EXPANDED NATURAL RESOURCES INTERIM COMMITTEE MEETING
9:30 A.M.
November 29, 2004
BOISE CITY HALL - CITY COUNCIL CHAMBERS
BOISE, IDAHO

The meeting was called to order by Cochairman Representative Dell Raybould at 9:35 a.m. Other committee members present were Cochairman Senator Laird Noh, Senator Don Burtenshaw, Senator Stan Williams, Senator Dean Cameron, Senator Joe Stegner, Senator Skip Brandt, Senator Clint Stennett, Representative Bert Stevenson, Representative JoAn Wood, Representative Jack Barraclough, Representative Mike Moyle, Representative George Eskridge and Representative Wendy Jaquet. Senator Robert Geddes, Senator Bert Marley, Representative Scott Bedke and Representative Chuck Cuddy were absent and excused.

Ad Hoc members present were Senator John Andreason, Senator Brad Little, Senator Gary Schroeder, Senator Tom Gannon, Senator Shawn Keough, Senator Marti Calabretta, Senator Dick Compton, Representative Darrell Bolz, Representative Eulalie Langford, Representative Larry Bradford, Representative Wayne Meyer, Representative Doug Jones and Representative Pete Nielsen. Senator Brent Hill, Representative Maxine Bell, Representative Tim Ridinger, Representative Lawerence Denney, Representative George Sayler were absent and excused. Staff members present were Katharine Gerrity, Toni Hobbs and Ray Houston.

Others present included Jerry Rigby, Committee of Nine and the Idaho Water Resource Board; Larry Pennington, North Side Canal Committee; Lynn Harmon, American Falls Reservoir District #2; Lynn Carlquist and Mike Faulkner, North Snake Ground Water District; Ted Diehl**,** North Snake Canal Company; Julie May, Rangen, Inc.; Brent Olmstead, Milk Producers of Idaho; Dean Stevenson, Magic Valley Ground Water District; Bill Thompson, Minidoka Irrigation District; Randy MacMillan and Larry Cope, Clear Springs Foods; Lewis Rounds, Idaho Department of Water Resources/Water District 120; Tom Stuart, Bill Sedivy and Matt Yost, Idaho Rivers United; Jeff Gould, Idaho Department of Fish and Game; Joe Jordan, Idaho Water Resource Board; John Simpson, Barker Rosholt; Skip Smyser and Scott Pugrud, Connolly and Smyser; Maria Minicucci, City of Boise Parks and Recreation; Michael Creamer, Givens Pursley; Rocky Barker, Idaho Statesman; Lynn Tominaga, Brenda Tominaga, Idaho Ground Water Appropriators; Dave Tuthill and Hal Anderson, Idaho Department of Water Resources; Allyn Meuleman and Rich Rigby, Bureau of Reclamation; Dick Rush and Steve Thomas, Idaho Association of Commerce and Industry; Gayle Batt and Norm Semanko, Idaho Water Users Association; Neil Colwell, Avista; Rick Skinner, Skinner Fawcett; Leonard Beck, Idaho Department of Water Resources Board; Barry Brunell, Department of Environmental Quality; Craig Evans, Bingham Groundwater District; Linda Lemmon, Thousand Springs Water Users Association; Jim Wrigley, Wells Fargo; Gary Lemmon; Christian Petrich, SPF Water

Engineering and Glen Prouty, JR Simplot Company.

After opening remarks from the cochairmen, **Representative Stevenson** moved that the minutes from the August meeting be approved. After a second from Senator Burtenshaw, the minutes were approved unanimously.

Representative Eulalie Langford, an Ad Hoc member representing the Bear Lake Working Group, was introduced to discuss a draft Joint Memorial authorized at the Committee's October 14 meeting. The Joint Memorial requests support from our congressional delegation for authorization and funding of a feasibility study by the United States Corps of Engineers relating to the possibilities, benefits and costs of providing flood control above Bear Lake. The memorial also urges Congress to allow and approve past local expenditures, up to fifty percent of the total cost of the study, as the required local match.

In response to a question from **Representative Raybould, Representative Langford** said that it was her assumption that the past expenditures that were contributed by the state could be tracked through past appropriations. Idaho's share of this study would be approximately 1/3 of $2 million. Utah and Wyoming would also be contributing to the study.

Representative JoAn Wood made a motion that the Committee endorse the draft Joint Memorial for introduction. Senator Burtenshaw seconded. The motion carried unanimously by voice vote.

Representative Bert Stevenson, reported that the Mountain Home Working Group discussed its final report at their November meeting. A draft version has been completed for review and changes will be made if necessary at the December 6 meeting of the working group.

Representative Stevenson stated that the following recommendations were formulated by the working group based on presentations and discussions during meetings of the group:

, Mountain Home Ground Water Advisory Committee. The committee has been meeting for over eight years and a recommended management plan has not been completed. The Working Group recommends that the committee complete and submit to the Idaho Department of Water Resources a recommended management plan within 180 days. The Working group has reviewed an existing draft plan prepared by the committee in 1998, and recommends the committee pursue revision and completion of this plan that is consistent with the other recommendations that follow.

, The Working Group recommends a net reduction of approximately 30,900 acre-feet per year in ground water withdrawals from the regional aquifer system to balance the water budget. Reductions in ground water withdrawal must be sufficient to arrest, or at least significantly slow the declines in water levels in the regional aquifer

, The Working Group recommends that the Idaho Department of Water Resources

reconsider the boundaries of the Mountain Home Ground Water Management Area and the Cinder Cone Butte Critical Ground Water Area, and redefine the boundaries of areas for ground water management to match physical evidence of declining ground water levels and areas of water supply.

, The Working Group recommends legislation that would authorize the creation of an umbrella aquifer management authority with broad authority for inclusion of ground water users, for implementing actions to address water shortages, and for equitably assessing all water users to finance the actions.

, The Working Group recommends the legislature analyze the existing definition of domestic use in Idaho Code § 42-111 and the associated exclusion from the requirement to apply for a water right contained in Idaho Code § 42-227 to determine need for revision.

, The Working Group recommends the Director of the Idaho Department of Water Resources form a water district that includes the ground water rights in the Mountain Home area. While regulation should not be immediately contemplated by the creation, ground water users must measure and report their diversions of water to insure adherence to limitation of the water rights.

, The Working Group recommends establishment of a Conservation Reserve Enhanced Program (CREP) for the State of Idaho. Some lands irrigated with ground water could be taken out of production through CREP, reducing the financial loss of nonagricultural production.

, The Working Group recommends adoption of water conservation measures by local governments, including incentives for low water use landscaping.

, The Working Group recommends the county and city evaluate the benefits of revisions to land use codes. Land use codes may be used to ensure water rights are transferred when lands are annexed. Revisions to land use codes could also restrict development of large lot acreage that may ultimately be irrigated illegally with ground water.

, The Working Group recommends a one-time budget request in the amount of $100,000 to Idaho Department of Water Resources for installation of dedicated monitoring wells. Dedicated monitoring wells provide valuable and accurate data for evaluating the aquifer conditions and changes. The current monitoring network depends on existing wells that were drilled for various uses. Dedicated monitoring wells at key locations would add important data to the network. To obtain such wells, they would need to be installed at selected locations. Estimated cost for installing monitoring wells is $25-30 per foot; estimated cost for pressure transducer monitoring equipment is $1500. Estimated cost for a 600-foot monitoring well, with monitoring equipment would be $15,000-$18,000. It is recommended that 5 wells be installed, with a total estimated cost of $75,000-$90,000.

