
# 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.

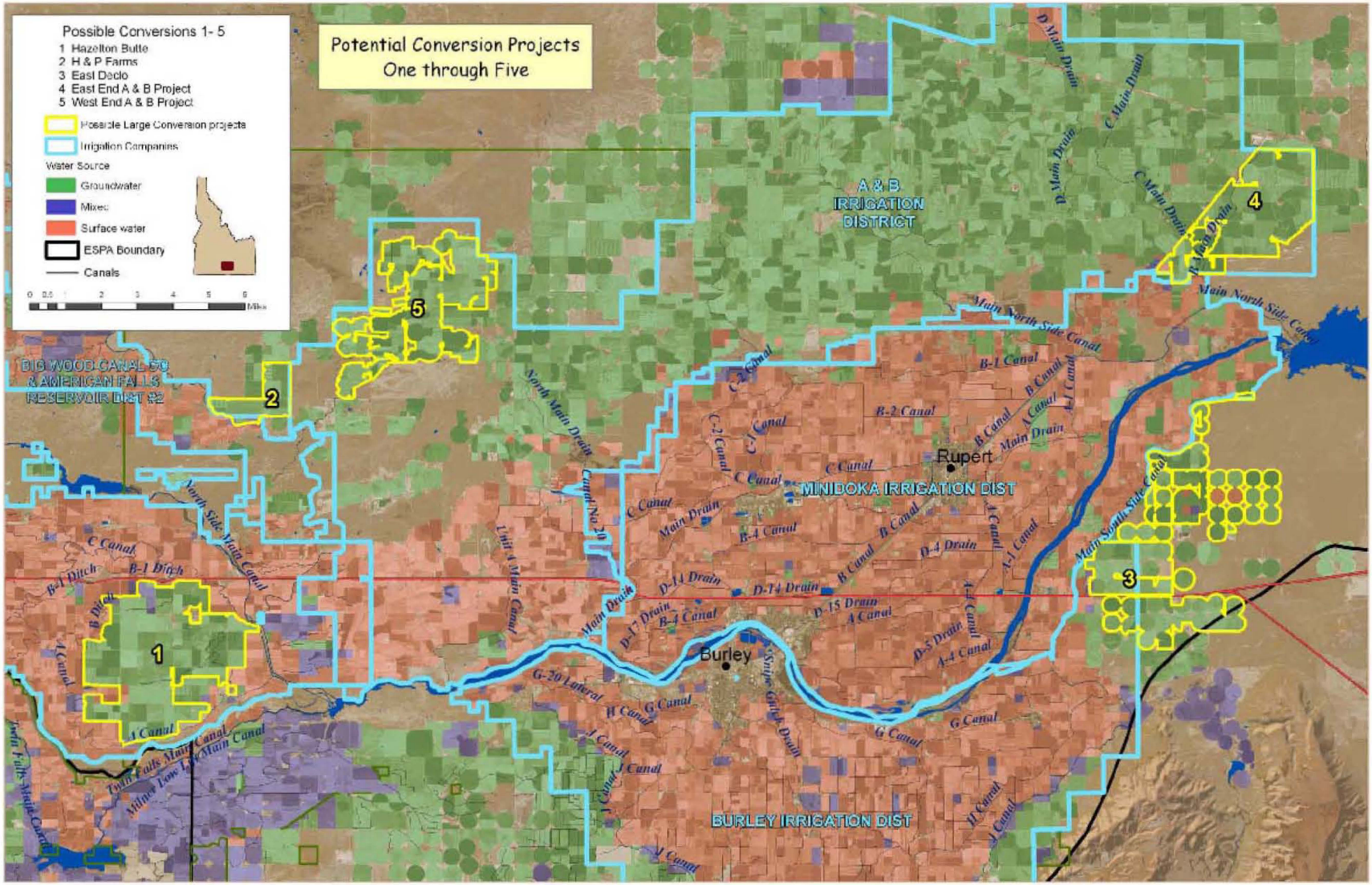
# Funding Direction : Interim Legislative Committee Motion

