

AGENDA Idaho Water Resource Board

Joint Aquifer Stabilization & Planning Committee Meeting

No. 5-19 October 23, 2019 at 9:00 a.m. Water Center Conference Room 602 B, C & D 322 E. Front St. BOISE

- 1. Introductions and Attendance
- 2. ESPA CAMP Progress Report
 - a. Update on Schedule and ESPA CAMP Targets
 - b. Cloud Seeding
- 3. ESPA CAMP Stakeholder Comment
 - a. Spring Users
 - b. Environmental Interests
 - c. Idaho Association of Commerce and Industry
- 4. Background on Implementation Committee as Proposed in the CAMP
- 5. Progress Report Draft 1.0
- 6. Adjourn

Committee Members: Bert Stevenson (Chair), Al Barker, Jeff Raybould, Roger Chase and Vince Alberdi

Committee Members: Jeff Raybould (Chair), Bert Stevenson, Al Barker, Pete Van Der Meulen and Jo Ann Cole-Hansen

* Action Item: A vote regarding this item may be made this meeting. Identifying an item as an action item on the agenda does not require a vote to be taken on the item.

Americans with Disabilities

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Brad Little *Governor*

Roger W. Chase

Chairman Pocatello District 4

Jeff Raybould

Vice-Chairman St. Anthony At Large

Vince Alberdi

Secretary Kimberly At Large

Peter Van Der Meulen Hailey At Large

Albert Barker Boise

District 2

John "Bert" Stevenson Rupert District 3

Dale Van Stone Hope District 1

Jo Ann Cole-Hansen

Lewiston At Large

Memorandum

To: Idaho Water Resource Board (IWRB)

From: Neeley Miller, Planning & Projects Bureau

Date: October 21, 2019



Re: ESPA CAMP progress report background, schedule, update on progress towards CAMP targets

Background

In 2006 Idaho Legislature passed Idaho SCR 136 which requested the Idaho Water Resource Board (IWRB) prepare and submit a comprehensive aquifer management plan (CAMP) for the Eastern Snake Plain Aquifer (ESPA). By 2007, the IWRB appointed an advisory committee to prepare and recommend a plan. The IWRB and the Advisory Committee worked together to develop and submit the ESPA CAMP to the 2009 Idaho Legislature where it became effective as of the Idaho State Water Plan upon adoption of HB 264.

Legislative Request for a Plan Review

On May 8, 2019 the IWRB received a letter from Idaho House Speaker Scott Bedke requesting the IWRB complete a 10-year review of the ESPA CAMP and to submit appropriate planning recommendations to the Legislature and the Governor's office by the start of the next regular legislative session.

Process & Schedule - Joint Aquifer Stabilization & Planning Committee meetings

Staff is completing the ESPA CAMP 10-year review through a series of Joint Aquifer Stabilization & Planning Committee meetings between now and the next legislative session. Upcoming Joint Committee meetings are scheduled for the following dates:

Wednesday October 23rd in Boise

Agenda Items:

- Cloud Seeding/Weather Modification (status of program as related to CAMP, how much from program contributes to aquifer water budget change/aquifer management)
- Progress Report Rough draft
- ESPA CAMP Stakeholder Comment (Spring Users, Environmental perspective, IACI)
- Implementation Committee Considerations

Wednesday November 13th in Boise

Agenda Items:

- Aquifer Storage Analysis (review actions that resulted in storage change)
- ESPA CAMP Stakeholder Comment (IWUA, TBA)
- Report Conclusions
- Final draft

Progress Towards ESPA CAMP Hydrologic Targets

MANAGED RECHARGE		AF
IWRB Recharge	Avg annual if we had current capacity over last 20 years	202,000
	SUB-TOTAL	202,000
DEMAND REDUCTION		
	3 years average reduction via SWC Settlement (minus A&B conversion and SWID) per Jaxon	
IGWA-SWC Settlement Agreement	Higgs	239,967
SWID-SWC Settlement Agreement	2,919 acres set-aside results in about 6,421 AF (2.2 AFA) Per Jaxon Higgs	6,421
	SUB-TOTAL	246,388
GW-SW CONVERSIONS		
SWID Conversions	SWID-SWC Settlement Agreement (per Jaxon Higgs) - 3 year average 2016 - 2018	78,875
A&B ID Conversions	ABID-SWC Settlement (per Dan Temple)	8,340
	SUB-TOTAL	87,215
CLOUD SEEDING		
Cooperative Cloud Seeding Program	How much from Upper Snake and Wood contributes to Aquifer?	??
	SUB-TOTAL	??
		7.050
Storage Water from SWC-Cities-IGWA Settlement	average of 7,650 AF provided for recharge	7,650
	SWID-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average	
SWID Recharge	2016-2018	10,894
	SUB-TOTAL	18,544
	TOTAL	554,147

PERIODIC/OPPORTUNISTIC - depend upon water supply

Storage Water from SWC-IGWA Settlement	50,000 AF contributed for recharge if not needed by SWC	50,000
	IGWA-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average	
IGWA Private Recharge	2016-2018	145,130



Cooperative Cloud Seeding Program- CAMP Review

IWRB Joint Planning & Aquifer Stabilization Committee

October 23, 2019

IDAHO Water Resource Board









GOAL: SURFACE WATER SUPPLY ENHANCEMENT

Action: Implement a cooperative 5-year pilot weather modification project in the Upper Snake River Basin and possibly the Wood River System

Overview

- Inception of ESPA CAMP to present
- Benefits to the water supply
- Physical program build-out
- Impact by volume
- Supporting science
- Active program development

Water Resource Board



Implementation

2009-2014 – Idaho Power Company (IPC) implements pilot project

- Initial operations limited to the Upper Snake River Basin
- Coordinated with existing High Country RC&D program
- Expanded into the Wood River Basin winter of 2014
- Installation of small network of remote ground-based

generators and weather monitoring equipment







Expansion

2014 – IPC presents proposal for building out full scale cloud seeding program to the Idaho Water Resource Board (IWRB)

- Expand remote ground generator network by approximately 57 generators
- Add 1-2 modified aircraft units
- Develop weather monitoring infrastructure
- Projected that with full buildout, the program had the potential to increase winter snowpack by 5% or more in the Upper Snake, and 10% or more in the Wood River Basin
- Requested partnership with the IWRB for buildout of program.





Cooperative Cloud Seeding Program

FY2015-Present – The IWRB and other water users enter into partnership for buildout of the program

IWRB Funding Commitments

- Capital investments, 40% of total estimated costs
- Cost share with IPC on aircraft pilot project
- Operations & Maintenance (O&M)
 - 33% of total program cost (FY17 to present)
- Equal cost share with IPC for development of a Weather Research & Forecasting- Cloud Seeding Module
- Funding for additional program development activities

Water User Funding Commitments

- Wood and Upper Snake River Basins contributing to O&M costs
- Actively working to development more equitable funding apportionment





Water Supply Benefits

Augmentation of winter snowpack across the ESPA has resulted in the enhancement of runoff, increasing the availability of water for a variety of uses and providing a range of other resulting benefits

- Reservoir storage
- Extended seasonal flows due to increase of high elevation snowpack
 - → Fill of natural flow water rights (Irrigation, Recharge, Hydropower, and more)
 - → Reduced dependence on storage water
 - \rightarrow Increased reservoir carryover
- Surface water for conversion projects → reduced consumption of groundwater

Non-Use Benefits

- Recreation
- Water quality
- Aquatic habitat







Program Buildout



Shaun Parkinson, PhD, PE

























Proposed Full Buildout



Benefits – Target Control



Estimated Runoff Benefits

Average Additional Runoff (unregulated)

CURRENT PROGRAM

Wood – 113 KAF

Upper Snake – 424 KAF

Above Palisades – 280 KAF Henry's Fork – 144 KAF

TOTAL - 537 KAF



240 KAF

PROGRAM AT FULL BUILD-OUT

Wood – 163 KAF

Upper Snake – 614 KAF

Above Palisades – 424 KAF Henry's Fork – 190 KAF



2017 SNOWIE Research



"SNOWIE has addressed the scientific question, it has now transitioned to an engineering problem"

Pocatello NWS Radar







Current Priorities

Program growth is largely dependent upon support for ongoing refinement and continued stakeholder participation

- Better understand the distribution of benefits to various water user groups and determine more equitable funding arrangement long-term
- Increase program efficiency
- Improve operations and enhance capabilities for evaluating impacts
- Further development towards full buildout and the potential to increasing runoff in ESPA by approximately 240,000 acre feet





QUESTIONS?





GOAL: SURFACE WATER SUPPLY ENHANCEMENT

Action: Implement a cooperative 5-year pilot weather modification project in the Upper Snake River Basin and possibly the Wood River System

Issues:

- ✓ Develop plan in 2009
- ✓ Design and implement a detailed monitoring and evaluation program
- Idaho Power to work with State and interested parties to implement experimental project
- Coordinate with the State of Wyoming regarding potential program partnership
- ✓ Develop procedures to suspend cloud seeding activities

Spring Users ESPA CAMP Comments General Spring Users, Lower Snake River Aquifer Recharge District, and Clear Springs Foods Randy MacMillan, Ph.D. randy.macmillan@clearsprings.com October 23, 2019

Representation

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Mr. Chairman and members of the committee, thank you for the opportunity to provide a spring users perspective on ESPA aquifer management. My name is Randy MacMillan. I am employed by Clear Springs Foods in Buhl where I serve as their Vice President of Environmental Affairs. I also serve as the President of the Lower Snake River Aquifer Recharge District (LSRARD) and am Vice President of the Idaho Aquaculture Association. I am a member of the Idaho Board of Environmental Quality.

I am also President of the Southern Idaho Water Quality Coalition. I mention this affiliation because while the ESPA CAMP focuses on the health of the aquifer, CAMP also seeks to stabilize and improve river flows. CAMP recognizes that how we manage water quantity has environmental implications and that is certainly the case in the Middle Snake River. The Middle Snake River is often challenged by low water flows. The Southern Idaho Water Quality Coalition is a group of primarily agricultural interests but includes municipalities, that rely on both surface and groundwater, in the Middle Snake River area. The Water Quality Coalition has a keen interest in improving water quality in the river. We encourage this committee and the Board to well consider how best to balance the needs of the aquifer and Idaho's need to maintain healthy rivers.

Spring User Definition

Spring water users are located at various locations in the ESP but primarily near the Snake River. Some spring users generate electricity or irrigate land but by far the greatest use of spring water is for commercial and public aquaculture. We are fish farmers and just to be clear, aquaculture is recognized as a beneficial use of State waters. The fish farming community typically has non-consumptive water rights. The first fish farms in Idaho were started in 1909. Clear Springs Foods has a 1933 water right. The most **water** challenged spring users are those in the 1000 Springs or Magic Valley area from about Twin Falls down to King Hill. Spring water flows at our sites have declined as much as 30%.

Strengths, Weakness, Opportunities, and Threats (SWOT) Analysis

Strengths

- Spring users continue to support the ESPA CAMP plan and we thank the State of Idaho
 for its financial and human resource commitment to the ESPA CAMP. We support the
 goals of the plan and are especially supportive of the goal to "stabilize and improve"
 spring flows. The plan also seeks to stabilize and improve river flows which is important
 for those confronted with nutrient TMDLs as we are in the Middle Snake River. In our
 view CAMP is the best plan because it is a "consensus" plan and based on voluntary
 measures. At the same time, the plan does not contravene the priority doctrine nor the
 authority of the State. We believe the plan must be of enough duration and financial
 support to accomplish its goals, and this likely means in perpetuity.
- Spring users continue to support the CAMP objectives. This means we support increasing water supply predictability, better management of overall demand, creation of alternatives to administrative curtailment, and reduction in withdrawals.
- Spring users continue to support ESPA recharge. We strongly agree with other stakeholders that there remains considerable need to develop greater capacity for recharge for times when ample water is available. We believe there is need for additional recharge sites in the lower basin below American Falls. LSRARD believes recharge has been helpful for improving spring water flows but suggests we have a long way to go before we can conclude the ESPA is sustainable.

Weakness

It is very difficult to distinguish a CAMP impact on spring flows vs. the impact of good snowpack. For example, spring flow at Box Canyon, one of the springs used by Clear Springs Foods, has improved significantly over the past 3-4 years. Along with CAMP, those 3-4 years have had robust snowpack. The long-term trend has been a steady decline in water flow at Box Canyon. While that is the trend, there were times, before CAMP, when water flow improvements occurred. But after 3-4 years of steadily increasing flows, there was decline to even lower flows than previously occurred. At Box Canyon, the lowest flow on record occurred in 2015.