, 11. The Working Group evaluated several projects during the course of meeting. The Working Group recommends the following projects:

a. Conservation Reserve Enhancement Program (CREP)
b. Little Camas Canal PAM Study

The projects will be further explained in the finalized version of the Mountain Home Working Group final report.

Representative Stevenson noted that the working group was able to meet with the commander of the Mountain Home Air Force Base to discuss the water situation in the area. **Senator Gannon** explained that the Base Realignment Committee (BRAC) looks at various military installations and decide which ones remain open. This has been going on for several years and Mountain Home Air Force Base is automatically involved in this process. Until that is completed, the base cannot be involved with the issue of water in the area. According to **Senator Gannon,** the base commander had to sign a document saying he would take no action that would enhance the Mountain Home Air Force Base's appearance before the BRAC, such as to buy more water.

Representative Meyer reported for the North Idaho Working Group. He stated the reports that were distributed at the last meeting did not include monetary amounts from DEQ for the recommendations. He said the total amount requested is $550,000 from DEQ and, in **Representative Meyers** opinion, will be included in their budget request from JFAC. Part of this money is for water use and reuse in Northern Idaho.

Part of the money would be used to conduct a study in the Rathdrum Prairie, to see how affluent that is being discharged into the Spokane River affects flow. The study would cost an estimated $300,000.

The next monetary item involves the Coeur d'Alene Lake Management Plan Implementation in conjunction with the Tribe at an estimated cost of $150,000.

The third item is a long-term impact study of the effect of the proposed Rock Creek Mine in Montana at $100,000. This is in addition to the amount that was included in the request at the last meeting.

Representative Meyer reviewed the recommended Rathdrum Prairie Ground Water Management Area Ground Water Management Plan that was included in the October minutes. He explained that Congress has appropriated an additional $2 million to continue the study of the Rathdrum Prairie Aquifer and there will probably be a state match required. Last year the State of Washington contributed $100,000 and intent language provided that Idaho would make in-kind contributions through technical services. In **Representative Meyers** opinion, the state will be required to contribute actual cash to the study. He suggested that the State of Idaho should

match Washington's contribution which this year is predicted to be $150,000.

This report includes water management strategies and goals such as obtaining adequate technical data and quantification of water availability and water use to make knowledgeable and appropriate management decisions about the ground water resources of the Rathdrum Prairie. These goals also include the efficient and fair management of ground water for all users and the encouragement of water conservation efforts. Another goal is to encourage the state of Washington to obtain information regarding water availability and use to manage the resource consistently across the bi-state aquifer. A complete copy of the North Idaho report is maintained at the Legislative Services Office.

Representative Meyer concluded that the total dollar recommendations amounted to the following:

$ 550,000		DEQ
$ 474,000		Palouse Basin
$ 394,000		Region 1/District 1
$1,418,000	Total	

Representative Jaquet asked whether the working group had discussed the threat of lawsuits from the State of Washington regarding water transfers. **Representative Meyer** said that was not addressed in great detail. He believed that this issue revolved around the fact that Idaho is still issuing drilling permits for wells while the State of Washington is not. He explained that, on the other hand, the State of Washington in Spokane County, is withdrawing 1,000 acre feet of water per year and has an additional 1,000 acre feet of water on the books that they can withdraw without having to apply for additional drilling permits. The drilling permit process is very different in each state. **Representative Jaquet** said that her question was in regard to the Kootenai Water District being granted additional transfers.

In response to another question from **Representative Jaquet, Representative Meyer** said that the recommendation for adjudication of water rights on the Spokane River drainage was included because the Snake River adjudication is almost completed and the process is in place to conduct adjudication. The working group thought it was timely that, when appropriate, these water rights be adjudicated.

Representative Moyle gave the report for the Treasure Valley Working Group. He explained that their final report is also still in draft form. They are asking for comments from various people and groups before everything is finalized. In his opinion, the report contains good information about the basin.

Representative Moyle stated that the number one goal of the working group was to investigate the extent of ground water depletions from the Treasure Valley Aquifer and to make recommendations for reducing or curtailing ground water depletions. As they studied the

aquifer, they learned that it is in better shape than most of the others across the state. Some of the reasons for this include flood irrigation and associated uses that help keep the water supply adequate in most areas.

The working group made these general findings:

- There is sufficient water for a growing population, but water is not always available where and when it is needed.
- There is an abundant amount of surface and ground water in the western portion of the Treasure Valley.
- Approximately 1 million acre feet of water leave the Treasure Valley via the Boise River on an annual basis, although this amount varies substantially from year to year. This amount includes surface water flow in the Boise River, tributary flows to the Boise River (including irrigation return flows), and ground water discharge into the Boise River or tributary channels.
- ESA constraints (e.g., salmon and steelhead flow augmentation in the lower Snake River) are limiting development of water currently leaving the basin.
- There currently is a backlog of approximately 300 unprocessed applications for permit to appropriate ground water.
- There is currently uncontracted water in the Boise River reservoir system that is being used by the U.S. Bureau of Reclamation for flow augmentation in the lower Snake River.
- The Idaho Water Resource Board will soon be moving to complete a comprehensive basin plan for the lower Boise River. This plan will provide a policy framework and specific recommendations for water resource development and management.

Water level findings included:

- Ground water levels in many parts of the Treasure Valley are stable.
- Treasure Valley aquifers are susceptible to water level declines from increased withdrawals in some areas, especially in some deeper zones.
- There have been substantial water level declines in southeast Boise and in an area south of Lake Lowell, although those levels seem to have stabilized.
- Some ground water declines have occurred in the area between Eagle, Kuna and Boise. These declines have generally been less than 10 to 20 feet, and may represent new pumping equilibria in response to increasing withdrawals.
- Some areas have experienced local limitations in aquifer capacity (resulting in well interference).
- Shallow aquifer levels in many areas are influenced by local irrigation and/or withdrawals, fluctuate in response to irrigation and pumping, and/or are controlled by surface topography.
- Decreases in recharge from irrigation or increases in shallow withdrawals may lead to decreased drain flows in these areas.

As the Treasure Valley grows, the working group found, in part, that:

- Domestic, Commercial, Municipal and Industrial (DCMI) demand for water is projected to increase from 105,000 acre feet to 190,000 acre feet by 2025 (Idaho Department of Water Resources).
- Urbanization leads to changes in types of water use, seasons of water use and water sources utilized.
- Urbanization (changes in land use) can lead to changes in shallow-aquifer recharge.
- Municipal suppliers require increasing amounts of potable-quality water (because of increased population) to supply domestic water, fire flows and lawn and landscaping irrigation.
- Most municipal water comes from ground water sources.

Some of the working group recommendations include:

- That monitoring of ground water continue with studies done annually.
- A massive ground water study be done every five years.
- Consideration of installing additional permit multi-level monitoring wells.
- Completion of a periodic water level report on the basin so that a problem can be recognized early.
- Find long and short term management goals to ensure an adequate high quality water supply in the Treasure Valley for irrigation, commercial, municipal, industrial, recreational and wildlife purposes.
- Minimize the risk of flooding along the Boise River corridor.
- Find opportunities for managed recharge and aquifer storage and recovery.
- Encourage the use of shallow aquifer water through regulatory and financial incentives.
- Encourage the use of single community wells, instead of individual wells, for new residential developments.

The complete report of the Treasure Valley Working Group is maintained at the Legislative Services Office.

In response to a question from **Senator Calabretta, Representative Moyle** said that they had not included any requests for funding in the report but that could be included in the finalized version at the request of the Committee.

