

MINUTES OF THE
BEAR RIVER COMMISSION
REGULAR MEETING

November 22, 1982

Room 303
State Capitol Building
Salt Lake City, Utah

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10:00 a.m.

CALL TO ORDER

CHAIRMAN JIBSON: The regular meeting of the Bear River Commission will come to order. First we'll have introductions. Don, why don't you start it - introduce yourself.

THOSE PRESENT

UNITED STATES

Wallace N. Jibson, Chairman
and Federal Representative

UTAH COMMISSIONERS

Daniel F. Lawrence
(Secretary-Treasurer)
Paul Holmgren
Simeon Weston

IDAHO COMMISSIONERS

Don W. Gilbert
Donald S. Rex
Daniel Roberts

WYOMING COMMISSIONERS

George L. Christopulos
S. Reed Dayton
Marvin Bollschweiler
(Alternate)

LEGAL ADVISER

E. J. Skeen

ALTERNATES AND OTHERS IN ATTENDANCE

Blair R. Francis, (Alternate Commissioner), Utah
Calvin Funk, (Alternate Commissioner), Utah
Dee Hansen, State Engineer, Utah
R. Michael Turnipseed, Division of Water Rights, Utah
John Holmgren, Board of Water Resources, Utah
Norman Stauffer, Division of Water Resources, Utah
Barry Saunders, Division of Water Resources, Utah
Walter R. Scott, Hydrographer - Commissioner UT-WY, Utah
Robert Hill, Utah State University, Utah
Keith Higginson, Higginson-Barnett Consultants, Utah

Kenneth Dunn, Director, Department of Water Resources, Idaho
Russell Stoker, Watermaster - Bear River, Idaho

John A. Teichert, Superintendent, Water Division #4, Wyoming
John P. Buyok, State Engineer's Office, Wyoming
Paul Schwieger, State Engineer's Office, Wyoming
Dick Stockdale, State Engineer's Office, Wyoming

Ted Arnow, District Chief, U. S. Geological Survey

J. G. Haight, Utah Power & Light Company
Carly Burton, Utah Power & Light Company

Connie Borrowman, Secretary to the Commission

CHAIRMAN JIBSON: We're glad to see you here, gentlemen. Happy to have Keith back with us - it's just like old times.

READING OF MINUTES OF LAST MEETING

The next item is the approval of the Minutes of our Annual meeting in April. I'll review the Minutes - you should have all received them.

Annual Meeting - April 29, 1982
Review of Minutes

The Annual Meeting convened at 1:30 p.m. in the Wildlife Conference Room, Salt Lake City. All commissioners and officers were present. Minutes of the December 1981 meeting were summarized and approved.

The Chairman reported that the State Engineers' Committee had met earlier to discuss the University of Utah project, now completed. Dan Lawrence gave his report as Secretary-Treasurer. He moved and the motion was passed, that we amend the 1982 budget to cover the \$10,000 contract with the University, to include \$1,950 for printing the Biennial Report

that was budgeted in 1981 but billed in 1982, and to increase the Treasurer's bond and audit by \$105 to cover actual charges. A reserve balance of about \$72,000 will be on-hand after paying for budgeted obligations in the 1982 fiscal year. The amended 1982 budget was circulated with the April minutes.

The Engineer's report showed a seasonal water supply forecast of about 23 percent above normal with full reservoirs, including Bear Lake, expected. An estimated budget for 1983 was included and subsequently approved. The Engineer also recommended that the Logan mailing address and Commission phone calls be changed to his home.*

Sim Weston was elected vice-chairman of the Commission for the 1982-83 year with Dan Lawrence re-elected Secretary-Treasurer.

Dee Hansen, reporting for the State Engineers' Committee, discussed the University study, now completed, on acreage determination as of January 1, 1976. Imagery quality and some excessive verification differences with SCS measurements prompted the recommendation that the states review carefully results of the study before a decision is made to accept this as a base acreage for January 1, 1976.

Dee also discussed a proposal by Utah State University, in conjunction with the Universities of Idaho and Wyoming, to conduct a basin-wide consumptive use study over a 5-year period to be used as a basis for depletion determination under the Amended Compact. After discussion, a motion was approved to enter into the first year contract and for the Commission share of \$45,120 to be paid from the \$72,000 cash reserve on hand. The study would start July 1, 1982.

Mr. Skeen, at the request of the Commission, presented amendments to the Bylaws that would eliminate the Assistant Secretary as an officer of the Commission and would transfer specified duties to the Secretary. The suggested amendments were approved, and the meeting adjourned at 4:00 p.m.

*CHAIRMAN JIBSON: I didn't get a lot of cooperation on those changes. I had letters from all three State Engineers and from the U.S.G.S. in Salt Lake. Two of the letters used Box 413, which was changed 8 years ago. The other two letters used 22 East Center, which was changed 2 years ago. So the post office has been rather lenient with me. But I wish that we would make that address change, because it always takes them 4 to 5 days to get a letter delivered.

MR. LAWRENCE: Are you suggesting that we - the Secretary send out a remodeled mailing list for Bear River Commission people? I mean - if nobody knows where Wally lives maybe we ought to send out a formal, official mailing list that we could --

MRS. BORROWMAN: I thought we had done that not too long ago.

CHAIRMAN JIBSON: I think you have an update on that, Connie.

APPROVAL OF MINUTES OF LAST MEETING

CHAIRMAN JIBSON: Assuming that you had a chance to look over the Minutes as they were circulated, I think a motion would be in order to approve them, or to amend them if you found any corrections.

MR. GILBERT: I move that we accept them as mailed.

MR. DAYTON: Second the motion.

CHAIRMAN JIBSON: Any discussion on the Minutes? All in favor?

MOTION CARRIED

REPORT OF CHAIRMAN

CHAIRMAN JIBSON: The next item is the Report of the Chairman. I have a brief report just on one subject, and I will read it so that I don't get to wandering too much.

In the April Meeting, as you recall, the Commission approved entering into a first-year contract of a proposed 5-year study toward arriving at a method or methods of estimating the duty of water. This method or methods would then be used as a basis for calculating water depletions that are allocated in the amended compact. The study was to be conducted by Utah State University, in conjunction with the Universities of Idaho and Wyoming, and was to begin July 1, 1982. The first-year agreement as approved by the Commission was limited to Commission participation to the extent of \$45,120 based on an estimate prepared by Dr. Robert Hill, who was to spearhead the study.

The study got underway as planned, but a few problems came up in negotiating a contract. We lacked understanding as to whether the contract was with each university or, as an alternative, with Utah State University who would subcontract with the other two. The first contract presented to us was with USU, while the other two universities were preparing similar contracts. An overlooked item of overhead was included over and above the \$45,120. Each of the states, as represented by two State Engineers and Dan Lawrence, objected to the Commission paying overhead where financing was entirely from State funds paid to another State agency. Also, we had no authority as officers of the Commission to exceed the approved amount of \$45,120. Finally, a new contract was negotiated

with Utah State University, who will subcontract with the other two universities. Total Commission share is \$45,120 for the first year, with subsequent annual contracts to be prepared each year depending on availability of funds.

Dr. Hill has delivered the final contract to us today for signatures of the Chairman and Secretary. Bob also will give us a report and update on the study which has been underway since July 1. We regret that a lack of communication has resulted in some confusion for all parties concerned, and two or three different contracts have been circulating hither and yon; but the important thing is that the study began on time and is progressing pretty much according to plan, as of today.

In a later item on the program we will have a presentation from Bob Hill, who is with us today. Any questions that we might have on the contract I think would be well to hold up until that time, Bob.

REPORT OF SECRETARY-TREASURER

CHAIRMAN JIBSON: Our next item is the Report of the Secretary-Treasurer.

MR. LAWRENCE: Mr. Chairman, I would like to call on Mr. Bert Page to present the report of the expenditures of the Commission.

MR. PAGE: I think each of you probably has a copy of this - it was passed out earlier.

You'll notice there are actually two reports. You've got a report in April - and the year ended September - and you have another meeting in November. So you really don't get much of a report after your fiscal year unless I do it this way.

You'll notice on the first one, then, to September 30, 1982 - it indicates there at the top that each state has paid its \$24,000 assessment, and that Utah has paid \$48,000. This isn't because Utah's better or anything else, it just so happens that the billings went out in September and the check came back before the end of the fiscal year. It's just a cross in lines - no problem - but that is income.

During the year we picked up \$14,935.91 in interest, and total income for the year was \$228,487.79. You'll notice that there's an asterisk there that the stream gaging payment to the U.S.G.S. was paid late - at the beginning of the year for the prior year. So actually,

during this past fiscal year, there were two payments to the U. S. Geological Survey - one was paid the first of October, and the other paid the last of September - so that they're both in there. The prior year there was no payment reflected.

'Expended through the Commission' expenses - 'Personal Services', \$7,550.11. Wally called to my attention earlier that the last report probably indicated some of the funds that have been paid under that contract to the University, and they're not included there now; they stand by themselves. There is a \$10,000.00 contract and \$7,806.00 was paid out of that. There were no travel costs. The treasurer's bond and audit was \$505.00. The printing was \$108.94. Mr. Skeen is one of the best attorneys I have seen. We've only had to pay him \$7.55 last year. I think we've certainly got our money's worth and then some.

CHAIRMAN JIBSON: You wrote three checks to do that, didn't you?

(Laughter)

MR. PAGE: The office supplies, postage, etc., was \$46.00, and the printing of the biennial report was \$1,960.00. Total expenditures - \$123,064.00, and the cash balance at the end of September was \$105,423.00.

On the back of the form we've listed the checks that were paid during the year. You'll notice a \$70,000.00 check where we put money in the State Treasurer and we're gaining interest on that. You remember on the other side we had quite a hunk of interest. I think this has worked out very fine for us.

At the end of the year we had \$26,000.00 in the bank, but the check for \$55,000.00 to U.S.G.S had not cleared; and knowing that it would not in time, I didn't transfer anything from savings to cover it - because I knew these payments from the states would begin. It keeps the interest coming in and, as noted, there's \$133,000.00 in the savings account to offset the deficit of the checking account, leaving a total cash balance of \$105,000.00 plus.

Are there any questions on that report before I go on to the other one?

The other one is very simple. It indicates the cash balance that we just ended with on the other report. It shows that Wyoming and Idaho

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF OCTOBER 1, 1981 TO SEPTEMBER 30, 1982

<u>Income</u>	<u>Cash On hand</u>	<u>Misc. Income</u>	<u>Approved Budget</u>	<u>Total Revenue</u>
Cash Balance 10/1/81	\$117,551.88*	\$-----	\$-----	\$117,551.88
State of Wyoming	-----	-----	24,000.00	24,000.00
State of Idaho	-----	-----	24,000.00	24,000.00
State of Utah	-----	-----	48,000.00	24,000.00
Interest on Savings and other income	-----	14,935.91	-----	14,935.91

TOTAL INCOME TO September 30, 1982	\$117,551.88	\$ 14,935.91	\$ 96,000.00	\$228,487.79
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*Includes \$51,480.00 from last year. Payment was made in this year.

DEDUCT OPERATION EXPENSE

EXPENDED THROUGH U.S.G.S

	<u>APPROVED BUDGET</u>	<u>UNEXPENDED BALANCE</u>	<u>TOTAL EXPENDITURES</u>
Stream Gaging	\$ 53,600.00	\$ 51,480.00CR	\$105,080.00
SUBTOTAL	\$ 53,600.00	\$ 51,480.00CR	\$105,080.00

EXPENDED THROUGH COMMISSION

Personal Services	\$ 9,200.00	\$ 1,649.89	\$ 7,550.11
Contract	10,000.00	2,193.42	7,806.58
Travel	500.00	500.00	-----
Treasurer Bond and Audit	455.00	50.00CR	505.00
Printing and Reproduction	300.00	191.06	108.94
Legal Consultant	300.00	292.45	7.55
Office Expenses and Supplies	350.00	304.00	46.00
Bi-Annual Report	1,960.00	-----	1,960.00
SUBTOTAL	\$ 23,065.00	\$ 5,080.82	\$ 17,984.18
TOTAL EXPENDITURES	\$ 76,665.00	\$ 46,399.18CR	\$123,064.18

UNEXPENDED CASH BALANCE AS OF 9-30-82

\$105,423.61

BEAR RIVER COMMISSION

DETAILS OF EXPENDITURES

FOR PERIOD ENDING SEPTEMBER 30, 1982

317	Wallace N. Jibson	\$ 1,569.30
318	U.S.G.S. (FY81 Services, paid in FY82)	51,480.00
319	VOID	---
320	University of Utah	1,639.88
321	Sir Speedy Printing	28.00
322	Wallace N. Jibson	2,075.35
323	Postmaster	40.00
324	Rose Printing	1,960.00
325	University of Utah	1,229.07
326	University of Utah	1,093.10
327	Utah State Treasurer	70,000.00
328	University of Utah	3,742.44
329	Gilchrist & Co., CPA's	455.00
---	Bank Charge	6.00
330	University of Utah	102.09
331	Beacon Insurance	50.00
332	Wallace N. Jibson	712.22
333	Central Printing	53.85
334	Sir Speedy Printing	27.09
335	Wallace N. Jibson	918.35
336	Van Cott Bagley, ect.	7.55
337	Wallace N. Jibson	692.12
338	Wallace N. Jibson	1,582.77
339	U.S. Geological Survey	53,600.00
		<u>\$193,064.18</u>

Less Savings	70,000.00
Total Expense	<u>\$123,064.18</u>

BANK RECONCILIATION

September 30, 1982

Cash in Bank per Statement 10-01-82	\$ 26,814.61
Less: Outstanding Checks	<u>55,182.77</u>
Total Cash in Bank	\$ 28,368.16CR
Plus: Savings Accounts - Utah State Treasurer	<u>133,791.77</u>
TOTAL CASH IN SAVINGS AND IN CHECKING ACCOUNT	<u>\$105,423.61</u>

BEAR RIVER COMMISSION

STATEMENT OF INCOME AND EXPENDITURES

FOR THE PERIOD OF OCTOBER 1, 1982 TO OCTOBER 31, 1982

<u>Income</u>	<u>Cash On hand</u>	<u>Misc. Income</u>	<u>Approved Budget</u>	<u>Total Revenue</u>
Cash Balance 10/1/82	\$105,423.61*	\$-----	\$-----	\$105,423.61
State of Wyoming	-----	-----	24,000.00	24,000.00
State of Idaho	-----	-----	24,000.00	24,000.00
State of Utah	-----	-----	-----	-----
Interest on Savings and other income	-----	1,119.54	-----	1,119.54
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TOTAL INCOME TO October 30, 1982	\$105,423.61	\$ 1,119.54	\$ 48,000.00	\$154,543.15

*Funds were paid September of last year and are included in beginning cash balance.

