meeting.

BOB FOTHERINGHAM: That will depend on the length of time of window we have to look at the maps. I would recommend that come in after we receive all the comments back from the field people, revise the map, and give you the maps with some final discussion.

LARRY ANDERSON: That would be fine. I make that motion.

KEITH HIGGINSON: I'll second it.

CHAIRMAN: Motion passed.

#### DEPLETION GUIDELINE REPORT

BOB MORGAN: At the last meeting of the State Engineers, it was suggested by Idaho in reviewing the RFP for the computer study, that perhaps we should take a step back to look at possibly preparing a road map which would be the way of getting from where we are now to the end of our destination which would be the compilation not only of the data the Tac committee is looking at but involving the report that was prepared by Dr. Hill. There has been a draft of a partial sketch that was reviewed and comments were made by Idaho and Utah. I don't think we are at the point where we have that road map yet. I do think as far as the guidelines for the Commission approved procedures that we should start to formalize parts of it. Parts of that road map can be drawn, and I think it is the goal of the State Engineers to start to formalize those guidelines into

final written form as to verbage and content. After the preparation of the road map and it's review, we can decide if we do a computer study or not. I think we would propose it be in a looseleaf type form so that the various segments of the guidelines can be formalized and looked at individually. Certainly I think we can finalize some of them. We need to put those in a final form and we need to have them in a form where if there are changes with some of them we can take them out and put them back in. Unless there are any questions that's where we are. We know where we want to be. We think we can get there.

CHAIRMAN: What's the timetable, Bob?

BOB MORGAN: I would think part of the proceedings can be ready and to the Commission members prior to the next meeting. I think there are some issues, supplemental water will probably require a little bit of discussion, and the resolution of computerizing needs some discussion. Right now I think I would like to pay tribute to the Tac Committee. There have been a lot of people that have been working very hard trying to come up with the answers we keep asking. It's not an easy task. I want to compliment them. I'm not going to name names but they know who they are and they've been working very hard, and I think now it's time for the State Engineer's committee to take that and formalize it.

CHAIRMAN: Any comment.

BOB MORGAN: I don't think that requires a Motion.

CHAIRMAN: No. Thanks Bob. Keith.

#### RFP FOR A BEAR RIVER HYDROLOGIC MODEL

KEITH HIGGINSON: Mr. Chairman, Members of the Commission, this issue of how we proceed from here has been one that has been a concern of ours for some time. You recall at the Commission meeting last November we were authorized to proceed to prepare an RFP for development of a computer model of the Bear River. We indicated we could support that subject to final review of the RFP. As we reviewed the RFP it seemed to us that we were not at the stage where we had enough commission decisions on aspects of how to model the Bear River in compliance with the Compact that we were ready to proceed with an RFP for the development of the model. Some of the issues that have not been resolved are supplemental irrigation and determining when Bear Lake is spilling or bypassing the water. These and other issues have got to be resolved I think before you can hand it to a modeler and say okay now model the system using these guidelines. We've got an issue with regard to the evaporation from reservoirs as to whether that's chargeable depletion out of the Compact. A modeler would not be able to do anything with that issue until the Commission makes a decision. We just felt there was some decisions and that's why we prepared what we thought was the first outline of a roadmap that Bob referred to as to how we get from where we are to where we need to be to present to the Commission a full set of procedures. The road map has been out and we've got a one-page comment back from the State of Utah which in effect says we've got some problems with the road map, and then we got back five to six pages of fairly detailed comments from Wyoming. It's my fault, Mr. Chairman, we didn't do what we were authorized to do at the last Commission

meeting and that's to come to you today with an RFP ready to contract for the development of a model. That's where the study is.

CHAIRMAN: How far on a percentage or 1 in 100 basis would you feel by having it by next November, Keith.

KEITH HIGGINSON: I think we can get it resolved by next November. The Technical Committee has a lot of work to do to resolve some of these issues and it may be we might do the unthinkable thing of having a Commission meeting before next November. That would be unthinkable wouldn't it.

CHAIRMAN: Is there any unfinished business. Dennis Funk is with us to report on the Cache County Ad Hoc Committee.

#### CACHE COUNTY AD HOC COMMITTEE

LARRY ANDERSON: Mr. Chairman, the Cache County area has been quite active the last year and a half trying to create a water conservancy district. There's a group just about as active trying not to create a water conservancy district and there seems to be quite a bit of interest within the basin of what's going on in Cache Valley and what's happening. We asked Dennis if he'd come in and take a few minutes and just explain what they're doing. Then if there's any questions we can answer them.

DENNIS FUNK: Thank you. I appreciate this invitation to spend a few minutes with you and tell you what's going on from our perspective in Cache County. By way of background I was raised on the banks of the Bear River in Cache

County, but I didn't know very much about the Bear River until about two years ago when I became involved with this Committee. It's been a great learning experience and I wish everyone in Cache County could learn as much about water and about the Bear River water as I've learned in the last two years. It's been a real learning experience and I'll have to tell you that one of my main teachers is Wally Jibson. I know about that much of what Wally knows but it's increasing every day. I've appreciated the opportunity to be involved. Wally indicated that he'd like me to report briefly on what is happening in Cache County in regard to water development.

In the summer of 1987 the Cache County Executive appointed a committee to work on water development. We were given two specific charges - one to provide initiative, leadership and direction in planning future utilization of the available water in the Bear River and its tributaries. That sounds like a charge that should be given to you folks too. We were looking at it from Cache County's perspective. The second charge was to establish future water development direction for the overall best interests of the broad Cache County community. We've been looking at those two charges for nearly two years now; and as we began working on our assignment, it became evident to us that not everyone on the committee of about 12 that was appointed felt the same way or had the same level of understanding about the value of Bear River water to the entire area as well as Cache County. In some cases quite differing opinions surfaced on the committee and we pursued looking at various alternatives for dealing with water development in Cache County. We talked about some of the other mechanisms that are in effect currently, such as municipal water systems, irrigation companies, special improvement districts. After we had looked at all the alternatives we could think of, at least, it seemed to the

majority of the committee that the creation of a water conservancy district was the best structure to pursue here in Cache County. Of course, that's where some of the differences started to surface because there were members of the committee that felt water conservancy districts were not the appropriate way to go. By far the majority of the committee finally arrived at the conclusion the water conservancy district would be in the best interest of Cache County.

As we looked at that alternative we studied the law and decided there were some things in the Utah law that we could perhaps change which were particularly offensive to some of the opposition, and we worked with our legislators and local legislators in Box Elder County as well and had some changes made in the conservancy district act in the State of Utah, not real major changes but I guess one of them was particularly major for us in that water conservancy districts now can sell water outside of the district. They also increased the number of petitioners required in the larger cities. We felt there was some inequity there and so that was increased. We increased the value of the property in order to be a petitioner in a water conservancy district. Originally it was \$300. We proposed \$3000 and the legislature took \$10,000. That is what is required now to be a petitioner to sign a petition for a conservancy district. We also recommended an increase in the term of office for Board of Directors and that was increased from 3-4 years. We had a reason for doing that.

Our legislators have been very supportive of what we are trying to do. We participated, as a committee, in a seminar that was conducted here in January of 1988 on Bear River water development, sponsored by the Bear River

RC&D and sort of spearheaded by Senator Holmgren in Box Elder County. We also recommended to the county council that funds be allocated for a joint study with Box Elder County on municipal water needs as well as other water needs and that study has just recently been completed with a small involvement from us and a major involvement from Box Elder County. We've spent considerable time preparing a slide tape presentation that tells the story of water conservancy districts and the need for one in Cache County. We've shown the presentation to approximately 15 groups and had a lot of debate. Wally and I've been out as a team on some. It seems those who are opposed to the water conservancy district have been most anxious to have us come and talk to them mainly so they can hear our side of the story, I suspect. We've also prepared a little brochure we've used for public information on Bear River water development. We've maintained regular contact with Box Elder County as they've developed a conservancy district over there. I want to acknowledge here the help that Larry and his staff have been to us in preparing our slide tape presentation. Larry and others have been to our committee meetings and discussed water issues with us and have been very helpful and we appreciate their involvement. We've also had considerable support and help from the Department of Agriculture in the State of Utah as we've developed some of our materials. There's been a lot of interest and involvement and activity from a number of agencies and people in the things we've been doing.