Senator Noh explained that the EASTERN SNAKE PLAIN AQUIFER Working Group was not at a point in which a final report could be prepared. The parties involved have been meeting frequently among themselves or with the cochairmen, Director Dreher and Mr. Strong. In some cases there are specific proposals presented in writing to be evaluated and in some cases it is just discussion. **Senator Noh** noted that it is a very challenging situation due to the fact that it has reached the point where people have to assess what they can afford, both short and long term, balanced against the costs and risks of litigation. In his opinion, the encouraging part of this is that all of the parties appear committed to finding ways to reach a solution while minimizing the adverse effects to the Idaho economy.

Mr. Wayne Hammon, FSA, was introduced to give an update of the CREP program. He discussed his meeting with the national office in Washington D.C. relating to the program. **Mr. Hammon** noted that the primary reason for his meeting with the national office was to review the issue of the state match. He added that he did not receive a definitive answer regarding what would be required. However, a number of state matching funds have been identified through the Idaho Department of Water Resources and other agencies such as the Department of Fish and Game. Fish and Game has identified almost $350,000 in their continuing operation budget that will count toward CREP enforcement.

Mr. Hammon said that a meeting tomorrow with the private wildlife groups will identify their contributing matches to the program as well. In his opinion, this should firm up the majority of the state match requirement for the program except for the actual cash match requirement.

Mr. Hammon explained that he spoke with the program manager, the conservation chief and the farm program chief in Washington, D.C. about the cash requirement. They discussed a possible "signing bonus" that would be a one time, state match on top of FSA's annual rental payment to the individual. This would mean that the state would multiply its per acre rental payment amount by the length of the contract (15 years) and pay that up front as a signing bonus and FSA would continue to pay their portion annually. At 100,000 acres that would represent between $3 to $5 million in state funds. In **Mr. Hammon's** opinion, this is doable and is much less than what was being considered earlier.

Mr. Hammon said that the rough draft of the CREP proposal has been shared with the CREP working group that includes representatives from wildlife groups, state agencies, federal agencies, legislators, farm groups private organizations and hunting groups. This draft was very well received and a second draft that is more detailed is being developed by the Attorney General's office. A copy of the original rough draft is on file at the Legislative Services Office. **Mr. Hammon** said that, in his opinion, the next draft should be available in early to mid-January. He said that even though the proposal is in the early stages, a consensus is building around the proposal. All groups including wildlife groups and environmental groups seem to be supportive. It is their goal to provide the working group with a proposal that has a consensus around it so that it can be used as the first step.

Representative Stevenson asked if the money from Fish and Game will count as part of the state's actual cash match. **Mr. Hammon** said the state has to match 20%. Administrative time, Fish and Game money, money from Idaho Department of Water Resources as part of their enforcement, and modeling all count toward that match. There is a lot of in-kind work that needs to be done to make this successful. In addition, any cost-share money that private groups contribute will also count toward the 20%. Unfortunately part of the 20% needs to be cash.

In response to a question from **Senator Stegner** regarding the up-front "signing bonus" that was discussed, **Mr. Hammon** explained that instead of a one-time payment, that amount could be paid annually. Issuing the payment once, up-front, in his opinion, is probably easier from an appropriation point of view. If it is done annually the dollar amount is less but it would be

required every year for 15 years. Oregon elected to do it annually and ran into trouble when the state budget got tight. They are currently making up the payments that they missed.

Mr. Rick Skinner, Bond Counsel for the Idaho Water Resource Board, spoke to the Committee regarding the potential acquisition of water rights, specifically financing of the program with the use of tax exempt bonds. He explained that acquisition of these water rights would augment in-stream flow to afford compliance with the requirements of the Endangered Species Act for migratory salmon. An effort would be made to acquire water rights from willing sellers that would then permit additional flow of up to 280,000 acre feet of natural flow or storage water. **Mr. Skinner** noted that this water would either be leased by the Bureau of Reclamation (the "Federal Lease") for this purpose, or the Bureau might execute a grant or subsidy agreement (the "Federal Agreement") for payment of the costs of financing the acquisition. **Mr. Skinner** went on to say that any financing structure for this program needs to take account of certain security/credit quality concerns in order to attract bond investors, as well as tax exempt bond requirements if tax exempt bonds at lower interest rates are desired.

Mr. Skinner said that it is suggested that the Idaho Water Resource Board be authorized to issue bonds to finance the program repayable from a water user fee which would be provided for and required by statute. The amount of the fee should be determined based on a formula set forth in the statute and although all users may pay some basic fee, the fee would be higher for junior ground water users and others who will derive greater benefits from the implementation of the program. **Mr. Skinner** went on to say that, in order to be able to sell the bonds, the statute should also provide and require that the fee be assessed and collected by water districts designated by statute (with additional districts created as necessary to cover the applicable regions of the state). The fees collected would be required to be transmitted to the Board to be deposited for payment of the bonds. According to **Mr. Skinner,** the districts should also be statutorily required to enforce the collection of the fees by either turning off the water for failure to pay where that is feasible or, if that is not feasible, to proceed with a lien against (and foreclosure upon if necessary) the water user's property as well as to sell the water user's water right if failure to pay continues. Legislative amendments to both the IWRB statute and water district statutes would be needed to provide for the program.

According to **Mr. Skinner,** in order to meet the requirements for tax exempt bonds, it will be important to have a fee that is broadly applied throughout the state, which would likely be higher for those who receive greater benefits from the program and which would been forced by water turnoffs, by sale of water rights and by a lien on the water user's property if turning off the water is not feasible. **Mr. Skinner** went on to say that it is advisable to have the federal grant agreement approach, if possible. **Mr. Skinner** said that because of the private interests involved, it may be necessary to split the financing into a tax exempt (lower interest rate) portion and a taxable (higher interest rate) portion handled as a separate series of bonds based on an allocation of the portion leased to, and paid for by, the federal government (taxable) and the portion which is used by and paid for by water users generally. He continued by saying that in order for there to be a tax-exempt portion, there should be a base fee charged to all water users in the area with additional amounts charged to ground water users and others who will receive greater water

benefits as a result of the program. The more that the fee resembles a broadly applicable utility or service charge, the greater the likelihood that the portion of the bonds payable from the fee will bear a tax-exempt interest rate. If the federal government can be persuaded to make grant payments for a perpetual flow of water (rather than to lease rights to water flow), then it is possible that the entire bond issue would be tax exempt, although we may need a private letter ruling from the IRS to confirm this approach. These concepts will likely need to be refined in further discussion.

Mr. Skinner told the Committee that the information presented was reviewed by financial officers from Wells Fargo Bank and by a bond financing firm that deals with tax exempt bonds. These reviews reached similar conclusions.

Mr. Skinner said that a caveat needs to be added that in regard to the bond tax exemption, there will be no way to know with certainty until the program is actually designed and put in place. It may be that an IRS ruling will be required or it may be that a portion of the bonds are taxable and a portion will be tax exempt.

According to **Mr. Skinner,** the program would require some statutory changes to provide for the bonds. Statutory provisions would also have to be created to provide for the fee and the enforcement and collection of the fee as well as statutory provisions for the creation of regional water districts in areas where they do not currently exist.

Senator Cameron asked if the credit issued would be in the state's name. **Mr. Skinner** said that it would be issued in the name of the Water Resource Board with the water district acting as a collection agent for the Board and for the state. In response to another question from **Senator Cameron, Mr. Skinner** clarified that he was not sure that the state's credit rating would be on the line for repayment of the bonds. The fee would be used to repay the bonds. He added that the interest rate on the bonds would be higher than if the full credit of the State of Idaho was behind them.

Senator Cameron asked for clarification of the statewide broad based fee being used to help ensure the best rating rate for the bonds. He also asked, since the water districts will collect the fee, if the state would have to mandate water districts in areas where they do not currently exist. **Mr. Skinner** said that would be correct regarding the creation of water districts.

