

# Reservation faces the drought question

While weather patterns puzzle observers, the reservation is gearing up to look anticipated summer drought

## So far the range has suffered the most

conditions right in the eye. Recent snowfall has changed the picture for foresters, but ranchers, farmers and fishermen still have reason to be concerned as the moisture at the lower elevations remains critical.

The Resource Committee in the Municipal Branch will be recommending to the Tribal Council the formation of a Drought Committee to coordinate a reservation-wide plan of action before an emergency exists.

In addition they will ask that a 15-member Livestock-Range Board be set up to advise the Tribal Council, committees and departments on how to deal with the problem of scarce forage and water. So far the range has suffered the most according to Extension Agent Clint Jacks.

The seriousness of the drought is illustrated by the

## "We already know we're going to hurt"

most recent snowpack and moisture figures compiled by the Natural Resources Department. Gene Greene reports that as of April 1, Baldpeter had 40 inches of snow with a water content of 9.2 inches. This compares with last year's March 1 figures of 127 inches snowpack and 28.2 inches water content. (Measurements for April 1, 1976 were not made).

Although these figures are improved from March 1, '77 measurements due to the blizzard that hit the mountains during the last week, March did not produce the predicted above average amount of moisture to Central Oregon.

"We already know we're going to hurt," said Jacks, "so we're doing some groundwork now."

A key piece of groundwork is the drought survey conducted by the Resource Committee. The results of the survey, which were presented to the Tribal Council March 7, reflect the concerns and needs of the many Tribal and BIA departments involved in management of the reservation's resources.

## Irrigation for farming will be limited in the event of low stream flow.

It is clear from the report that every resource will be affected by a continued drought, although the impact will be to varying degrees. Highlights of the survey can be summarized in the following way:

a) Community water shortages are not expected. However, shallow wells will suffer greatly from lack of surface water.

b) Scarce range grass at the lower elevations will necessitate new grazing patterns for stock. Water for stock will also be a problem.

c) Irrigation for farming will be limited in the event of low stream flow. Dry land crops will not grow without rain.

d) More and earlier fire protection in the timbered areas and restrictions on logging could become necessary if the low moisture in the early part of the year continues.

e) The expected low stream flow will provide a less than ideal habitat for fish and will affect the return of adult anadromous fish to the reservation as well as the progress of the downriver smolts.

f) Big game might be more abundant due to the mild winter, putting a strain on their food and shelter.

The formation of a Drought Committee would be an attempt to implement the recommendations made in this report by setting priorities and coordinating available resources to address the problems.

Funding is a primary concern. The Land Use Planning Committee and the Grants Office will be looked to for the location of monies. Jacks notes the National American Indian Cattlemen's Association is a

possibility for range projects.

President Carter has asked Congress to appropriate \$850,000,000 for relief to the ten western states affected by the drought. State disaster relief funds will not be available until economic loss has already occurred.

Various departments are planning to mobilize their own manpower and funds in the meantime. Local youth may provide valuable conservation work through such programs as YCC and the summer work programs.

A resource by resource account of the drought's impact along with tentative plans of action are capsulized here.

## Local youth may provide valuable conservation work through such programs as YCC and the summer work programs

### RANGE

Protection of the grass resource through better distribution of stock and water is the goal for the range, says Jacks. It is expected that stock will have to be moved to higher elevations or previously ungrazed areas in order to provide food and allow grass to restore itself. Currently there is no grass in the South End and no water to speak of on Miller Flat.

Livestockmen are encouraged to buy hay early. The prices have already gone up from \$60 to about \$100-\$110 per ton and will continue to climb.

Formation of the Livestock-Range Board is recommended for setting priorities.

### WATER SUPPLY

Jack Fiala of Facilities Management reports that the Warm Springs supply, which depends entirely on Shitike Creek, is not in extreme danger, although the maximum summer domestic use of a million gallons per household per day might need to be reduced. Fiala points out that a continued drought might provide a good opportunity to establish a primary water system using the Deschutes River. If an emergency arises, the Deschutes can be used as a back-up supply.

Tribal Engineer Satish Puri indicates that deep wells will not be greatly affected by a short-term drought. However, surface wells in areas such as Schoolie Flat are in trouble and spring-fed supplies upon which about 17 rural homes depend, may face difficulties.

Community education about water conservation and the curtailment of certain domestic uses of water are possible actions to be taken if the water supply is threatened. Methods of hauling water for rural homes will be looked into.

### TIMBER

Recent moisture has changed the forestry outlook since the drought survey, says Forest Manager Gunther Heeron. In fact tree planting in the high country, which was ex-

pected to be delayed a year for lack of moisture, was delayed this week for altogether different reasons — too much snow! It remains to be seen whether there will be enough moisture at the lower elevations to go ahead with planting.

One fire lookout was hired a bit earlier this year but the fire season is not expected to be much longer than usual. The customary fire safety precautions will be exercised by logging and tree-thinning crews but Heeron predicts that heavy restrictions, such as hoot owl hours, will not be necessary.

### FISH

Gene Greene sees the drought as critical for all species of fish since "their total environment is water." Low stream flow may cause lower oxygen content and "thermal pollution", or the climbing of water temperatures above 65 degrees, which is too warm for most species of fish.

Stocking of fish should not be a problem as reservoir levels are expected to drop only one foot.

Spawning anadromous fish need a minimum water depth for traveling upstream, and downriver smolts face the danger of going through Columbia River dam turbines during low flow. Plans for transporting the fish past Bonneville Dam are now being discussed by several parties.

Concern over the fish hatchery's impact on stream flow was dispelled when Greene explained that the hatchery recycles water at a rate to 80 percent.

Management guidelines similar to the state's may become necessary. Reservation fishing might be closed to non-Indians and seasons may have to be set up for fishing at Sherar's Bridge. Ceremonial fishermen on the Columbia River might require longer nets to reach fish forced to swim at midstream depths.

### WILDLIFE

Gene Greene sees the need for enhancement of "effective overall management practices or techniques" for wildlife now more than ever. Game populations, availability of forage, and wintering behavior will

## Dry land farmers can expect a loss if low moisture continues.

have to be examined to determine the effects of a dry and mild winter. It is possible that the big game survival rate was such that there could now be an overabundance.

### AGRICULTURE

Irrigation must not interfere with the stream flow to the point where the fishery is endangered. In the Mill Creek area, canal intake may be limited and water shared on a rotational basis. Construction of holding ponds for livestock water might be encouraged.

Barriers in the Warm Springs River may be needed to raise the water level and water users will be encouraged to practice conservation measures.

Dry land farmers can expect a loss if low moisture continues. It might be necessary to summer fallow present crop land so that farmers are in a better position in 1978.

