

# Answers Given on Willow Creek Project Questions

Following are 35 questions that have been asked by the public on the Willow Creek project with answers prepared by the U. S. Army Corps of Engineers, the Bureau of Reclamation, and the State Water Resources Board. They are printed to give the public background information on matters concerning the project which are of importance to residents.

## HOW MUCH FLOOD PROTECTION WILL THE WILLOW CREEK PROJECT PROVIDE?

The project will provide protection against floods originating above the damsite. It will completely store a flood similar to that which occurred in 1903. Protection will be afforded to Heppner, downstream communities, and agricultural areas along Willow Creek with a lesser degree of protection for the lower reaches.

## WILL THIS PROJECT BE ANY SAFER FOR HEPPNER, LEXINGTON, AND IONE THAN JUST A GOOD CHANNEL CLEARANCE TO TAKE CARE OF HIGH WATER?

Improvement by levee and channel work of all or part of the 45-mile channel of Willow Creek below Heppner and 20 miles of Rhea Creek above its mouth to provide flood protection to rural areas and to Lexington and Ione was not found to be economically feasible at this time. In most cases, protection would require a large capacity, rock revetted channel, whose cost would far exceed benefits. The development of a channel through Heppner to provide capacity for a discharge approaching the standard project flood peak of 29,000 cfs would require a channel over 100 feet wide costing nearly three million dollars. This cost would not be justified and would provide only a partial solution to one of the basin needs. A storage project, besides being economically the best way to meet this flood problem, is safer because the flood flow can be contained and later released at a non-destructive rate which could be beneficially used downstream.

## WOULDN'T A SERIES OF SMALL DAMS UP BOTH WILLOW CREEK AND RHEA CREEK BE A BETTER APPROACH TO FLOOD CONTROL?

In studies of basin problems and the means of meeting them, a series of small dams was one of the possible solutions studied and found economically unfeasible. Because most of the basin area is treeless, relatively barren of vegetation, impervious to high intensity precipitation, and cut with steep-sided gulches, extreme flooding from cloud-burst may occur. To provide the maximum feasible flood protection, the reservoir was located where the largest practical storage capacity could be found and above the main potential flood damage areas. A similar storage project on Rhea Creek is under study by the Soil Conservation Service in cooperation with the local people.

## IF WILLOW CREEK DAM HAD BEEN IN EXISTENCE, WHAT WOULD THE 1964 WINTER FLOODS HAVE BEEN LIKE?

Both the December 1964 and the January 1965 floods were unusual in that they were generated largely in areas below 3,000 and 4,000 feet elevation, respectively. Since most of the area upstream of Heppner is above these elevations, little flows originated here. Most of the flow reaching the lower Willow Creek area originated from the Rhea Creek area. Because little flows originated above Heppner, Willow Creek Dam's ability to trap these flows would have reduced downstream flooding only slightly. We must not judge the potential for use of Willow Creek Reservoir solely on the basis of the two floods, as indicated by the 1903 flood. For such a flood, Willow Creek Reservoir would release less than the bankfull capacity and afford complete protection.

## HAS A CORPS OF ENGINEERS' DAM OF THE TYPE PLANNED HERE, EVER FAILED?

No. Projects which are constructed by the Corps of Engineers are only built after careful and complete exploration and design studies. A high safety factor is used to insure a safe project. The Heppner damsite is among the best ever investigated by the Corps.

## HOW MANY YEARS OUT OF EACH TEN WILL THE DAM REACH ITS CAPACITY FOR BOTH RECREATION AND IRRIGATION?

Six or seven years out of ten, usually in the late spring, the reservoir will fill and be available for recreation and irrigation. In most other years there will be a substantial supply. This estimate is based on the hypothetical regulation of the last 32 years of streamflow data.

## CAN THE RESERVOIR BE MADE A SUCCESSFUL RECREATION LOCATION?

Yes, because the basin has very limited facilities for recreation and sports fishing but considerable local and regional interest. Recreation plans will be developed in conjunction with local agencies to meet the needs of the area. Existing water-related recreation outlets nearest to Heppner are McKay Reservoir, 55 miles distant; McNary Reser-

voir, 57 miles; John Day Reservoir, 50 miles; and Bull Prairie Reservoir (35 acres), 42 miles.