Senator Cameron said that according to **Mr. Skinner,** the system will initially be a type of dual fee system with higher fees for those who receive the most benefit from the bonding and a base fee for everyone else. These bonds could also be taxable or tax exempt. In **Senator Cameron's** opinion, this system results in a quadruple fee system of taxable and non-taxable base rate bonds and taxable and non-taxable bonds applied to the higher fee. **Mr. Skinner** stated that if the bond issue had a taxable part and a tax exempt part, there would be a certain amount that had to be raised every year to pay the debt service that would be a combined debt service. The fee charged would simply be enough to make the payments to repay those bonds. In his opinion, this would not result in two different fee systems. He also said that if the fee was narrowed down to a

specific group, in his opinion, the chance for the bonds to be tax exempt is less likely. It can still be done but the interest rate would be higher.

In response to another question from **Senator Cameron, Mr. Skinner** said that this type of financing, without other collateral, does occur on the local level. The City of Twin Falls had a financing to acquire water rights for flow on their system. In some cases this may be done for simply drilling a well. The question is where does the security come from since there is no actual property being financed. **Senator Cameron** asked what would actually happen if a fee is assessed and a farmer cannot pay and goes out of business; who would be responsible for that bond and what happens to the water that was purchased. **Mr. Skinner** said that it will require looking at the odds of the farmer staying in business and how much the property is actually worth.

Senator Stennett asked how the benefit will be calculated. Is it based on a scale of how much water the water user uses or is it based on the economic benefit to the community. **Mr. Skinner** said the benefit they assumed was the ability to continue to have water with some non-water benefits. He added that would be a policy decision for the legislature.

Senator Schroeder asked if this program was actually the imposition of a tax, commonly referred to as a fee, on private domestic wells. **Representative Raybould** said that would have to be discussed by the Committee at a later time. He added that it has been suggested that private wells should have some type of measurement in order to monitor whether their uses are being expanded beyond their rights to use that water for domestic purposes.

Senator Stegner asked whether the proposed bonding program would restrict or be restrictive in the use of the money raised by the bonds to the exclusive purpose of purchasing water rights or could it be used for broader purposes to be determined by the Legislature. **Mr. Skinner** said that, in his opinion, it could be used for broader purposes.

Representative Raybould asked, if the state were to be the responsible party for the bonds, make the assessments and take the risk (similar to Idaho Housing bonds), would that make it easier to get the bonds to be tax exempt and get the interest rate lower and if so what would that do to the state's bond rating. **Mr. Skinner** said that it would make it easier to get the tax exemption and a better interest rate. The process for authorizing the bonds would be different requiring an election with a majority of voters approving issuance of the bonds. It would require more work for authorization but would probably produce stronger credit and a lower interest rate as well as making the tax exemption easier to get.

Representative Jaquet asked for clarification of where the 280,000 acre feet of water amount comes from. **Representative Raybould** explained that, as he understands it, the Nez Perce agreement says that the state will provide up to 427,000 acre feet of water from a willing buyer/willing seller basis. From that amount about 220,000 acre feet comes from above Milner dam. Also provided in the agreement is the provision allowing the federal government to purchase outright, an additional 60,000 acre feet, on a willing buyer/willing seller basis. That is

where the 280,000 comes from. **Representative Raybould** noted that the benefit to the state if it were to buy this water, it could then be exchanged for water in other valley reservoirs that is now being dedicated for flow augmentation in the Nez Perce agreement. This water is needed in order to make those exchanges so that the water in the reservoir can be used where it is needed instead of going downstream for flow augmentation.

Senator Noh said, in his opinion, to the degree that acquisition of these water rights firms up ESA requirements or commitments and reduces the likelihood that there would be litigation on the biological opinion that requires those contributions, basically the entire state or at least all of the Snake River Basin above Hells Canyon would be a beneficiary. He asked if this concept would count under the tax exempt requirements as a statewide conservation benefit. **Mr. Skinner** said yes. Under the IRS requirements, they look at who the ultimate beneficiaries are and where is the money coming from to repay the debt. The IRS looks at payments from the federal government through a lease as private payments as opposed to grants or subsidies.

Mr. Jim Wrigley stated that one reason it is important that these bonds be tax exempt, if possible, is because the savings in interest costs is about 1/3. If the amount to purchase these water rights was $70 million, as a taxable bond the interest rate would be about 7.4% and would cost about $6.6 million annually over 30 years to repay. If that debt, however, were tax exempt, the interest rate would be about 4.90% and the annual payment would be about $4.4 million over 30 years. He noted that anything that can be done to enhance the rating of the bonds from an A to a AA or AAA would also trim the interest costs tremendously.

Mr. Jerry Rigby, Idaho Water Resource Board, commented that this issue was discussed at the last meeting of the Board and they offered to help in any way possible. He stated that this is a nice tool for the Committee to have available as another way to help solve this very complicated matter.

Mr. Clive Strong, addressed the Committee regarding state commitments pursuant to the Eastern Snake Plain Aquifer Mitigation Recovery and Restoration Agreement for 2004. He distributed the state's quarterly report which is now on file at the Legislative Services Office. **Mr. Strong** explained that the document relates to Sections 1 and 2 of the EASTERN SNAKE PLAIN AQUIFER agreement that deal with legislative and executive branch commitments. The document shows the language of the agreement and indicates activities that have been performed with regard to those commitments. He noted that this report may be supplemented in the future because he was unable to reach two agencies during its preparation.

In **Mr. Strong's** opinion, the document recounts the major activities that have taken place and demonstrates both an active and progressive approach by the state in terms of moving forward with the agreement. All activities have had action taken on them or are in the process of action being taken on them with one exception. That exception involves new conjunctive management rules, and with consensus of the parties involved, action has been deferred as development and implementation of a longer settlement agreement is being pursued.

Mr. Dean Stevenson, representing the Magic Valley Ground Water District, addressed the Committee next relating to the district's actions pursuant to the terms of the agreement. He explained that the Magic Valley Ground Water District committed, in the agreement last March, to curtail 3,000 acres of ground water. He said that in actuality they have curtailed about 3,900 acres of ground water. The district also restricted irrigation and moved the turn on date from March 15 to April 10. In addition, irrigation was turned off about 15 days early. He reported that the district provided services of one of their members to the technical advisory committee and also timely paid their share of the required $500,000 to the spring water users.

Mr. Mike Faulkner of the North Snake Ground Water District reported that part of their commitment to the agreement dealt with conversions. He noted that they began the season with 4,477 acres and added an additional 4,539 projects. All of the projects are on the North Side Canal Company system and there are requests from people who would like to sign up that involve about 5,000 more acres. They are unable to add these people due to the fact that the system is taxed out. They believe that if title transfer for AFRD#2 was to occur, there are more acres that could be added. The North Side Canal Company's accounting showed that they used 39,995 acre feet of water. The district installed a new transonic meter in April to the head of the ponds so they were able to get a better, more accurate measurement of the flow into the pond and allowed them to more accurately calculate what needed to be sent down. According to North Side, they delivered 8,970 acre feet plus some additional flows of snow water at certain times that, according to the meter, brought the total to 10,364 acre feet. **Mr. Faulkner** also reported that the ponds ran better this year than last year and people were very happy with that. The North Snake Ground Water District also shortened their season in the same manner as the Magic Valley Ground Water District and contributed their portion of the $500,000 on time.