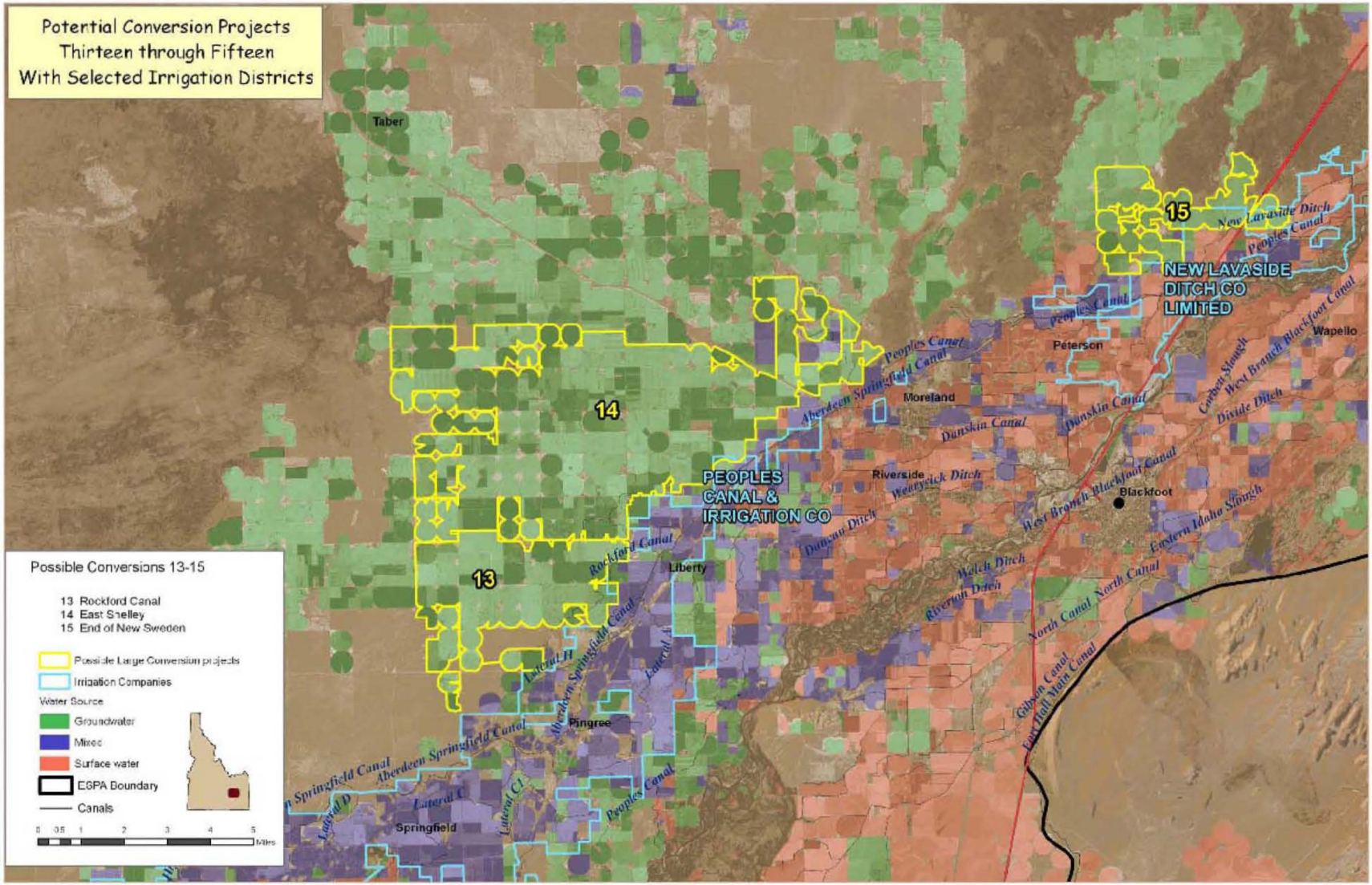
**"That the Interim Natural Resource Committee accept the ESPA Implementation Committee's conceptual plan to fund the ESPA Plan through a mandatory fee assessed either by the water districts and/or counties and/or other methods and request that the Implementation Committee develop legislation consistent 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
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 Main Drain
Main Drain
C Canal
B Canal
A Canal
B-1 Canal
B-2 Canal
C-2 Canal
C-3 Canal
A-1 Canal
A-2 Canal
A-3 Canal
A-4 Canal
B-4 Canal
D-4 Drain
D-14 Drain
D-15 Drain
D-17 Drain
D-5 Drain
G Canal
J Canal
H Canal
G-20 Lateral
Canal No 20
Unit A Main Canal
Twin Falls Main Canal
Milner Low Lift Main Canal
South Side Main Canal
B-1 Ditch
B Ditch
Salmon Falls Creek 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
Peterson
Riverside
Blackfoot
Wapello
Liberty
Pingree
Springfield
Rockford Canal
Aberdeen Springfield Canal
Peoples Canal
Dunkin Canal
Weeryick Ditch
Duncan Ditch
Welch Ditch
Riverton Ditch
North Canal
Gibson Canal
Farr Hall Main Canal
Eastern Idaho Slough
Corbet Slough
West Branch Blackfoot Canal
Divide Ditch
New Lavaside 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
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 | 88 | 13,980 | 18,174 | | $194,560 | $54,522 | $1,073 | $85,227 | $12 |
| 14 | Moreland | Peoples or Aberdeen Springfield Canals | 2200 | 22[illegible] | $2,[illegible] | [illegible] | 4,400 | 5,720 | | $76,330 | $17,160 | $909 | $74,074 | $34 |



