BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF BOISE RIVER BASIN FEASIBILITY STUDY AND ANDERSON RANCH DAM RAISE

RESOLUTION TO NEGOTIATE CONTRACT WITH BUREAU OF RECLAMATION FOR THE COMPLETION OF THE ANDERSON RANCH DAM RAISE PROJECT

WHEREAS, the Idaho Water Resource Board (IWRB) partnered with the U.S. Bureau of Reclamation (Reclamation) to complete a feasibility study of new surface water storage options on the Boise River. Reclamation issued the Final Feasibility Study (Study) and a Draft Environmental Impact Statement (DEIS) in 2020. The Study recommended a 6-foot raise of the Anderson Ranch Dam (Project), resulting in approximately 29,000 acre-feet of new storage space of which ten percent is reserved for Federal purposes; and

WHEREAS, the Study was authorized under the Water Infrastructure Improvements for the Nation Act (WIIN Act) which provides study and potential construction authority and Federal funding proportionate to Federal benefits for projects deemed feasible as of January 2021. The WIIN Act further requires Reclamation’s Project partner(s) to pay the non-federal share of Project costs and requires the Project to be under construction by December 16, 2021 (includes commencement of design); and

WHEREAS, in December 2020, the Secretary of the Interior determined the Study’s recommended plan to be feasible in accordance with the WIIN Act, and Fiscal Year 2021 Omnibus Appropriations legislation (H.R. 133) secured $12.88 Million in WIIN Act funding as the federal cost share for completing the Study, environmental compliance, and construction; and

WHEREAS, based on the findings of the Study, the IWRB and water users requested additional Project design and cost information to address questions about final Project costs, water availability, and concerns about impacts to existing Anderson Ranch Dam Reservoir spaceholders. The IWRB stressed the importance of this information for determining the viability of the Project for local water users and new spaceholders; and

WHEREAS, to address IWRB questions and meet the WIIN Act deadline for construction, Reclamation has proposed a modified Project approach and schedule. The modified approach includes: 1) negotiation and execution of a cost-share agreement (agreement) between the IWRB and Reclamation detailing a commitment to initiate final design and complete Project construction, 2) begin design as an element of construction under the WIIN Act prior to December 16, 2021, and 3) delay completion of the Final Environmental Impact Statement (FEIS) and the Record of Decision in order to incorporate the additional Project information generated during the final design process; and

WHEREAS, Reclamation has verified that commencement of design will meet the requirement of the WIIN Act for construction to start prior to December 16, 2021. An agreement covering the cost share through completion of the Project with a partner that is capable of funding the entire Project is required before commencement of the design. Reclamation also clarified that the agreement may include early termination clauses to allow the parties to further consider the viability of the Project based upon additional information developed through the final design process; and

WHEREAS, through IWRB Resolution No. 19-2020, IWRB expressed its belief that contracting
directly with Reclamation for all the new non-Federal storage space resulting from a raise of Anderson Ranch Dam will be the most efficient and best method to ensure stakeholder and state support for reasonable financing for the Project. The IWRB’s preference is to contract with Reclamation and then negotiate directly with potential spaceholders for the new storage space and how it would be allocated and priced; and

WHEREAS, through IWRB Resolution No. 07-2021, IWRB allocated a portion of the funds in the Water Management Account provided by House Bill 285 and Senate Bill 1121 to meet non-Federal Project funding and authorization deadlines set forth in the WIIN Act and authorized spending those funds allocated for the Anderson Ranch Dam Raise for activities required to advance the Project to construction, including final design, contracting, and financial planning; and

WHEREAS, the IWRB’s Water Projects Storage Committee met on May 12, 2021 and recommended the full IWRB consider approving the modified Project approach and schedule as described above; and

NOW THEREFORE BE IT RESOLVED, IWRB approves Reclamation’s modified Project approach and schedule with the understanding that this approach satisfies terms of the WIIN Act.

NOW THEREFORE BE IT FURTHER RESOLVED, IWRB authorizes IWRB Chairman or designee to pursue negotiations with Reclamation regarding the design and construction of the Project. The IWRB, subject to details provided during negotiation, is willing to commit funds to cover the non-federal portion of the final design Project costs, and the IWRB is capable of covering Project costs through completion. Any agreement between the IWRB and Reclamation will include negotiated early-termination clauses acceptable to both parties.

NOW THEREFORE BE IT FURTHER RESOLVED, IWRB shall negotiate an agreement regarding the design and construction of the Project with Reclamation without having first obtained executed subcontracts or formal commitments with potential spaceholders, and with the expectation that future subcontracts may require repayment of all or a portion of the Project costs assumed by the IWRB as the non-federal partner, including feasibility level costs.

DATED this 21st day of May 2021.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST
JO ANN COLE-HANSEN, Secretary
WHEREAS, House Bill 547 passed and approved by the 2014 Legislature allocates $5 million annually through 2019 from the Cigarette Tax to the Idaho Water Resource Board’s (IWRB) Secondary Aquifer Planning, Management, and Implementation Fund (Secondary Aquifer Fund) for statewide aquifer stabilization; and

WHEREAS, House Bill 256 passed and approved by the 2019 Legislature allocated $5 million in ongoing General Fund dollars to the IWRB’s Secondary Aquifer Fund for statewide water sustainability and aquifer stabilization; and

WHEREAS, the IWRB has the opportunity to utilize up to $2.068 million provided by the Idaho National Laboratory for aquifer monitoring in the Eastern Snake Plain Aquifer and the Big Lost Basin Aquifer over a three-year period; and

WHEREAS, un-allocated funds already in the Secondary Aquifer Fund will be carried forward into the Fiscal Year 2021 budget; and

WHEREAS, many aquifers across Idaho are declining or have existing or potential conjunctive administration water use conflicts, including the Eastern Snake Plain Aquifer, Mountain Home Aquifer, Wood River Valley Aquifer, Big Lost Aquifer, Raft River Aquifer, Malad Valley Aquifer, Treasure Valley Aquifer, Rathdrum Prairie Aquifer, Palouse Basin Aquifer, Lewiston Plateau Aquifer, and others; and