I recall that during development of the ESPA CAMP some IDWR experts repeatedly suggested we really need to examine at least a 10-year flow record to determine if real improvements have been achieved. We have **NOT** implemented significant recharge long enough to really tell if those efforts have had a meaningful impact.

 Some springs in the ESPA have not shown any improvements. According to the Basin 36A Watermaster (in the Hagerman area), some springs have not improved at all while others have improved. The belief is that better modeling in the area might help identify why and better identify where recharge sites might be helpful.

- The CAMP is in some measure experimental. Multiple methods are identified to achieve a 600,000 aft annual change in the water budget by 2030 but we don't have a good way to distinguish the impact of any particular method. This makes it difficult to make informed decisions about ways to improve the plan. We also cannot prioritize our efforts.
- Poor ability to measure the collective or individual impacts of CAMP actions may ultimately mean that at the end of 2030 our efforts have been futile and the decline in the ESPA is even more difficult to reverse than current modeling suggests. We do recommend more frequent reviews than once every 10 years.

Opportunities

- There is a request by some CAMP Implementation Committee members to invigorate the Implementation Committee. Spring Users support that reactivation. The Eastern Snake Plain is expansive. There are many types of water users often with divergent interests. Development of CAMP brought those divergent interests together in a neutral environment. We educated each other and had a healthy exchange of ideas and development of consensus solutions. Such dialog seems critical for future efforts particularly as we discover our efforts are falling short. It may be that we will discover there is need for increased resources beyond what we currently have. If we do need additional resources, a consensus of ESPA water users would be most helpful.
- Spring users believe engaging the implementation committee in more frequent reviews of the CAMP would be helpful. Part of our challenge is that we are not deeply engaged in what CAMP is doing so can't fully offer **collective** advice. This 10-year review is helpful in that regards because we are seeing a catalog of actions and estimated impacts but there is limited opportunity to engage those with shared interest.
- More frequent engagement might enable us to develop a consensus for measuring success and support.

Threats

 Ground water quality in some parts of the ESPA is variable and has probably changed over time as a result of various human activities. The Department of Environmental Quality has identified various areas where nitrate concentrations exceed maximum contaminant levels for safe drinking water. There are also areas where phosphorus concentrations are above expected concentrations and while not a violation of state groundwater quality standards, are a cause for investigation and perhaps vigilance. Examination of the groundwater quality at some recharge sites confirms elevated concentrations of plant nutrients does occur. The good news is that while data is limited, there is no empirical evidence that recharge is the cause. We do encourage the State to institute a more robust data collection program and if they already have one, develop an annual summary that is readily available to the public. Potential loss of state funding is a threat to long-term CAMP effort. CAMP is a voluntary program. It is not clear if CAMP will be successful but we will never know if we don't keep the effort going.

Questions?

PRESENTATION OF PETER ANDERSON JOINT IWRB AQUIFER STABILIZATION AND PLANNING COMMITTEE OCTOBER 23, 2019

MY NAME IS PETER ANDERSON, OF TROUT UNLIMITED. THANK YOU FOR GIVING ME THE OPPORTUNITY TO SPEAK TO YOU TODAY ABOUT YOUR 10 YEAR REPORT ON THE ESPA CAMP.

IN YOUR REPORT YOU WILL LIKELY FOCUS ON THE WATER RESOURCE ASPECTS OF THE PLAN: RECHARGE, DEMAND REDUCTION, CONVERSIONS, CLOUD SEEDING, AND SO ON. THEY ARE IMPORTANT, AND TROUT UNLIMITED AND THE NATURE CONSERVANCY, SUPPORTED THEM AND THE PLAN WHEN IT WAS ADOPTED.

BUT I THINK THAT THERE IS A HIDDEN ASPECT OF THE PLAN THAT MAY BE AS IMPORTANT, FOR WHICH THE BOARD SHOULD TAKE GREAT PRIDE, AND WHICH SHOULD NOT BE LEFT TO SHRIVEL AWAY.

THAT ACCOMPLISHMENT WAS THE DEVELOPMENT OF THE COLLABORATIVE ESPA CAMP ADVISORY COMMITTEE. THAT COMMITTEE MET FOR ALMOST TWO YEARS, AT GREAT EXPENSE TO THE STATE AND THROUGH MANY MANY VOLUNTEER HOURS DONATED BY ITS MEMBERS. AS WITH ALL COLLABORATIVES OF THIS NATURE THAT TIME TOGETHER, IF IT DID NOT DEVELOP FRIENDSHIPS, IT DID DEVELOP AT LEAST MUTUAL RESPECT, CANDOR, AND AN UNDERSTANDING OF WHERE EACH OF THE MEMBERS WERE COMING FROM.

THIS ACCOMPLISHMENT SHOULD NOT BE MINIMIZED. I WOULD ARGUE THAT THOSE RELATIONSHIPS WERE THE FOUNDATION FOR THE GROUND AND SURFACE WATER USERS AND CITY SETTLEMENTS. THEY WERE THE FOUNDATION OF SUCCESSFUL APPLICATIONS FOR THE NRCS AWEP AND RCPP PROGRAMS. THEY HAVE IN SOME MEASURE SECURED THE PEACE ON THE EASTERN SNAKE PLAIN

AND THESE RELATIONSHIPS WILL BE ESPECIALLY IMPORTANT GOING FORWARD. WITH CLIMATE CHANGE WE ARE ENTERING A NEW ERA OF UNCERTAINTY IN OUR WATER SUPPLY. AS ONE ARTICLE STATED: IT IS THE END OF STATIONARITY (THAT DYNAMIC EQUILIBRIUM THAT HAS BEEN CRUCIAL FOR WATER RESOURCE PLANNING). SO THIS OR SOME FUTURE WATER RESOURCE BOARD WILL BE FACED WITH A PERIOD WHEN WATER SUPPLIES FOR RECHARGE ARE LIMITED OR NON-EXISTENT. OR PERHAPS THE AQUIFER TARGET LEVELS UNDER THE SETTLEMENT ARE NOT ACHIEVED. OR THE CIRCUMSTANCES FOR CLOUD SEEDING DO NO OCCUR. THE STATE IS GOING TO NEED PEOPLE OF GOOD WILL, WHO KNOW EACH OTHER, WHO UNDERSTAND THE ISSUES, AND ARE WILLING TO HAVE HARD CONVERSATIONS, TO COME TOGETHER AND HELP CHART A PATH FORWARD.

IF THE BOARD MAKES THE ESPA CAMP PROGRAM INTO A PRIMARILY GOVERNMENT RUN RECHARGE PROJECT IT WILL LOSE THIS HARD FOUGHT FLEXIBILITY THAT IS SO IMPORTANT. FOR THAT REASON I URGE YOU TO RETAIN THE IMPLEMENTATION COMMITTEE. IT DOES NOT NECESSARILY NEED TO LOOK LIKE HOW IT WAS ORIGINALLY CONCEIVED. IT MAY NOT NEED TO MEET MORE THAN ONCE A YEAR, AND IT MAY JUST BE A FORUM FOR DISCUSSING ISSUES AND INTRODUCING NEW MEMBERS AND THEIR INTERESTS AND CONCERNS. ITS RECOMMENDATIONS, IF IT HAS THEM, ARE NOT BINDING ON THE BOARD, BUT THE BOARD AND ITS STAFF CAN FIGURE OUT A WAY TO MAINTAIN THAT WIDELY INCLUSIVE COMMUNITY AS A NIMBLE TOOL TO NAVIGATE THE UNCERTAIN WATER FUTURE ON THE EASTERN SNAKE PLAIN.

NOW, TURNING TO SOME OF SPEAKER BEDKE'S QUESTIONS FOR THE BOARD:

1.A PROGRESS TOWARD MEETING THE LONG-TERM GOALS.

I DON'T KNOW WHERE THE ACTUAL NUMBERS LIE, BUT MY IMPRESSIONS IS THAT THE PHASE 1 TARGETS HAVE BEEN MET. THIS, OF COURSE, DEPENDS ON WHETHER THE BOARD CONSIDERS THE SETTLEMENT OUTCOMES TO BE ESPA CAMP OUTCOMES. IT SHOULD. THE ESPA CAMP GOALS WERE HYDROLOGIC, NOT ABOUT WHO GETS CREDIT. THE CAMP EXPECTED FROM THE BEGINNING ACTIVITIES BY PRIVATE PARTIES OTHER THAN JUST THE IWRB WERE PART OF ITS TARGETS.

THIS, ONCE AGAIN, ARGUES FOR NOT CONSIDERING THE ESPA CAMP TO BE A STATE-CENTRIC ENGINEERING PROGRAM. I VIEW IT AS A COLLABORATIVELY DEVELOPED PLAN TO RESHAPE THE HYDROLOGY OF THE ESPA. THANKS TO THE IWRB, THE PARTIES TO THE SETTLEMENT AGREEMENTS, IDAHO POWER, THE PRIVATE IMPLEMENTERS OF THE NRCS PROGRAMS, AND MANY OTHERS, WE ARE GETTING THERE.

THE SPEAKER DID ASK ABOUT HOW PUBLIC INVOLVEMENT THROUGH THE IMPLEMENTATION COMMITTEE HAS BEEN ESTABLISHED. AS I PREVIOUSLY DISCUSSED, PUBLIC INVOLVEMENT THROUGH THE IMPLEMENTATION COMMITTEE HAS WAIVERED. I URGE THE BOARD TO REINVIGORATE THAT PROCESS.

2.A. IMPLEMENTATION OF THE MIX OF STRATEGIES.

AS WE MOVE FORWARD TO IMPLEMENT ALL OF THE ESPA CAMP STRATEGIES, THE BOARD SHOULD INCREASE ITS FOCUS ON DEMAND REDUCTION. THE SETTLEMENTS GOT US MUCH OF THE WAY TOWARD THE LONG-TERM GOALS, BUT MORE SHOULD BE DONE. I URGE YOU TO LOOK AT THE SUB-COMMITTEE REPORT ON ENVIRONMENTAL OBSERVATIONS. YOU WILL SEE THERE THAT DEMAND REDUCTION, AS MODELED BY IDWR, PROVIDES GREATER SNAKE RIVER AND SPRING FLOWS THAN RECHARGE. PART OF THE REASON FOR THAT IS OBVIOUS-- DEMAND REDUCTIONS ARE AVAILABLE EVERY YEAR, RAIN OR SHINE, WHILE RECHARGE IS SUBJECT TO THE WHIMS OF THE WATER YEAR. I KNOW THAT RECHARGE IS EVERYONE'S FAVORITE PROGRAM, BUT THE HYDROLOGY DOES NOT RESPOND TO
POPULARITY. THE CAMP ADVISORY COMMITTEE RELUCTANTLY RECOGNIZED THE EFFICACY OF DEMAND REDUCTION IN IT LONG-TERM TARGETS, AND THE BOARD SHOULD NOT LOST SIGHT OF THAT DIFFICULT RECKONING.

3. ACCOUNTING OF FUNDS

IN THIS SECTION OF THE REPORT I SIMPLY RECOMMEND THAT THE BOARD NOTE ALL THE MONEY THAT HAS BEEN LEVERAGED TO ACCOMPLISH THE ESPA PROGRAM—AWEP AND RCPP MONEY, WITH PRIVATE MATCH, FROM NRCS; CLIMATE MODIFICATION FROM IDAHO POWER; MEASURING DEVICES, DEMAND REDUCTION AND SURFACE WATER PURCHASES BY THE GROUND WATER USERS; THE COMPROMISE OF THEIR CLAIMS BY THE SURFACE WATER USERS. A FULL ACCOUNTING OF THE PUBLIC AND PRIVATE CONTRIBUTIONS TO MANAGEMENT OF THE ESPA SHOULD BE GIVEN TO THE LEGISLATURE.

4.A. <u>REASONABLENESS OF RECHARGE EVENTS IN RELATION TO OTHER USES.</u>

UNDER THIS SECTION I HOPE THE BOARD WILL TAKE CREDIT FOR THE CREATION OF THE ENVIRONMENTAL RESOURCS AND TECHNICAL WORKING GROUP, ARISING OUT OF THE SETTLEMENT OF SOME OF THE BOARDS RECHARGE WATER RIGHT APPLICATIONS. THE MEMORANDUM OF AGREEMENT PURPOSEFULLY AND EXPLICITLY CITED TO THE ESPA CAMP, ITS IMPLEMENTATION COMMITTEE, AND THE NEED TO OPTIMIZE OUTCOMES FOR IRRIGATION, MUNICIPALITIES, FISH AND WILDLIFE, RECREATION, HYDROPOWER, AQUACULTURE AND OTHER USES. THAT GROUP IS JUST UNDERWAY; ROB VAN KIRK HAVING GIVEN HIS REPORT ON UPPER SNAKE FLOW IMPACTS OF RECHARGE TO THESE SUBCOMMITTEES IN SEPTEMBER. OUR NEXT MEETING IN NOVEMBER 6. WE HOPE WE CAN BE OF SERVICE TO THE BOARD AND THE STATE OF IDAHO IN DISCHARGING THIS PART OF THE ESPA CAMP.

