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TUALATIN RECLAMATION PROJECT—PHASE II

APRIL 23, 1976

U.S. SENATE,
SUBCOMMITTEE ON ENERGY RESEARCH AND WATER RESOURCES,
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Forest Grove, Oreg.

The subcommittee met at 2 p.m., at the Pacific University, Hon. Mark O. Hatfield presiding.

Present: Senator Hatfield.

Also present: Russell R. Brown, professional staff member; Avis O'Leary, Interior Committee staff; and Tom Imeson, legislative assistant for Senator Hatfield.

OPENING STATEMENT OF HON. MARK HATFIELD, A U.S. SENATOR FROM THE STATE OF OREGON

Senator HATFIELD. First, I would like to express my apologies for the lateness of my arrival, but airlines are not always dependable if you want to make a schedule.

This is a public hearing of the subcommittee on Energy Research and Water Resources of the Senate Committee on Interior and Insular Affairs. Our purpose today is to hear public testimony on S. 2301, which would authorize the Secretary of the Interior to construct phase II of the Tualatin Reclamation project. I introduced this legislation in the Senate, and Congressman AuCoin has introduced an identical bill in the House of Representatives.

The public planning process on future water resource needs of this area, which began in the early 1960's, resulted in the construction of Scoggins Dam. This first phase of the Tualatin project has improved water quality, and has provided other public benefits in the form of fish and wildlife enhancement, recreation, irrigation, municipal, and industrial water, and flood control.

We are now at the point of considering whether to move ahead with the second phase of the Tualatin project.

The Congress must provide the authorization and appropriate the funds for the construction of such projects. Today's hearing is the first on this bill. It will be followed by additional hearings in Washington after the Interior Department's feasibility study on the project is completed.

I want to emphasize that no decisions have been made yet on the Tualatin Second Phase Reclamation project. I requested this field hearing because I wanted to hear the viewpoints of those who live in the area and I want them to be a part of the public record on S. 2301. Many of us here have discussed this proposed project previously and

this hearing is a further opportunity to express your views for the consideration of the subcommittee on Energy Research and Water Resources and the Congress.

Your views will be fully considered, whether submitted in writing or presented orally. They will be of great assistance in determining whether this project ought to be constructed and, if so, how. For those of you who will be testifying today, let me suggest that you summarize your statements when possible so that we can accomodate the large number of witnesses who are scheduled. Your entire statement will be printed in the hearing record. The record will remain open for written statements until May 5.

Commissioner Richard Heisler, of Washington County, has had a heart attack and I know he wanted to testify today but he's unable to do so. I hope that he has a very speedy recovery. At this time I would like to say that Janet Roberts is our reporter for today who is preparing the transcript. She is here at some personal inconvenience but offered to help the committee. And at the table to my left is Mrs. O'Leary. She has extra copies of Senate bill 2301 for those of you who would like one. In addition, she has a sign-up list for those of you who wish to receive a copy of today's record. Also anyone with written statements for the record here today may give them to Mrs. O'Leary and they will be included in the record.

At this point I would like to insert in the record a copy of S. 2301.
[The bill follows:]

S. 2301

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 8, 1975

Mr. HATFIELD introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs

A BILL

To authorize the Secretary of the Interior to construct, operate, and maintain the Tualatin Second Phase reclamation project, Oregon, and for other purposes.

- 1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That in order to provide water quality improvement in the
4 Tualatin River; to supply irrigation water to approximately
5 seven thousand five hundred acres in the Tualatin Valley;
6 to develop municipal and industrial water supplies for Wash-
7 ington County; to provide for the conservation and develop-
8 ment of fish and wildlife resources; to enhance outdoor rec-
9 reation opportunities; and to provide facilities for control of
10 floods on the Tualatin River; and for other purposes; the

1 Secretary of the Interior (hereinafter referred to as the Sec-
2 retary), is authorized to construct, operate, and maintain the
3 Tualatin Second Phase reclamation project in accordance
4 with Federal reclamation laws (Act of June 17, 1902, 32
5 Stat. 388, and Acts amendatory thereof or supplementary
6 thereto). The principal features of said project will be a dam
7 and a reservoir on the Tualatin River, and recreation and fish
8 and wildlife enhancement facilities.

9 SEC. 2. With respect to irrigation, the Secretary may
10 amend the contract of March 10, 1971, between the United
11 States and the Tualatin Valley Irrigation District and execute
12 new contracts for the payment of the project costs of the
13 Tualatin Federal reclamation project authorized by the Act
14 of September 29, 1966 (80 Stat. 822), and the project costs
15 of the Tualatin Second Phase reclamation project. Such con-
16 tracts shall be entered into pursuant to section 9 of the Recla-
17 mation Project Act of August 4, 1939 (53 Stat. 1187). The
18 term of such contracts shall be fifty years, exclusive of any
19 development period authorized by law. The contracts may
20 provide for the assessment of an account charge for each
21 identifiable ownership receiving water from the project. Such
22 charge, together with the acreage or acre-foot charge, shall
23 not exceed the repayment capacity of commercial family-
24 size farm enterprises as determined on the basis of studies by
25 the Secretary. Project construction costs covered by contracts

1 entered into pursuant to section 9 (d) of the Act of August 4,
2 1939, as determined by the Secretary, and which are beyond
3 the ability of the irrigators to repay within a fifty-year period
4 shall be charged to and returned to the reclamation fund in
5 accordance with the provisions of section 2 of the Act of
6 June 14, 1966 (80 Stat. 200), as amended by section 6 of
7 the Act of September 7, 1966 (80 Stat. 707).

8 SEC. 3. The conservation and development of fish and
9 wildlife resources and the enhancement of recreation oppor-
10 tunities in connection with the Tualatin Project Second Phase
11 shall be in accordance with the provisions of the Federal
12 Water Project Recreation Act (79 Stat. 213) as amended in
13 the Water Resources Development Act of 1974 (88 Stat.
14 33). All costs allocated to enhancement of anadromous fish
15 species and migratory waterfowl shall be nonreimbursable.

16 SEC. 4. Costs of the project allocated to municipal and
17 industrial water supply shall be repayable with interest under
18 contracts entered into pursuant to section 9 (c) of the Recla-
19 mation Project Act of August 4, 1939 (53 Stat. 1187), and
20 to the extent applicable, the Water Supply Act of July 3,
21 1958 (72 Stat. 319), as amended. The terms of such con-
22 tracts and the repayment of the allocated costs may be fifty
23 years from the date that water is first delivered from the
24 project for said purpose or, in the case of contracts entered
25 into under the Water Supply Act of July 3, 1958 (72

1 Stat. 319), as amended, fifty years from the date that water
2 is first delivered from the last segment of deferred project
3 storage but not to exceed the anticipated life of the project
4 works. Contracts may be entered into without regard to
5 the last sentence of subsection 9 (c) of the Reclamation Act
6 of August 4, 1939 (53 Stat. 1187).

7 SEC. 5. Fifty per centum of the total project costs allo-
8 cated to water quality control shall be repayable with interest
9 under contracts entered into pursuant to section 9 of the Rec-
10 lamation Project Act of August 4, 1939 (53 Stat. 1187),
11 and to the extent applicable, the Water Supply Act of
12 July 3, 1958 (72 Stat. 319), as amended. The terms of
13 such contracts and the repayment of one-half of the allocated
14 investment costs may be fifty years from the date that water
15 is first delivered from the project for said purpose or, in the
16 case of contracts entered into under the Water Supply Act
17 of July 3, 1958 (72 Stat. 319), as amended, fifty years
18 from the date that water is first delivered from the last
19 segment of deferred project storage but not to exceed the
20 anticipated life of the project works. Contracts may be
21 entered into without regard to the last sentence of section
22 9 (c) of the Reclamation Project Act of August 4, 1939
23 (53 Stat. 1187). All of the annual operating, maintenance,
24 and replacement costs associated with water quality control
25 shall be a non-Federal responsibility.

1 SEC. 6. Costs allocated to flood control purposes of the
2 project shall be nonreimbursable and nonreturnable.

3 SEC. 7. For a period of ten years from the date of en-
4 actment of this Act, no water from the project authorized
5 by this Act shall be delivered to any water user for the pro-
6 duction on newly irrigated lands of any basic agricultural
7 commodity, as defined in the Agricultural Act of 1949 (63
8 Stat. 1051; 7 U.S.C. 1421), or any amendment thereof, if
9 the total supply of such commodity for the marketing year
10 in which the bulk of the crop would normally be marketed
11 is in excess of the normal supply as defined in section 310
12 (b) (10) of the Agricultural Adjustment Act of 1938 (62
13 Stat. 1251; 7 U.S.C. 1301), as amended, unless the Sec-
14 retary of Agriculture calls for an increase in production of
15 such commodity in the interest of national security.

16 SEC. 8. The interest rate used for purposes of computing
17 interest during construction and, where appropriate, interest
18 on the unpaid balance of the reimbursable costs of the Tual-
19 atin Project Second Phase shall be determined by the Sec-
20 retary of the Treasury, as of the beginning of the fiscal year
21 in which construction on the second phase is initiated, on
22 the basis of the computed average interest rate payable by
23 the Treasury upon its outstanding marketable public obliga-
24 tions which are neither due nor callable for redemption from

1 fifteen years from date of issue, adjusted to the nearest one-
2 eighth of 1 per centum.

3 SEC. 9. There is hereby authorized to be appropriated
4 for construction of the Tualatin Project Second Phase the
5 sum of \$78,334,000 (July 1975 prices), plus or minus such
6 amounts, if any, as may be justified by reason of changes in
7 the cost of construction work of the types indicated therein as
8 shown by engineering cost indices. There are also author-
9 ized to be appropriated such sums as may be required for
10 the operation and maintenance of the project.

Senator HATFIELD. As our first witness today, I'd like to call Mr. Rod Vissia, the Regional Director of the Bureau of Reclamation, Department of the Interior.

**STATEMENT OF ROD VISSIA, REGIONAL DIRECTOR, PACIFIC
NORTHWEST REGION, BUREAU OF RECLAMATION**

Mr. VISSIA. Mr. Chairman, I am Rod Vissia, Regional Director of the Pacific Northwest Region, Bureau of Reclamation. We have been requested to and authorized to make a study of the second phase Tualatin project. Consequently, my statement will be a factual presentation of the results of that study to date. We are submitting a full statement for the record and I will attempt to summarize that today.

As you indicated, we have been involved in the Tualatin Basin already with first phase in that Scoggins Dam is now completed and we hope to complete the rest of the facilities, which are basically irrigation facilities, by 1977. There still remains some additional requirements and needs in the area for municipal supplies, flood control, irrigation, streamflow and fishery enhancement as well as recreation. Population in the Washington County area will probably grow or increase by 20 to 30 percent in 10 years. Consequently, what they do with their water will be very important.

Floods still do occur in the areas; consequently, there's a need for flood control. Streamflows in the summer are low and there are water quality and fishery problems; therefore, enhancement of that streamflow will be helpful. Because of increasing population, there will be a need for high water and also for irrigation.

The location of this project to the Portland area will make it also a very prime recreation area, much like the first phase. The feasibility study for this second phase was authorized by Public Law 89-561 in September 1966 and we first received planning funds in fiscal year 1969. We have used the principles and standards and, formulated by the Water Resources Council to plan this project. We have worked with Federal and local and State agencies, the main agencies being Washington County, the State department of fish and wildlife, and Federal agencies including the Fish and Wildlife Service, National Board of Fisheries, the Bureau of Outdoor Recreation, and Corps of Engineers. The plan, the main concept and scope of phase 2 is essentially defined; at this time we are still in the process of formulating some details of each function. Prior to construction we would be exploring all potential avenues to make a plan that is acceptable and responsive to the identified needs. Heading these items is inclusion of a fish ladder at Haines Falls and formulation of a viable wildlife mitigation plan. The map on the wall over there to the left shows that this project upon the Tualatin-Gaston dam site is a major feature which we are studying and it would store water during the high runoff season and this water then would be released when needed for municipal and industrial use, irrigation, and to improve the water flow and water quality enhancement in the stream below the dam. It would also include storage for flood control as well as being used for recreation.

Gaston Dam is one-half mile upstream from the community of Gaston and it would be low land 112 feet above stream bed, have a

crest length of 3,400 feet. The reservoir would hold about 119,000 acre-feet with a surface area of 2,140 acres and 21 miles of shoreline. About 18½ miles of project-associated roads would be constructed or relocated. The space in the reservoir is allocated as follows: water quality control 62,000 acre-feet; minimum pool for recreation and fishing, 25,000 acre-feet; for municipal and industrial water use, 20,000 acre-feet; and for irrigation, about 12,000 acre-feet, to make a total of 119,000 acre-feet.

Water quality improvement would come about from the storage which I have mentioned and it would meet Washington County unified sewerage agency requirements of 224 cubic-feet-per-second at Rock Creek and 204 cubic-feet-per-second at Durham. The municipal and industrial water from the project will be released down the river where it would be directed or diverted from the river by water users who would construct their own private facilities.

Recreation in the project would include extensive park development around the reservoir as well as eight small park and access developments along the Tualatin River. Recreation would be constructed in two phases—here and year 10. There would be four separate areas around the reservoir that would be developed and the types of facilities include the following in the initial phase: 190 picnic tables, 150 campsites, 4 trailheads with 7 miles of trail, 2 swimming beaches, 8 boat lanes, 8 boat docks, 1 scenic overlook and 5 miles of bike trail; 10 years later additional facilities would be added as required. The estimated recreational use is as follows: initially about 350,000 recreation days per year. Within 10 years it's estimated that that would grow to 480, and in 50 years of 1,350,000 recreation days.

I would like to talk about the fishery. There will be some spawning and rearing areas for coho salmon and winter steelhead that will be affected by the construction of Gaston Dam. The mitigation for these losses includes trapping facilities above and below the reservoir. The fish would be transported by truck around the reservoir and released into the stream to continue their migration. Matching the rearing facilities, a ladder at Haines Creek and stream improvement structures would also be included in the plan.

There's also mitigation for resident trout losses, construction of numerous stream improvement structures along the Tualatin River above the reservoir and on Scoggins Creek above Henry Hagg Lake. These structures are designed to increase the ratio and therefore increase the fishery. This project would also enhance resident fish resources by establishing a reservoir trout fishery and expansion of the hatchery would be required in order to provide the fish to stock the reservoir. The estimated use, increase in use would be about 83,500 days per year.

We also presently are exploring the possibility of enhancing the anadromous fishery through the phase 2 project. Since there will also be some wildlife losses, we developed a wildlife mitigation management plan. Losses estimated are 150 man-days of upland game hunting and 50 man-days of big game hunting. And our plan would include the acquisition of a 500-acre tract for wildlife habitat and management which would probably be managed by the Oregon Department of Fish and Wildlife.

Projects include irrigation for sprinkler irrigation of 7,500 acres. This water would be released to the river and diverted by water users through their own privately constructed works. All of the lands that are potentially irrigable are within the boundary of the Tualatin Valley Irrigation District. The reservoir includes 8,000 acre-feet of space for flood control which would control the 25-year frequency flood.

The cost of this project, based on July 1975 price levels, is \$79,900,000. The annual operation maintenance cost is estimated to be about \$476,000 and the main capital cost feature is of course, Gaston Dam is based on the cost of \$55 million. The benefits of the project are as follows, these are annual benefits: recreation, slightly over \$1 million a year; resident fishery, one-half million dollars a year; municipal and industrial water use, about \$1.4 million a year; irrigation, slightly less than \$1 million a year; flood control, about \$360,000 a year; and water quality, about \$1 million, \$620,000 a year, for a total annual benefit of close to \$6 million, and we compared the benefit-cost ratio to be 1.18 to 1.

Repayment is also a part of the Wheeler commission project and the various payments go as follows: for recreation, the cost would have to be repaid according to Public Law 89-72, and the Washington County Board of Commissioners has expressed interest in recreation development and would hope that they can participate. For the fishery function, the State of Oregon Department of Fish and Wildlife has also indicated an interest in resident fishery. We hope that they can participate fully in that plan. Municipal and industrial water use costs are repayable with interest, and based upon 1975 prices, the initial water charge per acre-foot for untreated water in the river would be about \$40, and the Washington County Board of Commissioners has expressed an interest in being a contracted entity. Irrigation costs are, of course, repayable without interest; based on 1975 cost estimates, the annual cost per acre-foot to the irrigators would be about \$22 per year. This is well within their calculated repayment capacity, and consequently the entire cost of irrigation would be repaid. We are hopeful that the Tualatin Valley Irrigation District would become the contracting entity.

We are recommending that the costs allocated to water quality function be shared equally by the Federal Government and a non-Federal entity, and the operating costs of course would also be repaid by the non-Federal entity. Based on 1975 prices, the charge for that water would be about \$13 per acre-foot per year. The Unified Sewerage Agency of Washington County has expressed an interest in developing this water supply and we hope they will be a contracting entity. Functions that will be recommended to be nonreimbursible include flood control, highway improvement, and environment aspects of the project.

In conclusion, the plan for the second phase is engineeringly feasible, and economically justifiable. Mr. Chairman, that concludes my statement.

Senator HATFIELD. Thank you very much, Mr. Vissia. I know you have colleagues with you from the bureau. Would you have them stand and be introduced for the record, please?

Mr. VISSIA. Yes; Mr. Nawgany is our planning officer from Boise, the regional office, and from our Salem office we have Mr. Bob Barbo who is in charge of the actual investigation of this project. And Steve Wade is here on public information. I guess he stepped out. Those are the main colleagues.

Senator HATFIELD. First of all I'd like to ask you when would a feasibility report be made available for public purview?

Mr. VISSIA. We plan to send a draft of the report to our Washington office in about 2 weeks, Senator; then after a review period, I suppose it would be a few months before it became available to the public.

Senator HATFIELD. It's out of your hands at that point when you send it to Washington?

Mr. VISSIA. More or less, yes.

Senator HATFIELD. What is the status of the environment impact statement for this project?

Mr. VISSIA. We prepare the environmental impact statement at the same time that we prepare the report, so when the report comes out, the EIS will come out with it.

Senator HATFIELD. Do you at this time plan additional hearings as far as the Bureau is concerned?

Mr. VISSIA. We'll continue to have public meetings, and especially on one of the issues which is the location of the dam site.

Senator HATFIELD. As you know, I have a very keen interest in having the public provided full opportunity for participation in the planning of this project. I assume that the Bureau will provide ample opportunity, not only for the review of the feasibility study but the ongoing project as well.

Mr. VISSIA. Yes, sir, we will the best we can.

Senator HATFIELD. In the environmental impact statement, will you give due recognition and consideration to alternative sites for the project?