WHEREAS, the State of Idaho relies on spring discharge from the Eastern Snake Plain Aquifer (ESPA) through the Thousand Springs to assist in meeting the minimum streamflow water rights at the Murphy Gage established under the Swan Falls Agreement; and

WHEREAS, prior to the initiation of significant aquifer stabilization efforts around 2014, the ESPA had been losing approximately 216,000 acre-feet annually from aquifer storage since the 1950’s resulting in declining ground water levels in the aquifer and declining spring flows from the aquifer; and

WHEREAS, during parts of 2013 and 2014 flows at the Murphy Gage approached the minimum flow, and in 2015 flows at the Murphy Gage went below minimum flows; and
WHEREAS, the ESPA experienced conjunctive administration water use conflicts over the past two decades that had the potential to significantly impact Idaho’s economy; and

WHEREAS, on June 30, 2015 members of the Idaho Ground Water Approprietors entered into an agreement with the Surface Water Coalition whereby the ground water users agreed to reduce their consumptive use from the ESPA by 240,000 acre-feet annually and take other actions, and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 138 supporting this agreement; and

WHEREAS, the State Water Plan includes a goal to accomplish managed recharge in the ESPA averaging 250,000 acre-feet annually; and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 136 directing the IWRB to develop the capacity to achieve 250,000 acre-feet of annual average managed recharge to the ESPA by December 31, 2024; and

WHEREAS, in 2018 the cities on the ESPA entered into an agreement with the Surface Water Coalition and the Idaho Ground Water Approprietors whereby the cities agreed to enhance the ESPA by an average of 7,650 acre-feet annually; and

WHEREAS, the 2019 Idaho Legislature passed and approved House Concurrent Resolution 10 supporting this agreement; and

WHEREAS, the ground water use reduction and managed recharge are together designed to stabilize and then recover the ESPA; and

WHEREAS, a 2016 study commissioned by the IWRB predicts the growing Treasure Valley population could result in an increase in Domestic, Commercial, Municipal, and Industrial water-demand ranging from 109,000 to 188,000 acre-feet per year by the year 2065; and

WHEREAS, the IWRB approved development of the Treasure Valley Ground Water Model in partnership with the U.S. Geological Survey to support future monitoring of ground water conditions, water use, and administration of ground water and surface water rights, and approved entering into an agreement with the U.S. Bureau of Reclamation to complete the Boise River Storage Feasibility Study to provide additional water supply through new surface water storage, and

WHEREAS, conjunctive administration water delivery calls have been made in the Big and Little Wood River Basins against junior-priority upstream ground water uses; and

WHEREAS, the Mountain Home aquifer is being over-drafted by about 30,000 acre-feet annually;

WHEREAS, the deep aquifer in the Palouse Basin has been declining for decades despite aggressive conservation measures; and
WHEREAS, the Department of Water Resources recently enacted Ground Water Management Areas in the Malad Valley Aquifer and the Lewiston Plateau Aquifer in response to declining ground water levels in those aquifers; and

WHEREAS, ground water levels in many aquifers are inadequate to sustain a supply of water for surface and ground water irrigation, hydropower, municipal, industrial, and other uses, the curtailment of which would cause severe economic harm to Idaho’s economy; and

WHEREAS, the 2016 Idaho Legislature passed and approved Senate Concurrent Resolution 137 which recognized that stabilizing and enhancing aquifer levels is in the public interest, and directs the IWRB to take actions in aquifers across the state to stabilize and enhance aquifer levels thereby maintaining water supply for consumptive and non-consumptive uses and minimizing harm to Idaho’s economy arising from water supply shortages; and

WHEREAS, on May 10, 2021 the IWRB Finance Committee recommended the approval of a Fiscal Year 2022 Budget for the use of available funds in the Secondary Aquifer Fund for statewide water sustainability and aquifer stabilization purposes; and

NOW THEREFORE BE IT RESOLVED that the IWRB adopts the Fiscal Year 2022 Budget for the continuously-appropriated Secondary Aquifer Planning, Management, and Implementation Fund as shown in Attachment A to this resolution.

BE IT FURTHER RESOLVED that the budget may be adjusted if necessary based on the actual amount of Cigarette Tax funds received, interest income received, amount received from the Idaho National laboratory, or the actual amount of carry-over from Fiscal Year 2021.

BE IT FURTHER RESOLVED that funds for budgeted ESPA managed recharge infrastructure shall be approved by the IWRB by resolution for each individual project in excess of $20,000, detailing the terms and conditions of approval, and must include conditions maintaining long-term access for recharge by the IWRB in any facilities owned by others.

BE IT FURTHER RESOLVED that expenditures for identified ESPA managed recharge operations, investigations, and engineering for further ESPA managed recharge capacity development may proceed with no further approvals; however, the IWRB shall be kept apprised of such expenditures.

BE IT FURTHER RESOLVED that the Idaho National Laboratory funded monitoring and investigation work in the Raft River Basin may proceed with no further approvals up to the total amount provided by the Idaho National Laboratory; however, the IWRB shall be kept apprised of such expenditures.

BE IT FURTHER RESOLVED that expenditures for monitoring in support of the Treasure Valley Ground Water Model, for statewide surface water and aquifer monitoring, professional assistance for securing federal funding, and administrative expenses may proceed with no further approvals; however, the IWRB shall be kept apprised of such expenditures.
BE IT FURTHER RESOLVED that expenditures for the Operations and Maintenance costs for the Cooperative Cloud Seeding Program, O&M shortages provided by the IWRB, the Cloud Seeding Modeling Project, and Capital Expenses may proceed with no further approvals; however, the IWRB shall be kept apprised of such expenditures. Further, it is the IWRB's stated goal that both the state and the water users financially participate with Idaho Power in the Cooperative Cloud Seeding Program.

BE IT FURTHER RESOLVED that all other expenditures from the Secondary Aquifer Fund shall require an additional approval by the IWRB by resolution.

BE IT FURTHER RESOLVED that the IWRB may modify this budget during Fiscal Year 2022 at a properly noticed meeting of the IWRB.

