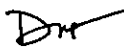


MEMORANDUM

TO: Shelley Keen

FROM: Dave Tuthill 

DATE: June 27, 2002

RE: Recommendations for Licensing of Water Right No. 63-03618

During March, 2002, our Western Regional Office distributed preliminary recommendations for water rights claimed in the SRBA within Part 1 of Basin 63, upstream from Lucky Peak. These recommendations included water right No. 63-03618, the Lucky Peak water right.

On April 5, 2002, the Bureau of Reclamation submitted recommendations for modification of the recommendations, in the form of a Notice of Error reply. In response to this notice, IDWR staff met with BOR staff on May 20, 2002, to discuss the proposed changes. As a result of the meeting we came to mutual understandings as codified by a marked-up Notice of Error reply, attached.

The purpose of this memorandum is to convey to you recommendations for modification to License Draft #3. I have hand-written proposed modifications to the draft. This memorandum provides background for the genesis of the recommended changes.

RECEIVED

APR 05 2002

WATER RESOURCES
WESTERN REGIONNOTICE OF ERROR
REPLY

Please type or print clearly, fill out this form completely and mail.

Return this reply form to IDWR by the deadline date printed below if you want IDWR to change your recommendation or you want to let IDWR know that you agree with its recommendation.

YOUR DEADLINE FOR RETURNING A NOTICE OF ERROR REPLY IS: April 5 2002

Water right number: 63-3618

UNITED STATES OF AMERICA ACTING THROUGH
REGIONAL DIRECTOR PN REGION CODE PN-3100
BUREAU OF RECLAMATION
1150 N CURTIS RD SUITE 100
BOISE ID 83706-1234
Telephone Number: (208) 378-5306

1. Describe the portion of the proposed recommendation with which you disagree (e.g. priority date, period of use, source):

A) Name and Address, B) Quantity, C) Purpose and Period of Use, D) Place of Use, E) Other provisions necessary for definition or administration of this water right

2. Describe the changes you wish to make in the proposed recommendation:

✓ A) Zip code should be 83706-1234.

B) Quantity Remark should be changed to "Total reservoir capacity is 293,050 acre feet when filled to elevation 3055.0 and measured at the upstream face of the dam." The Bureau of Reclamation may temporarily store water in the surcharge capacity, which is above elevation 3055.0 during flood events or emergency operations.

C) "Fish Habitat Storage" should be changed to "Streamflow Maintenance Storage" and "Fish Habitat from Storage" should be changed to "Streamflow Maintenance from Storage"

D) Place of Use should be changed to "The place of use is within the Boise Federal Reclamation Project within Ada, Canyon, ~~Payette, Cam~~ Counties, Idaho, and ~~Malheur County, Oregon (Big Bend Irrigation District)~~.
ADD BOISE & ELMORE COUNTY.Place of Use for streamflow maintenance is the Boise River from the Boise Diversion Dam to the mouth of the Boise River at the Snake River. ^{Lake Lowell Reservoir}E) Remark should be added "Arrowrock, Anderson, and Lucky Peak reservoirs are operated as one system in accordance with the Act of August 35, 1954, ch. 909, 68 Stat. 794." ^{other provisions}F) ~~The following remark should be added: "Purpose of use for Recreation Storage also includes incidental irrigation for the state parks in and around Lucky Peak Reservoir."~~

3. Give a brief explanation as to why you disagree with these portions:

A) Zip code is wrong

B) The quantity remark is necessary to administer all beneficial and operational uses of the reservoir including flood control.

C) Streamflow maintenance is the beneficial use applied for in the application for permit No. R1183 and accurately describes the beneficial use.

D) Federal project water from this reservoir is used on lands within the Arrowrock and Payette Divisions of the Boise Federal Reclamation Project, pursuant to the Act of August 35, 1954, ch. 909, 68 Stat. 794.

The place of use for the streamflow maintenance is necessary to protect the beneficial use of this water right.

E) Arrowrock, Anderson, and Lucky Peak are operated as one system as authorized by federal law, as recognized by contracts with spaceholders in the reservoirs, and as administered by the Idaho State Watermaster for Water District 63.

F) Remark reflects use for state parks.

I AGREE with this proposed recommendation: no changes need to be made.