1. The design rate for each project was based on a assu[illegible]d application r[illegible]uiren[illegible]t 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 projec[illegible]osts and to d[illegible]ibute [illegible]cess 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 [illegible]a mai[illegible]e 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 tren[illegible]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 monitori[illegible]wells, backflow protection devices (check valves), laterals. Note, costs referenced in this table are based on the high end of an estimated cost range.

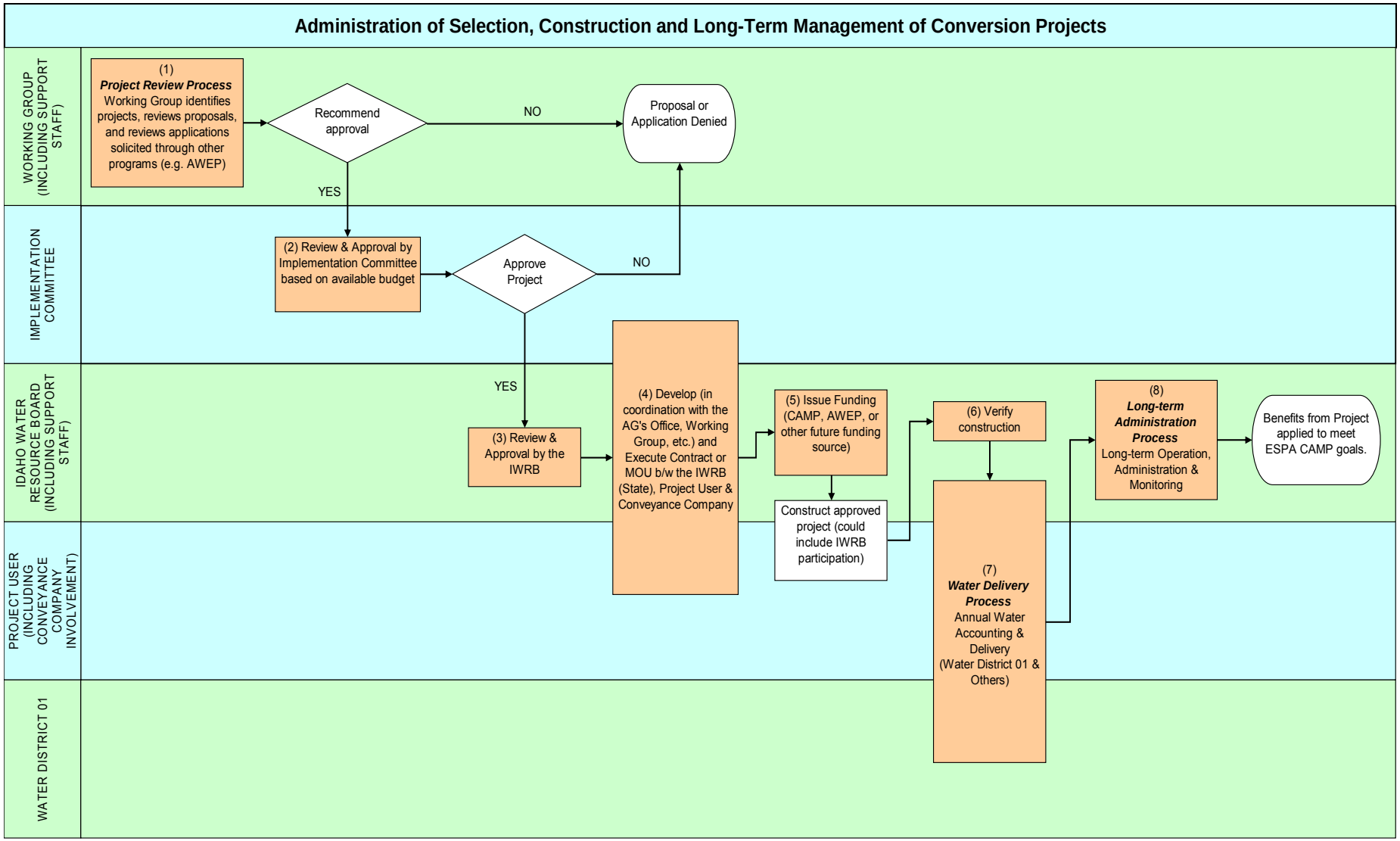
3 The design rate for each project was based on an assumed application requirement of 1 cfs per 80 acres or 5/8 inches per acre.