DATED this 21st day of May, 2021

Jeff Raybould, Chairman
Idaho Water Resource Board

ATTEST
Jo Ann Cole-Hansen, Secretary
**ATTACHMENT A - Fiscal Year 2022 Secondary Aquifer Planning, Management and Implementation Fund Budget**

**FY2022 DRAFT PROPOSED BUDGET FOR THE SECONDARY AQUIFER FUND**

### Carry-Over From FY21
- **$5,000,000**

### General Fund (SB 1190)
- **$5,000,000**

### HB547 funds
- Receipt of Cigarette Tax proceeds
- **$5,000,000**

### DOE-INL SEP Funds ($832K over 3 years)
- **$277,000**

### Estimated interest
- **$100,000**

**TOTAL**
- **$15,377,000**

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<td>Equipment, Supplies</td>
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<td>Recharge Monitoring</td>
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<td>Regional Monitoring</td>
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<td>ESPA Upper Valley sites</td>
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<td>Shoshone Irrigation District Recharge Projects</td>
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<td>Boise-Meridian Lake Recharge Wells</td>
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<td>Enterprise Project</td>
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<td>Reserve for Additional Infrastructure Projects</td>
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<td>Large Upper Valley Project</td>
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<td>Reserved for additional investigations and engineering</td>
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<td><strong>Operations &amp; Maintenance</strong></td>
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<td>SNOWIE Data Analysis (Year 1 of 3 - Total $600,000)</td>
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<td>RFC Administration</td>
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<td>Raft River Hydrologic Characterization</td>
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<td>Hydrologic Monitoring (DOB Funding) (Year 2 of 3 - Total $632K)</td>
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<td><strong>RAFT RIVER TOTAL</strong></td>
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<td>USGS/USGS Support</td>
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<td>Big Lost Stream gages (one year funding)</td>
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<td><strong>LEMMHI BASIN</strong></td>
<td>Support of Water Sustainability initiatives</td>
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<td>Administrative expenses (public information, staff training, Riverware Maintenance, etc)</td>
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<td>Professional Assistance for Federal Issues</td>
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<td>Nationwide surface water and aquifer monitoring</td>
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<td><strong>GRAND TOTAL</strong></td>
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**Reserve for Work in Other Priority Aquifers Total**
- **$1,417,000**

* Items that will require an additional Board resolution to authorize expenditure of funds
WHEREAS, Chinook and Sockeye salmon, steelhead, and bull trout habitat in the Upper Salmon River basin is limited by low flow conditions and high water temperatures; and

WHEREAS, it is in the interest of the State of Idaho to augment stream flows and provide habitat in the Upper Salmon River Basin to encourage recovery of ESA-listed Chinook and Sockeye salmon, steelhead, and bull trout fish; and

WHEREAS, the 2004 Snake River Water Rights ("Nez Perce") Agreement commits the state to providing incentives for improving fish habitat which includes improving or protecting flow conditions to augment stream flows; and

WHEREAS, Alturas Lake Creek, Valley Creek, and the Upper Salmon River have been identified as high priority streams for flow restoration efforts, to provide high quality habitat for anadromous Chinook and Sockeye salmon, steelhead and resident bull trout; and

WHEREAS, as provided for in the Nez Perce Agreement, the Idaho Water Resource Board (Board) established minimum streamflow Water Rights 71-10890 on Alturas Lake Creek, 71-10886 on Valley Creek, and 72-16668 on the Salmon River to be met through water right rentals or acquisitions under state law; and

WHEREAS, the United States Forest Service (USFS) owns Water Right Nos. 71-41, 71-42B, 71-43B, 71-49B, 71-50, 71-59, 71-61, 71-64B, 71-66, 71-68, 71-2004D, 71-2053A, 71-7002, 71-10277, 71-10278, 71-10728, 71-10766, 71-10772 and 71-10871 (Water Rights) on Alturas Lake Creek, Valley Creek, the Salmon River, and several Salmon River tributaries, and has leased the referenced rights into the Idaho Water Supply Bank; and

WHEREAS, the Board, pursuant to Section 42-1734, Idaho Code, has the authority to acquire, purchase, lease, or exchange land, rights, water rights, easements, franchises, and other property deemed necessary or proper for the construction, operation, and maintenance of water projects; and

WHEREAS, the USFS desires to protect the Water Rights in stream and offers them to the Board for rental and permanent delivery to Board minimum stream flow Water Right Nos. 71-10890, 71-10886, and 72-16668; and

WHEREAS, the permanent rental of the Water Rights is in the public interest, and is consistent with the State Water Plan and intent of the Nez Perce Agreement; and

WHEREAS, the total rate of the flow from the Water Rights is 124 cfs, resulting in a one-time rental fee of $14,941.20 to be paid to the Idaho Water Supply Bank; and
WHEREAS, funds are available in the Board’s Revolving Development Account to cover the cost of the one-time rental fee; and

NOW THEREFORE BE IT RESOLVED that the Board authorizes expenditure of a one-time rental fee in the amount of fourteen thousand, nine hundred forty-one dollars and twenty cents ($14,941.20) to the Idaho Water Supply Bank from the Board’s Revolving Development Account.

DATED this 21st day of May 2021.

Jeff Raybould, Chairman
Idaho Water Resource Board

ATTEST
Jo Ann Cole Hansen, Secretary
BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF POINT SPRINGS GRAZING ASSOCIATION FUNDING REQUEST

RESOLUTION TO AUTHORIZE FUNDING FOR NEW WELL

WHEREAS, Point Springs Grazing Association (Association) submitted a loan application to the Idaho Water Resource Board (IWRB) in the amount of $20,000.00 for the drilling of a new ground water well (Project); and

WHEREAS, the Association holds a grazing allotment on 13,000 acres of land owned by the Bureau of Land Management (BLM); and

WHEREAS, the Association rotates cattle between two areas of the allotment known as the Cold Springs area and the Meadow Creek area, to allow for periods of rest; and

WHEREAS, water in the Meadow Creek area is provided by an existing ground water well and 6 miles of pipeline supplying several watering stations; and

WHEREAS, water in the Cold Springs area is currently supplied by a spring which is no longer able to provide a sustainable supply. The Association will need to drill a new ground water well in this area to supply water and allow for continued rotation of its livestock; and

