

## Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan

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### Advisory Committee

#### Meeting Notes

**Date:** Thursday, April 24, 2008

**Time:** 10:00 a.m. to 5:00 p.m.

**Location:** Rexburg - 343 E. 4<sup>th</sup> North, 83440

#### MEETING AGENDA

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1. Welcome, Introductions, Agenda Review and Meeting Note Finalization
2. Brainstorm: CAMP Opportunities to Work with Idaho Power's WIF and WAF  
**Goal: Committee development of potential projects to work with Idaho Powers Watershed Improvement Program (WIF) and Water Acquisition Fund (WAF)**
3. Presentation and Discussion: Fish and Wildlife Sub-Committee  
**Goal: Committee understanding of Fish and Wildlife Sub-Committee progress and discussion of issues of interest/concern.**
5. Discussion: Economic Sub-Committee Briefing  
**Goal: Report back from Economic Sub-Committee and briefing of the status of economic analysis.**
6. Discussion: Developing a Comprehensive Aquifer Management Plan  
**Goal: Committee discussion of how to integrate information and make decisions on components of CAMP.**
7. Presentation and Review: Outline for CAMP  
**Goal: Committee review and discussion of draft CAMP outline.**
8. Discussion: Next Steps and Future Meeting Agenda Development
9. Public Comment

**Next Meeting:** May 29<sup>th</sup> (5<sup>th</sup> Thursday) in Pocatello

## **WELCOME, INTRODUCTIONS, AGENDA REVIEW AND MEETING NOTE FINALIZATION**

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Jonathan Bartsch, the facilitator, opened the meeting with comments on the meeting purpose and the primary focus of the Advisory Committee at this point in the CAMP process. He emphasized the Committee's transition from information sharing to decision-making. Jonathan noted that from this point forward, meeting formats will change from a series of presentations to information-sharing focused on decision discriminators (benefit, cost, impacts, policy etc.).

The March 27<sup>th</sup> meeting summary was not finalized, as the notes did not reach everyone (distributed electronically on April 10, 2008 by CDR). Hard copies of the notes were distributed at the meeting, and meeting notes for March will be finalized at the May Committee meeting.

A concern was raised about the level of detail outlined in the matrix and perceived gaps in information, particularly the coverage of recharge. A group member suggested asking a sub-committee to improve the recharge components of the matrix and make another presentation to the Committee. This question was set aside for discussion at the end of the day.

## **BRAINSTORM: CAMP OPPORTUNITIES TO WORK WITH IDAHO POWER'S WIF AND WAF**

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The Advisory Committee brainstormed ways for the CAMP process to work with Idaho Power (IPC) proposals coming out of the Hells Canyon Relicensing. The proposals include a Watershed Improvement Fund (WIF) and Water Acquisition Fund (WAF) designed to pay for projects that could provide water management and water temperature benefits. Jim Tucker of Idaho Power explained the background of the two programs. Participants then gathered in small groups to generate ideas – including potential projects, strategies and opportunities – and returned to share them in plenary.

Jim reviewed the Idaho Power's (IPC's) Hells Canyon Relicensing process and their proposal to the State DEQs (Idaho and Oregon) for a Temperature Enhancement Management program to meet the complex's TMDL (Total Maximum Daily Load) allocation for temperature. The programs being proposed by IPC include WIF (Watershed Improvement Fund) and WAF (Water Acquisition Fund). As proposed, these programs could provide significant resources over the 40-year license for projects within the watershed that help manage temperature, and may provide funding opportunities for the CAMP actions.

Jim explained that one way to address the TMDL allocation for temperature is to build a structure that meets IPC's needs at a specific time of year (June, July and August) but which may have little benefit at other times of the year. Biologists have expressed concern about impacts within the reservoirs and downstream from such a structure. Instead of building a structure, Idaho Power examined the upstream causes of the temperature problem and decided to propose a watershed program to the State DEQs with two components: improvement and acquisition. The program, if approved, would entail funding upstream projects that create water temperature benefits in June, July and August. It is anticipated that Idaho Power would allocate

approximately \$3 million per year over a 40 year period for these two programs. Specifically, the WIF would provide \$1 million per year for projects that would create temperature benefits upstream of Hells Canyon (e.g., fencing, shading, culverts, return flows). The WAF allotment of \$2 million per year would be used to acquire water and put it into the river during critical temperature periods to offset allocations.