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.

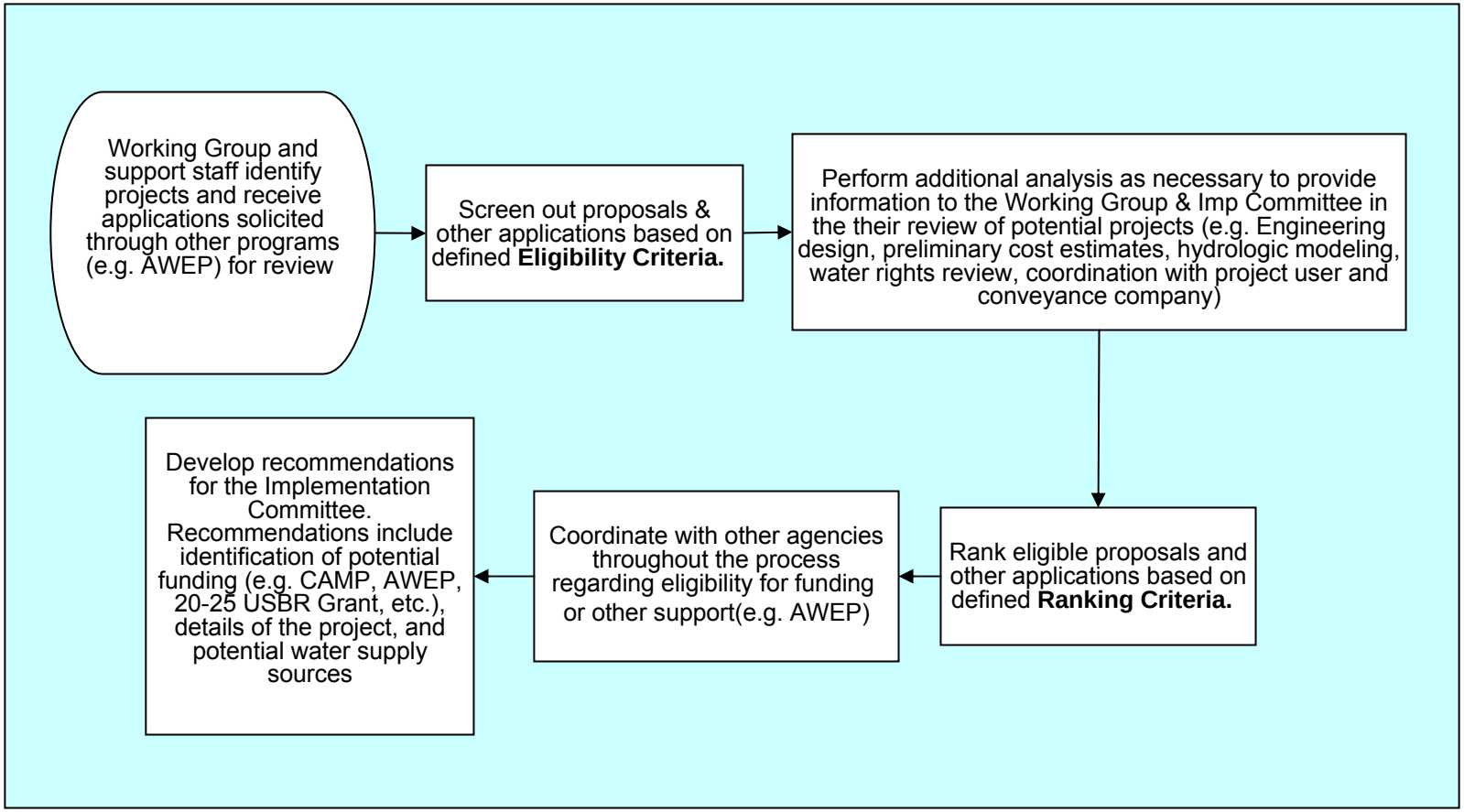
5 Volume of surface water required to be delivered to the specified conversion site includes the estimated volume of ground water replaced plus 30% for conveyance losses. Conveyance losses were not applied to designs with diversions directly from Milner Lake.

