MINUTES

SENATE RESOURCES & ENVIRONMENT COMMITTEE

DATE:	Monday, January 27, 2014
TIME:	1:30 P.M.
PLACE:	Room WW55
MEMBERS PRESENT:	Chairman Pearce, Vice Chairman Bair, Senators Cameron, Siddoway, Heider, Tippets, Stennett and Lacey
ABSENT/ EXCUSED:	Senator Brackett
NOTE:	The sign-in sheet, testimonies and other related materials will be retained with the minutes in the committee's office until the end of the session and will then be located on file with the minutes in the Legislative Services Library.

CONVENED: **Chairman Pearce** called the Senate Resources and Environment Committee (Committee) to order at 1:30 p.m. He welcomed the members of the audience to the meeting. He then asked Vice Chairman Bair to present his RS.

RS 22661: **Vice Chairman Bair** said that **RS 22661** is a Senate Concurrent Resolution rejecting Docket No. 25-0101-1201 of the Outfitters and Guides Licensing Board.

There was no discussion regarding this RS as the docket had been discussed at length in a previous meeting. **Chairman Pearce** called for a motion.

MOTION: **Vice Chairman Bair** made the motion to send **RS 22661** to print. The motion was seconded by **Senator Cameron**. The motion passed by unanimous **voice vote**.

RS 22561: **Senator Tippets** presented **RS 22561**. He said this legislation clarifies that conveyances of mineral rights include rights to oil and gas, unless such rights are specifically reserved in the conveyance, or unless the oil and gas rights were previously conveyed.

There was no discussion regarding this RS as the intent and purpose was clearly stated. **Chairman Pearce** called for a motion.

MOTION: **Senator Siddoway** made the motion to send **RS 22561** to print. The motion was seconded by **Senator Heider**. The motion passed by unanimous **voice vote**.

Chairman Pearce welcomed and introduced Mr. Ed Schriever, Fisheries Bureau Chief, Idaho Department of Fish and Game. Mr. Schriever's presentation was: "Snake River Sockeye Salmon Program Review: Transitioning From Conservation To Recovery".

SPEAKER: **Mr. Schriever** provided some background about the program (how we got to where we are today); reviewed the phased approach to implementation; and finished the presentation with some photos of the new hatchery.

The project is located at the headwaters of the Salmon River in Idaho - some 900 miles from the Pacific Ocean. The Snake River sockeye are unique as they travel a greater distance to spawn than any other population of sockeye in the world. They also travel to a higher elevation to spawn than any other population, and they are currently the most southerly spawning population in existence. The habitat is relatively pristine in the three lakes of recovery.

Redfish Lake is the largest of the three lakes and has the most potential of all lakes to contribute to recovery. When the captive broodstock program was initiated in 1991, only this lake supported a remnant run of anadromous sockeye salmon. Alturas Lake is the second largest lake that historically supported anadromous sockeye and Pettit Lake is the smallest. Hatcheries are located at Eagle, near Boise; Sawtooth Hatchery, near Redfish Lake; and Springfield Hatchery, near American Falls.

Mr. Schriever stated that work on the program has been cooperative in nature from the outset of activities in 1991 and involves Idaho Department of Fish and Game (IDFG); National Marine Fisheries Service (NMFS); and the Shoshone-Bannock Tribes (SBT). Funding is provided by Bonneville Power Administration (BPA) through the Northwest Power and Conservation Council (NPCC).

The trend of population abundance is measured at Snake River dams, and prior to 1991, the return in the 1960s was about 1,000. This number dropped off to 200 or fewer adults in the late 1970s and 1980s. In 1989, four adult sockeye were counted crossing Lower Granite Dam. This number was down to zero in 1990. As a result of this downward trend, in 1990, the SBT petitioned NMFS to protect the Snake River sockeye salmon under the Endangered Species Act (ESA). Federal protection was found to be warranted and the Redfish Lake population was listed as endangered in 1991. This was the first ESA listing of a Pacific salmon. In the 20+ years since listing, many actions have occurred to maintain and begin rebuilding the remnant Redfish Lake population.