WHEREAS, the total estimated cost for the Project is $20,000; and

WHEREAS, the Association currently holds a loan with the IWRB, with a remaining balance of $17,335.53. The Association is requesting to roll the balance from its existing loan, into a new loan that includes funding for the proposed well project in the Cold Springs area; and

WHEREAS, the Association is requesting a new loan of $37,335.53; and

WHEREAS, the Association is a qualified applicant and the proposed Project qualifies for a loan from the IWRB’S Revolving Development Account; and

WHEREAS, the proposed Project is in the public interest and is in compliance with the State Water Plan; and

NOW THEREFORE BE IT RESOLVED that the IWRB approves a loan not to exceed $37,335.53, with $20,000.00 in new funds from the Revolving Development Account, and $17,335.53 to be rolled over from the Association's existing loan with the IWRB. The loan will be approved at 3.5% interest with a 10-year repayment term and provides authority to the Chairman of the Idaho Water Resource Board, or his designee, to enter into contracts with the Association on behalf of the IWRB.

NOW THEREFORE BE IT FURTHER RESOLVED that this resolution and the approval of the loan are subject to the following conditions:
1) The Association shall comply with all applicable rules and regulations that apply to the proposed Project.

2) Prior to the disbursement of any funds, the Association will provide acceptable security for the loan to the IWRB.

DATED this 21st day of May, 2021.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST
JO ANN COLE-HANSEN, Secretary
WHEREAS, section 42-1765, Idaho Code and subsections of IDAPA 37.02.030.40, Water Supply Bank Rule 40, authorizes the Idaho Water Resource Board to appoint local committees to facilitate the lease and rental of stored water within rental pools; and

WHEREAS, the Water District 01 Advisory Committee is the local committee appointed by the Idaho Water Resource Board to facilitate the lease and rental of stored water within the Upper Snake River Rental Pool; and

WHEREAS, the Water District 01 Advisory Committee has adopted amended procedures for the calendar year 2021, pursuant to which they intend to facilitate the lease and rental of rental pool stored water; and

WHEREAS, the Director of the Department of Water Resources has reviewed the local committee procedures and may recommend that the Idaho Water Resource Board approve the rental pool procedures; and

NOW, THEREFORE BE IT RESOLVED that the amended Upper Snake River Rental Pool procedures are approved by the Idaho Water Resource Board.

DATED this 21st day of May, 2021.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST
JO ANN COLE-HANSEN, Secretary
BEFORE THE IDAHO WATER RESOURCE BOARD

IN THE MATTER OF THE BEAR LAKE ECONOMIC STUDY

RESOLUTION

WHEREAS, the Bear River flows through the states of Idaho, Wyoming and Utah. It begins in the Unita Mountains of Utah, meanders back and forth between Utah and Wyoming before entering Idaho near Montpelier and flowing through Idaho and Utah before ending in the Great Salt Lake, and

WHEREAS, the entire flow of the Bear River is diverted at Stewart Dam, through Mud Lake and into Bear Lake, which is used as a storage reservoir. Water is subsequently released back to the Bear River channel for downstream uses, and

WHEREAS, the Bear River is subject to an interstate compact dated February 8, 1980 and codified by Idaho Code § 42-2402, and

WHEREAS, the Bear River Compact sets forth, among other items, allocation in the Lower Division between Idaho and Utah for future water development, including ground water, and

WHEREAS, under the Bear River Compact, Idaho has the first right to the remaining water in the Lower Division resulting in an annual depletion of not more than 125,000 acre-feet, and Utah has the second right to the remaining water in the Lower Division resulting in an annual depletion of not more than 225,000 acre-feet, and

WHEREAS, State Water Plan Policy 5A provides that “Water use and management in the Bear River Basin shall conform to the allocations agreed to in the Bear River Compact”, and

WHEREAS, State Water Plan Policy 5B provides that “The Idaho Water Resource Board supports enhancing water supplies, increasing water use efficiency, and implementing water supply bank mechanisms to help meet future water needs in the Bear River Basin”, and

WHEREAS, State Water Plan Policy 5B further provides that “the state should move forward with the development of Idaho’s depletion allocation as provided for in the Compact.”, and

WHEREAS, pursuant to the designation of the Bear River Ground Water Management Area, a Management Plan for the ground water management area was prepared by a committee of local stakeholders and adopted by the Director of the Department of Water Resources in 2003. Among other recommendations the Management Plan states “The advisory committee recommended preparation of a comprehensive state water plan for the Bear River Basin in Idaho.
A water plan could recommend feasibility studies for new storage facilities and other water supply enhancements. Additional storage could facilitate development of the first 125,000 acre feet of depletion allowed to Idaho under the Compact. New storage could be in surface reservoirs or underground as managed aquifer recharge.

WHEREAS, the Idaho Water Resource Board (IWRB) hold a minimum lake level water right from the bottom of Bear lake to elevation 5902 feet, and

WHEREAS, Pacificorp owns the facilities used to store water in Bear lake and operates the water storage reservoir portion of the lake between elevations 5902 feet and 5923.56 feet, and

WHEREAS, in 2004 Pacificorp entered into the Amended and Restated Bear Lake Settlement Agreement with various Idaho and Utah entities regarding irrigation water delivery, and

WHEREAS, Pacificorp entered in to the 1995 and 2000 Operation Agreements with Utah, Wyoming, and Idaho regarding operations of Bear Lake, and

WHEREAS, under normal conditions, Bear Lake operations by Pacificorp sets a March 31 lake level target elevation on 5918 feet, known as the PTE, which is set to maintain space in the lake for flood control during high runoff periods while meeting contract requirements for Bear Lake storage water; and

WHEREAS, there appears to be opportunity to utilize the space in Bear Lake between the elevations of 5918 and 5923.65 feet to store water that is otherwise released from the lake or bypassed past the lake to maintain the March 31 target elevation of 5918 feet, and

WHEREAS, in 2018 the IWRB, together with the State of Utah, filed a water right application to store additional water in Bear Lake for multiple purposes, and

WHEREAS, the IWRB together with the State of Utah and PacifiCorp have been working to model the effects of storing additional water in Bear Lake; and

WHEREAS, modeling results indicate that, in addition to water storage benefits for multiple purposes, storing additional water in Bear Lake may enhance the recreational and environmental benefits provided by Bear Lake, and

WHEREAS, Bear Lake interests have requested the IWRB’s participation in a proposed economic evaluation of environmental and recreational benefits provided by Bear Lake.