## WILL THIS BE JUST A BREEDING GROUND FOR MOSQUITOES?

The Public Health Service recommends mosquito prevention measures which will be included by the Corps of Engineers in the planning, design, construction, and operation of the project. This provides assurance against the creation of a mosquito production problem.

## WILL THE DAM BE DRAINED AND A CONSEQUENT LOSS OF FISH EXPECTED AS SOMETIMES OCCURS AT MCKAY DAM IN UMATILLA COUNTY?

No. McKay Dam was built in 1927 by the Bureau of Reclamation as a single-purpose project for irrigation. Most storage reservoirs constructed these days are for multipurpose use. Willow Creek Dam and Reservoir is to be a multipurpose project with pool space specifically allotted to fishery. 1,400 acre-feet of pool space would be reserved in the bottom of the reservoir for the gradual accumulation of sediment to assure full effective use of the active storage space for 100 years. An additional 500 acre-feet of storage would be reserved for fish survival and year-round recreation and would be full at all times. In addition to the fish which outwit the anglers, annual stocking and management would be performed by the Oregon State Game Commission.

## WILL I LOSE MY WATER RIGHTS AFTER THE DAM IS CONSTRUCTED?

No! The Bureau of Reclamation recognizes all water rights in the development of the irrigation aspect of the project. Those who participate in the project would be expected to agree to forego winter diversions as now practiced. This water would be stored for use later during the irrigation season when the natural flow is not sufficient and it could be put to more beneficial use. Water rights held by those not participating in the project would be administered by the State of Oregon according to current policy.

## HOW WILL THE WATER RIGHTS ON LANDS TO BE FLOODED BY THE RESERVOIR BE DISPOSED OF TO OTHER LAND OWNERS?

There are two things which might happen to the water rights the affected owners now have: (1) The owner might sell his water right and it could be transferred to some other tract of land provided the transfer did not injure others. If he did this, the land would then in actuality be unirrigated and without water rights and would be worth less when purchased by the Corps.

(2) If the land has water rights at the time of purchase by the Corps, the water rights would be extinguished with the same effect as if they had never existed. This would mean that a little more water would be available to existing water users.

## IF A SOIL CONSERVATION SERVICE SPONSORED DAM SHOULD BE BUILT ON RHEA CREEK, HOW WILL THIS AFFECT THE DOWNSTREAM WATER RIGHTS ON WILLOW CREEK?

No dam, whether built by the Corps, the Bureau of Reclamation, or the Soil Conservation Service would eliminate a person's water rights. All water rights must be recognized in planning a Federal project.

## ARE THE LANDOWNERS REQUIRED TO PAY ALL COSTS ASSIGNED TO IRRIGATION?

No. The landowners would pay according to their "payment capacity" which is based on the increased net farm income resulting from irrigation. Costs beyond the landowners' payment capacity would be returned to the Federal Treasury from surplus Federal power revenues.

## WHAT FACTORS ARE CONSIDERED IN DETERMINING THE LANDOWNERS' "PAYMENT CAPACITY"?

The term "payment capacity" is defined as the amount a farmer can afford to pay for irrigation water. Basically, the payment capacity represents the difference between anticipated general economic conditions of the area with and without the project in operation. Factors considered in this determination include types of soils, crops that can be grown, transportation, markets, etc. The type of service is also a factor in this determination. For example, where storage water is released into the stream and the irrigator has the expense of getting the water to his land, his payment capacity is less than if the project provided delivery of water to the land.

## WHAT IS THE LANDOWNERS' PAYMENT CAPACITY IN THIS AREA?

Based on very preliminary studies, the irrigators could be expected to pay approximately \$3 per acre-foot of project water diverted onto the land. A part of this charge would be used to pay operation and maintenance costs, and the difference would be paid to the Federal Government on construction costs. Detailed studies are required to establish a firm estimate of payment capacity.

