

Engineers Release Report On Willow Creek Dam Project

(Editor's note: Below is the report of the U. S. Army Engineer Division, North Pacific Corps of Engineers, on the Willow Creek dam and reservoir project, released February 14. Although much of the information contained therein is well-known to Morrow county residents, it is printed in full because of the interest in the project and because it is felt that many would want to know what the favorable report contained.)

Notice is hereby given that the report on Willow Creek, Oregon, authorized by the Flood Control Act of 28 August, 1937, has been completed by the District and Division Engineers. A public hearing was held at Heppner, Oregon, by the District Engineer on 14 January, 1963.

The report is favorable to improvements consisting of construction of a dam and reservoir on Willow Creek just upstream from Heppner and downstream channel improvements through the city. The reservoir would have a total storage capacity of 11,500 acre-feet for flood control, irrigation, water supply, sports fishing and wildlife, recreation and water quality control. The channel improvements would carry the regulated releases of 1,500 cfs downstream through the city. The estimated first cost of the construction is \$6,690,000. Pertinent information concerning the project is contained in the attached Information Bulletin.

In accordance with law the report is being referred for review to the Board of Engineers for Rivers and Harbors in Washington, D. C. Interested parties may present written views on the report to the Board. Statements submitted should not repeat material previously presented at the public hearing or contained in the report as this information is already available to the Board. Information submitted should be new, specific in nature and bear directly on the findings in the report.

Further hearings will be held only on written request explaining the need to present material not included in the report.

Written communications are to be mailed to the Board of Engineers for Rivers and Harbors, Washington, D. C. 20513 in time to reach the Board by 16 March, 1964. If extension of this date is considered necessary, requests giving reasons and additional time desired should be submitted as soon as possible.

The Board considers communications and the report at a date subsequent to expiration of notice. Information furnished by mail receives the same attention as that received at the public hearing. Should the Board not be convinced of the soundness of the recommendations in the report, notice to that effect will be mailed to all known interested parties prior to final action.

Further information needed may be obtained from this office or the District Engineer, U. S. Army Engineer District, Walla Walla, Building 602, City-County Airport, Walla Walla, Washington. Interested parties, including the press, may make such notes of the contents of the report as

they desire. Copies of the report will not be loaned for use outside the office, but interested parties may purchase copies of the report, or parts thereof including illustrations, at the cost of reproduction. Copies may be obtained from the Walla Walla District Engineer at a price of \$2.00 for the main report and \$3.00 for the appendix material. Checks or money orders should be made payable to the Treasurer of the United States.

You are requested to give the foregoing information to any persons known by you to be interested in the report, and who, not being known by the Division Engineer, do not receive a copy of this public notice.

W. W. LAPSLEY
Major General, USA
Division Engineer

INFORMATION BULLETIN Willow Creek Project, Oregon

1. The Willow Creek Basin of north central Oregon, covering 890 square miles, is comprised of about 100 square miles of partially forested, rugged, mountainous area and 790 square miles of semi-arid treeless grassland prairie divided by numerous watercourses and valleys. It is sparsely populated, having a total population of 3,500 persons of which 47 percent reside in Heppner, Oregon. Willow Creek is a stream 70 miles in length which flows in a generally northerly direction from the Blue Mountains to enter the Columbia River 250 miles from the ocean near Arlington, Oregon.

2. Throughout the 100-year history of white settlement, the area has sustained considerable damage and extremely high loss of life from floods of cloudburst origin. The flood of record, occurring in 1903, resulted in the death of 247 people out of a population of 1,200 in the City of Heppner. This was the most disastrous natural flood of its kind in the history of the United States. It is with this background and recognized potential for unpredictable cloudburst floods, that the chief desire of the people is to obtain relief from the threat of a recurrence of a similar disaster. There have been other floods of lesser proportions resulting in loss of life elsewhere throughout the basin. Other major water-resource problems and needs are generally those of seasonal distribution characteristic of arid areas, as related to irrigation, water quality, and municipal and industrial water supply, and development of additional facilities for recreation sports fishing, and hunting.

3. Studies have been made of several possible solutions to the flood-control problem, water resources, and related needs. These include single and multiple-purpose storage projects, single-purpose channel improvement works, local flood protection projects, and combinations thereof; regulation of flood-plain use; and relocation of portions of the City of Heppner. Specifically, storage opportunities have been investigated on Willow Creek above Heppner to control cloudburst floods and to provide for other beneficial uses; and on Rhea Creek, upstream from the town of Ruggs. Channel improvements and levees were considered throughout both Rhea

Creek and Willow Creek Valleys, including Heppner; and in addition, local protection works were examined for Shobe Canyon and Hinton Creek where they enter Heppner, for Blackhorse Creek at Lexington, for Rietmann Canyon at Lone, and for Rhea Creek at Ruggs. Studies concerning the feasibility of storage on Rhea Creek have been initiated recently by the Soil Conservation Service.

