

STATEMENT MADE BY E. O. LARSON AT MEETING OF BEAR RIVER COMPACT
STATE CAPITOL BUILDING, SALT LAKE CITY, UTAH
OCTOBER 22, 1946

Serving as a Government representative with this Compact Commission, I will be glad to do all I can to aid in the solution of water problems on the Bear River and the formulation of a compact to cover the allocation of water now being used, and to make possible the construction of those potential projects found to be feasible and desirable.

While I do not have anything definite to offer at this time, I believe a few comments might be helpful.

The Tri-State Committee consists of the State Engineers of Utah and Wyoming and the Idaho State Commissioner of Reclamation. Under a cooperative agreement with the Geological Survey, the Bureau of Reclamation has been gaining a considerable amount of factual data consisting principally of measurements of stream flow and canal diversions. Airplane photographs and numerous maps of irrigated lands on the above system have been furnished by the Bureau of Reclamation as a part of this project planning work. The extent of water rights in the three states is pretty well known. The Dietrich Decree adjudicates all rights in Idaho and the statutory adjudication includes all the Wyoming water rights. The Kimball Decree covers the larger rights in Cache and Box Elder Counties in Utah and statutory adjudication suits are pending in Rich and Summit Counties in Utah. I understand that virtually all of the water users' claims in these latter counties have been filed and checked by the Utah State Engineer. It is understood that the State Engineers for Utah and Wyoming and the State Commissioner of Reclamation in Idaho have completed tabulations of irrigated acreages and have checked the irrigated land areas shown on the maps. They are in agreement except for some minor differences in each state which are yet to be reconciled. All of this information is of course a very good start in the negotiation of a compact.

In my opinion, one of the matters of chief importance is the making of a careful study for determining the fundamental basis for the division of the waters of the Bear River. One idea, for example, may work out best for the division of the appropriated water and an entire different idea may be more satisfactory for the division of the surplus water. Another matter is that the interest of the United States should be carefully examined and analyzed in connection with state interests, especially with reference to the unappropriated water. The various Federal agencies, including the Forest Service, Fish and Wild Life Service, Indian Service, Bureau of Land Management, Federal Power Commission and others should be notified to submit a memorandum specifically setting out any interests they may have in the Bear River.

There is a serious question as to whether the states should attempt to agree upon a division of the surplus water of Bear River before construction is undertaken of any or several of the projects outlined in the Bonneville Basin report. For example, it may be easier and better for all of the states

concerned to agree that the comprehensive development of the river may proceed without giving consideration to state lines. If this plan shall be followed the compact should contain provisions, among others, which would:

- (a) Permit appropriation of water in one state for use in another state.
- (b) Permit water users' organizations in one state to condemn land for reservoir and canal construction in another state.
- (c) Permit exchanges of water in one state for water in another state.
- (d) Provide for administration by an interstate committee.

The effect of a compact on future projects cannot be stressed too strongly and particularly with respect to how the question of state lines is to be handled. The large potential development in the vicinity of Preston extends over the state line into Utah. The Woodruff Narrows Project is in both Wyoming and Utah and downstream in the vicinity of Montpelier, a potential project is located in both Wyoming and Idaho.

Full development of the Bear River will require many complicated exchanges of water and power, which cannot be worked out this far in advance of authorization and construction. Any compact providing for a definite allocation of water to the states, either in acre feet or a percentage of flow, would, in my opinion, have to be changed regardless of the skill and foresight of its drafters. It is entirely probable that any compact allocating surplus water to the various states before authorization of the proposed irrigation projects may be an impediment rather than a help to the states and to the United States in making possible the maximum beneficial use of water. After the pattern of river development has taken shape a compact could be written definitely allocating surplus water on the basis of such development.

This question as to the kind of a compact to be written should be studied and discussed in an early meeting before any large amount of money is spent on a detailed analysis of the figures. A comprehensive analysis should at least be based on a tentative agreement as to the basis of the compact. This of course does not include the items of work proposed to be done by Mr. Iorns, the completion of which is necessary, regardless of the principles adopted for writing the compact.

