Eastern Snake Plain Comprehensive Aquifer Implementation Committee

October 13, 2009

On-going Role and Function of the Implementation Committee

Implementation Committee Role

- The long-term role, purpose and composition of the Implementation Committee was discussed with the Board on September 25, 2009

- Board envisions a representative and engaged Committee throughout the life of the program to provide stakeholder engagement and informed recommendations.

- The Board recognizes that the composition and purpose of the Committee may change as the program becomes mature.

- Should the Board consider a 3-year renewable term for Committee members?

- After the program has been established, how many meetings per year should be held? When? Purpose?

Proposed Funding Mechanism for the ESPA CAMP

Funding Working Group - Background

- Presented to the Interim Legislative Committee on September 24, 2008

- Positive indications from Interim Committee members regarding fee based approach

- Interim Committee passed motion directing the Implementation Committee to develop draft legislation with fee collected through the county treasurer and water district

- Idaho Association of Counties has as identified four county treasurers to assist in developing county collection mechanism

- Testimony and discussion focused on issue of incidental ground water recharge

Funding Recommendations: Overall Structure

1. The Legislature would approve the fee structure.
   - Essential to sustaining a legislative fee are findings demonstrating that the fee is reasonably related to the benefits received.

   - Simply describing the assessment as a fee is not enough.

2. The legislation must contain a clear statement of legislative findings supporting the proposed fee structure, which demonstrates the relationship between the fee assessed and the benefits received.

3. The legislation would require either each affected county or each affected water district to collect the CAMP fee.

Funding Recommendations: Overall Structure

4. Considerable effort will be required to determine the amount of the fee to be collected from individual water users or water delivery entities.

5. This effort will be required whether state water districts or counties are used to collect the fee.

Funding Recommendations: Water District Alternative

- Each water district would by law be required to collect the CAMP fee.
- The fee would be collected annually as part of the water districts created by the director of the Department of Water Resources under chapter 6, title 42, Idaho Code.
- The fee would not be identified as an expense related to water distribution, but instead would be separately itemized as a CAMP implementation fee

Funding Recommendations: County Alternative

- The treasurer of each affected county would be required by law to collect the CAMP fee as imposed by the Legislature.
- The county auditor would be required to make up a roll showing the fee amount to be collected and from whom and deliver the roll to the county treasurer for collection.
- The county treasurer would be required to mail a notice to each water delivery entity or affected water user stating the amount of the fee payable and the due date, and if not so paid, the amount of the penalty and monthly interest accruing until paid.

Funding Recommendations: Overall Structure Continued

- The legislation would provide when the collected fees, whether collected by water districts or county treasurers, must be paid to the state and the fund to which the fees would be deposited.

- The legislation would authorize the retention of a percentage of the collected amount as the cost of administration for collection of the fee.

- The legislation would contain other provisions as determined necessary during the drafting process.

Funding Recommendations: Enforcement

- The legislation would need to authorize the water districts, the county treasurers, or the Water Resource Board to collect any mandatory fees due and unpaid.
- Enforcement would be by civil action brought in a court of competent jurisdiction???
- Enforcement would include collection of any unpaid fee, penalty, interest and costs, together with reasonable attorney fees.

Funding Recommendations: Conclusion

- The alternatives satisfy the CAMP Implementation Committee's desire for a funding mechanism that is mandatory with no added level of governance.

- Agreements between the Board and some individual participants will be necessary.

- For example, Idaho Power's share needs to be obtained by agreement because its use is largely outside the affected geographic area.

- Payments by municipalities also may be best handled with agreements.