DEDUCT OPERATION EXPENSE

EXPENDED THROUGH U.S.G.S

	<u>APPROVED BUDGET</u>	<u>UNEXPENDED BALANCE</u>	<u>TOTAL EXPENDITURES</u>
Stream Gaging	\$ 57,600.00	\$ 57,600.00	\$ -----
SUBTOTAL	\$ 57,600.00	\$ 57,600.00	\$ -----

EXPENDED THROUGH COMMISSION

Personal Services	\$ 9,400.00	\$ 9,400.00	\$ -----
Travel	500.00	500.00	-----
Treasurer Bond and Audit	500.00	500.00	-----
Printing and Reproduction	2,000.00	2,000.00	-----
Legal Consultant	500.00	498.10	1.90
Office Expenses and Supplies	200.00	200.00	-----
SUBTOTAL	\$ 13,100.00	\$ 13,098.10	\$ 1.90
TOTAL EXPENDITURES	\$ 70,700.00	\$ 70,698.10	\$ 1.90

UNEXPENDED CASH BALANCE AS OF 10-31-82

\$154,541.25

BEAR RIVER COMMISSION
DETAILS OF EXPENDITURES
FOR PERIOD ENDING OCTOBER 31, 1982

340

Van Cott, Bagley, etc.

\$ 1.90

\$ 1.90

Total Expense \$ 1.90

BANK RECONCILIATION

October 31, 1982

Cash in Bank per Statement 11-01-82 \$ 19,629.94

Less: Outstanding Checks .00

Total Cash in Bank \$ 19,629.94

Plus: Savings Accounts - Utah State
Treasurer 134,911.31

TOTAL CASH IN SAVINGS AND IN CHECKING ACCOUNT \$154,541.25

have paid their dues right on time as they should have done, and that we've picked up income from interest, already, of \$1,119.54.

The only bill that we've paid, again is to our legal counsel here of \$1.90. I don't know how he can operate on that, but I think that's great. Really, I think we're being billed for some telephone calls, or something like that.

MR. SKEEN: I'm sure of that.

MR. PAGE: Since he's joined this new firm, they don't let a thing get by. Boy, they're right on top of us.

So, unless there are some questions, that is the financial report.

CHAIRMAN JIBSON: The reference that Bert made to our March report - I don't expect you to take it out - but I didn't notice during the March meeting that the 'Personal Services' item, which was budgeted for \$9,200.00, which should come to me, was overspent by \$2,251.00; and I knew that couldn't be; but I didn't know it until about three days ago when I looked this over again. So for want of a better place, Bert put the University of Utah contract money into my budget. So this is the reason that we're overspent.

Do we have any questions, now, on the financial report? If not, a motion would be in order to approve the report of the Secretary-Treasurer.

MR. DAYTON: I'd so move.

MR. WESTON: I'll second the motion.

CHAIRMAN JIBSON: Moved by Dayton, and seconded by Sim Weston. Any discussion? All in favor?

MOTION CARRIED

REPORT OF ENGINEER

CHAIRMAN JIBSON: The next item is the Report of the Engineer.

This is the usual report on Water Supply and Compact Operation that in the past has been given as the report of the Assistant Secretary.

(The Chairman's Report is attached as a part of these Minutes. The following comments were made in the places indicated on the report.)

1. You see from the table the great difference in all sections of the river between 1981 and 1982, and also with the average.
2. Of the two that I've mentioned there, Sulphur Creek was spilling and Woodruff Creek wasn't spilling but it gained during the heavy storm period.
3. Here, again, comparing it to 1965 - we started regulation right on August 15 in that year.
4. This change was to break 'Personal Services' down into two items - one for personal services of the U.S.G.S. program, Ted Arnow; and the other was personal services for the engineer. In the future we will break that down so the budget estimate is a little more clear.
5. Ted asked me just before the meeting if I'd received it yet; so it's evidently in the mail - probably to Box 413 - and as soon as we get it we'll sign it and return it.

MR. LAWRENCE: Is that like File 13?

(Laughter)

MR. ARNOW: Do you want me to comment on whether it's firm or not - the cooperative agreement? We sent you the cooperative agreement. We have a tentative allocation of matching funds. So we can match that; however, as you probably all know, Congress has not passed our appropriation. We're operating under a continuing resolution. We assume that they will pass the appropriation and the cooperative agreement will hold up. If perchance there is a huge cut, we'll have to get back to you.

6. There's a number of Utah reservoirs this time.
7. It's quite a change from the old days when Wyoming used to have a half page of applications and Utah had 6 or 8 pages; and then we eliminated domestic and stockwater filings so Utah comes in with a page or two and now, with the oil boom in Wyoming we always get 2 or 3 pages of applications.

In that connection you'll notice that the Wyoming applications that have an asterisk at the left-hand side are temporary applications that will be cancelled after drilling operations are completed, in most cases. There's a highway application and a few others in addition to the oil drilling that are temporary; but in the aggregate, rather small, overall amounts - as we've summarized on page 11. For this last 6 months

we had 3.826 cfs surface water, 18.86 groundwater, and a storage application for 37.67 on Mill Creek. I'm not sure that I'm familiar with that filing. I was going to ask Wes about it and he isn't here. Just for our information, Marv, what is that storage filing in Wyoming?

MR. BOLLSCHWEILER: Which one are you referring to?

CHAIRMAN JIBSON: I'm sorry. There's a filing for Pittsburg Coal on Twin Creek. I don't know what that filing was for right now.

MR. TEICHERT: Actually that water comes from the other drainage, I think. It's a flow on Twin Creek, where they're pumping water out of some of those pits into kind of a holding pond. I think that's what it is. In Twin Creek drainage - the water is probably coming out of Muddy Creek.

CHAIRMAN JIBSON: I was wrong on that. I don't know where I got the idea we had a filing on Mill Creek. It's actually for Wyoming, but it was a Utah filing - 1,200 acre-feet; right, Mike?

MR. TURNIPSEED: Yes.

CHAIRMAN JIBSON: And then the 150 is for enlargement of Duane Barker's Reservoir? And 5,400 acre-feet in Utah on Woodruff Creek - is that for an enlargement of Woodruff Creek Reservoir? We also have some rather large power rights, of course, filed in Utah. 100,000 acre-feet on Bear River by Logan City for power - what would that site be?

MR. TURNIPSEED: It's at the old Bureau of Reclamation Smithfield site.

CHAIRMAN JIBSON: Okay.

Do we have any other questions on the filings?

MR. LAWRENCE: I would like to ask Mike - where is that site?

MR. TURNIPSEED: Just west of Smithfield.

CHAIRMAN JIBSON: You will notice that Logan City also filed for 1,000 second-feet on Logan River, and that would be the old Utah Power & Light site, I guess.

MR. TURNIPSEED: No, their filing for that is a prior filing. This is right at the Eighth Ward diversion down on Logan Island.

CHAIRMAN JIBSON: Then the 74.5 second-feet by the City of Logan.

MR. TURNIPSEED: I think that's an existing - on already diverted water out of one of the canals. I don't know which one that would be - that's pretty high.

CHAIRMAN JIBSON: It wouldn't be that spillback from the Logan Hyde Park in Smithfield?

MR. TURNIPSEED: Yes, it could be.

CHAIRMAN JIBSON: Any other questions?

MR. LAWRENCE: On your report, Mr. Jibson, page 2 you say that although "there was no interference with direct-flow rights in September, this early storage may be contrary to state law". Which state?

CHAIRMAN JIBSON: Well, actually I only illustrated one, and that was Woodruff Narrows Reservoir, which would be in the state of Wyoming. However, as I mentioned, Woodruff Creek Reservoir also stored water in September during the storm period, and that would be in Utah. Sulphur Creek Reservoir did likewise which, again, would be in Wyoming.

Now, I wasn't sure what the state law says about that. I remember in a previous meeting we discussed the idea - well, when we had the gate trouble on Woodruff Narrows - the reservoir filled again in the middle of summer, and I think state law was rather clear that you only had one filling in the year. In this particular case, what we've actually done is moved the storage period up from what we generally accepted - October 1 - as the end of the irrigation season; and then their gates are shut and they start storing. We moved it up to, in this case, about the 5th or 6th of September because of the heavy storms that came. So I wasn't sure whether or not that is a violation of the state law. It would not be a violation of the Compact.

MR. LAWRENCE: Is there some specific reason that you put that in - to call it to our attention so we can discuss it in some way?

CHAIRMAN JIBSON: Yes, I did because - when was it? A year ago we had the filling again in June in Woodruff Narrows Reservoir, and we had some discussion on that; and I thought rather than just ignore it I would mention it again and see if there was any comment from either George, or you or Dee from the state of Utah.

MR. CHRISTOPULOS: There wouldn't be any violation of Wyoming state law in refilling it as long as they didn't interfere with any other priority.

MR. HANSEN: It's the same in Utah. There's no problem with it. As long as direct-flow rights aren't interfered with.

CHAIRMAN JIBSON: Basically, then, your state right is pretty much the same as our Compact provision. The time element does not enter into it.

Well this clarifies it for me and I guess I mentioned it for my own clarification as much as anything else. Does that answer your question, Dan?

MR. LAWRENCE: I think so. My concern was that if it was in violation of state law, we ought to know what state law; and I suppose there should have been some other Memorandum of Understanding or something because of the high yield of the river. I'm certain Norm doesn't want it in the Great Salt Lake. He would rather have it up in Woodruff Narrows. But if you put that there for a purpose - I just wanted to be sure that we understand it.

CHAIRMAN JIBSON: It was merely for clarification, and as far as I'm concerned the thing is clarified.

Any other discussion on the report?

MR. HOLMGREN: Wally, I'm not clear on this. The Upper Bear River and Mill Creek Water Users Association is making an application for 1,200 acre-feet, and Duane Barker is making one for 150 acre-feet. Does that come out of Utah's allocation, or Wyoming's? It's going to be used in Wyoming, but it's our water.

CHAIRMAN JIBSON: Each of the two reservoir sites is located in Utah, but I think total use is in Wyoming, is it not? I know it would be in Duane Barker's case.

MR. HANSEN: Isn't part of his in Utah? If not all, most of it is in Utah.

CHAIRMAN JIBSON: Yes, practically all of it.

MR. HANSEN: That would come out of Utah's allocation.

CHAIRMAN JIBSON: Yes, that's right on Duane's - it's Utah, not Wyoming.

MR. LAWRENCE: Is the answer to Paul's question, then, that it depends on where the water is used?

CHAIRMAN JIBSON: Right. Under the original Compact an allocation was made to the Barker Reservoir - which is the one that is now being enlarged, or has applied for enlargement - and that came out of the Utah allocation in the first go-around. That's the one we list as A. J. Barker Reservoir, Yellow Creek, and Utah - 162 acre-feet. That was allocated out of the first Compact allocation.

Now the Mill Creek site would be for total use in Wyoming, right? That would come out of a new allocation in Wyoming.

MR. HOLMGREN: That would come out of Wyoming's new allocation - not the old Compact? Then on this Woodruff Creek Irrigation Company - 5,400 acre-feet. I didn't get what that was for.

CHAIRMAN JIBSON: The existing Woodruff Creek Reservoir --

MR. HOLMGREN: Are they going to raise it?

CHAIRMAN JIBSON: It would be an application to raise that, wouldn't it Mike?

MR. TURNIPSEED: Yes.

MR. LAWRENCE: They would like to, and that's why they've applied.

MR. HOLMGREN: I see. Well I just didn't understand.

CHAIRMAN JIBSON: Here again, initially that reservoir - part of its adjudication came out of the Compact allocation; part came out of a transfer of other rights.

Any other questions? I guess if not, a motion would be in order to accept the Engineer's Report.

MR. LAWRENCE: I move we accept the Engineer's Report.

MR. CHRISTOPULOS: Second.

CHAIRMAN JIBSON: Moved and seconded. All in favor?

MOTION CARRIED

REPORT OF COMMITTEES

CHAIRMAN JIBSON: The next item on the agenda is the Report of Committees. You will notice that we included a footnote to the agenda that was mailed out to you, that we would have a progress report on depletion studies being conducted by Utah State University. Unless the State Engineers' Committee has something to report before that --

MR. HANSEN: I just have a quick item.

I appreciate taking a few minutes. You will recall from the minutes of the last meeting that the State Engineers were asked to go back and go over the remote sensing report that was done by the University of Utah by Dr. Ridd. Utah did do some spot-checking. I haven't had a chance to talk to George - but I did talk with Ken Dunn and he has some concerns. Let me just pass out a small check list Mike did on those.

You will notice that it was done by township and range; and we used our adjudication surveys as a comparison to the study that was completed by Dr. Ridd; and you'll notice that it ranges from an insignificant amount to 650% difference. You'll note also that those that are large differences generally involve smaller acreages. In one case - the 33rd one down from the top - 30 acres was recorded on Dr. Ridd's report. We found 4 acres - most of the differences coming in dryfarm areas where the remote sensing data was not able to distinguish between; and of course being out in the field and going over each of the acres, Mike was able to determine the difference.

If you add those all up - I think Ken added them up this morning - I think it's about a 5% or 6% error. That's not too bad, but I'm a little concerned whether this is good enough for a base-line data map; and I don't have a suggestion how we go unless we go back to U-2 flights in each state. I guess, in thinking about what we would do as an alternative, is for each state to do its own with a committee organized - perhaps Mike from Utah, and Ken would pick someone, and George would have someone - correlating to make sure that we were doing the same type of data collection.

I feel a little bad because I sort of sponsored this thing when it started out. I'm not sure it's as good as we need.

CHAIRMAN JIBSON: Dee, would it be practical at all - with your committee or with each state working independently, either way - to work with the Department of Agriculture people, particularly the ASCS people, on the irrigated acreage that they show, and if they keep pretty well updated to have them back-up to their records on January 1, 1976 and perhaps check specific areas with them? This is the reason I was a little pessimistic. At our last meeting we just quickly glanced at a couple of areas up Smiths Fork that were clear out-of-whack. John and Reed noticed it and, knowing some of those areas that might be questionable, I wondered if it would be impractical to make that kind of an approach.

MR. HANSEN: I don't know. That's certainly worthy of looking into. We need some sort of a base map or tabulation. Do they tabulate it by township and range, or section, or -- ?

CHAIRMAN JIBSON: Well they tabulate it by farm and then they have it - back a hundred years ago when I worked for them they had it broken up into areas within the county and they had them summarized by areas. Of course they had net acreage all the time. They eliminated willow patches and ditches and this sort of thing so that their acreage was net. In some areas that we question, I would think that you could go into their office without too much trouble and compare acreage.

The other acreage that we did have, by 40-acre tracts - even though in many areas it's badly outdated - was the acreage that we used in negotiating the Bear River Compact. That was supplied to our office by each of the State Engineers and, with the Bureau of Reclamation working on those acreages, they were all planimetered. Like I say, it was way back in the 40's; however, the acreages were awfully accurate at the time, by 40-acre tracts, and in the Upper Basin particularly a lot of those acreages wouldn't have changed. That's another possibility.