THANK YOU AGAIN FOR THE OPPORTUNITY TO PRESENT TO YOU TODAY.

MATERIALS MAY BE PROVIDED AT THE

IWRB MEETING



Considerations for CAMP Implementation Committee

Joint IWRB Planning and Aquifer Stabilization Committee

October 23, 2019



Background of Implementation Committee Concept

CAMP document states: "The Board will establish an Implementation Committee to assist in Implementation of the Plan. The Implementation Committee will assist the Board in the prioritization, development, implementation, and monitoring of management actions. The Implementation Committee will recommend actions and objectives to stabilize and improve spring flows and aquifer levels and effect changes in river flows. The Implementation Committee will include, but not be limited to, interest groups currently represented in the Advisory Committee. The Implementation Committee will also establish a coordination process that provides for the sharing of information on river and aquifer management actions and provides opportunity for public involvement. The Implementation Committee will serve at the pleasure of the Board and provide a forum for public participation. The Board's staff and/or contractors will facilitate the work of the Implementation Committee and provide the technical information needed for its deliberations. The Board will continue to make all final decisions concerning Plan project priorities, implementation, and funding."



Background of Implementation Committee Concept

- Implementation Committee was based on idea that water users would be assessed to pay for CAMP Implementation
- Idea was that assessed funds would flow to the Board's Secondary Aquifer Fund
- Implementation Committee would then help Board prioritize spending for aquifer management
- Draft assessment legislation (never passed) makes link clear
- Implementation Committee was to also serve other functions: public participation, provide information, build stakeholder support, etc.



Background of Implementation Committee Concept

- Advisory Committee that helped develop CAMP was largely continued over as the Implementation Committee after Legislature approved the CAMP in 2009
- Implementation Committee met throughout 2009 to work on the assessment legislation and other items
- The assessment legislation was not passed by the 2010 Legislature
- Implementation Committee lost momentum and stopped meeting



Implementation of Aquifer Management Actions

Aquifer management actions being implemented, but differently than proposed in CAMP document

- Managed Recharge state paying for and managing the recharge program
- Demand Reduction GW users implementing reduction of use per IGWA-SWC Settlement
- ✓ GW-SW Conversions being installed by water users where it makes sense
- Cloud Seeding joint program paid for by Idaho Power, State, and water users



Re-establishment of CAMP Implementation Committee has been requested by several parties, including:

- ✓ Idaho Power
- ✓ A&B Irrigation District
- ✓ North Side Canal Company
- ✓ Clear Springs Foods
- ✓ Burley Irrigation District
- ✓ Twin Falls Canal Company
- ✓ City of Twin Falls
- ✓ Trout Unlimited



- Given changed conditions, however, does the Implementation Committee envisioned in the CAMP document make sense?
 - ✓ Don't have central management of aquifer management actions
 - IWRB only has management over recharge and partial management over cloud seeding
- Other Committees working on parts of ESPA management exist:
 - ✓ IGWA-SWC Settlement Agreement Steering Committee
 - ✓ Recharge Program Environmental-Technical Working Group
 - Pending Committee ESPA Ground Water Management Area Advisory Committee formed by Director after final establishment of GWMA



- Do these other committees (partly) fill the role envisioned by the CAMP Implementation Committee?
- What does IWRB want the CAMP Implementation Committee to do? What is its function?
- Would the CAMP Implementation Committee create "Committee Overload" given the existing and pending committees working on ESPA matters?
- What are risks in activating CAMP Implementation Committee?
- What would gained by activating the CAMP Implementation Committee?



- What would be lost if CAMP Implementation Committee not activated?
- What do the requesting stakeholders want from the CAMP Implementation Committee?
- Would a committee with a more limited scope -- like a Recharge Program Advisory Committee -- be sufficient?



Questions and Discussion



ESPA CAMP Progress Report

Draft 1.0

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1. Legislative Request for a Plan Review

On May 8, 2019 the Idaho Water Resource Board (IWRB) received a letter from Idaho House Speaker Scott Bedke (see Appendix A for letter) requesting the IWRB complete a 10-year review of the Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan (CAMP) and to submit appropriate planning recommendations to the Legislature and the Governor's office by the start of the next regular legislative session. The IWRB is completing the review through the following steps:

- Inventory aquifer management actions including those done by the State and by others
- Report aquifer levels, spring flows, and reach gain responses
- Report on finances provided by State for aquifer management
- Conduct review in open, transparent manner through sub-committee meetings
- Seek stakeholder input

2. Background

Between 1912 and 1952, ESPA water levels rose because of increased incidental recharge from flood irrigation, unlined canal systems, and climactic factors. These increased aquifer levels resulted in higher spring discharges into the Snake River. After 1952, a combination of extended periods of drought, conversion from flood irrigation to sprinkler irrigation, increased ground water development, and more efficient water delivery systems contributed to decreasing aquifer levels in the ESPA resulting in decreased spring discharges. The decline of the ESPA led to more than a decade of litigation, water shortages for economically important uses, and reduced spring and river flows. By 2006, the situation had reached a crisis level with formal requests by senior water users (delivery calls) for administrative curtailment of tens of thousands of irrigated acres.

In 2006 Idaho Legislature passed Idaho SCR 136 which requested the IWRB prepare and submit a comprehensive aquifer management plan (CAMP) for the Eastern Snake Plain Aquifer (ESPA). By 2007, the IWRB appointed an advisory committee to prepare and recommend a plan. The IWRB and the Advisory Committee worked together to develop and submit the ESPA CAMP to the 2009 Idaho Legislature where it became effective as a part B of the Idaho State Water Plan upon adoption of HB 264. This legislation approved the ESPA CAMP as part of the State Water Plan and established goals, objectives, short-term and long-term hydrologic targets for the management of the ESPA.

3. Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan (ESPA CAMP)

The goal of the Plan is to "sustain the economic viability and social and environmental health of the Eastern Snake Plain by adaptively managing a balance between water us and supplies." The Plan defined five objectives:



- 1. Increase predictability for water users by Managing for a reliable supply.
- Create alternatives to administrative curtailment.
- 3. Manage overall demand for water within the Eastern Snake Plain.
- 4. Increase recharge to the aquifer.
- 5. Reduce withdrawals from the aquifer.

The Plan establishes a long-term program for stabilizing and recovering the ESPA through a phased approach to implementation, together with an adaptive management process to allow for adjustments in management as implementation proceeds. The long-term target of the Plan is to incrementally achieve a net water budget change of 600,000 acre-feet annually by the year 2030 through implementing a mix of management actions:

- Aquifer Recharge
- Demand Reduction
- Ground Water to Surface Water Conversions
- Weather modification/Cloud Seeding

The Plan establishes phase 1 targets (10 years) and long-term target (20 years; 2030). The Plan includes average annual targets for managed recharge of 100,000 acre-feet/year for years 1-10, and 250,000 acre-feet/year after year 10. Other aquifer management strategies include GW-SW conversion projects, demand reduction, and cloud seeding.

ESPA CAMP Hydrologic Targets		
Action	Phase 1 Target (KAF)	Long-Term Target (KAF)
Aquifer Recharge	100*	150 - 250*
Demand Reduction	95	250 - 350
Ground Water to Surface	100	100
Water Conversion		
Weather Modification/Cloud Seeding	50	No Target
TOTAL	200 - 300	600

*In 2016 SCR 136 provided legislative approval to increase the phase 1 recharge goal from 100 KAF to 250 KAF on an average annual basis prior to 2019, pursuant to Swan Falls Re-Affirmation Agreement.

The plan proposed an approach for funding phase 1 actions over a 10 year period. The proposed funding approach was not put into place as proposed in the CAMP.

4. Legal Settlements

In June 2015, a settlement agreement was entered into between groundwater users and surface water users to end conflict over use and management of the ESPA (see Appendix D for SCR 138 IGWA-SWC Settlement). The settlement called for increased aquifer recharge funded by the State of Idaho and diversion reductions by groundwater users designed to stabilize and over time improve groundwater levels.

The settlement was entered into between several large canal companies known collectively as the Surface Water Coalition (SWC) and a large group of groundwater irrigation entities represented by Idaho Ground Water Appropriators, Inc. (IGWA). The primary objectives of the settlement are to (1) mitigate injury to the SWC, (2) provide a "safe harbor" from curtailment to participating groundwater users, (3) stabilize the ESPA to protect and preserve water supplies for both surface and ground water users, and (4) minimize economic impacts to individual water users and the economy of the State of Idaho arising from water supply shortages.

The settlement requires ground water users to: (a) reduce their diversions from the ESPA by 240,000 acre-feet annually—a reduction of about 12 and 13 percent over historic water use; (b) lease and deliver to the SWC 50,000 acre-feet of storage water annually; (c) continue delivering surface water to certain lands historically irrigated with groundwater; (d) not irrigate sooner than April 1 or later than October 31; and (e) install meters on all groundwater wells by 2018.

The settlement has been approved by Idaho Department of Water Resources (IDWR) as a mitigation plan, protecting groundwater users from curtailment so long as they comply with the terms of the settlement. In addition, the State of Idaho committed to permanently recharge 250,000 acre-feet into the ESPA on an annual average basis. This commitment was confirmed in 2016 by a joint legislative resolution (See Appendix C for SCR 136) along with the appropriation of necessary funding.

The settlement establishes groundwater level benchmarks and a recovery goal for the ESPA. The recovery goal requires that the water level in the ESPA be returned to the average water level from 1991-2001 by the year 2026. In the interim, the ESPA water level must be stabilized at the 2015 level by 2020 and increased to a point halfway between the 2015 level and the ultimate recovery goal by 2023. If these benchmarks or the recovery goal are not achieved, groundwater users will be required to take adaptive measures to achieve the goal. A series of 19 "sentinel wells" with a track record of groundwater level measurements are being utilized to measure progress. The groundwater users' obligation to reduce water diversions by 240,000 acre-feet annually is being implemented on a local level by each of the participating districts represented by IGWA. Each district has been allocated a portion of the 240,000 acre-feet based on the amount of water its members have diverted historically, and has developed and implemented its own plan for meeting its share of the reduction. A variety of tools are being employed, including pumping reductions, end gun removals, crop rotations, fallowing, conversion from groundwater to surface water irrigation, and recharge.

A few groundwater entities chose to negotiate settlements separate from the IGWA-SWC Settlement. Southwest Irrigation District (SWID) and A&B Irrigation District each developed their own settlement agreements with the SWC. They are separate because these irrigation districts use both ground water and surface water and requested separate settlements with the SWC. In addition, the cities on the ESPA also requested their own settlement with the SWC. See Appendix E for HCR 10 (2019) recognizing the Cities-SWC Settlement.

The combination of these settlements and Legislative direction from the State, provide the framework for implementing and funding the ESPA CAMP. The State of Idaho committed to permanently recharge 250,000 acre-feet into the ESPA on an annual average basis. Ground water users are implementing the demand reduction:

- Reduced use and therefore reduced crop production
- In some cases they are installing GW-to-SW conversion projects to reduce ground water use
- SWID and ABID, though not solely ground water users they are required to reduce use under the SWC-IGWA Settlement, have expended significant amounts to install large-scale GW-to-SW conversion projects
- Cities, food processors also bearing costs

5. Implementation Progress

The ESPA CAMP Plan recommended the development of an Implementation Committee. It was based on the idea that water users would be assessed to pay for implementation of the CAMP and funds would be deposited into a IWRB account and the Implementation Committee would help the IWRB prioritize spending, and building stakeholder support for management actions. The Advisory Committee that helped develop the CAMP was largely continued over as the Implementation Committee and met a few times throughout 2009 to develop water user funding assessment legislation. The assessment legislation was ultimately not passed by the 201 Legislature. The Implementation Committee struggled because of uncertainty related to the proposed funding mechanism. Without a funding mechanism to provide resources for projects the implementation process evolved into a limited implementation for the first several years. The limited implementation consisted of the 1) IWRB and water users leveraging Federal

Programs such as Conservation Reserve Enhancement Program (CREP), Agricultural Water Enhancement Program (AWEP), and Regional Conservation Partnership Program (RCPP) to implement conversion and demand reduction projects, and 2) IWRB developed Pilot Recharge Program.

Between 2009 and 2019 the IWRB worked with water users to enroll over 18,000 acres into the CREP program and to convert 13,000 acres from groundwater to surface water irrigation through the AWEP and RCPP programs. These Board-driven efforts helped to provide significant water savings.