Linda Lemmon, representing the Spring Water Users said that they were given three responsibilities in the agreement. The first was to stay water calls which has been done. The second was to participate in the various aspects of negotiation. She said that has been met through meeting attendance and participation. The third responsibility was to establish the entity that was to receive and distribute the $500,000 as a non-profit entity. She noted that she personally picked up the checks on July 15, 2004. The spring users who became members were informed that they had until November 15, 2004 to send in their claim forms for water loss. Those forms have been received and are awaiting Judge Hurlbutt's final recommendations on how to distribute the money. She said that decision is expected any day.

Ms. Lemmon said there was also a provision in the agreement for the creation of the Aquaculture Commission. The Governor appointed the five commissioners in October and they are now meeting to get organized. The Department of Commerce is to assist the commission in finding funding sources.

Senator Noh asked for a report detailing the use of the $500,000 and how it was distributed. **Ms. Lemmon** said she would get that as soon as the process has been completed.

Director Karl Dreher, Idaho Department of Water Resources, was the next speaker. He

explained that the request for proposals (RFPs) he discussed at the last meeting should be ready to go this week. He has a meeting scheduled with the Bureau of Reclamation to make sure there are no inconsistencies between what the Department is planning to do and what the Bureau needs to do in terms of its leases for 2005. The RFP has been changed and has be reworked into the form of an offer to sell as opposed to an RFP. Before the RFP/Offer to Sell is issued, it will be reviewed by **Mr. Skinner, Bond Counsel for the Idaho Water Resource Board,** to make sure it does not contain anything that would compromise the ability to obtain tax exempt status for the bonds. There is some question as to how this will relate to the Bureau's rental program. **Director Dreher** said that under the offer to sell, if there is a right submitted that the state would be interested in purchasing, preliminary acceptance would be conveyed subject to negotiation of acceptable conditions, subject to financing and subject to an agreeable sales price. For those rights the state is interested in acquiring in 2005, the state would work with the Bureau and use their money to rent that water, the Bureau would receive credit for its ESA obligations, and the state would secure an option to purchase that water for a one year time period. This program does not preclude people from continuing to lease their water directly to the Bureau. People selling their water to the state will not receive any more money than if they leased to the Bureau because the state is not paying any additional money for the water. What they receive is the first right of consideration in the acquisition.

Director Dreher stated that the Governor has given his concurrence to proceed with the plan. He clarified that the RFP/Offer to Sell is not an offer to purchase, it is simply providing people an opportunity to give an offer to sell their rights to the state. This will allow the state to assess how much water might be available, where it might be located, what priority date it has, what source it has, and what the costs might be.

In response to the media articles about the program, **Director Dreher** emphasized that this is not a program to purchase junior priority water rights that would otherwise be subject to curtailment under our prior appropriation laws. The rights they are seeking to acquire are rights that can be used to supply relatively senior priority rights which currently are short because of drought and other conditions including depletions from ground water withdrawals. If these rights cannot be used to supply these senior priority water rights, the state would not be interested in acquiring them. **Director Dreher** said that he is confident that the RFP/Offer to Sell will be issued this week and will be accompanied with a press release describing the program. The press release will also emphasize that this is not the only activity that the state is looking at in terms of resolving the water issues. The Governor, according to **Director Dreher,** is interested in seeing the state do everything possible, and to implement whatever activities necessary, to resolve these issues.

Senator Cameron asked what the state might be looking at for the broad based fee applied throughout the state for the bonding issue. **Director Dreher** said that the program has not gotten into that much detail at this time. The Department was waiting for the report from Mr. Skinner and will now begin looking at alternatives and costs. He stated that all of the funding mechanisms that have been discussed have been based on the premise of only assessing those that benefit. This may be somewhat at odds with whether the bonds are taxable or not.

Director Dreher agreed with what **Senator Noh** stated earlier, that essentially all water right holders along the Eastern Snake Plain**,** surface or ground water right holders, including domestic wells, derive a benefit from this activity.

He said that if someone holds a surface water right, even though you have a senior priority of 1900, almost all of those senior rights are accompanied with storage contracts in Bureau of Reclamation facilities. Those are the right holders that have an obligation under the ESA in order for the Bureau projects to continue to operate. If there is not coverage under the ESA, there is a risk that those projects could be curtailed. To the extent that these water right holders supply in storage is made more certain by firming up the ESA obligations, that is a benefit, and any shortfall in the revenues generated by leases could be made up by assessments to those beneficiaries.

Director Dreher noted that, to the extent the state acquiring this water provides for an exchange, that makes storage water accessible that can then be used for mitigation purposes, which, in his opinion, is clearly a benefit for ground water right holders.

As far as statutory claim holders/domestic well owners, if a call is made the first rights that are subject to curtailment are statutory claims. To the extent that firming up the ESA obligations of more senior right holders associated with their storage space diminishes the likelihood those senior right holders will make a call, this benefits all junior right holders as well as all holders of statutory claims.

In response to another question from **Senator Cameron, Director Dreher** said that he would provide the number of water right holders in the Eastern Snake Plain Aquifer, excluding domestic wells, for the Committee during the afternoon segment of the meeting. **Director Dreher** said that the number of domestic wells is difficult to determine because the Department did not maintain as good of records early on when these wells were established. The permitting statutes for getting the license to construct a well were not initially in place. **Director Dreher** estimated the number to be 50,000 wells on the Eastern Snake Plain.

In response to a question from **Senator Calabretta, Director Dreher** said that the activities in the other aquifers around the state have benefits associated with them and, in his view, those benefits do warrant some form of assessment. The relationship becomes unclear as to whether the revenue from fees charged in other areas can be used to repay the bonds being issued to acquire water rights in the EASTERN SNAKE PLAIN AQUIFER. He stated that the bond issue was viewed in the narrow context of deriving funds for the purchase of existing water rights. If this Committee has interest in broadening that purpose, that could be done.

Representative Nielsen asked for clarification of how the Bureau of Reclamation lease program will work with the proposed program. **Director Dreher** explained that the Bureau's lease and the lease the state has in mind, is a one year lease. The state would then have time to complete the additional evaluations and answer more question as to whether the idea is feasible. He said the decision has to be made in the next year because if it is not feasible, another plan has to be

developed. The lease would not have to be interruptible because the purposes for which the natural flow would be delivered is for ESA obligations meaning it has to remain in the river down to the Hells Canyon Complex. That purpose would not change whether the state purchases the water right or not. The lease payment for 2005 is structured as an option payment. The Bureau has maintained annual lease programs for natural flow for at least the prior two years and this will be the third year. It is **Director Dreher's** understanding that the Bureau intends to continue with some level of annual lease programs to the extent necessary for them to meet their obligations.

In response to a question from **Representative Jaquet** regarding collection of water district assessments, **Director Dreher** said that beyond hearing that there are some difficulties in terms of when the assessments become delinquent and when the ground water districts could pursue collection activities, he is not aware of the specifics. He proposed meeting with the ground water district representatives and attorneys to flush out the difficulties and draft some legislation to deal with it. He noted that beyond that, there is the issue of membership in a ground water district being voluntary. The legislation that was enacted at the end of last session recognized nonmembers of ground water districts as participants for mitigation purposes only. It allowed the ground water districts to make assessments for the costs of providing mitigation and it provided that those assessments had to be paid. This was a means of bringing in those ground water right holders who have chosen not to join a ground water district but who, according to **Director Dreher,** are clearly benefitting from bringing the agreement to the table. There is a broader issue as to what to do with the fact that membership in ground water districts is voluntary, and, he noted, perhaps membership needs to be mandatory. That, he added, raises the question of membership in water districts and how they relate to ground water districts.