Just recently we put together our report to the county council. We indicated we thought there were four things the county should do as far as water development is concerned. We think we need an agency or organization in the county that can help support municipalities and individual citizens in their effort to protect the quality of water we have. We think there's a need

for an organization to sponsor a system to identify and monitor localized water problems, particularly shortages. We had a few, even in the great water county of Cache County. There were a few places last year where springs didn't flow quite as heavily as they normally do and some residents have small wells that didn't perform as well as they normally do. We've had a few localized problems and we think they need to get busy monitoring those.

We think there's a need for us to cooperate with Box Elder County and Salt Lake County Water Conservancy Districts, who expressed some interest in further development of water in this area. We want to be a part of the Division of Water Resources activities as they work on Bear River water development. We think it's important we become more actively involved than we have been in the past years. The mechanism we think would be most appropriate for us is our fourth recommendation to the Cache County Council, and that is a water conservancy district be pursued immediately. As a result of that presentation to the council, they accepted our report including the recommendation that a conservancy district be formed and they authorized the committee that had been appointed originally by them to take the leadership in the petition drive to form the water conservancy district. We're in the process of a petition drive. That's a pretty quick overview of what we have done and what we're doing and I'd be glad to answer any questions if there are any or refer them to Wally at least. Thank you very much.

CHAIRMAN: Thank you, Dennis. Next is Les Dixon from the Corps of Engineers on the study of possible dam sites.



## CORPS OF ENGINEERS BEAR RIVER RECONNAISSANCE STUDY

LARRY ANDERSON: You all have a recent copy of this publication (Reconnaissance Report, Bear River Basin Investigation, Idaho, Utah, Wyoming, February 1989). This is Mr. Dixon's final report.

LES DIXON: Almost. You notice the big word that says DRAFT on the front. The report's incomplete in that we're still in the process of talking to the states of Idaho and Utah as to whether or not they're interested in the Corps of Engineers participating in further studies.

I've had an opportunity to speak to you twice on the Corps of Engineers involvement in the Bear River Basin and to discuss with you the status and the intent of the Corps of Engineers reconnaissance study of the Bear River Basin, which was essentially to determine if there was a federal interest in participating in the project or problem resolution. I have a short synopsis for you on the results of our study. I think the study is best summarized by the last paragraph on the second page. I believe there is a potential federal interest in participating in a large reservoir project on the lower Bear River Basin, however, I don't know or I can't tell you there's a definite local interest in participating in cost-sharing feasibility studies with the Corps of Engineers. I'm in the process of pursuing further studies with both the States of Idaho and Utah. One of the things I should point out to you is when the Corps of Engineers looks at a reservoir project to determine if there's a federal interest, one of the things we quickly discount are reservoirs that are clearly single purpose. If you look on the cost sharing distribution on the synopsis, it's quite clear why that is. If you have a project that's

strictly 100% M&I water supply, that would be 100% local cost and that would obviously not be of federal interest in participating in such a project. To qualify for a Corps of Engineers project or assistance, the project would have to have significant agricultural benefits, flood control benefits, in addition to any other type of benefits you planned the project for. Are there any questions?

CHAIRMAN: What would the feasibility study cost?

LES DIXON: My preliminary estimate of a feasibility study cost would be approximately \$1.2 million.

CHAIRMAN: That would be shared by who?

LES DIXON: Whoever the local sponsor was. The federal government would cost share half, and the other half would have to come from a local sponsor.

CHAIRMAN: If a reservoir is a combination of agricultural benefits and flood control and recreation opportunities, how do you allocate the percentages?

LES DIXON: Are we talking study cost or construction cost?

CHAIRMAN: Either one.

LES DIXON: Study costs are a straight 50-50. Construction costs are allocated as I have shown you, and we distribute the cost by a method called separable-cost-remaining benefit. Those purposes of the project that are

clearly for a separate purpose such as hydropower are assigned to hydropower. Those portions of the project that you can't clearly separate, you share them in proportion to the benefits.

CHAIRMAN: Have you selected a site?

LES DIXON: No, we have not. We looked at seven potential damsites. It looks like you could probably justify with respect to Corps criteria one large reservoir in the lower Bear River Basin.

LARRY ANDERSON: How many sites in the lower Bear River did you look at that turned out to be feasible?

LES DIXON: We looked at three sites and those sites are sites that have previously been studied by other local agencies.

CALVIN FUNK: Does the information from those previous studies bear on what you would do now or would you start from zero and accumulate all new facts?

LES DIXON: We would not have to. We could design the feasibility study based on the intent of the local studies sponsors. In other words if the State of Utah had a specific site in mind, we could work with them on that specific site. Conversely, if they wanted to look at more than one site, we could point our studies accordingly.

CALVIN FUNK: Only as an example, the High Oneida was almost to the stage of being offered as a project at one time. Is the data still valid?

LES DIXON: As far as I know the data is still valid.

LARRY ANDERSON: You wouldn't have to go in and recreate the wheel, you would use the data that was there but you would have to gather additional data. Over the years the procedure for gathering technical data has changed significantly since the Bureau of Reclamation did their studies. The State of Utah has gathered substantial data that would be used but we still know we would have to conduct additional studies. That could be part of the feasibility study.

LES DIXON: What you have on this report is the big word DRAFT. What we are waiting for to complete this report is a determination from both Idaho and Utah as to whether or not they want to pursue further studies. If they don't, we will terminate our studies this June.

CHAIRMAN: What happens to private land when the reservoir goes in?

LES DIXON: On flood control projects with the Corps of Engineers, we turn to the locals and ask them to obtain all lands, easements, rights-of-ways, and relocations.

CHAIRMAN: Is it purchased or an easement?

LES DIXON: Normally on flood control projects, the local sponsors will go for a permanent easement which is usually 90% of the cost purchase and fee. I don't know the answer to that. On a reservoir project, I would assume the

land that is submerged is no longer available to the property owner and would probably be purchased at a fee.

CHAIRMAN: This matter is up to the local states.

LES DIXON: Whether we pursue anything else now is up to the states.

CHAIRMAN: Who makes that decision in Idaho?

KEITH HIGGINSON: It will be made by our Water Resources Board and our legislature. Our legislature has to authorize projects that the Board proposes to participate in. The Board has revenue bonding authority and can build projects but only those projects that are authorized by the legislature.

JEFF FASSETT: Does the report systematically go through all the seven projects you looked at and give pro and con and discard. What you are saying you jumped to the bottom line and the results of the analysis is that maybe one site in the lower basin is about all that can be feasible based on Corps criteria.

LES DIXON: You stated it real well.

#### REPORT ON LEGISLATION AFFECTING THE BEAR RIVER DRAINAGE

KEITH HIGGINSON: It might be well to have Utah report first because we followed Utah's lead on this one. If they tell you what they did, I will tell you what we did in response.

LARRY ANDERSON: The State of Utah has shown a great deal of interest in the development of the Bear River. Salt Lake County Water Conservancy District which supplies water to several hundred thousand people has indicated a need for additional municipal water. They submitted an application to the Board of Water Resources three or four years ago asking us to assist them in identifying future sources of water which they will need around the year 2000. They asked us to look at the Bear River as one of the identifiable sources. We have conducted several studies in the Bear River since 1980 and published a short publication about six months ago, "Overview of the Proposed Lower Bear River Development Plan", and this year's legislature created a Governor-Legislature Bear River Task Force. It consists of 22 individuals who are assigned to serve on the committee, nine are legislators. The committee will officially begin meetings after May 1. The legislature has appointed their members and co-chairman, one from the Senate and one from the House. The Co-Chairman is Senator John Holmgren, who you met last night, and Representative Evan Olsen is the Co-Chairman from the House of Representatives. The rest of the members are being appointed by the Governor but they were identified in the legislation as to who they would represent. Our Board has a member on that and we have identified our Board member who will be serving, plus there are representatives of numerous groups and conservancy districts, and Utah Power and Light as a holder of a major non-consumptive water right, and a holder of a major consumptive water right which our interpretation would be the Bear River Canal Company. So the Governor has the responsibility of making those appointments. It is my understanding he is reviewing the list of applicants and will be making those appointments in the next few days. The first meeting will be held May 8.