Mr. VISSIA. Yes, sir. Of course, that's required by the law and final chapter in our ESI does include the, what we have done to evaluate all of the alternatives to the project that's selected.

Senator HATFIELD. All right. Thank you very much. We'll be calling on you perhaps at a later point for additional information.

Mr. VISSIA. All right.

[The prepared statement of Mr. Vissia follows:]

STATEMENT OF ROD VISSIA, REGIONAL DIRECTOR, PACIFIC NORTHWEST REGION,
BUREAU OF RECLAMATION

Mr. Chairman and members of the subcommittee, we are pleased to appear today to testify on the potential Second Phase of the Tualatin Project here in northwest Oregon.

The Bureau of Reclamation has been an active participant in water- and land-resource planning in the Tualatin River basin for many years. After extensive studies in the basin, the Tualatin Project (First Phase) was authorized for construction in 1966. The major feature of the multipurpose project, Scoggins Dam, is completed, and the remaining facilities are scheduled to be completed by 1978.

Although the First Phase of the multipurpose development will contribute considerably to the water and land resource demands in the basin, there are additional needs for municipal, industrial, and irrigation water supplies. There is also a need for further improvement of streamflows during the summer months for water quality and fishery enhancement. Additional flood control measures are needed in the winter months. The demand for outdoor recreation in the

area is high. With these additional needs in mind, and through concerted local efforts, the Bureau is conducting planning studies of the Second Phase which, if constructed, would help satisfy the water needs in the area that are beyond the capability of the First Phase.

Tualatin valley's population is predicted to increase by 20 to 30 percent in the next 10 years. With this increase, the quality of life in the Tualatin valley will depend upon how well the management of its natural resources are planned and implemented.

Continued growth and expansion in the basin will result in expanding near-term needs for municipal and industrial water supplies, water quality improvement, fish and wildlife enhancement, recreation development, and flood control.

Floodflows occur in the Tualatin basin during the winter rainy season, while streamflows are meager to nonexistent during the summer months. Because of the heavy population and industrial growth and seasonality of streamflows, municipal and industrial water supply and sewage disposal are major problems. There is a great need for larger summer flows to assimilate waste effluents and create better esthetic conditions throughout the stream system.

The First Phase of the Tualatin Project is designed to make a significant contribution to improvement of water quality by increasing summer flows in the Tualatin River. The Second Phase can supplement these flows to meet the minimum flow schedule at critical points as determined by the Oregon Department of Environmental Quality and the Environmental Protection Agency.

Multipurpose reservoirs are very popular recreational attractions in this area because of their location near the metropolitan area of Portland and other urbanized areas. In meeting identified near-term water-based recreation needs, a Second Phase reservoir would be used for boating, swimming, fishing, and water skiing; and the adjacent shoreline areas would provide facilities for camping, picnicking, and other related activities.

The feasibility study authorization for the Tualatin Project, Second Phase, is contained in Public Law 89-561, September 7, 1966. Study funds were first appropriated in FY 1969. Planning procedures used in formulating the project are based on the Water Resources Council's "Principles and Standards for Planning Water and related Land Resources." These procedures became effective in October 1973. The principal thrust of the "Principles and Standards" is the emphasis of multiobjective planning and formulation of alternative plans based on national economic development and environmental quality objectives. In addition to the effects on the two objectives, the effects of regional development and social well being are vital factors in evaluating alternative plans.

A vital aspect of our planning activities for the Second Phase is an Environmental Quality Evaluation Team, which is composed of representatives of various groups with a particular concern for the environment. The Environmental Quality Evaluation Team has provided valuable input to the studies by evaluating the environment under present conditions, what it might be like without further major development, and what effect various alternative plans of development for the Second Phase would have on the environment.

We have been working closely with local government, State and Federal agencies, and various private organizations. We have had particular close coordination with Washington County, Oregon Department of Fish and Wildlife, and the Federal agencies—Fish and Wildlife Service, National Marine Fisheries Service, Bureau of Outdoor Recreation, and Corps of Engineers.

The concept and scope of the Second Phase is essentially defined; however, formulation of the details of each function will require additional work beyond the hearings here today. Prior to construction, we would further explore all potential avenues to make the plan acceptable and as fully responsive as possible to the identified needs.

The preliminary plan for the Second Phase, as now envisioned, would entail utilization of the waters of the Tualatin River. Gaston Dam and Reservoir would store water during the high runoff season for release for municipal and industrial use, water quality improvement, and irrigation. Reservoir storage regulation would reduce flood damage along the Tualatin River, and the reservoir would be an attractive recreation feature and resident trout fishery.

The key structural feature of the plan would be Gaston Dam, which would be located on the Tualatin River about one-half mile upstream from the community of Gaston. The dam would be an earthfill structure rising about 112 feet above streambed of the Tualatin River, with a crest length of about 3,400 feet. It would form a 119,000-acre-foot reservoir with a water surface of about 2,140

acres and about 21 miles of shoreline. About 18.5 miles of project-associated roads would be constructed or relocated. Space in the reservoir would be allocated to the various functions as follows:

	<i>Acre-feet</i>
Water quality control and certain desired flows for fishlife-----	62,000
Minimum pool for recreation, resident fishery, and environmental quality -----	25,000
Municipal and industrial water-----	20,000
Irrigation (estimated 7,500 acres)-----	12,000
Total -----	119,000

Improvement of water quality in the Tualatin River is a major feature of the plan. Water releases would be made to meet Washington County's Unified Sewerage Agency flow requirements in the Tualatin River of 224 cfs at Rock Creek and 204 cfs at Durham. The project flows also would meet the Oregon Department of Environmental Quality flow requirement in the Tualatin River of 250 cfs at West Linn in Clackamas County.

Population projections for Washington County indicate that there will be a need to develop new water supplies to meet the demands of the cities and water districts anticipated by year 2000. Based on needs identified in studies made for Washington County by a private consulting firm, we have included 20,000 acre-feet of storage in the plan for future municipal and industrial use. M&I water supplies would be released directly into the Tualatin River and diverted downstream by the water users. It would be the responsibility of the municipalities to construct facilities for diversion, treatment, and distribution of water.

The project recreation development being considered would include an extensive park development around Gaston Reservoir, and eight small park and access developments along the Tualatin River. Federal recreation facility development is planned for two stages—initial and year 10—with the bulk occurring in the initial development. Recreation development beyond year 10 would be a non-Federal responsibility. The recreation developments are conceived to accommodate a wide variety of outdoor recreation activities. Four separate areas around the reservoir would be developed. Initial development at these sites would include:

190 picnic tables, 150 campsites, 4 trailheads with 7 miles of trail, 2 swimming beaches, 8 boat lanes, 8 boat docks, 1 scenic overlook, and 5 miles of bike trail.

After 10 years, an additional 70 picnic tables, 50 campsites, 1 swimming beach, 2 boat lanes, and 2 boat docks would be installed. We are also exploring the desirability of expanding the system of bike trails around the reservoir.

Initial use for the reservoir and downstream sites is estimated to be 450,000 recreation days annually. This is projected to grow to 585,000 by year 10 and reach 1,455,000 recreation days by project year 50.

The Tualatin River system supports runs of coho salmon and winter steelhead, in addition to resident fish populations. Mainstem spawning and rearing areas for anadromous fish are located in the reservoir area and upstream from the reservoir. These spawning and rearing areas would be lost with construction of Gaston Dam and Reservoir.

The plan now under consideration for mitigation of anadromous fish losses includes installation of trapping facilities for adult and juvenile migrant fishes above and below the reservoir. These fish would be transported by truck around the reservoir and released into the stream to continue their migration. Additional measures would include hatchery and rearing facilities to supplement natural runs, a fish ladder at Haines Falls, and stream improvement structures in the reach between the reservoir and Lee Falls. Evaluation of the success of the anadromous fish mitigation plan would be accomplished in a 5-year project-funded study by the Oregon Department of Fish and Wildlife.

The mitigation plan for resident trout losses caused by the project would require the construction of numerous stream improvement structures on both the Tualatin River above the reservoir and on Scoggins Creek above Henry Hagg Lake. These structures would be designed to increase the pool-to-riffle ratio, thereby increasing the carrying capacity of the streams. A program for control of nongame fish is also included in the plan. Funds to evaluate the success of the resident trout mitigation plan are included in the project costs.

The project also would provide an opportunity to enhance resident fish resources. Establishment of a reservoir trout fishery is the major fish enhancement opportunity. It would be necessary to provide expanded hatchery facilities to

produce the number of trout necessary for stocking the reservoir on an annual basis. Facilities for fishermen, such as boat ramp and parking facilities, are included in the recreation plan. The project is estimated to provide an ultimate increase of 83,500 angler-days annually of resident sport fishing.

We have been working closely with the Oregon and Federal fishery agencies, but as yet have not been able to identify a viable anadromous fish enhancement program for the Tualatin River. However, we will continue to explore all the possibilities to include the anadromous fish enhancement function.

The wildlife mitigation plan for the Second Phase is based on mitigation for lost hunting opportunities that would result from construction and operation of Gaston Dam and Reservoir. These losses include about 150 man-days of upland game and 50 man-days of big game hunting. The plan now being evaluated would include acquisition of a 500-acre tract for wildlife habitat management. The lands are located northeast of the town of Gaston along both sides of the river. The essence of the plan is to increase the carrying capacity of the lands to offset the loss of hunting opportunities in the reservoir area. These lands would be managed by the Oregon Department of Fish and Wildlife under agreement with the Bureau of Reclamation. In addition to the wildlife mitigation plan, a project-funded 5-year study would be made to determine the success of the mitigation measures.

Storage in Gaston Reservoir would provide 12,000 acre-feet of water for irrigation. This water supply would be sufficient to meet the needs of about 7,500 acres under sprinkler irrigation. The irrigation water would be released directly into the Tualatin River. Irrigation diversions from the river would be made on an individual basis through privately constructed diversion works. Most of the potential irrigation lands are within the boundaries of the Tualatin Valley Irrigation District.

Space required for flood control would be made available by evacuation of space allocated for other functions, and by scheduling filling of the reservoir during the winter flood season. A total of 8,000 acre-feet of reservoir space would be required for the control of a 25-year frequency flood.

The total investment cost of the Tualatin Second Phase development at July 1975 prices is estimated at \$79,900,000. The annual operating cost is estimated at \$475,900. The total annual equivalent project cost is \$5,038,000. This includes an annual equivalent of the Federal investment, based on a Federal discount rate of 6½ percent and a 100-year period of analysis plus the annual operating cost.

Structural features: Gaston Dam and Reservoir.....	\$54, 960, 000
Recreation facilities:	
Gaston Reservoir	3, 540, 000
Tualatin River	750, 000
Fish and wildlife facilities: Reservoir.....	5, 050, 000
Irrigation facilities	910, 000
Permanent operating facilities: Gaston Reservoir.....	90, 000
Highway improvement	4, 600, 000
Total, construction cost	69, 900, 000
Interest during construction.....	10, 000, 000
Total, investment cost	79, 900, 000
Annual operating costs.....	475, 900
Total annual costs	5, 038, 000
Annual direct benefits for the project by function:	
Recreation	1, 196, 900
Resident fish	570, 200
Municipal and industrial water.....	1, 252, 300
Irrigation	947, 900
Flood control	360, 100
Water quality	1, 620, 000
Total	5, 947, 400

Net annual project benefits of \$5,947,400 exceed annual costs of \$5,038,000 by \$909,400. The benefit-cost ratio is 1.18 to 1.

Costs to be allocated among the functions of the Second Phase amount to \$69,900,000 less \$1,000,000 investigation costs, or \$68,900,000. The separable cost-remaining benefit method was used to allocate the construction and annual operating costs, which resulted in the following:

	Construction	Operation
Recreation and resident fish.....	\$18,132,000	\$304,500
Municipal and industrial water.....	11,970,000	48,500
Irrigation.....	10,278,000	52,400
Flood control.....	3,709,000	23,000
Highway improvement.....	4,600,000	0
Water quality.....	19,609,000	47,500
Environmental quality objective.....	602,000	0
Total.....	68,900,000	475,900

Repayment aspects for the project functions would be in accordance with existing law and policy.

Costs allocated to recreation and fish and wildlife enhancement would be subject to the cost-sharing provisions of Public Law 89-72, as amended by Public Law 93-251.

Separable costs assigned to recreation are \$4,575,000. The law provides that 50 percent of that amount (\$2,288,000) plus associated interest during construction (\$162,000) be paid by a non-Federal entity. In addition, all of the separable annual operating costs would be borne by the cost-sharing entity. Total annual repayment associated with investment costs for recreation would be about \$136,600. The remaining joint costs associated with recreation and the remaining separable costs assigned to recreation would be nonreimbursable.

The Washington County Board of Commissioners has expressed interest in recreation development in the Tualatin Second Phase. We are hopeful that the county will be able to fully participate in the project by assuming the reimbursable recreation obligation and by operating and maintaining the recreation facilities at the reservoir and downstream sites.

Separable costs assigned to resident fish are \$1,522,000. The law provides that one-quarter of that amount (\$381,000) plus associated interest during construction (\$22,000) be paid by a non-Federal entity. Total annual repayment for resident fish would be about \$105,300, which includes an annual cost (\$82,800) for operation and maintenance associated with providing the enhancement; these costs must be borne by a non-Federal entity. The joint construction costs allocated to fish enhancement and the remaining separable costs assigned to the resident fishery would be nonreimbursable. We are hopeful that the State of Oregon (Department of Fish and Wildlife) would be able to fully participate in the project by assuming the reimbursable fishery costs.

Costs allocated to municipal and industrial water would be repaid with interest as provided by the Water Supply Act of 1958. Under that act, repayment of capital costs for an unused portion of storage space for M&I use may be deferred up to 10 years without interest. The initial water charges for untreated water taken from the Tualatin River are estimated to be about \$40 per acre-foot for a total of \$800,000 annually. The Washington County Board of Commissioners has expressed an interest in being considered as a possible contracting entity for additional water supplies from the project.

Costs allocated to irrigation (\$10,278,000) would be reimbursable without interest. Irrigators would be expected to pay allocated construction and annual operating costs up to their ability to pay. Based on 1975 cost estimates, the cost of water, including operation and maintenance, to the irrigator is estimated to be \$22 per acre-foot annually. The \$22/acre-foot charge is within the calculated payment capacity for the water user in this area. Based on current costs, the irrigators would be able to repay 100 percent of the construction cost allocated to irrigation. The Tualatin Valley Irrigation District would likely become the contracting entity with the Federal Government.

It is recommended that the total construction cost (\$19,609,000) and associated interest during construction (\$2,679,000) allocated to the water quality component be borne equally by the Federal Government and a non-Federal entity. The total annual operating costs allocated to this purpose (\$47,500) would be a non-Federal responsibility. Using 1975 prices, the annual charge

for water quality improvement, including operation and maintenance, is estimated to be about \$13 per acre-foot, or a total annual financial cost of approximately \$669,000. The Unified Sewerage Agency of Washington County has expressed an interest in development of a water supply to meet future streamflow augmentation requirements. We are hopeful that the Unified Sewerage Agency will be able to fully participate in the project by assuming the repayment obligation associated with the water quality component when those costs have been determined.

Costs allocated to Flood Control (\$3,709,000) and Highway Improvement (\$4,600,000) would be nonreimbursable under existing laws. Costs allocated to the Environmental Quality objective (\$602,000) are recommended to be considered as nonreimbursable.

The plan for the Second Phase, Tualatin Project, is an engineeringly feasible, economically justifiable multipurpose project.

Senator HATFIELD. Thank you. At this time I'd like to invite Washington County Commissioner Allen C. Patterson. We are glad to welcome you here today, Commissioner.

STATEMENT OF ALLEN C. PATTERSON, WASHINGTON COUNTY COMMISSIONER, HILLSBORO, OREG.

Commissioner PATTERSON. Senator Hatfield, I have a statement to go over which the board of commissioners endorsed at their meeting on April 20.

Senator HATFIELD. All right. The full statement will be placed in the record and you may handle it as you wish, either by highlighting or summarizing, whatever you wish to do.

Commissioner PATTERSON. Well, I don't believe it's very long and it's been presented already, so I will go over it. The Board of Commissioners of Washington County have had a sincere interest in the possible construction of the Tualatin project phase 2. This interest is fivefold: first, Washington County is interested in potential increase of irrigation water which will assist farm owners and operators to increase their crop diversification. Such diversification will work in parallel with the county land-use plan and will assist in maintaining an additional 7,500 acres of croplands in full production. Second, Washington County believes that the construction of a proposed project will provide a needed regional water-oriented recreational area and provide both an active and passive recreational outlet for the citizens of Portland metropolitan area. In this regard we have presented letters to the Department of the Interior, Bureau of Reclamation, indicating that Washington County would like to be considered as a sponsor of such a recreational component of the Tualatin phase 2 project.

Our initial observations upon the use of recreational facilities at Henry Hagg Lake clearly show that such water/land-related recreation is in high demand. This demand is accentuated in the Henry Hagg Lake department phase 1 project and the proposed phase 2 project provides the only nonflowing body of water in the Portland metropolitan area for those who wish to boat, fish, and otherwise enjoy the passive nature of such a lake.

Third, in 1969 Washington County caused the water supply and wastewater study to be composed by an engineering consultant. The water supply portion of the report was again updated in 1973. Based on current population projections, Washington County is expected to

have a population of 345,000 by the year 2000 with 295,000 in the urban areas. This compares with a total population of 190,000 now and 165 in the urban area—165,000. These projections clearly show an adequate municipal and industrial need of 20,000 acre-feet to provide an adequate municipal and industrial supply for this future population.

The increasing requirements for municipal and industrial water are now being explored by several of the cities and water districts within the county. Increasing standards now virtually rule out the use of Willamette River water because of non-point-source pollution problems, and the incidence of organic materials, chemicals, fertilizers, and viruses that are carried by the river from unstream sources. Water from the coast range is increasingly looked upon as one of the rational alternatives. In order that an adequate supply be available for the future populations, Washington County has requested that 20,000 acre-feet be set aside for municipal and industrial purposes. The county proposes to become a wholesale entity for water districts and cities or, in the alternative, act as a fiscal agent to provide a municipal and industrial water supply for the future.

Recognizing the leadtime necessary for authorization and appropriations for projects of this type, we are certain the need for the municipal and industrial supply will be present when the phase 2 project becomes available.

Fourth, Washington County has long been concerned about the cleanup of the pollution in the Tualatin River. To this end we have created a county service district known as the unified sewerage agency which is now engaged in the construction of major sewerage treatment plant facilities which, when completed in 1977, will return the Tualatin River to a more usable and esthetic stream.