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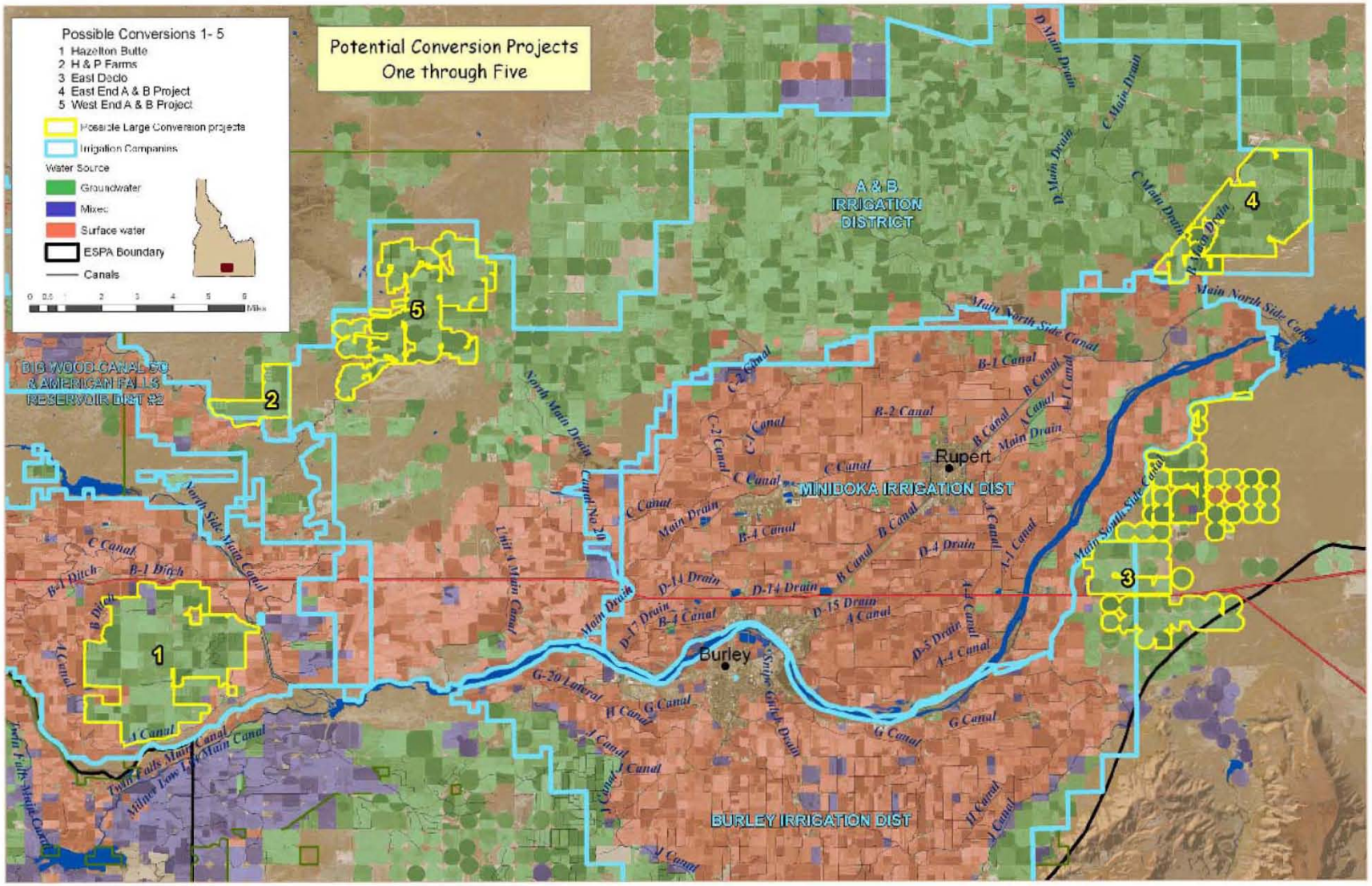
Funding Direction : Interim Legislative Committee Motion

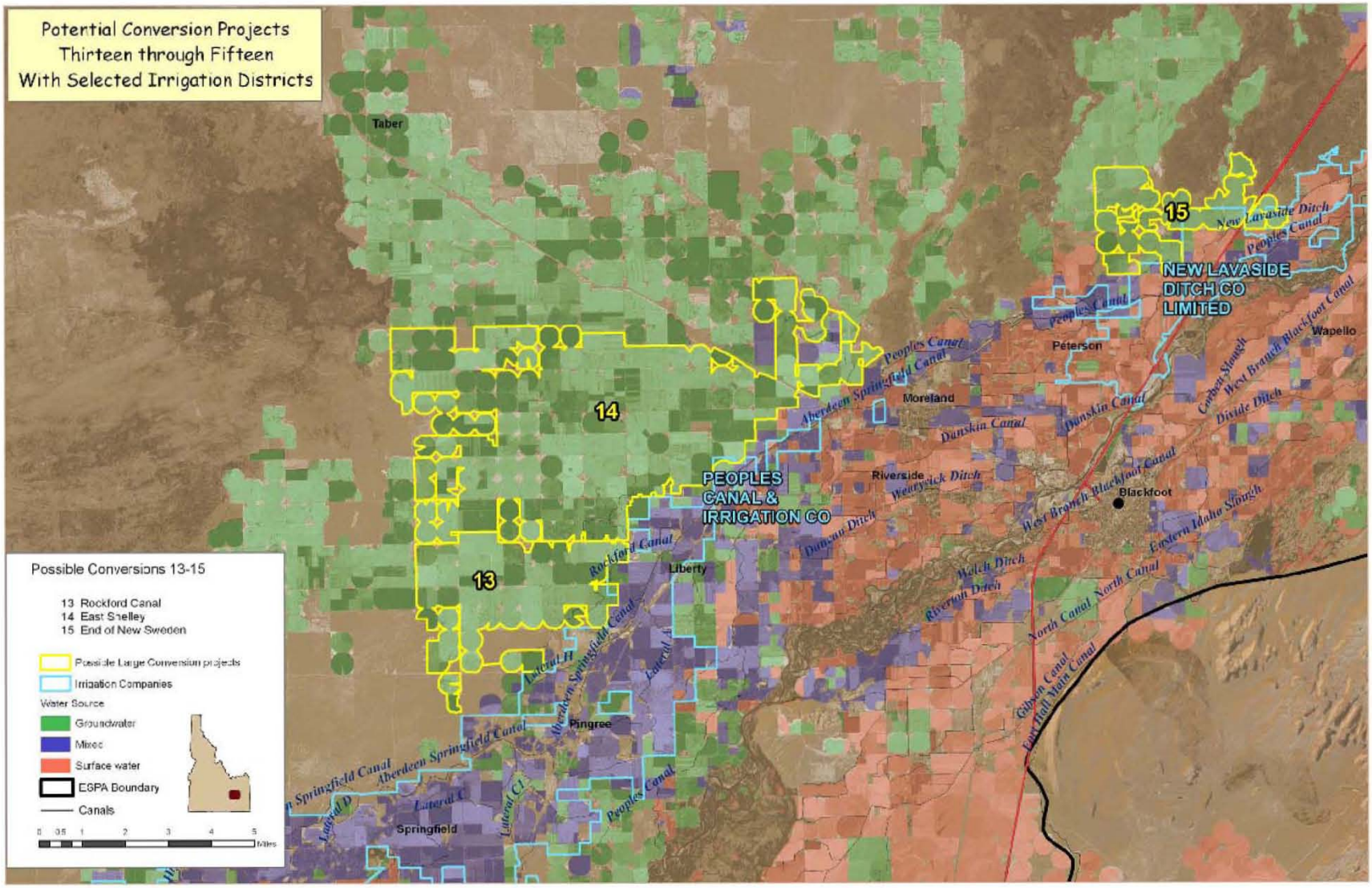
"That the Interim Natural Resource Committee accept the ESPA Implementation Committee's conceptual plan to fund the ESPA Plan through a mandatory fee assessed either by the water districts and/or counties and/or other methods and request that the Implementation Committee develop legislation consistent with the conceptual plan for consideration at the next legislative session," was introduced. The **motion carried** by unanimous voice vote.