The intent of our Task Force is to identify potential opportunities for development of water in the Bear River, and how to fund that water development in the State of Utah which is really the big question. Another item for consideration is to determine who would be the entity that would own and operate a Bear River project or projects. Would it be the State of Utah, would it be individual water conservancy districts, water companies, or some other type of entity? One of the items in there says they can work with other Compact States to determine the possibility of joint-development of a water project. After the May 8 meeting, they will schedule a meeting in June so they can tour the Bear River area, a 2-day trip where the committee will hold meetings on future water needs both in the Bear River drainage as well as Salt Lake County and Weber Basin area. There's a great deal of interest in Utah. It's not going to go away, it'll be back for our legislature next year and the year after. In addition the legislature appropriated \$200,000 to my office to do additional studies in the Bear River drainage.

KEITH HIGGINSON: We were well aware of what Utah was considering as their legislature considered this task force. It was made known to us in January and so we called it to the attention of some of the water users within the Bear River drainage and members of the Idaho legislature from that part of the state. They asked us to monitor that and that we also draft an Idaho version of a task force that might be available to work with the Utah task force. We did assist in the drafting of an Idaho task force bill that became Senate Bill 1287. That bill was introduced and held until we saw the final result of what happened in Utah. When their bill passed, we notified our legislature and they considered and passed Senate Bill 1287. It creates a 12-person Idaho task force on the Bear River composed of two members of our Senate, one of

whom is from the Bear River area. Two members of the House of Representatives, one of whom is from the Bear River area, myself, a member of our Water Resource Board, a representative of each of the four counties, county commissions of each of the four counties, a non-consumptive water user and a consumptive water user from the area. That constitutes the Idaho task force. We have the grand total of funding for that task force effort at \$5000, which will pay the costs of a few of the non-state employees who are members of the task force to attend a few meetings.

LARRY ANDERSON: You're going to have a hard time keeping track of what we're doing in Utah with only that much money.

KEITH HIGGINSON: That's right. I'll watch you. Our legislature did not provide any additional funds for Bear River studies. There's no money in our departmental budget of the \$200,000 variety that Larry's talking about to allow us to participate in feasibility or other type studies on the Bear River. The intent is that Idaho will be in a position to at least consult with the State of Utah's task force as it deliberates on Bear River projects and to participate in studies and meetings investigating the possibility of joint project development.

CHAIRMAN: Where does Wyoming fit in this, or does it.

LARRY ANDERSON: Mr. Chairman, just before Wyoming answers that I just want to mention for Keith's sake. I've met with both co-chairmen and they are very anxious to keep Idaho informed and to meet with Idaho as they come up in the area.



KEITH HIGGINSON: You've talked about a tour and we'll be happy to stamp your Visa's at the border.

JEFF FASSETT: We have not gotten into the legislative tit-for-tat game quite yet. We're interested but as we understand the issues they don't necessarily affect Wyoming other than continue to supply the water. I think we are interested. We would appreciate whatever contact or communication that either of these task forces are able to do. Larry has been more than helpful to supply us with copies of the legislation and keep us aware of at least what was occurring, but clearly these are in-state issues that are being dealt with. We don't want to unnecessarily stick our nose into Utah's business and to just keep a watchful eye. There's been no new force within our state, no new committees formed. We've already got existing mechanisms in place to develop water in the Bear River drainage. We're progressing as we see fit to deal with our compact allocations. I was going to ask a question as to how this new group will or will not relate or deal with the new Corps of Engineers study. Are you sort of starting over and have a new 18-month process or are we picking up what they were studying or has your agency already been doing independent work.

LARRY ANDERSON: We've been doing a lot of independent things, of course, but I looked at this group as a group that's going to answer the political questions as how do we fund the development of the Bear River? What type of agency is going to be used to manage future projects on the Bear River. Those were real key questions not necessarily as to what should be built, even though I think they may get into those types of questions also. The creation of the Task Force was suggested several years ago but we suggested it was

premature and they agreed. It now appears that we have reached a point in the State of Utah where we had political questions that needed to be answered and the Task Force was the appropriate entity to answer those political questions. We're talking in Utah to develop the Bear River that it will cost somewhere around \$400 million. We don't see it coming from the federal government. Even if we work out a project with the Corps of Engineers, that's just a small portion of Utah's needs for development of the Bear River and the State's going to have to address where it will come up with its money. That's the real question I hope the Task Force addresses. I'm sure they'll be very interested in the Corps study but probably no more than any other study we have done in the past on the Bear River. There are many options available to Utah in the development of the Bear River.

JEFF FASSETT: There are plenty of studies we're now wondering how mechanically you can build something.

LARRY ANDERSON: We really are at a point where we need to sit down and decide if the state is going to take the lead in building something or are they going to leave it up to the local areas to build their own project.

JEFF FASSETT: That's precisely why it's not appropriate, obviously for Wyoming to worry about internal Utah policies. We're interested and we'll be watchful and any information or feedback you get will be very much appreciated.

JOHN SHIELDS: Mr. Chairman, I was curious to ask Mr. Anderson as to the precedent or earlier activities in regard to the marketing strategies portion

of that bill. One of the charges to the task force was to examine marketing strategies that should be implemented for different types of water uses. Is that a relatively new activity?

LARRY ANDERSON: When they said marketing strategies, it's just terminology. The strategy was who pays for the cost of the recreational water shared by everybody? Is it subsidized by the State of Utah. What cost do you charge agriculture for their water? Do you subsidize it or do you pay the full cost of development. Same thing for M&I water and flood control benefits. What type of subsidy or non-subsidy are you going to give if you develop the Bear River so that the water can be put to beneficial use. That was the intent of that part of the legislation.

CHAIRMAN: It's a marketing strategy to take it out of the water resources department and give this blue ribbon committee. That's a marketing strategy. That makes it up front and visible. That's a very political move. Any other comment?

BOB MORGAN: Mr. Chairman, it's not a result of new legislation but it's the result of legislation and legislative intent. The State of Utah has created a river commissioner in the lower Bear River of Utah where there's quite a bit of controversy. This is the first time and it's probably the only major river system in the State of Utah that has not had water regulated by a commissioner. The commissioner was appointed this spring and he will be working to see the water rights in the Bear River will be distributed according to state water law. It will be interesting to see if we have a 4th of July starting about the 1st of May.

LARRY ANDERSON: Jeff, you passed a bill up in Wyoming that affects the Bear about a new wildlife reserve. Could you tell us about that?

JEFF FASSETT: After two years of substantial debate in our state legislature, this past session our legislature passed enabling or authorizing legislation for the creation of a new national wildlife refuge along the Bear River pretty much centered around Cokeville. It was a proposal that's been long pursued by the U.S. Fish and Wildlife Service and under the various federal acts which they operate on to create a new refuge. It does require state legislative approval before the Federal Government can pursue the creation of the new refuge, begin acquiring lands and things of this nature. The bill failed in 1988. It passed this session after a tremendous amount of debate. The proposal is for a 27,000 acre refuge called the Sublet Meadows National Wildlife Refuge, with Cokeville more or less in the middle, but generally most of the segment of the Bear River that's in Wyoming below Woodruff Narrows back where it crosses again at Border. It is a huge chunk of land. With the passage of that legislation the Fish & Wildlife Service can now begin proceeding with the process of getting the refuge established. They have to go through an environmental compliance process just like you would to build a new dam. The interesting thing in the legislation, the bill itself is only a couple of pages long. The water issues among a huge list of other items were heavily debated.

The bill, itself, puts a burden on me as State Engineer to enter into specific agreements with the Fish & Wildlife Service dealing with how the water right issues are going to be dealt with for the refuge. We did not want

to have some new federal reservation water rights being created or some new federal authority being provided with the creation of a new refuge as to how the water rights are going to be handled. Water issues are going to be a problem even with this refuge being established, detailed management plans have been prepared but not finalized on how the refuge is going to be operated. Their pattern of water use may be different than the way it's been used in the past as they begin to acquire the irrigated lands and perhaps want to operate those ditches differently. They are going to run headlong into some state law problems and perhaps some compact issues that you are very interested in.