In order that the unified sewerage agency can meet its stream augmentation requirements, there will be a need of an additional 52,000 acre-feet of water for water quality purposes. The unified sewerage agency of Washington County wishes to be considered as a possible contracting agency for such water for such purposes.

The Environmental Protection Agency section 208 water quality study is currently ongoing in the Portland metropolitan area. This study is scheduled for completion in the fall of 1977 and the outcome of this study could have an effect on the water quality requirement.

Fifth, Washington County believes that the impoundment of water by the phase 2 project can work to a definite advantage to those people downstream by reducing the potential of flooding. This would be particularly true if the project impoundments were carefully managed and a detention/release program were used.

The elimination of a portion of the flooding potential would have a significant effect on streambank erosion and on the dangers that flooding brings to lives and property. This benefit needs to be looked at as one that is of significance to the county. Farm operators will also receive an additional benefit from reduced flooding by the elimination of a portion of field erosion and an ability to get on the land at an earlier time for planting. This project alone will not do the total job, but the reduction of the crest of the flood can be of significant importance to all downstream property owners and to the several communities and cities in the lower Tualatin Basin.

That concludes our statement.

Senator HATFIELD. Thank you very much, Commissioner. I note in your third paragraph you state that you have provided letters to the Department of the Interior indicating that Washington County would like to be considered as a sponsor of such a recreational component, in the Tualatin phase II project. Would it be possible to obtain copies of such letters for our records?

Mr. PATTERSON. Yes, sir. We will get that to you.
[The letters referred to above follow:]



WASHINGTON COUNTY

ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

BOARD OF COMMISSIONERS

VIRGINIA DAGG, Chairman
RICHARD C. HEISLER
RAY MILLER
J. ALLAN PATERSON
MICHAEL SHEPHERD

DANIEL O. POTTER
COUNTY ADMINISTRATIVE OFFICER
ROOM 418
(503) 648-8676

April 27, 1976

Senate Interior and Insular Affairs Committee
Room 3106 -- Dirksen Building
Washington, D. C. 20510

ATTENTION: Russell Brown

Gentlemen:

On April 23, 1976 Senator Hatfield held a hearing on the
Tualatin Project, Phase II in Forest Grove, Oregon.

Washington County, through Commissioner Allan Paterson,
entered a statement at this hearing. Our statement made
reference to letters that had been provided to the Department
of Interior, Bureau of Reclamation in support of the project,
and indicating Washington County desired to be considered as
a sponsor for project elements.

Senator Hatfield requested copies of these letters be provided
for the record and they are attached.

Sincerely yours,

Daniel O. Potter
County Administrative Officer

DOP:ams

cc: Senator Hatfield

April 29, 1975

Mr. E. Carl Hulsh
U. S. Department of the Interior
Bureau of Reclamation
P. O. Box 7395
Salem, Oregon 97303

Dear Mr. Hulsh:

We have indicated in the past that Washington County has a continued interest in additional recreational outlets for its citizens and those who reside in the metropolitan area of Portland.

The Board of Commissioners of Washington County is in agreement that any consideration of the second phase of the Tualatin Project needs to include regional recreational facilities. Based on our initial observations on the use of recreational facilities at Henry Hagg Lake, created as a part of the first phase of the Tualatin Project, such water and land related recreation is in high demand.

As your studies progress on the second phase of the Tualatin Project we are certain you will find increasing and sustained interest in the park and recreational aspect of the project. We would like to be considered as a possible sponsor or contracting entity for payment of costs relating to the parks and recreational portion of the project. We understand clearly that any actual contractual arrangements are several years in the future and will be subject to prevailing circumstances and conditions as of that time.

Please let us know if you have need of any further expression of interest from Washington County, or if we can assist you in any way in relation to the park and recreational needs of the area.

Sincerely yours,

Burton C. Wilson, Jr.
Chairman, Washington County
Board of Commissioners

BCW:ams



BOARD OF COMMISSIONERS
BURTON C. WILSON JR., Chairman
VIRGINIA DAGG
RICHARD C. HEISLER
RAY MILLER
ROD ROTH

WASHINGTON COUNTY

ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

(503) 648-8681

ROOM 418

February 13, 1975

Mr. E. Carl Huish
U. S. Department of Interior
Bureau of Reclamation
P. O. Box 7395
Salem, Oregon 97303

Dear Mr. Huish:

As we have indicated in the past, Washington County has a continuing interest in developing our water resources to provide an adequate water supply to meet future municipal and industrial needs, for irrigation, and streamflow augmentation.

There are many uncertainties at this time regarding future M & I water supplies that cause the cities and water districts in the County to be reluctant to indicate their intent to take water from the Tualatin 2nd Phase. In spite of these uncertainties, it is generally understood that there will be a need for developing new water supplies to meet the population demands anticipated by year 2000. Based on studies made for the County by Stevens, Thompson and Runyan, we feel you should include 20,000 acre-feet of storage in the Tualatin 2nd Phase for future M & I use.

The Washington County Commissioners are in agreement that the Tualatin 2nd Phase project will be an important asset to the County and feel it would be a mistake not to make provision in the project plans to meet some of the future M & I water needs. As your studies progress and the project gets closer to becoming a reality, we expect that more interest will be shown in the project as a water supply source. Because of these reasons, Washington County would like to be considered as a possible contracting entity for payment of costs associated with the 20,000 acre-feet of storage for an M & I water supply. We understand, of course, that the actual contractual arrangements are several years in the future and will be subject to the prevailing conditions at that time.

Please let us know if you have need of any further expression of interest from the County.

Sincerely yours,

Burton C. Wilson, Jr.
Burton C. Wilson, Jr.
Chairman, Washington County
Board of Commissioners

BCW:ams

**UNIFIED SEWERAGE AGENCY
OF
WASHINGTON COUNTY**

ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

(503) 648-8621

BOARD OF COMMISSIONERS
BURTON C. WILSON JR., Chairman
VIRGINIA DAGG
RICHARD C. HEISLER
RAY MILLER
ROD ROTH

April 3, 1975

Joel Wesselman
General Manager
Room 302

Mr. Carl Huish
U. S. Dept. of Interior
Bureau of Reclamation
P. O. Box 7395
Salem, OR 97303

Dear Mr. Huish:

RE: Tualatin Project--Phase II

You are aware of the fact that the Unified Sewerage Agency of Washington County has a continuing interest in developing water resources to provide an adequate water supply to meet future stream flow augmentation requirements.

As was expressed to you in a meeting held on Thursday, April 3, 1975, in the Washington County Administration Bldg., there are many uncertainties at this time regarding the need for future augmentation water supplies. In any event, however, the current requirements do indicate a need for approximately 52,000 acre ft. of additional water storage capacity for augmentation purposes based on estimated sewage flows by the year 2000.

The Board of Directors of the Unified Sewerage Agency are in agreement that the Tualatin Second Phase Project will be an important asset to Washington County and feel that it would be in error not to make provisions in the project for water quality needs. Because of these reasons, the Unified Sewerage Agency would like to be considered as a possible contracting entity for payment of costs associated with the 52,000 acre ft. of storage for water quality purposes. We understand, of course, that the actual contractual arrangements are several years in the future and will be subject to the prevailing conditions at that time.

Please let us know if you have need for any further expression of interest from the Agency.

Sincerely yours,

Burton C. Wilson, Jr.
Chairman, Board of Directors



WASHINGTON COUNTY

ADMINISTRATION BUILDING — 150 N. FIRST AVENUE
HILLSBORO, OREGON 97123

BOARD OF COMMISSIONERS

VIRGINIA DAGG, Chairman
RICHARD C. HEISLER
RAY MILLER
J. ALLAN PATERSON
MICHAEL SHEPHERD

DANIEL O. POTTER

COUNTY ADMINISTRATIVE OFFICER
ROOM 418
(503) 648-8676

STATEMENT BEFORE THE SENATE INTERIOR & INSULAR AFFAIRS COMMITTEE

April 23, 1976

Pacific University, Forest Grove, Oregon

Regarding the Tualatin Project, Phase II

The Board of Commissioners of Washington County have had a sincere interest in the possible construction of the Tualatin Project, Phase II. This interest is fivefold:

First, Washington County is interested in the potential increase of irrigation water which will assist farm owners and operators to increase their crop diversification. Such diversification will work in parallel with the County Land Use Plan and will assist in maintaining an additional 7,500 or more acres of crop lands in full production.

Second, Washington County believes that the construction of the proposed project will provide a needed regional water oriented recreational area that can provide both an active and passive recreational outlet for the citizens of the Portland Metropolitan Area. In this regard, we have provided letters to the Department of Interior, Bureau of Reclamation indicating that Washington County would like to be considered as the sponsor of such a recreational component of the Tualatin, Phase II project.

Our initial observations on the use of recreational facilities at Henry Hagg Lake clearly show that such water and land related recreation is in high demand. This demand is accentuated in that Henry Hagg Lake, a part of the Phase I project, and the proposed Phase II project provide the only nonflowing body of water in the Portland Metropolitan Area for those who wish to boat, fish, or enjoy the passive nature of such a lake.

Third, in 1969 Washington County caused a Water Supply and Waste Water Study to be performed by competent engineering consultants. The water supply portion of the report was again updated in 1973. Based on current population projections, Washington County is expected to have a population of 345,000 by the year 2000 with 295,000 in the urban area. This compares with a total population of 190,900 now with 165,000 in the urban area. These projections clearly show an additional Municipal and Industrial need of 20,000 acre feet to provide an adequate Municipal and Industrial Supply for this future population.

April 23, 1976

The increasing requirements for Municipal and Industrial water are now being explored by several of the cities and water districts within the County. Increasing standards now virtually rule out the use of Willamette River water because of nonpoint source pollution problems, and the incidence of organic materials, chemicals, fertilizers, and viruses that are carried by the River from upstream sources. Water from the Coast Range is increasingly looked upon as one of the rational alternatives. In order that an adequate supply be available for future populations Washington County has requested that 20,000 acre feet be set aside for Municipal and Industrial purposes. The County proposes to become a wholesale entity for water districts and cities or, in the alternative, act as a fiscal agent to provide a Municipal and Industrial water supply for the future.

Recognizing the lead time necessary for authorization and appropriations for projects of this type, we are certain the need for the Municipal and Industrial supply will be present when the Phase II project becomes available.

Fourth, Washington County has long been concerned about the cleanup of the pollution in the Tualatin River. To this end we have created a County Service District known as the Unified Sewerage Agency which is now engaged in the construction of major sewerage treatment plant facilities which, when completed in 1977, will return the Tualatin River to a more usable and aesthetic stream.

In order that the Unified Sewerage Agency can meet its stream augmentation requirements, there will be a need of an additional 52,000 acre feet of water for water quality purposes. The Unified Sewerage Agency of Washington County wishes to be considered as a possible contracting agency for such water for such purposes.

The Environmental Protection Agency Section 208 Water Quality Study is currently ongoing in the Portland Metropolitan Area. This study is scheduled for completion in the fall of 1977 and the outcome of this study could have an effect on the water quality requirement.

Fifth, Washington County believes that the impoundment of water by the Phase II project can work to a definite advantage to those people downstream by reducing the potential of flooding. This would be particularly true if the project impoundments were carefully managed and a detention-release program were used.

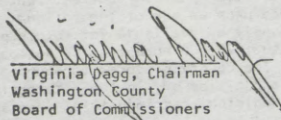
The elimination of a portion of the flooding potential would have a significant effect on stream bank erosion and on the dangers that flooding brings to lives and property. This benefit needs to be looked at as one that is of significance to the County. Farm operators will also receive an additional benefit from reduced flooding by the elimination of a portion of field erosion and an ability to get on the land at an earlier time for planting. This project alone will not do the total job, but the reduction of the crest of the flood can be of significant importance to all downstream property owners and to the several communities and cities in the lower Tualatin Basin.

Tualatin Phase II

-3-

April 23, 1976

This statement has been endorsed by the Board of Commissioners of Washington County at a meeting regularly held on April 20, 1976.


Virginia Dagg, Chairman
Washington County
Board of Commissioners

VD:ams

Senator HATFIELD. If you can provide that, we will complete the record. Also we do have a letter of resolution from the city of Hillsboro to be included in the record.

You mentioned your recreational needs here in the county. Would you like to make any predictions or observations of what you expect tomorrow at Henry Hagg Lake?

Mr. PATTERSON. Well, we have, that's an ongoing problem, but we expect to, to handle them and improve on it and be ready for the time and skilled in the operation of it by the time phase II is done.

Senator HATFIELD. Well, Commissioner, I appreciate very much your statement on behalf of the Washington County Commissioners. Please carry our best regards to Commissioner Heisler and I want to thank you again for your participation today. Having known you for many years and your involvement and interest in public matters, I appreciate again the concerns you have expressed.

Mr. PATTERSON. Thank you, Senator. It's a privilege to welcome you to our community.

Senator HATFIELD. Mr. Robert Platt, from the Oregon Environmental Council.

Mr. PLATT. Senator Hatfield—

Senator HATFIELD. Mr. Platt, we are happy to welcome you here today and appreciate your presence. We will, as I indicated before, place the full printed statement in the record. You may handle it as you wish, either by summarizing or highlighting it.

Mr. PLATT. I have a summary prepared.

Senator HATFIELD. Fine; please proceed.

STATEMENT OF ROBERT T. PLATT, REPRESENTING THE OREGON ENVIRONMENTAL COUNCIL, PORTLAND, OREG.

Mr. PLATT. My name is Robert T. Platt, I live in Hillsboro. I represent the Oregon Environmental Council which is a coalition of more than 80 organizations and over 2,000 members. I have served for the past 2 years as a member of the environmental quality evaluation team as organized by the Bureau of Reclamation to help formulate plans for the second phase Tualatin Valley project. Although the Tualatin Valley project was in its initial form to provide irrigation for as much as 30,000 acres of the valley, we find that Gaston Dam today proposed to you will irrigate only 7,500 acres and those directly adjacent as the Bureau now finds the pipeline distribution system is not economically justified.

One of the most significant aspects we feel is the impact of this project on agricultural lands in the valley. The State of Oregon and Washington County have both adopted a declared policy of preserving existing agricultural lands for agricultural uses. This project would flood some of the valley's best farmlands and would take from private taxpaying owners some 6,174 acres of land. These are the figures as they were developed and presented to the environmental quality evaluation team. There is some variation in the figures as presented today.

Of this total of over 6,000 acres, 3,825 acres are now being farmed; not quite 2,000 acres are in forest land. That makes 5,802 acres to be taken out of production, and of this total, it's interesting to note that

1,380 acres are already being irrigated without construction of the dam. But, crop values from the lands to be taken from the project would of course be lost forever, and the increases from irrigated downstream lands are calculated at an almost equal amount which would barely offset the loss. The project would produce no net gain in farm production in the Tualatin Valley.

Let's look at the other objectives. Municipal water supplies: so far among all the cities of Tualatin Valley, there are no takers except Gaston which is one of the very smallest cities of all. Downstream water quality improvement which is said to be needed to carry the effluent from the several sewage treatment plants during summer low water. However, all of these plants will provide tertiary treatment before releasing their effluent on plans to spray the bulk of effluent directly on agricultural lands during the summer as Hillsboro is already doing, rather than put such effluent in the river. This raises the question, is 52,000 acre-feet of water really needed for this purpose?

Recreation: instant popularity of the Scoggins project proved again that Washington County has an insatiable appetite for water related recreation. There's no question of that. Washington County government has furnished a letter of intent for planning purposes concerning the participation and in the repayment for recreation facilities, but considering the present financial condition of Washington County and the severe burden which the financing of this portion of the Scoggins project has become, it seems a very, very grave question whether the county really can shoulder the additional financial burden of even a correlary project to Gaston.

Fish and wildlife enhancement was to be another result, but very recently the Fish and Wildlife Service of the Oregon Department of Fish and Wildlife has found that it would be uneconomic to try to culture the salmonid fish in the reservoir in the only 19,000 feet of water which was allocated for this purpose now shows in the Bureau's project as part of the minimum pool, but without other justification. I might also mention that the Bureau of Reclamation has recently come up with its own proposal for 500 acres of compensating lands to compensate for wildlife loss resulting from the project, whereas the Fish and Wildlife Service and the State fish and game department found a minimum 550 acres would be necessary. And they tell me that the 500-acre proposal from the Bureau is completely inadequate to compensate for the losses. Now, the question has to be raised. What are the alternatives to the project? Are there alternatives? Yes: the Bureau has made preliminary studies of two other sites further upstream, from either of which all the same benefits could be derived that are proposed to be derived from the Gaston Dam. These alternatives are Gaston No. 3 at Mt. Richland Grove and Cherry Grove where the river comes out of the canyons.

Senator, we urge that your committee require the Bureau to provide full presentations of these alternatives, even if it requires the Congress provide more funds for the purpose. They tell us that their study funds are running out with the completion of the feasibility report.

We urge consideration of these alternatives because the studies and deliberations of the environmental quality evaluation team after 2 years of discussion with the Bureau has determined that the farther

up the river that the dam is located, the less will be the damage impact on the valley, its people, and its economy. It's our choice that Cherry Grove be used for these reasons: Cherry Grove will flood only a very small amount of low quality farmland compared to the almost 3,000 acres of high-grade farmland that will be flooded by the Gaston Dam. It would flood some timberland, to be sure, but due to the steepness of the terrain, the total take of land would be much less and also there would be less land required for wildlife compensation. As the Bureau report mentioned, some of the best fish spawning grounds in the river would be flooded by the Gaston Dam, while Cherry Grove is above these best spawning areas and the stretch of stream that would be flooded there is of much less value for fish spawning purposes. Also the deeper reservoir would provide colder water for the benefit of the downstream fish.

A number of archeological sites that are considered quite important have been identified in the valley between Gaston and Cherry Grove, all of which would be flooded by the Gaston Dam. The Cherry Grove Dam, of course, would be above these and would not flood any of them. It would allow them to be studied and evaluated at leisure. Cherry Grove would displace far less of the valley families since the reservoir would be in a largely uninhabited area. It would not destroy the tax base of the Gaston school district nor the farm economy of Patton Valley.

Patton Valley presents some of the loveliest pastoral landscapes of anywhere in the State. They are a scenic asset for all of us. The reservoir at Cherry Grove cradled in timbered canyons would be a scenic asset of another kind to add to those already existing rather than destroying those. It will probably be brought out in other statements, but I want to mention it, that local opinion seems to be running quite strongly against any Patton Valley project, as I believe a letter to you, Senator, from the Gaston Community Planning Organization has stated. We urge that your committee review the real water needs of the valley and the real cost involved. I know that the cost figures are given in 1975 figures where the expectation is maybe ten years before the construction would actually be accomplished, and 1975 figures undoubtedly will not prove to be realistic at that time.