OFFICE MEMORANDUM
(E. O. Larson)

Subject: Meeting of Bear River Compact Commission held October 22, 1946.

The meeting of the Bear River Compact Commission convened at the State Capitol Building at 10:00 a.m., October 22, 1946, with the following representatives present

Ed. H. Watson, State Engineer of Utah, Chairman
L. C. Bishop, State Engineer of Wyoming
Mark R. Kulp, Idaho Commissioner of Reclamation
Leshar R. Wing, Regional Director, Federal Power
Commission
E. O. Larson, Representative for the United States
E. J. Skeen, Regional Counsel's Office, Bureau of
Reclamation
W. V. Iorns, Geological Survey
Milton T. Wilson, Geological Survey
E. J. Baird, Water Commissioner for Bear River
Frank Langley, Attorney General of Idaho
Fred M. Cooper, Pocatello, Idaho
W. J. Hunter, Montpelier, Idaho, representing Bear
River irrigation interests near Montpelier
Gerald Irvine, Attorney for Utah Power and Light
Company

Mr. Watson, chairman, explained that the meeting had been called to determine the necessary steps in the negotiation of a compact and explained that Mr. E. O. Larson has been appointed by the President to represent the United States in the negotiations and then stated that he was sure that the compact commissioners would like to hear from Mr. Larson first as to any comments or suggestions he might have with respect to compact work. Mr. Larson then gave his views and comments on compact investigations to date and plans on the outline. A copy of his statement is attached.

At the conclusion of Mr. Larson's statement the chairman then called for any comments anyone cared to make. The following principal statements were made:

MR. BISHOP stated that it was his belief that Mr. Wing's scheme of using the principle of "divertible flow" in the Yellowstone River Compact should be followed on the Bear River except that determinations should be made of diversions from the river system.

MR. BAIRD explained that this was his first attendance at a compact meeting and as the matter was new to him, he would not make any statement at this time.

Mr. KULP explained that the State Engineer had attended a large number of meetings over a long period of time and that nothing concrete had been accomplished. He stated that in his opinion the first thing that should be done is to perfect the organization of the Compact Commission and then adopt a definite program. He added that one of the first things on the program would be to determine the extent of existing rights and then reconcile any differences.

MR. IORNS stated that he had nothing to add to the conference.

MR. IRVINE stated he had nothing to add.

MR. BAIRD stated he concurred in Mr. Larson's remarks generally.

MR. HUNTER stated that nothing had been done as far as he could see and that he was still waiting for something to develop before "making his noise."

MR. WING briefly described the Yellowstone River Compact and pointed out the good features. He then stated that in his opinion the Bear River Compact Commissioners were fortunate in having such good data already available and praised the large amount and quality of work done by Mr. Iorns. What has been done so far is fine but he explained that the Commissioners should now adopt definite objectives, some of the items being:

1. Determine the extent of present water rights.
2. What are the potential irrigable areas in each state which might be put into classes a, b, c etc., as the proportion of better lands might vary in each state.
3. What is the remaining amount of surplus water and what are the transmountain diversion potentialities from the Colorado River to the Bear River.

MR. WING also stated that he agreed entirely with the program as outlined by Mr. Larson and then went on to explain that the Federal Power Commission has a definite interest in the Bear River, particularly with respect to the present and potential power developments. He again stressed the question "what are the fundamental things which are going to be agreed upon to form the basis for the compact." He then concluded his remarks by saying that the Commissioners had a good foundation of data upon which to proceed.

MR. BISHOP stated that he believed Mr. Wing's scheme for using priorities on the Yellowstone River should be used on the Bear River except that determinations should be made by diversions.

MR. KULP explained that the Committee had had many general meetings but nothing concrete had been accomplished. He thought the Commission should first perfect an organization and then adopt an agenda with the first work being to determine the extent of the priority rights and then reconcile the differences.