The process is proceeding and 27,000 acres of land will be acquired. The majority is destined to be outright purchased. It's mostly private and state land. There is some federal lands but most of it is private land. In our state what was interesting legislatively, of course, is that Cheyenne is about as far away from Cokeville as you can get and still be in the State of Wyoming. As a result, those that are either pro or con on an issue like this are the only ones that will take the time to come clear to Cheyenne and let their voice be heard. These were very heated debates and very divided. Unfortunately, I think Mr. Dayton can tell you as a lifelong resident of the area it has severely divided the local community in Cokeville. Families voting on either side as to whether they want a refuge being established or not. Some see it as a future breakup of the family farming ranching operation of the valley. Those on the other side are looking for this as a potential economic development, bringing more people into the valley, the springboard to growth of the local community.

CHAIRMAN: The issue is the right of private property ownership. How many people are involved? How many people lose their lands?

JEFF FASSETT: Mr. Chairman, that may not be the right terminology. It's strictly a willing buyer sort of relationship. That's a concern depending on who you are. A lot of landowners want to sell. They were heavily pushing this as a means to bail themselves out of a difficult economic situation. Others don't want to and you end up with a possibility of a sort of patchwork quilt, a land ownership system within the bounds of this refuge, and what problems that may cause to those landowners that don't want to sell. Instead of purchasing the land outright, there may be easements acquired to help manage the area as a wildlife refuge. The right to sell or not sell the land was one of the issues. Without the consent the Fish & Wildlife Service is without power to proceed to even enter into a willing-buyer, willing-seller relationship, so they saw inaction by our legislature as a threat to a private landowners ability to sell their land to whomever they want even if they want to sell it to the federal government. That issue can be debated heavily on both sides.

REED DAYTON: A vote was taken in the community as to their feelings toward this project, the vote from the community was 7-1 against. As Jeff has said it has created some problems and feelings in the community. I might say the last time it was defeated by one vote in the legislature, but it passed by a good majority this time.

RODNEY WALLENTINE: Are there any other stipulations on the private landowners who may not want to sell.

JOHN TEICHERT: We've got some stipulations. I don't know how they came out on the legislation, I haven't seen the final legislation, as far as their report. The federal Fish and Game did stipulate they would abide by the historic use on the Bear River. When they pull the Pixley and BQ Dam on the 10th of July, that is what keeps Smith Fork out of regulation for three weeks beyond that period.

REED DAYTON: The bill was not signed by the Governor. He allowed it to become law without his signature.

BLAIR FRANCIS: In this whole discussion we in the Woodruff Narrows Reservoir view this as a challenge to our management ability in the future. Traditionally, we've managed the reservoir to maximize the one goal, that being agriculture income for the stockholders and the people down there. John alluded partially to the problem, but he didn't answer the question, where they plan to get the water to keep in those duck ponds for those later dates when they pull those dams on the 10th of July, there at Pixley. What we're afraid of is the fact sometime in the future we could be approached by the U.S. Fish and Wildlife Service and asked to release the reservoir water differently because they would like us to leave it up in the reservoir and release it in August and September which is entirely diametrically opposite to the way we've managed the reservoir. This is the threat we see to our ability to operate the Woodruff Narrows Reservoir. I've had brief dialogues with Jeff on this. He's agreed to meet with our people. We're going to have to address this. If, in fact, they get all 27,000 acres, they're not going to have enough water from that amount of land to manage the way they propose and the number of ponds they've got in their proposal. They'll either have to reduce

the ponds or they'll have to seek additional water on those years like 88-89. I don't know where they're going to get it from unless they're looking upstream to Woodruff Narrows Reservoir. This is where we have really grave problems. We're going to have to work closely with Jeff and his people on this strictly from a Woodruff Narrows manageability.

JEFF FASSETT: Stay tuned. Our water from the Compact is fully allocated. They think they can buy the water and bring it down there.

#### APPROVAL OF BUDGET

LARRY ANDERSON: We need to increase this year's budget to cover several additional expenses relating to hiring a new engineer-manager. You have a revised budget before you for approval that requires a change to cover last night's dinner for Wally. I would suggest we increase office supplies by an additional \$800 to cover the meal and make that \$1800. We don't have an item in the budget to cover meals. As I mentioned the budget you are reviewing has already been modified to cover the additional publication costs for all of the newspaper advertising for the engineer-manager and additional personal services costs for our new engineer-manager to begin work on May 1. If that is acceptable to the Commission, the subtotal for fiscal year ending June 30, 1989 will be \$50,365. I haven't tried to carry this increase all the way through the budget, just down to the subtotal.

Another change I suggest we make in the proceeding three years 90-91-92 is that the item called "Contract Universities" where we show 0 dollars, that was the old three university contracts and we have nothing there. I would



suggest we change that to say "Contract Service" and in the years 90-91-92 make that \$3000. This would be to cover the Technician that Jack has indicated he would use from time to time to save the Commission money and we'd have an item in the budget for \$3000 to cover that item. Then you would have to change all the subtotals by \$3000, making it \$63,050, \$55,550, \$58,050. It affects the whole budget all the way through, all the calculations. Again I did not go through them. It will not require an increase in dues to the states. We will still have close to \$80,000 in unexpended funds at the end of June of 1992 and we still have an item called "Special Studies" that amounts to \$25,000 a year that we have said we may spend as we identify items that should be done. With those changes in this budget, Mr. Chairman, I would move we approve the budget. Keith, we had talked about another item that also needs to be covered after approval of the budget.

KEITH HIGGINSON: I'd like to second your motion on this budget and then I'd like to discuss this other item.

CHAIRMAN: Any other discussion of the proposed budget?

JEFF FASSETT: Will our approval of this budget lock us into the assessment in those out years.

KEITH HIGGINSON: For your biennial planning purposes, Jeff, I think you're looking at \$25,000 a year for the next two years.

JEFF FASSETT: That's my question. I'm about to start the process to budget 91 and 92 so I need to have some assurance from the group that we're

comfortable at this point and that anything special that might come up we have reserves to cover that. We did not anticipate an increase until 1993.

KEITH HIGGINSON: 1992 if any.

CHAIRMAN: If not, all those in favor. MOTION CARRIED.

KEITH HIGGINSON: Mr. Chairman, if I may raise the other issue as Larry has said we have this Special Studies category in here of \$25,000 a year for whatever study purposes we might determine. I'd like to propose we take advantage of the fact we have Mr. Wally Jibson with his photographic memory available to us and I would like to see us enter into an agreement through our new Engineer-Manager with Wally to have him prepare a written history of the Bear River Compact. I think it would be invaluable to us in the future if from his memory and calling upon others like Mr. Dayton who have been involved the Bear River for years, to recall the reasons that various provisions were placed in the compact and the reasons certain revisions were made to the compact. I don't know how much longer all of these people with that kind of memory are going to be available to us and it would be a shame if we lost the benefit of the information they have available.

CALVIN FUNK: Second that proposal.

WES MYERS: Mr. Chairman, I'd like to know if this history is just the Bear River Compact or if it would go back a little further and cover some of the historical events with the Bear River such as the court procedures, the Utah

Power & Light, and Utah-Idaho Sugar involvement with developing the river. I'd like to see it go clear back to the beginning and have Wally hit the highlights before the compact.

KEITH HIGGINSON: I think that in order to write the history of the compact you have to go back ahead of the compact and say what was going on and why did the states decide they needed the compact. The history should address all of those issues.

WES MYERS: The first thing he'd have to do is go into why it's called the Bear.

WALLY JIBSON: Trouble is we disagree with A. J. Simmons, the official historian on why it's called the Bear River. I guess I'll have to ask my wife if I have any time. This subject has come up before with another group (UP&L) and they've requested about the same thing and I have given it a little thought. I would be agreeable to try to get something together, providing you don't give me a deadline.