MR. HANSEN: Utah has adjudicated, or at least mapped, all of the area that's in the Bear River so it isn't a big problem for the maps that are there, but we would want to be consistent with the other two states. Whatever method they use we would want to use so we have the same type of format. Ken doesn't have that. I doubt that George does. I don't know what kind of acreage determinations you have.

MR. CHRISTOPULOS: Dee, I don't know. John, do you know if we've got any mapping?

MR. TEICHERT: Yes, we've got some that was done in 1971 of the whole basin, and we also have some photographs from 1975 which we haven't interpreted yet. We can come up with some new numbers fairly quickly.

MR. HANSEN: Maybe you need to discuss among yourselves how you want us to approach it, and we'll probably do that. Cost, of course, is a very important item as all of you know. States are suffering some cutbacks in budgets and if we get any more serious cuts, we just haven't got it to do - it would have to be with existing programs. But I wanted you to be aware of that. You might think about it. U-2 flights are available; they're generally pretty good - better than the remote sensing data. Dr. Ridd, you recall, did criticize NASA aims a number of times about the poor quality of the data he was getting. He had some real problems, I think.

CHAIRMAN JIBSON: Didn't we have a lot of cloud-cover on U-2?

MR. HANSEN: Yes, we'd have to go to some adjacent years where we could get clear coverage. I guess it would be my suggestion, if we go now, not to infra-red but to standard photographic interpretation and go out in the field, check it through, do it quickly - not in great detail - planimeter large tract areas all at once, not individual areas, and come up with a decent base map. I guess, from what Ken talked about, perhaps that would be the easiest. It may not take all that long to do.

MR. DUNN: Well, Wally, one of the problems I've got is, we seem to be trying to patch this thing together. The base map we're talking about is supposed to be something that we base everything on for a long time into the future; and I have some concern about spending the time and dollars to put together a map that, when you want to find out what the changes are you have to go back and reproduce that by hand all over again, to get that increment of change. That's why we had talked about earlier using Land-Sat technology and computer applications; so that the only thing you had to generate, really, was an overlay by computer and you have the difference very quickly.

I think one of the problems Dr. Ridd had was trying to make a visual interpretation out of data that is not designed for that - it's designed for computer analysis; and the pictures or photographs that you get from that will never have the clarity of U-2 - they were never intended to have that clarity. I think that criticism should not be based on that. I think it should be a realization that they were trying to utilize something that was never designed for that purpose.

I guess I'm a little in question. I think Dee mentioned also as to what are we going to do with the base map once we get it. If we're going to stick it in a drawer and not worry about it for 15 years and then try to argue about it later, I guess any method we use is adequate; but if we, in fact, want to know what we had on/or about 1976, we ought to use as close to the state-of-the-art as we can use now and develop it if that's important; and I guess that's something the Commission needs to think about and needs to decide. Once they make that decision, then the dollars that are needed for that have to be obtained, or the decision has to be changed - one of the two. I think what we've got now is just a mish-mash. I can't see going back to the ASCS office and trying to get small acreages 5 or 10 years from now and just reconstructing the whole process.

CHAIRMAN JIBSON: The point you bring up is - even if we got a good base map, if we haven't got a good way of updating it, we're repeating this thing.

I suppose from a practical standpoint we're down the road, like you say, maybe 12 or 15 years until we approach the time that we need to know each year, under increase and depletion, that we still have to tie it back to January 1, 1976.

MR. HANSEN: The farther we get away from that date the tougher it is to reproduce a map. I agree with what Ken says - if we have some, perhaps not easy but rapid, way of repeating the process in 10 years from now, that certainly is worthy of consideration. When we went into this with Dr. Ridd the thought was that we may be able to, in fact, feed the data into the computer and do the mapping. But in this case we're using infra-red.

MR. LAWRENCE: I was going to wait until 'New Business', but I wanted to bring up the fact that the Commission has not yet approved a procedure to determine those uses after January 1, 1976, and I don't believe that we can forever postpone that. I think that there are a lot of things going on that, even if it's just the continuity of the people who are here working and the understanding of the background and legislative history - if you want to call it that - and how we developed the Compact and so forth, we ought to go ahead.

We've got a study going in Utah that's semi-related now. We're computer modeling the Bear River system in connection with studies that we're making on the rising level of the Great Salt Lake. A, I guess legislative-mandated, action plan of some kind to try and hold the water back so that the lake doesn't ever get above certain levels.

MR. HANSEN: It's already exceeded that.

(Laughter)

MR. LAWRENCE: Yes. But we're going to be moving ahead to accomplish the task that was given us and it seems to me that a cooperative study, by the states through the Commission, is an appropriate way to estimate modified flows in the river - bring them up to date.

If I could, Mr. Chairman, I'd like to have Norm Stauffer elaborate on those thoughts a little bit, if that's appropriate now, or do you want to hold off until - ?

CHAIRMAN JIBSON: I think - the only thing we don't want to get in any discussion on is the consumptive use study until after we've had Bob's presentation; but other than that I think we just as well get the rest of this out into the open. We're really talking about two things - one is acreage. But after we get the acreage - whether it's January 1, 1976 or whether it's now - we still have to apply a depletion to it; so we have two problems facing us. I think we just as well discuss the whole thing now as far as these points Dan has brought up.

MR. HANSEN: In our previous discussions we talked about a number of things in the Compact that call for a Commission-approved procedure. There was never any real doubt, I think, on establishing a firm base map.

The other was in reference to consumptive use, depletions, and that sort of thing. I think it was always agreed that the base map had to be established somehow for the use of all of us.

MR. LAWRENCE: I agree with Dee; and I think maybe we ought to stick, right now, with the base map subject and then a little bit later in the meeting come back to this.

MR. HANSEN: Let me ask you one other question for whatever value this has. A number of people have asked me for copies of it and I've said that it's the property, as far as I'm concerned, of the Bear River Commission. Am I free to distribute that to anyone that's willing to pay the reproduction cost? Ralph Rollins, a consulting engineer in Utah, is one that has asked for it and I said, 'no, not until I had asked the Commission if it was agreeable with them'.

CHAIRMAN JIBSON: How do the Commissioners feel about that? Does that cover all three states?

MR. HANSEN: Yes.

MR. LAWRENCE: I would think that it was generated with public funds and as far as I know there's no requirement that the public can't pay for the copies and use it.

MR. HANSEN: I didn't have any problems; but it was done with money that the Commission put up --

CHAIRMAN JIBSON: It might be that it ought to be stated that it should be taken with some reservation - that we haven't accepted it as a accurate study. If that's the consensus of the Commissioners here today.

Presentation - Dr. Bob Hill

CHAIRMAN JIBSON: Bob, could you give us your update now? I think Bob has a few slides he'd like to show.

DR. HILL: I appreciate being here today to represent the three state universities. The individuals I'm working with in Idaho are Chuck Rockway and Rick Allen who are stationed at Twin Falls and Kimberly, and Bob Burman in Laramie, and myself at Logan.

The objective of the study is to make some field measurements on cropwater-use and then use those measurements as estimates to verify with methods such as the Blaney-Criddle equation - so we can use the equation, then, to calculate cropwater-use or depletions on the Bear River system. The key is to make the measurements in the field. We have some measurements under research conditions in Cache Valley associated with Utah State University research, but we need to take field conditions where the farmers are.

We jumped the gun a little bit, Wally - we didn't wait until July 1. You'll notice the date on that picture is the 30th of June. I'll show pictures from the Idaho sites. They had another research project that they were doing. Bob Burman with the University of Wyoming did not have some of the instrumentation this year so we went ahead and borrowed a little, and put up in Hilliard Flat, but I don't have any pictures of Hilliard Flat. This particular site is just north of Randolph - south of the highway, across the valley on the ranch that's just been purchased, if I remember correctly, by Norm Weston and it's called the J. F. Ranch. So when you see J. F. Ranch, this is the Randolph site.

As we went each week we took pictures to show the progress.

(Slide presentation by Dr. Hill followed.)

This shows a general site picture, and you can see right there a little weather shelter.

You see there the neutron probe that we're using. That's the above-ground instrument. There is a little probe that goes down a hole. They dig a hole in the soil; they insert this probe that gets neutrons and can tell us how much moisture is in the soil. We drop it down and make a reading every foot. I think we got these holes dug at about 10-foot depths. So we can determine the amount of moisture, say, in a root zone.

We also put in an automated weather station. This happens to be in a stockyard. You can see a rain gage and an anemometer, and on top of that stand is a little device that measures solar radiation. There is the shelter in which we have temperature and humidity sensors, and here is the electronic device. This is kind of a fun little thing - completely

unattended. It runs on alkaline D batteries. It supposedly can be unattended for up to 8 months. It has a tape recorder in it. It records the data. It samples the sensors every 10 or 30 seconds and then each unit adds up the values, and then each 24 hours at midnight it saves all the values out for the daily maximum temperature, the wind, humidity values, whatever else we want to do. What we're trying to do is get some measurements in the field of soil-water status and also collect some weather data. We had another site near Woodruff on the Louis Stuart field - alfalfa, again, irrigated by sprinkler.

Here's a site - Preston - University of Idaho, Rick Allen put in. The same student from Utah State University is also making the readings at Idaho - they've contracted with him - and he took the pictures during the year. They had a little different instrumentation set up than we did. You can see the anemometers on separate stands and also they had a separate shelter for the temperature and humidity sensors. Same electronic device for recording information.

These three pictures were taken within two days of each other. The J. F. Ranch on the 18th of August. The first cutting of alfalfa at the J. F. Ranch was on July 14, and so this is essentially a month after that first cutting. Notice the alfalfa is a little over 2 feet tall.

Here's the Louis Stuart field on the 18th of August. The first cutting on that field was on July 7, and so it was cut a week earlier than the previous picture. Notice that it's only a foot tall. Difference in growth - same valley.

Here's the Talmage site - north of Grace, west of Soda Springs. The first cutting at Talmage was on the 17th of July - within three days of the cutting at the J. F. Ranch and this alfalfa is only a foot tall. So there's quite a difference in the growth rate of alfalfa between those three sites.

The neutron probe, valuable as it is, does not do much for us without a water-table. The water is supplied from a water-table and it's almost constantly available - you can't see any changes in the soil water content.

There's the inside of a lysimeter. That's 3.5 feet by 3.5 feet square and 4 feet long. We dig a hole, put the thing down in, fill it back up, being careful to disturb the soil as little as possible. You put the soil back in in the reverse order that you take it out. They maintain the water-table in these tanks to match the water-table in adjacent fields. By doing that - as we come each week, measure the depth of the water-table, and pour water back in - we can keep track of how much water the crops have used. That's a picture of our lysimeter, and it's probably the most practical way of measuring.

When we install them, we put a little drainage pipe diagonally across the bottom and then fill it with sand to cover the top of the tank. Then we have a stilling well that comes up one corner - 4" diameter PVC. But in the center we'll put about a 1-1/2 inch diameter pipe. This is rather a low-budget lysimeter. This is a simple water-table lysimeter.

Any other questions on the slides? I have a couple of overheads I'd like to show.

This is a chart showing maximum daily temperature for J. F. Ranch site from when we installed the system until we pulled it out. We pull the weather instrumentation out at these remote sites around the middle or end of October. Next year we'll probably get it in somewhere around the first of April which will pre-date the actual beginning growth on the alfalfa and on most of the other crops.

I used to think, when I was back on the farm, that only farmers have trouble with mechanical equipment - I spent my share of time underneath the baler and other things. But see that right there? Our temperature sensor went haywire, so we had some temperatures up around 120 degrees - completely out of sight up there. We replaced the sensor and then you can see that things are behaving a little better.

The interesting thing to me was that we had quite a few days early-on in June when we had frost and there was frost damage on that alfalfa. Then, again, we picked up frost in September. So the growing season would be classified as fairly short this year; but there was quite a bit of alfalfa growth before that and subsequent to that.

What we'll do is compare this data with a long-term weather station at Woodruff so we'll have some way of going back in time from the data we're now picking up.

Here's a chart showing the solar radiation for the same site. You can see the intense, day-to-day variation with cloud cover, rain storms, and so on that move in. Generally you can see the pattern, but the sunshine decreases as we move from June on through September and into October, as we'd expect.

The simplest equation for calculating cropwater-use is the Blaney-Criddle. We've all kind of felt like the Blaney-Criddle equation makes sense in the Bear River, but we've never verified it - we've never gotten data from the Upper Bear to verify that it does. So this data will give us that verification.

Here is a graph showing the Utah probe readings, I believe in the upper 5 feet of the soil profile, with our first reading taken sometime after we put the tube in in June. You can see that the soil water drops as the alfalfa uses the water. Here's an irrigation. Then soil readings again. There was a cutting right here, and then another irrigation after that. So you can see the soil moisture depletion between irrigations or between rainfalls and here, again, another irrigation. Three irrigations that we were aware of this summer - that we could keep track of - and from the rainfall. Here was the last cutting towards the end of August and then not too much happened as far as cropwater-use after we got into mid-September. Then hardly anything happened from this point in October to the point in October when we pulled the weather station out.

Any questions or comments on this?

One of the things we have to do next year is construct a small rain gage to put right on top of the access to where we take our water readings, so we can catch the amount of irrigation water which applied to that spot and also the amount of rain. Our weather station is about 3/4 mile from where our alfalfa field was, and we were there during the summer. On one trip, I remember particularly, it appeared that a thunder shower had come through just that morning or the previous evening, and as we got out to where the weather station was there was hardly evidence of rainfall at all. So there was quite a variation.

CHAIRMAN JIBSON: Do you have any questions for Bob?

MR. DAYTON: What is the accuracy of those instruments?

DR. HILL: The new control? The way we're using them I'd say within 5%, but we've got to keep it calibrated.

CHAIRMAN JIBSON: Thank you, Bob.

I recall some 20-25 years ago, speaking of the Blaney-Criddle method for consumptive use - back when Vaughn Iorns was working as chairman of the Engineering Committee and I was assisting - we took some inflow-outflow studies of various areas and our gaging stations. Of course, we had no groundwater in the picture - it may have been in the picture but we didn't have it studied - but we were checking the coefficients that are used for Blaney-Criddle. We came out very close, as Bob implied here. The Blaney-Criddle method in the Bear River Basin looks like a logical method to use.

Incidentally, the hermit-appearing individual wasn't me - but Mike Turnipseed. He went with us on that field trip. We'd like, next spring sometime I guess, Bob, to make a similar type trip and look at the Idaho installations also.

DR. HILL: What we'd like to do is invite representatives from each State Engineer's office, as well as Bob Burman, and Chuck, and myself, and Wally, and anyone else from the Commission that would like to come along, on maybe a two-day trip up through the entire system and look at all the sites that we would be putting this in.