DATE: 4-5-02

SIGNATURE: E. Gail McGarry

Please print your name:

E. Gail McGarry, Program Manager,
Water Rights & Acquisitions

IDWR Regional Office, 2735 Airport Way, Boise, ID 83703, (208) 334-2190

Draft #3

State of Idaho
Department of Water Resources
Water Right License

WATER RIGHT NO. 63-03618

Priority: April 12, 1963

Maximum Diversion Volume: 293,050.0 AF

It is hereby certified that US DEPT OF INTERIOR
BUREAU OF RECLAMATION
PN REGIONAL OFFICE
1150 N CURTIS RD SUITE 100
BOISE ID 83706-1234 has complied with the terms and
conditions of the permit, issued pursuant to Application for Permit dated ; and has submitted Proof of
Beneficial Use on September 22, 1986. An examination indicates that the works have a diversion
capacity of 0 cfs of water from:

SOURCE

BOISE RIVER

Tributary: SNAKE RIVER

and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>ANNUAL DIVERSION VOLUME</u>
IRRIGATION FROM STORAGE	03/01 to 11/15	111,950.0 AF
IRRIGATION STORAGE	01/01 to 12/31	111,950.0 AF
RECREATION STORAGE	01/01 to 12/31	28,800.0 AF
FISH HABITAT STORAGE	01/01 to 12/31	152,300.0 AF
FISH HABITAT FROM STORAGE	01/01 to 12/31	152,300.0 AF

→ STREAMFLOW MAINTENANCE

LOCATION OF POINT(S) OF DIVERSION:

BOISE RIVER L7 SE¼NE¼ Sec. 11, Twp 2N, Rge 3E, B.M. ADA County

CONDITIONS OF APPROVAL

1. The storage of water under this right is contingent upon continued certification by the Department of Water Resources under the dam safety provisions of the Idaho Code, authorizing storage.
2. Use of water under this water right will be regulated by the watermaster of State Water District No. 63.
3. Place of use for irrigation from storage is ~~324,300 acres~~ ^{Recommend deletion} within the lands of the Boise Federal Reclamation Project in Ada and Canyon Counties, including all lands for contracts under Federal Reclamation laws for space in Lucky Peak Reservoir.
4. Place of use for irrigation storage, fish habitat storage and recreation storage is Lucky Peak Reservoir.

, Boise and Elmore

State of Idaho
Department of Water Resources
Water Right License

WATER RIGHT NO. 63-03618

Streamflow maintenance

5. The place of use for ~~fish habitat~~ from storage ~~(streamflow maintenance)~~ under this right is within the channel of the Boise River from Lucky Peak downstream to the confluence with the Snake River.
6. *OK* The Bureau of Reclamation and Idaho Department of Fish and Game shall provide written instructions to the Department, for conveyance to the watermaster, regarding delivery of the Lucky Peak streamflow maintenance storage water.
7. Use of water under this right is subject to contracts administered by the right holder.
8. Water released from storage for irrigation purposes under this right shall be used as a supplemental supply for lands having separate primary water rights for irrigation.
9. Lucky Peak Reservoir has 13,950 acre feet of capacity for flood control purposes in addition to the volume of water authorized for storage under this right.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed and sealed this _____ day of _____, 2002.

KARL J. DREHER
Director

10. Total reservoir capacity is 293,050 acre feet when filled to elevation 3055.0 and measured at the upstream face of the dam.
11. Arrowrock, Anderson, Lucky Peak, Lake Lowell and Hubbard Reservoirs are operated as one system in accordance with the Act of August 35, 1954, ch. 909, 68 Stat. 794.

LUCKY PEAK DAM
and
RESERVOIR
1955



From Dam Safety File-

NOT REVERSED
JAN 10 2002

LUCKY PEAK DAM AND RESERVOIR IS A FLOOD CONTROL PROJECT OF THE CORPS OF ENGINEERS, AUTHORIZED BY PUBLIC LAW 526, 79TH CONGRESS, 2ND SESSION, AND APPROVED 24 JULY 1946. CONSTRUCTION WAS STARTED IN NOVEMBER 1949 AND THE PROJECT PLACED IN FULL OPERATION IN APRIL 1955.