If you find the project is justified, then we urge that you locate it as far upstream as possible and we recommend the Cherry Grove site. We are convinced, I speak both for the environmental quality team and for the Oregon Environmental Council, we are convinced that to build the Gaston Dam as presented would be a tragic and irrevocable mistake, a serious loss to the community.

Senator HATFIELD. Thank you, Mr. Platt. You have brought out a very important point relating to alternative sites. You might be interested to know that the Bureau has requested the Senate and House Appropriations Committee for a transfer of an additional \$100,000 to study the alternative sites, to incorporate them in their report.

Mr. PLATT. I am glad to hear it.

Senator HATFIELD. It will be handled in a generally routine fashion because they have checked with me on this as a member of that subcommittee and I have no objection to it. In fact, I urged them to complete their study for alternative sites, in response to the National Environmental Policy Act. I believe this represents the desire of the

Bureau to develop the kind of in-depth study that is called for here in your report.

Mr. PLATT. Very good.

Senator HATFIELD. Thank you very much, sir.

[The prepared statement of Mr. Platt follows:]

STATEMENT OF ROBERT T. PLATT, REPRESENTING THE OREGON ENVIRONMENTAL COUNCIL, PORTLAND, OREG.

My name is Robert T. Platt, 491 NW Forest Street, Hillsboro, Oreg. I represent the Oregon Environmental Council which is a coalition of more than 80 organizations and more than 2,500 individual members. I have served for the past two years as a member, representing the Oregon Environmental Council, of the Environmental Quality Evaluation Team organized by the Bureau of Reclamation to help formulate plans for the second phase of the Bureau's Tualatin Valley Project. I have attended all meetings of the EQ Team, plus meetings of the Tualatin Project Steering Committee and of the Gaston Community Planning Organization No. 11. I have inspected the proposed dam sites on the ground. As a result, I am quite familiar with the project being presented to you by the Bureau—the Gaston No. 1 Reservoir—and also with the alternate sites at Gaston No. 3 and at Cherry Grove, which are not being presented to you in the Bureau's report.

The Tualatin Valley Project was originally instigated by the Tualatin Valley Irrigation District, in order to supplement the low summer flow of the river and make possible the irrigation, hopefully, of as much as 30,000 acres of the Tualatin Valleys fertile agricultural lands.

The Second Phase, at Gaston, as it is being presented to you, can only irrigate lands adjacent to the river below the Project and to Gales Creek, since the Bureau now finds that pipeline distribution systems cannot be economically justified; a maximum of 7,500 acres could be irrigated by this means.

The State of Oregon and Washington County have both adopted a declared policy of preserving agricultural lands for agricultural use. This Project, however would take from private, tax-paying owners 6,174 acres of land. Of this 3,825 acres is presently being farmed, 1,977 is forest land—a total of 5,802 acres to be taken out of production. Of these acres, 1,380 are presently under irrigation—without a dam.

We have been told by agricultural experts in the area that the net gain in production from irrigating the full potential of 7,500 acres of existing farm land, as a result of the project, would just about offset the production lost from the lands taken for the project—thus no net gain in agricultural production.

Municipal and industrial water was to be another major accomplishment from the Project; 20,000 acre feet of impoundment is programmed for this purpose. However, with the exception of the little community of Gaston, there are no takers for this water. Hillsboro and Forest Grove are amply supplied from Hillsboro's Trask River project, expandable to cover needs through the year 2000. Beaverton, the Wolf Creek Highway Water District, and Tigard presently use Bull Run water from Portland, and all have stated that pipelines from Gaston would make this water prohibitively expensive. All of these are looking, for the distant future, to the use of Willamette River water from a treatment plant near Wilsonville. As another alternate, the proposed McKay Creek Reservoir would provide an equal amount of municipal water, much closer to Wolf Creek and Beaverton.

Downstream water quality improvement is a major accomplishment of the Project; 62,000 acre feet of the impoundment is identified for this purpose. The Tualatin River is naturally a turgid, mud-bottomed meandering stream, moving slowly through an almost flat valley. However, despite its looks, the quality of the water is better than it appears. But it is burdened with effluent from a number of sewage treatment plants, at Hillsboro, Forest Grove, Rock Creek and others further downstream, and the Unified Sewerage Agency of Washington County has asked for an increase in the summer flow to a minimum of 240 second feet at Rock Creek. The Gaston Project—at any one of the three possible locations—would provide this.

In considering this subject, however, your committee should consider that all of the Valley treatment plants will soon be providing tertiary treatment, and that present plans will provide for the direct spraying of most if not all

of the effluent, during the summer directly on agricultural lands rather than flowing it into the river—as Hillsboro already is doing. In other seasons, present flows are adequate to handle the effluent.

Recreation would undoubtedly be enhanced by the Project. Washington County has an insatiable appetite for water-related recreation. Boating, fishing, swimming, water-side picnicking would all be heavily used. However, the law requires that a local agency undertake repayment of 50 percent of capital costs, plus interest, plus the cost of maintaining, supervising and policing the reservoir and its surrounding recreation areas. Although Washington County has given the Bureau a letter of intent for planning purposes, the County is in severe financial straits, and is already overwhelmed by the costs resulting from the Scoggins Reservoir (Tualatin Project Phase I) and it seems most unlikely that the County can take on the added costs from a second facility.

Fish and wildlife enhancement was to be another accomplishment of the Project, but very recently the Bureau of Sports Fisheries and Wildlife has determined that it would not be economic to attempt the culture of salmonid fish in the reservoir, since the same results could be attained at much less cost in hatcheries. 19,000 acre feet of impoundment was provided for this purpose, and may be deleted from the project unless it can be justified for other purposes. As to the terrestrial wildlife, any enhancement would only be achieved through lands taken to compensate for those lost to the reservoir; there is presently a sharp disagreement on the extent of such compensatory lands between the Bureau of Reclamation and the Bureau of Sports Fisheries and Wildlife.

Flood control benefits are minimal, since the Corps of Engineers has determined that no appreciable benefits would result below Dilley. Most flood waters further downstream are from other tributaries or of local origin, and are impounded primarily by the flat gradient of the river and its valley.

Alternatives to the Project: The Final Report now being completed by the Bureau of Reclamation presents only one site, known as Gaston No. 1, about half a mile from the town of Gaston. The Bureau has also made preliminary investigations of other sites at Gaston No. 3 and at Cherry Grove. We urge that your committee insist on a thorough study of these alternatives, even if it requires that Congress provide additional funds to the Bureau for this purpose.

We urge consideration of these alternatives because the studies and deliberations of the Environmental Quality Evaluation Team have convinced members of this Team that equal benefits can be realized from these other locations, with far less loss to the community and the State. We are convinced that the farther upstream the impoundment is placed, the less will be the damage. For this reason, we prefer the Cherry Grove site, for these reasons:

It will flood out only a very small amount of farm land, of lesser quality, though it will flood some timber land. Due to the steep terrain, it takes less total land.

Whereas the Gaston No. 1 site floods the best fish spawning areas in the stream, Cherry Grove would flood much less valuable streambottom areas, and provide colder water, from a deeper reservoir, to the benefit of downstream fish.

A number of archeological sites have been identified in Patton Valley, nearly all of which would be destroyed by the Gaston No. 1 Reservoir. Cherry Grove would be upstream from all of them and would allow them to be preserved and studied at leisure.

Cherry Grove would displace far less of the residents of the valley, would not destroy the tax base of the school district nor the economy of the community.

Patton Valley, from Gaston upstream, is a beautiful pastoral valley, of peaceful rural landscapes cradled in tree-clad hills. Gaston No. 1 would flood all this, while a Cherry Grove reservoir, back in the steep canyons of the hills, would provide water for all the purposes embraced in the project without such a severe impact on the scenery or the life of the community.

In October of 1975 Senator Hatfield, by letter to the citizens of the Gaston-Cherry Grove area, asked them for their views. The Gaston Community Planning Organization has replied that they are opposed to any project in this area. Our discussions with residents of the area have led us to believe that most of them are opposed, with the exception of the few landowners who see in the project a chance to cash in their lands and retire elsewhere.

We urge the members of your Committee to review all of the arguments for further water impoundment in the Tualatin Valley, that you question them thoroughly in the light of today's facts, and that you insist on full consideration of all the alternatives. You may well conclude that the rapidly escalating costs

of construction, the burden of maintenance and repayment on local finances, and the diminishing benefits, make any such further developments uneconomic and undesirable.

If the Gaston No. 1 project, as presented, is carried through, we believe that a costly and tragic mistake will have been foisted irrevocably on the community, the state, and the nation. Please consider it with the utmost care, Gentlemen.

Thank you.

Senator HATFIELD. Mr. Don Jones, chairman of the Community Planning Organization No. 11. You may proceed.

STATEMENT OF DON JONES, CHAIRMAN, COMMUNITY PLANNING ORGANIZATION NO. 11

Mr. JONES. My name is Don Jones, my residence is Route 1, Box 127B, Gaston, Oreg. I am the chairman of the Community Planning Organization No. 11, and I have been requested by that body to testify here today.

Senator HATFIELD. Your full statement will be put in the record. If you like to summarize or highlight it, please proceed.

Mr. JONES. I would like to read it, if I may, as I presented it.

Senator HATFIELD. All right. Now, let's make sure we are looking at the same statement. I have two parts here. I have the one that is legal sized.

Mr. JONES. Yes; and one that is smaller.

Senator HATFIELD. Which one do you want to present first?

Mr. JONES. The smaller sized.

Senator HATFIELD. In order to get through all of the witnesses we have here today, we had hoped that possibly rather than just reading such rather extensive statements, that you could summarize. Otherwise it might make it difficult to hear all of those who have asked to appear. I can assure you that the committee will carefully review the full written record. I note that you have seven pages in the first part and about four in the second part.

Mr. JONES. That's right, and I have a small lecture on the side.

Senator HATFIELD. I notice also that the statement is single spaced, consequently we would be here very late tonight if everybody read their full statement.

Mr. JONES. Sir, may I read my first statement? I want to emphasize that we are the community, the target area which is involved in this project. We are the most important single agency or group coming before you this afternoon, and we believe that it's important for your understanding and a significant public process that our statement be fully made.

Senator HATFIELD. It will be. It's being made part of the record. All I am asking, though, is if you would just please summarize it. I am not asking you to cut yourself down to an improper period of time, but at this rate we will be here at least half an hour on yours and there are other people, some 30 other people, that want to be heard.

In all fairness to the others who want to be heard, I think we have to put a limit.

Mr. JONES. Sir, I am representing several hundred people.

Senator HATFIELD. I know, so are others. If you will limit yourself to 10 minutes, I will be very happy to hear it.

Mr. JONES. I am sorry, Senator, that you have taken this position. I will do the best I can.

Senator HATFIELD. Yes.

Mr. JONES. I feel it's prejudicial to our position.

Senator HATFIELD. It's not really I am trying to be fair to everyone, Mr. Jones. If everybody took 25 minutes, as I say, we have only this one period of time within which to hold the hearing. I am trying to be fair, to insure that everyone has an equal right. I don't consider anyone has any more right than anyone else. Everyone has to be heard today, but in order to be fair, we are going to have to have some kind of parameters or limitations.

Mr. JONES. Sir, I will do the best I can under these circumstances, but I do so under protest. I wish to state at the beginning that we come here with a very positive and cordial attitude. We have had some good relations with your service and your attitude and your work in this area within the last year. And is, this puts on the record, coming up with \$2 million in 1 year's time to fix the booboo that the Bureau of Reclamation and the county had in terms of the Scoggins Access Road, we think this is almost a miracle which, when we think of the normal Government process, we wish to state our appreciation.

Senator HATFIELD. With a lot of your help and your input from the local level I want to give credit where credit is due.

Thank you.

Mr. JONES. Thank you. Now, our principal position is that we are asking you to put this Senate bill 2301 aside at this time. We ask this because we are convinced that the project as presently formulated will eventually fail as a result of its completely inadequate conceptualization and planning. Approval of and moving forward utilizing the current proposal will mean we will lose this important water resource development in the worst possible way, through bad planning and mismanagement. Our request that approval of this project be postponed until a much sounder plan can be developed arises out of our deep concern for the unnecessary damage it will do to Patton Valley and of the importance and need for a long-range water resources development program for Washington County. We ask that this committee go slow now in order to save the project and as well save Patton Valley.

We have these key fundamental errors that we'd like to raise now. They have been raised already partly, so I perhaps can move a little bit. There are alternative proposals available, but they have not been made available to you or to the public by the Bureau of Reclamation. The Bureau of Reclamation has offered a single take-it-or-leave-it proposal. They have actually, their representatives have stated publicly "if you don't approve of our project as we have got it planned with the site location at the Gaston Dam site No. 1, there will be no project." It's been virtually a blackmail type of proposition. The dam site location has been mentioned and will be mentioned again, floods the entire valley, wipes out vast acres of prime farmland for which there is no promised gain.

BOR predicts that in farm activity gain downstream through irrigation there will be no more than a replacement in this productivity loss. What, what you have here is a moving of a farm economic activity from Patton Valley to other areas of the county with no, no contribu-

tion to the general public good. It's just a grab for one area to another area. And if, if we could find a, an important significant gain in farm economy in the county for this, I doubt that any of the people in the valley would seriously object. There aren't any gains.

The next item that I'd like to mention is that taking this farmland in this way violates the State, the regional and the county land use planning laws and ordinances. I worry that when it gets to where they have to sign off, they won't. There will be litigation, there will be delays, delay, delay—we'll lose the project. I would like to suggest that or point out to you this dam site deals a death blow to the city of Gaston. Gaston is an only marginal viable community economically now, a major reason of which is because it has such a narrow land base. We are working for an economic, I mean, an urban development plan with the county. The county is working well with us on this and we'll have something reasonable shortly.

The present plan of BOR takes over all the area that Gaston's planning for its urban development in Washington County. The results will be destructive economic and environmental problems. Somebody else will talk about those.

Now, there's a big proposal that the project is going to provide recreational advantages. The fact is that it will fail to do that. One of the most serious reasons is that being a multipurpose dam, the end of the rainy season which is the peak of the recreational season, the lake will be drawn down to a minimum pool so that more than half the valley will be a mud flat. This forces all activity and water down at the small lake that will be left, and if you have ever been involved, I am sure you have, the motorboats with the water skiers will then take that over. Motorboat and waterskiing type of recreation tends to force all other recreation away. It is not a sound recreational plan.

Of course, it's been mentioned and should be underlined that this proposal unnecessarily dislocates a large number of people who live in the valley, and the word "unnecessary" is a proper term. There are other sites which will mitigate considerably that problem. There's no solution. We are not going to get a project in the valley that somebody won't be disturbed. We are not saying that, but this is the least that's damaging if we go up the valley.

It is the most damaging to the way of life for this area where the site that's been chosen, and since we can get the planned-for results, if we could get those planned-for results, and there's a question there, but assuming that we could, if we can get those planned for results with the alternative sites, there's no justification to, to move all of those people out of the valley just because the BOR has decided on this particular site.

Senator HATFIELD. May I interrupt? When you speak of alternative sites, is there one other than Cherry Grove?

Mr. JONES. Yes.

Senator HATFIELD. Would you like to use a map?

Mr. JONES. Incidentally, those maps put out by the BOR are inaccurate, incorrect. One problem is that the project changes every day. This is a project we have been working on, it's not a project that's presented over on those boards. This one shows a 1,500-acre wildlife area to be taken out below the dam in prime farm land. Much of it is already under irrigation. Their proposal doesn't show that.

Here are the alternative sites. This one-half way up the valley at a place called Mount Richland Road area and the second one is the one that was mentioned by the previous reporter testifying here, which is the Gaston—

Senator HATFIELD. Cherry Grove?

Mr. JONES [continuing]. Cherry Grove site. We had to request directly and personally from BOR to get these maps, and as you will notice that in the material that we are presenting you, these maps are not available.

There will be some more discussion that, I heard somebody else will make a presentation, Mr. Chairman, so I will move on. Our, one of our key concerns, moving from, some of the problems of that site location is that the county has issued letters of intent to pick up 50 percent of the costs of, capital costs and to cover the operation costs of this whole project. To pick up, but there is no plan to do that. If you would listen carefully, and I am sure you were listening, to the Commissioner's statement, all he expressed was some hope. He expressed that there was some need for some water planning. We are saying that we are concerned, we do not want to lose this project, and he's expressing a hope that somehow the county could find a way to come up with support of it. There's nothing in their presentation that commits the county to a financial plan.

And the BOR is bringing you a feasibility study in 2 weeks. Sir, the only contract for the social economic impact study was started 2 weeks ago, and that group has 75 days to make their study. They can't present you with a feasibility report in 2 weeks.

The environmental quality team has, has one more meeting which is within another week or 2. They have to approve the final reports before it can go into the feasibility report. It will be May or June before they are ready. What I am trying to point out is that the plan is not ready. They are arguing between themselves and the Wildlife Commission about the wildlife area. That has not been decided. It's a major problem. They now tell you that they are asking, in the report they are asking for money to do analysis of these alternatives. Surely that ought to be part of the feasibility study that will take several months.

What we are asking you, sir, is to back off now to protect this good idea and wait, wait for a good sound plan to come forward. You don't have it now.

Finally, I'd like to point out that this BOR, this county government has never worked with this CPO in developing this plan. The BOR came to us a year, more than a year ago and said they were studying various sites. When they got something more concrete, they would come back to us. Six months later we found they were already with you in Washington and arguing and proposing a bill. Six months later when we asked them about it, we, they said "we have already decided on Gaston site 1, take it or there will be no project."

You are the only elected official of our Government who has ever been ready to listen, and we ask that this, the CPO which is a vital community based planning group, open membership with capable people and ready to be a part of the planning process, and we are the target area. Nobody else is more seriously affected by this project than we are, and we have not been involved in this plan.

So, my summary then, sir, is back up, don't go ahead with this project now in terms of your bill. It is a phony proposition. It will lose us the project. Thank you very much.

Senator HATFIELD. Mr. Jones, I want to thank you for your statement. I want to just try to reassure you today that the Congress, not the Bureau of Reclamation, is the only body that can authorize such a project. I mentioned earlier today that there had been a request to transfer \$100,000 for additional planning funds for the consideration of such alternative sites which would incorporate, I am sure, all that you have mentioned, and perhaps even others. I don't know, but at the least it would include the alternative sites that have been discussed up to this point. And as you recall, we had a meeting out at Gaston—

Mr. JONES. Yes, you did a good meeting.