## HOW DOES THE FEDERAL GOVERNMENT COLLECT IRRIGATION COSTS FROM THE LANDOWNERS?

The Government contracts with a locally organized legal entity, such as an irrigation district or similar legal entity. The local organization, through assessments, collects from the landowners and makes payments annually to the Government.

## IS IT NECESSARY TO FORM AN IRRIGATION DISTRICT OR IMPROVEMENT COMPANY?

Since the Government cannot contract with each water user, it is necessary to form an irrigation district or similar legal entity. The irrigation district or improvement company then, as the representative of the landowners, contracts with the Federal Government for repayment of its share of irrigation costs. In forming the irrigation district the landowners do not obligate themselves for any of the project costs. Only after a repayment contract is signed do the landowners become obligated to pay their share of project costs.

## WHAT ADVANTAGES MIGHT AN IMPROVEMENT COMPANY OFFER OVER AN IRRIGATION DISTRICT?

An improvement company has the principal advantage of being relatively fast and economical to form. The earlier the landowners can organize themselves, the sooner their desires concerning irrigation will be established and the sooner the Corps and the Bureau can complete further irrigation studies and development. There are nearly as many improvement companies in Oregon as there are irrigation districts. The members of an improvement company may later change to an irrigation district, if they desire more power for easier workability.

## WHAT WOULD BE THE COSTS OF FORMING AN IMPROVEMENT COMPANY OR AN IRRIGATION DISTRICT?

Costs of forming a district depend upon the size of the project, number of landowners and type of district. A good indication of costs could be obtained by contacting either the State Engineer or the Oregon State Water Resources Board. At a meeting in Heppner on 30 October, 1963, the landowners' committee proposed to form a district improvement company. This type of district is less expensive to form. They are often formed for less than \$600. Irrigation districts usually cost about twice as much to form because of the additional cost of newspaper publications and an election, but have certain advantages over other forms of districts.

## WHEN MUST A REPAYMENT CONTRACT BE SIGNED?

A contract must be negotiated before actual construction can start on a project that includes irrigation as a project function. If an irrigation district or improvement company were formed but did not approve the repayment contract with the Government, the project would not include irrigation as a function and the district would have no further financial obligation toward the project.

## WHEN DO PAYMENTS ON IRRIGATION ACTUALLY START?

Payment of operating costs start the first year water is delivered. A development period of 1 to 10 years, to be determined by detailed studies, will be allowed and the irrigators will pay only operating costs during this period. The first assessment for the interest free construction costs would be made at the end of the development period.

## DO I HAVE TO PAY FOR THE WATER ALLOCATED TO MY FARM EVEN IF I DON'T USE IT?

You must first participate in the project before an allocation of water can be made. Construction costs incurred for irrigation must be returned to the Government, generally over a 50-year period. These costs prorated on an annual basis, along with annual operation costs, must be paid each year by the district. What you will depend on how the Board of Directors of your irrigation district or improvement company decides to assess charges. Charges are usually assessed on an annual basis.

## IF I NEED A LOT OF WATER ONE YEAR BUT NOT MUCH THE NEXT, DO I ONLY PAY FOR WHAT I USE?

This will also depend on how the Board of Directors of your irrigation district or improvement company decides to assess charges for water delivery. In some cases, it is a flat rate for an adequate supply. In other cases, a rate is assessed for a base quantity adequate for the average farming operation and additional charges are made for excess water delivery over this amount.

## WILL I GET AS MUCH WATER AS I HAVE BEEN PREVIOUSLY USING?

It is not possible to give a yes or no answer to this question because some water applied under existing conditions, especially during the winter months, is not beneficially used. The important point is that those who participate in the project will receive a supply adequate to raise any of the crops

that can be successfully grown in the area. Water will be delivered when most needed for optimum plant growth. This is the real advantage of project development over the present system of winter diversions and little or no water later in the summer. Those who don't participate in the project will receive water according to their existing rights. However, unless a sufficient number of irrigators participate in the project and agree to forego winter diversions, there may not be adequate water for storage to justify a project.