After the Committee returned from lunch, **Director Dreher** stated that he met with Director Hardesty, DEQ, since the last meeting regarding the proposed guidelines for water quality monitoring for recharge. DEQ will defer from issuing any guidelines and work with Idaho Department of Water Resources to develop monitoring plans for two sites that have been identified as strong candidates for recharge in the future. After those monitoring requirements are developed, they can consider the issue of guidelines.

Steve Thomas, Moffatt Thomas, representing the IACI Water Quantity Committee, was the next speaker. He explained that IACI is the voice of business in Idaho with approximately 300 members, both large and small businesses, scattered throughout the state including the Snake River Plain and the Magic Valley. He explained that the Water Quantity Committee policies will be adopted at their quarterly meeting this Friday. As soon as those are finalized, they will be forwarded to the cochairmen of the interim committee for distribution.

Mr. Thomas explained that IACI supports the Nez Perce Agreement dated May 15, 2004. He also stated that IACI supports the Snake River Basin Adjudication and has for many years. With regard to the Snake River Governance, **Mr. Thomas** explained that IACI supports a multi-use concept but they do oppose flow augmentation unless on an approved willing buyer/willing seller basis.

In terms of the Hells Canyon Dam Complex relicensure, IACI supports Idaho Power's efforts to relicense the three dams and encourages the Legislature to provide whatever assistance it can in achieving that goal. IACI opposes dam breaching.

Mr. Thomas said that IACI supports conjunctive management of tributary ground and surface waters. They also support recharge as a beneficial use provided that it recognizes and protects prior ground and surface water rights.

As to the Committee's work, **Mr. Thomas** explained that IACI realizes their members exist as members of a larger community that need adequate water supplies in order to thrive. IACI does not want to prejudge the Committee's conclusions or end product and he said he would be surprised if IACI took any action on future legislation until they had a chance to review it. For the time being, IACI tends to stay neutral on the matter and plans to become better educated and knowledgeable in order to be able to play a constructive role in the ultimate decision making process.

In response to a question from **Senator Noh, Mr. Thomas** explained that the Water Quantity Committee membership consists of representatives from JR Simplot Co., Idaho Power, water users, Clear Springs, as well as other IACI members that are interested in the issue. He also explained that the Water Quantity Committee is a new subcommittee of IACI's environmental committee. There is a separate committee for water quality.

Jay Engstrom, Department of Commerce and Labor gave the Committee an update relating to the $500,000 grant program that was appropriated by the Legislature to fund projects to address spring water supply issues in the Thousand Springs area. He explained that they were able to fund eight projects totaling $418,000. The grants were awarded as follows:

	COMPANY	AMOUNT FUNDED	EST. BENEFIT
,	Buckeye Ditch Company	$ 19,370	2 CFS
,	Buckeye Farms	$184,005	16 CFS
,	Canyon Springs Golf Course & Fish Farm	$ 23,090	4 CFS
,	Clear Springs Foods	$ 76,752	4 CFS
,	Fisheries Dev. Co.	$ 77,500	2 CFS
,	Rangen, Inc.	$ 37,375	1 CFS

The approved projects are currently under design, bid or construction. One project, the Buckeye Ditch Company, is completed.

The remaining $82,000 was set aside for a joint test well for Clear Lakes and Clear Springs. However, the test well project was canceled by the mutual consent of the parties. These funds will be reevaluated and awarded to one of the 18 applicants that submitted applications to the

Department of Commerce and Labor. In response to a question from **Representative Stevenson, Mr. Engstrom** explained that the test well project was withdrawn due to the fact that other, possibly more efficient ways to accomplish what was intended for the test well were discovered.

Clive Strong, Division Chief, Natural Resources Division, Attorney General's Office spoke to the Committee regarding the National Wildlife Federation vs NOAA Fisheries case, the American Rivers vs NOAA Fisheries case and the Nez Perce Term Sheet.

National Wildlife Federation vs NOAA Fisheries

Mr. Strong explained that this case involves the federal Columbia River Power System Biological Opinion that is being challenged. There is a new biological opinion due to be issued November 30, 2004, that will begin another round of litigation. Proposed scheduling for that litigation is being submitted to the court. Under the proposed scheduling order an amended complaint would be filed by December 30, 2004, administrative record by January 28, 2005, and briefing would begin by Feb 11, 2004, with conclusion of the briefing on April 8, 2005. **Mr. Strong** said that he would expect a decision sometime this summer on the new biological opinion. If preliminary injunction motions are filed, the decision will be made sooner. **Mr. Strong** stated that the preliminary injunction would be filed to block the implementation of the new biological opinion.

American Rivers vs NOAA

Mr. Strong said that this case is a companion case to the National Wildlife Federation case and involves a challenge to the operation of the Upper Snake River projects pursuant to the biological opinion for those projects. Briefing on motions for summary judgment conclude this week. A decision on these motions will probably occur in February or March of 2005.

Nez Perce Term Sheet

The term sheet has won support form the United States Congress. **Mr. Strong** noted that there is a requirement in the term sheet for state legislative action as well as action by the Nez Perce Tribe and issuance of biological opinions on the operation of the Upper Snake River projects. Preparations relating to the biological opinion are moving forward. **Mr. Strong** stated that they recognize there is still strong opposition to the term sheet in some areas of the state and there are on-going outreach efforts to try to meet with those in opposition to address their concerns.

There is also work on-going with the Idaho Water Resource Board to begin the process for development of the in-stream flow recommendations for B-list streams. B-list streams are streams that are presently flow limited and there would have to be a negotiated in-stream flow.

Mr. Strong said that the Legislature will probably see at least three bills relating to the Nez Perce Agreement. The first would be ratification of the agreement, the second would be the extension of flow augmentation legislation and finally a bill to address approval of the in-stream flows from the A and B lists. Additional legislation might be necessary to address water marketing mechanisms to provide flows for in-stream flows for B-list streams. Hopefully this legislation will be available for the Committee to review before the session begins.

Senator Calabretta asked if the moratorium was to fall apart and negotiations cease, what role would the state play. **Mr. Strong** explained that the interim stipulated agreement between the water users in Water District 120 will expire at the end of this year and the agreement that was reached by the Legislature last year expires on March 15, 2005. With the expiration of either of those agreements the parties are free to move forward with delivery calls to the Director of the Idaho Department of Water Resources. The Director would then issue an order on the extent of potential injury that would be subject to appeal from the normal administrative procedures process. In response to another question from **Senator Calabretta, Mr. Strong** said that an appeal is made from the Director's order so the state would be a party to the appeal in terms of defending the Director's determination of the potential injury. Both junior and senior water right holders would also participate in such an appeal.

Senator Burtenshaw asked if there is any expected change in the Upper Snake River biological opinion that might affect this Committee's work. **Mr. Strong** said that biological opinion is expected to be consistent with the term sheet so it should not affect the Committee.

In response to a question from **Senator Noh, Mr. Strong** explained that there has been a complaint filed in federal district court by the Idaho Conservation League and others challenging operations in the Priest Lake State Forest. Currently the state has not been served with that complaint so at this point it is not a formal action. He said that the state is preparing to defend the case should it become a formal action. The state has, through the Department of Lands, voluntarily agreed to apply the forest practices provisions of the Nez Perce Agreement to the Priest Lake area lands as a consequence of obtaining appropriate coverage from the Endangered Species Act.

Mr. Bryce Contor, Idaho Water Resources Research Institute, spoke to the Committee regarding the surface water legacy modeling scenario. Essentially, this scenario looks at what spring discharges and gains to the river would be like today if the surface water irrigation practices of the 1950s had continued. His complete power point presentation is available at www.idwr.state.id.us/Committee.