In 2014 the Legislature passed HB 547 which provided up to \$5M annually from the Cigarette Tax to the IWRB to be used for "Statewide Aquifer Stabilization." In 2016 the Idaho Legislature passed SCR 136 providing Legislative approval for the IWRB to increase the Phase 1 CAMP recharge goal from 100,000 AF to 250,000 AF on an average annual basis prior to 2019, pursuant to the Swan Falls Re-Affirmation Agreement (see Appendix B for a Summary of the Swan Falls Reaffirmation Settlement, and for the managed recharge Memorandum of Agreement). SCR 136 provided \$5M annually from the General Fund to the IWRB's Secondary Aquifer Fund to be used for "Water Sustainability" and "Aquifer Management." The IWRB sets a Secondary Aquifer Fund budget for the use of the combined amount received from the Cigarette Tax, General Fund and accrued interest.

Major management actions proposed in the CAMP have been implemented:

- <u>Aquifer Recharge</u> The IWRB with state funding and Legislative direction (SCR 136, 2016) is implementing a managed recharge program with a target of 250,000 AF on an average annual basis.
- <u>Demand Reduction</u> ground water are implementing240,000 AF reduction per IGWA-SWC Settlement Agreement
- <u>Ground Water-to-Surface Water Conversions</u> installed by water users where it makes sense; some projects counted toward 240,000 AF reduction; others are separate including 85,000 AF in SWID and 8,000 AF in ABID
- <u>Cloud Seeding</u> cooperative program put into place as joint venture between Idaho Power, State, and Water Users

Other actions contributing to ESPA Aquifer Management:

- IGWA-SWC Settlement Agreement IGWA provides 50,000 AF of storage water to SWC every year -- If not needed by SWC, it is to be used for aquifer management
- Cities-SWC-IGWA Settlement Agreement ESPA Cities agreed to provide 7,650 AF of storage every year to aquifer management
- Others food processors, SWID, ABID agreements

Combined these actions result in over a 550,000 acre-foot water budget change towards the long-term goal of 600,000 acre-feet.

Progress Towards ESPA CAMP Hydrologic Targets

IWRB Recharge	Avg annual if we had current capacity over last 20 years	202,000
	SUB-TOTAL	202,000
DEMAND REDUCTION		
	3 years average reduction via SWC Settlement (minus A&B conversion and SWID) per Jaxon	
IGWA-SWC Settlement Agreement	Higgs	239,967
SWID-SWC Settlement Agreement	2,919 acres set-aside results in about 6,421 AF (2.2 AFA) Per Jaxon Higgs	6,421
	SUB-TOTAL	246,388
GW-SW CONVERSIONS		
SWID Conversions	SWID-SWC Settlement Agreement (per Jaxon Higgs) - 3 year average 2016 - 2018	78,875
A&B 1D Conversions	ABID-SWC Settlement (per Dan Temple)	8,340
	SUB-TOTAL	87,215
CLOUD SEEDING		
Cooperative Cloud Seeding Program		
cooperative cloud second robiant	How much from Upper Snake and Wood contributes to Aquifer?	??
	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL	??
cooperative close second riogram	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL	?? ??
OTHER	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL	?? ??
OTHER Storage Water from SWC-Cities-IGWA Settlement	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL average of 7,650 AF provided for recharge	?? ?? 7,650
OTHER Storage Water from SWC-Cities-IGWA Settlement	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL average of 7,650 AF provided for recharge SWID-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average	?? ?? 7,650
OTHER Storage Water from SWC-Cities-IGWA Settlement	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL average of 7,650 AF provided for recharge SWID-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average 2016-2018	?? ?? 7,650 10,894
OTHER Storage Water from SWC-Cities-IGWA Settlement SWID Recharge	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL average of 7,650 AF provided for recharge SWID-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average 2016-2018 SUB-TOTAL	?? ?? 7,650 10,894 18,544
OTHER Storage Water from SWC-Cities-IGWA Settlement SWID Recharge	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL average of 7,650 AF provided for recharge SWID-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average 2016-2018 SUB-TOTAL	?? ?? 7,650 10,894 18,544
OTHER Storage Water from SWC-Cities-IGWA Settlement	How much from Upper Snake and Wood contributes to Aquifer? SUB-TOTAL average of 7,650 AF provided for recharge SWID-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average 2016-2018 SUB-TOTAL	?? ?? 7,650 10,894 18,544

PERIODIC	OPPORTUNISTIC - depend upon water supply	
PERIODIC	OFFORTONISTIC - depend upon water supply	

Storage Water from SWC-IGWA Settlement	50,000 AF contributed for recharge if not needed by SWC	50,000
	IGWA-SWC Settlement - in addition to IWRB recharge (Per Jaxon Higgs) - 3 year average	
IGWA Private Recharge	2016-2018	145,130

5.1 ESPA Aquifer Recharge

Managed aquifer recharge has been studied as a water management strategy for the ESPA as far back as 1962 when the U.S. Bureau of Reclamation issued a report on the topic. Various studies and pilot projects proceeded over the years prior to establishment of a full-scale program by the State of Idaho. In 1980, a water right permit for recharge was issued from the Snake River to the Lower Snake River Aquifer Recharge District. This permits was later transferred to the Idaho Water Resource Board (IWRB). In 1998, the IWRB filed 20 water right applications for recharge from the Snake River at various locations.

In 1999, the IWRB and Department of Water Resources issued a report titled "Feasibility of Large-Snake Managed Recharge of the Eastern Snake Plain Aquifer System." This report evaluated various scenarios for implementing a recharge program of the ESPA.

In 2007, IDWR issued the water right license for the Milner Hydropower Plant. This decision confirmed that hydropower generation at the Milner Hydropower Plant was subordinate to recharge diversions at or upstream of Milner. Prior to this decision, there were conflicting provisions in the Milner Hydropower water right permit and the 1980-priority recharge permit regarding which water use would have priority for the available water supply.

5.2 Recharge and the Swan Falls Re-Affirmation Agreement

Following adoption of the CAMP by the legislature and its incorporation into the State Water Plan, the State of Idaho and the Idaho Power Company entered in to the Swan Falls Re-Affirmation Agreement. The Re-Affirmation Agreement also included a Memorandum of Agreement specific to managed recharge. The Memorandum of Agreement incorporated the goals of the CAMP, and, based on the CAMP targets, placed limits on the State's managed recharge program of:

- 1) An average annual volume of 175,000 acre-feet through January 1, 2019, and
- 2) An average annual volume of up to 250,000 acre-feet thereafter.

Any changes to these targets would require legislative approval. The Memorandum of Agreement also requires the IWRB to cooperate with Idaho Power in rate proceedings before the Public Utilities Commission if managed recharge affects power rates. Pursuant to the Re-Affirmation Agreement, Idaho Code 42-1737 was modified to require IWRB approval of managed recharge projects by others meeting a certain threshold. The managed recharge Memorandum of Agreement was signed by Idaho Power, the Governor, and the IWRB. See Appendix B for a Summary of the Swan Falls Reaffirmation Settlement, and for the managed recharge Memorandum of Agreement.

It is important to note that the Legislature provided approval to accelerate the timeline in the managed recharge Memorandum of Agreement through passage of Senate Concurrent Resolution 136 in 2016.

5.3 Recharge and Senate Concurrent Resolution 136 (2016)

In 2016 the Legislature passed SCR136. SCR136 did three things:

- 1) Directed the IWRB develop a managed aquifer recharge program for the ESPA of 250,000 acre-feet on an average annual basis,
- 2) Directed the IWRB to develop the needed capacity by 2024, and
- 3) Provided approval to increase the Phase 1 CAMP managed recharge goal from 100,000 acre-feet to 250,000 acre-feet on an average annual basis prior to 2019.

See appendix C for a copy of SCR136.

5.4 Progression of Managed Recharge Program after Passage of the CAMP

After legislative approval of the CAMP in 2009, the IWRB proceeded with a managed recharge pilot program. This pilot program ran until 2014. The pilot program struggled with funding issues as a dedicated, ongoing funding source had not yet been identified. However, in some years the pilot program managed to reach 100,000 acre-feet of recharge, primarily due to 2009-2012 all being above-average water years. In other years very little was recharged, with an average of 73,002 acre-feet per year during the 2009-2014 period. The IWRB used this pilot program to figure out how an ongoing managed recharge program would fit with operational constraints like water right administration, Snake River reservoir operations, canal operations, canal maintenance and repair schedules, recharge locations and retention on recharged water in the aquifer, and water quality issues.

In 2014, the Legislature passed HB547 which directed up to \$5 million annually from the Cigarette Tax to aquifer management including the ESPA.

5.5 Current Status of the Managed Recharge Program

The current status of the ESPA Managed Recharge program can be summarized by two different metrics: 1) average annual volume of recharge accomplished since the CAMP was approved in 2009, and 2) current long-term average annual capacity for recharge. Each will be discussed.

Average Annual Volume of Recharge since the CAMP was Approved in 2009

While this is a useful metric, is does not reflect the true current status of the managed recharge program as this was operated as a pilot program from 2009 to 2014, and large-scale infrastructure construction to increase capacity did not begin until 2014.

Recharge Season (fall through spring)	Natural Flow Recharge Volume (acre-feet)
2009-2010	79,894
2010-2011	61,588
2011-2012	143,839
2012-2013	32,435
2013-2014	3,867
2014-2015	69,201
2015-2016	66,897
2016-2017	317,714
2017-2018	474,839
2018-2019	310,132
2009-2019 Natural Flow Average Annual Volume	156,041

Current Long-Term Average Annual Capacity for Managed Recharge

As construction to increase capacity has been ongoing since 2014, this metric probably provides a better picture of the current status of the recharge program. Because the available water supply from the Snake River for managed recharge runs in cycles with several wet years in row followed by several dry years in a row, the average annual capacity must be considered over a long period of time to account for both wet and dry cycles. The recharge program capacity must be sized to average 250,000 acre-feet per year, even though the recharge volume will be substantially less in dry years. This means that more than 250,000 acre-feet must be recharged in wet years.

The following chart shows the current average annual natural flow recharge volume if our current capacity had been in place since the year 2000. The IWRB estimates the current long-term capacity at 202,000 acre-feet annually. In other words, over a 20-year period, we do not yet have the capacity to average 250,000 acre-feet. We need to build more capacity to recharge more water during the wet years in order to offset the minimal recharge that will occur in dry years.



The IWRB estimates that an additional 300 cfs of capacity will be needed in the Magic Valley region, and an additional 200 cfs will be needed in Eastern Idaho upstream from American Falls Reservoir. There are three projects currently in development that should provide the needed capacity in the Magic Valley region: the Wilson Canyon Recharge Site on the North Side Canal, the Mile Post 29 Recharge Site on the Milner Gooding Canal, and the Mid-Snake Recharge Wells Project at the A&B Irrigation District. In the region upstream from American Falls Reservoir, the Egin Recharge Site Expansion, which is currently under development, should provide about 50 cfs of additional capacity. The IWRB is undertaking investigations to determine the best options



Construction on the Wilson Canyon Recharge Site

for developing the remaining needed capacity upstream from American Falls Reservoir.

5.6 Average Annual Volume Definition for Managed Recharge

Neither the CAMP, the Swan Falls Re-Affirmation Agreement, nor SCR136 identified how to define the average annual for the purpose of managed aquifer recharge. The Snake River upstream from Milner Dam is the water source for nearly all of the State's ESPA managed recharge program. The Snake River upstream from Milner tends to run in cycles with several wet years in a row (for example 2009-2012 and 2017-2019), followed by several dry years in a row (for example 2013-2016). For this reason, a minimum of a 10-year average is needed to account for recharge volumes in wet years when the average annual target of 250,000 acre-feet will be exceeded, and for recharge volumes in dry years when the average annual target of 250,000 acre-feet will be exceeded will not be met.



5.7 Storage Water Use for Managed Recharge

The IWRB has stated it will not seek to use storage water for managed recharge in order to avoid putting additional pressure on the Upper Snake Reservoir System. However, several agreements require the parties to provide storage water for aquifer management. In some cases, the parties to these agreements choose to have the IWRB recharge it for convenience. The parties, however could choose other means of using that storage water for aquifer management. <u>For this reason, any storage water provided for recharge pursuant to the various settlement agreements should not be counted toward the IWRB's 250,000 acre-foot average annual goal.</u>

5.8 Role of "Private Recharge" by Others

The SWC-IGWA Settlement Agreement allows IGWA Ground Water Districts to offset their required reductions with managed recharge. This creates a market for managed recharge by private or 3rd parties to recharge on behalf of the Ground Water Districts or other groups of ground water pumpers. This "Private Recharge" is being done with a variety of water sources, including:

- Storage water leased through Upper Snake Rental Pool,
- Natural flow irrigation rights leased through Water Supply Bank,

- Natural flow recharge rights help by irrigation districts, canal companies, ground water districts, or others,
- Temporary water use approvals during large flows.