CHAIRMAN: This is a motion, Keith, to authorize Jack to sit down and negotiate with Wally a timetable and a cost to do this kind of job.

KEITH HIGGINSON: I wanted the sense of the Commission that the Commission felt it was something they feel is worthwhile pursuing. I personally do, and I would hope the rest of the Commission would support that kind of an effort to put together the history and the documentation for this Compact. I know, Wally has got in his files some of the early papers that were circulated. It

would be interesting to have them attached as appendices to this history he's writing so we could have them for future reference. Let's publish it.

CHAIRMAN: There's a Motion on the floor any discussion. All in favor.

MOTION CARRIED.

#### OTHER BUSINESS

CHAIRMAN: Any other business. I had one item if no one else does. I'd like to propose a Motion as well that would make Wally a permanent ex-officio Engineer-Manager member of the Bear River Commission with his name appearing on the letterhead whenever we reprint that and be more than welcome at all of our meetings in the future. I put that in the form of a Motion.

DON GILBERT: I'll second.

CHAIRMAN: Any discussion. All those in favor. MOTION CARRIED.

#### NEXT MEETING

CHAIRMAN: The next meeting's November 20 in Salt Lake City.

LARRY ANDERSON: Mr. Chairman, November 20 is a week earlier than what it called for in the by-laws. We moved it up to keep it away from Thanksgiving.

JEFF FASSETT: What day's Thanksgiving?

LARRY ANDERSON: The 23rd.

KEITH HIGGINSON: It's the Monday of Thanksgiving week, and ordinarily it would be the 27th.

#### OTHER ITEMS

JEFF FASSETT: Mr. Chairman, I didn't mean to drag it out, I should have brought it up earlier. I wanted to know if either Keith or Larry could quickly update and report on any weather modification activities that are occurring within the Bear River drainage. I know in our state we have a licensing-permitting process and I issued a new permit to a company working for Utah Power and Light to do some weather mod in our state. I was curious if we could just briefly touch on that before we broke up.

LARRY ANDERSON: In Utah our cloud seeding program has about ended for the year. We have a \$400,000 statewide program this year. We are seeding both Cache and Box Elder Counties.

JEFF FASSETT: Do you publish reports or information about the real or perceived successfulness or lack of successfulness of the program? Obviously with that kind of a dollar commitment the legislature feels very strongly because it's effective.

LARRY ANDERSON: We only provided \$75,000 in cost sharing from the state this year. The rest of the funds were provided by the counties or water user organizations. We do not generally publish a report every year but over the

past 15 years statistically we have improved the stream runoff by 10% and have published several reports containing statistical data. If we publish a report this year, I'll send it to you.

KEITH HIGGINSON: Carly's here so he might report on what UP&L did. I know there was an activity in the central part of the basin at least.

CARLY BURTON: We contracted with North American Weather Consultants to seed the Smiths and Thomas Forks basins. There was some interest in us being involved in seeding the headwaters, but we felt it was such a long distance from the headwaters to Bear Lake where really we want the impact or benefit to take place. We felt that for our needs it was better to seed an area closer to Bear Lake so we contracted with North American to seed that area. Part of that contract will be a document that will analyze the data of the seeded area, with some statistical results as far as what the calculated increase in snowpack was.

KEITH HIGGINSON: As far as Idaho was concerned there were no state funds put in, but the four counties down in the southeast corner of our state each put up a little bit of money as an extension of the North American Weather Consultants contract. They put a dozen or so generators throughout parts of Caribou, Bannock, Oneida and Bear Lake Counties. Since we didn't have any involvement in that, we've not been monitoring the results of that and I can't give you a report on how successful it was.

GLEN NELSON: I was hoping they'd carry this through the summer on this hail suppression. I felt like a few years ago when they were doing it, it really

did some good over in our valley. I know the hail damage sure increased when they stopped this several years ago. I was hoping they'd have enough money for a summer hail suppression program. Maybe there won't be any clouds this summer to seed. I believe the people in our valley felt some very definite benefit from hail suppression.

CHAIRMAN: Bring me up to date on that one. Is that a different kind of seeding?

GLEN NELSON: Same seeding but I think they do it with airplanes. They were following these thunderstorms around with airplanes.

LARRY ANDERSON: Hail suppression is very costly because you have to seed from planes. We did it for 2 or 3 years, and I suspect if there was still local interest and local funding we'd be willing to discuss it with you.

GLEN NELSON: Box Elder County Commission came up with about \$25,000 that they had a hard time raising to help get through the winter.

CHAIRMAN: Before we adjourn I think Wally would like to say a few words.

WALLY JIBSON: Thank you. I discovered today how enjoyable it is to sit through one of these meetings and by and large keep my mouth shut. I should have discovered that many years ago. I had to prompt myself a time or two. I would just like to again thank this group for last night and for all of the letters we have. I mentioned before we've gone through and read them all and I'd like to thank the group for the expressions here today of their support

and kind expressions to me for the work we've done these past many years. I just want to bid you a fond adieu and tell you how I've enjoyed working with all of you and the people before you.

CHAIRMAN: Not a fond adieu, you're going to be with us either writing or attending or something.

Is there a motion for adjournment.

Meeting adjourned at 11:20 p.m.



BEAR RIVER COMMISSION ANNUAL MEETING

April 18, 1989

9:00 a.m.

Room 205-207

Eccles Conference Center

Utah State University

Logan, Utah

A G E N D A

1. CALL TO ORDER
2. READING OF MINUTES OF LAST MEETING
3. APPROVAL OF MINUTES (November 21, 1988)
4. REPORT OF CHAIRMAN
5. ELECTION OF OFFICERS
  - a. Vice Chairman
  - b. Secretary-Treasurer
6. REPORT OF TREASURER
7. REPORT OF ENGINEER-MANAGER
8. REPORT OF COMMITTEES
  - a. Appointment of New Engineer-Manager
  - b. Status of 1976 Base Map/Depletion Study - Bob Fotheringham
  - c. Commission-Approved Depletion Guidelines - Bob Morgan
  - d. Status Report on RFP "For a Bear River Hydrologic Model"-Keith Higginson
9. UNFINISHED BUSINESS
10. NEW BUSINESS
  - a. Report by Cache County Ad Hoc Committee - Dennis Funk
  - b. Update by Corps of Engineers on Bear River Reconnaissance Study-Les Dixon
  - c. Report on Legislation Affecting the Bear River Drainage - States
11. APPROVAL OF BUDGET
12. NEXT MEETING - NOVEMBER 20, 1989 - 1:00 p.m. Natural Resources Aud.
13. ADJOURNMENT

# BEAR RIVER COMMISSION

## STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF JULY 1, 1988 TO APRIL 1, 1989

INCOME	CASH ON HAND	INTEREST INCOME	FROM STATES	TOTAL REVENUE
Cash Balance 07-1-88	\$128,362.38			\$128,362.38
State of Idaho			\$25,000.00	\$25,000.00
State of Utah			\$25,000.00	\$25,000.00
State of Wyoming			\$25,000.00	\$25,000.00
Interest on Savings and other income		\$11,044.83		\$11,044.83
<b>TOTAL INCOME TO April 1, 1989</b>	<b>\$128,362.38</b>	<b>\$11,044.83</b>	<b>\$75,000.00</b>	<b>\$214,407.21</b>

### DEDUCT OPERATION EXPENSE

#### EXPENDED THROUGH U.S.G.S.

	APPROVED BUDGET	UNEXPENDED BALANCE	EXPENDITURES TO DATE
Stream Gaging	\$37,665.00	\$15.00	\$37,650.00
<b>SUBTOTAL</b>	<b>\$37,665.00</b>	<b>\$15.00</b>	<b>\$37,650.00</b>