THE LUCKY PEAK PROJECT IS A STORAGE RESERVOIR PRIMARILY FOR CONTROL OF DESTRUCTIVE FLOODS OCCURRING ALONG THE MAIN STEM OF THE BOISE RIVER FROM ABOVE BOISE TO THE MOUTH OF THE RIVER, AN APPROXIMATE DISTANCE OF 60 MILES. THE PROJECT, A KEY FLOOD CONTROL UNIT WITH 280,000 ACRE-FOOT STORAGE CAPACITY, IS THE THIRD MAJOR DAM IN THE BOISE RIVER VALLEY. ARROWROCK AND ANDERSON RANCH DAMS UPSTREAM WERE CONSTRUCTED BY THE BUREAU OF RECLAMATION, PRIMARILY TO PROVIDE STORAGE FOR IRRIGATION.

THE RIVER BASIN

IN ITS LOWER 60 MILES, THE BOISE RIVER VALLEY FLOOR VARIES IN WIDTH FROM 2 TO 6 MILES. THE STREAM IS A MEANDERING CHANNEL WITH SHIFTING GRAVEL BARS, LOW, EASILY ERODED BANKS, AND GENERALLY INADEQUATE CHANNEL CAPACITY. DAMAGING SNOW-MELT FLOODS, RANGING FROM 6500 CFS TO 50,000 CFS IN PEAK DISCHARGE, HAVE OCCURRED ALMOST ANNUALLY. THE POTENTIAL FLOOD PLAIN NOW PROTECTED BY THIS STORAGE PROJECT VARIES FROM ONE TO THREE MILES IN WIDTH AND CONTAINS SOME 56,000 ACRES OF HIGHLY PRODUCTIVE AGRICULTURAL LANDS AND 1800 ACRES OF URBAN AND SUBURBAN DEVELOPMENT.

BORDERING THE VALLEY FLOOR ON BOTH SIDES ARE WIDE IRRIGATED BENCH LANDS. BOISE RIVER WATER SUPPORTS PRODUCTION ON SOME 342,000 ACRES OF LAND AND THE BOISE RIVER VALLEY HAS A POPULATION OF ABOUT 100,000. THE CITY OF BOISE, CAPITAL OF THE STATE OF IDAHO, WITH A METROPOLITAN POPULATION OF ABOUT 35,000 PERSONS, LIES NEAR THE HEAD OF THE VALLEY ASTRIDE THE RIVER CHANNEL.

THE OPERATION PLAN

TO PERMIT MORE EFFECTIVE USE OF ALL STORAGE SPACE, THE OPERATION OF THE THREE DAMS IN THE BOISE RIVER BASIN IS COORDINATED TO PROVIDE AS MUCH AS 983,000 ACRE-FOET OF FLOOD CONTROL SPACE ON A FORECAST BASIS WITH ALL THREE RESERVOIRS REFILLED AT THE END OF THE FLOOD SEASON FOR IRRIGATION. THIS OPERATION PLAN WAS FORMULATED AND IS DIRECTED JOINTLY BY THE CORPS OF ENGINEERS, THE BUREAU OF RECLAMATION, THE BOISE RIVER BOARD OF CONTROL AND THE BOISE RIVER WATERMASTER.

LUCKY PEAK, IN COORDINATION WITH THE UPSTREAM DAMS, WILL CONTROL ALL FLOOD FLOWS (25,000 CFS MAX.) THAT HAVE OCCURRED SINCE 1900 TO WITHIN BANK FLOWS. MAJOR FLOODS, SIMILAR TO SEVERAL OCCURRING

PRIOR TO 1900 WILL BE CONTROLLED TO A MAJOR EXTENT ALTHOUGH SOME SERIOUS FLOODING OF AGRICULTURAL LANDS WILL STILL OCCUR IN THE VALLEY BELOW BOISE. SUSTAINED BANKFULL RELEASES FOR FLOOD CONTROL CREATE SEVERE BANK EROSION AND CHANNEL CHANGES THROUGH THE VALLEY BELOW BOISE AND CORRECTIVE BANK STABILIZATION MEASURES, TOGETHER WITH SOME LEVEES, WILL BE REQUIRED TO COMPLETE THE PROTECTION OF THE VALLEY FROM FLOOD ACTION.