## WILL I BE GUARANTEED WATER WHEN I WANT IT?

With the project an adequate supply would normally be available on demand throughout the irrigation season. During extended periods of below-average runoff, shortages, if any, would be shared by all project lands. It should also be kept in mind that the irrigation part of the project will be managed by the irrigation district which will be made up of local irrigators. With this arrangement, water would be delivered, as nearly as humanly possible, to meet the needs of those participating in the project.

## WILL THE WATER USERS ON BOTH RHEA AND WILLOW CREEKS BE MADE TO BECOME A PART OF THE IRRIGATION DISTRICT TO BE FORMED?

The Bureau of Reclamation does not force anyone to become a part of an irrigation district, as that is strictly a personal decision. However, those who will benefit from the project should become participating members of a district organized according to Oregon law. The project as planned would not benefit Rhea Creek water users, so there would be no reason for them to join an irrigation district.

## HOW MUCH LAND WILL BE REQUIRED FOR THE PROJECT?

The total project land requirements of about 570 acres will include the dam and spillway, 100 acres for recreation development, and 61 acres for relocations. Lands needed for the reservoir include a minimum of 300 feet of freeboard (measured horizontally from full pool at elevation 2058) to allow for such backwater effects as wave action, sloughing, bank erosion, and saturation. Just over 12 acres will be required for construction of the improved channel through Heppner. Public meetings will be held by the Corps as early as possible in advance of construction to describe the actual lands required and answer those specific questions that will vary from ownership to ownership.

## IF MY PROPERTY IS REQUIRED FOR CONSTRUCTION OF THIS PROJECT, HOW MUCH WILL I BE PAID?

The rights of a citizen are protected by the Fifth Amendment of the Constitution of the United States which permits private property to be acquired for public use provided that the property owner is paid "just compensation" for any of this property taken. The Constitution does not define "just compensation." Neither are there general statutes which attempt to establish criteria upon which to base payments to property owners affected by public works projects. The determination of "just compensation," therefore, is a judicial question. The Federal courts have defined "just compensation" as "fair market value." It is the Corps of Engineers' desire and duty to pay the property owner "just compensation."

## WILL THE PRESENCE OF THE DAM ADVERSELY AFFECT THE PROPERTY VALUE OF MY HOME DOWNSTREAM FROM THE DAM?

Although there has been no complete study on this, the consensus of opinion (after considering the many, many cities that are on rivers and streams downstream from dams) is that property value would not be adversely affected. If anything, most people would rather live downstream from a dam that would protect their lives and property than be at the mercy of the river. Every effort will be made to construct a dam and related facilities that harmonize with the adjoining landscape.

## HOW MANY WORKERS WILL BE EMPLOYED FOR THE CONSTRUCTION OF THE DAM AND HOW LONG WILL THEY BE HERE?

Although it is contingent upon allocation of construction funds by Congress, it is estimated that construction of the project will require two calendar years. Based upon experience from other dam projects, it is estimated that approximately 50 workers will be employed the first year and 230 the second year. This estimate includes both contractor and government employees and represents a total population, employees and their families, of about 120 and 600 for the first and second years, respectively. There is no way of knowing how many of these employees will reside in Heppner during the construction period. This depends, naturally, on the facilities available in Heppner and in nearby communities.

As a matter of interest, and as a possible means of comparison,

many of the workers on the Lower Snake River dams currently under construction, commute from Walla Walla, Dayton, Waitsburg, and Pasco. Commuting distances are, in some instances, nearly 60 miles one way. The construction periods on these projects are, however, considerably longer than on the Heppner project. Some of the workers on these projects live in trailer camps near the sites. It may reasonably be expected that a considerable number of the workers, and their families, will reside in Heppner if they can obtain adequate facilities at reasonable costs. Since the construction period is short, it would not be expected that many would buy homes, but would, instead, rent homes in Heppner and nearby communities. Because rental units would be limited in availability, it would be reasonable to assume that many of the workers would live in trailer parks in, or near, Heppner.