Through 42-2737, the IWRB must approving any recharge project greater than an average annual of 10,000 acre-feet/year proposing new use of natural flows. As the "private recharge" makes use of these various water supply sources, it is unclear whether any "private recharge" efforts meet the threshold in 42-1737 and no approvals pursuant to 42-1737 have been made by the IWRB. <u>Since the "private recharge" is done pursuant to the provisions of the IGWA-SWC Settlement, it should be considered separate from the State's 250,000 acre-foot average annual recharge program</u>

5.9 Recharge Recommendations

 Recharge program advisory committee – the IWRB recognizes that the ESPA Managed Recharge is a very large undertaking by the State of Idaho involving countless stakeholders and costing tens of millions of dollars. For this reason the IWRB recognizes that the creation of a Managed Recharge Program Advisory Committee may be warranted.

An initial task for the Recharge Program Advisory Committee would be to provide recommendations to the IWRB regarding balancing the use of winter-time Snake River flows for managed recharge

6 Weather Modification (Cloud Seeding)

The ESPA CAMP provided for implementation of Weather modification, more commonly referred to as cloud seeding, as a management strategy to augment water supply. Unlike other strategies intended to use existing water supply to change the net aquifer water budget, winter cloud seeding is the only ESPA CAMP strategy that increases surface water supply by targeting high elevation winter storm systems to enhance the snowpack. Runoff resulting from the enhanced snowpack can be captured in storage reservoirs, and prolongs river flow during the summer and fall to fill natural flow water rights- thereby decreasing dependence on storage water and improving carryover in reservoirs. This additional supply supports all beneficial uses including irrigation, hydropower, managed aquifer recharge, fish and wildlife, and water quality. It also reduces the need to use ground water by providing surface water for surface-to-ground water conversion projects, a direct benefit to the ESPA.

The ESPA CAMP called for implementation of a 5-year pilot weather modification program in the Upper Snake to support ESPA recovery efforts. Guided by successful operation of a cloud seeding

program in the Payette River Basin, Idaho Power Company (IPC) initiated development of a pilot program in the Upper Snake and Wood River Basins in coordination with an existing water user supported program in the Upper Snake. Outcomes included the installation of a network of remote, ground-based generators to seed winter storms, and meteorological equipment for purposes of weather monitoring and forecasting for seeding opportunities. In 2014, IPC presented a proposal for buildout of a full-scale cloud seeding program, which included considerable expansion of the remote ground-based generator network (total of 57 units targeting the Wood and Upper Snake) and the addition of one to two modified aircraft to increase seeding opportunities. IPC projected a potential increase in



the snowpack by 5% or more in the Upper Snake and 10% or more in the Wood River Basin at full program buildout.

Collaboration with stakeholders has been important to the success of the program, which resulted in the formation of the Cooperative Cloud Seeding Program, a partnership between the Idaho Water Resource Board (IWRB), IPC, and various other water users. Expansion of the program in the Upper Snake to date has included the addition of 2 modified aircraft units, approximately 61% build-out of the total proposed

remote ground-based generator network, infrastructure for weather monitoring, and development of a weather research and forecasting-cloud seeding module (WRF-CSM) to guide program operations and better quantify water supply benefits. IPC continues to perform all cloud seeding operational activities including maintenance, aircraft contracting and flight coordination, and meteorological services and forecasting. Funding for capital expenditures related to program development is shared between the IWRB and IPC. The cost to operate the program across the



Eastern Snake River Plain at its current buildout is approximately \$2 million annually, with the IWRB contributing one-third of costs, water users a portion for their respective basins, and the remainder being covered by IPC.

The average amount of water, or increased unregulated runoff, resulting from winter cloud seeding activities across the ESPA is estimated to be over 537,000 acre-feet annually, with an average increase in total snowpack of approximately 5% in the Henry's Fork, 8% in the Upper Snake River, and over 10% in the Wood River basins. Efforts are underway refine these estimates

with improved data collection and modeling tools, and to quantify where this additional water supply is used.

Idaho's Cooperative Cloud Seeding Program is widely recognized for its comprehensive and scientifically based operations. Cloud seeding is performed using a range of ground and air-based tools as well as meteorological and predictive tools that are designed specifically for operation in Idaho. While these tools continue to be improved and infrastructure build-out continues, other program development activities continue to develop in coordination with all project partners. These activities include an analysis of the water supply benefits to various water user groups to better understand program efficacy and to help determine a long-term equitable funding arrangement. IPC and the IWRB continue to participate in expanded research to further improve operations and evaluate impacts, and will continue to work with water users to address program funding, permitting and monitoring requirements.

The total increase in average unregulated runoff if the program is developed to "full buildout" capacity is estimated to be at least 240,000 acre-feet in the Upper Snake and Wood River basins. However, continued program growth is largely dependent upon support for ongoing program refinement and stakeholder participation.

SNOWIE- Seeded & Natural Orographic Wintertime clouds: the Idaho Experiment



The SNOWIE project was a 2017 field campaign carried out in the Payette River Basin with funding support from the Nation Science Foundation. A collaborative effort between multiple universities, the National Center for Atmospheric Research, and Idaho Power Company provided ground breaking research demonstrating the ability to augment snowpack through winter time seeding of storms. The project has since gained international recognition, and publications into multiple distinguished scientific journals.

7 Funding

In 2014 the Legislature passed HB 547 which provided up to \$5M annually from the Cigarette Tax to the IWRB to be used for "Statewide Aquifer Stabilization." These funds are deposited into the IWRB's Secondary Aquifer Planning, Management & Implementation Fund (Secondary Aquifer Fund). In 2016 the Idaho Legislature passed SCR 136 providing Legislative approval for the IWRB to increase the Phase 1 CAMP recharge goal from 100,000 AF to 250,000 AF on an average annual basis prior to 2019, pursuant to the Swan Falls Re-Affirmation Agreement. See appendix B for a Summary of the Swan Falls Reaffirmation Settlement, and for the managed recharge Memorandum of Agreement. SCR 136 also provided the IWRB with an additional \$5M annually from the General Fund to the IWRB's Secondary Aquifer Fund to be used for "Water Sustainability" and "Aquifer Management." The IWRB has established a predictable process for developing their Secondary Aquifer Fund budget for the use of the combined amount received from the Cigarette Tax, General Fund and accrued interest. In the spring the IWRB's Finance Committee convenes to discuss the upcoming year's priorities with staff and to develop a recommended Secondary Aquifer Fund budget to the full IWRB for adoption at their regularly scheduled May meeting.

As of June 2019 the IWRB has received a total of over \$54M in the Secondary Aquifer Fund. Approximately \$35M has been either committed/expended on the ESPA, with over \$29M of that allocated towards the ESPA Managed Recharge program, \$3.5M towards the Cloud Seeding program, and over \$2M towards aquifer monitoring and modeling. Of the \$29M authorized for the Managed Recharge program about \$19M has been spent on recharge infrastructure with approximately \$9.5M allocated towards recharge operations/maintenance/conveyance, and almost \$1M for recharge monitoring.

SECONDARY AQUIFER PLANNING MANAGEMENT & IMPLEMENTATION FUND REVENUE AS OF JUNE 30, 2019

Used for Aquifer Management



I CIGARETTE TAX ... GENERAL FUND I ECONOMIC RECOVERY RESERVE FUND ... OTHER

Cigarette Tax - HB547 (2014) -- up to \$5M annually for "Statewide Aquifer Stabilization"

 General Fund -- Part of IDWR "Base Budget" beginning in FY2016 -- \$5M annually for "Water Sustainability" and "Aquifer Management"

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SECONDARY AQUIFER PLANNING MANAGEMENT & IMPLEMENTATION FUND EXPENDITURES & COMMITMENTS AS OF JUNE 30, 2019



Used for Aquifer Management

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2818 5115 June 2 2028 June 50 2018

SECONDARY AQUIFER FUND ESPA EXPENDITURES & COMMITMENTS AS OF JUNE 30, 2019



Determinal Station 51311

SECONDARY AQUIFER FUND ESPA RECHARGE EXPENDITURES & COMMITMENTS AS OF JUNE 30, 2019



= O&M/CONVEYANCE = INVESTIGATIONS/INFRASTRUCTURE = MONITORING

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8. ESPA CAMP Results

As efforts management actions identified in the CAMP are implemented over time the goal is to establish long-term upward trends in aquifer water levels. Increases in aquifer water levels has the potential to stabilize and recover spring flows from the ESPA to the Snake River, including those spring flows from the Thousand Springs that provide the river flows to meet the minimum flows established at the Murphy gaging Station under the Swan Falls Agreement.

8.1 Aquifer Storage Changes

Changes in aquifer water levels reflect changes in the amount of water stored in an aquifer. Water levels in the eastern Snake Plain aquifer (ESPA) indicate a long-term downward trend in aquifer storage since the late 1950's. Although there have been short periods of water-level recovery over this period, the water levels never recover to previous peak levels.

Aquifer storage rose significantly from 2016-2018 due to a number of factors. A portion of the observed rise was due to State sponsored managed recharge and reduced groundwater pumping associated with the IGWA-SWC Settlement Agreement, and a larger portion of the increase was due to the exceptional precipitation the region received from 2016-2018.

Although precipitation was above average from 2018-2019, there was less precipitation than in previous two years. This relative reduction in precipitation resulted in a slight decrease in aquifer storage as compared to the previous two years. It is important to consider that this reduction is in comparison to two exceptional years, and aquifer storage has increase substantially since 2015. This reduction is storage is not an indication that management activities are ineffective, it is a reflection of the fact that aquifer-storage gains in the ESPA are temporary given the fact that the aquifer "leaks" though springs, river gains, and agricultural consumptive use. The nature of the system produces undulations in aquifer storage due to weather, and the goal of management activities is to produce a long-term upward trend.







8.2 Spring Flows & Reach Gains



The ESPA primarily discharges to the Snake River through springs in two reaches of the river: Near Blackfoot to Neeley and Kimberly to King Hill (also known as Thousand Springs). Discharge from these springs is controlled by the water level in the ESPA. Higher water levels in the aquifer increase discharge at springs, and vice versa. Calculations are made to estimate the volume of water being contributed to the Snake River from the ESPA in these two river reaches. The results are illustrated in the figures titled "Near Blackfoot to Minidoka Reach Gains – 1928 to 2018" and "ESPA Change in Volume of Water and Thousand Springs Discharge." In the Near Blackfoot to Neeley reach, the discharge from the ESPA had an upward trend from 1925 to approximately 1985, then steeper downward trend to the present. In the Kimberly to King Hill reach, the discharge from the ESPA had an upward trend from 1912 to approximately 1950, then a less steep downward trend to the present.


Near Blackfoot to Minidoka Reach Gains – 1928 to 2018

9 Conclusions & Looking Forward

The ESPA CAMP established a long-term program for aquifer management. The continued viability of irrigated agriculture, aquaculture, industry, hydropower, municipalities, domestic uses and environmental resources depend upon improving water supply trends in the ESPA.

Management actions identified in the ESPA CAMP are working and need to be continued into the future. Major management actions proposed in the CAMP have been implemented:

- <u>Aquifer Recharge</u> The IWRB with state funding and Legislative direction (SCR 136, 2016) is implementing a managed recharge program with a target of 250,000 AF on an average annual basis.
- <u>Demand Reduction</u> ground water users agreed to reduce use by 240,000 AF in 2015 SWC-IGWA Settlement Agreement
- <u>Ground Water-to-Surface Water Conversions</u> some projects counted toward 240,000 AF reduction; others are separate including 85,000 AF in SWID and 8,000 AF in ABID
- <u>Cloud Seeding</u> cooperative program put into place as joint venture between Idaho Power, State, and Water Users in Upper Snake and Wood (and Boise) Basins

Other actions contributing to ESPA Aquifer Management:

- IGWA-SWC Settlement Agreement IGWA provides 50,000 AF of storage water to SWC every year -- If not needed by SWC, it is to be used for aquifer management
- Cities-SWC-IGWA Settlement Agreement ESPA Cities agreed to provide 7,650 AF of storage every year to aquifer management
- Others food processors, SWID, ABID agreements

Combined these actions result in over a 550,000 acre-foot water budget change towards the long-term goal of 600,000 acre-feet.

Water level trends are in the right direction and demonstrate the plan is working. Aquifer storage (& spring flows/discharges) rose significantly in recent years due to a number of factors. A portion of the observed rise was due to State sponsored managed recharge and reduced groundwater pumping associated with the IGWA-SWC Settlement Agreement, and a larger portion of the increase was due to the exceptional precipitation the region received from 2016-2018.