THE DAM

LUCKY PEAK IS A ROLLED EARTHILL DAM WITH A MAXIMUM HEIGHT OF 340 FEET. IT IS ONE OF THE HIGHEST IN THE UNITED STATES, AND ITS OUTLET WORKS ARE UNIQUE IN SEVERAL FEATURES. A 1365 FOOT TUNNEL WITH INSIDE DIAMETER OF 23 FEET FORMS THE RESERVOIR OUTLET. DURING CONSTRUCTION OF THE DAM THIS TUNNEL WAS USED TO BYPASS THE RIVER. RELEASE OF RESERVOIR WATER IS CONTROLLED BY SLIDE GATES OPERATING UNDER 228 FEET MAXIMUM HEAD, BELIEVED TO BE THE HIGHEST OF RECORD FOR THIS TYPE GATE. THE PENSTOCK CONNECTING THE RESERVOIR OUTLET TUNNEL WITH THE MANIFOLD IS A 23-FOOT DIAMETER STEEL CONDUIT, 200 FEET IN LENGTH WITHOUT EXPANSION JOINTS, RESTING IN A CONTINUOUS CONCRETE SADDLE WITH A 3/4" FIBRE GLASS CUSHION UNDER THE LOWER HALF OF THE CONDUIT. INDIVIDUAL FLIP BUCKETS WITH STILLING BASIN BELOW CONTROL THE DISCHARGE WATERS FROM THE MANIFOLD GATES. THE ENERGY OF THE RELEASED WATER IS DISSIPATED BY BEING DEFLECTED HIGH INTO THE AIR AT THE CONCRETE FLIP BUCKETS FORMING A SPECTACULAR PLUME OF WATER WHICH FALLS HARMLESSLY INTO THE STREAM BED BELOW. THE VELOCITY OF THE WATER, AS IT LEAVES THE MANIFOLD GATES, IS BETWEEN 60 AND 80 MILES PER HOUR. THE MANIFOLD, OF WHICH THE FLIP BUCKETS ARE A PART, IS A STRUCTURE WITH CONCRETE WALLS ELEVEN FEET THICK AND WITH A DEPTH FROM DECK TO FOUNDATION EQUIVALENT TO A FOUR STORY BUILDING IN HEIGHT.

THE RESERVOIR

THE LUCKY PEAK RESERVOIR SHORELINE AFFORDS SEVERAL POINTS OF INTEREST FOR PICNICKING, HIKING AND SIGHTSEEING AND THE RESERVOIR IS WELL SUITED FOR BOATING, SWIMMING, AND FISHING. WATER-ASSOCIATED RECREATIONAL DIVERSIONS ARE LACKING IN THIS REGION AND LUCKY PEAK IS WITHIN CONVENIENT TRAVEL DISTANCE FOR MORE THAN 130,000 PEOPLE. DEVELOPMENT AND OPERATION OF THE SEVERAL RECREATIONAL FACILITIES AROUND THE PROJECT WILL BE PERFORMED BY STATE AND LOCAL INTERESTS. FOUR AREAS ARE PLANNED FOR CONCENTRATED PUBLIC USE, TWO IN THE VICINITY OF THE DAM, ONE ON MORES CREEK AND ONE ON THE RESERVOIR ARM