## WILL THE WORKERS SPEND MUCH MONEY HERE?

The total payroll for the Willow Creek project will amount to approximately \$2,000,000. The amount of this money spent in Heppner and Morrow County will, of course, depend upon how many of the workers choose to live there, and upon the availability and cost of the facilities and services required.

## IF THE DAM IS BUILT AND THE RUNOFF CONTROLLED, WON'T MORE WILLOW TREES GROW UP IN THE CREEK?

If the dam is built and streamflows regulated, some additional growth of willow trees may occur in the channel. In such a case the regular removal of excess growth would be desirable to maintain an adequate channel and keep transpiration losses from vegetation within reason. Maintenance of the channel will become a responsibility of the irrigation district and the expense would be

a part of the project's annual operation and maintenance costs. Maintenance of the channel through the City of Heppner will be a responsibility of the city.

## WHO WILL OPERATE THE PROJECT?

The project will probably be operated under the supervision of the staff at McNary Dam with an operator detailed as required during the flood season. During the irrigation season it is expected the operation would be supervised by a representative of the irrigation district or company. The management of the recreation facilities would be a responsibility of the local interests. Specific arrangements regarding project operation will be made during the construction stages of the project.

## AFTER THE FORMATION OF AN IRRIGATION DISTRICT OR IMPROVEMENT COMPANY, HOW WILL THIS AFFECT MY TAXES?

Since the productivity of the land and the land values are higher with irrigation, most counties assess irrigated lands at a higher rate than nonirrigated lands. However, the tax assessments are the responsibility of the county officials and are not established by the Federal Government.

## HOW MUCH MONEY IS IT GOING TO COST THE CITY OF HEPPNER AND MORROW COUNTY?

Prior to construction of Willow Creek Dam and Reservoir local interests will need to:

- (1) Make arrangements to repay costs allocated to irrigation. This will involve water users formed into an irrigation or water district, however, not the City or County. That part of the cost beyond the irrigators' "payment capacity" will be repaid from revenues derived from disposition of power marketed through the Bonneville Power Administration.
- (2) Provide without cost to

the United States all lands, easements, rights-of-ways, and relocations, necessary for construction of the channel improvement through the City of Heppner. The estimated cost is \$10,500.

(3) Hold and save the United States free from all damages incident to construction, operation, and maintenance of the improved channel through Heppner.

(4) Make arrangements for repayment of the construction cost, estimated at \$72,000, allocated to municipal and industrial water supply plus a nominal charge for operation, maintenance, and replacements. This repayment would be by the city and may be spread over 50 years with the first ten years interest free.

(5) Administer project land and water areas for fish and wildlife enhancement.

(6) Make arrangements to repay with interest one-half the costs allocated to fish and wildlife enhancement which are estimated at \$57,000. The sponsor may, with agreement of the Corps, charge a reasonable user-fee to help defray this cost. Fish stocking would be accomplished by the State.

(7) Bear all costs of operation, maintenance, and replacement of recreation and fish and wildlife lands and facilities. The estimated annual cost is \$5,000.

## Knitting Club Meets

Busy Needles 4-H Knitting club worked on projects at the meeting January 28 at the home of Mrs. Herb Ekstrom, Jr. Phase 1 continued knitting their hats and phase 3 worked on their sweaters. We meet again Friday, February 4 at Mrs. Ekstrom's home.

D-Ann Barnett, reporter

When you patronize Gazette-Times advertisers, you help make a better paper. Tell them you saw it in the Gazette-Times.

## To All the People Of Morrow County

YOU ARE INVITED TO ATTEND A

# Public Meeting

ON THE

## Willow Creek Project

Tuesday, February 8

### At 1:30 P.M.

IN HEPPNER ELEMENTARY SCHOOL MULTIPURPOSE ROOM

Representatives Will Be Present From The U. S. Army Corps of Engineers State Water Resources Board, and Bureau of Reclamation

The District Watermaster Will Also Be Present

An Attempt Will Be Made To Answer All Questions of Potential Irrigators And Others In Regard to the Formation Of The Willow Creek Dam. This Meeting is of Utmost Importance And We Urge Attendance of All Those Interested.

--Morrow County Court