Funding Working Group will meet with County Treasurers on October 28 to begin drafting legislation

Conversions Working Group Update

1. Preliminary costs for selected project sites.
2. Review process for ranking, selection, and recommendation of conversion projects to the Implementation Committee.
3. Recommended large project sites
4. Memorandum of Understanding
5. Next Steps


Possible Conversions 1- 5
1 Hazelton Butte
2 H & P Farms
3 East Declo
4 East End A & B Project
5 West End A & B Project
Possible Large Conversion projects
Irrigation Companies
Water Source
Groundwater
Mixed
Surface water
ESPA Boundary
Canals
Miles
Potential Conversion Projects
One through Five
A & B IRRIGATION DISTRICT
BIG WOOD CANAL CO & AMERICAN FALLS RESERVOIR DIST #2
MINIDOKA IRRIGATION DIST
BURLEY IRRIGATION DIST
Rupert
Burley
Main North Side Canal
Main South Side Canal
North Side Main Canal
Twin Falls Main Canal
Milner Low Lift Main Canal
Twin Falls Main Canal
Little A Main Canal
North Main Drain
Canal No 20
Main Drain
D Main Drain
C Main Drain
B-1 Canal
B-2 Canal
B-4 Canal
C Canal
C-1 Canal
C-2 Canal
A Canal
A-1 Canal
A-4 Canal
B Canal
D-4 Drain
D-14 Drain
D-15 Drain
D-17 Drain
D-5 Drain
G Canal
G-20 Lateral
H Canal
J Canal
J1 Canal
B-1 Ditch
B Ditch
Stripe Gulch Drain
1
2
3
4
5


Potential Conversion Projects
Thirteen through Fifteen
With Selected Irrigation Districts
Taber
14
13
15
PEOPLES CANAL & IRRIGATION CO
NEW LAVASIDE DITCH CO LIMITED
Moreland
Riverside
Liberty
Pingree
Springfield
Peterson
Blackfoot
Wapello
Peoples Canal
Aberdeen Springfield Canal
Danskin Canal
Rockford Canal
Lateral H
Lateral A
Lateral C
Lateral C1
Lateral D
Dunson Ditch
Wentzwick Ditch
Welch Ditch
Riverton Ditch
West Branch Blackfoot Canal
Eastern Idaho Slough
North Canal
Gibson Canal
Fort Hall Main Canal
New Lavaside Ditch
Carbon Slough
Divide Ditch
Possible Conversions 13-15
13 Rockford Canal
14 East Shelley
15 End of New Sweden
Possible Large Conversion projects
Irrigation Companies
Water Source
Groundwater
Mixed
Surface water
ESPA Boundary
Canals
0 0.5 1 2 3 4 5 Miles