NOW THEREFORE BE IN RESOLVED that the IWRB authorized the expenditure or $5,000.00 from the Secondary Aquifer Planning Management and Implementation Fund for the
purpose of assisting with the Bear Lake Economic Proposal as attached to this resolution, and
provided authority to the Chair or his designee to enter into agreements on behalf of the IWRB
for the purpose of this resolution.

DATED this 21st day of May, 2021.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST
JO ANN COLE-HANSEN, Secretary
Executive Summary of CEI’s Proposal to Bear Lake Committee

Bear Lake is an economically important resource located in northeastern Utah and southeastern Idaho. Split almost equally between Idaho and Utah, Bear Lake is a summer destination for numerous vacationers providing for ample regional economic impacts and contributions to local residents and businesses that have been there for generations. Its turquoise-colored waters also attract residents from Salt Lake City and other nearby communities as place to own a second home or recreational housing, enhancing regional tax revenues and increasing the number of stakeholders that are concerned about the sustainability of Bear Lake.

Bear Lake is a water body of many uses that all depend on the quality and quantity of water passing through the lake. In addition to supporting many forms of water-based recreation like boating, jet skiing, fishing, and camping, the water from Bear Lake is used for irrigation of agriculture and ranching. The uses of Bear Lake water can be contentious as water used for one activity typically cannot be used for another, as is the case with lake recreation and irrigation. Ecologically, Bear Lake is unique and hosts a number of endemic species.

Communities adjacent to Bear Lake, including Garden City and Laketown in Utah and St. Charles in Idaho, are economically dependent on Bear Lake visitors and family vacationers. Summer vacationers flock to Bear Lake, especially for community gatherings like the Raspberry Days Festival. While winter is the slow season, snowmobiling and annual traditions like Winterfest and the Cisco Disco add warmth to the cold days. With families and visitors repeatedly coming back to Bear Lake, the adjacent gateway communities are dependent upon a healthy and full Bear Lake.

Conservation and smart policies are needed to keep clean and abundant water in Bear Lake and to sustain the regional economic contributions and benefits afforded by Bear Lake. A prerequisite for developing long-term, sustainable policies for Bear Lake is to fully understand the current economic and ecosystem benefits flowing from Bear Lake. However, there is currently little information, or monitoring baselines, in place. While anecdotal information on economic and ecological trends and changes to Bear Lake are helpful, collecting and synthesizing scientific data that measure the economic effects of Bear Lake will allow for objective data to inform future land use decisions. Primary economic data can also illustrate how changes in the quality and quantity of Bear Lake water can impact economic contributions and ecosystem services.

In order to measure the economic contributions of Bear Lake, the Conservation Economics Institute (CEI) is proposing a comprehensive economic study that directly responds to the RFP. We propose three primary research methods that, in concert, would provide the most comprehensive and influential information to be used by Bear Lake stakeholders and decision-makers. The most important research component is conducting a regional economic contribution analysis of visitor expenditures to understand the amount of regional jobs, income, and value-added sustained by Bear Lake visitation.
Separately, an assessment of second home ownership and amenity development will be conducted. Finally, natural capital and ecosystem service valuations will be conducted to more fully understand the competing uses of Bear Lake water and how changes to water quality and quantity may effect ecosystem service stocks and flows.

Detailed Response

I. Identification of the contractor and qualifications:

Name of firm and contact information

Conservation Economics Institute, PO Box 5454, Twin Falls, ID 83301, www.conservationecon.org, 208-869-1675, Evan Hjerpe, Executive Director (evan@conservationecon.org)

Description of the firm’s general background and capabilities

The Conservation Economics Institute (CEI) is a 501(c)3 nonprofit organization that provides independent research on economic means to simultaneously provide for biodiversity, ecological health, and community welfare. CEI’s mission is to apply economics to the sustainable management of our natural resources, the development of healthy communities, and the conservation of nature.

CEI is a network of expert environmental and ecological economists that come from academia, NGOs, and the private sector. Pulling from years of combined economics experience, we apply numerous statistical, market, and non-market methods to inform businesses, policy, and the public. Since 2014, CEI has consulted and collaborated with more than 30 universities, federal agencies, state and local governments, and conservation organizations. Our focus is on providing economic values for monitoring and policy development.

We have a wide array of economic methods and tools to illustrate the economic effects and consequences of various development types. Economic development is both a driver and consequence of environmental dynamics. As such, each policy solution is unique, calling for varied methods including:

- Market Valuation (economic impact analysis, net present valuation, contribution analysis, trend analysis);
- Non-Market Valuation and Mixed (replacement cost, hedonic pricing, contingent valuation, willingness-to-pay, travel cost);
- Total Valuation (econometrics and statistical analysis, cost/benefit analysis, return on investment, linear programming, net present valuation)

II. Experience information

Description of the specific related experience of staff on similar projects and how it relates to the proposed work
CEI’s cadre of Ph.D. economists have conducted numerous economic impact and contribution analyses related to tourism and outdoor recreation, amenity migration and development studies, and ecosystem service valuations. Most of our research ends up being published in peer-reviewed academic journals in order to enhance the legal and policy influence of our economic measurements. Our research is routinely cited in agency NEPA documents, books, and journals.

Principal investigator Dr. Evan Hjerpe and CEI have conducted many economic impact and contribution analyses of outdoor recreation, with a specific focus on water recreation. Dr. Hjerpe has two decades of experience including the first quantification of the economic impacts of boating in Grand Canyon National Park. With CEI, Dr. Hjerpe conducted an economic impact analysis of Boundary Waters Wilderness visitors, which is very similar to the requested Bear Lake analysis. Dr. Hjerpe is experienced at designing and implementing surveys of recreation visitors. All CEI Economists have abundant experience in conducting research on the values associated with nature and natural amenities.