Mr. Watson asked Mr. Irvine if he had any comments.

MR. IRVINE explained that his Company was interested in the Bear River but had nothing to add at this time.

MR. HUNTER stated that he was waiting for something definite to develop before making any remarks.

MR. WATSON asked Mr. Kulp if he had anything to suggest as to how to proceed.

MR. KULP explained the office work that should be done by each State Engineer in getting ready for meetings and explained further that there was considerable other work which he couldn't do in his office which would have to be done in the field. He then made a motion that Mr. Larson be made Secretary.

MR. BISHOP explained the appointment of the Government representative and said that he would like to make a motion that Mr. Larson be made Chairman. The motion was seconded by Mr. Kulp and passed unanimously.

The Commission members then asked Mr. Iorns several questions. Iorns explained the work which he felt he should do now as follows:

1. Collection of water right data and reconcile with land classification maps.
2. Make study and computations of return flows and computations of all diversions from Bear River.
3. Work out and set up comparisons of water rights supplies and return flows by certain gaging stations--to be an indication of where the divertible supply exists.
4. Assume certain diversions and then work through on an assumed basis for the purpose of determining the plan that will work by diversions in both the high and low flow seasons.

MR. LARSON suggested that Mr. Iorns submit a memorandum of the work he feels should be done for further consideration of the Commission.

MR. HUNTER stated that there would be no trouble in arriving at the basis for duty of water such as 60 acres per second feet.

MR. KULP expressed his opinion that the time and place of future meetings should be determined. After a short discussion it was agreed that Mr. Thomas of the Bureau of Reclamation and Mr. Iorns would meet Mr. Watson and Mr. Bishop at the Evanston Hotel in Evanston on Thursday morning, October 24, 1946. It was agreed that Mr. Thomas and Mr. Iorns would have with them the original photographs and irrigable maps so that the areas above the Hilliard and Myers ranches could be viewed.

MR. KULP also suggested that a basic policy be adopted regarding the meetings which would be open to the public and where the meetings would be held. He suggested further that the water users should be kept informed about what is going on. He then moved that the Chairman call the next meeting when he thinks it necessary, consulting with Mr. Iorns and Mr. Wing. He suggested that the next meeting be held in Evanston as the last meeting was in Montpelier. It was agreed by all that the four meeting places should be Montpelier, Salt Lake City, Preston and Evanston and that inasmuch as the last meeting was held in Montpelier, and in view of the meeting in Salt Lake today, the next meeting might be in Preston. In any event, the Chairman would call the meeting at either Evanston or Preston when Mr. Iorns' additional data had been completed or as soon as there was enough business to warrant the next meeting.

BEAR RIVER COMPACT MEETING
Capitol Building,
Salt Lake City, Utah

October 22, 1946

(Minutes of this meeting were never completed and distributed. Apparently Mr. Mark R. Kulp acted as Secretary and mailed his notice of the meeting to Mr. C. E. Larson, Chairman, c/o Bureau of Reclamation, Salt Lake City, Utah, for completion and preparation of the minutes. Attached letter dated October 17, 1946, addressed to the State Engineers of Utah, Wyoming and Idaho was presented at the meeting. Attached letter dated October 29, 1946, to Mark R. Kulp, contains most of various phases of Compact work which the Logan Project Office could accomplish during the balance of the 1947 fiscal year and which was discussed at the meeting).

M.R.K.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Surface Water Division
P. O. Box 413
Logan, Utah
October 17, 1946

Ed. H. Watson, State Engineer, Salt Lake City, Utah

L. C. Bishop, State Engineer, Cheyenne, Wyoming

Mark R. Kulp, State Reclamation Engineer, Boise, Idaho

At the informal meeting on Bear River Tri-State Investigations at Jackson, Wyoming on September 11, 1946 I was requested by you to prepare an estimate of state contributions and federal cooperation necessary to continue the investigational program during the 1948-49 biennium.