CHAIRMAN JIBSON: Any other discussion on the project study?

UNFINISHED BUSINESS

CHAIRMAN JIBSON: I guess we're down to 'Unfinished Business'. Dan, would you like to have Norm's discussion at this point?

MR. LAWRENCE: I think that would be fine.

DR. STAUFFER: Dan talked a few minutes ago about some of our studies in the Division of Water Resources in Utah. We're doing some computer modeling associated with two main projects. One is the rising levels of

the Great Salt Lake, and the other is developing a "comprehensive water plan" for the Lower Bear River area. To do this we need to know what the hydrology of the River is going to be, and what it currently is. Present modified flows that we have available are modified to the 1965 level. That's essentially the hydrology we used in Bear River negotiations a few years ago.

I talked with Alan Robertson from Idaho. He's indicated they have updated, themselves, some of the 1972 level of development. They seemed willing to cooperate with us, but we figured that if we're going to get a new data base for the Bear River we might ought to go through the Commission and get a data base that we can all agree to. I think what we need is an update of the hydrology, at least through the 1976 level, so we have a base point with the Compact. It would be nice to get it right to the 1982 level, with a base on 1976.

What Utah needs is to develop these flows. If we have to, I guess, we'll make our best guess and do it ourselves, but we'd prefer to have a common data base that all three states agree to. That's essentially where we're at.

MR. LAWRENCE: Norm, could you go a little further and explain what this involves in terms of manpower - how you would develop a cooperative effort.

DR. STAUFFER: Again, that depends on what detail you go to. You could spend 2 or 3 years and several million dollars or you can get together, perhaps, in a 3- to 6-month period, with one or two staff from each of the three states, and try to see what increase estimated consumptive use since 1965. I think we all pretty much agreed with the '65 data at that time, and it would be looking at changes in use since '65 throughout the whole system. I think you could do it in a 6-month period with staff from each of the three states. Now it's true we won't have the results of the consumptive use work that Dr. Hill is working on, but we're looking not at total use, but change in use, since that time. We have the base stations of the river to go with.

That's how I perceive it, or what I perceive as how we ought to go. If we don't, I think Utah is going to essentially do that itself and try to get a better handle on our modeling.

CHAIRMAN JIBSON: As far as stream-gaging stations that were used in updating through 1965, though, you had to do a lot of correlative work before that. All of those stations are still in operation, aren't they, Norm?

DR. STAUFFER: That's right.

CHAIRMAN JIBSON: So as far as the streamflow records it would be very simple to update.

DR. STAUFFER: Right. Streamflow records are there. We need to go through and see what change has taken place since '65, through '82 - new uses of water during that period of time.

MR. LAWRENCE: Do we use aerial photography, Land-Sat, or what?

DR. STAUFFER: I think we start with looking at what water rights have been developed during that time, and that goes back to the increased acreage. Maybe we're spinning our wheels trying to get something done in 6 months, and maybe this is going to be a 5-year procedure that the Commission is going to take.

CHAIRMAN JIBSON: Incidentally, in connection with starting out with water rights, in the summaries that I presented today Idaho and Wyoming had given me an update of rights perfected - adjudicated - in the past 6 months' period. I didn't get a chance to go over this with Mike, because the Utah rights were quite late getting to me; but even though we haven't been listing acreages with these rights it would be a simple matter, at the starting point of rights since January 1, 1976, to list the acreages - not necessarily on these six-month meetings but periodically. I do get this information from Idaho and Wyoming now, and how many rights were actually adjudicated, which means really put to use, in that 6-month period along with their approved and pending rights. I think that Mike and I should get together and get some more information for Utah, so that at any time we can tell you just about how many rights have actually been put to use and how much acreage. Some of them will be supplemental to other rights, which makes it more difficult; but at least we can have the total rights and the total acreage actually put to beneficial use since January 1, 1976.

DR. STAUFFER: That would help; but we've got to go back from '65 to '76 to get our total use, and then we need to go back and file those numbers clear back through '27 or whenever it would begin.

MR. HANSEN: I think the way you said that sounds nice. I don't think it's quite that simple. If you take the rights that are certificated we can give you that too, but those that have been approved or are in some stage of development - I don't think Idaho or Wyoming are giving you that.

CHAIRMAN JIBSON: No.

MR. HANSEN: So you're not really getting a true picture of what's being put to beneficial use. You're getting those that have been perfected. We can do that very easily, too, for you. But there may be a lot of acreages actually placed to beneficial use that you don't have.

CHAIRMAN JIBSON: Well, we have a problem, too, Dee - rights that were dated prior to January 1, 1976 and not put to beneficial use until afterwards - until after January 1, 1976. Now in Idaho's case, the printouts that he sends to me - though it's a little work involved, I can go clear back to the first rights adjudicated in Bear River Basin in Idaho and pull those out. George merely makes a statement of how many rights, if any, were perfected in the six-month period. But it is true. I didn't mean to over-simplify it.

MR. HANSEN: Well I was just going to say - we can do that if that's what you want; but that isn't a real, true picture of what's being placed to beneficial use.

CHAIRMAN JIBSON: But by Mike knowing the area pretty well he can almost hand-pick a lot of those rights.

MR. HANSEN: And you recall, we gave you a listing of what rights had been placed to either full or partial beneficial use by January 1, 1976.

CHAIRMAN JIBSON: Yes, we have that. But we haven't updated it, and maybe we should at each 6-months period. Actually we had decided, in the biennial report, to update it as of - well, in this case it will be December 31, 1982 for the 1981-82 Biennial Report.

MR. HANSEN: I guess I don't see any advantage to updating it.

CHAIRMAN JIBSON: Each 6 months.

MR. HANSEN: No, if it involves handwork. The other stuff we can pull off our computer; but I'm sorry, this time you didn't get it from the computer because the operator didn't know how to pull it so he just gave it to you the old way. We can give you, easier perhaps than an index, a complete listing of the rights. We can print that out for you. That will list the whole thing - the acreage, where the acreage is - the whole thing. That's fairly easy to pull off the computer, if you want it in that much detail. That's easier to give you than the index.

CHAIRMAN JIBSON: My point has been that if I'm going to summarize these - I'm not speaking now of the six-month meetings - if I'm going to summarize them in the biennial report, we should have something in there that might be of use to us in the thing that Norm has mentioned - updating the hydrology, say through January 1, 1976. Otherwise it's a lot of work to summarize it. If it doesn't mean anything, we get nothing out of it. But I think it could be used if we try to get at a figure of those water rights perfected after January 1, 1976, including some of those filed before January or all of them filed before January 1 that were not perfected until after January 1, and then by taking the acreage associated with those rights at least we have a starting point on new uses.

MR. HANSEN: I don't disagree with that. The only point I wanted to make, Wally, is that what Idaho is reporting to you we can report too; but that doesn't really give you a true picture of what's being placed to beneficial use. It may not reflect, in measuring your gaging station, the water depletion. That's what you were intending to start to see, and you may not get a true picture of what you're seeing.

MR. DUNN: You probably have between a 5- and 7-year lag from the time an application is approved until it's fully put to beneficial use and a license is issued in Idaho. It can be a year, it can be 2, 3, 4 - it depends on when that person puts it to use, when proof of beneficial use is submitted, and when we finally make our field exam and issue a license. So the times are really erratic.

CHAIRMAN JIBSON: How much lag, Ken, would you expect between the time that they actually put it to beneficial use and the time that you issue a perfected right or licensed right?

MR. DUNN: Well, right now we have a backlog of three years in field --

CHAIRMAN JIBSON: Three years? So at any particular time we could have quite a lot of rights put to beneficial use that we don't have record of yet?

MR. DUNN: Yes. Once we approve the permit they have a 5-year period to develop it, and they can develop it any time in that 5-year period. They may develop it after the first year and actually utilize water for 4 years before they submit proof of beneficial use, and it may take a year or two for us to make an exam after that. So what you get is what we know. It does not reflect accurately what may be going on in the system, and that's what Dee was trying to tell you.

CHAIRMAN JIBSON: So we just have no way, really, to bring that right up-to-date - no feasible way to bring it up-to-date at any particular time then.

MR. HANSEN: Someday we'll do that by satellite.

(Laughter)

CHAIRMAN JIBSON: Do we have any further discussion, then, on this or other subjects - any Unfinished Business?

MR. HOLMGREN: Wally, I was contacted by one of the Land Board people to see if we wanted to make a statement or a stand on the application for drilling oil wells in and around Bear Lake; and I said, 'well, how do you feel?' And he said, 'I'm against it'; and after our hearing over in Bear Lake in Rich County - on the Utah side, the people around there pretty well felt that they didn't want it - and I said, 'well, as far as we're concerned down in the lower Bear we use a lot of water, and we don't want to have any threats of oil spills or pollution of any kind we could possibly have'. So I told him as far as we were concerned in the Bear River Valley of Utah, we felt that we would have to be against it. I was just wondering if the Compact Commission had any thoughts on that - did you have any feeling about that at the time that this program was taking place?

CHAIRMAN JIBSON: I had a similar contact, Paul, probably from the same individual, and I just answered him that the Bear River Commission

officially had not taken a stand because it hadn't been brought to our attention. I sort of forgot it after that; but that was my answer to him.

MR. HOLMGREN: He was one of them that voted against it; and we felt, as a water users association in Bear River Valley, that they weren't that hard-up for oil right now and that we were having some problems, you know, with pollution in our streams as it was, and we didn't want to even take the remotest chance that there might be something like that happen.

CHAIRMAN JIBSON: It seems as though, from reading the paper, the Land Board has turned it down in Utah at the present time. I don't know what the status is in Idaho.

MR. REX: Idaho is leased to _____ Energy and they're not going to do anything in the valley until Utah leases its half of the lake; but I think that you'd have to go into the agreements that were signed. There's some precautions involved there that they can't get within 500 feet of the high-water mark with their drilling rigs, and I think on the preliminary agreement I saw on the Utah side they've got it at about 1,000 feet. This agreement that Idaho went into was brought up here in Utah with the Utah technical staff, and they felt confident that it would work. So when Mr. Holmgren referred to that hearing and from people up there - that was a rigged meeting. People with an acre did the majority of the talking. Those other people didn't have too much to say.

CHAIRMAN JIBSON: I guess the primary function of the Bear River Commission is to administer the Bear River Compact. I don't know that we should or could take a stand on some of these other items. Do we have any other comment on Paul's discussion?

I take the silence, Paul, to mean that as a Commission we prefer not to take a stand on it. I think we might individually have our own feelings on the matter.

MR. HOLMGREN: Well I didn't take a stand as a Commissioner on it. I more or less told him that as president of the Bear River Valley Water Users Association we felt that we didn't want to take the remotest chance that our streams would be polluted, and that at this point in time we didn't say one way or the other about the drilling. We just were against any chance of pollution. I suppose he took it from there and I think that

he made a statement against it. Of course he had the backing of the meeting, and I suppose over in Rich County about 375 voted against it and 25 voted for it.

CHAIRMAN JIBSON: I understand the Rich County Commission was somewhat in favor of it.

MR. WESTON: I don't know much about it; I didn't go to the meeting; I hadn't even heard of it. But if I were a landowner over in Bear Lake I'd think that'd be my business if I leased my oil rights and got a drill on, rather than somebody else's. And I don't think there's much danger of getting oil spills or anything out of these oil companies now because they have the technology; and they've had enough law suits, I think, that they don't let that happen very often. I don't think you have to worry too much about polluting the streams, because they've got that pretty well under control.

MR. REX: Mr. Chairman, in going back to what I mentioned here a little while ago - when you've got an agreement that they have to be 500 feet or even 1,000 feet back from the high-water level that means that they're going to have to acquire a right-of-way from some private landowner in order to drill that well. It isn't as simple as those people at that hearing would make it sound; and as far as Rich County - there were several of the towns there that favored drilling. They're just like we are in Idaho. We don't have an oil well in Idaho and we'd like to see one. We'd like to see it in Bear Lake County, of course, being a little selfish.

CHAIRMAN JIBSON: Do we have any further discussion or any other business to bring before the Commission today?

MR. LAWRENCE: I would just like to ask Dr. Stauffer if it's clear in his mind what answer we got from our discussion on updating our hydrology.

DR. STAUFFER: I didn't think we got an answer either way. I think Utah, at least the Division of Water Resources, has to pursue this - whether we do it on our own or we do in cooperation with the states; whether we do it outside the Commission or in it - we've got to move forward with our study.

CHAIRMAN JIBSON: If you'd name the dollar figure, Norm, I'm sure you'd have had an answer.

DR. STAUFFER: Of course it's going to cost money, but I don't look at the Commission hiring somebody to do it. I'd look at the staff of the water resource agencies in the states getting together with some staff time - of course there'd be some travel - and getting this done.

MR. LAWRENCE: Are we saying then, by our silence, in your view the Commission doesn't consider this a Commission matter and it should be handled between the states directly through their state agencies? Is that what I heard here today?

MR. DUNN: Mr. Chairman, I don't think there was enough discussion to figure out what was going on with the thing, quite frankly. We heard some discussion from Dee Hansen on the acreage measurements, and then from Norm, and I'm not sure how the two are going to relate - where we should be going on either one of them.

MR. LAWRENCE: It seems to me it boils down to one or two things. Either the states need to be talking to each other, as states per se, or the states need to be talking to each other as embassies of this Commission on assignment to carry out a Commission assignment. I don't suppose it really matters, Norm, which way we go. If the Commission would want to make a motion asking us to pursue the matter and report back, that would be fine; but maybe that might not be timely - that we need to get together with Idaho, especially, and Wyoming, and just go ahead as individual states. What's your reaction?

DR. STAUFFER: It sounds like that's what we're going to have to do.

CHAIRMAN JIBSON: Do you have any comments, George? Did you hear the discussion on that?

MR. CHRISTOPULOS: I heard part of it, I think. It sounds to me like part of the problem is that - if you're going in and try to determine what's happened from '65 up until now you're back trying to get a figure on what's happened, primarily, in acreage differences between '65 and '82. If I'm on target I don't think we've got those figures ready, or are going to have them for a while.

CHAIRMAN JIBSON: Is that basically true, Norm, in your suggested work with the other two states?

DR. STAUFFER: Of course we know we've got Dr. Ridd's study, which is somewhat in question, but we've got that. We've got the Type IV study - that's a list of acreages which was done in the 70's. What I'm looking at is some way so we can proceed with our plans with the Lower Bear River Basin with updating our hydrology. We don't have to get it down to the nearest acre foot, but we need something somewhere 'in the ballpark'. That's what our need is. We can, as Utah, just make those assumptions and go ahead and run our study. The part I don't like about that is, 5 years down the road we're using a slightly different data base than anyone else, and that's what I wanted to avoid. Now Idaho, at least Alan Robertson, said he was willing to share what they had done - updating from '65 to '72. He said they would be willing to provide us what they've done. We'd like to go even further and get at least to '76 and preferably to '82.