#### EXPENDED THROUGH COMMISSION

Personal Services	\$8,600.00	\$3,756.50	\$4,843.50
Travel (Eng-Mgr)	\$800.00	\$0.98	\$799.02
Office Expenses & Supplies	\$250.00	-\$704.40	\$954.40
Printing Biennial Report	\$0.00	\$0.00	\$0.00
Treasurer Bond & Audit	\$700.00	-\$85.00	\$785.00
Printing and Reproduction	\$100.00	\$100.00	\$0.00
Legal Consultant	\$500.00	\$0.00	\$500.00
Contract-Idaho, Utah & Wyoming	\$32,879.72	\$3,005.84	\$29,873.88
Commission-Approved Procedures	\$25,000.00	\$25,000.00	\$0.00
<b>SUBTOTAL</b>	<b>\$68,829.72</b>	<b>\$31,073.92</b>	<b>\$37,755.80</b>

<b>TOTAL</b>	<b>\$106,494.72</b>	<b>\$31,088.92</b>	<b>\$75,405.80</b>
<b>CASH BALANCE AS OF 4-1-89</b>			<b>\$139,001.41</b>

BEAR RIVER COMMISSION  
DETAILS OF EXPENDITURES

FOR PERIOD ENDING APRIL 1, 1989

180	A G R	\$3,462.05
181	VAN, COTT, BAGLEY	\$500.00
182	U S G S	\$37,650.00
183	WALLY JIBSON	\$2,026.90
184	A G R	\$6,628.16
185	GILCHRIST & CO	\$735.00
186	WALLY JIBSON	\$2,114.86
187	A G R	\$2,783.67
188	IDAHO WATER RESOURCES	\$17,000.00
189	UINTAH COUNTY HERALD	\$115.50
190	WALLY JIBSON	\$1,500.76
191	NEWSPAPER AGENCY CORP	\$286.96
192	FENTON INSURANCE AGENCY	\$50.00
193	CASPER STAR-TRIBUNE	\$142.50
194	IDAHO STATE JOURNAL	\$282.24
195	THE HERALD JOURNAL	\$127.20
		\$0.00
	TOTAL EXPENSES	<u>\$75,405.80</u>

BANK RECONCILIATION

APRIL 1, 1989

Cash in Bank per Statement 4-1-89	\$1,891.55
Less: Outstanding Checks	\$142.50
Total Cash in Bank	<u>\$1,749.05</u>
Plus: Savings Account-Utah State Treasurer	\$137,252.36
TOTAL CASH IN SAVINGS AND IN CHECKING ACCOUNT	<u>\$139,001.41</u>

BEAR RIVER COMMISSION  
880 River Heights Blvd.  
Logan, Utah 84321

April 18, 1989

Engineer-Mgr Report

Wallace N. Jibson --

1989 Water Supply and Compact Administration

Water Supply

We are expecting a deficient water supply for the third consecutive year in Bear River basin. Though less serious than in 1988, back to back dry years usually mean less benefit from available snowpack and smaller holdover storage each year in the cycle. April 1 forecasts are down an average of six percent over those of March 1 with Cub River being the only station in the basin to show a little improvement during the month. SNOTEL sites as of April 10 give an average water content of 94 percent for eight higher-elevation courses which is actually up from a month ago, but lower-elevation snowpack has been melting rapidly.

Forecast for April 1, shown in the table, predicts 82 percent of the 25-year average runoff from the upper Bear watershed in the April-July period. Last year's measured runoff was down from the forecast to 61 percent, so we still anticipate about a third more runoff than in 1988. Smiths Fork is expected to improve only moderately from last year's 59 percent to 70 percent this year, but Logan River should improve from 53 percent to 78 percent. Smiths Fork runoff last year, for a change, came closer to the forecast than the other two.

Streamflow in Acre-Feet

	<u>April-July</u>				<u>Percent of Average</u>
	<u>Average 1961-85</u>	<u>Measured 1987</u>	<u>Measured 1988</u>	<u>Forecast 1989</u>	
Upper Bear R.	116,000	89,900	71,100	95,000	82%
Smiths Fork	122,700*	59,200*	73,000*	86,000*	70%*
Logan River	122,000	58,100	64,400	95,000	78%

\* April-September

Reservoirs

Hydrographs of Bear Lake are shown on page 3. Lake surface elevation practically coincided with the Irrigation Reserve elevation of 5,914.61 ft from November through January. The low point of 5,914.62 ft held steady from November 13 to December 17. April 1 forecast of runoff of Bear River at Stewart Dam is an indicator that it will be unlikely if the Bear Lake peak this year reaches 5,917.63 ft (1,000,000 ac.ft.). This means that with a moderately heavy draft this summer the Lake would make no net gain and would again be down near the Irrigation Reserve by September 30. The Lake was at 5,915.91 ft with usable storage of 882,500 ac.ft. on April 13. Inflow was 339 cfs, outflow was zero.

Woodruff Narrows Reservoir on April 6 was storing 21700 ac-ft of a spillway capacity of 57,300 ac-ft. The enlarged Sulphur Creek Reservoir is now storing about 9,000 ac-ft of a spillway capacity of 19,775 ac-ft. Sulphur Creek evidently has peaked and is contributing only a small amount, so the reservoir is now storing mostly Bear River water conveyed through a pipeline. Storage is now taking place in the enlarged portion. If we look at the measured runoff in 1988 as gaged at the head of Woodruff Narrows Reservoir, the same flow in 1989 would take until the end of May to fill both reservoirs. Of course, we are not expecting a repeat of 1988 this year from the upper Bear River; however, this illustrates that with no holdover prior to such a year as 1988, we could experience a problem of storage conflict with direct-flow irrigation.

#### Budget

Budget estimates, in accordance with the bylaws, are shown for the period 1989-92 on page 4. Some adjustments were necessary in the current-year (1989) budget from that previously approved because of the new Engineer-Manager coming aboard in April with some overlapping expected both in the 1989 and 1990 fiscal years.

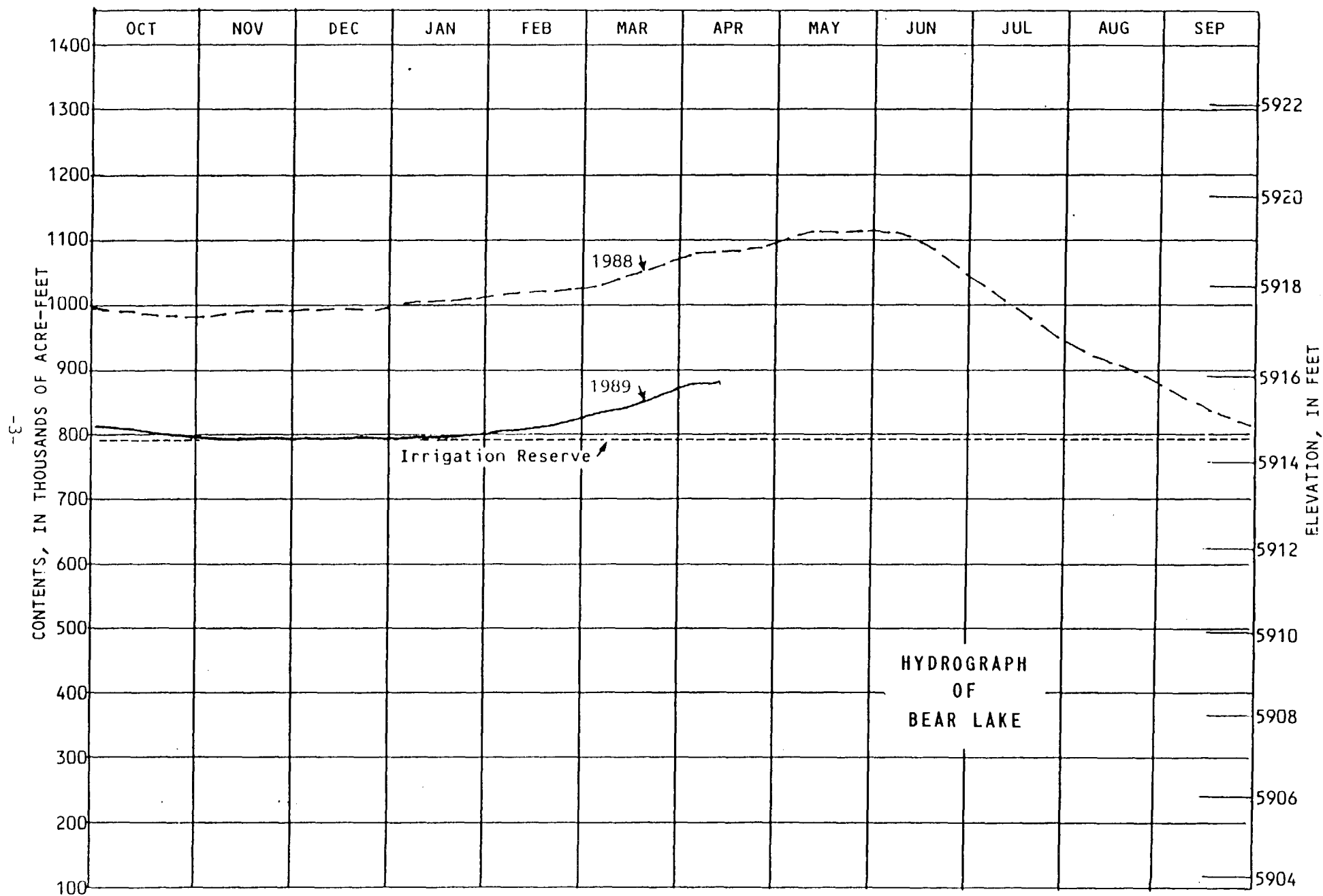
What has been called "Commission-Approved Procedures" in earlier estimates is now referred to as "1976 Depletion Studies" for which \$32,880 is shown for 1989 and zero thereafter. This is the unexpended balance at the beginning of 1989 of the original \$91,970 approved for the inhouse studies carried out by the Technical Subcommittee. To date all except about \$3,000 has been expended and this will be paid out before June 30. Additional work expected to be assigned to this committee is projected under "Special Studies".