Examples of similar studies

For water recreation, please see the economic impacts of boating in Grand Canyon National Park, economic impact analysis of Boundary Waters Wilderness visitors, and the subsequent published journal article in Ecological Economics. Other CEI economic contribution analyses include the economic values of Roadless areas and the economics of forest restoration in northern Arizona.

In terms of the other research topics included in our proposal, amenity development and ecosystem service valuation, CEI Economists are leading experts in these fields as well. We have recent econometric research on understanding the role of public lands in amenity migration in the rural West, a choice experiment on willingness to pay for conserving ecosystem services on the Tongass National Forest, a meta-analysis of global ecosystem conservation and their ecosystem services, and a total economic valuation of National Park Service lands and programs.

We have a number of other relevant studies as well. If you would like references to previous clients, please let us know.

III. Description of the proposed project team

The project will be led by principal investigator Dr. Evan Hjerpe. CEI Economists Dr. Michelle Haefele and Dr. Gwen Aldrich will provide assistance in many phases of the research. Additional assistance on research and methods will come from Dr. Anwar Hussain, while mapping services will be provided by our GIS analyst Leah Dunn. Dr. Hjerpe will coordinate with the stakeholder committee about the inclusion of one or two graduate students to help with data collection and regional interviews. CEI has previously hired interns and has collaborated with students on research projects.

Evan Hjerpe holds a Ph.D. in forest economics and management from Northern Arizona University, where he also was a visiting assistant professor. Evan is founder and Executive Director of the Conservation Economics Institute and is an Affiliated Expert for the Aldo Leopold Wilderness Research Institute. His expertise includes outdoor recreation impacts, conservation benefits, public lands management, amenity migration, and ecosystem services. He has consulted for private businesses, non-
profit organizations, federal agencies, and universities. Evan has conducted a number of economic impact analyses, meta-analyses, non-market valuations, and ecosystem service valuations. He has published in academic journals, magazines, and books.

Michelle Haefele has twenty years of research experience in environmental economics, working for the USDA Forest Service, The Wilderness Society and currently Colorado State University. Her research includes the economic value of public lands, the National Park Service, multi-country willingness to pay for migratory wildlife species habitat, the economic consequences of oil and gas development, and the value of ecosystem services. She has a Ph.D. in environmental and natural resource economics from Colorado State University, M.S. in environmental economics and policy from Duke University, and a B.S. in natural resource management from Colorado State.

Gwendolyn Aldrich holds a MS in Agricultural & Resource Economics from Oregon State University and a Ph.D. in Economics with an emphasis on natural resource & environmental economics from the University of New Mexico. She has 10 years of experience, most recently at the University of New Mexico’s Bureau of Business & Economic Research. Gwendolyn has conducted research on a broad array of environmental issues, including exhaustible resource extraction, resource valuation, regulation and natural resource management, urban development, and the control of invasive species.

Anwar Hussain works as Research Analyst for the State of Alaska, and serves as an Adjunct Faculty Forest Policy Center, School of Forestry & Wildlife Sciences, Auburn University. He earned his BA and MA Economics degrees from the University of Peshawar, Pakistan, and an MS Agricultural and Applied Economics as well as a Ph.D. in Forestry and Agricultural Economics from the University of Minnesota. His research interests include project appraisal, natural resource economics, regional economic analysis, applied econometrics and general equilibrium modeling.

Leah Dunn is a GIS analyst and landscape ecologist. She works with Boise State University and serves as Vice-President for the Idaho’s SW Chapter of the National Audubon Society. Leah has particular expertise in avian ecology and conservation and has consulted for various nonprofits, state, and federal agencies.

IV. Description of approach and methodology

Bear Lake is a natural amenity that attracts visitors and migrants, provides numerous recreational opportunities, and provides for ecosystem services. The ecological and economic services provided by Bear Lake spur abundant regional economic contributions, but the level and quality of these contributions have yet to be scientifically assessed. Understanding and documenting the regional economic contributions of Bear Lake can be very useful for the development of policies that can optimize the future of the Bear Lake Region.

With various types of economic effects generated by Bear Lake, including both market and non-market values, a multi-pronged economic valuation approach is required. We propose three valuation components that, when combined, will comprehensively illustrate the economic values generated by Bear Lake and can be used to project changes in values based on water levels and quality and will be most impactful for influencing future polices to ensure the sustainable production of Bear Lake benefits. The three components discussed below are: 1) a regional economic contribution/impact analysis; 2) a
calculation of amenity migration and development, along with second home ownership economic impacts (contributions not included in the Step 1 contribution analysis); and 3) a synthesis of the multiple values and tradeoffs associated with water flows and uses of Bear Lake, including ecosystem service and natural capital values. Deliverables will include a final report, executive summary, a description of economic methods, and numerous visual displays of information to be used for fact sheets and outreach.

1. We believe that the most important economic valuation methodology for estimating regional economic contributions of Bear Lake should be centered on estimating the market values, such as employment, income, and output, attributable to Bear Lake visitation and recreation. Gateway communities to Bear Lake include numerous businesses that provide goods and services to visitors that come for a weekend or for a week-long family vacation. These visitors bring outside money into Rich County and Bear Lake County.

Economic contribution analysis, and its closely related method economic impact analysis, is a formal economic method that utilizes collected regional expenditures to estimate regional jobs and taxes spurred by a specific activity such as Bear Lake visitation. Economic contribution analysis also uses a regional accounting matrix (known as input-output models) and impact analysis software, such as IMPLAN, to measure multiplier effects of visitor expenditures. That is, initial expenditures in Bear Lake communities generate indirect and induced effects as well, where the purchase of food, lodging, and fuel spur backward linkages of spending for materials and services required to provide the final service and regional spending of wages.

-How will this work element be accomplished?