The IPC's proposal is still under review by the Departments of Environmental Quality in Oregon and Idaho and will need to undergo a public review process. Jim explained that the reason for presenting it to the Advisory Committee is to explore the possibility of using a mechanism like the WIF/WAF to create mutual gain with the CAMP. Idaho Power is examining the feasibility of these projects to see if a watershed approach could work. The idea is also to solicit other interested parties to examine alternatives that benefit the river and offset temperatures requirements and develop partnerships.

Barry Burnell (Idaho DEQ) noted that the Idaho and Oregon DEQs are currently working with Idaho Power's technical staff to make sure that IPC's proposal is a technically viable and feasible approach to meet the TMDL requirements. Essentially, the DEQ needs reasonable assurance that the proposal presented by Idaho Power will meet their water quality requirement. The draft 401 certification (certification that IPCs efforts comply with applicable provisions of the state Water Quality Standards) is expected out this summer while the certification deadline is November 2008. Jim noted that Idaho Power may not be able to specifically identify available resources until it has the 401 certification. He later commented that IPC would consider moving forward with some projects in the mid-Snake section even before the final 401 certification is approved if it made reasonable technical sense. He added that this initiative holds potential for the Snake River watershed because it would solve three problems (water quality issues above, in reservoir and below the Hells Canyon complex). Jim noted that the proposal to the DEQ's covers more than just the mid-Snake section. The question for the Committee is what proposals can be looked at in the mid-Snake section.

Jim stressed that at this juncture, Idaho Power is simply interested in seeing if there could be synergy with the CAMP process. IPC's proposal to the DEQs is not contingent on the CAMP Advisory Committee being involved, although important opportunities to leverage resources exist that should be discussed. The types of projects discussed thus far include a rotating fallowing program, weather modification and buy-down of ground water rights.

#### Questions:

Following this overview, several clarification questions were posed regarding the parameters of the WIF and WAF. Those points in response to the questions are summarized here:

- A project that doesn't increase flows downstream would be hard to justify as part of the WIF/WAF. IPC would have to demonstrate that water in the river would be over and above base flows (in addition to Swan Falls minimum).

- Idaho Power has to demonstrate what is done in the watershed affects the temperature below Hells Canyon Dam during the two week period in question. If you can lower the temperature in the system above, it will affect the system below. This needs to be demonstrated, to a reasonable level, to the DEQs. Idaho Power has done a lot of work on the temperature issues so the data [on thermal inputs] is there.
- How will decisions be made on which projects to move forward with? A Resource Working Group involving the appropriate agency personnel, tribes, environmental groups and other interested parties will be involved to examine the proposed projects for the WIF. With the WAF there will be an on-going effort to look at projects, resources including other funding partners and the need to adaptively manage the system. The decision making process on which projects to implement and how could involve consultation with the CAMP Committee.
- Projects could be approved over time and it may not be all funded by IPC. The goal is to look for funding partners and opportunities to leverage resources that may be available. As for the allocation of the funds, if there are projects out there could be front loaded, IPC would consider concentrating portions of money in the earlier phases. It is hoped that this would be a program that people would buy into as benefits become clear and continue to support those efforts.
- Barry Burnell noted that State Bill 145 requires the DEQ to evaluate TMDL on each watershed in a 5 year cycle. Part of that cycle requires looking at new data, new water quality information, looking at the sub-basin and looking at that within a watershed. Whatever is determined in the 401 certification will be adaptively managed. The data at Hells Canyon complex and how IDC's TMDL allocation was determined include the use of a 30 year data set.
- In terms of the magnitude of the problem, there is a 2 degree temperature difference in October variations from the requirement. Idaho Power has to give reasonable assurance that projects will meet the requirements at the discharge point. In essence, that means lowering the temperatures by a couple of degrees centigrade. While it may seem like a small temperature difference it is a sizable challenge

#### WIF and WAF Brainstorming

The Committee organized into small groups and developed ideas, strategies and opportunities to accomplish goals. The next step of the overall process is for the Committee to continue to work to refine its analysis and make recommendations regarding the management alternatives. While doing so, the Committee will look for opportunities and synergies for projects and funding opportunities. Notes from the brainstorming sessions are included below.