Preliminary Project Cost Information

Site No. (Aug 3, 2009 Mtg Maps)	Project Name	Conveyance Company	Total Project Acres (ac)	Acres to Receive Assumed Application Rate (ac) [1]	Preliminary Project Cost Estimate [2]	Design Rate of Flow (cfs) [3]	Potential Volume of Reduced GW Pumping (af/yr) [4]	Volume of Surface Water Required to Deliver to Project (including Canal Losses) (af/yr) [5]	Estimated Annual Cost Savings from Reduced GW Pumping	Estimated Annual SW Pumping Costs [6]	Estimated Annual Conveyance Fees [7]	Total Project Cost/Acre (total project acres)	Total Project Cost/cfs	Total Project Cost/cfs/project acres
1(a)	Hazelton Butte (short design, reduced rate)	Milner-Gooding, North Side Canals	8600	4800	$9,500,000	60	9,600	12,480	*To Be Determined*	$167,720	$37,440	$1,105	$158,333	$18
1(b)	Hazelton Butte (long design, reduced rate)	Milner-Gooding, North Side Canals	8600	4800	$15,000,000	60	9,600	9,[illegible]00		$220,580	$0	$1,744	$250,000	$29
1(c)	Hazelton Butte (long design, full rate)	Milner-Gooding, North Side Canals	8600	8600	$30,000,000	108	17,2[illegible]	17,200		Not Avail	$0	$3,488	$277,778	$32
2	H & P Farms	Milner-Gooding Canal	1200	1200	$565,000	15	2,400	3,120		$62,000	$9,360	$471	$37,667	$31
5	West End A&B Project	Milner-Gooding Canal	6400	4800	$6,500,000	60	[illegible]	12,480		$247,500	$37,440	$1,016	$108,333	$17
13	Rockford	Aberdeen Springfield Canal	6990	6990	$[illegible],000,000	88	13,980	18,174		$194,560	$54,522	$1,073	$85,227	$12
14	Moreland	Peoples or Aberdeen Springfield Canals	2200	2[illegible]	$2,[illegible]	[illegible]	4,400	5,720		$76,330	$17,160	$909	$74,074	$34

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1. The design rate for each project was based on a assumed application requirement of 1 cfs per 80 acres or 5/8 inches per acres. Designs were developed based on a reduced flow rate for the Hazelton Butte 1(a) and 1(c), and West End A&B Projects to reduce project costs and to distribute excess canal capacity among multiple conversion projects. The reduced design rate of 60 cfs is expected to provide coverage at the assumed application rate to approximately 4800 acres.

2 Preliminary Project Cost Estimates generally include design of a main line and pump system, but do not include costs associated with laterals to individual farms. The following system elements are included in the costs: Pipe materials, valves and connections, pond and trench excavation, rock saw, pumps, pump station or "vault" construction, road crossings, site survey, 30% contingency and engineering fees. Costs that are not included: Easements, measuring devices and monitoring wells, backflow protection devices (check valves), laterals. Note, costs referenced in this table are based on the high end of an estimated cost range.

3 The design rate for each project was based on an assumed application requirement of 1 cfs per 80 acres or 5/8 inches per acre.

4 The potential annual volume of reduced ground water pumping in acre-feet was calculated based on two (2) acre-feet per acre times the number of project acres expected to receive the full assumed application rate.

5 Volume of surface water required to be delivered to the specified conversion site includes the estimated volume of ground water replaced plus 30% for conveyance losses. Conveyance losses were not applied to designs with diversions directly from Milner Lake.

6 Estimated pumping costs are based on a period of 3600 hours and a cost of six cents per kilowatt-hour.

7 Estimated conveyance fees are based on the current rate of conveyance for recharge at sites within the ESPA: $3.00 per acre-foot per year.

