## Oregon Water Resources Commission Work Session May 14, 1998 Hermiston

Roy Hemmingway

James Anderson

Theresa Goffredo

Wayne Downey

Varon Blackburn

William Reynolds

Susan LeFever W.H. Wright

Kimberley Priestley

Darryll Olsen

Donna Darm

Gary Reed Judy Rea

Fred Ziari

Tom Spoo

Members Nancy Leonard Mike Jewett Tyler Hansell Jim Nakano Ron Nelson Dan Thorndike

## Others

Mayor Bob Ramig Rep. Bob Jensen Chuck Norris Mayor Frank Harkenrider Merle Gibbens Keith Franklin Gail Achterman Roger Bachman Daren Coppock Frank Lockwood Houshie Ziari Claudia Stewart Bob Hoeffel Rob Brown Tom Myron Kalvin Keys Hollis Pope Bob Ramig Joe Brown Steve Eldrige Bob Hale Harold Nakano

Staff Martha Pagel Geoff Huntington Diane Addicott Tom Paul Mike Ladd Dwight French Tony Justus Pat Lee Adam Sussman Kent Searles Vern Church Mary Grainey Bruce Moyer

Written material submitted at this work session is part of the official record and on file at the Oregon Water Resources Department, 158 12<sup>th</sup> Street NE, Salem, Oregon 97310. Audiotapes of the work session are on file at the same address.

Chair Leonard opened the work session and asked Martha Pagel to introduce the elected officials in the audience. Tyler Hansell welcomed four classes of local students to the work session.

Geoff Huntington introduced Dr. Gary Reed, Director of the Oregon State University Experiment Station in the Hermiston area. Dr. Reed, using charts and tables, offered interesting statistics and discussed the connection between water use, population growth and the world food supply. The United States exports approximately 25 percent of the total food imported by other nations. It is estimated that in the next 20 years the United States will lose 12.2 percent of agricultural land to urbanization--and yet the need for food production capabilities will greatly increase. Reed said that when an acre of land is taken out of production, 30 people in the world go hungry. The global impact must be taken into consideration when decisions are made regarding any irrigated agricultural land.

Huntington next introduced Donna Darm, Director of the Protective Resources Division of the National Marine Fisheries Service (NMFS); Dr. Darryll Olsen, Resource Economist with the Pacific Northwest Project; and Dr. James Anderson, Research Biologist at the University of Washington. Each spoke on Columbia River management issues and responded to Commissioners' questions.

Ms. Darm spoke first to the Commission using charts and graphs with her presentation. Darm said NMFS has just listed or proposed for listing anadromous fish throughout the entire Columbia Basin. Flow augmentation and flow survival issues in the Snake and Columbia Rivers are a small part of the water problems in the Basin. Water quality, water allocation and accommodating industrial growth in agricultural areas must also be considered. The Endangered Species Act is not a good tool for water management and planning; the state has many available tools including withdrawals and water permits, maintenance of diversion structures, control of nonpoint source pollution, land use regulation in riparian areas, and the promotion of water conservation. Darm explained that NMFS has made rational decisions regarding flow augmentation and irrigation permits, using the flow objectives from a 1995 biological opinion on the operation of the federal Columbia River power system. NMFS has worked to improve inadequate flows for fish in the Snake and Columbia Rivers. According to the Bureau of Reclamation the strongest contributor to inadequate flows is the hydro power and storage system; irrigation also contributes significantly. Moratoriums on new water withdrawals in Oregon, Washington, and Idaho do not guarantee adequate flows in the Snake and Columbia Rivers. There does appear to be fairly strong evidence that there is a flow/survival relationship for fall Chinook during the summer period; this is the time of year when irrigation withdrawals

would have the greatest effect on flow. Darm said that by working together, the states and federal government should be able to come up with creative solutions for clean water, healthy streams, and adequate world food supplies.

Dr. Darryll Olsen and Dr. Jim Anderson commented on and distributed copies of "The Columbia-Snake River Flow Targets/Augmentation Program, A White Paper Review with Recommendations for Decision Makers." They commented on the review of the flow targets/flow augmentation program being implemented by NMFS. Olsen said NMFS does have a water policy for the Pacific Northwest. This policy calls for a continuation of moratoria on the mainstem of the Snake and Columbia for new water withdrawals; a moratoria extended to the tributaries to the mainstem of the Snake and Columbia; and that moratoria should also affect contiguous ground water affecting the tributaries in the mainstem Snake and Columbia. It is essentially a zero net loss policy. Olsen briefly reviewed the history of the flow targets/flow augmentation program; and discussed issues relating to hydrology, its relationship to the flow targets, and the effects of the net irrigation depletion. Referring to a graph showing average 1997 monthly flows at McNary Dam, Olsen said that in a low water year such as 1997 the NMFS flow target cannot be met with or without the effects of the net irrigation depletion. The same situation exists at Lower Granite Dam — the NMFS flow target is well above the hydrologic capability of the system.