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.


Administration of Selection, Construction and Long-Term Management of Conversion Projects
WORKING GROUP (INCLUDING SUPPORT STAFF)
IMPLEMENTATION COMMITTEE
IDAHO WATER RESOURCE BOARD (INCLUDING SUPPORT STAFF)
PROJECT USER (INCLUDING CONVEYANCE COMPANY INVOLVEMENT)
WATER DISTRICT 01
(1) Project Review Process Working Group identifies projects, reviews proposals, and reviews applications solicited through other programs (e.g. AWEP)
Recommend approval
NO
Proposal or Application Denied
YES
(2) Review & Approval by Implementation Committee based on available budget
Approve Project
NO
YES
(3) Review & Approval by the IWRB
(4) Develop (in coordination with the AG's Office, Working Group, etc.) and Execute Contract or MOU b/w the IWRB (State), Project User & Conveyance Company
(5) Issue Funding (CAMP, AWEP, or other future funding source)
Construct approved project (could include IWRB participation)
(6) Verify construction
(7) Water Delivery Process Annual Water Accounting & Delivery (Water District 01 & Others)
(8) Long-term Administration Process Long-term Operation, Administration & Monitoring
Benefits from Project applied to meet ESPA CAMP goals.

# Conversion Project Proposal Review



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# 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 it is 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** |



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)**

| | Ranking Criteria | Scoring | Points | 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 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 | [illegible]one | 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 | Non[illegible] | 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]ears | 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 | 200 | ≥ 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** | | | | | | | | | | | | | | | | | |

# 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<br>Yes - Not prohibitive<br>Yes - Prohibitive (Deny Proposal) | | | | | | | | | | | | | | | | |
| 3 | Working Group Discretionary Criteria or Considerations. | | | | | | | | | | | | | | | | | |
| | | FINAL RANKING | | | | | | | | | | | | | | | | |

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# 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

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# 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

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- 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<br>atural flow available | up to 1500 cfs of<br>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

IDAHO
Water Resource Board

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Water Resource Board

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