The IWRB estimates the current long-term Managed Recharge capacity is at 202,000 acre-feet annually. We do not yet have the capacity to average 250,000 acre-feet. We need to build more capacity to recharge more water during the wet years in order to offset the minimal recharge that will occur in dry years. Need continued funding to support the recharge program. IWRB has determined a need for a potential recharge advisory committee that could be tasked with addressing questions such as average annual calculations and how to integrate other interests in the recharge program.

Recommend another progress report in 5 years.

May need to amend CAMP to include updated implementation section.

Appendix A – Speaker Bedke Letter



HOME ADDRESS P.O. BOX 89 OAKLEY, IDAHO 83346 HOME: (208) 862-3619 EMAIL: sbedke@house.idaho.gov

STATE CAPITOL P.O. BOX 83720 BOISE, IDAHO 83720-0038 (208) 332-1111

House of Representatives State of Idaho

SPEAKER OF THE HOUSE

May 8, 2019

Roger Chase, Chairman Idaho Water Resource Board PO Box 83720 Boise, ID 83720-0098

Dear Mr. Chairman and Board Members,

Pursuant to Legislative authorization (see: 2006 SCR #136, 2007 HCR #28 and I.C. Section 42-1779), the Idaho Water Resource Board (IWRB) was directed to develop a Comprehensive Aquifer Management Plan (CAMP) for the Eastern Snake Plain Aquifer (ESPA). The IWRB completed that task and adopted the ESPA CAMP, in January 2009. Subsequently, the 2009 Legislature approved the ESPA CAMP as a component of the comprehensive State Water Plan, directing that all state agencies exercise their duties in a manner consistent with the ESPA CAMP (2009 HB #264). That legislation also directed the IWRB to prepare and submit to the Legislature for approval any subsequent proposed changes to the ESPA CAMP and also directed that the IWRB, in implementing the CAMP, should seek to optimize outcomes for irrigation, municipalities, fish and wildlife, recreation, hydropower, aquaculture and other uses.

As stated in the ESPA CAMP document, the overall goal is to "sustain the economic viability and social and environmental health of the Eastern Snake Plain Aquifer by adaptively managing a balance between water use and supplies." This goal was to be achieved through specific objectives, which included managing the overall demand for water within the ESP, and increasing recharge to, and reducing withdrawals from, the aquifer. The CAMP also provided for the establishment of an Implementation Committee to assist the IWRB in the prioritization, development, implementation, monitoring and evaluation of CAMP management actions, and also an adaptive management component to support improved decision-making and water management actions over time. Finally, the CAMP directed the IWRB to conduct an evaluation of the CAMP after 10 years of implementation and make planning recommendations to the Legislature and the Governor's office.

By this letter, I am requesting the IWRB to complete this 10-year review and submit appropriate planning recommendations to the Legislature and the Governor's office by the start of the next regular legislative session. If this review and the time necessary to complete it is extended beyond this time frame, please make the IWRB available to provide an update on the review and its progress. Please recognize the urgency in completing this review and address, among other things, the issues outlined below:

- 1. The ESPA CAMP establishes a long-term goal of 600,000 acre-feet (600 kaf) average annual change to the aquifer water budget with implementation to occur over a 30-year period. This water budget change was determined to be an appropriate long-term goal considering the then present and future water needs.
 - a. What progress has been made over the past 10 years toward achieving this long-term goal? Please identify how this progress has addressed the aquifer levels and river reach gains while allowing for assessment/airing of hydrologic, economic and environmental issues. Further, how has public involvement through the Implementation Committee been established?
 - b. Does the IWRB still consider this 600 kaf average annual water budget change to be an appropriate long-term goal? If not, what would be an appropriate long-term goal and what has changed or what new information has been developed to support the re-evaluation and re-setting of the longterm goal?
- 2. The ESPA CAMP adopted a mix of strategies, or actions, which it considered a "balanced approach" to modifying the aquifer water budget, and set hydrologic targets for each of these strategies. These included: ground water to surface water conversions (approximately 100 kaf/year), aquifer recharge (approximately 150/250 kaf/year), demand reduction (approximately 250-350 kaf/year) and a pilot weather modification program (initial Phase I target of 50 kaf/year with no long-term target).
 - a. What has been the progress in the implementation of each of these strategies and what is the current status of each?
 - b. Should changes or adjustments to the strategies be considered? If so, what adjustments does the IWRB recommend, and why?
 - c. With respect to aquifer recharge, has or should the IWRB consider private recharge as well as Board funded recharge in attaining the long-term goal?
- 3. The Legislature has provided \$5,000,000 in ongoing annual funding, as well as periodic one-time appropriations as funds were available, to the IWRB for, among other things, the implementation of the above CAMP strategies. Please provide an accounting of the funds expended in the implementation of each of these strategies in the first 10 years of CAMP implementation and an explanation regarding how funds were distributed.
- 4. Over the past several years, Idaho has experienced relatively good water years and a significant portion of the appropriated funds for CAMP have been expended on aquifer recharge. With reference to the IWRB recharge efforts:
 - a. Provide an assessment of the overall efficacy of the recharge program, including IWRB efforts to ensure that the various recharge events (IWRB or private) undertaken are reasonable in relationship to other uses and interests. In this context, reasonable is intended to mean:
 - i. That the specific recharge event provides sufficient benefit to the aquifer and the overall goal of achieving the 600 kaf annual change to

the water budget to justify the expenditure of funds on the recharge event, and

ii. In considering the recharge event, the IWRB has sought to optimize outcomes for irrigation, municipalities, fish and wildlife, recreation, hydropower, aquaculture and other uses.

I look forward to hearing from you and continuing our cordial, collaborative and productive relationship.

Sincerely,

Scott Bedke

Scott Bedke Speaker

SB:mlm

 CC: Office of the Governor Pro Tem Brent Hill
 Director Gary Spackman
 Deputy Director Mat Weaver
 Paul Arrington, Idaho Water Users Association
 Rep. Marc Gibbs, Chairman, House Resources & Conservation Committee
 Sen. Lee Heider, Chairman, Senate Resources & Environment Committee
 Sen. Steve Bair, Chairman, Senate Finance Committee
 Brian Patton, IWRB Appendix B - Summary of Swan Falls Re-Affirmation Agreement

SUMMARY OF SWAN FALLS REAFFIRMATION SETTLEMENT

Prepared by State of Idaho and Idaho Power Company

The 2009 Framework Reaffirming the Swan Falls Settlement (2009 Framework) sets forth the conditions for settling the current litigation. The terms "Framework" and "Reaffirming" are used intentionally to connote two key points. First, the 2009 Framework is a road map for reaching settlement rather than a final settlement document. Article II of the 2009 Framework describes the executive, legislative and judicial actions that collectively will constitute the settlement of the pending litigation and lays the foundation for cooperative resolution of other important issues. Second, the parties intend the proposed 2009 Reaffirmation Settlement to reconfirm rather than change any of the terms and conditions of the 1984 Swan Falls Settlement. This intent is reflected in the following language from the Framework:

The parties through this Framework and its Exhibits reaffirm all aspects of the Swan Falls Settlement. This Framework and its Exhibits are consistent with the Swan Falls Settlement and clarify the original intent of the Swan Falls Settlement. Nothing in this Framework or its Exhibits changes, modifies, amends or alters any aspect of the Swan Falls Settlement.

2009 Framework Reaffirming the Swan Falls Settlement at 7. Thus, the parties intend that the 2009 Framework and its Exhibits will be interpreted in harmony with the 1984 Swan Falls Settlement.

The proposed 2009 Reaffirmation Settlement will resolve three issues regarding the interpretation of the 1984 Swan Falls Settlement. First, consistent with I.C. 42-203B, it will reaffirm that for the purposes of the determination and administration of rights to the use of the waters of the Snake River or its tributaries downstream from Milner dam, no portion of the waters of the Snake River or surface or ground water tributary to the Snake River upstream from Milner Dam are to be considered. As such, the hydropower water rights for the Idaho Power Company facilities located on the reach of the Snake River between Milner Dam and the Murphy Gage carry no entitlement to demand the release of natural flow past Milner Dam or to seek administration of the water rights diverting the waters of the Snake River or surface or ground water tributary to the Snake River upstream from Milner Dam. Second, it will reaffirm the Swan Falls Agreement by decreeing the hydropower water rights for Idaho Power Company's facilities between the Milner Dam and the Murphy Gage consistent with the SRBA District Court's Memorandum Decision and Order on Cross-Motions for Summary Judgment in Consolidated Subcase 00-92023(92-(23) dated April 18, 2008. Finally, it will reaffirm that the 1984 Swan Falls Settlement does not preclude use of water for aquifer recharge.

There are four Articles in the 2009 Framework Reaffirming the Swan Falls Settlement – each has a separate purpose.

Article I provides general background principles from the 1984 Swan Fall Settlement drawn from the 1984 Swan Falls Agreement, the 1984 Swan Falls Framework and the 1985 Idaho Water Resource Board resolution approving amendments to the Idaho State Water Plan that are relevant to the issues being resolved through the 2009 Reaffirmation Settlement. The fact that the 2009 Framework does not recite all of the provisions of the 1984 Swan Falls Settlement does not diminish the continuing importance or effect of other provisions of the 1984 Settlement. Rather, the 2009 Framework expressly reaffirms all aspects of the 1984 Swan Falls Settlement and does not alter or revise in any way the statutory provisions adopted as part of that Settlement, including but not limited to those provisions applicable to agriculture and the family farming tradition in Idaho.

Article II, as noted above, is the road map for resolving the current litigation. It provides for entry of partial decrees for the hydropower water rights at issue and for entry of an order dismissing Idaho Power Company's complaint, but only if the proposed legislation and Memorandum of Agreement are completed to the satisfaction of the State and Idaho Power Company. Assuming these actions are taken and the SRBA District Court enters partial decrees and a dismissal order acceptable to the State, Idaho Power Company and the other parties to Subcase 00-92023, the current litigation will be resolved. Otherwise, either the State or Idaho Power Company has the option of voiding the Framework and the proposed settlement and continuing the litigation.

Article III identifies certain issues that will be the subject of future discussions between the State, Idaho Power Company and other affected interests. The parties intend such discussions to be inclusive rather than exclusive. Moreover, nothing in Article III is intended to define the rights or obligations of any person, reinterpret the Swan Falls Settlement, or prejudice any party affected by such issues. For example, the reference to discussions regarding the establishment of an effective marketing system does not require any action by, or impose any obligations on, any person or entity. It is a commitment to have a good faith discussion of the issues associated with the water marketing issue and does not presuppose any particular outcome from such discussions. Likewise, the discussions regarding an acceptable program to monitor and measure flows at the Murphy Gage and procedures for re-evaluating term permits approved under Idaho Code § 42-203C do not contemplate any changes to the Swan Falls Settlement. Rather, these two issues, like the others identified in Article III, are illustrative of issues that warrant further discussion to determine whether an accord can be reached. Again, they do not presuppose any particular outcome from such discussions.

Article IV of the 2009 Framework contains general provisions relating to the intent and effect of the Settlement. This Article begins with the

confirmation recited above that the Framework and its Exhibits reaffirm the Swan Falls Settlement and neither modify, amend or alter any aspect of the Swan Falls Settlement. The remaining provisions of the Article are generally recitations of provisions of the Swan Falls Settlement, including the recognition that "upon implementation of the conditions contained in Article II of this Framework, any subsequent order by a court of competent jurisdiction, legislative enactment or administrative ruling shall not affect the validity of the Framework or the Swan Falls Settlement." *Id.* at 8; and that "the Framework does not confer or create any additional vested, compensable or enforceable rights or interest of any kind whatsoever in any legislative enactments passed pursuant to this Framework beyond those rights otherwise available under applicable law." *Id.* at 8.

The proposed Memorandum of Agreement between the Idaho Water Resource Board, the Governor and Idaho Power Company sets forth an understanding between the parties regarding certain protocols for implementation of managed recharge. Like the 2009 Framework, the preamble language in the Memorandum is drawn primarily from the 1984 Swan Falls Agreement, the 1984 Swan Falls Framework and the 1985 State Water Plan amendments. Again, the recitation of some but not all of the provisions of these documents is not intended to diminish or alter in any way the importance, or effect, of other provisions of the 1984 Swan Falls Settlement. Rather, the provisions cited are intended to provide context for the substantive aspects of the Memorandum of Agreement and relating that Agreement to the provisions of the 1984 Swan Falls Settlement that are being clarified by the 2009 Settlement.