Olsen commented briefly on the economic trade-offs of flow augmentation. He suggested that the NMFS water policy not be adopted, that the flow targets be changed and the augmentation program be restructured to get the most biological benefit for the costs incurred.

Anderson commented on the biological portion of the white paper review. The 1995 biological opinion was based on qualitative descriptions of water need. There are more variables now in the equation — water for fish in the spring and fall, water for farming and feeding people. The qualitative tools previously used are inadequate. Mathematical models are now used to quantify the impacts based on ecological principles that connect the entire system together; the models are then calibrated with data and tested against other data for results. Using graphs, Anderson explained how the view of the flow/survival relationship has changed over the years. The old data did have low survivals, but the hydro system was radically different than it is now. Improved dam operations have reduced mortality problems and increased dam passage survival. To assume that just by adding more water in the system will result in higher fish survival is simply speculation. There are several other factors that affect survival.

Geoff Huntington introduced Attorney Gail Achterman of Stoel Rives; and Roy Hemmingway, Governor's Salmon and Energy Advisor.

Gail Achterman, speaking on behalf of the local water users, distributed a handout of her comments and graphs. Unlike most large interstate water basins in the United States, Achterman said there is no interstate agreement allocating the water in the Columbia Basin among Oregon, Washington, Idaho and Montana. Ninety-three percent of the Columbia Basin flow goes to the ocean, 3.8 percent is diverted in Idaho, 2.9 percent in Washington, and 0.3 percent in Oregon. Of the annual net water use by state in acre feet, 54.3 percent is diverted in Idaho, 41.4 percent in Washington, and only 4.3 percent in Oregon. Achterman spoke about the population growth in Umatilla County being brought about by a new prison in the city of Umatilla; construction of the Umatilla Army Depot nerve gas incinerator; the new Union Pacific Hinkle railroad yard; and the new Wal-Mart Distribution Center in Hermiston. These new projects alone will bring an estimated population growth of 20 percent, resulting in increased needs for water supply development. In this community, ground water is not an alternative source of supply. The only available source of supply is the main stem of the Columbia River and the John Day pool. A permit from the Corps of Engineers must be acquired to install a new pump station in the John Day pool. The NMFS "No Net Loss" policy would interfere with obtaining that permit --WRD's Division 33 rules provide more flexibility. Irrigators share the community's pride in restoring fish runs in the Umatilla River, but for them, the Umatilla Basin Project has not fulfilled its promise. The fish are back, but the irrigators still have no assurance that all lands irrigated as of October 1, 1988, will continue to be irrigated. Achterman said that the state of Washington lifted its moratorium and over 30,000 acres of new land has been irrigated in recent years while Oregon has restricted new appropriations and development under existing permits. She read from the WRD Columbia Basin Program rule which reserves 30 million acre-feet for appropriation in Oregon. Achterman asked the Commission to help rebuild the trust needed to meet water needs while restoring fish runs. This can be done by evaluating the validity of the NMFS target flows and the Bureau of Reclamation cumulative effects analysis and by taking the lead in developing fair and efficient mitigation methods and standards basin-wide.

Roy Hemmingway, Governor's Salmon and Energy Advisor, gave his comments following Achterman. He said that at the present time approximately one percent of the wild salmon that historically returned to the Columbia River are returning. That reality has fundamentally shifted the burden of proof away from the resource protection advocates to the resource development advocates. There are studies to show that every effort made to save the fish does not work. The Columbia River ecosystem has been fundamentally altered in the space of fewer than ten salmon generations. The Columbia River hydro system was built between 1938 and 1975 — it was impossible in that short time to assess the effects of that system on salmon. Assumptions were made on what might be done to mitigate for the fish losses at the dams, such as hatcheries none of the attempts have worked. Experimenting to find out what will bring the fish back has been difficult and expensive, but it will continue. This is a long-term effort. State, federal, and local government need to work together with residents of the Columbia Basin on a common basis.

Pagel commented that the states of Oregon, Idaho, Montana and Washington are working together to review with the Bureau of Reclamation the cumulative effects interim study. She said the Water Resources Department is looking into the issue of mitigation banking or water bank concept as a possible tool for offsetting the effects of new water development. The Commission's authority relates to water allocation decisions that are made; Division 33 rules give the Department strict guidelines but with more flexibility than the NMFS Biological Opinion. Just about any new development will involve a federal permit — we will need help in figuring out how to meet the federal requirements.

Chair Leonard announced that the Commission would meet in Executive Session the following day at 8 a.m. to discuss current litigation regarding Grants Pass Irrigation District. There being no further discussion, the work session was adjourned.

Sincerely,

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Diane K. Addicott Commission Assistant