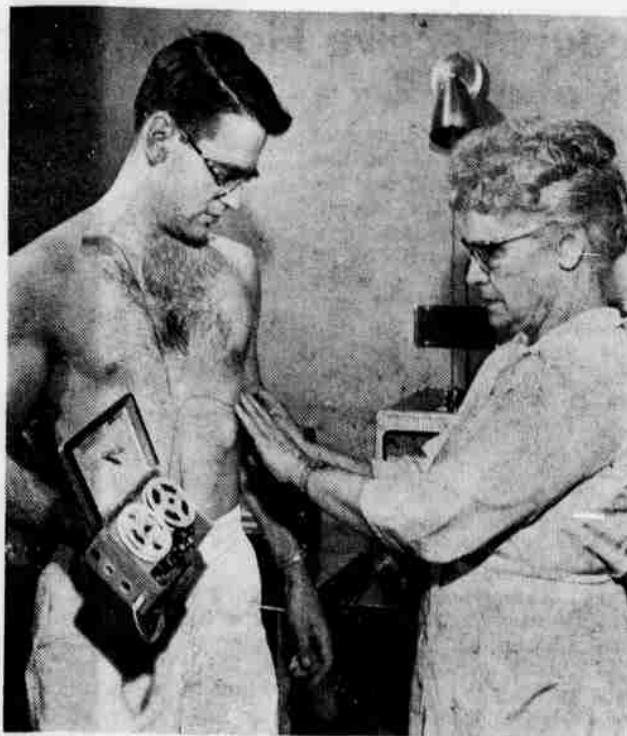
4. Preliminary studies for this report established that single-purpose solutions to the various basin problems, including both storage reservoirs and channel improvement works, are not generally economically feasible at this time due to high costs and limited benefits. A possible exception is that localized protection against lesser floods may be justified at the several locations discussed in the preceding paragraph. Channel improvements, including enlargement, rectification, and clearing and snagging, offer a possible means for limited protection. These could be investigated and, if feasible, provided under existing continuing authorities.

5. Detailed investigations by the Corps of Engineers have been directed toward providing a multiple-purpose dam and reservoir on Willow Creek immediately above Heppner that would relieve the major direct flood threat to the City, the adjacent community, and developments along Willow Creek Valley; and additionally, provide the maximum benefits from water conservation. In formulation studies it has been determined that since the present and future water needs and associated values far exceed the available supply, the project must equitably apportion this resource among the various uses on the basis of maximum tangible benefits.

6. The plan of improvement selected consists of a rock and earthfill dam 155 feet high, located above the City of Heppner and just below the confluence of Willow Creek and Balm Fork; and an improved channel of 1500-cfs capacity extending from the dam along Willow Creek through Heppner for a distance of 1.5 miles. The reservoir would have a total capacity of 11,500 acre-feet. This would provide (1) 1300 acre-feet of exclusive flood control space; (2) 8,300 acre-feet of joint-use space for flood control, irrigation, municipal and industrial water supply, water quality control, sports fishing and wildlife, and recreation; and (3) 1,900 acre-feet dead storage for sedimentation, fish survival, wildlife and recreation.

7. The project would completely store a flood equivalent to that of 1903; prevent 86 percent of the potential flood damages in Heppner and Willow Creek Valley originating above the damsite; and minimize the possibility of loss of life. The reservoir would produce an average annual yield of 8,400 acre-feet of water to irrigate some 3,700 acres; improve water quality in Willow Creek with an average monthly minimum flow of 2 cfs past the Heppner sewage plant; and provide 100 acre-feet of municipal and industrial water supply for the City of Heppner. A resident trout fishery could be developed that would attract an estimated 21,000 persons annually. Associated benefits would increase security from loss of life, safeguarding of public health, enhancement of esthetic conditions, groundwater recharge, and recreational use of the reservoir.

8. The estimated construction cost of the dam, reservoir, and downstream channel would be \$6,690,000, with a total investment cost of \$7,018,000. The annual cost is estimated at \$233,100 including interest and amorti-



BERNARD KRAMER watches as Mrs. Bernice Platt, R.N., technician in the cardiac telmetry laboratory at Portland's St. Vincent's hospital tapes electrodes in place. They will carry a record of his heart action to magnetic tape in carrying case, left. It is part of a new study which Oregon Heart Assn. and others are supporting.

Public Party Aids Kinzua PTA

By VIRGINIA KESLO
KINZUA—The card party given Saturday night by the Kinzua PTA was well attended and a big success. Nine tables of pinocle and five of bridge were in play. Cookies and coffee were served throughout the evening. Winning high in pinocle was Mrs. Virginia Sitton, low went to Grayson Gerard, and floating prizes to Mrs. Carol Gerard and Earl Norris. High for bridge went to Mrs. Margaret Duke and low to Mrs. Marie Wall.