MR. LAWRENCE: Ken, do you have a suggestion as to how we might work this out?

MR. DUNN: Well, I guess what we need to do is decide we're going to do something, first. It's almost impossible to come before this Commission and have a presentation and try to make a decision, without having some pretty good staff discussion - something prepared by staff of the three State Engineer's offices, with some recommendations to the Commission that we ought to take these procedures and arrive at a certain point, so that the Commission has something to react to - rather than to have a short written, or short verbal, discussion of what one state thinks ought to be done, and then realize Utah's had some conversations with Alan Robertson of my office. I don't think we've got a system put together within the Commission to arrive at some decisions. To do that, we have to have some staff work that has to be done ahead of the meeting; otherwise, we flounder.

CHAIRMAN JIBSON: Would you suggest, then, Ken, that perhaps we refer this to the State Engineers' Committee and they would, of course, include Norm from Dan's office in that group, and have some discussion on that level and bring it to the Commission?

MR. DUNN: Sure; have some recommended alternatives of where the Commission ought to go, and then the Commission can make a decision from that. As I say, I think it's almost impossible for this Commission to select the alternatives and then make the decision without having something before them to react to.

CHAIRMAN JIBSON: Would you agree with that Dan?

MR. LAWRENCE: Yes.

CHAIRMAN JIBSON: George?

Well let's do that. We will refer it to the State Engineers' Committee for further study and report back to the Commission in the next meeting.

MR. LAWRENCE: I think what Ken is saying is maybe just a little technical difference of your words. You said in our next meeting, but Ken is saying that we need to come back a month ahead, or three months ahead, of the next meeting so that the Commissioners are all prepared and have had briefings well in advance of the next meeting so that it can be discussed, if it's going to be a Commission item.

CHAIRMAN JIBSON: We could circulate a report from the Committee ahead of time so that we're not coming in cold.

MR. LAWRENCE: Could I ask for 'personal privilege' for just a second? I'd like to make one introduction today, a little bit special. There may be one or two of you who don't know Barry Saunders. Will you stand, Barry? Barry has been with our office for a long time and most of you know him. We've made a little realignment in responsibilities, with the result that Barry is now Chief Interstate Streams Engineer; and we're going to be making a transition and involving him more and more in Bear River matters, as he has been in the Colorado River system, and we're giving Norm some other duties. So as you see Barry involved with this Commission you'll know that's how the transition is taking.

CHAIRMAN JIBSON: Welcome aboard Barry.

Okay, do we have anything else that should be brought up? George. I'm sorry that I didn't pursue that -- let me just make a statement on it.

We had a letter from George Christopoulos some weeks ago asking that we have a little further discussion today - the definition of domestic use under the amended Compact. I didn't realize how complex these various industrial or domestic or municipal uses are until I started going through the applications that came in from Wyoming. We have trailer courts, water for cleaning purposes, water for drilling purposes, and about a dozen others. So I think if we turn the time over to George at this time he can put before the Commission the problems that he has, and whether or not we should try to clarify our definition of what is domestic use under the amended Compact.

MR. CHRISTOPULOS: Thank you Wally. As Wally indicated, we do have some problems with the various uses that are coming before us and that we are granting permits for in Wyoming, that are primarily water that's used for drinking purposes and probably some very incidental other uses in connection with the primary purpose of drinking water. I'm talking about the filings that have been made by various industries which might be for - say an office in some sort of a well-servicing outfit that wants water for sanitary purposes within that complex. Maybe they'll use some of the water for truck washing or something like that. But we felt that in trying to arrive at an allocation in Wyoming we've had to inventory all these uses and proposed uses and try to get them pinned down and see how we assess them. And we've rapidly found out that we've got a real problem with some of these proposals that we have and some of the uses that are being made.

I guess our basic approach to the thing is to maybe try to define domestic use. Now, the Compact says that ordinary domestic and stock-watering purposes as determined by state law shall be exempt, more or less, under the Compact. I guess we would like to solicit some consideration in maybe defining domestic use to tie it more or less to the more normal domestic uses. We're not talking about a hundred-unit trailer court as being a domestic use in this sense, but we certainly would like to consider use of water for an office and maybe some ancillary use along with that by an industry. As long as the amount of water is fairly minimal and probably less than what our loss is as domestic, which is 25 gallons a minute - maybe with that general brief introduction I'll ask Dick Stockdale, who's our groundwater geologist, to

give you some of his thoughts on this thing if he has any other additional thoughts to what I've mentioned, and then see what kind of reaction we get from the Commission on this.

MR. STOCKDALE: I don't know that I can add much to what George has said; but it's somewhat unclear in my mind as to how some of the other states treat domestic use - what are considered to be domestic uses - and perhaps just a minute of discussion from Dee or Ken to indicate to us how they define domestic use, would be a good way to kick this conversation off. In Wyoming it's considered a single-family dwelling, and that is the only domestic use that we have. Anything above and beyond that has to fall into some other category. That's the problem we get into with these small industrial users or office complexes, where they may not use as much water as a household would, but nonetheless we cannot consider them as domestic use.

CHAIRMAN JIBSON: I recall that in discussing 'ordinary domestic' before we approved the Compact - that the single-family dwelling concept was brought up here in the Commission a number of times, and it's probably been the accepted feeling of the Commission that we're talking about single-family dwellings when you talk about 'ordinary domestic'.

MR. CHRISTOPULOS: Well, as Dick says, I think I'd like to hear from Utah and Idaho as to what their thoughts might be on this thing. We don't want to stretch it too far, but we think that just from the standpoint of the sheer numbers and the problems that we might have in keeping tabs of these things, that our general thinking would be that if we're using water that's comparable to the single-family dwelling type thing it would seem reasonable that you would consider this too. Of course the other thing we could do, I suppose, is to seek an amendment to our law to make it a little broader to include some of these uses; again, more or less in keeping with the idea that we're talking about minimal quantities of water. We're not talking about, as I said earlier, the hundred-unit trailer court or something like that. We're not trying to stretch it that far, certainly.

CHAIRMAN JIBSON: I notice several of them were listed for an office. I might read just the sentence covering this ordinary domestic.

Subject to existing rights, each State shall have the use of water, including groundwater, for ordinary domestic, and stock watering purposes, as determined by State law and shall have the right to impound water for such purposes in reservoirs having storage capacities not in excess, in any case, of 20 acre-feet, without deduction from the allocation made by paragraphs A, B, and C of this Article.

So we did refer that back to State law, as you mentioned.

MR. CHRISTOPULOS: I would just like to have some feelings from everybody and kind of see what kind of reaction we have on it. It does cause us a little concern. It's probably more concern from the standpoint of the numbers. You know, overall quantity-wise, it's not going to amount to that much water; but it's sure going to make our life easier if we don't have to worry about it as part of our allocation.

CHAIRMAN JIBSON: A lot of them are temporary, too, and ultimately they'll be out of the picture.

MR. LAWRENCE: I wonder if I could call on Dee Hansen to indicate how his office considers this?

MR. HANSEN: I think we've treated them exactly as Wyoming has - single-family dwellings. I recognize what George says is true. You, in many cases get a service station, for instance, who would probably use less total water than a single-family dwelling but we've told them they have to purchase water if it's in an area that's restricted - and you have many areas in Utah that are restricted to domestic filings only. In those areas we've forced any industry or business to go and purchase the right, so we only approve to a single-family dwelling. I recognize this is a different situation here, but it would be my interpretation that the limitation in the Compact applies to single-family dwellings. Now I'm happy to go with whatever you want to interpret.

MR. CHRISTOPULOS: One other point I should make - of course that single-family dwelling use includes the irrigation of lawns and gardens up to an acre, which again --

MR. HANSEN: Not to exceed 3 acre-feet, I believe.

MR. CHRISTOPULOS: Well, we don't have that limitation. But even at that, 3 acre-feet's a million gallons a year. That's a pretty fair chunk of

water, really. So I guess we're talking technicalities in some respects, but I'd like to have the feelings of the Commission to see where we are.

CHAIRMAN JIBSON: Do you have any comments, Ken?

MR. DUNN: In Idaho we also have single-family dwelling and water for the stock for that family and irrigation of up to half-an-acre of ground. That comes out to - it could be a maximum of 13,000 gallons a day; it's 9 gallons a minute and if they consumed it at 24 hours a day it would come out to 13,000 gallons. But we have always interpreted that as a single family.

CHAIRMAN JIBSON: It appears that the law in each of the three states is not too different. It is a question of whether we want to broaden the single-family concept for some of these other uses.

MR. CHRISTOPULOS: What is Idaho or Utah's reaction to what we're saying? I appreciate what you're telling me about the definition of the law, but are you saying that you feel that that's the way we should stay?

MR. HANSEN: I guess, if you're looking at it realistically, an office complex, in reality, uses less water than a single-family home because 85% or 90% of it is return flow through the septic tank, effluent or something. I don't really care if we restrict it to that type thing not to exceed so many acre-feet or something. We gain, I guess, as much as anyone else. If you're a Lower Basin State you have that concern. As George indicated, it takes a lot of those small filings to make any difference; so I don't think we're talking about that many.

MR. CHRISTOPULOS: I can't recall now whether we sent a copy of that letter to everybody on the Commission, or not. Of course we did indicate we'd like to have it on the agenda, but maybe, until today, nobody was really aware of what we were talking about.

MR. DUNN: Let me make one comment, George. I can see the possibility - certainly Idaho would never do a thing like this! - but in Wyoming there might be the possibility of somebody filing 5 or 6 domestic rights in a cluster, the real purpose being for a non-household use, and end up exporting the water for whatever energy purpose they may have. I don't know how much demand there is for energy but that, I think, would be a

possibility; and if we were going to expand the domestic use to include service stations, or some kind of processing facilities, we ought to make sure that it was not possible to read a scam of getting water that way.

MR. CHRISTOPULOS: Yes. Well that's certainly not what we have in mind. You know, if we were to come up with a definition for our own purposes to more or less implement the Compact - I'm thinking more along the lines of if you had an energy-type situation - if they had an office there and were going to use water for that purpose as opposed to a single-family dwelling, or say they had that and a shop along with it, or something like that. That's the kind of thing we're talking about, really, because we have quite a number of those filings; and yet, how do you really treat them?

CHAIRMAN JIBSON: Let me read George's letter. It didn't go to the other states, George, and you summarize that here pretty well, I think.

The State of Wyoming is in the process of attempting to divide the additional water allocated to us by the Amended Bear River Compact among the various users in the basin. Among the many requests for a portion of the additional water there is a substantial number of requests for domestic and sanitary uses, particularly from groundwater wells. Many of these are requests for small capacity wells of 25 gallons-per-minute and less, or use for sanitary purposes in offices, warehouses, and so forth. These are basically domestic uses which result in minimal depletions to the system.

We would like to discuss these types of uses at the upcoming Bear River Commission meeting in November in order to begin working toward a Commission definition of domestic use for Compact administration. Would you please add this topic for discussion to the meeting agenda. A common definition of domestic use will be needed soon, as each state begins to allocate their water.

MR. CHRISTOPULOS: I think there are maybe two things to consider here. One would be if the Commission would like to establish a little more of a definition of 'domestic', as long as we stay within some framework of the quantities of water and so on. That's our intent here. We're certainly not talking about anybody finding a way to beat the Compact, or certainly we're not going to help them do that, or anything like that. Of course I think the other way we could do it would be to amend our law along these same lines, because we're just as jealous as Dee is on deciding what kind

of a use you can call 'domestic' and what you call something else. Of course I think our law could be amended to include some of these other kinds of uses and then probably put some kind of a lid on an annual amount, or something like that that makes it comparable to what you use for domestic. To me, as I say, I think we can go either way. I don't know, maybe you're not prepared to tell us today, but I'd like to have some indication; because I think one way to solve it would be through definition and some understanding. The other way would probably be to change the law.

MR. LAWRENCE: It seems to me that it's very important, very relevant, and is tied to the overall process of determining the Commission-approved procedure related to new consumptive uses over and above 1976. I think we ought to get some formal wheels in motion so that there could be a more formal discussion as early as the next meeting and keep hacking at this thing.

MR. CHRISTOPULOS: Are you suggesting that maybe we turn this over to that same committee? I think we'd do that; and then maybe the appropriate thing to do would be to have each state name somebody to serve on a committee, and then they can function between now and the next meeting and know that they should get something back to the Commission ahead of time.

CHAIRMAN JIBSON: Dee, you had a comment?

MR. HANSEN: Let me suggest, George, that perhaps whatever you think is a good definition of domestic use - we'll consider it.

MR. LAWRENCE: But I think it is worthy of our consideration.

MR. DUNN: Mr. Chairman, within the Compact can the Commission make that kind of decision?

CHAIRMAN JIBSON: Why don't we refer it back to state law? Ed, what is your opinion on that question?

MR. SKEEN: I've been pondering it some, but the definition is to be one determined by state law in each state. The language "for ordinary domestic, and stock-watering purposes, as determined by State law", and I'm inclined to think the Compact Commission would be bound by the State law on the subject. I doubt that the Bear River Compact Commission could prevent any state from having it determined by the state legislature and

using it in the state on that basis. I really don't think that we should try to make a definition and force it on any state, even though the people presently here might agree on it.

MR. HANSEN: I was going to say - under Utah law there is no restriction. So if you take that broad of interpretation we may end up hurting you more than you hurt us. Be a little cautious. I don't say that - you know - I'm trying to be reasonable about it. We put that in there because it was a concern, and I think we ought to keep it pretty narrow or it's going to get out of hand. We have no restriction. If it says 'domestic' it could be a city.

MR. CHRISTOPULOS: Well, if we were to seek legislative change in our state our thoughts would be along the line of expanding that domestic use to include the kinds of uses that I've been describing this morning, and probably even put an angle - diversion-depletion amount to fix an upward limit, probably both as to flow rate and to total quantity. Because, as I say, we certainly have nothing in mind as far as circumventing the Compact or anything else. It does cause us concern to say if we don't more or less exempt these we're going to have to keep track of all of them, and there'll be quite a number of them. Time will take care of a good share of it because in time those things, as all other things, will come and go - they'll pass - there won't be that many; and it's all mostly centered, of course, in the overthrust area around Evanston where we're getting these filings. Dick, do you have any idea how many of those we've had?

CHAIRMAN JIBSON: Well, in view of the wording in the Compact and Mr. Skeen's interpretation of it, I think it's rather clear-cut as far as that goes. Perhaps we shouldn't refer it to a committee but have you proceed in that manner - just make up your own definition.

MR. CHRISTOPULOS: We might be checking with Idaho and Utah to see what they have. We probably will tell you what we're going to really come up with.

CHAIRMAN JIBSON: We would have to hope that Utah would not loosely interpret its law.

MR. LAWRENCE: I don't think this Compact says 'in accordance with state interpretations of state law' - I don't think Ed went that far did you?