In presenting to you this estimate it is advisable to briefly summarize the history, accomplishments and future work necessary to bring to completion this special investigation so vital in supplying the states with data necessary, upon which to base a compact for the equitable division of the waters of Bear River between the states of Idaho, Utah and Wyoming.

In the late 1930's it became apparent to the officials and water users of the three states and interested federal agencies that an interstate water compact between the three states, fully integrating and defining their interests and respective rights, would be necessary to settle all current and future litigation and provide for the distribution of benefits of future developments in the river basin. Such a compact is a prerequisite before a program of river development could be undertaken by the Bureau of Reclamation. River development would comprise additional reservoirs and other facilities to provide supplemental water for lands now having a deficient full season water supply and to provide water for new lands, the benefits of which would be of inestimable value to the peoples of the three states in their future prosperity and economic stability.

However, it was not until July 1943 that sufficient funds were made available and an organization effected for carrying forward a program to obtain adequate information on the water supplies, tributary flow within the basin, and amounts of water diverted for irrigation and other uses, as base data for a compact between the three states on the division of the waters of the river system and to assist the Bureau of Reclamation in determining irrigation and power potentialities in the Bear River Basin.

In general, the division of costs has been on the basis of the Bureau of Reclamation providing one-third, the Water Resources Branch of the Geological Survey one-third, and the remaining one-third divided equally between the three states. This arrangement has been in effect since July 1943 and is to last through June 1947.

In this period of time the following reports have been, or will be, published in which are recorded all data collected to date:

- Bear River Hydrometric Data Report - 1943:
Records of 57 gaging stations in the Basin for the 1942-43 water year and, in addition, as much as five years' records for some stations which had not been previously published in the Water Supply Papers of the Geological Survey.
- Bear River Hydrometric Data Report - 1944:
Records for the 1943-44 water year of 79 base and development gaging stations and 1944 irrigation season records of 443 other stream and canal gaging stations on the river and its tributaries in the basin.
- Bear River Hydrometric Data Report - 1945:
Data for the 1944-45 water year for the same group of stations as listed for the 1944 report.
- Bear River Hydrometric Data Report - 1946:
This report is projected to be completed prior to June 1947 and will include records for approximately 70 base and development gaging stations and 1946 irrigation season records of about 150 miscellaneous gaging stations on canals and tributaries on the main river and 10 gaging stations on tributaries below diversions.

All of these reports contain hydrometric summaries and studies showing return flows in the river system and other pertinent data.

It is your expressed desire that this organization be continued and records be collected in the basin on a program similar to that followed during the 1945-46 water year through the 1948-49 biennium, or until an agreeable compact is arrived at between the states and a compact organization effected. You have also requested that this office assist your compact commissioners in every way practicable in analyzing the data and other pertinent information needed in formulating a compact.

The Director of the Bureau of Reclamation has expressed his opinion that since the collection of stream-flow records at the various proposed reservoir sites is work of direct value to the states and that the states

will receive the benefits therefrom, the Bureau of Reclamation should not be required to pay the full cost thereof. He has proposed that the Bureau pay one-third of the cost of this class of stations, the states provide one-third and the Geological Survey match the states' third. The Director has further indicated his willingness to pay a part of the costs necessary for work performed by this organization on analysis for the compact.

The Chief Hydraulic Engineer of the Water Resources Branch, subject, of course, to the final approval of the Director of the Geological Survey, has expressed his willingness to cooperate fully with the states in the collection of stream-flow records, stream-flow data analysis, and to assist your compact commissioners in every way practicable in the formulation of a compact, on the basis that such work is of interstate character and of interest to the United States.

On the basis of these premises, the following listing of gaging stations and cost estimates are submitted:

Gaging Stations:

Estimated Cost: .