MICROFILMED

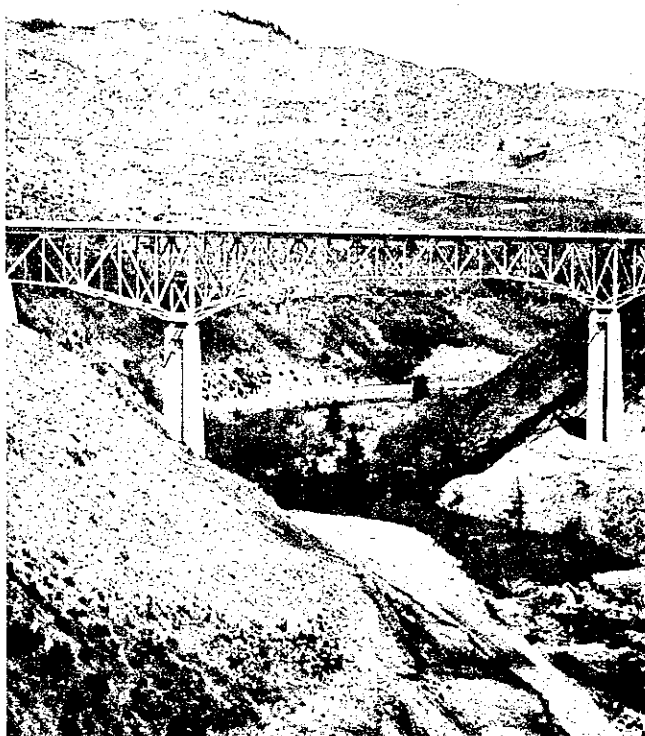
NOV 12 2002

From Dam Safety File -

MORES CREEK BRIDGE

IDAHO STATE HIGHWAY 21

COMPLETED MAY 1955



MORES CREEK BRIDGE WAS CONSTRUCTED IN THE RELOCATION OF STATE HIGHWAY 21 LEADING FROM BOISE TO IDAHO CITY. THE MORES CREEK BRIDGE WAS AWARDED AN HONORABLE MENTION BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION FOR BRIDGES BUILT IN 1953. THE BRIDGE IS 825 FEET, RIM TO RIM, ACROSS THE MORES CREEK CANYON AND CARRIES A CENTER SPAN OF 432 FEET.

PHOTO FILMED
NOV 12 1955

GENERAL DATA

GENERAL

Stream Boise River
River mile above mouth 64.5
Miles above Boise, Idaho 10.2
Drainage area, square miles 2,650
Cost (estimated) \$19,900,000

RESERVOIR

Normal pool elevation (m.s.l.) 3,060
Minimum pool elevation (m.s.l.) 2,905
Pool area at elevation 3,060 (acres) 2,850
Usable storage (acre-feet) 280,000
Highway relocation (miles) 21.3

DAM

Type Rolled earth and gravel fill
Crest length (feet) 2,340
Top elevation (m.s.l.) 3,078
Maximum height, foundation to Crest 340
Embankment (cubic yards) 5,900,000

SPILLWAY

Type Uncontrolled, with unlined channel
Length of Crest (feet) 600
Crest elevation (m.s.l.) 3,060
Spillway design discharge (c.f.s.) 93,300
Concrete (cubic yards) 12,400

OUTLET WORKS

Type Steel-lined pressure tunnel
Diameter of conduit (feet) 23
Length of conduit (feet) 1,365
Capacity of min. pool elevation (c.f.s.) 17,000
Capacity at norm. pool elevation (c.f.s.) 30,000
Type of energy dissipator flip bucket
Type of regulating gates slide gates
No. and size of regulating gates 6-5'3" x 10'0"

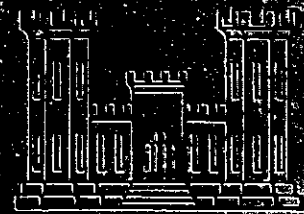
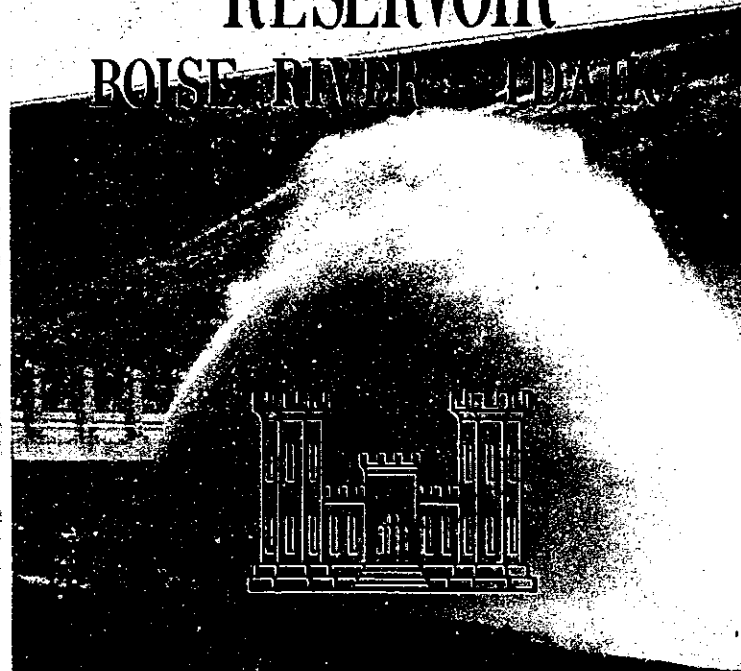
POWER

Power installations up to 40,000 KW is practicable and can be incorporated into the Lucky Peak Dam structure.

LUCKY PEAK

DAM and RESERVOIR

BOISE RIVER - IDAHO



CORPS OF ENGINEERS

U.S. ARMY

WALLA WALLA DISTRICT

1955