Mr. Contor explained that the methods used included simulating 1957 - 1960 surface-water irrigation, simulating current surface water irrigation and determining the difference between the two simulations. The Institute then used steady-state run to find the *size* of the impact and used transient run to understand *seasonality*.

Mr. Contor stated that the most important change simulated involves the diversions that have

declined substantially over the years. For the diversion data most of the electronic data from the Idaho Department of Water Resources was for the Snake River and the Big and Little Wood Rivers. For some of the smaller basins around the edge, estimates were made based on model calibration because data was not available electronically. The data used was for 1980 through spring of 2002. The estimated return flows, based on guidance from the Eastern Snake Hydroelectric Modeling Committee, turned out to be difficult to estimate.

Another big change, according the **Mr. Contor,** is that there have been changes in consumptive use such as crop mix, amount of land irrigated, and changes in practices. The Institute represented spreading the water on more acres, due to land leveling or conversion to sprinklers, by assuming a 5% increase in the acreage. This, too, was based on guidance from the modeling committee. In addition, **Mr. Contor** noted that the other change in consumptive use represented is a change in evapotranspiration of 5% on sprinkler irrigated lands and an additional 5% increase on all lands that simulates the effect of change in crop mix and change in cultural practices.

Mr. Contor explained that the differences between consumptive use and diversions describes the total difference. But to understand what that difference means and where it came from the change was partitioned to various contributing factors that may have caused diversions to change over the years. Adjustments had to be made to the data due to the fact that some lands could not be included either because they were not irrigated in the 1950s or because the data for that time period is not available. As a result, about 7% of the lands were omitted. However, most of these lands are still gravity irrigated so, in their opinion, 7% of the changes were not actually omitted. This is a minor change.

In summarizing the results, **Mr. Contor** noted that the annual average change is a summary of those differences in in-flow and stresses to the aquifer. He also addressed partitioning of those changes and the implication of the partitioning. The model takes the stresses imposed on it and tells where and when we can expect to see these stresses to the aquifer find their way to the rivers and springs.

Mr. Contor noted that they found the change in stress to be a negative 2,640 cfs. This figure represents how much less recharge there is today than there was in the 1950s. The standard deviation is about 220 cfs. The information comes from the diversion data from the water master and that makes it highly reliable. The Institute estimates partitioning from canal leakage, flow augmentation, change in winter diversions, changes in consumptive use, supplemental ground water on mixed source lands and changes in percolation due to conversion to sprinklers. He explained that the standard deviation of these individual components is quite large relative to the size of the component. Changes in the use of supplemental ground water on mixed source lands, and the changes in percolation due to conversion to sprinklers, are the largest contributors. **Mr. Contor's** power point presentation includes a map showing where these changes are stationed and distributed across the plain.

According to **Mr. Contor,** implications of the data include:

- Two areas showed increased recharge.
- The sum (2,640 cfs) has reasonable certainty.
- Partitioning the effect to contributing factors is less certain.
- Part of the "No Surface-water Changes Scenario" is actually due to ground-water development to the application of supplemental ground water to land that already had a surface water right.
- The exact amount is uncertain.
- This makes the scenario NOT ADDITIVE to Curtailment Scenario.
- Changes in percolation (sprinklers) and supplemental ground-water appear to be the big hitters.

The steady-state results are also shown on a map in **Mr. Contor's** power point presentation. He explained that steady-state occurs after they have projected these changes out into the future far enough that all of the changing storage in the aquifer is exhausted and all of the effects have found their way to the river. At that point they found the difference of 2,640 cfs as previously addressed. He explained that more of the difference will follow the upper reach because more of the irrigated lands are adjacent to the upper reach. About 1/3 of the difference would fall in the Thousand Springs Reach. **Mr. Contor** said that the big impact in the upper reach is to the Blackfoot to Neeley Reach. This is the reach that experiences most of the gains as well as most of the impact due to changes.

The steady-state results imply that the big driver of spring discharges and river gains is surface water irrigation. Most of the recharge to the aquifer is surface water irrigation and consequently any changes to surface water practices have a large impact on the aquifer. **Mr. Contor** said it is possible that when the springs peaked out in the 1950s, they had not yet reached the maximum level had this change in surface water practices not begun. It is possible that the 1950 peak spring discharge is not the benchmark that these numbers would be subtracted from. These results reflect only the changes that have been simulated. The steady state results show a difference of 2,640 cfs (partition 1,620 cfs to the upper valley and 1,019 cfs to the lower valley) and show how much higher spring discharges would be today had these changes not occurred. There is some uncertainty in these results, particularly in the partitioning of contributing factors, and the results are not additive with the curtailment scenario.

Mr. Contor explained that the next simulation took the same changes and represented them in a transient format to give a seasonal picture of how and when the results appear in different reaches of the river. It shows the variation from summer to winter. What drives seasonality is the hydraulic distance to areas of change and the magnitude of nearby changes. **Mr. Contor** clarified that hydraulic distance is not always the same as the distance you would measure with the odometer on your car. **Mr. Contor's** power point presentation includes maps showing the seasonal picture in different areas.

Implications of transient (seasonal) results show that most incidental recharge, as well as most of the change to incidental recharge, occurs in the summer. This means the impact of surface water changes comes at the same time as the impact of ground water pumping. There is more seasonal

swing in impact in the Thousand Springs area than in the upper valley.

Mr. Contor said that the next step was to compare these results to the curtailment scenario. One of the goals for providing this analysis was to provide context for the curtailment scenario. They compared the Upper Snake River Basin Study and with observed historical changes. He clarified that this scenario is not additive to the curtailment scenario because scenarios evaluate the impact of pumping due to supplemental water on lands that already have surface water rights.

This scenario and the curtailment scenario together are generally consistent with the observed changes with some mismatch in the upper valley. The record for the historical discharge in the American Falls Reach starts late enough that there is no way to know what the key development condition would have been. The historical pattern is much flatter than expected. One explanation for this is the fact that there is uncertainty in all of the estimates including the historical record. There is a possibility that the Aberdeen Springfield canal is moderating some of these changes so that instead of appearing in the river reach, the impact of these changes may actually appear as increased seepage from the canal.

Mr. Contor said that the curtailment scenario is generally consistent with the Upper Snake Basin Study. Any differences can be traced back to the fact that each studied different irrigated lands and treated irrigation within the Fort Hall Reservation.

Conclusions from these scenarios show that there have been dramatic impacts to spring discharges due to changes in surface water practices. Overall, the changes simulated show discharges are about 2,600 cfs lower now than they would be had these changes not occurred. It may be that this 2,600 cfs has not yet found its way to the river because good data was not available as to when these changes actually took place over time. The assumption was made that all of the changes took place on a given day and then that was projected out into the future until the impact was stable. There is some uncertainty in these results primarily in the partition of the effects to the different components. The major conclusion is that the hydrology of the Snake River Plain is largely driven by surface water irrigation.

Representative Raybould asked for clarification relating to the negative 2,650 cfs in the context of time. **Mr. Contor** said that was that actual annual volume spread out over the year and that would equate to almost 2 million acre feet less going into the aquifer now solely due to changes in irrigation practices, as compared in the 1950s.

Mr. Contor went on to address a managed recharge scenario. The scenario looked at what the status wold be if the state had been recharging for the past 22 years with available water. The first issue **Mr. Contor** discussed is how recharge affects the water. He explained that recharge is controlled by the hydraulic properties of the spring and by the head of water at the spring. If managed recharge is done, a ground water mound is created at the recharge site. This mound actually backs up the water up-gradient and provides additional water down-gradient. Head and spring discharges increase throughout the aquifer. In other words, even though the water is

flowing downhill, the benefit of recharge finds its way toward springs that are above it.