Bureau of Reclamation Development Stations:

- Chapman Canal at State Line near Evanston, Wyoming ✓
- Montpelier Creek at Irrigators Weir near Montpelier, Ida. ✓
- Bloomington Creek near Bloomington, Idaho ✓
- Paris Creek near Paris, Idaho ✓
- Paris Power Canal near Paris, Idaho. ✓
- Mill Creek near Liberty, Idaho ✓
- Mill Creek above West Fork near Liberty, Idaho ✓
- North Creek below Emigration Creek near Liberty, Idaho ✓
- Mink Creek near Mink Creek, Idaho ✓
- Twin Lakes Canal near Mink Creek, Idaho ✓
- Preston, Riverdale & Mink Creek Canal nr. Mink Creek, Ida. ✓
- Cub River near Preston, Idaho
- Cub River above Maple Creek near Franklin, Idaho
- Cub River-Worm Creek Canal near Preston, Idaho.
- Preston-Whitney Canal near Preston, Idaho
- Cub River Canal near Preston, Idaho
- Maple Creek near Franklin, Idaho
- High Creek near Richmond, Utah
- East Fork Little Bear River near Avon, Utah
- Blacksmith Fork at Hardware Ranch near Hyrum, Utah
- Clarkston Creek near Newton, Utah ✓

Total - 21 stations at \$400 per station -- -- \$ 8,400

Handwritten calculations:

4000
13
5200
176

13
14

out to

contains

no Report
filed with
the Engineer

up to and the...

Tri-State Compact Stations:

Bear River near Utah-Wyoming State Line
Bear River above Sulphur Creek near Evanston, Wyoming
Bear River near Evanston, Wyoming
Bear River near Woodruff, Utah
Bear River near Randolph, Utah
Bear River at Border, Wyoming
Bear River near Preston, Idaho
Bear River near Collinston, Utah
Mill Creek near Evanston, Wyoming
Sulphur Creek near Evanston, Wyoming
Twin Creek near Sage, Wyoming
Smith's Fork near Border, Wyoming
Smith's Fork at Cokeville, Wyoming
Thomas Fork near Raymond, Idaho
West Side Canal near Collinston, Utah.
Hammond Canal near Collinston, Utah

Total - 16 stations at \$ 400 per station -- -- \$ 6,400

Tri-State Compact Irrigation Season Records:

Mill Creek below diversions (Wyoming)
Yellow Creek below diversions
Woodruff Creek below diversions
Big Creek below diversions
Otter Creek below diversions
Montpelier Creek below diversions
Georgetown Creek below diversions
Stauffer Creek below diversions
Eight Mile Creek below diversions
Soda Creek below diversions

Canals - Irrigation Season:

85 canals diverting from main stem of Bear
River, upstream from Border, Wyoming
28 canals diverting from Smith's Fork and
small tributaries to Smith's Fork
5 miscellaneous small tributaries to
Smith's Fork
23 pump canals in Cache Valley, Utah
1 canal from lower Thomas Fork, Idaho

Total - 129 irrigation season stations at \$ 150 -- \$ 19,350

23 pump canals at \$ 25 -- -- 575

interesting Miscellaneous Gaging Stations in Bear River Basin:

Thomas Fork near Geneva, Idaho
 Salt Creek near Geneva, Idaho
 Georgetown Creek near Georgetown, Idaho
 Cottonwood Creek near Cleveland, Idaho
 Little Bear River near Paradise, Utah
 Hyrum Reservoir near Paradise, Utah
 Little Bear River near Hyrum, Utah
 Logan, Hyde Park and Smithfield Canal near Logan, Utah
 Logan River above State Dam near Logan, Utah
 Utah Power & Light Co. Tailrace near Logan, Utah
 Blacksmith Fork above Utah Power & Light Co. Dam near Hyrum, Utah.

