

Data predicts low summer flows

The Natural Resources Department has been monitoring the snow pack on the reservation since 1974. The data is collected at four different sites. Two of these sites are reached by ground equipment and the other two sites monitored from the Tribal plane.

The depth of the snow at each site is measured and the water content determined for that area. This data is then compiled and compared to the flows that occur in the streams and rivers of the Reservation. From the snow pack data it is possible to make a prediction of the flows that may occur in the following summer months. (table 1).

A chart of the average water content for all four sites for the years 1974 through 1986 against the water content for this year was developed. This indicates that we have approximately 87.5 percent of the average water content that occurred in the last thirteen years.

A flow monitoring station was installed on Shitike Creek at Thompson Bridge in 1974 and the data compiled on a continuous basis. It is possible to compare the data from this station with the snow data pack and make a fair prediction of the type of flows that can be expected for the months of July, August and September.

The data from these graphs predicts the following: The mean flow for July 1987 will be approximately 80 cfs., August will be approximately 54 cfs and September will be approximately 47 cfs.

The flow monitoring station on the Warm Springs River at Culpus

Bridge was established in 1973 and data has been compiled continuously since then. In making a similar comparison of data from this station it is possible to predict the flows that can be expected for the months of June, July, August, and September.

The data from these graphs predict the following: The mean flow for June 1987 will be approximately 350 cfs, July 1987 will be approximately 267 cfs, August 1987 will be approximately 245 cfs and September 1987 will be approximately 247 cfs.

A stream of major concern to many is Mill Creek. A flow monitoring station was established on this stream at the B241 road crossing in late 1983 and data compiled on a continuous basis since that time. Due to the short period of data records it is difficult to make a similar comparison of snow pack and flows as was possible for Shitike Creek and Warm Springs River.

But due to the concern of water users on Sidwalter Flat a prediction of flows was made using a three year average flow and a fact that approximately 90 percent of this average will probably be produced this year. This method of prediction is not as accurate as the one utilized for Shitike Creek and Warm Springs River but will be in the "Ball Park."

From this data it is possible to predict that the flows in Mill Creek will be inadequate to meet those of the a nadromous fish and the water users on Sidwalter Flat.

Spruce budworm under attack

Portland, March 30—Spruce budworm infestations in northeastern Oregon will come under attack in a 300,000-acre joint Forest Service-Oregon State Department of Forestry aerial spray project scheduled to begin in June.

"This will be the largest effort in the Pacific Northwest to employ a natural insecticide in the treatment of spruce budworm," said Jim Torrence, Regional Forester of the Pacific Northwest Region, USDA Forest Service.

Naturally occurring insecticide *Bacillus thuringiensis* or B.t., will be sprayed from helicopters and airplanes onto the infested trees. The effectiveness of treating infestations on an operational basis with B.t., which is harmful only to the larvae of some moths and butterflies and only for a short period of time, was evaluated in 1985.

Over 150 Forest Service employees from the Pacific Northwest Region and other regions throughout the west, and several Oregon State Department of Forestry employees, will be involved in this summer's spray project, which will be headquartered in John Day. The Project will begin in June and run through mid-July.

The spruce budworm is the larvae of a small moth that feeds almost exclusively on the new growth of Douglas-fir and true fir species. The insects feed on trees of all sizes. Damage is mostly visible in the

summer months when the needles killed by the feeding insects turn a reddish brown color. Repeated heavy feeding for several years can cause some topkill and mortality in trees and will weaken them, making them more susceptible to other insect and disease agents. If the trees were not treated, this seven year budworm outbreak would continue and valuable timber would be lost.

Entomologists had proposed a spray program last year, but funding was not available.

A similar project is planned in Yakima County, Washington, where 57,000 acres near Rimrock Lake will be treated.

Water measures approved

The Joint Committee on Water Policy approved two water policy measures April 18, one to fight water waste and the other to launch new watershed improvement projects.

A new Watershed Enhancement Board would be created to supervise and finance local streambank and watershed improvement projects designed to increase stream flows. Senate Bill 23 now goes to the budget writers of the Ways and Means Committee.

This bill was initially drafted after water experts testified that

Response found to be "disappointing"

The response by Forest Service officials "was disappointing and condescending," said Paul Dewey, president of the Sisters Forest Planning Committee. He felt the reply to the appeal filed January 9 by the citizen's watchdog group opposing logging in the Wizard Timber sale was inadequate.