(Laughter)

MR. CHRISTOPULOS: Dee, did you say that Utah does not have a definition by law?

MR. HANSEN: Yes. Our only restriction is administrative decisions of the State Engineer; so whatever you decide, we can roll with you.

MR. CHRISTOPULOS: But Idaho does have a definition?

MR. DUNN: Yes.

MR. CHRISTOPULOS: Which is fairly similar to ours. Ours is probably a little broader. Our rate is 25 gallons a minute. That's the amount. Of course if you restrict it as to how you use it, the 25 gallons a minute doesn't mean very much because you can only use it for certain purposes. That would be our thinking if we were to expand it to come up with some sort of an exemption that would still keep you down quantity-wise to some limited amount. But I think that what we'll probably do is seek some sort of legislative amendment this next session. As I say, I'll probably be talking to you and to Dee and get your ideas here; because we certainly want to keep the thing in balance. We're not trying to do anything that's out of line or anything else. It's kind of a pain in the neck sometimes.

CHAIRMAN JIBSON: Do we have any further discussion on this subject?

MR. BUYAK: Mike Turnipseed had a suggestion. It says in the Compact that the depletions have to be reported by a Commission-approved procedure. Maybe the reporting could include those that are under a certain amount, in the procedure that you set up.

MR. LAWRENCE: I think Mike's been reading my mind, or vice versa.

MR. TURNIPSEED: I didn't know if the problem was simply the reporting of the filings for the Commission, or whether the fear that the basket flow of them would take away from their allocation.

CHAIRMAN JIBSON: Well I think this particular article is clear - that it is not in the reporting but in the definition of 'domestic use' as defined by state law. There's no reference to a Commission-approved procedure in that particular part of the ordinance.

MR. HANSEN: It's just excluding that type of filing.

CHAIRMAN JIBSON: It just excludes it from paragraphs A, B, and C.

MR. TURNIPSEED: If he goes ahead and reports it, though, and you put them in your summary, you'll have to just assign it some depletion when you get around to that point.

MR. HANSEN: When you report filings you don't report the depletion.

MR. TURNIPSEED: I know, but you're going to have to treat it some day.

MR. HANSEN: Compact exemptions - you don't ever treat it.

MR. CHRISTOPULOS: I think the safest thing is to try to change the law.

MR. TURNIPSEED: If the problem is reporting them, then you have to treat it now. It's just the fear that it can come out of your allocation.

CHAIRMAN JIBSON: So far the total amounts of this type of filing reported to the Commission is so minimal compared to the other depletions that we're going to be working with, we probably shouldn't blow it up beyond its importance here; but nevertheless we should have the definitions.

MR. HANSEN: I really think it would be wise for the Commission to adopt a definition of 'domestic use' so that we're all operating on the same base - whether the Compact requires it or not. I think you can do that.

CHAIRMAN JIBSON: And then what you are suggesting, Dee, is that when George brings that before the next Commission meeting, say, that we officially approve that as a definition?

MR. HANSEN: Yes, I think the Commission has that kind of power.

MR. SKEEN: I don't agree that we can sit here and change the Compact by putting a definition in it. It's a matter of policy as to whether the states can get together and get similar legislation on it. It would be a nice thing to have. I think the suggestion that George go ahead and prepare a definition that we can consider is a good one, but I don't think this Commission can take any action on it.

MR. LAWRENCE: Don't you agree that one day we're going to face up to the clauses in the Compact that limits depletion above the 1976 levels, and we're going to have to have some definitions? This Commission is going to have to adopt its definitions for administrative purposes, it seems to

me. And whether we purport to be changing state law or anything like that we're going to have rules under which we operate, or else we're going to decide not to have rules and go to the courts every time we want to make a decision.

CHAIRMAN JIBSON: Well I think we could do that, Dan, without actually adopting a definition ourselves. If George brings a definition to the Commission, and then on future filings that he brings up he brings them to the Commission and we use his definition, we haven't adopted a definition but we're using his definition to segregate his rights as to whether or not they're counted toward depletion.

MR. SKEEN: Dan, if the words "as determined by State law" were not in there, why the provision in B, "water depletions permitted under this paragraph B shall be calculated and administered by a Commission-approved procedure" would probably be controlling; but I think with those words in there - they mean what they say, and I don't think we can ignore them.

MR. LAWRENCE: And they mean whatever the State law is in 2020 -- ?

MR. SKEEN: On what ordinary domestic and stock-water use is.

MR. LAWRENCE: Not what it was in 1979 when the Compact was passed?

MR. CHRISTOPULOS: I think that's why it'd be important, perhaps, to - I think we can get past our problem; and as I say, I think that we would certainly want to work with the Compact Commission, and Commission members of the states to try to come up with something that's generally acceptable that we pretty much agree with; because I would suspect that as time passes each of the other states - we might want to come together and get the laws changed to make them pretty comparable so that then you wouldn't have a situation where one state, say, could change the laws to get an advantage. I think what I want to do is to probably go ahead and seek legislation this session coming up to change our law; but I'm going to be talking to Ken and to Dee to try to get some agreement from them with what I'm going to suggest. Certainly I'll want their feelings on it, so that we'll have something that sells fairly well, and then bring it back to the Commission; because I think somewhere along the line Utah might want to pass a law or make their law more definitive, and I intend to talk to Ken and get his feelings. Just from what he told us on what

they have there, they maybe have something fairly comparable, at least as to quantities. I'm more concerned with, say, annual amounts than I am with the rate. Our rate's at 25 gallons a minute which I've always thought was too high, but that's where it is and I don't know if we can change that. But as I said, I don't feel that's too important because you only need so much water no matter what rate you take it at.

MR. LAWRENCE: There was surely some reason that they're exempt in the first place, and the states agreed to it; and I presume, in 1955, it was because they were considered very minimal in total. If they get so that they're not minimal, then maybe the Compact ought to be changed so that they're not exempt.

MR. HANSEN: They weren't treated in '55, were they?

MR. JIBSON: We were just going to check that, Dee, to see if that wording is just in the Amended Compact - "in accordance to state law".

MR. SKEEN: Under the original Compact:

Subject to existing rights, each State shall have the use of water for farm and ranch domestic, and stock watering purposes, and subject to State law shall have the right to impound water for such purposes in reservoirs having storage capacities not in excess, in any case, of 20 acre-feet, without deduction from the allocation made by paragraph A of this Article.

CHAIRMAN JIBSON: See, we didn't refer it back to state law then, but we didn't confine it to farm and ranch. Our two compacts are worded somewhat differently.

MR. SKEEN: And "as determined by state law" wasn't in the original compact.

CHAIRMAN JIBSON: With that discussion why don't you bring that back to us George, and we'll go on from there.

Do we have any other items of business? I hope we covered everything we had listed. If so, I guess a motion would be in order to adjourn.

MR. CHRISTOPULOS: So move.

MR. GILBERT: Second.

CHAIRMAN JIBSON: All in favor?

MOTION CARRIED

CHAIRMAN JIBSON: Our Annual Meeting in April will be the next one. That would be the third Monday in April (April 18, 1983). We wish you all a Happy Thanksgiving and hope the storms will hold off until we get home.

Meeting adjourned at 12:35 p.m.

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

November 22, 1982

Engineers Report

Wallace N. Jibson

1982 Water Supply and Compact Operation

Water Supply

Even the June 1st forecast for seasonal supply was exceeded by 14 to 21 percent at key gaging stations in Bear River Basin. May-September runoff from Smiths Fork was more than three times that of 1981, and throughout the basin seasonal flow has been exceeded only in one or two years since the early twenties. The pattern of recent years continued in 1982 with alternate years of deficiency being followed by years of above-average supply.

In the following table is compared the 1981 and 1982 measured streamflow with the 1943-82 average at key gaging stations in each of the three river divisions.①

Streamflow in Acre-Feet

May-September

	<u>1981</u>	<u>1982</u>	<u>Average 1943-82</u>	<u>1982 as Percent of Average</u>
Upper Bear River	100,600	160,800	114,400	141%
Smiths Fork	54,000	165,900	109,800	151%
Logan River	73,200	191,400	123,700	155%

Water Year

Upper Bear River	125,400	182,600	136,700	134%
Smiths Fork	85,000	198,400	142,300	139%
Logan River	126,300	248,000	183,600	135%

Reservoirs

Bear Lake hydrographs for 1981 and 1982 are shown on page 4. During the storage period from the first part of December to the last part of July, the Lake gained 441,300 acre-feet and 6.36 feet in elevation. Only in 1965 of the past 55 years, was this rise exceeded, though larger quantities have been available for storage or bypass in a few other years. Peak elevation came later (July 30-August 8) than in any year except 1965, and the elevation on September 30, 1982 of 5921.08 ft was about 9 inches lower than in 1965. About 1,300 cfs are now being released to lower the Lake, but fall storms have resulted in unusually high inflow, and the Lake was down only to 5920.66 ft by November 15. Part of the inflow has been coming from spills at Sulphur Creek and Woodruff Narrows Reservoirs since the latter part of September.

A hydrograph of Woodruff Narrows Reservoir is shown on page 5. A gain of 41,600 ac-ft from water diverted to storage is shown from October 1 through about May 1 when the spillway crest was reached. About 9,000 acre-feet was again stored during September and raised the water level again to the spillway crest by September 28. The Compact does not restrict allowable storage to any specified period but the storage rights cannot be exercised if direct-flow rights (for consumptive use) are impaired. There was no interference with direct-flow rights during this period in September, but this early storage may be contrary to state law.

Observations made during the year on other compact reservoirs are included in the following tabulation. It is noted that both Sulphur Creek and Woodruff Creek Reservoirs registered gains in September.②

Sulphur Creek Reservoir

<u>Date</u>	<u>Contents ac-ft</u>
10-5-81	2,500
1-20-82	4,200
5-4-82	6,880
6-7-82	7,180
6-30-82	7,320
8-9-82	7,070
9-24-82	6,170
10-4-82	7,090
(Spillway Crest, 7,088)	

Woodruff Creek Reservoir

<u>Date</u>	<u>Contents ac-ft</u>
10-5-81	830
12-1-81	670
3-3-82	2,010
5-4-82	4,040
5-19-82	4,030
6-28-82	3,930
8-9-82	1,210
10-4-82	2,190
(Spillway Crest, 3,960)	

Whitney Reservoir

<u>Date</u>	<u>Contents ac-ft</u>
10-6-81	1,140
5-4-82	1,890
6-13-82	4,800
8-9-82	4,800
10-20-82	2,295
(Spillway Crest, 4,740)	

Compact Operation

Diversion records in the Upper Division have not been completed for analysis; however, inflow to Woodruff Narrows Reservoir ranged from 1,000 cfs to 1,240 cfs in the period June 15 to July 1st then gradually dropped to 340 cfs by July 15. It is evident from these flows that divertible flow did not drop to the 1250 cfs point of requiring compact allocation until Utah diversions were cut for haying operation.

Interstate allocation in the Central Division was not required until after mid-August, the latest date of a "water emergency" since the Compact has been in operation^③ (August 15 in 1965). Wyoming was diverting only about two-thirds of its allocation at the time and thereafter throughout the season.

Budget

The 1982 fiscal year budget, as amended in April, was attached to the minutes of the April 29, 1982 meeting. The Engineer's budget of \$10,000 included \$9,200 Personal Service, \$500 travel, and \$300 Printing and Supplies. Total obligation as of 9-30-82 was \$5,980, so we had a carryover of \$4,020 into the reserve. Publication of the next biennial report is due by July 1, 1983, so the 1983 budget estimate of \$10,000 is realistic notwithstanding the underspending last year. Less time is required in Compact administration in years of high water supply.

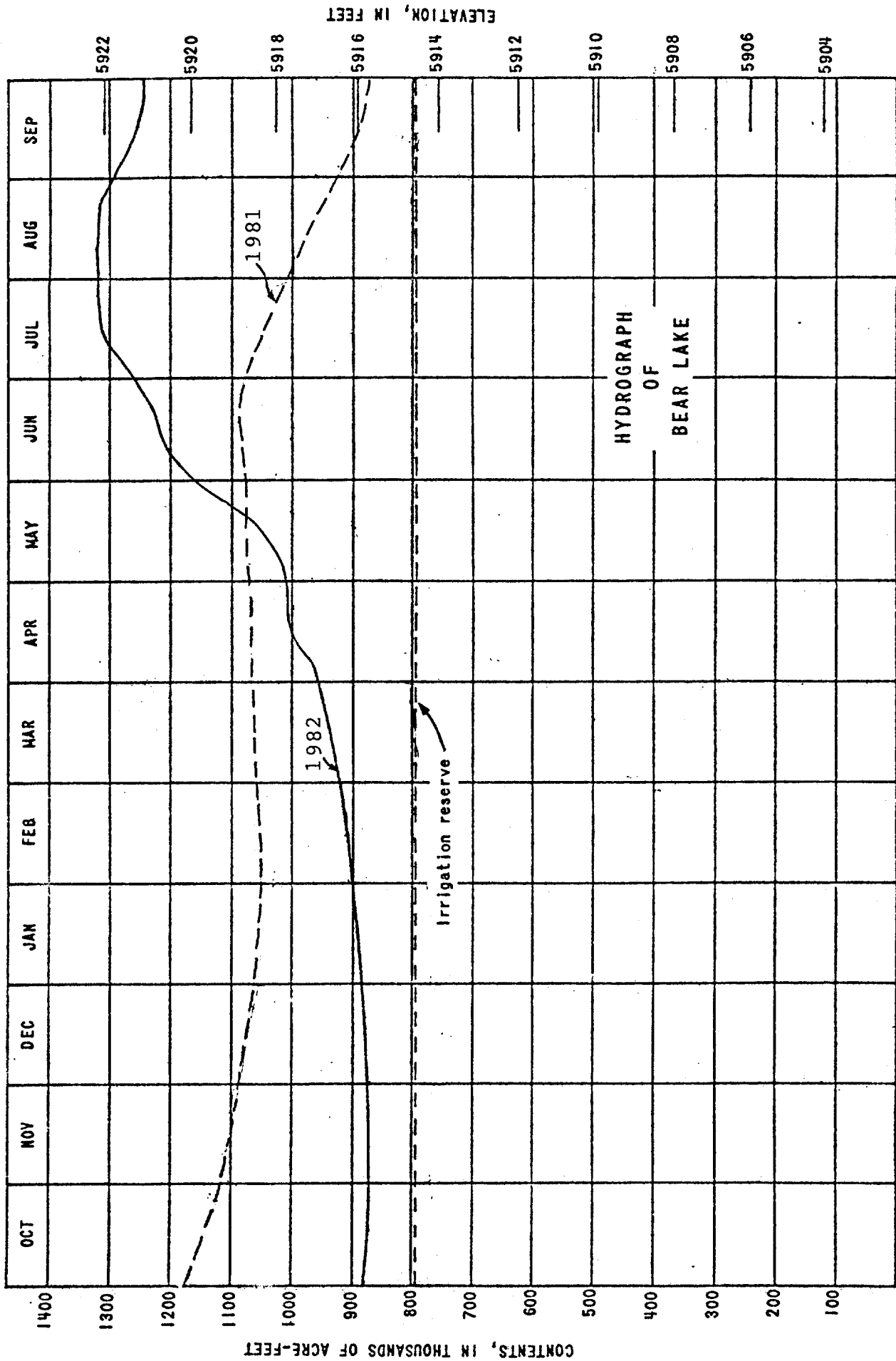
The 1983 fiscal year budget also was approved in the April meeting. The format subsequently was changed with respect to the engineer's services, as suggested by the Secretary-Treasurer,^④ and a footnote added for the auditor's benefit with reference to the contractual service for \$45,120 for consumptive-use studies as approved in the April meeting. A copy of this budget, as changed, also was attached to the minutes.