Total - 11 stations at \$400 -- -- -- \$ 4,400

Utah Power & Light Co. Stations:

(Utah Power & Light Co. furnished records which are necessary for Tri-State Compact studies)

Bear River at Harer, Idaho
 Bear River below Stewart Dam near Montpelier, Idaho
 Rainbow Canal near Dingle, Idaho
 Outlet Canal at Dike near Paris, Idaho
 Bear Lake at Lifton near St. Charles, Idaho
 Bear River at Pescadero, Idaho
 Soda Reservoir at Alexander, Idaho
 Bear River at Alexander, Idaho
 Bear River below Grace Dam near Grace, Idaho
 Oneida Reservoir at Oneida, Idaho
 Bear River below U.P. & L. Co's. Tailrace at Oneida, Idaho
 Cutler Reservoir near Collinston, Utah

Total - 12 stations -- -- -- No charge

Idaho Canals - Border, Wyoming to Preston, Idaho:

Records of 26 canals, 6 spring creeks and Bear River at Soda Springs, Idaho furnished by Watermaster of District No. 5, Idaho

Total 33 stations -- -- -- No charge

Assembling river data and preparation of report -- \$ 1,000

Compact analysis and studies:

Engineer - 3/4 time	- -	\$ 4,000	
Ass't. engineer - 3/4 time	- -	3,000	
Stenographic help	- - -	1,000	
Travel expenses	- - - -	1,000	--
			<u>\$ 9,000</u>

Total Cost (Est.) \$ 49,125

Cost per Fiscal Year for each year in 1948-1949 Biennium:

Summary of Program:	Distribution of Costs:				
	B. of R.	Idaho	Wyoming	Utah	U.S.G.S.
Bur. of Rec. Devel. Stations: 21 stations at \$400 = \$8,400	2,800	933.33	933.33	933.33	2,800.00
Tri-State Compact Stations: 16 stations at \$400 = \$6,400		1,066.67	1,066.67	1,066.67	3,200.00
Tri-State Irrig. Season Stations: 129 stations at \$150 = \$19,350 23 pump canals at \$25 575 Total: \$19,925		3,320.83	3,320.83	3,320.83	9,962.50
Misc. stations not Tri-State: 11 stations at \$400 = \$4,400		733.33	733.33	733.33	2,200.00
Utah Power & Light Co.: 12 stations - no charge					
Water District No. 5, Idaho: 33 stations - no charge					
Assembling and preparing hydrometric report - \$1,000		166.67	166.67	166.67	500.00
Compact Analysis and Studies Estimate - \$9,000	3,000	1,000.00	1,000.00	1,000.00	3,000.00
	5,800	7,220.83	7,220.83	7,220.83	21,662.50

Summary of contributions required per fiscal year for 1948-1949 biennium:

Bureau of Reclamation - -	\$ 5,800.00	
Geological Survey - - -	21,662.50	
Idaho - - - - -	7,220.83	Total per fiscal year:
Utah - - - - -	7,220.83	
Wyoming - - - - -	7,220.83	\$ 49,125

W. V. Iorns
W. V. Iorns
Project Engineer

✓

Surface Water Division
P. O. Box 413
Logan, Utah
October 29, 1946

Mr. Mark R. Kilp
State Reclamation Engineer
Boise, Idaho.

At the meeting of the Tri-State Compact Committee in Salt Lake City on October 22, 1946, I discussed various work on a compact that the Tri-State Investigational Organization could accomplish during the balance of the current fiscal year. It was requested that I write this in the form of a Memorandum for inclusion in the minutes of the meeting:

1. Assist the states in completing and checking the compilation of water rights and plotting of irrigated acreages on land use maps.

2. Make up tables of priority dates and irrigated acreages, computing flows due each state on a common basis of one second-foot of flow for each 60 acres of land.

3. Study distribution of supplies in the river on the basis of the 1944 and 1945 records to determine flows at which the river would operate as a unit, and critical flows when it breaks down into separated sections, as governed by priority requirements and flows available.

4. Determine delivery formulas, as indicated by key gaging stations, to supply deliveries due each state or section on a priority basis.

5. Work out, so far as possible, the distribution plan and provisions in the compact, as related to the natural flow rights, for presentation to the compact commission at subsequent meetings.

CC--Mr. Watson
Mr. Bishop
Mr. Larson
Mr. Wing.

W. V. Iorns
Project Engineer