Senator HATFIELD. To get the input and the feel of the public there in the area most directly affected by this. Part of my reason for being here today is to see that alternatives are considered and the public have full participation. I do want to assure you that the, the bill itself is but a vehicle for discussion. It does not list the site.

Mr. JONES. That's a danger.

Senator HATFIELD. I did not specify the site because the objective of the bill is to provide us with a vehicle about which to hold these hearings and to solicit public participation.

Mr. JONES. Does not specify a site.

Senator HATFIELD. A site, no, because we would not be in a position to specify a site. We had not had your input, we had not had the consideration of alternative sites. This bill is what might be called a rough draft of an idea. You said, I believe, that you think the general idea is good but the location is wrong. The bill is the general idea, it doesn't cite a location.

Mr. JONES. Sir, there is a number there of \$78, \$79 million. How did they find that number? Well, I will tell you how they found it. They already have decided on the site and they calculated their economics, those dollars in terms of a specific plan. You are, I am sure you understand that a plan has already been decided, and even though it isn't said in there it's in all your back up material; it's in this report by, here by the BOR plan. The only—

Senator HATFIELD. Mr. Jones it has not been decided by me as a member of this committee today and therefore it's not been decided. There isn't a single member of the Bureau of Reclamation that has a vote on our committee. Our committee is the one that makes the decision. I just want to assure you.

Mr. JONES. I feel assured by that statement.

Senator HATFIELD. We will stay in this kind of close relationship and communication throughout the whole procedure and let me say this—we may decide on no site, we may decide on no project, I don't know. We have to get all the material in from you and all the others in this room and the Bureau and everyone involved before I am in a position to even make a decision. I will not make a decision now. But I am here to try to help gather the information upon which we can base a judgment that will withstand any of the major criticisms that have been presented. And this is the democratic process and I am grateful for your role.

I just want to assure you no decision has been made by the only committee and the only people who can make such a decision. Now, in the minds of some people working on this program, in their minds they may have made a decision, I don't know, but, whatever decision they make is totally inconsequential in comparison to the only authority that can make such a decision, namely this subcommittee.

Mr. JONES. I appreciate the statement. I just——

Senator HATFIELD. I hope you can sleep better tonight.

Mr. JONES. That you are depending upon the Bureau of Reclamation for your technical data?

Senator HATFIELD. Yes.

Mr. JONES. And by the nature of that process, regardless of your license of responsibility which I respect, you are controlled by the data that's provided you, and that worries me very much.

Senator HATFIELD. We are certainly dependent a great deal upon that data. There's no question about that, but that's one of the reasons for this kind of a hearing, why I came to Gaston. I don't want to be dependent on a single source, and that's why I feel it's important to get other sources and to get other evaluations. That's why I asked the Bureau of Reclamation for public participation in considering alternative sites so that you will have an input even at that time. So, I just want to reassure you and I hope you will base it upon not just my words but upon my record. We have been in a close working relationship. I want to maintain that throughout this whole matter, because I value the judgment and the evaluations of all of you here today.

Mr. JONES. I know that there are a number of people from the valley and from our CPO here today, and I am sure that they are heartened by your statement.

Senator HATFIELD. Thank you, Mr. Jones.

[The prepared statement of Mr. Jones follows:]

STATEMENT OF DON JONES, CHAIRMAN, COMMUNITY PLANNING
ORGANIZATION No. 11

My name is Donald Corwin Jones. My residence is Rt. 1, Box 127 B, Gaston, Oregon. I am chairman of CPO No. 11 and have been requested by that body to testify here today. My remarks are the expression of the policy position of this CPO and while I personally, fully support this report, the statements made here express the interests and concerns of a publically established and open membership body whose members come from and effectively represent the entire area which will be directly affected by the Phase II Project, as proposed.

No other group, individual or government, testifying before this Senate Committee today has the all encompassing interest in this project as does CPO No. 11. We represent the target area. Our ways of life will be profoundly affected by the completion of this project. We stand to gain or lose far more than any other group or section of the County. It is our land which will be taken, our tranquility, our economic stability and processes which will be most seriously altered. Thus, we urge and expect that our remarks concerning this matter will be given special attention and primary importance by this Senate Committee.

We wish to state publically, that we have a most positive attitude and come here to testify with great hope and faith that the right decisions will be made. We have this attitude because our experiences in the recent past with this Committee and particularly with Senator Hatfield, have been cordial and fruitful. I refer to Senator Hatfield's recent achievement of securing \$2,000,0000 to redesign and modernize the Scoggin Valley Road, which is the access road to Henry Hagg Lake. Within one year of our initial contact with Senator Hatfield concerning that serious problem, the money became available and the work on the road is now proceeding. From our viewpoint and observations of the usual

processes of government, we consider this achievement as almost a miracle and we take this opportunity to publically and sincerely express our appreciation. I should add that Senator Hatfield is the only elected official, local, state or national who has come before this CPO to discuss this Phase II Project.

SUMMARY STATEMENT ON THE PROPOSED PHASE II PROJECT PROPOSAL

CPO #11 Strongly urges that Congress postpone approval of this Phase II project at this time. Senate Bill 2301 should be set aside. We ask for this decision because we are convinced that the project, as presently formulated, will eventually fail as the result of its completely inadequate conceptualization and planning. Approval of and moving forward utilizing the current proposal will mean that we will lose this important water resources development project in the worst possible way—through bad planning and mismanagement. Our request that approval of this project be postponed until a much sounder plan can be developed arises out of our deep concern for the unnecessary damage it will do to Patton Valley and of the importance and need for a long-range water resources development program for Washington County. We ask that this Committee go slow now in order to save the project and as well save Patton Valley.

CPO #11 is preparing a written statement outlining the errors and inadequacies of the current proposal and will offer suggestions for a sound and successful project. The study is a large undertaking and will require several hours just to read it. We will therefore confine this report to be a brief statement of the key problems, issues and possible solutions which support our conclusion that you have before you a very bad project proposal. We will submit our completed study later and pray that it is studied carefully.

FUNDAMENTAL ERRORS IN PRESENT PROPOSAL

A. Alternative Project Proposals have not been provided.—The Bureau of Reclamation (BOR), offers only one solution to the water resources development needs of Washington County. They offer a single, "take-it-or-leave-it" proposition. Their representatives have publicly stated that if this current proposal is not accepted there will be no project. This is virtually a blackmail proposition. A proposal of this magnitude, without alternatives, is unsound planning and probably is illegal.

B. Dam Site Locations.—BOR offers only one dam site location. Alternative sites—which are available—have not been proposed and in fact, have had only cursory study by BOR. Yet, what study that has been made indicates that either of the two alternatives is much more suitable in BOR's terms than the site which BOR has selected. Gaston Dam Site #1, BOR's choice, would create more problems than it would solve. We list the major reasons why it should not be the site selected.

2,709 acres of productive farm land will be flooded, or taken out of production and an additional 1,116 productive farm land acres will be flooded or otherwise taken out of production along the first few miles of the river below the dam. This is a total of 3,925 acres of productive farm land which will be irrevocably lost—much of it prime farm land. In addition 1,977 acres of forest land will be either flooded or otherwise taken out of forest use. Thus, 5,902 acres of basic land resource of this County is to be consumed by this project as proposed.

BOR predicts that in farm productivity gain down stream through irrigation, there will be no more than a replacement of this productivity loss. Thus, an \$80,000,000 project is being proposed for which in farm productivity—a basic and principal justification of the project (and a central element in S2301)—there will be no gain! Further, the predicted increased farm productivity down stream contains a large measure of speculation, but the land lost will be real and irrevocable. What is being proposed here is a shifting of economic potentials from one area of the County to another—a major and certain loss to one area and a probable gain to another area, (or to other individuals) using taxpayers' money but with no gain to the well being of the general public.

The land-use laws and goals established by the State of Oregon, the regional planning agency (CRAIG) and the Washington County Comprehensive Land-Use Plan are seriously violated by this BOR proposal.—The violation of the 38-Acre rule on farm land is one such violation. Recreational projects which encourage excessive energy consumption is another. Destruction of forest reserve land is a third violation. There is no known evidence that these agencies have had any

contact with BOR in connection with the planning of this project. As a result of this failure to integrate their planning with land-use planning agencies we can anticipate considerable delay when these organizations are asked to "sign-off" on this proposal. Court litigation by one or more of these agencies and by environmental protection groups as well as by individuals, is most probably. These actions could postpone the project for several years—delays which are not necessary if one of the alternative dam sites is selected. Delays which could permit inflation to wipe out the project.

I should add that there is being circulated the idea that because some farm land down stream will get irrigation water this will make it easier to hold this land in a farm status—thus aid in the enforcement of the County Comprehensive Land-use Plan. This is an extremely weak concept both because the amount of farm land to be irrigated is limited and its achievement uncertain at best and because the proposed gains in M & I water and sewage treatment, if achieved, will greatly encourage urban development. The pressure for urban development outside of urban zoned areas in the land-use plan will be overwhelming.

Gaston Dam Site No. 1 deals a death blow to the urban growth need of the City of Gaston. Currently Gaston is only marginally a viable community from an economic point-of-view for several reasons but a major one is that it lacks an adequate land base. A well-conceived plan for extending the urban growth boundaries is now under study by the County's Planning Commission. Approval by the Planning Commission appears quite promising, but the dam site No. 1 location will engulf the area which is the major part of Gaston's planned growth area.

Any dam-reservoir project in Patton Valley will result in serious damage in environmental quality of the area. But of all the alternative dam site locations, Gaston Dam Site No. 1 results in the most serious destructive environmental results. BOR has had an environmental quality study team making an evaluation of the several sites in terms of the potential environmental impact. In almost all of the tests used, the currently proposed dam site was scored as the poorest choice.

The current proposal fails to deliver the promised recreational advantages. This is true for several reasons. One serious problem is that the reservoir will be drawn down to a minimum pool during the peak recreational months of the year. What is planned is a long, narrow, fairly shallow lake, which when full will extend the entire length of the Valley. At the minimum pool period of the year, more than half of the Valley (over four miles), will be a dry lake bottom or mud flats. This condition will force all water sports into the remaining small lake near the dam. The motor boats and water skiers, by the nature of their activity, will force all other recreation out of that area. Sailing, canoeing, swimming, fishing, picnicking, will all be driven away with the concentration of the motor boating in the one end of the lake where there will be water.

The current proposal will result in an unnecessary dislocation of all of the people who live in Patton Valley. Unnecessary is the proper term because either of the two other potential sites will eliminate to a major degree the need to force the people of the Valley off their land and out of their homes. Any dam and reservoir in the Valley will result in some dislocation. The People of Patton Valley lose more than they gain whatever the site location. But if we must have this water resources project in Patton Valley it seems reasonable to suggest that a plan to be developed which will cause the least amount of tragedy.

C. The Capital Payback and Operations and Maintenance Financial Plans.—The major point to be made here is that there are no payback plans—no financial plan for supporting, or operating costs. There is speculation that the various water users which are supposed to be served by the project will somehow payback their share of the costs. In fact there is nothing within the proposed plan on this matter except speculation.

The letters of intent, written by the Washington County Government are in no way commitments and more, these letters are based upon some exceedingly shaky assumptions about water needs. For instance, the Governments in the eastern part of the County, for whom the bulk of the M & I water is to be supplied in this proposal, do not want this water and are seriously planning for other sources to meet their long-range water needs. These water districts have not made commitments to buy this Patton Valley water.

Again, the United Sewage District, which is supposed to pay for a large portion of the water that is to be dumped down the river during the summer to dilute

and flush the sewage out of the Tualatin into the Willamette River, expects to have its operations at a technical level by the 1980's so that it will not need to dilute its effluent. Further, the sewage processing plants are said not to be the major source of the Tualatin River pollution so even if they were to pay for some water for diluting their affluent, there is no plan for who will pay for the flushing of the over 60 percent of the pollution which comes from non-point sources.

The farmers who are to buy the irrigation water have not signed contracts. They have merely indicated an interest in the irrigation water. At this time there is no assurance what-so-ever that there will be sufficient firm commitments to cover the cost of supplying this irrigation water. In fact Senate Bill 2301 (Section 7) establishes potential restrictions for even delivering this irrigation water to the farmers. Obviously, they will not pay for water which they do not receive.

Recreation is supposed to justify some 43 percent of the cost of this project. However, there is no evidence of a financial plan which will determine that the recreational aspects of this project will carry its share of the capital or operational costs. The Washington County government had a big disaster in their first year of trying to operate the park at the Scoggin Valley project and their financial plan for this year for that park is no more than a hope.

What can happen, if the Washington County government does eventually contract for the payback of the capital costs of this project and for funding the operational costs is that it will be attempting to commit the taxpayers of the County to pick up the over-run of costs against revenues. The current tax laws prevent the County from legally making such a commitment without a referendum. Is the Federal Government willing to support an \$80,000,000 project where in the 50 percent of the cost is to be underwritten by a tax referendum which may occur sometime in the future say ten or twenty years from now?

The fact that neither the Washington County Government nor the BOR offer even a semblance of a financial support plan for this project should be a warning signal that this proposal is in no way ready for support by the Congress of the United States, at this time.

Flood Control and Irrigation were the two major accomplishments proposed in the original justification of the Tualatin River Development Act. Senate Bill 2301 also emphasizes these two as major justifications for the project. However, neither of these are major justifications for Phase II as presently proposed. Irrigation, at the most optimistic level, will use no more than 15 percent of the water. It is the smallest planned usage of the various water needs the project is supposed to support. There is to be no economic gain from Flood control. In fact, there is good evidence that the project as planned will cause continued flooding throughout the year on the river between Gaston and Forest Grove. The expectation is an increase of flooding not less flooding.

D. Water Needs Analysis.—Careful reading of the proposal will demonstrate that the County's water needs analysis to the year 2000 is suspect. BOR has redefined the water needs to support a pre-determined dam site. It appears that Gaston Dam Site No. 1 was selected first and when the water needs identified would not support the cost of the pre-determined project, the water needs were modified to meet the effectiveness criteria for justification of the project. CPO No. 11 has made a detailed analysis of this interworking of the water needs with a pre-determined project and will submit this analysis in its written report.

E. Finally, neither the BOR or the County government has worked with the people of the target area in designing the Phase II proposal.—The BOR came to this CPO over a year ago and told us that they were studying various dam sites and when their studies were more mature they would return to the CPO with their findings, for further consultation. Six months later we discovered that they had been to Washington consulting with this Committee and others with the result that Senate Bill 2301 and a similar measure in the House of Representatives was written. When we asked them just what was going on they told us that we must accept Gaston Dam Site No. 1 or there would be no project. We have learned recently that they have not worked with the County Planning Commission on the serious land-use issues which are involved.

In turn, the County Government has never approached this CPO on matters involving the Phase II Project. They made a promise to do so but they have not visited us. Nor has the County discussed the matter with the City of Gaston, the community of Cherry Grove, the local school district or the area fire district. These latter two agencies will suffer a serious loss of tax base if the current proposal is adopted.

SUMMARY

It is clear from this recital that the Phase II Project proposal is not ready for approval by your Senate Committee. We trust that you will take the sensible and responsible action of sending the BOR and the County Government back to their planning tables. CPO No. 11, however, does not want to leave this hearing on this negative note. We reiterate the following:

We do not want to lose this Phase II Project. Long-range water resource development is an important necessity for the prosperous well-being of this County's future. We urge that a Phase II project be developed which truly works towards this great need.

If a dam and reservoir must be built in Patton Valley, there are two other sites besides the one presently proposed which are much more suitable.

There are other sources of water which can and should be developed and made a part of a sound long-range plan. For instance, the Trask River project now operated by the City of Hillsboro, if fully developed, would supply all of the M & I water included in this current Phase II proposal.

There are other solutions—at least partial solutions—to our water needs. Mainly these solutions would reduce pollution in the river, thus reduce the need for flushing the sewage down into the Willamette River; reduce the per-capita consumption of water; reduce the negative environment quality impacts of the current proposal and would increase the potentials for flood control and irrigation water.

This CPO is a vital, community based, planning group which stands ready to help in working out a sound water resource development plan. We urge that your Committee determine that we are fully involved in this planning before you commit the Federal Government to the wanton destruction of our beautiful valley with a project which will not accomplish the results which are now claimed for it.

As a supplement to our testimony to this Committee we offer brief remarks concerning the *Statement* provided you by the *Washington County Commissioners* pertaining to the Phase II Project.

Please note that the Commissioner's *Statement* does not endorse the Phase II Project as currently proposed by the Bureau of Reclamation (BOR). It does not endorse any particulars of the proposed project (such as a specific dam site, the taking of 1500 acres of farm land below the proposed dam, a specific recreational plan—or any other element of the proposal. It merely states that the County Government has a "sincere interest" in some sort of a Phase II Project.

The *Statement* does indicate the County Government's awareness of the potential long-range water needs of the County and seeks to specify what the County Government believes these needs will be. This CPO, while recognizing that it is important that long-range water needs be studied and solutions sought (and commends the County Government for its sense of responsibility in this matter), believes that considerable more study is required on just what these water needs can be expected to be and on the potential solutions for meeting these needs, before a specific program or project for solution is agreed upon. We believe that the BOR interworked their water needs analysis with a pre-determined dam site in order to justify the site. We believe that the County Government has been ill-advised by BOR on the specifics and when the County Government does look beyond their hopes they too will agree that more study is needed before a particular project plan is endorsed.

To be more specific concerning the mis-information or the in-determinate nature of the facts upon which the County Government is basing its hopes for a water development project, the following comments are offered:

(a) The County Government's *Statement* suggests that the irrigation elements of the BOR plan "will work in parallel" with the County Comprehensive Land-Use Plan. In fact there has been no study or decisions made by the County's Planning Commission on this matter. Our study indicates that the Phase II project, as presently proposed, will result in major violations of the County's Comprehensive Land-Use Plan. It not only violates in a serious way the 38-acre rule but will encourage urban developers in the eastern side of the County to push hard at extending the currently established urban area out into the rural areas.

(b) The County expects the Phase II reservoir and proposed surrounding park to provide an excellent recreational facility for the area. In fact it is an extremely poor recreational plan since during the peak of the recreational season the reservoir will be drawn down so that more than half of it will be mud flats. Further, the plan caters to a single recreational group (The motorboat-water

skiers), and this, again, especially during the peak recreational period of the year. These features work to the discouragement of all other types of potential recreational activities.

(c) While the potential population growth reported in the Statement and the assumption of the need to plan for adequate M & I water for such a population seems generally sound, there are a number of serious questions needing answers before commitment to a particular project is made. These include: The heavily populated side of the county—where all of this M & I water is assumed will be needed—does not at this time believe they will need the water and are not supporting the Phase II project, as currently proposed. The projected need for M & I water assumes current per capita water consumption patterns. No effort even to study, is being made to find ways to reduce this water consumption or to slow the rate of population growth. Finally, the County is assuming that the proposed BOR Phase II project is the only viable solution to providing this M & I water. CPO believes there are better solutions.