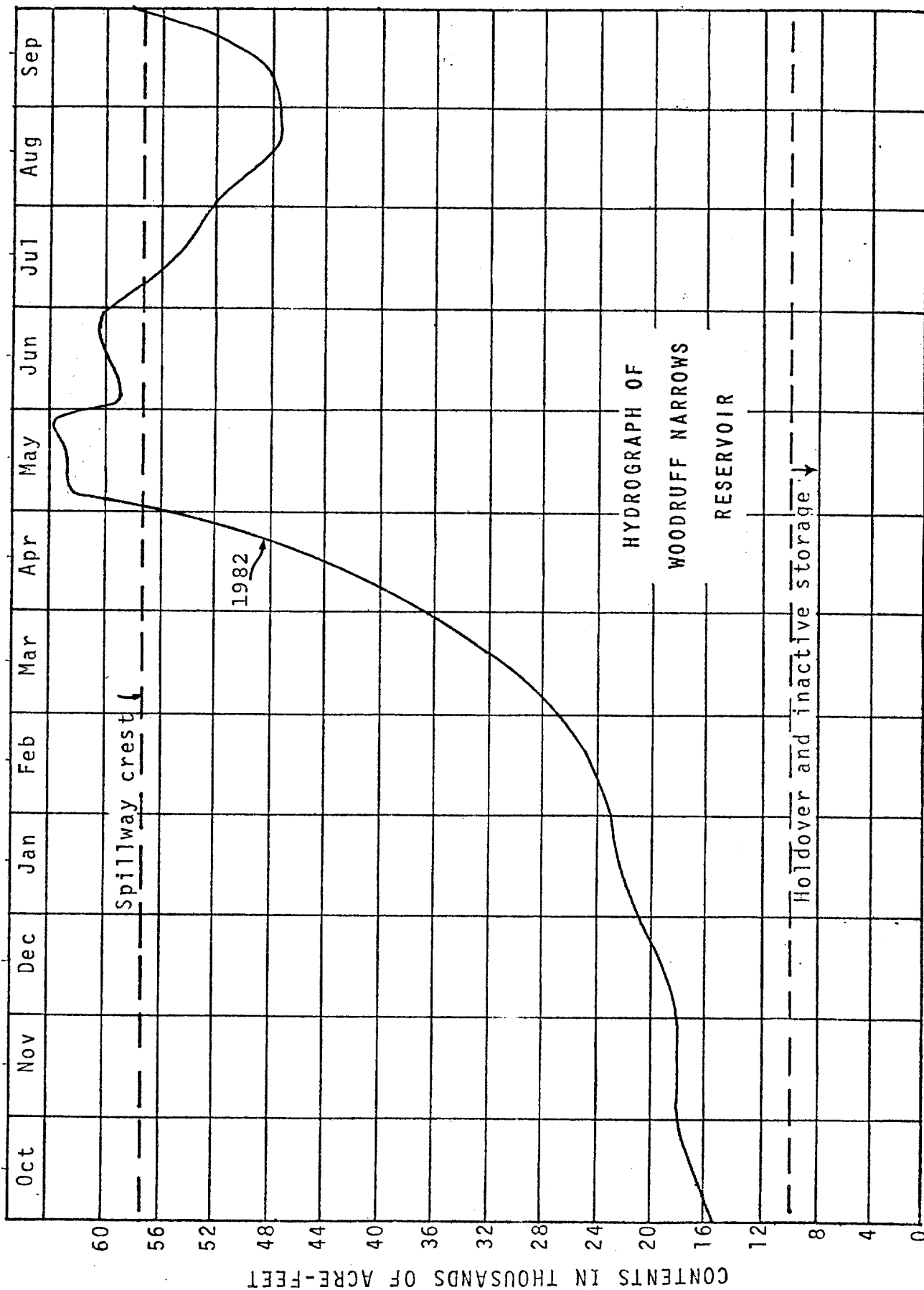
Stream-Gaging Program

The 32 gaging stations in operation in the 1982 water year have been continued into 1983 in accordance with the approved 1983 budget. Perhaps Mr. Arnow could bring us up to date as to whether the 1983 USGS offering is firm. If so, I assume the Cooperative Agreement will be forthcoming.^⑤

Applications for Appropriation

A summary of applications submitted for the past 6-month period is shown on pages 6-11. The large hydroelectric filing (page 6) is on Bear River about a mile below the Alexander (Soda) power plant. Also shown are irrigation and power reservoirs in Utah^⑥ (Pages 7,8). Wyoming filings associated with the oil industry continue to be rather extensive^⑦ (pages 9-11).





Presented to Commission: 11-22-82

Applic. Number	Date of Filing	Name	Source	Use	Location		Amount (cfs)	Act'n
STATE OF IDAHO (Excludes Ordinary Domestic and Stockwater)								
11-7284	3/22/82	Ruth Jenson	Ground Water	Irrig.	S31T11R44	B.L.	3.00	Pend.
11-7286	6/01/82	B.L. Joint Venture	Ground Water	R.V. Park	S10T16R43	B.L.	0.13	App.
11-7287	6/01/82	Alfred Hirschi	Ground Water	Irrig.	S14T13R44	B.L.	0.20	App.
11-7288	6/01/82	Vernon Bingham	Ground Water	Irrig.	S13T12R42	B.L.	0.82	App.
11-7291	6/21/82	LDS Church	Ground Water	Irrig.	S22T12R46	B.L.	0.06	App.
11-7292	7/01/82	Emerald Beach Ass.	Ground Water	Irrig.	S12T12R44	B.L.	0.08	App.
11-7293	7/13/82	S. Christensen	Ground Water	Irrig.	S32T9R42	Carib.	0.20	App.
11-7294	9/08/82	Donald Wassmuth	Sinks	Irrig.	S5T10R42	Carib.	0.20	Pend.
13-7359	3/15/82	Roland Hull	Springs Tr Cub	Fish Prp	S7T15R41	Fr	2.00	Pend.
13-7363	5/05/82	Geo. C. Kimball	Spr. Tr. Bear	Power	S17T10R40	Carib.	10.00	App.
13-7365	7/09/82	Jos. Smith	Ground Water	Irrig.	S19T12R41		0.20	App.
13-7366	7/08/82	Dean Gibson	Maple Tr Cub	Power	S14T16R40	Fr.	1.00	Pend.
13-7367	9/23/82	Fern Bennett	Ground Water	Irrig.	S9T16R39	Fr.	0.03	Pend.
13-7368	9/29/82	Duane Bitton	Bear R.	Power	S19T9R41	Carib.	1500.00	Pend.
15-7083	7/12/82	Lloyd Hubbard	Ground Water	Irrig.	S28T14R36	Oneida	0.40	App.
15-7085	9/20/82	Ralph Jones	Ground Water	Irrig.	S31T14R36	Oneida	1.12	Pend.
Total Surface Water (Idaho)			Approved *10.00 cfs	Pending *1503.20 cfs	Total 1513.20 cfs	(*1511.00 cfs, pow		
Total Ground Water (Idaho)			2.82 cfs	3.40 cfs	6.22 cfs			
Changes in Status, Past Six Months (Previously Reported)								
21.53 cfs (incl. 19.50 Ground Water) Approved to licensed								
120 ac-ft (Sheep Cr.) Approved to licensed								
27.45 cfs (incl. 22.87 Ground Water) Pending to Approved								
4,049 ac-ft, Pending to Approved.								

APPLICATIONS TO APPROPRIATE WATER
BEAR RIVER DRAINAGE

STATE OF UTAH

Presented to Commission: November , 1982

AREA CODE	DATE OF FILING	NAME	SOURCE	USE	LOCATION	AMOUNT (CFS)	ACTION
			STATE OF UTAH				
21-1463	07/07/82	Upper Bear R. & Mill Ck Water Users Assoc.	Mill Creek	Irrigation	Sec29T2NR11E Summ	1200 A/F	Pend
21-1471	08/11/82	DeWayne Barker	Yellow Creek	Irri/Stock	Sec32,T5NR8E Summ	150 A/F	Pend
23-3644	04/16/82	U.S. Dept. Int., BLM.	UGW-Well	Stock/Incid.			
23-3645	05/13/82	William M. Nielson	Hatch Spr Str	Wldlf Water	Sec10T10NR6E Rich	0.111	Pend
			Unnamed Spr	Irrigation	Sec23T11NR6E Rich	0.5	Pend
23-3646	05/28/82	Reid S. Stewart	UGW-Well	D/S/I	Sec6T13NR5E Rich	0.5	Pend
23-3650	07/15/82	Woodruff Ck Irr.Co.	Woodruff Ck	Irrigation	Sec31T9NR7E Rich	5400 A/F	Pend
23-3651	06/30/82	Louis Stuart & Sons	UGW-Well	D/S/I	Sec33T10NR7E Rich	4.0	Pend
23-3654	08/31/82	Lawrence R. Brown	UGW-Well	Drill Explor	Sec17T8NR8E Rich	0.445	Pend
23-3656	10/20/82	Mark L. Kunz/Blaine L. Kunz	Swan Ck Spr	Power	Sec6T14NR5E Rich	50	Pend
25-8374	05/07/82	Terry L. Thurston	UGW-Well	D/S/Inc.	Sec16T12NR1E Cache	0.1	Appr
25-8379	05/18/82	Brad Noble	UGW-Well	Irr/Stock	Sec24,T14NR1E Cache	0.1	Pend
25-8380	05/18/82	C. Bruce Hurron and Marsden Balls	UGW-Drains	Irr/Stock	Sec10T12NR1E Cache	0.75	Pend
25-8383	05/21/82	Hyrum City	Blacksmith Fk Creek	Power	Sec8T10NR2E Cache	500	Pend
25-8384	05/28/82	Larry Parker	UGW-Well	D/S/I/Dairy	Sec24T10NR1W Cache	0.5	Pend
25-8385	06/08/82	Cache Valley Dairy As'n	Cache V. Dairy Waste Lagoon	Irrigation	Sec24T13NR1W Cache	2.0	Pend
25-8386	06/08/82	John Allen & Reta June Condos	UGW-Well	D/S/I	Sec6T11NR1W Cache	0.1	Pend
25-8389	06/10/82	Max J. Rasmussen	Bear R./Cutler Resv.	Irrigation	Sec27T13NR1W Cache	2.0	Pend
25-8390	06/16/82	Archit. Design West	UGW-Wells-4	D/Irr/Ind.	Sec21T12NR1E Cache	0.5	Pend
25-8391	05/21/82	Enos W. Nielson	UGW-Well	D/S/I	Sec20T13NR1E Cache	0.1	Pend
25-8396	07/26/82	Heber T. Hardman	Gitten-Maple Bench-SprSt	Stock/Irr	Sec9T11NR1W Cache	3.0	Pend
25-8397	07/26/82	Max J. Rasmussen	Cutler Resv.	Irrigation	Sec27T13NR1W Cache	3.0	Pend
25-8400	08/06/82	Samuel W. Hilton	UGW-Well	D/S/I	Sec10T12NR1W Cache	0.25	Pend

APPLICATIONS TO APPROPRIATE WATER
BEAR RIVER DRAINAGE

STATE OF UTAH

Presented to Commission: November , 1982

AREA CODE	DATE OF FILING	NAME	SOURCE	USE	LOCATION	AMOUNT (CFS)	ACTION
			STATE OF UTAH				
25-8437	08/10/82	Don E. Mitton	UGW-Well	D/S/I/Inci	Sec13T10NR1W	Cache 0.5	Pend
25-8440	08/16/82	Lawrence O. Cannon	UGW-Sump	Irrigation	Sec34T12NR1E	Cache 0.1	Pend
25-8441	08/18-82	Robert/Marilyn W. Einzinger	UGW-Drain	Irr/Geo.Ext.	Sec5T11NR1E	Cache 0.1	Pend
25-8446	09/02/82	LaMar Ashby	UGW-Well	Irrigation	Sec7T11NR1E	Cache 0.25	Pend
25-8448	09/20/82	Kyle Hancey	UGW-Well	D/Irr.	Sec23T11NR1E	Cache 0.1	Pend
25-8451	09/24/82	Frank P. Olsen	UGW-Well	D/S/Dairy	Sec33T10NR1E	Cache 0.1	Pend
25-8453	09/25/82	City of Logan	Logan River	Power	Sec36T12NR1E	Cache 1000	Pend
25-8454	09/24/82	City of Logan	Logan River	Power	Sec34T12NR1E	Cache 74.5	Pend
25-8457	10/26/82	Edwin Gossner	UGW-Wells	Irr/Indus.	Sec29T12NR1E	Cache 2.0	Pend
25-8458	10/26/82	Logan City Corp.	Bear River	Power	Sec30T13NR1E	Cache 100,000 A/F	Pend
29-2790	05/07/82	Tremonton City Corp.	Tre.Gar.Drain	Irrigation	Sec10T11NR3W	Box E 0.2	Appr.
29-2791	05/10/82	Tremonton Utah So. Stake	Unnamed Spr	Irr/Recrea	Sec7T11NR2W	Box E 0.1	Appr.
29-2792	05/10/82	Mark B. Christensen	Reeder Overf	Irr/S/Trapp	Sec18T9NR2W	Box E 3.0	Pend
29-2793	05/24/82	Tremonton City Corp	Unnamed Spr	Municipal	Sec31T12NR2W	Box E 2.0	Pend
29-2795	05/25/82	P.D. Inc.	Unnamed Sprs	Irrigation	Sec30T9NR1W	Box E 0.4	Pend
29-2797	05/28/82	Marilyn C. Walker	UGW-Drains	Irrigation	Sec35T9NR2W	Box E 0.5	Pend
29-2798	06/2/82	Lawrence W. Lloyd/ David L. Lloyd	Field Drain	Irr/Stock	Sec36T12NR3W	Box E 0.5	Pend
29-2800	06/08/82	James T. Patterson	Unnamed Dev. Spring	D/S/I	Sec4T11NR2W	Box E 0.10	Pend
29-2801	06/15/82	David Scott	UGW-Well	D/Irr.	Sec6T12NR2W	Box E 0.10	Pend
29-2803	06/21/82	Darrell Nielsen	N. Cook Can Spring	D/S/Irr.	Sec25T8NR2W	Box E 0.1	Pend
29-2804	06/22/82	Frank Neil Jenson	Field Drain/ Shall. Well	Irrigation	Sec7T10NR2W	Box E 0.5	Pend
29-2805	05/23/82	LeWayne Walker	Overflow	Irr/Stock	Sec4T10NR2W	Box E 1.0	Pend
29-2806	07/06/82	I.F.A/C/o Grant Adams	UGW-Well	Industrial	Sec26T12NR3W	Box E 0.1	Pend
29-2810	10/05/82	Glen Mason	UGW-Well	Irrigation	Sec22T14NR3W	Box E 2.0	Pend
Total Surface Water (Utah)			0.3 cfs	1,644.9 cfs	1,645.2 cfs		
Total Ground Water (Utah)			0.1 cfs	10.906 "	11.006 cfs		
Total Storage Water (Utah)			0	106,750 ac-ft	(Includes 6,750 ac-ft for irrig.)		