A white elephant auction was held afterwards netting a goodly amount for the PTA treasury and a lot of fun by Auctioneer Milt Boring.

Mr. and Mrs. Herbert Ekstrom of Bend were week-end house guests of Mr. and Mrs. Milo Prindle. They all attended the card party Saturday night.

Mr. and Mrs. Scott Reed and sons of Prineville spent Saturday visiting with Mr. and Mrs. Ralph Medlock and family.

Mr. and Mrs. Ferner Plank and daughters spent Sunday visiting friends in Monument.

Mr. and Mrs. Lloyd Shelton and family spent the week-end in John Day visiting Mrs. Shelton's sister and family, Mr. and Mrs. Denton Cox.

Week-end guests of Mr. and Mrs. Burt Hoover were Mr. and Mrs. Harry Turner of St. Helens.

Miss Charmian Adams was home last week from EOC at La Grande, from Thursday until Sunday. She became ill so was met in Arlington by her mother, Mrs. W. C. Freeman, and returned to school Sunday with Tom Gilliam.

Going to Hermiston Sunday

zation, operation, maintenance, and replacements; and the estimated total annual benefits are \$284,900. Costs and benefits are based on an economic life of 100 years and a 3-percent interest rate. The proposed project would have a benefit-to-cost ratio of 1.2 to 1. Using the separable cost-remaining benefits method, construction costs are tentatively allocated as follows: flood control \$2,789,000, irrigation \$2,698,000, municipal supply \$104,000, municipal supply \$36,000, sports fishing and wildlife \$611,000, and recreation \$452,000. Construction costs, and annual operation, maintenance, and replacement costs allocated to irrigation, and municipal and industrial water supply must be reimbursed to the United States Treasury in accordance with Reclamation Law and the Water Supply Act of 1958, as amended. The final cost allocation is to be made by the Secretary of the Army, with the assistance of the Secretary of the Interior.

Boardman News

(Held over from last week)

Mr. and Mrs. Ivan Kress and son Brian of The Dalles were week-end visitors at the homes of their parents, Mrs. LaVerne Partlow, and Mr. and Mrs. Harold Kress.

Johnnie Partlow, student at EOC, La Grande, and Jim Miller, student at Blue Mountain college, Pendleton, spent the week-end at their homes here.

Heart Canvass This Week

The month long 1964 Heart Fund drive will reach a high

point this week when members of the Mothers club of the Boardman Grade School will form a Heart Fund School Volunteer Army to carry the fight against heart diseases to the threshold of every family in this community.

Local chairman of the Heart Fund Canvass is Mrs. Harold Baker, who pointed out that each volunteer will call at the homes of between 15 and 25 of her neighbors, distributing helpful information about the heart diseases, and receiving gifts for the Heart Fund.

Get restaurant guest checks and salesbooks, both carbonized and non-carbonized, at the Gazette-Times.

For Your Protection

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QUESTION: You read in the papers about cars running off the street and crashing into houses and someone made a joke the other day about people taking out insurance if they lived on bad corners. Is there any such insurance?

ANSWER: Yes, there is. Damage to homes from wild vehicles comes under extended coverage insurance which is an endorsement added to a regular fire insurance policy.

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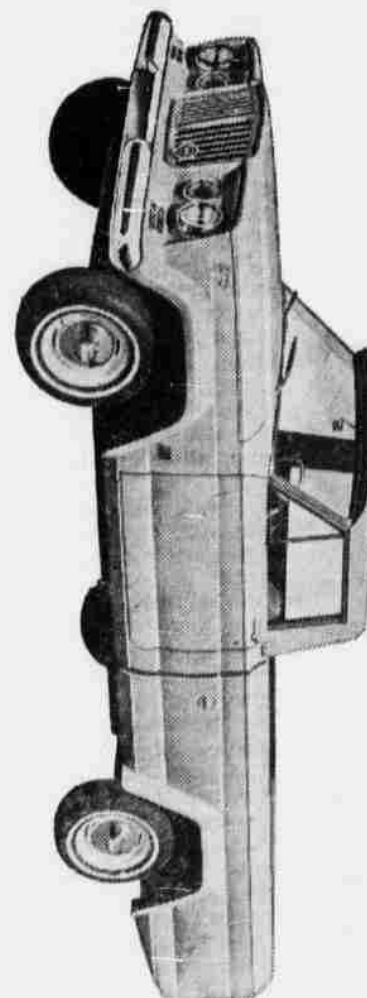
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Will Be Back Again This Spring To Offer Assistance To The Ranchers Of This Area With Their Spraying Problems.

OOPS...

We did it again!



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