Three aspects of the Memorandum of Agreement warrant discussion. First, the Memorandum acknowledges that through the 1984 Swan Falls Settlement the State and the Company have a shared interest in ensuring that the Swan Falls minimum flows are maintained and recognizes that it is in their mutual interest to work cooperatively to explore and develop a managed recharge program that achieves to the extent possible benefits for all uses including hydropower. In this context, the Memorandum of Agreement memorializes Idaho Power Company's right to participate in the public process before the Board for evaluating and approving managed recharge as provided by state law and present information relative to any issues associated with a managed recharged proposal.

Second, the Memorandum acknowledges that the Idaho Water Resource Board adopted the Comprehensive Aquifer Management Plan (CAMP) and that the CAMP establishes a long-term hydrologic target for managed recharge from 150,000 to 250,000 acre-feet on an average annual basis and that any amendment of this long-term hydrologic target shall constitute a change in the State Water Plan. The Memorandum memorializes the Board's intent to implement managed recharge in phases and sets forth a protocol for phasing in managed recharge consistent with the adaptive management provisions of the CAMP. It further recognizes that the Board has discretion on how to implement the components of CAMP but provides the Board will seek legislative approval if it seeks to increase the CAMP Phase I recharge target of 100,000 acre-feet by more than 75,000 acre-feet prior to January 1, 2019. Nothing in the Memorandum of Agreement, however, precludes the Board or the Legislature from changing how managed recharge is to be implemented provided they do so in accordance with state law.

Third, paragraph 5 of the Memorandum of Agreement provides that the Governor and the Idaho Water Resource Board will cooperate with and inform the Public Utilities Commission of any direct effects of managed recharge on hydropower generation capacity. This provision does not divest the Public Utilities Commission of its authority to independently evaluate Idaho Power's request. Rather, paragraph 5 is merely an extension of the recognition under the original Swan Falls Settlement and this Reaffirmation that the State should make informed decisions with regard to water management in an effort to enhance and manage the water supply in the Snake River for the benefit of agriculture, hydropower and other beneficial uses. Consistent with that recognition, Paragraph 5 provides that upon making such an informed decision with regard to the implementation of managed recharge, the Governor and the Board will so inform the Public Utilities Commission of any "direct impacts" they determine may arise from implementation of managed recharge and acknowledge that such impacts may have an effect on the Company's ability to provide electrical energy. Paragraph 5 of the Memorandum does not require the Governor or the Board to take any affirmative position on whether a specific request by the Company is appropriate or necessary or on how any resulting rate impact should be allocated.

Senate Bill 1167 proposes that managed recharge projects be subject to the same review process applicable to storage reservoirs under Idaho Code § 42-1737 because managed recharge may have effects on surface flows similar to those of a storage reservoir. The bill does not apply to incidental recharge.

Senate Bill 1185 clarifies that the Swan Falls Agreement does not preclude use of water for recharge by removing the reference to the Agreement in Idaho Code § 42-234 and repealing Idaho Code § 42-4201A. In addition, this bill would consolidate state recharge policy in Idaho Code § 42-234. The parties anticipate amending this bill or submitting a substitute bill that will clarify the intent of subsection 3 of Senate Bill 1168.

Senate Bill 1169 reconfirms that the Company by reaffirming the 1984 Swan Falls Settlement is entitled to the same protection as contained in the uncodified provisions set forth in Chapter 14 of the 1985 Idaho Session Law at page 20-21. Because this Reaffirmation Settlement is an extension of the original Swan Falls Settlement, this bill is not intended to create any new or additional benefits for Idaho Power Company that do not already exist as a result of Chapter 14 of the 1985 Idaho Session Laws, it merely clarifies that the same protections afforded to Idaho Power by the 1985 legislation are extended to this reaffirmation settlement. This bill does not deprive the Public Utilities Commission of authority to independently determine the necessity or reasonableness of any of any rate request by Idaho Power Company.

The form of the partial decrees of the hydropower water rights are attached as Exhibit 6 to the 2009 Framework. The language of these decrees is consistent with the resolution of the three issues discussed above. In addition, the decrees recognized the subordination provisions contained in the 1984 Swan Falls Agreement and the 1180 Contract executed as part of the 1984 Swan Falls Settlement.

In summary, the State and Idaho Power Company believe the terms of the proposed 2009 Reaffirmation Settlement are entirely consistent with the 1984 Swan Falls Settlement and provide an opportunity for the parties to set aside their differences and work in a cooperative manner to resolve other Snake River water management issues. Appendix C - Memorandum of Agreement between IWRB and Idaho Power on Managed Recharge

MEMORANDUM OF AGREEMENT

WHEREAS, the Swan Falls Settlement recognized that the resolution of Idaho Power Company's water rights and the recognition thereof by the State of Idaho, together with the State Water Plan, provided a sound comprehensive plan best adapted to develop, conserve, and utilize the water resources of the Snake River in the public interest; and

WHEREAS, the Swan Falls Settlement provided that the State shall enforce the State Water Plan and shall assert the existence of water rights held in trust by the State; and

WHEREAS, the Swan Falls Settlement reconfirmed that the minimum daily flow at Milner Dam shall remain at zero, and that for the purposes of the determination and administration of rights to the use of the waters of the Snake River or its tributaries downstream from Milner Dam, no portion of the waters of the Snake River or surface or ground water tributary to the Snake River upstream from Milner Dam shall be considered; and

WHEREAS, the Swan Falls Settlement recognized that the establishment of a zero minimum flow at Milner Dam allowed existing uses above Milner to continue and for some additional development above Milner, and further recognized that the zero minimum flow means that river flows downstream from Milner Dam to Swan Falls Dam at times may consist almost entirely of ground-water discharge and that therefore the Eastern Snake Plain Aquifer (ESPA) must be managed as an integral part of the Snake River; and

WHEREAS, the Swan Falls Settlement recognized that the amount of development that can take place without affecting the average daily flows of 3,900 CFS from April 1 to October 31 and 5,600 CFS from November 1 to March 31 as measured at the Murphy Gaging Station would depend on the nature and location of each new development, as well as the implementation of new practices to augment the stream flows; and

WHEREAS, the Swan Falls Settlement recognized that maintenance of inexpensive hydropower resources contributes to a positive economic climate for the creation of new jobs for Idahoans and thus future water rights allocation decisions should weigh the benefits to be obtained from each development against the probable impact it will have on hydropower resources; and

WHEREAS, the Swan Falls Settlement recognized methods that enhance stream flows, such as in-stream storage and aquifer recharge projects, benefit both agricultural development and hydropower generation and deserve study to determine their economic potential, their impact on the environment, and their impact on hydropower generation; and

Memorandum of Agreement

Page 1 of 4

WHEREAS, flows passing Milner Dam provide opportunities for hydropower generation and under the Swan Falls Settlement the Idaho Power Company has a right to use such flows when available at its facilities; and

WHEREAS, the State, through the Eastern Snake Plain Aquifer Comprehensive Aquifer Management Plan (ESPA CAMP), a component of the State Water Plan, intends to implement managed recharge as part of a series of comprehensive measures to enhance the water supply of the ESPA and the Snake River; and

WHEREAS, it is important that the effects of implementation of managed recharge be understood in order to permit the State to make informed water management and planning decisions that are in the public interest as provided by chapter 17 title 42 Idaho Code; and

WHEREAS, the Idaho Power Company participated in the development of the ESPA CAMP and as part of the Phase I actions is cooperating with the implementation of a recharge program between Milner Dam and American Falls; and

WHEREAS, the coordination and consideration of the respective interests of the State and Idaho Power Company with regard to managed recharge furthers their mutual interest in honoring the commitments made as part of the Swan Falls Settlement.

NOW THEREFORE, the parties agree as follows:

- 1. It is in the mutual interest of the parties to work cooperatively to uphold and implement the principles established by the Swan Falls Settlement.
- 2. ESPA CAMP, as adopted by the Idaho Water Resource Board (January 2009) and approved by the Idaho Legislature as a component of the state water plan, establishes a long-term hydrologic target for managed aquifer recharge from 150,000 to 250,000 acre feet on an average annual basis. Amendment of this long-term hydrologic target for managed recharge shall constitute a change in the state water plan as contemplated by Article 15, § 7 of the Idaho Constitution and the legislation approving CAMP, and therefore must be adopted pursuant to Idaho Code § 42-1734B, as it currently exists or as it may be amended hereafter.
- 3. The purpose of this memorandum of agreement is to recognize that implementation of managed recharge will have an effect on the flow characteristics of the Snake River above and below Milner Dam and to confirm that the relative merits of recharge proposals in addition to or different than that provided for in Phase I of ESPA CAMP will be considered through the adaptive management process set forth in Section 4 of ESPA CAMP. If the Board proposes to increase the 100,000 acre-foot average annual ESPA CAMP Phase I target for managed aquifer recharge by more than 75,000 acre-feet prior to January 1, 2019, the Board must obtain legislative approval for such increase.

Memorandum of Agreement

Page 2 of 4

The Board and the Director will consider, in accordance with state law, any information received in determining whether a managed recharge proposal is in the public interest.

- 4. Further, the parties recognize it is in their mutual interest to work cooperatively to explore and develop a managed recharge program for the Snake River Basin above Swan Falls Dam that achieves to the extent possible benefits for all uses including hydropower and therefore agree that in connection with the development and consideration of proposals for managed recharge that may be in addition to or different than that provided for in Phase I of the ESPA CAMP, the State of Idaho, through the Idaho Water Resource Board (the Board):
 - a. will provide notice to Idaho Power Company of such managed recharge proposals together with an opportunity to meet and confer with the Board on the potential costs and benefits of such proposals and ways to implement managed recharge to achieve the mutual interests of the State and Idaho Power Company; and
 - b. will provide an opportunity for Idaho Power Company to appear before the Board and present information relative to any concerns the Company may have about a managed recharge proposal;
- 5. The State, through the Governor and the Idaho Water Resource Board, will in good faith cooperate with and support Idaho Power Company in any regulatory proceeding before the Idaho Public Utilities Commission to address any rate, or other impacts directly attributable to the implementation of managed recharge.
- 6. Idaho Power Company acknowledges that the decision of whether to proceed with the implementation of managed recharge is fundamentally a public policy decision of the State of Idaho and that nothing in this memorandum of agreement shall be construed to limit or interfere with the authority of the State of Idaho to authorize managed recharge in accordance with applicable state law.
- 7. Nothing in this memorandum of agreement shall be construed to preclude Idaho Power Company from exercising any rights it may have under state law to challenge the State's implementation of managed recharge. While Idaho Power Company retains its right under the Swan Falls Settlement to contest any appropriation of water, including but not limited to appropriations for recharge, in accordance with State law, the Company shall not have a right to assert that implementation of managed recharge is precluded by the Swan Falls Settlement.
- /
- /
- Memorandum of Agreement

Page 3 of 4

DATED this 6 day of May 2009.

STATE OF IDAHO

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By:

C.L. "BUTCH" OTTER Governor of the State of Idaho

By:

TERRY T. UHLING Chairman Idaho Water Resource Board

IDAHO POWER COMPANY

BY

J. LAMONT KEEN President and Chief Executive Officer

Memorandum of Agreement

Appendix D – SCR 136 (2016) Recharge

IN THE SENATE

SENATE CONCURRENT RESOLUTION NO. 136

BY RESOURCES AND ENVIRONMENT COMMITTEE

A CONCURRENT RESOLUTION

STATING FINDINGS OF THE LEGISLATURE RECOGNIZING THE NEED FOR MANAGED 2 3 RECHARGE OF THE EASTERN SNAKE PLAIN AQUIFER, AND RESOLVING THAT THE STATE OF IDAHO ESTABLISH A MANAGED RECHARGE GOAL OF 250,000 ACRE-FEET ON 4 AN AVERAGE ANNUAL BASIS ACROSS THE ESPA, DEVELOP THE CAPACITY TO ACHIEVE 5 250,000 ACRE-FEET OF AVERAGE ANNUAL MANAGED RECHARGE ON OR BEFORE DE-6 CEMBER 31, 2024, AND INCREASE THE 100,000 ACRE-FEET AVERAGE ANNUAL 7 ESPA CAMP PHASE I TARGET FOR STATE FUNDED MANAGED RECHARGE TO 250,000 8 ACRE-FEET OF AVERAGE ANNUAL RECHARGE ACROSS THE ESPA. 9

10 Be It Resolved by the Legislature of the State of Idaho:

1

11 WHEREAS, Policy 1I of the 2012 Idaho State Water Plan provides that 12 "aquifer recharge should be promoted and encouraged, consistent with state 13 law"; and

WHEREAS, the Eastern Snake Plain Aquifer (ESPA) supplies ground water
 to nearly one million irrigated acres and to numerous cities, businesses,
 dairies, factories and homes; and

WHEREAS, the ESPA is hydraulically connected to the Snake River and discharges to the Snake River via tributary springs, which supply surface water for multiple beneficial uses, including aquaculture, hydropower, and the irrigation of nearly one million acres; and