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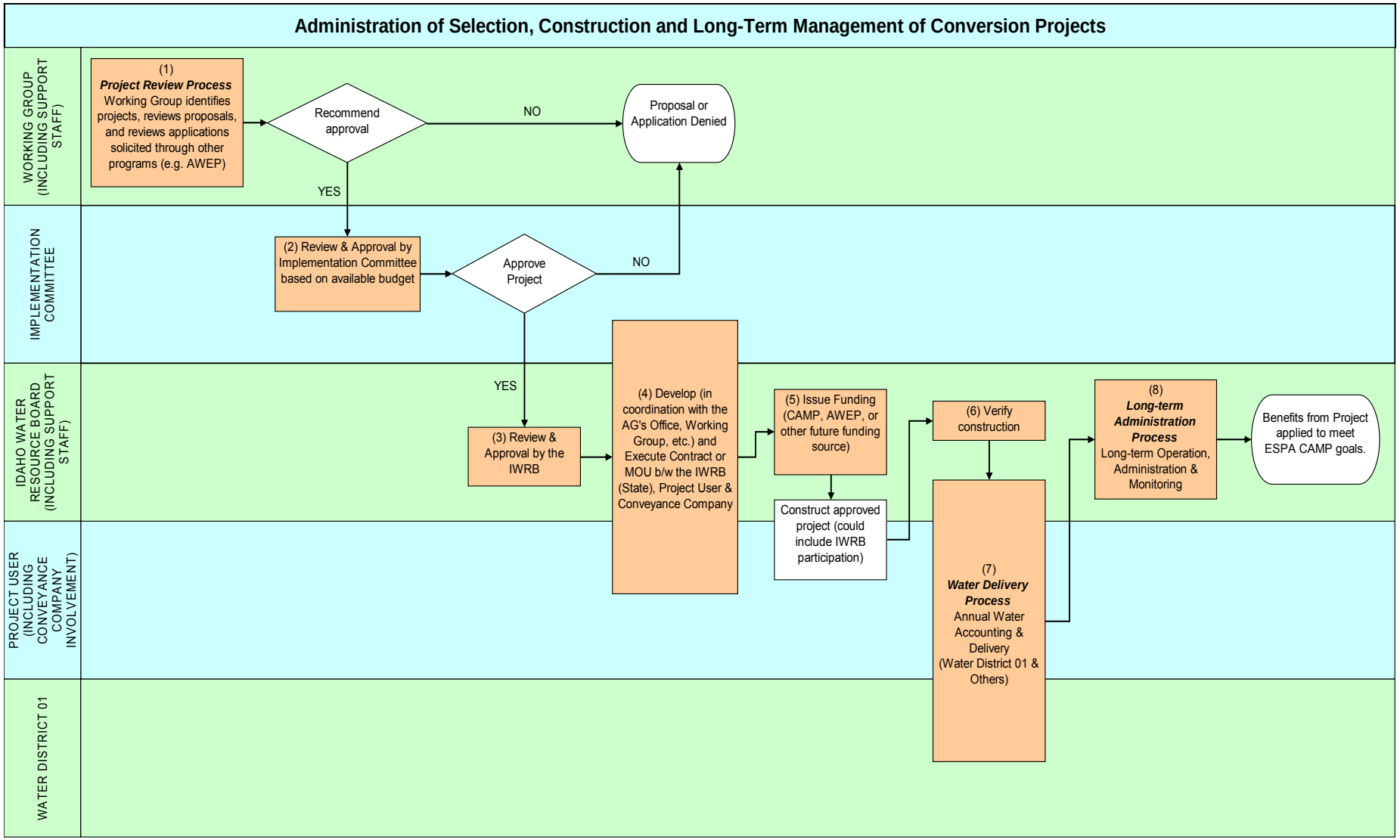
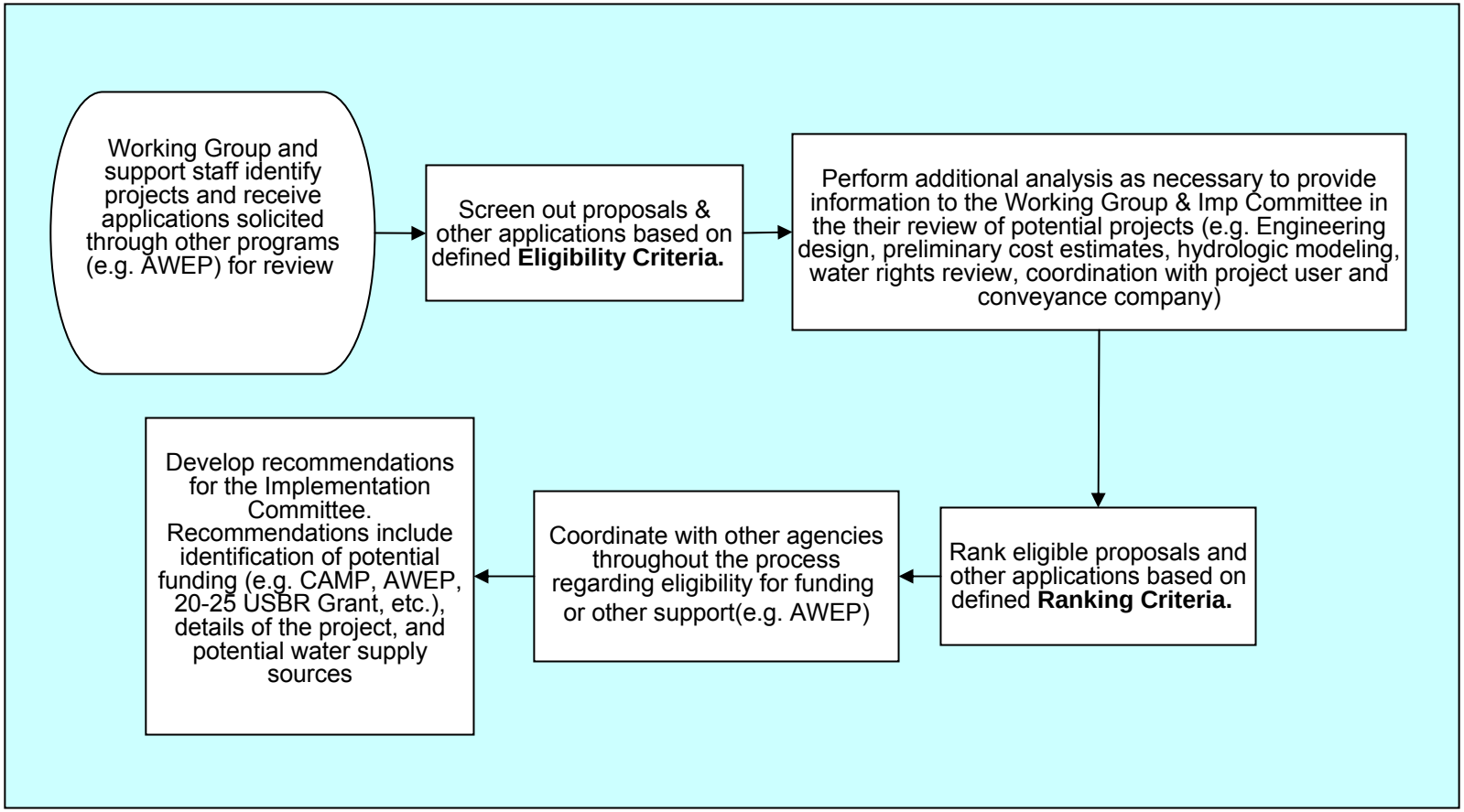