Stream-gaging estimates for the 1991-92 fiscal years (1990-91 water years) were secured from the USGS and show an average increase of about  $8\frac{1}{2}$  percent each year. The 1990 estimate is firm at \$4,600 per gaging station.

The rather large item for "Office Supplies" in 1989 results from newspaper advertising costs for the Engineer-Manager. Despite sizable increases in some areas, the winding down of some implementing studies results in a projected balance of \$87,494 at the end of the 1992 fiscal year without increasing annual assessments.

#### Applications for Appropriation

Applications submitted for the past 6-month period are shown on pages 5 and 6. Noteworthy, is an Idaho filing for a proposed power development in the lower Oneida Narrows. This is a pending application for 1,440 cfs. At a recent hearing in Preston it was reported by the applicants that this development would not eliminate a possible second dam in the Narrows.



BEAR RIVER COMMISSION

BUDGET, INCOME, AND EXPENDITURES

APRIL 18, 1989

<u>BUDGET</u>	<u>FISCAL</u> <u>YEAR</u> <u>ENDING</u> <u>6-30-89</u>	<u>FISCAL</u> <u>YEAR</u> <u>ENDING</u> <u>6-30-90</u>	<u>FISCAL</u> <u>YEAR</u> <u>ENDING</u> <u>6-30-91</u>	<u>FISCAL</u> <u>YEAR</u> <u>ENDING</u> <u>6-30-92</u>
<b>COMPACT ADMINISTRATION</b>				
PERSONAL SERVICES (ENGR-MGR)	\$ 13,000	\$ 30,000	\$ 25,000	\$ 25,000
TRAVEL (ENGR-MGR)	1,300	800	800	800
OFFICE SUPPLIES	1,000	250	250	250
PRINTING BIENNIAL REPORT	00	2,500	00	2,500
AUDIT AND TREASURER BOND	785	800	800	800
PRINTING AND REPRODUCTION	100	200	200	200
LEGAL RETAINER AND FEES	500	500	500	500
CONTRACT (UNIVERSITIES)	00	00	00	00
1976 DEPLETION STUDIES	32,880	00	00	00
SPECIAL STUDIES	00	25,000	25,000	25,000
SUBTOTAL:	\$ 49,565	\$ 60,050	\$ 52,550	\$ 55,050
STREAM-GAGING PROGRAM (USGS)	\$ 75,300	\$ 76,800	\$ 83,520	\$ 90,210
TOTAL BUDGET:	\$ 124,865	\$ 136,850	\$ 136,070	\$ 145,260
<b>ALLOCATION OF BUDGET</b>				
U.S GEOLOGICAL SURVEY	\$ 37,650	\$ 38,400	\$ 41,760	\$ 45,105
BEAR RIVER COMMISSION	\$ 87,215	\$ 98,450	\$ 94,310	\$ 100,155
TOTAL BUDGET:	\$ 124,865	\$ 136,850	\$ 136,070	\$ 145,260
<b>ASSESSMENT FOR COMMISSION SHARE</b>				
ASSESSMENT TO EACH STATE	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000
TOTAL THREE-STATE ASSESSMENT	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000
<b>INCOME-EXPENDITURE PROJECTION (1989-92)</b>				
<b>INCOME</b>				
BEGINNING BALANCE	\$ 128,363	\$ 126,109	\$ 112,659	\$ 103,149
INCOME FROM STATES	75,000	75,000	75,000	75,000
INCOME FROM INTEREST	9,961	10,000	9,800	9,500
TOTAL INCOME:	\$ 213,324	\$ 211,109	\$ 197,459	\$ 187,649
<b>EXPENDITURES</b>				
STREAM GAGING (USGS)	\$ 37,650	\$ 38,400*	\$ 41,760	\$ 45,105
COMPACT ADMINISTRATION (GENERAL)	16,685	35,050	27,550	30,050
CONTRACT (UNIVERSITIES)	00	00	00	00
1976 DEPLETION STUDIES	32,880	00	00	00
SPECIAL STUDIES	00	25,000	25,000	25,000
TOTAL EXPENDITURE:	\$ 87,215	\$ 98,450	\$ 94,310	\$ 100,155
UNEXPENDED BALANCE:	\$ 126,109	\$ 112,659	\$ 103,149	\$ 87,494
STREAM-GAGING COST PER STATION:	\$ 4,380	\$ 4,600	\$ 5,000	\$ 5,400
PUBLIC. COST CUTLER STATIONS (3)	\$ 840	\$ 900	\$ 1,020	\$ 1,110

\* 50% OF COST: 16 STATIONS @ \$4,600 PLUS ONE @ \$2,300 PLUS THREE AT CUTLER @ \$300.