(d) CPO No. 11 believes that the County has been misled as to the economic gains which will result from the irrigation water to be provided. There will be little or no gain.

(e) The County appears to have been misled in the expected elimination of flooding along the Tualatin River. In the BOR current proposal there will be very little flood control achieved and there is evidence that in one reach of the river flooding will be increased. Please note that BOR puts no economic value to the claimed flood control which is supposed to result.

(f) Finally, the County Government makes no proposal in this Statement (nor in any other document available to this CPO), of a commitment to a financial plan for covering the 50 percent capital cost of this project or for securing the funds necessary for operating the program after the dam is constructed. This Statement is no more than a recognition of water need (however poorly understood) and an expression of the hope that the BOR will come up with a project which will meet these needs. Also there is an implied hope that the County will sometime in the future come up with a plan for financing their share of the project.

CPO No. 11 urges that this Committee not take the Statement by the Washington County Commissioners very seriously expect that it does clearly indicate that the planning for this Phase II project is far from mature and that we are not ready at this time to ask Congress to vote us a law which is suppose to create a sound program of water development.

Senator HATFIELD. Now, Mr. Ralph Raines is next. Mr. Raines, it's nice to see you again.

STATEMENT OF RALPH RAINES, RAINES LOGGING CO. AND TREE FARM, GASTON, OREG.

Mr. RAINES. Thank you, Senator, and don't let the number of pages scare you, please, because I will stay within the 10-minute limit. I realize the necessity, and if it goes longer than 10 minutes, please blow the whistle. And right now I am a little in a quandry about what comes first, the chicken or the egg. I am from the Gaston area. I support some of the views of CPO but I think in the main that I must disagree. And I am in the target area up there and at your request, and I think it's best, I will do as best I can to summarize as I go through.

Senator HATFIELD. But your whole statement will be part of the official record.

Mr. RAINES. This I understand, Senator, and I appreciate it very much. Thank you.

My name is Ralph Raines and I do business as Raines Logging Co. and Raines Tree Farm. I have a substantial amount of property which is possible that it will be in this project here. And my statement goes on through with a little bit of what I have been doing in the past, which I will omit. And I do have some questions which I would like

to go into with you. The first question is, What method is to be used as to the acquisition of timber and timber land, and I think this does consider this area of concern of timber owners, particularly myself, and, of course, others. I'd like to know just what is the usual procedure for acquisition. As I understand, making an inquiry with the Bureau of Reclamation, the usual procedure is to have a private independent appraiser come in and cruise the timber, appraise it and base it on local sales. Please correct me if I am wrong.

But, I have a little bit different thought about this, in that much of our timber in this area—as a matter of fact, I don't know of any, really, that goes to Portland market, which is a high market and also it is the market and the outlet for log export which brings high sales prices from the Willamette National Forest. And these high sales from national forests and State forests as I explained to you before, and for the record here, are picked up by our Timber Tax Division, the Department of Revenue, State of Oregon, and averaged into the computer to determine 100-percent immediate harvest values in order to determine local taxes. Of course, these averages come out high on or the, meaning harvest values, and this is what we pay taxes on. And I won't go through all of the mathematics of the thing, because I am sure that you understand that.

But, if our timber in acquisition on the basis of local sales out there, we are indeed selling our timber to the Government at a lesser price than what your immediate harvest values are and what we are paying taxes on without the Federal Government contributing to these high immediate harvest values. And my thinking is that all considered and after making inquiry, I think, of standing on sound ground, I just want to get paid the same as what the Government sells their timber for, and I think that that is something to talk about. I think it's a reasonable request or at least a thing to talk about.

Now, there's several other things that I am concerned about. Is the, in recent years we have had a lot of eroding of timber supply and timber land and I state on page 2 other reasons for it, and I will try to sum them up quickly as best I can. We have had large areas of Federal forest lands which have been transferred from timber producing areas to the status of wildlife, primitive areas, and other non-producing designations. Condemnation of private lands further erodes the total timber supply. Then I talk about Willamette's contribution and its predictions of contribution. I am sure that my figures are correct. And I talk about the declining timber industry in Oregon and the reports, repeated reports of reduced timber supply.

Now, I am concerned about, further, any further eroding of timber, of timber supply or areas which I know, Senator, that you can understand, that it does indeed detract from our economic plan and it does affect us grossly, not only in the immediate community but you might say nationwide, and I state the reasons why this, this erosion, has happened.

And I have a suggestion, and I don't think it's very practical, since the fringe of acquisition around the lake is rather small and it's rather thin; I suggest that timber around the lake not allied with recreational facilities be considered for harvesting, taking into consideration esthetics, water quality, and a continuous timber supply. And I suggest in face of these declines, my reservations about this project on point 3

is no doubt land acquisition for the Gaston Dam phase will reduce our tax base. This deficit would be reduced, causing an additional tax burden on property owners. I suggest that the Federal Government curtail some of its spending on outgoing things abroad and to bring home a like amount to offset the tax burden to the taxpayer who, it's my feeling, has had it up over his head, and to reimburse our State and county alike amounts, alleviating additional tax burden. I believe you call this payment in lieu of taxes.

Also there's another thought about harvest, timber harvest. That is, when I say timber harvest, I mean careful planned timber harvest, one that's esthetic, water quality, et cetera. The timber harvest, continual harvest, continued timber harvest would help, perhaps, maybe to, to offset some of the tax base loss and to, and would still have a tendency not to erode so far as our timber producing area. And I am concerned about not only some of the things that, that I and other people are concerned about, our Government and planning. I have confidence in our Government planning. I have fear that there perhaps maybe is a lack of vision on some of our people and I would like to, I deal in part with vision in the future. And where I talk of, of gifts and grants and loans to overseas and, our payments back to us per month which are overdue, some nations will never pay us; then I have a question in view of shortages and forecast shortages of the right of eminent domain and the dislocation of people.

This isn't a new question, but I think it is a new question in this respect; that heretofore when a question has been raised, When does the right of eminent domain begin? We have never had circumstances that we have in our present situation, shortages and forecasts of shortages. And this, I really think that sometime in the future that our Congress and our Government will have to come to some hard rock decisions on this point. Now, after last year's recreational pressure and activity on Hagg Lake, Scoggins Dam, it occurs to me our county is not ready to manage that activity.

In my opinion that construction of the dam when completed, if it is, ownership and administration of the park should be turned over to the State of Oregon to be administered by the State park department. This is a suggestion I think that might work better, or at least I think it should be considered.

On my summary, I will just read a part of it and skip over the rest. There is no doubt that we are in the twilight period of the good old days and that we are entering a transition period. It is forecast that by the year 2020, in 45 years, population will be approximately 300 million and that we can feed and take care of ourselves along with maintaining a substantial export trade which is vital to the maintenance of a strong U.S. dollar abroad. But, now is the time for planning for our future security. And I trust that our Government will meet this challenge and, and some of the conduct of our Government in the past few years is, is rather upsetting.

Now, I have several, after reading this bill, I have several suggestions that I would like to make as perhaps conclusions. All through this bill there is nowhere mention made of timber. Timber is a vital resource, it is our No. 1 economy to date. An energy crisis is full upon us and will remain for an undetermined time. Tremendous amounts of energy are required to reduce ore and petrochemicals, and a wide vari-

ety of pollutants enter our environment. Many are highly toxic. Could it be that our country is becoming a junkyard of synthetic polymers which are literally indestructible? Wood is clearly the most desirable material for our housing needs. To grow a tree is energy free, biodegradable, and renewable. The cycle is complete. Careful harvesting produces little strain on our environment. I believe this points up that, the necessity to include well-planned timber harvesting in specified areas in this bill, but as I say, the fringe area of acquisition line is rather thin. This is only a suggestion.

This is one thing on 5, page 5, lines 13 and 15. This bill provides for increases in agricultural products in the interest of national security, but makes no reference to timber in that same interest. I suggest that, suggest that timber could be included as a part of the national security. I certainly think that it's a resource that can't be overlooked.

For instance, I am not sure of what national security means. Does it mean like in a case of disaster of, say, the October storm of 1962 when we had vast amounts of timber blow down in Oregon and it was a disaster to the industry as far as sustained yield cutting is concerned. Now, if we have timber blown down in the acquisition area, I suppose this would come within the realm of national security. Timber would not be laid waste and that would be salvage for what it is. But, I think that this provision should be made in this bill. And whereas the water, but timber should not be excluded in your considerations, and I think, sir, that this pretty well sums up my feelings and expressions. And I trust that the public will look farther than just the immediate problem and consider 45, 50 years ahead or duration or the life of the dam and its impact.

I trust the Government will do a good job of planning and its actions will be correct. Thank you very much for this opportunity.

Senator HATFIELD. Thank you, Mr. Raines.

Mr. RAINES. Mr. Hatfield, I have visited a good many countries and I, in only a handful of the countries—I have been, I have lived with families behind the, in the east zone behind the Communist bloc. I only know of a handful of countries that, where people can come forward as we are here today. It's a marvelous government.

Senator HATFIELD. It's a great experience. I assume, Mr. Raines, that you are submitting also your statement of November 1975 for the record today?

Mr. RAINES. This I did, Mr. Hatfield.

Senator HATFIELD. Yes, that's fine.

Mr. RAINES. The reason for it is because it more fully in detail describes my true feeling.

Senator HATFIELD. Fine; thank you, Mr. Raines.

[The prepared statements of Mr. Raines follows:]

STATEMENT OF RALPH W. RAINES, RAINES LOGGING CO. AND TREE FARM,
GASTON, OREG.

My name is Ralph W. Raines and I do business as Raines Logging Co. and Raines Tree Farm. I acquired 1,200 acres of forest land in 1957 with the prime purpose of earning my families living by managing it for continuous yields of timber. Since 1957, I have planted over 2,000,000 trees and have practiced intensive forest management with professional assistance and help. Come this fall I plan to incorporate aerial fertilization with more to follow.

A substantial part of my tree farm (850 acres) is now listed under the preliminary proposal of the Gaston Dam and lake (Phase 2). I do not oppose the building of the dam and lake, but with some misgiving and what I believe to be serious reservations. They are:

1. What method is to be used in acquisition of timber and timberland?

My thoughts are—Acquisition be based on 100 percent Immediate Harvest Values as determined by the Timber Tax Division, Dept. of Revenue, State of Oregon, for ad valorem tax.

My reasoning—Federal and state timber sales are indeed directly contributing to exceedingly high 100 percent Immediate Harvest Values.

(a) Our state averages all public sales for the purpose of determining taxable values.

(b) High timber sales are caused mainly by the high quality demands of log export and long term cutting contracts.

(c) Private timber sales are not considered by our Dept. of Revenue for establishing taxable values.

2. Large areas of federal forest lands have been transferred from timber producing areas to status of wildlife, primitive areas and other non-timber producing designations. Condemnation of private lands further erode total timber supply. The Willamette Nat'l. is the West's most important timber producing forest. It's productive forests have been reduced to $\frac{1}{2}$ the available area, and now represents 9 percent of Oregon's total cut, and is forecast to increase only slightly to the year 2000. This indicates a declining economic contribution to Oregon since it is forecast that demands will be doubled by the year 2000. This stems partly from—

(a) Federal Forest Service has its ear tuned to much political pressure groups.

(b) Narrows to severely the lands available for intensive management. The true meaning of the word "environment" has been badly distorted. My dictionary defines the word "the aggregate of social and cultural conditions that influence the life of an individual or community". We must not focus on just a piece of the problem, the nation's ecological well-being, while ignoring it's economic health. I suggest that timber around the lake, not allied with recreational facilities, be considered for harvesting taking into consideration aesthetics, water quality, and continuous timber supply. I suggest this in view of forecasts of an 18 percent decline in softwood sawlog availability and a 28 percent employment decline in Oregon's number-one 870 million dollar annual economy over the next twenty-five years. I could easily expound further on second rate management of the people's federal timber and timberlands but would serve no purpose at this time.

3. No doubt lands acquisitioned for the Gaston Dam (Phase 2) will reduce the tax base. This deficit will be redistributed causing additional tax burden to property owners. I suggest the federal government curtail its gifts, grants, loans etc., to other nations and reimburse the state and county a like amount thus alleviating additional tax burden on the tax payers. [Payments in lieu of taxes.]

4. It occurs to me that there is an inability or reluctance of our government to project, anticipate, and secure what is needed by our own citizens before trading with the world. Over ninety nations are now in arrears in loan payments to our country. Many of these nations will probably never pay their debt to us. Despite shortages and warnings of shortages of certain raw materials, our government still lacks any semblance of a policy. Yet, at the same time we are using up our resources at an alarming rate. With expanding global populations straining our supplies of vital resources, we are faster than you think nearing the bottom of the barrel. With all of the above, pray tell me, just when does the right of eminent domain and the dislocation of our people begin?

5. After last year's recreational pressure and activity on Haag Lake (Scoggins Dam) it occurs to me that our country is not yet ready or trained to manage that activity.

In my opinion, after construction of the dam is completed, ownership and administration of the park should be turned over to the State of Oregon to be administered by the State Park Department.

SUMMARY

There is no doubt that we are now in the twilight period of the good old days, and that we are entering a transition period. It is forecast that by the year 2020 A.D., in forty-five years, population will be approximately 300 million and that

we can feed and take care of ourselves along with maintaining a substantial export trade which is vital to the maintenance of a strong U.S. dollar abroad. Now, is the time for planning for our security. Thus far, our government has not done its job well. In 1972-73, our own wood-based industry was left short of logs because of virtually uncontrolled exporting by a handful of people. Only public outcry and a belated jawboning by our government changed the picture. This happened even in the face of repeated warnings of short timber supply. In 1973, our government allowed an overselling of our national wheat bin adding to the sting of inflation and causing the wrath of the people. Again, lack of exercising whatever controls there were and lack of planning. Last year, the longshoremen refused to load wheat until our government could assure them that there would be ample supply for our own people. And yet, I pray for confidence, that our government will meet the challenge of planning for our future without the meddling that took place over an energy bill.

I remain in favor of the Gaston Dam (Phase 2) with reservations and a, "we'll see attitude".

Thank you for this opportunity.

RE: U.S. SENATE BILL S. 2301

Suggested inclusions

Page 1, Lines 7-10—An energy crisis is full upon us and will remain for an undetermined time. Tremendous amounts of energy are required to reduce ore and petrochemicals, and a wide variety of pollutants enter our environment. Many are highly toxic. Could it be that our country is becoming a junk-yard of synthetic polymers which are literally indestructible? Wood is clearly the most desirable material for our housing needs. To grow a tree is energy free, biodegradable and renewable. The cycle is complete. Careful harvesting produces little strain on our environment. I believe this points up the necessity to include well planned timber harvesting in specified areas in this bill.

Page 5, Lines 13-15—This bill provides for increases in agricultural products in the interest of national security but makes no reference to timber in that same interest. I suggest that timber be included.

SOURCES OF INFORMATION

1. March 1969, Subcommittee on Housing and Urban Affairs of the Senate Committee. (Hearings relating to timber supply and price problems).
2. June 1970, Public Land Review Commission. (Relating to management of federal lands).
3. June 1970, Robert Mayo, Director of the Budget, (report on softwood lumber and plywood).
4. March 1973, Whitehouse Timber Sale Task Force, (relating to increases in softwood lumber and plywood prices).
5. June 1973, National Commission on Material Supply, (report on timber supply problems).
6. Jan. 1975, Willamette National Forest Plan Information Region 6.
7. Oct. 1974, Analysis of Draft Area Guide, Region 6 U.S. Forest Service (by Oregon State Forestry).
8. Sept. 1974, Preliminary Staff Study Relating to Non-Industrial Lands (by Oregon State Forestry).
10. Jan. 1975, Research Bulletin No. 19, "Timber for Oregon's Tomorrow". (Beuter Report).
11. Feb. 1976, American Forests. (Sen. Hatfield article). "Waiting for a Crisis".
12. April 1976, American Forests. (Charles J. Hitch, President of Resources for the Future, Inc.) "Resources for 300 Million".

STATEMENT OF RALPH W. RAINES, RAINES LOGGING CO. AND TREE FARM, GASTON, OREG.

I come before you to discuss the Gaston Dam and to tell you of my views. Recently some several people have come to me and ask my thinking relative to this project. I have tried to be quite neutral in tone so as not to influence people with their most valued possession, his home and property. At this time I wish to become more clear on my position.

After traveling more than two times around the world and living with, not visiting, families in various nations, I believe I have a good insight as to the basic needs, likes and dislikes, and political thinking of these people. It more than occurs to me that the most basic needs along with several others are water, environment and the healthy minds of people. I say this relative to the people of our own nation. Without basic life support we are dead as a people and a nation. After my experiences in life, much thought and soul-searching, after much discussion with knowledgeable and substantial people, I have come to the conclusion some time ago that this world and nation is indeed short of water and food. These problems have just begun to surface in the past several years and will gain momentum at a staggering rate of speed in the very near future years. I believe I well understand the necessity for people and nations to barter, buy, sell and trade with their surplus.

Simple reasoning tells us that water and environment are critical in creating high producing agricultural lands to satisfy our own needs and commodity trading. The law clearly provides for highest and best use of our resources and just compensation to property owners and occupants.

I believe that it is the responsibility of our government to protect the needs of our people first and then trade its surplus. The people of this nation are certainly entitled to first priority of the produce of his own motherland. I call upon our state and nation to look down the road and define the word surplus. Webster's Dictionary defines the word as What is left above what is needed. I believe in the concept of balance of trade and the maintenance of a strong dollar with our surplus and to amply secure the requirements of our people. If our government does not make prudent determination of our own needs and surplus and come to closer grips with export quotas, it occurs to me that the issue might be raised as to whether this water impoundment and dislocation of people is best use and needed. America has one of the finest commodities in the world to sell and trade. That is to say; food. Have you ever saw an Arab try to eat an oil sandwich? Some people say that food should not be a political issue. It is now, always has been, and will remain so. Anyone who thinks different, in my opinion, is naive. I believe that water impoundment, the Gaston Project, is NOW of vital necessity to achieve the above mentioned. I believe domestic water supply, irrigation and recreation are about of equal importance to the mental health and economic welfare of our community and nation. By best projections there are approximately thirty-three days in the world's food basket and before last harvest, twenty-two days in the world's grain bin. I believe this emphasizes the criticals NOW needed for the Gaston Dam as an integral part of the scheme. Water is of critical key importance. The Tualitan River gut-shoots the heartland of quality agricultural land and communities, etc., many studies must be made, engineering problems solved, aquisition made, budget must be compiled and other details. Budget should be no problem, all you have to do is eliminate or curtail unnecessary outmoded expenditures, and there are many, and give the badly abused taxpayer something useful for his money instead of only all too much foolishness.