To conduct economic contribution analysis, we will administer a survey of Bear Lake recreationists and visitors. The primary research steps for investigating the economic contributions of Bear Lake visitor expenditures include:

- Designing and pre-testing a survey to determine regional expenditures made in various sectors (food and beverage, outfitters/guides, lodging, gear rental, fuel, etc.);
- Providing Bear Lake visitors with the opportunity to participate in a mail-in or web-based survey (will offer incentive);
- Administering survey and collecting and entering data;
- Conducting data analysis (descriptive statistics);
- Processing regional expenditures through a multi-county IMPLAN impact analysis for the regional economy comprised of Rich County, Utah and Bear Lake County, Idaho and through a two-state economy of both Utah and Idaho;
- Estimating regional economic contributions by employment, output, income, and value-added;
- Estimating industry sector impacts and multiplier effects;
- Evaluating prominence of these activities among the overall regional economy and two-state economy;
• Comparing results to other forms of outdoor recreation;
• Placing Bear Lake economic contributions within the larger economic context; and
• Disseminating findings through final reports and follow-up outreach.

We will survey a random sample of summer 2021 visitors. We will work with local businesses, campground hosts, and others to have surveys distributed at multiple access points around and near Bear Lake. We will aim to have 1,000 Bear Lake visitors pick up surveys. We hope for a response rate of 40 percent yielding a subsample of 400 visitors. But to be safe, the minimum required sample size needed for statistical significance (approx. 90 percent) is around 100 respondents. Thus, we will have robust results with a response rate as little as ten percent. When possible, Dillman survey methods will be employed. Additionally, we will attempt to quantify and characterize the off-season and winter use and expenditures. All survey dissemination and returns will be conducted under COVID-19 safe protocols.

2. Some of the Bear Lake visitors enjoy recreating on and around the lake so much that they purchase recreational, or second homes, near the lake. This type of development is known as amenity development and leads to a high number of houses and cabins that are used as time-shares, short term rentals such as those available on Airbnb or Vrbo, and personal vacation residences. Amenity development can be a positive economic influence for rural areas, leading to regional increases in tax revenues, per capita income, and employment.

However, too much amenity development can also create equity and cultural issues as the cost of living, particularly housing prices, can rapidly rise and new residents often have conflicting wants and needs as compared to long-term residents. Balancing amenity development in rural regions with “smart growth” is paramount to maximizing economic benefits while minimizing cultural and equity issues. Measuring the current amount of amenity development in the Bear Lake region, along with understanding past trends, provides the initial information needed to construct smart amenity development policy.

-How will this work element be accomplished?

Assessing amenity development and a focus on resident and part-time resident economic contributions are not included in traditional economic contribution analyses (see previous work task) because their economic impacts are considered as recirculated wealth inside the region. So, we will conduct a separate analysis of amenity development.

To assess amenity development and potential of the Bear Lake region, we will collate descriptive statistics for the regional economies of Rich and Bear Lake counties. “Destination” metrics including visitation rates, in-migration rates, percent seasonal/recreational housing, and regional ranking of housing values will be collected and presented over time. Time trend analysis will be visually displayed in charts and graphs. Likewise, a collection of amenities including natural, social, and climatic amenities...
will be collected and compared to other regions in Idaho and Utah and the Inter-Mountain West. An assessment of amenity development indicators and trends will provide a monitoring baseline while illustrating amenities most important for marketing and branding of Bear Lake gateway communities.

3. Finally, a synthesis of the multiple values and tradeoffs associated with water flows and uses of Bear Lake will be conducted, including a valuation of primary ecosystem services and natural capital afforded by Bear Lake. Ecosystem services are the benefits that nature provides to humans. Natural treasures such as Bear Lake provide numerous high-quality ecosystem services both onsite and offsite that result in both marketized and non-market values. Documenting the evidenced-based non-monetary contributions of Bear Lake ecosystem services, along with some of the marketed ecosystem services, will provide valuable information when determining trade-offs among various Bear Lake water uses.

Ecosystem services are a result of how Bear Lake’s natural capital, or wealth, is utilized by society. Ecosystem services are typically categorized as provisioning, cultural, regulating, or supporting services. Provisioning services include the production of food, water, and materials for buildings, while cultural services include opportunities for outdoor exploration and existence and bequest values of just knowing that Bear Lake will continue to have ample water of high-quality. Regulating and supporting services are the biophysical processes that help regulate regional climate and provide the building blocks for biodiversity and natural goods and services. Most ecosystem services are undervalued due to a lack of full understanding of biophysical processes and their sustainability.

-How will this work element be accomplished?

We will quantify some of the most high-profile ecosystem services and will qualitatively present others. Bear Lake water is used as irrigation for agriculture crops and ranching. While a local market price per cubic foot of Bear Lake water (upstream and downstream) can and will be assessed, we need to also understand that the market value of Bear Lake water undervalues the true value of the water as an ecosystem service. That is, the nonmarket values of retaining water in the lake, as opposed to using it for another service, are opportunity costs that are not fully considered when utilizing a quasi-public good like Bear Lake. Additionally, pesticide, fertilizer, and other chemical treatments within the Bear Lake watershed can damage the quality of the water. This in turn, diminishes the other ecosystem services produced by Bear Lake, like fishing or swimming, but these trade-offs are often not considered in policy development.

We will employ benefit transfer methods for determining primary ecosystem service values. Benefit transfer methods are used to extrapolate primary data from similar natural sites to the Bear Lake region. We will conduct a review of the pertinent literature, that we are very familiar with, to identify previous primary studies and meta-analyses that may be applicable to Bear Lake ecosystem services. Primary ecosystem services that will be valued include the economic value of water quantity, water quality,
and willingness to pay for lake/water conservation, along with their associated services such as irrigation, recreation, aesthetics, and primary productivity (e.g., endemic species).

We will limit our ecosystem service valuations to the primary services in consultation with the committee. We do not feel that a full valuation of all ecosystem services using benefits transfer methods\(^2\) is a worthwhile endeavor for this project. That is, Bear Lake’s ecosystem services total immense value, but putting a monetary tab on this value is of little use in understanding marginal changes in services based on different water levels and water quality.