In Phase 1, the Captive Broodstock Phase, conservation protocols were established early on to protect the remnant population including:

- The development of redundant broodstocks at IDFG and NMFS facilities to guard against a catastrophic loss at any one location;
- The development of annual spawning plans based on pedigree or genetic identity designed to maximize the retention of genetic variability and to minimize the risk of spawning related individuals;
- The protocol to screen 100 percent of all fish that die in the program for disease agents; and
- The creation of a multi-agency technical team to review the results, guide activities, and to address critical uncertainties. This team still meets regularly today.

Mr. Schriever stated that the Captive Broodstock Program works as follows: Each year, the IDFG and NMFS staff "rebuild" the broodstock by spawning adults that mature in captivity along with returning anadromous adults when available and appropriate. This creates the next generation of sockeye that will ultimately mature in the hatchery - the captive broodstock. At the same time, annual spawning events produced more eggs than were needed to just perpetuate the captive broodstock. These eggs were allocated to different reintroduction strategies, and evaluated experimentally to identify the release option with the most potential to return adults to Idaho.

Multiple hatcheries are involved in the current effort to maintain the captive broodstock, with the Eagle hatchery being the primary location. Two NMFS broodstock facilities are used and are part of the NMFS Science Center in Montlake, Washington. The Manchester Research Station uses pumped, filtered, UV treated saltwater from the Puget Sound. Broodstock adults raised at the saltwater facility are transferred to the Burly Creek facility for final maturation in fresh water.

Program managers have been evaluating the ability of different reintroduction strategies to return anadromous adult sockeye salmon to Idaho. Strategies included the release of full-term captive adults or returning anadromous adults to Redfish Lake for natural spawning. The planting of eyed-eggs in egg boxes were released in Pettit Lake, and pre-smolts were released in Redfish, Alturas, and Pettit lakes. Also, full-term smolts were released in the Main Salmon River and in Redfish Lake Creek, the outlet of Redfish Lake.

Mr. Schriever said that arrangements were made with the Sawtooth Fish Hatchery and the Oxbow Hatchery to provide space to rear experimental groups of pre-smolts and smolts. Both facilities were constructed and funded to address other mitigation mandates. The Sawtooth Hatchery currently rears just smolts. Annually, up to 100,000 full-term sockeye salmon smolts are reared at this facility. The Oxbow Hatchery is an Oregon Department of Fish and Wildlife operated hatchery just upstream of Bonneville Dam. This facility produces up to 100,000 sockeye salmon smolts. Smolt releases from both facilities combined average about 180,000 per year.

The program has rebuilt the broodstock annually and has produced about 3.8 million eggs and fish that have been allocated to the release strategies as indicated earlier. About 70 percent of all effort has gone into the production and release of eyed-eggs and pre-smolts, the two release strategies that require the least amount of hatchery rearing space. Smolt releases represent about 30 percent of the total.

For completed brood years of 2004, 2005, and 2006 (meaning the return of ages three, four, and five adults from these three spawning years), over 85 percent of all adult returns were generated from smolt releases. Pre-smolt releases accounted for only three percent of all returns. Results from eye-egg releases produced similar results. The surprising finding was that 11 percent of all returns were generated from natural production in Redfish Lake associated with the strategy to release adults for natural spawning.

Since the first hatchery-produced anadromous sockeye salmon returned to Idaho in 1999, over 7,678 have been counted passing Lower Granite Dam. Of these, over 4,800 (63 percent) have made the final 400 mile leg of the journey back to the Sawtooth Valley in Idaho. In comparison, only 79 total wild sockeye salmon adults were identified passing Lower Granite Dam in the first 8 years of the program operated (1991-1998). Since 1999, over 720 natural-origin adults have returned to Idaho - approximately 15 percent of the total number of returns.

Mr. Schriever said putting the past 20+ years of the Phase 1 captive broodstock effort in perspective, the program managers have developed conservation aquaculture techniques to raise sockeye full-term to maturation in the hatchery (with high survival). They have effectively maintained population genetic diversity and conserved the adaptive potential of the population, and implemented a comprehensive evaluation that identified releasing smolts as the most effective reintroduction strategy.