#### **Leveraging and Increasing Enrollment in the CREP Program**

- Combine IPC's money with the CREP program to increase CREP enrollment, particularly in the Thousand Springs area and below American Falls by increasing the per-acre incentive to take land out of production (Lincoln, Minidoka, and Jerome for example).
  - Identifying community partners for CREP (*This idea was compared to the 'Adopt-A-Road' program and was proposed as a funding source.*)
- Issue: What to do with when CREP program ends for irrigators (15-years) with IPC's 40 year license?*

### **Increase flows in Snake River past Milner**

- Storage higher in the system to be released for reducing temperature downstream
  - Tributary habitat improvement
- Issue: How is this connected to the CAMP goal of aquifer management?*
- Reduce municipal waste water

### **Water Stubble**

- Examine incentives to reduce watering of stubble, especially in July/August, as it represents a huge water loss.
- buy down

### **Fish Flush**

- Save for later in year.
  - Does it have the scientific value?
- ISSUE: It is required as a part of the Nez-Perce Agreement?*

### **Purchase water downstream to meet ESA obligations**

- Trade reliability for a longer season

### **Water shaping**

#### **Weather modification**

- Implement a weather modification program to increase snow pack

#### **Below Miler Acquisition**

- To increase flows in the river
- Helps provide flexibility in the management of the Upper Snake

#### **Increase flows to Thousand Springs through**

- Operation canals at full capacity (It was noted that additional capacity exists at Milner and North Side canal).
- Additional recharge opportunities and capacity from Wood River system (look at this example of 2006)
- Reduce groundwater diversions
  - Alternate rotations

- Crop mix, fallowing programs in the critical areas near Thousand Springs

#### **Target problem areas above specific springs**

- Analyze the area and identify the most beneficial well/farm to target for buy out

#### **Implement a mitigation bank**

- Develop system to credits of benefits into mitigation bank
- Creates opportunities to leverage a number of interests and resources and to encourage participation through purchase a piece of a measure/alternative  
Example: Pristine Springs
- Department of Water Resources would serve as broker mitigation credits:  
fallowing program on the rim, crop mix etc...
- Allows for greater flexibility and management of the overall system, need market based approach

#### **Groundwater to Surface water Conversion**

- Groundwater to surface water conversions – on the North Side Canal and Milner (Gooding Canal)  
*COMMENT: Northside Canal-could be converted if it had water. If could use full augmentation water and replace with high lift water and could use high lift water to recharge thousand springs.*

#### **Implement Permanent Buy-outs**

- Demand reduction in marginal areas

#### **Recharge**

- Implement recharge to increase base-flows in the falls
- Trade-offs
- *Could make sense in some places*

*\*It was noted that there are trade-offs to each of these ideas.*

### **PRESENTATION AND DISCUSSION: FISH & WILDLIFE SUB-COMMITTEE**

The subcommittee established to address Fish, Wildlife and Environmental issues held their second meeting by teleconference on Friday, May 4<sup>th</sup>, and agreed to work on two parallel tracks – analysis of modeling approaches, and development of a list of factors and features of importance. Committee members provided ad-hoc reports on the status of both activities.

Jon Bowling, Idaho Power, noted that the modeling subgroup is getting closer to an agreement on the assumptions, tools, and methodology. The group decided to analyze the period between 1990 and 2005. They will take reach gains, diversions, and reserve opportunities at a 2005 year of development and apply the hydrology from these years to the water budget scenario outlined previously, to see the effect in changes in spring flows, storage and rises in the river. This methodology tells what might have happened in the past and is not predictive of the future. The

idea is to develop a base case to see what the impacts are to the river, springs and reservoirs and then use this base case to analyze the overall effect of water budget change. The model will show how the proposed activities would manifest themselves as changes in the system in a given year, depending on the time lag and the hydrological regime.

The group hopes to have the model runs essentially completed in May. Several other analysis points will rely on this flow analysis. The Sub-Committee will work cooperatively and present preliminary results at the May meeting. These results will feed into the economic analysis in order to compare the cost effectiveness of the different methods.

Peter Anderson of Trout Unlimited explained that the Fish & Wildlife Sub-Committee was to identify features and factors on potentially affected reaches. These features and factors will explain important aspects of the natural environment to be considered by the Technical Work Group and Committee. The description will not attempt to assess potential impacts of ESPA actions. Instead, this effort is intended to serve as a checklist of issues to be reviewed as information on the hydrologic effects of ESPA management alternatives becomes available.

Once this information is put together, the idea is to lay these next to the model results and ask the questions: a) Are there increased or altered flows? b) Is there a negative impact? This would be put into matrix as part of the decision-making process.

The next sub-committee meeting is to be held in early May .