21 WHEREAS, since 1952 the total volume of water stored in the ESPA has de-22 creased by an average of 216,000 acre-feet annually due to increasing di-23 versions of ground water, increasingly efficient surface water irrigation 24 practices, and other factors; and

WHEREAS, as a result of declines to ESPA water levels and total storage content, there is currently an insufficient water supply for some water
users leading to water delivery calls, protracted litigation, and curtailment notices issued by the Idaho Department of Water Resources; and

WHEREAS, sustaining the spring flows in the Thousand Spring reach of the
 Snake River is essential to maintaining the Murphy minimum stream flows; and

31 WHEREAS, failure to maintain the Murphy minimum stream flows will re-32 quire curtailment of water rights junior to October 25, 1984; and

33 WHEREAS, current ESPA water levels and total storage content are inad-34 equate to provide a reasonably safe supply of water for sustainable surface 35 and ground water irrigation, aquaculture, hydropower, municipal and indus-36 trial uses, the curtailment of which would cause severe economic harm to the 37 State of Idaho; and

WHEREAS, Policy 4D of the 2012 Idaho State Water Plan provides that "[t]he Eastern Snake Plain Aquifer and the Snake River below Milner Dam should be conjunctively managed to provide a sustainable water supply for all existing and future beneficial uses within and downstream of the ESPA"; and 1 WHEREAS, Policy 4E provides that "[d]evelopment of new ... aquifer 2 storage is in the public interest"; and

3 WHEREAS, a 2009 Eastern Snake Plain Aquifer Comprehensive Aquifer Man-4 agement Plan ("ESPA CAMP") goal is to "[s]ustain the economic viability and 5 social and environmental health of the Eastern Snake Plan by adaptively man-6 aging a balance between water use and supplies"; and

7 WHEREAS, the ESPA CAMP established a long-term goal of 600,000
 8 acre-feet average annual change to the ESPA aquifer budget by 2030; and

9 WHEREAS, the ESPA CAMP established a long-term hydrologic target for 10 managed aquifer recharge of 150,000 to 250,000 acre-feet on an average an-11 nual basis; and

WHEREAS, Phase I of the ESPA CAMP established a 100,000 acre-feet average annual managed hydrologic target; and

WHEREAS, a 2009 Memorandum of Agreement between the Idaho Water Resource Board and Idaho Power Company provides that "[i]f the Board proposes to increase the 100,000 acre-feet average annual ESPA CAMP Phase I target for managed aquifer recharge by more than 75,000 acre-feet prior to January 1, 2019, the Board must obtain legislative approval for such increase"; and

19 WHEREAS, stabilizing and enhancing the ESPA water level is in the public 20 interest because it will lead to a sustainable water supply for consumptive 21 and nonconsumptive uses and minimize harm to Idaho's economy arising from 22 water supply shortages; and

WHEREAS, the state funding of the implementation of 250,000 acre-feet average annual managed recharge is consistent with the 2012 Idaho State Water Plan and the ESPA CAMP, and will help to alleviate the current water supply conflicts and ESPA sustainability issues.

NOW, THEREFORE, BE IT RESOLVED by the members of the Second Regular Session of the Sixty-third Idaho Legislature, the Senate and the House of Representatives concurring therein, that the State of Idaho recognizes the need for managed recharge of the Eastern Snake Plain Aquifer and resolves that the State of Idaho establish a managed recharge goal of 250,000 acre-feet on an average annual basis across the ESPA.

BE IT FURTHER RESOLVED that the state develop the capacity to achieve
 250,000 acre-feet of average annual managed recharge on or before December
 31, 2024.

BE IT FURTHER RESOLVED that the State of Idaho increase the 100,000
 acre-feet average annual ESPA CAMP Phase I target for state funded managed
 recharge to 250,000 acre-feet of average annual recharge across the ESPA.

Appendix E – SCR 138 (2016) SWC Settlement

IN THE SENATE

SENATE CONCURRENT RESOLUTION NO. 138

BY RESOURCES AND ENVIRONMENT COMMITTEE

A CONCURRENT RESOLUTION

2 STATING FINDINGS OF THE LEGISLATURE SUPPORTING THE SETTLEMENT AGREEMENT 3 ENTERED INTO ON JUNE 30, 2015, BETWEEN PARTICIPATING MEMBERS OF THE SURFACE WATER COALITION AND PARTICIPATING MEMBERS OF THE IDAHO GROUND 4 WATER APPROPRIATORS, INC. TO RESOLVE LITIGATION, AVOID CURTAILMENT, 5 6 MAINTAIN SUSTAINABLE GROUND AND SURFACE WATER SUPPLIES ON THE ESPA AND 7 MINIMIZE HARM TO IDAHO'S ECONOMY, SUPPORTING STATE MANAGEMENT TO ENSURE ESPA WATER SUPPLY ISSUES ARE TIMELY ADDRESSED, AND SUPPORTING THE GOAL 8 OF STABILIZING AND REVERSING THE TREND OF DECLINING ESPA WATER LEVELS IN 9 THE EASTERN SNAKE PLAIN AQUIFER. 10

11 Be It Resolved by the Legislature of the State of Idaho:

1

12 WHEREAS, the Eastern Snake Plain Aquifer (ESPA) supplies ground water 13 to approximately one million irrigated acres and to numerous cities, busi-14 nesses, dairies, factories and homes; and

WHEREAS, the ESPA is hydraulically connected to the Snake River and discharges to the Snake River via tributary springs, which supply surface water for multiple beneficial uses, including aquaculture, hydropower, and the irrigation of approximately one million acres; and

WHEREAS, since 1952 the total volume of water stored in the ESPA has de creased due to increasing direct diversions of ground water, increasingly
 efficient surface water irrigation practices, and other factors; and

WHEREAS, discharge from the ESPA to the Snake River is the most signifi cant contribution of water to the Snake River between Milner Dam and the Mur phy Gage; and

25 WHEREAS, Policy 4A of the 2012 Idaho State Water Plan requires that the
 26 Murphy minimum stream flow water right be administered in priority; and

27 WHEREAS, the declines in ESPA storage content have decreased surface 28 water supplies available for irrigation, aquaculture, municipal, indus-29 trial and other uses on land overlying the Eastern Snake Plain, resulting 30 in multiple water delivery calls, protracted litigation, and curtailment 31 notices issued by the Idaho Department of Water Resources; and

WHEREAS, current ESPA water levels and total storage content, after more than six decades of decline, are inadequate to provide a reasonably safe supply of water for sustainable surface and ground water irrigation, hydropower, aquaculture, municipal and industrial uses, the curtailment of which would cause severe economic harm to the State of Idaho; and

WHEREAS, if the Thousand Springs discharges continue to decline, junior
 water rights will be required to curtail to sustain the Murphy minimum stream
 flow; and

WHEREAS, on June 30, 2015, a historic settlement agreement was entered
into between the following surface water right holders: A & B Irrigation
District, American Falls Reservoir District #2, Burley Irrigation District,
Milner Irrigation District, Minidoka Irrigation District, North Side Canal

1 Company and Twin Falls Canal Company, collectively known as the Surface 2 Water Coalition (SWC); and the following ground water right holders: Aberdeen American Falls Ground Water District, Bingham Ground Water District, 3 Bonneville-Jefferson Ground Water District, Carey Valley Ground Water 4 District, North Side Ground Water District, Jefferson-Clark Ground Water 5 District, Madison Ground Water District, Magic Valley Ground Water Dis-6 trict, Fremont-Madison Irrigation District, Anheuser-Busch, United Water, 7 8 Glanbia Foods, City of Blackfoot, City of American Falls, City of Jerome, 9 City of Rupert, City of Heyburn, City of Paul, City of Chubbuck and City of Hazelton, collectively known as the Idaho Ground Water Appropriators, Inc. 10 (IGWA); for the purpose of resolving pending water delivery calls and to 11 provide for ongoing management of the ESPA; and 12

13 WHEREAS, the IGWA-SWC settlement agreement seeks to stabilize and ulti-14 mately reverse the trend of declining ESPA water levels in the ESPA; and

15 WHEREAS, the participating ground water users committed to reduce 16 ground water diversions from the ESPA necessary to meet the ground water 17 level goal and benchmarks identified in the settlement agreement; and

18 WHEREAS, implementation of the settlement agreement is expected to lead 19 to a sustainable water supply and minimize harm to Idaho's economy arising 20 from water supply shortages.

NOW, THEREFORE, BE IT RESOLVED by the members of the Second Regular Ses-21 sion of the Sixty-third Idaho Legislature, the Senate and the House of Rep-22 resentatives concurring therein, that the State of Idaho supports the set-23 tlement agreement entered into on June 30, 2015, between participating mem-24 bers of the Surface Water Coalition and participating members of the Idaho 25 Ground Water Appropriators, Inc. to resolve litigation, avoid curtailment, 26 maintain sustainable ground and surface water supplies on the ESPA and min-27 28 imize harm to Idaho's economy, and further supports state management to en-29 sure ESPA water supply issues are timely addressed.

30 BE IT FURTHER RESOLVED that the State of Idaho supports the goal of sta-31 bilizing and reversing the trend of declining ESPA water levels in the East-32 ern Snake Plain Aquifer.

Appendix F – HCR 10 (2019) Cities

LEGISLATURE OF THE STATE OF IDAHO Sixty-fifth Legislature First Regular Session - 2019

IN THE HOUSE OF REPRESENTATIVES

HOUSE CONCURRENT RESOLUTION NO. 10

BY RESOURCES AND CONSERVATION COMMITTEE

A CONCURRENT RESOLUTION

STATING FINDINGS OF THE LEGISLATURE AND SUPPORTING THE 2018 SETTLEMENT 2 AGREEMENT BETWEEN THE CITIES, THE SURFACE WATER COALITION, AND MEMBERS З OF IDAHO GROUND WATER APPROPRIATORS TO RESOLVE LITIGATION, AVOID CUR-4 TAILMENT, MAINTAIN SUSTAINABLE GROUND AND SURFACE WATER SUPPLIES ON THE 5 EASTERN SNAKE PLAIN AQUIFER, AND MINIMIZE HARM TO IDAHO'S ECONOMY, SUP-6 PORTING STATE MANAGEMENT THROUGH THE EASTERN SNAKE PLAIN AQUIFER GROUND 7 WATER MANAGEMENT AREA TO ENSURE THAT EASTERN SNAKE PLAIN AQUIFER WATER 8 SUPPLY ISSUES ARE TIMELY ADDRESSED, AND SUPPORTING THE CONTINUED FUND-9 10 ING AND IMPLEMENTATION OF EFFORTS TO SATISFY THE GOAL OF STABILIZING AND REVERSING THE TREND OF DECLINING WATER LEVELS IN THE EASTERN SNAKE PLAIN 11 12 AOUIFER.

13 Be It Resolved by the Legislature of the State of Idaho:

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WHEREAS, Senate Concurrent Resolution No. 138 was adopted during the 2016 legislative session, supporting the settlement agreement entered into on June 30, 2015, between participating members of the Surface Water Coalition (SWC) and participating members of the Idaho Ground Water Appropriators (IGWA) to avoid potential curtailment, to take actions to maintain sustainable ground and surface water supplies on the Eastern Snake Plain Aquifer (ESPA), and minimize harm to Idaho's economy; and

WHEREAS, in November 2016, the director of the Department of Water Re sources designated the ESPA Ground Water Management Area (GWMA); and

WHEREAS, the ESPA cities opposed designation of the GWMA; and

24 WHEREAS, in 2018, the cities entered into a settlement agreement with 25 IGWA and SWC, with the agreement covering ESPA municipal pumping; and

26 WHEREAS, key provisions of the agreement are that the cities will pro-27 vide aquifer enhancement activities and the participating cities, in turn, 28 will have safe harbor from SWC and IGWA delivery calls for up to 35 years; and

WHEREAS, as part of the agreement, participating cities will withdraw opposition to GWMA designation and will support continued funding of statesponsored efforts to further the goal of stabilizing and reversing the water level declines in the ESPA.

NOW, THEREFORE, BE IT RESOLVED by the members of the First Regular Session of the Sixty-fifth Idaho Legislature, the House of Representatives and the Senate concurring therein, that the State of Idaho supports the 2018 settlement agreement between the cities, the SWC, and members of the IGWA to resolve litigation, avoid curtailment, maintain sustainable ground and surface water supplies on the ESPA, and minimize harm to Idaho's economy.

39 BE IT FURTHER RESOLVED that the State of Idaho supports state management 40 through the ESPA GWMA to ensure ESPA water supply issues are timely addressed 41 and supports continued funding and implementation of efforts to satisfy the 42 goal of stabilizing and reversing the trend of declining water levels in the 43 Eastern Snake Plain Aquifer.