After all of this, I must say that the time is now close at hand to finish what there is to be said and for congress to get on with the project. All of the above mentioned conditions compel me to be in favor of the Gaston project.

I ask that in naming the dam and lake that our identity, antiquity, history and the names of our pioneer forefathers be remembered. I suggest the name Gaston Dam and Patton Lake.

Thank you.

Senator HATFIELD. Mr. Harold Wik? We are happy to welcome you here today.

STATEMENT OF HAROLD WIK, PORTLAND, OREG.

Mr. WIK. Thank you. I speak as a private citizen with reference to Senate bill 2301. My comments—

Senator HATFIELD. Excuse me, Mr. Wik. Could we have your address for the record, since we do have a copy of your statement?

Mr. WIK. I live at 260 NW 114th Avenue, Portland, Oreg., which is located in Washington County.

Senator HATFIELD. Thank you. You may proceed.

Mr. WIK. This is a study that I have done in concurrence with the intent of the Senate bill and with Phase Two of the project, namely Scoggins Valley project. My professional employment deals with energy and environment conservation and I have the same feelings regarding these two areas as I do in my private life. My deep concern is with the location of the dam. I will not be redundant. The comments were well established by Mr. Raines' statement, so I will read part; it will be my feeling that more serious consideration be given to a continued and extensive investigation of the alternative dam sites and a consequent reservoir site. That this would be much in keeping with the interests of land use as established by this marvelous State of Oregon. Flooding thousands of acres of prime farmland, a finite resource, is the more serious consequence and has serious overtones to the legacy of generations to come in this State, perhaps in the Nation. Our position in terms of prime land preservation must be respected. Irrigating 7,500 acres at the expense of taking 4,620 acres out of production phase appears imprudent and illogical. The Department of Interior is to present all alternatives in future summaries for future years. That is the alternative to the dam site to carry out in my study exactly the same objectives but not destroy farmland.

Senator HATFIELD. Thank you very much, Mr. Wik.

Mr. Wik, could we have your full printed statement, please so we can incorporate it into the record? You had far more testimony in your written statement.

Mr. WIK. No, that was it.

Senator HATFIELD. That was it? All right, thank you.

Dr. Lolita Carter.

STATEMENT OF DR. LOLITA CARTER, AQUATIC BIOLOGIST, HILLSBORO, OREG.

Dr. CARTER. I am Lolita Carter. I live in Hillsboro, Oreg. I am an aquatic biologist. I have my expertise here, which is sufficient to say that I did my doctoral thesis on the Tualatin River and am doing sewage effluent and sludge studies for land disposal in the Tualatin Basin, and I will do a dry weather study of the Tualatin River from Farmington downstream on a contract for the 208 program. Most of what I have in this has already been said one way or another. However, there are a few points from the aquatic biology standpoint I will try and glance over for you.

One is that when we irrigated from the Tualatin River before we had zero flow, it was a good use of effluent water for crop production. It was unfortunate that the crop demands exceeded the supply of, the water was able to handle, but it was a good use of the water that was able. The pooling of the water behind the Oregon Iron and Steel Dam created algal blooms which to me and other scientists were very unsightly, but in fact did provide sufficient oxygen for aquatic life and was therefore a positive benefit as well as an unsightly mess.

Then we go on to the fact that dilution is not enough for sewage abatement. It is only a short term improvement. The figures that are given on dilution are at 5:1 dilution which means five parts of river water to one part sewage, when in fact Oregon Department of Envi-

ronmental Quality standards are for 10 to 1 dilution which would mean that we would need twice as much water if we did not have 5 to 1 or plans that were capable of putting out a sufficiently processed sewage.

A pristine water supply is a rare commodity and I really question whether we are justified in taking a pristine water reservoir and using it to flush a river, which was approximately 52 percent or 62 percent of this reservoir would be, depending on which acre foot capacity it has.

I believe we are wasting both the sewage which should be put to some other use like on land, for growth, and we are wasting water by using it to flush a river. It seems to me in Congress that the agriculture people are pushing for this dam when in fact most of the water is for suburban and urban uses in municipal and industrial sewage effluent dilution. So, it seems to me that this is going to make it extremely hard for the farm community to maintain itself under the pressure of urban development. Water is, water is one of the chief supply problems for urban development, and when you have an excess of water, you will have an excess of urban development.

The one point I would like to strongly recommend here is that in the past 20 years we have put out \$300 million to make the Willamette River a showpiece of pollution abatement, and no one has inquired yet what the effect of all this additional flow from the Tualatin will have on the Willamette system. For example, we know that the species of algae in the two rivers are very different and we do not know what effect the less desirable blue-green algae that exists in the Tualatin will have on the Willamette. We need to make sure we do not flush the problems of the Tualatin into the Willamette.

I also was on the environmental impact team, and from a water quality and aquatic biologist's viewpoint, I would like to state also that the downstream dam site Gaston No. 1 which the Bureau has proposed is the least desirable for either the river quality, the fishlife or domestic use, and it's well known that reservoirs with a low surface-to-volume ratio will provide water supplies that are less desirable or one, let's see, with the low surface-to-volume ratio will provide better water for domestic use and aquatic organisms. Because the upstream reservoir site would be in forested situations, the cultural or man-caused beautification of the reservoirs would be held to a minimum and thus reduce the possibility of any unsightly algae problems developing in the reservoir.

I would be able to give you lots of technical testimony, but I don't think it's necessary at this point.

Senator HATFIELD. Well, it's very helpful, Dr. Carter. I appreciate your testimony, and also the statistical data that you have incorporated here for the information of the committee. Dr. Carter, where are you located now?

Dr. CARTER. I am a research associate at Portland State University, biology department.

Senator HATFIELD. Thank you very much. We may be calling on you again for your help.

Dr. CARTER. Thank you.

[The prepared statement of Dr. Carter follows:]

STATEMENT OF DR. LOLITA CARTER, AQUATIC BIOLOGIST, HILLSBORO, OREG.

I am Dr. Lolita Carter, an aquatic biologist. My expertise to testify before this committee is based on my studies of the Tualatin River Basin for my doctoral thesis, "The Effects of Human Activities on the Middle Course of the Tualatin River, Oregon," published in 1975. At present I have a contract with Portland State University to study sludges and effluents from selected sewage treatment plants in the Tualatin Basin and to do a dry-weather, chemical and biological study on the lower Tualatin River through 1976. This study is to be an attempt to quantify the effects that flow augmentation and up-grading sewage treatment at the Durham plant have on the lower Tualatin River.

The past use of the Tualatin River for irrigation was a wise use of the nutrient rich water. It was an informal way to dispose of sewage effluents on croplands where they had economic value as fertilizers. Unfortunately, the irrigation demands exceeded the river's capacity and times of zero flow prevailed. For the lower river this low flow combined with the long pool behind the Oregon Iron and Steel Dam created a fine habitat for algal blooms, making the river unsightly. These algae had a positive value, however, for they kept the oxygen supply in the river adequate for aquatic life. Additional flows from Scoggin Reservoir have temporarily relieved some of the algal problems, but when the proposed sewage effluent loads are added to the river, the algal blooms will return—it will be the same, just more of it. Other professional aquatic biologists agree on this.

Dilution, alone, is not enough it is at best a short-term improvement. Dilution neither can nor will be the solution to too much sewage effluent in the Tualatin system. Even at a 5:1 dilution ratio (5 parts water to 1 part effluent, the highest sewage treatment now possible) there isn't enough water in the summers to dilute all the sewage effluents to be generated by the projected populations for the Tualatin Valley (Table 1). (Present Oregon Department of Environmental Quality regulations only require a 10:1 dilution on the mainstem Tualatin below Gaston, thus, twice the water would be necessary than needed for 5:1 dilution.)

A pristine water supply is a rare commodity. I question whether we are justified in allocating 52% (62,000 ac-ft out of 119,000 ac-ft with no fish rearing water requirements) of a pristine water reservoir to flush a river of sewage at a minimum rate of 250 cfs. The Tualatin River would be a viable river at 150 cfs. Are we justified in using a valuable water resource to remove sewage effluents which have an economic value to agriculture? It seems to me that we are wasting two valuable resources—water and sewage.

It is incongruous that agricultural people are in favor of a dam that will bring so little return to farmers in irrigation water (only 12% of the reservoir is for irrigation) and will in fact threaten their way of life. Most of the water is to be allocated for Municipal and Industrial (M & I) water and water quality for the river—both of which promote urban growth and suburban sprawl. This appears to threaten or destroy the agricultural base in Washington County. The role of water supply to urban development cannot be understated. It is almost impossible for the farm community to withstand the pressure of urban development when M and I water and water quality allocations are so much greater than irrigation allotments. No one questions the need for water, but the designed misuse of the water creates doubts.

In the past 20 years and at a cost of over \$300,000,000 the State of Oregon has made the Willamette River a show piece of pollution abatement. Has anyone thought to question what the impact of greatly increased flows from the nutrient rich Tualatin will be on the Willamette? For example, we know the species composition of algae in the two rivers is different, but we do not know what effect the less-desirable blue-green algae of the Tualatin will have on the Willamette. Let us make sure we are not "flushing" the Tualatin Basin's problems into the Willamette to upset what we have already accomplished there.

The reluctance of the communities in the Tualatin Basin that need water to sign up for the Gaston M and I water is of economic importance. Many of these communities feel they may be too far away to make it feasible to pipe water from Gaston. And I feel that given the choice I would rather drink treated water from the Willamette than from the Tualatin on the basis of sewage volume to river volume alone.

Is the lower Gaston Dam site (#1) the best site for the dam? If nothing else, it is contrary to the Land Conservation and Development Commission objectives. There are alternate sites which are better environmentally, agriculturally, socially, politically and probably economically if all the externalities are taken into account.

As a member of the Environmental Quality Assessment Team for this project, I can assure you that many of us feel that Gaston #1 is the poorest site. As an aquatic biologist, I know that the Gaston #1 site is much inferior to the Cherry Grove site. A dam at Cherry Grove would provide the best fish habitat and water with the best quality for the river and for domestic use. It is well known that reservoirs with a low surface to volume ratio provide better water supplies for the more desirable aquatic organisms and man. Because the watershed for an upstream reservoir would be forested, the cultural (man-caused) eutrophication of the reservoir would be minimal, thus, reducing the possibility of undesirable algae problems in the reservoir. Even the Gaston #3 site at Richmond Bridge is preferable to Gaston #1 on the basis of water quality alone.

TABLE I.—CURRENT AND PROJECTED TUALATIN BASIN POPULATION, SEWAGE EFFLUENTS, AND RIVER DILUTION REQUIREMENTS TO MEET DEQ STANDARDS¹

Year	Population	MGD (at 120 g/c/d)	Effluents (cfs)	River flow for 5:1 dilution for 5/5 effluents
1970.....	158,000	19.0	28.5	142
1980.....	225,000	27.0	41.0	205
1990.....	271,000	33.0	49.5	247
2000 at—				
2.6 percent growth rate.....	341,000	41.0	61.5	307
3.2 percent.....	412,000	49.0	73.5	367
3.8 percent.....	485,000	58.0	87.0	435
2025 at 3.4 percent.....	1,200,000	144.0	216.0	1,080

¹ Data from Columbia Region Association of Governments and Unified Sewerage Agency.

Note: All projections are conservative in view of the fact that Washington County has had a 6-percent compounded growth rate for the past 30 years.

Senator HATFIELD. Mr. Bob Czimbab.

STATEMENT OF BOB CZIMBAL, GASTON, OREG.

Mr. CZIMBAL. My name is Bob Czimbab and my address is Route 1, Box 311, Gaston, Oreg. I made an oral report instead of a written report to try to keep from duplicating anything.

Senator HATFIELD. All right.

Mr. CZIMBAL. I'd like to make sure that you realize this presentation is to you, Senator, but also to my fellow community members here who have taken the time to come out. I live in the valley and I also am a director of a nonprofit retreat center there. I have been involved with this project at many different levels over the past year. I am not necessarily for or against the dam, but I am for comprehensive planning and up until now, I haven't seen that so that's what brings me here today. I have about five recommendations that I'd like to summarize for you.

First of all, before phase 2 is even considered, I'd like, I'd like to even see the road put in. I really appreciate the amount of work that's been done on the Hagg Lake. There's many other questions that, in phase 1 that need to be solved and I don't see the need yet for going on—I am kind of thinking before we start on phase 2, let's finish phase 1. I am concerned about motorboat recreation versus recreation adjacent to the lake. I see that there's motorboat recreation. Having

tried to swim the lake with a motorboat has not been too successful. I am also concerned about the drinking water there.

In summarizing, I am concerned about management of phase 1 park, about the tax base for the schools, about the schools, about the land use; these are just, you know, there can be summaries of and lots of reports on just problems with phase 1. I believe more energy should be taken to solve what problems we have caused by putting one lake in before we go about starting other problems by beginning to do another lake. So, I really want to make that one of my primary recommendations. Let's take care of these problems first.

Second, this matter of \$80 million versus a dam; can you spend \$80 million to solve the problems without creating problems in the future? That's a big concern of mine. Can you issue some type of competitive contract that says OK, Bureau of Reclamation has \$80 million, what could you do with it? OK, here's \$80 million, someone else—what do you do in terms of solving recreation, water quality, all other reasons listed for the dam? There doesn't seem to be any competitive balance here. That's, that's my second recommendation.

My third recommendation is in support of the Gaston CPO. They are the local government. We are the people who have to live with any problems that were created, Hagg Lake or any problems that will be created with phase 2. I'd like that you officially recognize that, that they be a community of—committee of—for citizen involvement. At—excuse me, before I go on—that the CPO be officially recognized as a subcommittee for you to send initial reports. We don't feel like it's supporting Don Jones—that we really have been listed to. We have spent lots of hours and time and he's kind of—well, so that's what the Gaston CPO is doing. It's kind of been—if you want citizen involvement—I attended about three, four meetings of the environmental quality team. I refuse to come back because I thought my information, my feelings, suggestions, comments, were being diffused and, in a very thick report that somehow it didn't come out, wasn't going to come out saying what I put into it. I feel that's also the feeling of many other people on the team.

So, a lot of very valuable information like the last speaker is not getting into those environmental quality reports, so that's why I say that there needs to be a very official committee that's composed of citizen people sending this information so that all the information is actually getting to you. That's my third recommendation.

My fourth recommendation comes from being a sociologist and community planner. I am taking a look at how this fits in, how this one little lake tucked back in the valley fits in with the rest of the world. I am asking for planning past the year 2000. That's—to me that's short-term planning. We have seen the effect of short-term planning before. We wind up having to solve those problems that that type of planning created. I am asking for planning more for my children and my children's children than for myself. Most of this for—well—say the year 2000 is kind of a target we are trying to meet standards. We have to even begin planning beyond that. We need that type of consciousness. I am part of a growing culture in this contraworld lifestyle that isn't satisfied with solutions that create more problems in the future. So, I want that type planning information, if we are going

to have a dam, I wanted the best that's possible. If there are other alternatives, let's go with that, but let's really pick the best.

I'd like to give an example about this type of philosophy, like—let's just on recreation, if you are going to have a dam and you are going to build a road, why not have the road going up into, instead of driving your car around when we are already running out of gas, why not just put a bicycle path around it? Instead of having motorboats on that lake, why don't you have canoes and sailboats for rent? People can buzz out to Forest Grove on Tri-Met, the bus goes over there, canoe around the lake without any pollution. Can you image what the cost of this particular project would be less without the road going around it, and how much more recreation for people who don't want motorboats, who say I don't want, first of all, "I don't want a motorboat," because that's going to pollute the drinking water coming back into Portland that he eventually is going to drink. That's the type of recreational planning I am looking at. If you are going to have a dam, there's some, some recreation.

OK, another one is—reasons for the dam is water quality. We at the center are going to be probably issued a DEQ permit on compost toilets, waterless toilets. It's going to be a considerable investment for these. We believe these types of investments have to be made. Instead of having septic tanks, we are going to have waterless toilets. I think this is being seen as something in the future and that those types of things happening with water quality can change some of the reasons we need this dam, if you are looking that far in the future, you can see.

A fifth procedure that, that I got from—actually got from one of your suggestions today when you talked about full participation. The only way you are going to have full participation is this, is that the \$100,000 you are talking about going for study, why not allocate directly some of that to the CPO? We are the local government, we are spending day after day of every week of our time. We are not getting paid for it. It's expensive to us to bring this information to you. We are not asking for to be paid a salary, we are asking for some help to get the information that you have asked for. And we spend all day at environmental quality meetings, we are spending all day here, we are spending weeks preparing for this meeting. We could use some help to get you the information that you ask. Thank you very much.

Senator HATFIELD. Thank you very much.

Dean Mallory? Nice to see you today, Mr. Mallory.

Mr. MALLORY. It's been awhile.

Senator HATFIELD. It has been a long time.

Mr. MALLORY. Mr. Chairman, I have only an oral statement today.

Senator HATFIELD. All right. If you'd give your address for our reporter, you may proceed, Mr. Mallory.

STATEMENT OF DEAN MALLORY, SHERWOOD, OREG.

Mr. MALLORY. My name is Dean Mallory, I live at Route 4, Box 418, Sherwood, Oreg. My family and I live on a 145-acre farm situated in a sharp bend of the Tualatin River about 2 miles north of Six Corners. This would also be at a point about 2 miles upstream from where 99W crosses the Tualatin, and on the shaded green, shaded area on the far

chart, it would be the last chart bend in the lower part of the shaded green area.

I border the river for approximately 2 miles in this bend that we live in. We have approximately 100 acres of that land that is subject to flooding whenever the Tualatin exceeds the regular flood stage. I came here today to testify primarily on behalf of myself and my family, but I did take the time last night to contact six of my agricultural neighbors, and they showed a lot of enthusiasm and support for what I was going to say today and asked that I include them, their names behind my statements. I would like to read those names. Would you care for their addresses as well?

SENATOR HATFIELD. I think that would be helpful if you have them.