Conversion Project Proposal Review



Conversion Project Eligibility Criteria

Working Group and support staff screen project proposals based on the following Eligibility Criteria:

	Eligibility Criteria (Yes/No) [1]	Hazelton Butte	H & P Farms	West End of A&B Irrigation District	Rockford	Moreland
1	Wells associated with a conversion project must be located within the ESPA boundary.	Yes	Yes	Yes	Yes	Yes
2	Conversion projects must result in a benefit to the ESPA through the reduction of ground water pumping.	Yes	Yes	Yes	Yes	Yes
3	Lands to receive conversion surface water must have valid ground water rights. [2]	Yes	Yes	Yes	Yes	Yes
4	Lands to receive surface water through a conversion project may not injure other existing water rights or adversely impact existing shareholders on the corresponding canal system.	Yes	Yes	Yes	Yes	Yes
5	Conveyance Company has indicated they willing to cooperate in delivering water to conversion projects (capacity and infrastructure requirements to be determined).	Yes	Yes	Yes	Yes	Yes
	Eligibility Determination	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**

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1. Proposed Projects must qualify under all identified Eligibility Criteria (all Yes).

2. A preliminary review shall be performed by support staff to determine eligibility. Action may be required by individual owners within a group system to clarify or resolve potential water right issues.

Conversion Project Ranking Table - Initial Score

(Scores and data are provided for discussion purposes and do not illustrate the actual project scores)