The sale, which involves 5.9 million board feet of timber on Forest land north of Camp Sherman on the Metolius River in Central Oregon, is bordered also by the Jefferson Wilderness area and the Warm Springs Reservation. Approximately 1,118 acres are designated for logging.

Logging in this area could have a detrimental effect on fish and wildlife as well as impact a prime recreational area, the committee asserts. Forest Service timber planner Rudy Hefter, however, feels the completed environmental assessment on the area provides sufficient data to justify logging.

The concern by the committee is not logging itself, said spokesman Dewey, but the cumulative effect of Forest Service logging practices in the Metolius Basin. Dewey stated, "The problem in the basin is not logging. The problem is clear-cutting and logging roads. The Forest Service is also not paying enough attention to fisheries, elk habitat and visual qualities of the area."

"The Forest Service," said Dewey, "has failed to correct the problem of poorly engineered roads

which cause erosion and contribute to sedimentation in tributaries in the Metolius.

"Two or three-year-old growth pine in the midst of an acre of young trees" as a visual goal is also unacceptable, said Dewey. "The basin is a premiere recreation area and this kind of planning does not contribute to a good visual experience."

Dewey continues, "The Forest

Service cannot keep on planning sale after sale after sale in the Metolius area without some plan to deal with cumulative effects... Because of the Basin's topography, with its many roads and streams, virtually every activity has some effect on the Metolius River."

The "we're taking care of it" attitude of the Forest Service "decreases our confidence," explained Dewey. There are numerous un-

resolved concerns regarding environmental impact involved in the Wizard Timber Sale that only a complete Environmental Impact Statement can address.

The Sisters Planning Committee has until May 15 to respond to the Forest Service reply. Since the initial appeal, "we've come up with documentation" regarding degradation of wildlife habitat brought about by logging.



The Warm Springs reservation borders the proposed Wizard Timber Sale in the Metolius Basin.

Sale removed

After public concern regarding the proposed timber sale at Antoken Creek, the 2,785 acres involved were removed from the commercial forest base by Tribal Council resolution April 6.

Tribal members residing near the sale area expressed feelings that aesthetic, cultural and big game value would be impacted by the sale.

The removal of this sale from the commercial forest base reduces the allowable cut by 886,000 board feet effective January 1, 1988 to a new total annual allowable cut of 79,714,000 board feet for the Warm Springs block.

Yaw goes to D.C.

Madras High School student Nicole Yaw was selected to attend the Young Leaders conference April 25-29 in Washington D.C.

Delegates for the conference were selected by United Way of America groups who paid for the travel and expenses. Involving youth more actively in their communities was the purpose of the conference.

Workshops at the conference dealt with leadership development and community problem-solving.

New police personnel



Newly hired special police officer John Halliday is 1/2 Wasco and the grandson of Frenchy Thomas and the son of Jeannie Thomas; Bill Chamema is a Hopi from Northern Arizona and is the new BIA law enforcement secretary.

Conference attended

Gilbert Brown and Dorian Soliz, along with Delbert Frank and Mary Ann Meanus, attended the Alcohol and Substance Abuse Conference held in South Sioux City, Nebraska May 5-8.

The conference was designed to bring elders and youth together for developing recommendations for prevention and treatment of substance abuse.

Forestry board adopts minimum riparian rules

Restrictions on logging and related practices in riparian areas have increased as the result of rules adopted April 15 by the state Board of Forestry.

The rules establish a riparian zone three times the width of a stream but not less than 25 feet or more than 100 feet wide along a fish-bearing stream. Within that zone, half of the tree canopy must be left, including nine conifers per acre if there are that many in half the zone nearest the water.

The new rules provide for moni-

toring of their impact which has not been done on logging practices in the past.

The 1987 legislature has appropriated \$171,563 for the forestry department to add two forest-practice foresters to its enforcement staff during the next biennium and to promote another forester from seasonal to fulltime enforcement. One position will also be added to the administrative staff for monitoring duties.

Conservation and environmental groups feel that the rules do not

adequately protect fish. In other states, buffer zones provide a 200 foot zone of shade along streams or 44 conifers with a minimum of a 12-inch diameter instead of nine trees provided in the new Oregon rules.

The problem, Oregon Trout executive director Bill Bakke claims, is the presence of a single member on the nine-member Oregon Board of Forestry who represents the public interest. The board, Bakke points out, appears to be serving logging industry interests.