Phase 2 is the re-colonization phase. The objective is to produce large numbers of smolts to increase the number of returning anadromous adults. Anadromous adults will be used to re-colonize the Stanley Basin Lakes and to replace captive adults in hatchery spawning designs. The annual production of smolts will increase 5 fold, from 200,000 to 1 million. To maintain genetic continuity between hatchery and natural spawning components, ten percent of the hatchery broodstock will be comprised of natural-origin anadromous adults (integration).

The expected outcomes of Phase 2 are the following: 1) Increase the number of anadromous adults naturally spawning in the habitat; 2) Transition to spawning only anadromous returns in the hatchery (captive broodstock becomes a safety net); and 3) Generate average returns of 5,000 hatchery-origin anadromous adults and 750 natural-origin anadromous adults annually.

Phase 3 will begin when: 1) The five year average return equals 1,000 anadromous adults - ramp down NBMFS captive program; 2) Five year average return equals 2,150 anadromous adults - ramp down IDFG captive program; and 3) Five year average return of natural-origin anadromous adults equals 750. The earliest this could happen is 2021, according to **Mr. Schriever**. Also during Phase 3, local adaptation will begin to control the ratio of hatchery and natural spawners in the habitat to allow natural selection to drive genetic adaptation. The smolt production required will be 400,000 to 600,000. Assumptions are that local adaptation and integrated broodstock management can effectively increase the natural population to sustainable levels that effectively address recovery objectives.

The expected Phase 3 outcomes are:

- Average natural-origin adult returns to equal 1,122;
- Average hatchery-origin adult returns to equal 5,384;
- NMFS minimum abundance threshold for Redfish Lake to equal 1,000; and
- Address Pettit and Alturas lake objectives.

That completed Mr. Schriever's presentation.

TESTIMONY: **Mr. Larry Thorngren**, a wildlife photographer from Donnelly, Idaho, said that he wished to compliment IDFG for what they are doing with the recovery program. He stated that he remembers when salmon were plentiful in Idaho streams and there was a fish cannery in McCall.

Chairman Pearce said the Committee would now hear a bill, presented by Ms. Sharon Kiefer.

S 1220: **Ms. Kiefer**, Deputy Director, IDFG, said that Idaho Code clearly states as the policy of the state of Idaho that all wild animals, wild birds, and fish, within the State are the property of the state of Idaho. In recognition of this, Idaho Code §36-1404 has long required reimbursable penalty to the State for the illegal killing, possession or waste of many species, but not all species of protected wildlife. S1220 would review current law so that the illegal take of any of the wildlife classified by the Fish and Game Commission with protected status in IDAPA 13.01.06 carries the minimum reimbursable penalty unless otherwise defined in Idaho Code §36-1404. This change enhances the regulatory structure important to uphold Idaho's sovereign management of its wildlife.

There are game and nongame species of wildlife for which illegal take would carry a $50.00 reimbursable penalty with passage of this bill. A few examples: Upland game animals - mountain cottontail, pygmy rabbit, and snowshoe hare; Protected nongame species, such as - American pika, North American wolverine, Northern flying squirrel, bald eagle, Peregrine falcon, and Bear Lake sculpin.

Many of these species are the subject of considerable conservation effort to preclude challenges to list them pursuant to the federal Endangered Species Act and to retain them under state management. Animals classified as predatory wildlife or unprotected wildlife carry no reimbursable penalty; this bill does not change this.

Ms. Kiefer said the bill also amends the reimbursable penalty for Chinook salmon of $250 to only apply to the illegal taking of wild Chinook salmon, analogous to the existing penalty for wild steelhead. There is no other change related to fines or the apportionment of fines. As the fiscal note reflects, this is an issue of policy, not of revenue for the department.

MOTION: After a brief discussion, **Senator Lacey** made the motion to send **S 1220** to the floor with a "do pass" recommendation. The motion was seconded by **Senator Stennett**. The motion passed by unanimous **voice vote**. Senator Lacey will be the floor sponsor of this bill.

ADJOURNED: **Chairman Pearce** adjourned the meeting at 2:25 p.m.

Senator Pearce
Chair

Juanita Budell
Secretary