The speed and magnitude of this response depends on hydraulic distance from the recharge to the spring. Hydraulic distance is controlled by aquifer characteristics of transmissivity and storativity that control the ability of the aquifer to transmit a hydraulic signal. Conductance controls the ability of springs and riverbeds to respond to the hydraulic signal.

The scenario simulated the natural flow available at Milner from 1980 to 2001. It honored the Idaho Water Resource Board's water right at 1,200 cfs even if more water was available. Seven hundred fifty (750) cfs of flow was always left past Milner leaving some flow maintained before recharge began. The normal deliveries of the canal companies were also monitored. If there was canal company water in the canals, any additional capacity was all that was used. No mid-winter recharge was considered. The recharge was simulated at the 6 recharge sites. Canal leakage was also considered between those sites. This becomes important because when you put a little bit of water in a large canal, it recharges close to the river first before there is enough water to carry it down to the recharge site. **Mr. Contor's** power point presentation shows a map of where these recharges sites are. The total average acre feet per year equaled 162,000 over the period from 1980 to 2001.

Another chart in **Mr. Contor's** presentation shows the seasonal pattern the water takes in 6 month blocks. He explained that the first six months in 1980 had about 40,000 acre feet of recharge, the second six months of that same year had almost no water, and in some high years there was 100,000 acre feet in one six-month period and 230,000 for another wet year. He noted that there were also years where almost no recharge occurred. This was the signal that was applied to the model so it would understand the seasonal changes that occur with recharge. To understand the total amount of benefit, the average recharge was put into the steady-state representation. In both cases they looked at the water levels that would be raised by the recharge activity and how those increased water levels would translate into river gains and spring discharges. **Mr. Contor** explained that the results of the steady-state water levels translate into increased discharges. The same thing was done with transient. Transient shows not only how much water gets to a point, but also when it arrives.

Conclusions from this scenario show that managed recharge is one viable part of the solution to declining spring flows. Realistically, water is not available every year for recharge but because of the dampening effect of the aquifer there are benefits that continue in years when recharge cannot be done. Some of benefits return to the river above Milner because the recharge mound backs the water up. Benefits continue even after cessation of recharge activities

Senator Burtenshaw asked if the effect of the 40,000 acre feet of water that was added to the aquifer, could be seen in the flow at Thousand Springs this year. **Mr. Contor** said that was not simulated but depending on how close a recharge site is to the river there is a 6 to 18 month response time to a recharge event. **Senator Burtenshaw** asked if ground water taken out close to the mound would negate the effect on the springs. **Mr. Contor** said that this aquifer is very thick and changes in the water levels are very small relative to that thickness. That means if

pumping exactly offset recharge, it could be said that the pumping has consumed the benefit of the recharge. On the other hand, if recharge did not occur, the pumping would still result in the same amount of decrease. The closer recharge is put to the river hydraulically, the faster it will get there. During a wet year when everyone is happy and there is storage available in the aquifer to be used for the future, it makes more sense to put the recharge as far from the river as possible so that it would have more time to rebuild or replenish the aquifer before it goes to the river. In response to another question from **Senator Burtenshaw, Mr. Contor** said that they did not simulate whether the plan to recharge 40,000 acre feet produced any results. The model predicts that the impact would mostly occur in 6 to 18 months and that seems reasonable considering other things they have seen. He added that one problem is that there is no way to know what it would have been without the 40,000 acre feet unless they run last year over again without it. Since it is such a small contribution to such a large goal, it would be difficult to determine the benefit it provided.

An audience member asked if the proposed ground water monitoring guidelines for recharge that DEQ is seeking comment on would affect this research. **Mr. Contor** said that to the extent those guidelines would effect the recharge scenario that went into this study, they would affect the results.

Senator Burtenshaw asked if the CREP program was put in place, where would it be the most beneficial. **Mr. Contor** said that would depend where and when the benefits are wanted. It is believed that the model can correctly predict when and where these benefits will occur.

In response to a question from **Representative Nielsen, Mr. Contor** explained that whenever there was natural flow past Milner, then up to the 1,200 cfs water right that the Water Resource Board holds, as much recharge was allowed as there was room for in the canal while still allowing 750 cfs in there for flow past Milner. Over that period, recharge that was simulated averages annually to about 223 cfs. This goes past Milner in addition to the 750 cfs plus whatever other water they have to allow to go past Milner because the canal was not big enough, the water right was not big enough, or it was winter. **Representative Nielsen** asked if it is necessary to allow that water to go past Milner. **Mr. Contor** said that could be modeled to see what would happen.

Senator Compton noted that a recommendation from the October 4, 2004, North Idaho Working Group report suggests establishment of an organization to coordinate and facilitate cross-border water resource management. The organization should focus on collaboration and information exchange for water resource issues between Idaho and Washington. The goal should be to provide a forum to educate and inform the community as well as provide recommendations to state water management agencies. He stated that what **Senator Noh** said earlier about the willingness of the State of Washington to have a dialogue with Idaho on cross-border issues is very important to that area. The State of Washington passed legislation setting maximum limits on the Spokane River that are driven by what is thought to be adequate for the Puget Sound area and King County. These limits do not work out so well for those on the Idaho side of the Spokane River. Compliance could end any further development, in **Senator Compton's**

opinion, on the Idaho side of the river. **Senator Compton** continued that Idaho needs to be at the table with EPA and the State of Washington to work on these issues because once they get too far along, it puts Idaho in a defensive position. He noted that no one agency seems to be in charge of these cross-border issues and proposed the establishment of an organization that would meet periodically with Washington to keep up-to-date on what issues are developing. He asked for support for the creation of such an organization. **Representative Raybould** commented that in a meeting of the Legislative Council on State Government in Portland it was suggested that if funding can be found to continue that organization, one of the objectives may be to have a staff member of that organization collect information from the four states (Washington, Oregon, Montana and Idaho) as to legislation, rules and so on pertaining to water and forward those periodically to specific legislators.

Senator Stegner said that the North Idaho Working Group Report had a number of recommendations as did the other working groups. He asked whether the cochairmen wanted the larger committee to review those recommendations and make motions to support those recommendations to be presented to the Legislature or whether the chair intended the recommendations be presented individually by Committee members or other legislators. **Representative Raybould** stated that because of the negotiations that are still taking place in the Eastern Snake Plain Aquifer, the Committee will be required to meet again and suggested that Committee members review all of the recommendations to be discussed at the next meeting. **Senator Noh** agreed with **Representative Raybould** and suggested that these recommendations be put together as a package including a price tag to make it easier for the Committee to see the entire picture. **Senator Compton** also agreed with **Senator Noh.**

Representative Meyer noted that $250,000 needs to be added to the North Idaho Working Group report. That amount, according to **Representative Meyer,** is for a general recommendation for all of the North Idaho counties with the first $150,000 being used for the aquifer study bringing the total requested to $1,668,000.

In response to an earlier question from **Senator Cameron, Mr. Tuthill,** said that there are approximately 8,000 points of diversion from ground water in the Eastern Snake Plain Aquifer excluding domestic wells. He explained that some points of diversion represent more than one ground water right. **Senator Cameron** clarified that per point of diversion the cost to bond would be about $750 per diversion per year.

Representative Raybould said goodbye to Committee members, **Representative Cuddy, Representative Meyer, Representative Langford, Representative Ridinger, Senator Calabretta and Senator Noh**. He explained that **Senator Noh** had been involved in water issues since the 1980's and has been very influential. He thanked **Senator Noh** for all of the work he has done for the State of Idaho and in cochairing the Committee.

The meeting was adjourned at 3:25 p.m.