Hatchery part of IHN research



Warm Springs fisheries technician aid Keith Moody assists ODFW fisheries technician Lonnie Freeman during spawning and sampling for IHN virus at Round Butte fish hatchery.

Infectious Hematopoietic Necrosis (IHN) is a virus that can prove fatal to fish. The virus infects the blood system of salmonids (salmon and steelhead) and has the potential to wipe out an entire hatchery, according to Oregon Department of Fish and Wildlife research biologist Brian Jonasson.

The IHN virus, discovered in 1974 at the Round Butte Hatchery on the Deschutes River, never reached serious proportions and researchers are working on ways to eliminate the problem completely.

Hatchery manager Bill Nyra explains that two years ago water supplies were changed and the flow into fish rearing ponds was doubled. The disease has decreased in frequency as a result.

However, researchers are still not certain that transmission of the disease is through water. For the past three years adult salmonids have been tested for the disease. Biologists cross pairs of fish with and without the IHN virus hoping to obtain more information. They are concerned that transmission may occur from adult to progeny.

Realty seeking current addresses

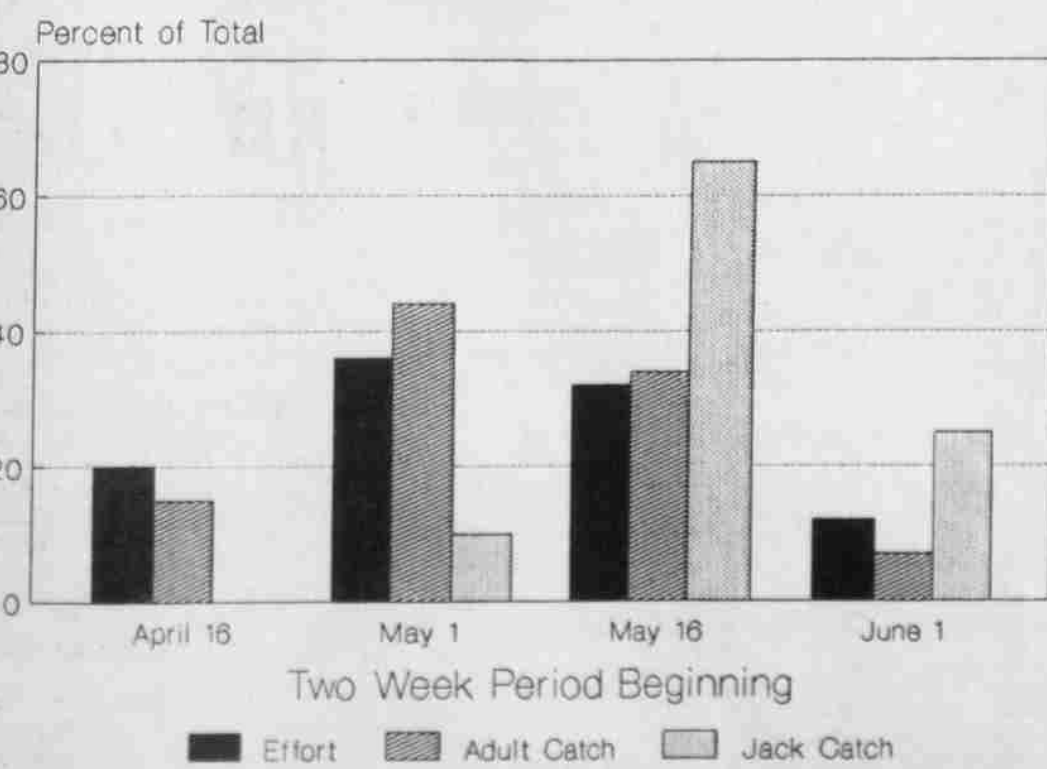
The Warm Springs Realty office is asking that all enrolled members of the Warm Springs reservation and the Burns Paiute reservation send in their current mailing address.

Send new addresses to Bureau of Indian Affairs Realty Office, P.O. Box 1239, Warm Springs, Oregon 97761.

Culture conference begins

Registration begins Thursday, May 7 from 6 to 9 p.m. for the Northwest Conference on Cultural Preservation at Kah-Nee-Ta Resort. Meetings will be held Friday and Saturday with a dinner Friday night at the Simnasho Longhouse.

DESCHUTES SPRING CHINOOK
Sherars Falls Sport Catch



Graph from Oregon Department of Fish and Wildlife shows how well sports fishermen do at Sherar's Falls during spring chinook run.