#### Questions/Comments

- *Do you have a feel for categories/factors?*

A lot of the TMDLs are based upon a concentration level at a point and then they engineer back to get the load allocations. A summary of the TMDLs as we move down the system will give us a good idea of the important factors we have to consider with respect to the CWA. We need to develop other kinds of factors we are going to be considering.

- One resource on impacts is the IDWR report on large scale recharge (2004?) This information includes changes in reach flows by season; percent changes in flows and aesthetic and recreation uses and if an ESA listed species in the area.

#### **DISCUSSION: ECONOMIC SUB-COMMITTEE BRIEFING**

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Hal Anderson (IDWR) began discussion on the work of the Economic Sub-Committee by providing background. He explained that originally a completely integrated hydrological flow and an economic model was considered, similar to the work that had been done in the Treasure Valley. However, due to the lead time needed to put that type of analysis together, the Department considered contracting with a consultant to do a modified cost-benefit analysis. Westwater Research was hired to conduct this abbreviated form of a cost-benefit analysis. A

typical cost-benefit analysis would look at the overall capitol costs and then look at overall benefits, including the water itself. That requires the valuation of economic activities such as aquaculture, municipal supplies, agriculture, etc. However, there was concern regarding such analysis, in particular that the benefit analysis would pit one water user against the other.

Consequently, the Economic Sub-Committee stood back and decided that the analysis should look primarily at the cost side and put together a series of economic analyses that will help discriminate between alternatives. The cost-effectiveness analysis will help the Advisory Committee determine which grouping of options will be the most fruitful.

The analysis will aim to provide some economic evaluations of the various activities that can be used to accomplish a water budget adjustment and then value the incremental cost of adding more to help answer the question, “*What would be the overall direct costs to changing a water budget?*”

The hope is that this type of analysis will help the group move forward, and assist in the distinguishing between the alternatives.

**DISCUSSION: DEVELOPING A COMPREHENSIVE AQUIFER MANAGEMENT PLAN**

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To stimulate discussion regarding an effective way to integrate information and make decisions on components of CAMP, Jonathan Bartsch presented a matrix to organize Committee thinking.

**Original Proposal:**

<b>Alternative Packages</b>	<b>Components</b>	<b>Benefits</b>	<b>Costs</b>	<b>Impacts</b>
300kaf				
600kaf				
900kaf				

In response to this proposal, the Advisory Committee made the following comments and suggestions:

- List measures/management alternatives instead of numbers (300 kaf, 600kaf etc.)
- There needs to be some flexibility and not get ‘stuck’ in these boxes, as this is a process that will change over time.
- We cannot plo p a 900kaf/\$1 billion package on the legislatures table and expect that they will ‘buy’ it. We need to strategize about where to start and the overall vision for the aquifer.

Through discussion, committee members proposed the following modifications to the matrix:



**Modified Proposal:**

<b>Management Alternatives</b>	<b>Components</b>	<b>Benefits (Qualitative/ Quantitative)</b>	<b>Costs</b>	<b>Timeline</b>	<b>Linkages (components that are dependant on other actions)</b>

With this modified proposal, it was noted/suggested that:

- Benefits can be somewhat objective
- Costs could be ranked from highest to lowest
- Costs should include legal/administrative requirements to implement
- This matrix could be a modified summary of the matrix developed by Rich Rigby
- Timing: rank actions based on those with a disappearing window of opportunity versus those that could be done later
- Focus on where can get the “most bang for our buck.”
- Diversify the package: by increasing the demand reduction component in the alternatives
- Have a menu to see what level that brings us to, i.e. stack the alternatives
- Should offer flexibility to pick and choose measures so we can piece together the right components to make it feasible.
- Include base management costs (daily, monthly management requirements) that could help discriminate between options
- Funding timeframe: if a billion dollars is spread out over 50 years, with many contributors, such a proposal might be received differently. We need to get started and recognize that it will be an iterative process.
- Are we wasting time by attempting to do this before we have the cost effectiveness analysis? Response: the cost-effectiveness analysis will help to refine decision making but will be a substitute and we can make some assumptions to get started
- Can rank management alternatives from highest to lowest in terms of cost, benefit, impact, etc.

As guiding principles, it was agreed that the Advisory Committee:

1. Start small; focus on the ‘first phase’  
*What can we do now? What is urgent that we can get a handle on?*
2. Should be realistic, yet robust in the first phase
3. Do not forget the long term vision

NOTE: There was a suggestion that the group develop a vision statement, however, it was suggested that the statement for the goal of the CAMP meets this purpose: Sustain the economic viability and social and environmental health of the Eastern Snake Plain by adaptively managing a balance between water use and supplies.