Presented to Commission: APRIL 18, 1989

Applic. Number	Date of Filing	Name	Source	Use	Location	Amount (cfs)	Act'n
<u>STATE OF IDAHO</u>							
11-07372	5-23-88	BEAR LAKE SANDS	GROUND WATER	IRR, DOM, IN	S1T16SR44E BEAR LAKE	5.65 cfs	PEND
11-07373	11-4-88	MARK H. EBORN	GROUND WATER	IRRIG	S15T13SR43E BEAR LAKE	2.06	APPR
13-07458	11-29-89	DWAIN K. CHRISTENSEN	GROUND WATER	IRRIG	S20T9SR40E CARIBOU	5.00	PEND
13-07459	1-25-89	TWIN LAKES CANAL CO	GROUND WATER	IRRIG	S23T14SR38E FRANKLIN	5cfs1448AF	PEND
13-07461	2-8-89	DUANE J. BITTON	BITTON SPRING	IRR-DOM-ST	S8T11SR41E CARIBOU	0.20	PEND
13-07462	2-16-89	S&F POWER CO.	BEAR RIVER	POWER	S16T14SR40E FRANKLIN	1440 cfs	PEND
13-07463	3-3-89	R. LLOYD BROS	GROUND WATER	IRRIG	S5T10SR41E CARIBOU	2.60	PEND
15-07110	12-30-88	RAY MCCLELLAN	GROUND WATER	IRRIG	S33T14SR46E ONEIDA	3.20	PEND
15-07111	3-1-89	DEEP CR. IRRIG CO.	GROUND WATER	IRRIG	S17T14SR37E ONEIDA	5.50	PEND
TOTAL SURFACE WATER, IDAHO: PENDING, 1,440.2 CFS, APPROVED, 00 CFS TOTAL GROUND WATER, IDAHO: PENDING, 26.95 CFS, APPROVED, 2.06 CFS CHANGE IN STATUS PAST SIX MONTHS OF PREVIOUSLY REPORTED APPLICATIONS: APPROVED TO LICENSED: SURFACE WATER, 15.0 CFS, GROUND WATER, 6.23 CFS (REPORTED, 10.7 CFS) APPROVED TO INVALIDATED: SURFACE WATER, 109.11 CFS (INCLUDES 91.0 CFS POWER), GW 6.08 CFS, 100 ACFT/ RECREATION							
<u>STATE OF WYOMING</u>							
TF 26 6/330	1-26-89	FAILONI LAND	ROCK CR.	IRRIG	S29T22NR119W LINCOLN	0.61 cfs	PEND
TF 26 1/331	1-26-89	FAILONI LAND	SULPHUR SPGS CR.	IRRIG	S20T22NR118W LINCOLN	1.25	PEND
PN 30 112	2-7-89	WYO HIGHWAY DEPT	BEAR RIVER	INDUSTRIAL	LOT19T24NR119WLINCOLN	1.00	APPR
<u>ADJUDICATIONS (WYOMING)</u>							
PN 5559R		DAYTON RANCH	MANNIFIOR RES SPR C.	IRR, STK	TR121T25NR119W LINC.	9.76 AF	
PN 4124 SR		BEN LOWHAM ET AL	#4 STK RES RANDALL DR	STOCK	S8T12NR120W UINTA	3.63 AF	
PN 30 112		DON & BONNIE LARSON	SMITHS FORK (ABANDONMENT OF FOUR ACRES)				
TOTAL SURFACE WATER, WYOMING: PENDING, 1.86 CFS, APPROVED, 1.0 CFS TOTAL GROUND WATER, WYOMING: PENDING, 00, APPROVED, 00 PAST SIX MONTHS: APPROVED TO CANCELLED, 3.47 CFS, GROUND WATER							



APPLICATIONS TO APPROPRIATE WATER  
BEAR RIVER DRAINAGE  
STATE OF UTAH

PRESENTED TO COMMISSION: April 18, 1989

APPLI. NO.	DATE OF FILING	NAME	SOURCE	USE	LOCATION	COUNTY	AMOUNT (CFS)	ACTION
25-8938	12/20/88	ALLSOP, RICHARD C.	UNNAMED DRAIN	IS	S11T13NR1W	CACHE	1.5	PEND
25-8949	12/21/88	ARCHIBALD, CECIL	UGW DRAINS & LOG	I	S15T12NR1W	CACHE	1.5	PEND
25-8953	01/03/89	RILEY, LARRY E.	HANSEN NORTHFIELD S.	Ot	S34T11NR1W	CACHE	8.0	PEND
25-8968	02/10/89	GUNNELL TRUSTEE, FRANKLIN	WELL	IDSot	S7T10NR1E	CACHE	0.1	PEND
25-8969	02/23/89	KELLER GRAZING CORP.	SPRING	IDS	S30T10NR2E	CACHE	0.1	PEND
25-8970	02/23/89	KELLER GRAZING CORP.	SPRING	IDS	S30T10NR2E	CACHE	0.1	PEND
25-8977	03/28/89	JENSEN, COURINEY	WELL	ISot	S13T11NR1W	CACHE	0.1	PEND
29-3527	01/27/89	WHITE, BOYD B.	WELL	IS	S2T8NR2W	BOX ELDER	0.1	PEND
29-3529	02/08/89	BOOTHE, VALOY J.	UGW DRAINS (2)	IS	S6T10NR2W	BOX ELDER	0.5	PEND
29-3530	03/08/89	RIVERSIDE NORTH WATER CO.	WELL	Mu	S3T13NR3W	BOX ELDER	2.0	PEND

UTAH: TOTAL SURFACE WATER: APPROVED, 0.00 CFS, PENDING, 11.7 CFS

UTAH: TOTAL GROUND WATER: APPROVED, 0.00 CFS, PENDING, 2.3 CFS

## SYNOPSIS

March 17, 1989

### BEAR RIVER BASIN INVESTIGATION, RECONNAISSANCE STUDY

**STUDY PURPOSE:** The purpose of the Bear River Basin investigation by the Corps of Engineers was to determine if there was a Federal interest in participating in water resources development or problem resolution.

**STUDY MANAGEMENT TEAM:** The Reconnaissance Study was conducted by the Corps of Engineers in cooperation with the following State Agencies: Idaho Department of Water Resources, Utah Division of Water Resources, and Wyoming Water Development Commission.

**STUDY STATUS:** The Study was initiated in March 1988 and was completed in February 1989. The Corps of Engineers is currently working with the States of Idaho and Utah to determine if there is an interest in conducting further joint studies. This coordination work will be completed by May 1989.

**STUDY FINDINGS:** a. There is a Federal interest in protecting the water quality of Bear Lake, and the Environmental Protection Agency would be the lead agency. Subsequent to review of prior studies, it was concluded that the primary source of phosphorus loading was from overland and channel erosion. Recommended future work included: 1) Quantifying an allowable total annual phosphorus load to the Lake; and 2) Develop a comprehensive operating plan for the Lake. This plan would need to address and integrate current and projected requirements for storage and releases for water supply, hydropower, and instream flows. In addition, the plan should address flood control storage, downstream flooding, Lake water quality, recreation, and Bear Lake National Refuge productivity.

b. Streambank Erosion, Evanston. A traditional streambank erosion protection project for the city of Evanston, Wyoming could not be justified with respect to Corps criteria.

c. A simplified analysis of sedimentation at 15 existing and 7 proposed reservoirs was conducted. The report recommends Corps of Engineers participation in detailed sedimentation studies at selected reservoir sites. Such studies would need to be requested through a State agency.

d. Seven potential reservoir sites were evaluated with respect to stringent Corps criteria. In order to qualify for Corps of Engineers assistance in design and construction, the proposed reservoir must provide significant flood control benefits and agricultural water supply benefits. The reason for this will become apparent upon review of the subsequent paragraph on cost sharing. The seven reservoir sites investigated were: Smiths Fork, Thomas Fork, Soda Springs, Oneida Narrows, Honeyville, Avon, and Mill Creek. The study results indicated that one large

reservoir in the lower Bear River Basin might meet Corps criteria. One potential site is Oneida Narrows on the Bear River. The estimated construction cost of a 100,000 acft earthfill dam at this location is \$66 million. Nearly, one-third of this cost would be for relocation of the existing UP&L power plant.

COST SHARING: Inorder to determine whether to pursue further cost shared studies with the Corps of Engineers, a knowledge of Federal cost sharing requirements is necessary. Further feasibility studies will have to be cost shared on a 50/50 basis with a local study sponsor(s). Half of the local cost share can be in-kind service. Construction of a large reservoir would be cost shared in the following manner:

LANDS, EASEMENTS, RIGHTS-OF-WAY, RELOCATIONS, AND BORROW AND DISPOSAL SITES.....	100% LOCAL
HYDROPOWER FACILITIES.....	100% LOCAL
MUNICIPAL AND INDUSTRIAL WATER SUPPLY.....	100% LOCAL
AGRICULTURAL WATER SUPPLY.....	65% FEDERAL 35% LOCAL
FLOOD CONTROL.....	75% FEDERAL 25% LOCAL
RECREATION (MINIMUM FACILITIES)...	50% FEDERAL 50% LOCAL

NOTE: The project sponsor(s) would retain title to the facilities and lands and would be responsible for all operation and maintenance. The Corps of Engineers continuing involvement would be limited to periodic inspection of operation and maintenance.

FEASIBILITY STUDY: Inorder to obtain authorization and funding from Congress for construction of a large dam on the Bear River, a Feasibility Study must be conducted. The Feasibility Study would normally include an Environmental Impact Statement and demonstrate that the proposed reservoir was locally supported, optimally located, and designed to provide the greatest net benefits. Feasibility studies are expensive and in some situations local study sponsors may find it to be more expedient and economical to proceed with a project without Federal assistance. The Corps of Engineers has asked the States of Idaho and Utah if they are interested in participating in a Feasibility Study. This question will be resolved by May 1989.

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