				Hazelton Butte (Short Design, Reduced Rate)		Hazelton Butte (Long Design, Reduced Rate)		Hazelton Butte (Long Design, Full Rate)		H & P Farms		West End of A&B Irrigation District		Rockford		Moreland		Example Small Project	
	Ranking Criteria	Scoring	Points	Project Information	Score	Project Information	Score	Project Information	Score	Project Information	Score	Project Information	Score	Project Information	Score	Project Information	Score	Project Information	Score
1	Cost Benefit: **Cost/cfs/Project Acres Prorate projects to the nearest ten.**	Lowest Cost Ratio	600	$18	400	$29	250	$32	230	$31	240	$17	430	$12	600	$34	220	$27	270
2	Potential volume of reduced ground water pumping (af/yr).	≥ 10,000 af/yr	600	9,600	400	9,600	400	17,200	600	2,400	200	9,600	400	13,980	600	4,400	200	1,800	100
		≥ 5,000 af/yr	400																
		≥ 2,000 af/yr	200																
		≥ 1,000 af/yr	100																
		< 1,000 af/yr	50																
3	Projects involving multiple farms or group projects.	Group project	500	Yes	500	Yes	500	Yes	500	No	0	Yes	500	Yes	500	Yes	500	No	0
		Individual project	0																
4	Availability of capacity in canal system.	Full Season	500	Full	500	Full	500	Full	500	Full	500	Full	500	Full	500	Partial	100	Full	500
		Partial Season	100																
5	Identified environmental constraints? Score based on level of concern.	High	-500	None	0	None	0	None	0	None	0	None	0	None	0	None	0	None	0
		Low	-200																
		None	0																
6	Identified environmental benefits? Score based on level of concern.	High	500	None	0	None	0	None	0	None	0	None	0	None	0	None	0	None	0
		Low	200																
		None	0																
7	Is surface water for the project provided by project user?	All	400	None	0	None	0	[illegible]	0	None	0	None	0	None	0	None	0	None	0
		Partial	200																
		None	0																
8	Depth to static ground water in the well(s) proposed to be shut down when surface water for conversion projects is available (use greatest depth).	≥ 300 ft	200	≥ 300 ft	200	≥ 300 [illegible]	200	≥ 3[illegible]	200	≥ 300 ft	200	≥ 300 ft	200	< 100 ft	0	< 100 ft	0	≥ 300 ft	200
		≥ 200 ft	100																
		≥ 100 ft	50																
		< 100 ft	0																
9	Willingness to cost share in project construction or seek funding from other sources?	100%	300	25%	50	25%	[illegible]	2[illegible]	50	25%	50	50%	100	25%	50	25%	50	100%	300
		75%	200																
		50%	100																
		25%	50																
		0	0																
10	Willingness to cost share in project O&M or Conveyance Fees?	100%	[illegible]	[illegible]%	[illegible]00	50%	100	50%	100	0%	0	50%	100	50%	100	25%	50	100%	300
		75%	[illegible]00																
		50%	100																
		25%	50																
		0%	0																
11	How long is the Project User willing to participate in the ESPA CAMP process?	≥ 15 years	[illegible]00	≥ 1[illegible] years	300	≥ 15 years	300	≥ 15 years	300	≥ 15 years	300	≥ 15 years	300	≥ 15 years	300	≥ 15 years	300	≥ 5 years	100
		≥ 5 years	[illegible]0																
		< 5 years																	
12	Furthest distance of water delivery from source canal.	< 1 mile	20[illegible]	≥ 5 mile	0	≥ 5 mile	0	≥ 5 mile	0	≥ 1 mile	100	≥ 5 mile	0	≥ 1 mile	100	≥ 1 mile	100	< 1 mile	200
		≥ 1 mile	100																
		≥ 5 mile	0																
13	Level of Project User Interest.	High	200	High	200	High	200	High	200	Medium	100	High	200	Medium	100	Low	0	High	200
		Medium	100																
		Low	0																
14	Level of conveyance company's willingness to participate in delivery to proposed projects.	High	100	Medium	50	Medium	50	Medium	50	Medium	50	High	100	High	100	Low	0	High	100
		Medium	50																
		Low	0																
15	Amount of responsibility required by the State for operation and maintenance on the pumping plant and infrastructure.	High	-500	High	-500	High	-500	High	-500	Low	0	Medium	-250	Medium	-250	High	-500	Low	0
		Medium	-250																
		Low	0																
16	Level of administration required by the State for water delivery.	High	-500	High	-500	High	-500	High	-500	High	-500	Medium	-250	Medium	-250	High	-500	Low (own supply)	0
		Medium	-250																
		Low	0																
			TOTAL SCORE																

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FINAL RANKING

- **Additional considerations by the Working Group that may not be reasonable to score can be included in the final ranking.**
- **Is additional information necessary to generate recommendations for the Implementation Committee?**

	Ranking Criteria	Basis for Selection/Ranking	Hazelton Butte (Short Design, Reduced Rate)		Hazelton Butte (Long Design, Reduced Rate)		Hazelton Butte (Long Design, Full Rate)		H & P Farms		West End of A&B Irrigation District		Rockford		Moreland		Example Small Project	
	PROJECT RANKING BASED ON INITIAL SCORING		--		--		2		5		3		1		6		4	
1	Geographic location (above and below American Falls).	Select equal number above and below based on highest Initial Scores.	Below		Below		Below	X	Below		Below		Above	X	Above		Below	
2	Are there water right issues associated with the land proposed for conversion that will require action by the project user and approval by the IDWR?	No Yes - Not prohibitive Yes - Prohibitive (Deny Proposal)																
3	Working Group Discretionary Criteria or Considerations.																	
		FINAL RANKING																

Recommended Conversions Project Sites for Large Scale Projects

- Hazleton Butte
- H & P Farms
- West End A & B Project
- Rockford Canal
- East Shelley

Memorandum of Understanding

- The Working Group is recommending two MOU for implementation of ESPA conversions projects
  - Between the IWRB and the property owner
  - Between the IWRB and the conveyance company

Conversions: Next Steps

✓ Circulate draft of the two MOU for Working Group review and finalization

✓Finalize the administrative mechanism for managing projects from application stage to construction to water delivery and monitoring (including eligibility and ranking criteria)

✓ Design public outreach and education strategy in order to get letters of interest for large scale conversions projects and possible partnerships

✓ Incorporate environmental factors

Demand Reduction Update

Demand Reduction

- PERC Program (CREP Incentives)
- Leasing and Agreements not to Divert
- Surface Water Conservation
- Next Steps

Demand Reduction: PERC Program

- In recent calls, the Demand Reduction WG has developed a proposal for a PERC Program to incentivize further enrollments in the existing CREP program. *Please see the handout of the PERC Program overview*

- The Demand Reduction Working Group is recommending the PERC Program as both a stand-alone program and as additional incentives for CREP enrollment.

Demand Reduction: Leasing and Agreements not to Divert

- Morgan Case, IWRB Staff, updated the Demand Reduction WG on leasing and agreements not to divert in the Upper Salmon Basin
- The Working Group is recommending these two strategies, but do not wish to actively pursue these projects. The goal is to hold small group meetings to determine interest and then move forward with any interested parties before exploring these two demand reduction strategies any further.