### **Next Steps:**

- 1) IDWR will identify a menu of alternatives, put together a proposal for a small, medium and large packages that examine the quickest, most cost-effective, easiest to implement) as well as short, medium and long term proposals
- 2) Next meeting to focus on developing the packages and examining the environmental impacts.

### **PRESENTATION AND REVIEW: OUTLINE FOR CAMP**

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Jonathan distributed a draft outline for the CAMP and solicited feedback from the group.

#### Questions

***When do we discuss who will manage this? What is the role of this committee in implementation?***

It is envisioned that the ‘responsible parties for implementation would be identified in section 6.2

***What do you see the role of this committee in the future?***

Jonathan suggested that the Committee focus attention on the immediate and challenging task at hand – developing a widely agreed upon CAMP – adding that the discussion of future role must eventually be had by the committee and the Board.

***We need to know what we’re doing before we decide who is going to pay for it. Are we going to be able to produce something?***

Barry of the DEQ shared two examples of experiences of the DEQ with similar committees:

1. Drinking water program. At the end of the process the committee had a role to play to represent stakeholders and provide info to the agency. The committee retained the structure and met quarterly or twice a year.

2. Groundwater Quality Plan. The Committee gave the key agencies responsibility for implementation and encouraged coordination and turned over the reigns to the agency.

Jonathan added that the Nebraska Water Policy Task Force developed a consensus based recommendation which passed and became law and now the committee meets twice a year.

**Next Step:**

Send Jonathan an email with feedback.

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**DISCUSSION: NEXT STEPS AND FUTURE MEETING AGENDA DEVELOPMENT**

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**Next Meeting: May 29<sup>th</sup>, 2008 in Pocatello (Holiday Inn)**

**Topics:**

- Presentation by the Fish & Wildlife Sub-Committee: Results of the modeling and features and factors discussion.
- Update Economic Sub-Committee
- Discussion of management alternatives and alternative packaging.
- Discuss further the outline of the CAMP

*NOTE: June meeting to be held on the June 19<sup>th</sup> due to a scheduling conflict on the fourth Thursday of the month. It will be convened in Aberdeen.*

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**PUBLIC COMMENT**

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No public comment.

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**MEETING ATTENDEES April 2008**

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Advisory Committee Members

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|-----|---------|----------|---------------------|
| 1.  | Lance   | Clow     | City of Twin Falls  |
| 2.  | Roger   | Chase    | City of Pocatello   |
| 3.  | Steve   | Howser   | ASCC                |
| 4.  | Linda   | Lemmon   | IAA/TSWUA           |
| 5.  | Jim     | Tucker   | Idaho Power         |
| 6.  | Brian   | Olmstead | TF Canal            |
| 7.  | Hal     | Anderson | IDWR                |
| 8.  | Barry   | Burnell  | IDEQ                |
| 9.  | Dave    | Parrish  | ID Fish and Game    |
| 10. | Rebecca | Casper   | Land Dev. Interests |

- |     |        |           |                     |
|-----|--------|-----------|---------------------|
| 11. | Jared  | Fuhriman  | City of Idaho Falls |
| 12. | Dell   | Raybould  | ID State Rep        |
| 13. | Jerry  | Rigby     | IDWR                |
| 14. | Albert | Lockwood  | NSCC                |
| 15. | George | Katseanas | Domestic Wells      |
| 16. | Steven | Serr      | Bonneville County   |
| 17. | Dee    | Reynolds  | Fall River Electric |
| 18. | Rich   | Rigby     | Reclamation         |
| 19. | Randy  | Bingham   | BID                 |
| 20. | Peter  | Anderson  | TU                  |

Other

Attendees

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|-----|----------|----------|---------------------------------------|
| 21. | Jon      | Bowling  | IPC                                   |
| 22. | Brian    | Patton   | IDWR                                  |
| 23. | David    | Blew     | IPC                                   |
| 24. | Walt     | Poole    | IDFG                                  |
| 25. | Patrick  | Naylor   |                                       |
| 26. | Stan     | Clark    |                                       |
| 27. | Lynn     | Tominaga | Idaho Ground Water Appropriators, Inc |
| 28. | Jonathan | Bartsch  | CDR Associates                        |
| 29. | Jennifer | Graham   | CDR Associates                        |