Presented to Commission: 11-22-92

Applic. Number	Date of Filing	Name	Source	Use	Location	Amount (cfs)	Act'n
STATE OF WYOMING (Excludes Domestic and Stockwater)							
24 4/285	9-8-82	Donley Linford	Wahsatch C.	Irr.	S26T15R121 Uinta	0.155	Pend.
24 5/291	9-21-82	Jerry Chadwick	Wahsatch C.	Irr.	S25T15R121 Uinta	0.061	Pend.
* 24 5/144	9-28-82	Pittsburg Coal	Tr. Twin C.	Ind.	S19T21R116 Linc.	5.15 af	Pend.
* 24 6/150	10-5-82	Pittsburg Coal	Tr. Twin C.	Ind.	S18T21R116 Linc.	2.46 af	App.
23 1/254	1-24-80	Pittsburg Coal	Tr. Twin C.	Ind.	S4T20R117 Linc.	9.85 af	App.
24 6/239	4-29-82	Evanston City	Tr. Bear R.	Flood C.	S28T15R120 Uinta	1.26 af	App.
24 1/240	4-29-82	Evanston City	Tr. Bear R.	Flood C.	S28T15R120 Uinta	1.49 af	App.
24 2/240	4-29-82	Evanston City	Tr. Bear R.	Flood C.	S28T15R120 Uinta	0.73 af	App.
24 5/239	4-28-82	Chevron	Tr. Salt C.	Ind.	S6T18NR119 Uinta	6.73 af	App.
23 4/120	12-11-78	Brent Bergen	Wahsatch C.	Irr.	S26T15R121 Uinta	0.17	App.
23 6/120	12-11-78	John Stevens	Wahsatch C.	Irr.	S26T15R121 Uinta	0.25	App.
* 24 3/202	2/12/82	Mobil Oil	Rock C.	Ind.	S4T21R118 Linc.	0.50	App.
* 24 6/240	4-29-82	Gulf Oil	Tr. Salt C.	Ind.	S31T18R119 Uinta	0.56	App.
* 24 3/266	7-15-82	Wy. Hiway	Twin C.	Ind.	S12T21R120 Linc.	0.22	App.
* 24 2/268	7-22-82	Chevron	Twin C.	Ind.	S7T20R117 Linc.	0.17	App.
* 24 3/298	9-29-82	Wy. Hiway	Thomas Fk.	Ind.	S24T29R119 Linc.	1.00	App.
* 24 1/304	10-19-82	Seal Consult	Yellow C.	Ind.	S36T15R121 Uinta	0.44	App.
24 5/305	10-22-82	Amoco	Bear R.	Ind.	S21T15R120 Uinta	0.30	App.
UW 58513	3-12-81	Edwin Fearn	Ground water	Subd.	S18T16R120 Uinta	0.167	App.
UW 58514	3-12-81	Edwin Fearn	Ground Water	Subd.	S18T16R120 Uinta	0.167	App.
* UW 58515	7-30-81	Amoco	Ground Water	Ind.	S3T18R120 Uinta	0.334	App.
* UW 58677	7-27-81	Amoco	Ground Water	Ind.	S21T16R120 Uinta	0.334	App.
* UW 58678	8-10-81	Chevron	Ground Water	Ind.	S8T17R119 Uinta	0.073	App.
* UW 58684	9-28-81	Amoco	Ground Water	Ind.	S1T13R121 Uinta	0.334	App.
* UW 60348	4-12-82	Cities Service	Ground Water	Ind.	S6T17R120 Uinta	0.167	App.
UW 60690	3-16-82	Air Products	Ground Water	Ind.	S5T15R119 Uinta	0.134	App.
UW 60692	5-7-82	R.L. Frailey	Ground Water	Misc.	S31T16R120 Uinta	0.056	App.

Presented to Commission 11-22-92

Applic. Number	Date of Filing	Name	Source	Use	Location		Amount (cfs)	Act'n
WYOMING Continued								
UW 60720	5-22-82	Alfred Thoman	Ground Water	Tr. Ct.	S2T21R119	Linc.	0.145	App.
UW 61024	5-20-82	Chevron	Ground Water	Misc.	S36T16R120	Uinta	0.045	App.
UW 61285	6-14-82	Amoco	Ground Water	Ind.	S31T18R119	Uinta	0.334	App.
UW 61457	7-6-82	Chevron	Ground Water	Ind.	S17T20R118	Linc.	0.051	App.
UW 61464	5-17-82	Prod. Oper.	Ground Water	Tr. Ct.	S18T16R120	Uinta	0.011	App.
UW 61526	7-14-82	Amoco	Ground Water	Ind.	S9T15R119	Uinta	0.334	App.
UW 61596	4-2-82	Chevron	Ground Water	Ind.	S6T15R119	Uinta	0.033	App.
UW 61598	5-17-82	Amoco	Ground Water	Ind.	S9T18R119	Uinta	0.334	App.
UW 61694	7-23-82	Lear Pet.	Ground Water	Ind.	S15T15R119	Uinta	0.167	App.
UW 61964	8-9-82	Chevron	Ground Water	Ind.	S20T16R120	Uinta	0.056	App.
UW 62065	7-19-82	Amoco	Ground Water	Ind.	S23T16R121	Uinta	0.334	App.
UW 62066	8-16-82	Amoco	Ground Water	Ind.	S25T13R121	Uinta	0.334	App.
UW 62067	8-18-82	Evanston Airport	Ground Water	Airport	S14T15R121	Uinta	0.100	App.
UW 62078	8-16-82	Amoco	Ground Water	Ind.	S25T13R121	Uinta	0.334	App.
UW 62083	8-13-82	Amoco	Ground Water	Ind.	S35T13R121	Uinta	0.067	App.
UW 62084	8-13-82	Amoco	Ground Water	Ind.	S35T13R121	Uinta	0.067	App.
15-8-322	5-8-81	Richard Sims	Ground Water	Tr. Ct.	S31T17R120	Uinta	0.223	Pend.
15-9-322	5-8-81	Richard Sims	Ground Water	Tr. Ct.	S30T17R120	Uinta	0.22	Pend.
16-1-216	4-5-82	Richard Sims	Ground Water	Tr. Ct.	S32T17R120	Uinta	0.379	Pend.
16-3-220	4-12-82	J. W. Bowns	Ground Water	Subd.	S12T16R121	Uinta	0.056	Pend.
16-5-224	4-16-82	South and Jones	Ground Water	Ind.	S12T16R121	Uinta	0.187	Pend.
16-6-224	4-16-82	South and Jones	Ground Water	Ind.	S12T16R121	Uinta	0.490	Pend.
16-5-235	4-26-82	Teel Const.	Ground Water	Ind.	S31T16R120	Linc.	0.057	Pend.
16-4-249	5-6-82	Evanston C.	Ground Water	Munic.	S34T15R120	Uinta	1.11	Pend.
16-4-274	5-25-82	Richard Sims	Ground Water	Office	S31T17R120	Uinta	0.056	Pend.
16-12-280	6-2-82	Fred Chambers	Ground Water	Irrig	S15T21R117	Linc.	0.445	Pend.
16-6-287	6-10-82	Amoco	Ground Water	Ind.	S15T14R120	Uinta	0.334	Pend.

Presented to Commission: 11-22-92

Applic. Number	Date of Filing	Name	Source	Use	Location		Amount (cfs)	Act'n
WYOMING Continued								
16-5-303	6-22-82	Seale and Lindley	Ground Water	Tr. Pk.	S6T14R120	Uinta	0.78	Pend
16-7-328	7-26-82	Evanston City	Ground Water	Munic.	S17T15R120	Uinta	8.91	Pend
16-8-342	8-11-82	Richard Sims	Ground Water	Tr. Pk.	S25T17R121	Uinta	0.223	Pend
16-8-345	8-13-82	Sunset Transp.	Ground Water	Ind.	S24T15R121	Uinta	0.056	Pend
16-9-347	8-18-82	State Hosp.	Ground Water	Misc.	S26T15R120	Uinta	0.045	Pend
16-2-386	10-8-82	Tilley Inv.	Ground Water	Misc.	S31T16R120	Uinta	0.056	Pend
16-6-395	10-19-82	Evanston City	Ground Water	Misc.	S23T15R120	Uinta	0.056	Pend
16-11-397	10-22-82	Amoco	Ground Water	Ind.	S19T15R114	Uinta	0.334	Pend
16-3-400	11-1-82	Amoco	Ground Water	Ind.	S35T13R121	Uinta	0.334	Pend
Temporary Permits								
			<u>Approved</u>	<u>Pending</u>	<u>Total</u>			
Total Surface Water (Wyoming)			3.61 cfs	0.216 cfs	3.826 cfs			
Total Ground Water (Wyoming)			4.512 cfs	14.351	18.863 cfs			
Total Storage (Wyoming)			37.67 ac-ft		37.67 ac-ft.			
In addition, 2.89 cfs surface water, and 2.13 cfs ground water, previously reported, were cancelled.								

ANNUAL MEETING - APRIL 29, 1982

Review of Minutes

The Annual Meeting convened at 1:30 p.m. in the Wildlife Conference Room, Salt Lake City. All commissioners and officers were present. Minutes of the December 1981 meeting were summarized and approved.

The Chairman reported that the State Engineers' Committee had met earlier to discuss the University of Utah project, now completed. Dan Lawrence gave his report as Secretary-Treasurer. He moved and the motion was passed, that we amend the 1982 budget to cover the \$10,000 contract with the University, to include \$1,950 for printing the Biennial Report that was budgeted in 1981 but billed in 1982, and to increase the Treasurer's bond and audit by \$105 to cover actual charges. A reserve balance of about \$72,000 will be on hand after paying for budgeted obligations in the 1982 fiscal year. The amended 1982 budget was circulated with the April minutes.

The Engineer's report showed a seasonal water supply forecast of about 23 percent above normal with full reservoirs, including Bear Lake, expected. An estimated budget for 1983 was included and subsequently approved. The engineer also recommended that the Logan mailing address and Commission phone calls be changed to his home. *Comment 35 f erg 2268*

Sim Weston was elected vice-chairman of the Commission for the 1982-83 year with Dan Lawrence re-elected Secretary-Treasurer.

Dee Hansen, reporting for the State Engineer's Committee, discussed the University study, now completed, on acreage determination as of January 1, 1976. Imagery quality and some excessive verification differences with SCS measurements prompted the recommendation that the states review carefully results of the study before a decision is made to accept this as a base acreage for January 1, 1976.

Dee also discussed a proposal by Utah State University, in conjunction with the Universities of Idaho and Wyoming, to conduct a basin-wide consumptive use study over a 5-year period to be used as a basis for depletion determination under the Amended Compact. After discussion, a motion was approved to enter into the first year contract for the Commission share of \$45,120 to be paid from the \$72,000 cash reserve on hand. The study would start July 1, 1982.

Mr. Skeen, at the request of the Commission, presented amendments to the Bylaws that would eliminate the Assistant Secretary as an officer of the Commission and would transfer specified duties to the Secretary. The suggested amendments were approved, and the meeting adjourned at 4:00 p.m.

REPORT OF CHAIRMAN

November 22, 1982

In the April Meeting, as you recall, the Commission approved entering into a first-year contract of a proposed 5-year study toward arriving at a method or methods of estimating the duty of water. This method or methods would then be used as a basis for calculating water depletions that are allocated in the amended compact. The study was to be conducted by Utah State University in conjunction with the Universities of Idaho and Wyoming and was to begin July 1, 1982. The first-year agreement as approved by the Commission was limited to Commission participation to the extent of \$45,120 based on an estimate prepared by Dr. Robert Hill, who was to spearhead the study.

The study got underway as planned, but a few problems came up in negotiating a contract. We lacked understanding as to whether the contract was with each university or as an alternative with Utah State University who would subcontract with the other two. The first contract presented to us was with USU while the other two universities were preparing similar contracts. An overlooked item of overhead was included over and above the \$45,120. Each of the states, as represented by two State Engineers and Dan Lawrence objected to the Commission paying overhead where financing was entirely from State funds paid to another State agency. Also, we had no authority as officers of the Commission to exceed the approved amount of \$45,120. Finally, a new contract was negotiated with Utah State University, who will subcontract with the other two universities. Total Commission share is \$45,120 for the first year with subsequent annual contracts to be prepared each year depending on availability of funds.

Dr. Hill has delivered the final contract to us today for signatures of the Chairman and Secretary. Bob also will give us a report and update on the study which has been underway since July 1st. We regret that a lack of communication has resulted in some confusion for all parties concerned, and two or three different contracts have been circulating hither and yon, but the important thing is that the study began on time and is progressing pretty much according to plan.

BEAR RIVER COMMISSION
1636 WEST NORTH TEMPLE
ROOM 310
SALT LAKE CITY, UTAH 84116

March 29, 1983

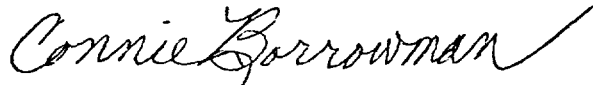
To Whom it May Concern:

I am enclosing, for your use and information, a copy of the Verbatim Minutes for the Regular Meeting of the Bear River Commission which was held Monday, November 22, 1982, in Salt Lake City.

Please note that several assignments were made in the meeting.

It is anticipated that the Bear River Commission will next meet on Monday, April 18. An official Notice, as to time and place, will be mailed approximately 10 days prior to the meeting.

Sincerely,

A handwritten signature in cursive script that reads "Connie Borrowman". The signature is written in dark ink and has a long, sweeping horizontal stroke at the end.

Connie Borrowman
Secretary to the Commission

Enclosure

/cb