**V. Budget and Timeline**

The following line items detail the budgetary costs required for the proposed research. CEI Economists have a pay rate of $100/hour or $4,000/week.\(^3\)

Survey Costs:
- Survey design and pre-test (2 weeks @ $4,000/week) $8,000
- Data collection and management (2 weeks @ $4,000/week) $8,000
- Data entry for surveys (1 week @ $4,000/week) $4,000
  Sub-Total: $20,000

Research and Data Analysis:
- Literature review (1 week @ $4,000/week) $4,000
- Additional data collection from businesses and stakeholders (1 week @ $4,000/week) $4,000
- Descriptive statistics (1 week @ $4,000/week) $4,000
- IMPLAN analysis and interpretation (1 week @ $4,000/week) $4,000
- Amenity development assessment (2 weeks @ $4,000/week) $8,000
- Ecosystem service valuation (1.5 weeks @ $4,000/week) $6,000
- Drafting Final Report and Outreach materials (2 weeks @ $4,000/week) $8,000
- Reviews and revisions (.5 weeks @ $4,000/week) $2,000
  Sub-Total: $40,000

Materials:
- IMPLAN county level data (2 counties at $1500/county) $3,000
- IMPLAN state level data (2 states at $1500/state) $3,000
- Survey Monkey online (1 annual subscription) $300
- Miscellaneous survey materials, post office survey collection, etc. $500
  Sub-Total: $6,800

Travel:\(^4\)
- One trip by PI Dr. Evan Hjerpe (travel/driving @ $500; 3 nights lodging @ $125/night) $875
- On-site meetings, scoping/outreach, travel time, per diem (.75 weeks @ $4,000/week) $3,000

\(^2\) E.g., Costanza et al.’s 1997 estimate that the earth’s annual ecosystem services value is at least $33 trillion.

\(^3\) Our budget does not include labor costs associated with graduate student help or other stakeholder assistance with survey dissemination. We are hoping to get some assistance that may be funded from other sources and may have to allocate some of our budget costs to intern/student assistance.

\(^4\) On-site travel to the Bear Lake region would be beneficial in May 2021 and after project completion (November 2021 for presentation of results). To keep budget costs down, only one trip is included in the budget. The PI will work with the committee to determine optimal travel time.
Sub-Total: $3,875

Project Management:
- Direct project and coordinate with committee (1 week @ $4,000/week) $4,000
  Sub-Total: $4,000

Project Direct Costs: $74,675
CEI Indirect (@20% of Direct Costs) $14,935

Project Total Estimate: $89,610

Proposed Timeline:

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<td>Literature Review</td>
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<td>Development of Methods</td>
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<td>Survey Design and Pre-Test</td>
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<td>Amenity Development Assessment</td>
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<td>Ecosystem Service Valuation</td>
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<td>Review process and Final Report</td>
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$^{5}$CEI indirect costs cover business and administration costs necessary to provide our services including staff benefits, offices, access to literature, supplies, equipment, management, and administration. CEI’s indirect rate broadly captures most of these costs per project, though it is often an underestimate.
WHEREAS, the Idaho Water Resource Board ("IWRB") is the executive branch entity with statutory oversight and authority over 12 chapters of Administrative Rules in IDAPA 37, including: IDAPA 37.01.01 Rules of Procedure of the IDWR; IDAPA 37.02.01 Comprehensive State Water Plan Rules; IDAPA 27.02.03 Water Supply Bank Rules; IDAPA 37.02.04 Shoshone Bannock Tribal Water Supply Bank Rules; IDAPA 37.03.03 Rules and Minimum Standards for the Construction and Use of Injection Wells; IDAPA 37.03.04 Drilling for Geothermal Resources Rules; IDAPA 37.03.05 Mines Tailing Impoundment Structures Rules; IDAPA 37.03.06 Safety of Dams Rules; IDAPA 37.03.07 Stream Channel Alteration Rules; IDAPA 37.03.09 Well Construction Standards and Rules; and IDAPA 37.03.10 Well Driller Licensing Rules; and

WHEREAS, as stated in Idaho Code, § 67-5292, "every adopted rule shall automatically expire on July 1 of the following year unless the rule is extended by statute" and the extension of Idaho’s administrative rules by statute requires the Idaho Legislature to pass a bill every year reauthorizing Idaho's administrative rules for another year prior to adjourning the legislative session; and

WHEREAS, the 2021 Idaho House of Representatives ("House") recessed on May 12, 2021, without the Idaho Legislature reauthorizing the IWRB’s administrative non-fee rules, or the House establishing a date certain that it would reconvene; and

WHEREAS, the IWRB’s administrative non-fee rules will expire on July 1, 2021; and

WHEREAS, the IWRB has already taken action to ensure its administrative fee rules will remain in effect on July 1, 2021, by adopting them as temporary rules in its Resolution No. 06-2021 on March 2, 2021; and

WHEREAS, as a precautionary measure to ensure the continuity of administrative rules and ensure that existing rules remain in effect in Fiscal Year 2022, the Division of Financial Management acting on behalf of the Governor of Idaho has directed all agencies to adopt all non-fee rules as temporary rules; and

WHEREAS, pursuant to Idaho Code, § 67-5226, the Governor has found temporary adoption of the IWRB’s rules is appropriate to protect the public health, safety, and welfare of the citizens of Idaho and confer a benefit on its citizens; and

WHEREAS, the IWRB’s rules implement the duly enacted laws of the state of Idaho, provide citizens with the detailed rules and standards for complying with those laws, and assist in the orderly execution and enforcement of those laws; and
WHEREAS, the expiration of the IWRB’s rules without due consideration and processes would undermine the public health, safety, and welfare of the citizens of Idaho and deprive them of the benefit intended by these rules.

NOW, THEREFORE BE IT RESOLVED that the IWRB adopts and authorizes the notice and publication of the following non-fee rules as temporary rules to be effective July 1, 2021. This approval and adoption is conditional and will only become effective if the 2021 Idaho Legislature, consistent with Idaho Code, §§ 67-5291 and 67-5292, has not otherwise taken action to reauthorize and effectuate the existing non-fee rules by July 1, 2021.

- 37.02.01, Comprehensive State Water Plan Rules
- 37.02.04, Shoshone Bannock Tribal Water Supply Bank

DATED this 21st day of May, 2021.

JEFF RAYBOULD, Chairman
Idaho Water Resource Board

ATTEST
JO ANN COLE-HANSEN, Secretary
Idaho Water Resource Board