Demand Reduction: Surface Water Conservation

- Surface water conservation on the Twin Falls Canal Company tract. Four opportunities for surface water conservation were emphasized:

  - *Seepage reduction*. Seepage can be reduced without impacting other, senior water rights.
  - *Late season reduction*. Installation of a check structure and diverting less at Milner
  - *Pump backs*. Reduce evaporation off the rim.
  - *Aquatic reed control*. Aquatic reed herbicide (Cascade) that to date shows no significant side effects.

  Recommendations expected in December.

Demand Reduction: Next Steps

- ✓ Continue the WG discussion on surface water conservation projects near the Twin Falls Canal and identify other possible sites
- ✓ Hold small group meetings to discuss leasing and agreements not to divert
- ✓ Individual working group members to contact Brian Olmstead if interested in a tour of the areas where the aquatic reed herbicide has been applied.
- ✓ Initiate discussions on buy-downs and buy-outs and how they fit into the ESPA Plan

Weather Modification Update

Weather Modification

- 5-Year Pilot Weather Modification Program in the Upper Snake
- Role of Idaho Power Company (IPC) in Cloud Seeding in the Upper Snake
- Role of Counties in Cloud Seeding in the Upper Snake
- Next Steps

Weather Modification: 5-Year Pilot Program in the Upper Snake River Basin

- At a recent meeting, IPC presented a budget for a 5-Year Cloud Seeding Pilot Program in the Upper Snake. At this meeting, several modifications were requested.
- Please see the handout of the estimated budget for the proposed cloud seeding program
- The Working Group is recommending that the ESPA Plan implement the proposed cloud seeding program presented in the draft budget.

Weather Modification: Role of IPC

- IPC has committed itself to cloud seeding in the Upper Snake.
  - *Seeding already has occurred in the 2008/9 winter season and was successful*
  - *IPC is committed to continuing and expanding cloud seeding operations in the Upper Snake*
  - *A formal agreement is to be developed between the IWRB and IPC for its cloud seeding program and how IPC's financial contributions for cloud seeding fit under the ESPA umbrells*

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Weather Modification: Roles of Counties in Cloud Seeding in the Upper Snake

- Counties are committed to a continued role in cloud seeding projects in the Upper Snake River.
- Continued coordination will occur between the counties and IPC to implement efforts in the Upper Snake
- A formal agreement needs to be developed between IWRB and the counties to determine the financial contribution of the counties under the ESPA umbrella

Weather Modification: FAQs

- Part of outreach and education, the Weather Modification WG developed an FAQ document that explains weather modification in plain terms, without the use of jargon

- The document provides an overview of the program, how it fits into the ESPA Plan, and addresses the benefits and concerns of such a program

Weather Modification: Next Steps

- Finalize the FAQ document
- Develop formal agreements between the IWRB and IPC and between the IWRB and counties (including how their financial contribution will fit under the ESPA Plan umbrella

Recharge Working Group Update

Late Season Recharge Plan recognizes:

CAMP goal of equal distribution above and below American Falls

That recharge below American Falls with the possible exception of the West Egin site generally has a longer aquifer retention time than recharge in canals above American Falls

That *early season* recharge above American Falls generally benefits base flows and storage opportunities in the Snake River

That natural flow water will be available below American Falls in October 2009

As a result of these conditions, this late season recharge plan primarily focuses on recharge below American Falls through the North Side canal, the Milner-Gooding canal and the Southwest Irrigation District

Late Season Recharge Plan

Canal	water source	volume (a-f)	unit price ($/a-f)	cost ($)
Below American Falls				
Milner-Gooding	up to 1500 cfs of natural flow available after Oct. 20th	42,000	3.00	126,000
North Side	up to 1500 cfs of natural flow available after Oct. 20th	10,000	3.00	30,000
Above American Falls				
Egin Bench (Recharge Canal)	leased Fremont-Madison storage	5,000	3.00	15,000
Total		57,000	3.00	171,000

Note: Southwest I.D. expects to participate in late season program , but volume estimate unknown at this time

Constructed Recharge Sites

Mile Post 31 Estimated construction cost: $1.25 million

Phased development of three 36-inch pipelines capable of delivering approximately105 cfs (210 afd)

West Egin Estimated construction cost: $880 thousand

Increase diversion rate from St. Anthony Canal into the Recharge Canal to approx. 150 cfs 300 afd) to deliver approx. 80 cfs (160 afd) to West Egin recharge area

Both sites would be operated passively with minimal O & M costs

Big/Little Wood River site still to be determined

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Mile Post 31
and Milner-Gooding Canal
July 2009

Recharge Liability

Jim Peterson - RSDIS/Glatfelter Public Practice

"Recharge activities, in my view, are part of normal operations. Coverage should exist." E-mail received October 7, 2009

Awaiting official letter from underwriter

Additional Plan Components