MR. MALLORY. All right. Mr. Tony Amstead, 14585, SW. 141st, Tigard, Ore. Mr. Amstead owns 300 acres of land in this area and leases approximately 900 more acres, so he represents about 1,200 acres of agricultural land in that area. Ed Bagenstaus, Route 4, Box 403, Sherwood, Ore.; farms with his brothers. They own approximately 175 acres and lease about 175 acres. They too are potato farmers. Dan Dennis, Ralph Fuller, Box 406, Sherwood, Ore., has 140 acres in the same general bend that I am in, presently raising sheep. Waller Gnell, Route 4, Box 421, Sherwood, Ore., has 95 acres, raises feed and cattle. H. L. Patti, Route 4, Box 420, Sherwood, Ore., has 115 acres and is currently raising hay and cattle. Mr. Ted Wetzel, Theodore Wetzel, Route 4, Box 423, Sherwood, Ore., has 104 acres and is a dairy farmer. My 145 acres is presently in alfalfa and I too raise sheep.

Altogether this represents approximately 2,150 acres in that immediate area of the Tualatin River. Most of this is prime farm land; however, some of it is subject to winter flooding and this land is virtually worthless in the summer during the dry summer months without water. We have recently been rezoned in this area during the past 3 years from a mixed farm residential zone to a straight agricultural use and this was under the recent legislated land use planning. I don't think that any of us are in real disagreement with the purpose of that. I would like to point out that it was, there was no monetary consideration to us for the loss of that market value as the result of that rezoning. And it did leave us with a single purpose land. About the same time as the zoning was taking place, the minimum flow legislation which had been enacted in the 1960's commenced to be enforced on the Tualatin River; had not been checked prior to that time, they did not feel the need for it, but I personally had made a rather heavy investment in irrigation equipment and had planned the farm equipment around that farm equipment prior to the time this started to being enforced.

The rights that I have and that some of these others have are now junior to that, to that legislation for minimum flow, and consequently the flow of that river reaches that minimum stage that has been set usually some time during the month of June, according to the studies. And of course, this is about the time that we really start needing that water to take care of the crops, and we sometimes have 90 to 100 degree periods of time in that particular area when we don't, did not have appreciable rainfall.

We are presently not in a Tualatin Irrigation District. We are below it. I do notice on the charts on the wall that under the phase 2 we would be included in that water district. All of the people that I am representing today are strongly enthusiastic for any type of development, this phase 2 program, we are very much in favor of that or any other type of development that, that would provide water and flood control along the Tualatin River. We think that agriculture is going to have to have additional water in order to survive. We also favor, of course, the flood control and the recreational and wildlife benefits that would result from this phase 2 project. However, we don't think this project should be the only consideration. The, we feel for, that we need channel clearance in the Tualatin River, we feel we need it desperately. There have been many mud slides and trees have fallen across the river and around my particular bend in the river, it was clogged completely for a period of time last year. And finally an enthusiastic boater brought a chain saw along and cut his way through, but I think that's typical of that river pretty much all up and down it. It's been accumulating for a lot of years. Because of the clogged condition, I am sure it's causing additional erosion and slowing down the, the runoff and causing additional flooding.

We also think that serious consideration should be given to the construction of a low cost hydraulic dam at the lower end of this river. This would be somewhere perhaps in the vicinity of the present Iron Works Dam, that I am not in a position really to appoint a location for. This would be a dam that could be lowered to the river bed, perhaps in the winter months and allow total runoff; could be raised in the late spring to store the later spring runoff and provide a full channel of water to use at the time that the flow of the river reached the minimum. And I am no engineer but I have made some rough calculations and I assure you they are rough, but I would guess that would provide somewhere around 20 miles of channel storage. It would probably exceed 100 feet in width, and if it could be raised to a depth of 6 feet over the normal channel level in the dry summer months, that should provide around 1,800 or around 1,500 acres of, of water that would be available for irrigation. It would not cover any present farmlands. It would provide, I think it would enhance the recreational benefits of the river and it should enhance the wildlife habitat.

Once again all I am asking is that this be given serious consideration. It may not prove feasible, but we would appreciate someone really and truly looking at it. I have one other comment. There has been some previous discussion on channel straightening of the Tualatin River, and our group and I guess many others feel the same way, that we don't feel there's real benefit to channel clearance. I think it would be detrimental to recreational and environmental causes. I can't see that it would benefit flood control nearly so much as the proposed channel clearance.

Senator Hatfield, I thank you very much for the opportunity to attend this hearing.

Senator HATFIELD. Thank you very much for being here, Mr. Mal-lory. Nice to hear from you.

Mr. Gordon Whitehead.

Mr. WHITEHEAD. I will wait a few minutes while my friend puts up a map that I have prepared for this testimony.

Senator HATFIELD. Why don't you proceed and give us your address?

STATEMENT OF GORDON WHITEHEAD, PORTLAND, OREG.

Mr. WHITEHEAD. My name is Gordon Whitehead and I live at 238 SE 88th Avenue in Portland. I have an interest in recreation, especially through my work with the Portland Bicycle Advisory Committee. In that regard, I'd like to speak to the issue of recreation concerning phase 2. The preliminary recreation plan for phase 2 lists additional picnicking, swimming, hiking, wading, fishing, boating, sightseeing and driving for pleasure and camping within the Tualatin subbasin as provided needs for the area. I would also like to add that since that study came out, bicycling has taken a leading position among those forms of recreation. In short, as I see it, the Tualatin subbasin needs virtually all kinds of recreational facilities, and there are several reasons why I think the Gaston Dam is not the means by which these recreational needs can be met.

First of all, why should we go to so much effort and expense for slack water recreation? It seems to me that all the choices listed above, that this is the poorest one to encourage. Powerboating which would be the main recreational use of the reservoir is a highly consumptive activity. This is the time that we need to discourage the waste of our precious oil resources. Also, powerboats make the area less attractive to other forms of recreation. If you ever have swum in a lake that has a high density of powerboats, you might realize that it's kind of more like siphoning gasoline than it is like swimming, not to mention the fact that you might get run over. It seems odd to me that expensive dams should be planned when all the listed forms of recreation except boating could be provided for without a dam.

Due to drawdown for water quality and water irrigation of farms, much recreational value of the dam would be greatly diminished. As I see it, during peak periods, the maximum mud flat area of 905 acres, that's the brown area on the map over there, there would be a, as compared to 1,240 acres of lake. Therefore, roughly two-fifths of the lake area are mud flats, hardly conducive to recreation, certainly not pleasant for lakeshore recreational activities.

Since it's no longer, as I have heard earlier in the testimony, it's no longer financially feasible to raise fish in the reservoir, I have heard that, that VOB has changed its tune several times as to the minimum, the minimum pool that, that will be of use for recreation, and that it may well be instead of the 1,240 acres of lake at a minimum, and 905 acres of mudflat, it may be as much as 1,340 acres of flat compared to 660 acres of lake surface. That's, that would mean that the blue area in, on the map that I have up would be reduced by roughly half.

Most of the area I think would be the upper part of the lake, so there'd be a pool extending from about half-way down the blue area to the dam that would be useful for recreation. That's, that's two-thirds of the area that's mudflat and one-third of the area lake. In, in that regard, I think that most recreational activities would be better off without the dam and the lake. The dam is expensive, it destroys

farmland, it will displace nearly 200 people from their homes, and the only recreational opportunity is provided for boating. That just doesn't make sense, and I just don't see why we have to displace people and needed farmland for that. There are many other types of recreation which would supply what I would, would feel would be of much greater benefit and no disruption for that amount of money.

It's \$80 million, is that correct, approximately? I work with the Portland Bicycle Advisory Committee and they are concerned with bike paths, and I have watched the volunteers—these are people who, who give their time—they are not hired planners—struggle with providing cycling facilities with a \$45,000 a year budget. At \$50,000 a mile, they can't even think of actually making a bicycle trail. Yet \$80 million would pay construction costs from scratch for 1,600 miles of class 1 trails.

Bike, let's see, bike trails through the Patton Valley would just fit in beautifully with the setting. I can't think of a better place to go bicycling. And I don't know, I understand now that money goes somewhere like this for recreation that, that is such, so much more consumptive and much more destructive. What I am saying is that recreation isn't as expensive as this project would indicate. It's dams that are expensive. Much of the downstream recreation planned for the project depends on improving the water quality of the Tualatin. This water quality improvement would be accomplished by using about 52 percent of the storage capacity of the reservoir to flush pollution out of the Tualatin and into the Willamette. This is not water quality improvement as I see it, it is simply passing the buck and the result is diminished environmental quality. Being in the Willamette, the Columbia, or the ocean at the mouth of the Columbia, that pollution is doing us all harm. Here again, the problem should be attacked directly by excluding the expensive construction of a dam and putting the money into a program that will really clean up the Tualatin.

That man mentioned compost toilets. That \$80 million would buy 160,000 compost toilets for this area. Some programs should go a long way toward recreational enhancement of the area downstream from the Patton Valley, from the Patton Valley Dam. Moreover, actual downstream facilities would only cost, that is, recreational facilities as they have been planned would only cost \$500,000 to \$600,000. That's less than the total project, so their installation should be no problem.

Anyway, in summary, I don't believe that the building of the Gaston Dam would in any way benefit recreation as a whole, or would it provide a real cure for water problems. These, according to what I have been told, the figures earlier in use of their justification for the project, I don't know how their figures got changed around, but they are at least one of the primary reasons for the project's implementation.

In short, it seems that the only real justification for the dam is based on a, on the obsolete idea of progress, as I see it, which bases future needs on unremedied exponential growth and population increase. Real problems I think should involve improvement of the quality of life for people who already live here and in this area rather than displacing families who are here in order to prepare for people who may or may not come in the future.

Senator HATFIELD. Thank you very much, Mr. Whitehead.
Mrs. Cathleen Carroll.

STATEMENT OF CATHLEEN CARROLL, GASTON, OREG.

Mrs. CARROLL. I represent the senior citizens. I live on, I am Cathleen Carroll, I live at route 3, box 44, Gaston, and this is the reason why we oppose the Gaston Dam. No. 1, we are taking thousands of acres of productive land that grows food. Two, taking taxable land valued, value off the tax rolls, thus increasing the taxes of the remaining property owners. Three, making a short, shortage of small acreage residences for the senior citizens in their retirement years and we have a 38-acre minimum land use plan in this area to retain farm land. This acreage requirement makes it impossible for us to resettle in the Gaston area. Four, forces a changing lifestyle on our country living as many senior citizens grow much of their fruits and vegetables to help with their living expenses because of a limited income. Five, disturbing 150 families, many of them are senior citizens, so others can have motorboating and recreation. Six, payment received on the condemnation will not enable us to replace our homes as payment is based on the low market value rather than on the current replacement value. Seven, now I represent many of the senior citizens in this area. We are all encouraged to stay in our homes and environment for health and family reasons. How can we when they take our homes? Some of these projects are more interested in the fish and the wildlife than they are in the people. The Bureau of Recreation and the Fish and Wildlife Department have reserved 1,550 acres of land for the, for this purpose and has made no plans for us. The only answer the Bureau of Reclamation gives is we would have to change the way we want to live.

Now, we know that water conservation is necessary, but please consider another site for the dam that will not disrupt so many lives and flood all of our farmland, and thank you very much.

Senator HATFIELD. You have set a high standard for all the other witnesses to state their cases co concisely and stay within the time frame.

Ms. Alita Pearl.

STATEMENT OF ALITA PEARL, MEMBER, BUREAU OF RECLAMATION ENVIRONMENTAL QUALITY EVALUATION TEAM

Ms. PEARL. My testimony is in the form of a information packet that you have there. I will just read the cover letter that will be going with it.

Senator HATFIELD. Thank you, Ms. Pearl.

Ms. PEARL. I have been a member of the Bureau of Reclamation's Environmental Quality Evaluation Team since the beginning of this year. The team has spent several months doing environmental impact evaluation on the three dam sites supplied to us by the Bureau of Reclamation. Since Gaston No. 1 was the least desirable in the majority of categories, I feel it only fair that maps of these alternatives and our evaluation sheets be included in this hearing. This is my testimony that the Gaston site No. 1 is not the best dam site in Patton Valley and therefore is not a sound plan to support. I am not against a local water project but good sound planning, including consultation with local officials, is a must. Thank you.

Senator HATFIELD. Just one moment, Ms. Pearl. I am not sure that we can reproduce this particular kind of map in the actual printed

record. What we can do is to certainly make it a part of the working record that we have for the committee. But this type of thing we have found in the past does not reproduce well in the printed record. So, I wanted to assure you that all your statistical data will be included and the maps if they can be reproduced will be also, but technical problems may prevent us. We just don't know.

Ms. PEARL. But they are supplied by the Bureau, you can get the information from them.

Senator HATFIELD. But we will make them part of our working record. I want to thank you very much for being here today.

Reverend D. S. Kime.

STATEMENT OF REV. D. S. KIME, GASTON, OREG.

Reverend KIME. When the shoe pinches is when a person begins to holler. Just received information from Representative Les AuCoin that Tualatin Project No. 2 will be discussed on April 23, 1976, at Forest Grove, giving residents an opportunity to express one's desire or rejection of phase 2.

I for one, among many, do not approve of the project as now planned. The "take" line encompasses my home which I have built up since 1952 for retirement and as others have done, more in seclusion, yet only a few feet beyond the Gaston city limits. My spirit is more than a little disturbed as I think of trying to locate in another locality, building a new home in liking to our desires with the environment such as we have here.

The newspapers and magazines which we read express the idea of survival in a few years to come. Personally, I don't think phase 2 is compatible with our needs. We take excellent farm land which is productive to create a place for pleasure, game reserves, in localities which are well settled and producing, and discommode many families from their homes as this lake will do. If the need of water is the imperative goal or need, I am in harmony with that idea, but that can be accomplished in good order by going back up the Tualatin where the water is also plentiful.

Just called the Washington County courthouse in Hillsboro and Mr. Lambert gave me this information concerning the area that will be inundated if the lower dam is approved. The lower dam will cover 4,500 acres. The News Times of Forest Grove gave this information under this caption, "Social Assessment Study for Tualatin Phase Two," found in that paper volume 91, No. 45, Forest Grove, Oreg., April 8, 1976, that phase 2 would supply water for approximately 7,500 acres.

Putting these two figures together, we come to these conclusions; 7,500 less 4,500 equals 3,000 acres gain with the approval of the lower dam. 7,500 plus 4,500 equals 12,000 acres gained by moving the dam above the cultivated portion of Patton Valley upstream. Very sincerely—

Senator HATFIELD. Thank you very much, Reverend Kime.

Mr. Kent Hutchinson.

STATEMENT OF KENT HUTCHINSON, FOREST GROVE, OREG.

Mr. HUTCHINSON. Senate bill 2301 authorizes \$78 million for a water project on the Tualatin River. It does not—

Senator HATFIELD. Excuse me for interrupting, but we don't have your address. Would you please give it to the reporter?

Mr. HUTCHINSON. My address is Route 1, Box 28-A, Forest Grove, Oreg. It does not, however, specify a site for the dam, the dam which is to be built. The site now being studied by the Bureau of Reclamation is in my judgment the least preferable for Washington County of the four possible sites which the BOR has been made aware. In my following remarks I will present the reasons that this is the case.

I wish to say at the outset that as a farmer in this county, I support a water project on the Tualatin River. I am unable, however, to support any project which cannot demonstrate sound land use planning and well-designed economic foundation. I believe that these prerequisites are lacking in the Gaston site 1 project. Washington County now possesses no plan for repayment of its 50 percent share of the \$78 million in the project costs. This aspect in itself argues for immediate halt and further planning until a sound financial plan is completed.

Further, I do not believe that the site supported by the BOR is the best possible for this project for a number of reasons. First, the proposed Gaston 1 site as described by the BOR will remove from private ownership approximately 6,300 acres of land, and will thereby reduce the amount of taxable land in Washington County. This reduction of land, this reduction of the land base will affect the county in several respects.

Second, the land lost as a result of the dam placement at Gaston 1 site, the reservoir, recreation area and wildlife management area will remove forever several thousand acres of prime farmland from Washington County. And, finally, I believe there will be evidence as to this committee that the investigation of the two proposed other sites, Mount Richland and Cherry Grove, is essential before a final decision with regard to dam placement is made. I believe that I can demonstrate for this committee that in a number of respects the upper two sites will provide ample water use advantages for water counting while at the same time circumventing the disadvantages inherent to Gaston 1 site.

I will further propose for the committee's consideration the placement of the dam at the Cherry Grove site for reasons which I will later outline. I will address myself first to loss of tax base which will result from the dam placement at Gaston 1 which is located in the entrance to Patton Valley. Land loss in the reservoir, recreation, and wildlife management area will result in a total loss to Washington County of \$8,000 a year in property taxes. This means over a 50-year period the loss to Washington County will amount to \$4 million. There's additional losses to the county. Over 3,800 acres of prime farmland will be taken should the proposed damsite at Gaston be considered. Obviously, of course, there is the loss of crop and livestock production resulting from the removal of these lands.

Equally significant to the community, however, is the loss of business to the firms in Washington County which supply goods and

services to these farms. Approximately three-quarters of a million dollars in such goods and services will be lost really to community business. Consider this, too, in the light that of the fact that these same businesses will be burdened with higher taxes as a result of the already shrunken tax base. Further to be considered is the fact that numerous farmers will be unable to relocate in Washington County because there is simply not the remaining farmland for sale. And by the same token, it is highly likely that some of the businesses who will be suffering significant losses will also be forced to relocate, again not in Washington County.

Finally, it is important to be aware of the number of jobs which will be lost by persons who are currently employed in these businesses and also local crop and livestock processing facilities.

Suggestion: The second major issue which I will deal with regards the loss of prime farmland which will result from the placement of the dam at the Gaston site 1. Nearly all agricultural land which will be lost is of prime quality, intensely and well managed. At present about half, half of it is irrigated and most of the remaining will be irrigated as further stages of the Scoggins Valley project are completed. Most of these lands have good drainage due to installation of drainage systems. The irrevocable loss of such land as the result of dam placement in Gaston 1 site would, in years to come, clearly represent not only an economic loss but an incalculable environmental loss to Washington County.

It should be noted as well that the location of the project in Gaston site 1 would run counter to Washington County's land use plan, one of the prime objectives of which is to preserve prime agricultural land.

Consider then the numerous disadvantages of Gaston site 1: Loss of taxable land, loss to the business community, loss of jobs, elimination of prime farmland and impracticalities of the site itself are respectfully recommended to this community that it support a thorough investigation of Mount Richland and Cherry Grove sites for the proposed Tualatin River project.

It should be noted also in this regard that the environmental quality team which was charged with the evaluating process of Gaston 1 site refused to do so until three other sites could be evaluated as well. When this occurred, each of the upper sites generally received higher ratings in all areas than did the Gaston 1 site.

Finally, I particularly wish to stress that I believe, what I believe to be advantages of dam placement at either of the two upper sites, Mt. Richland, or Cherry Grove. I believe that this committee will discover that in practically all the aforementioned area site, these offer both significant benefits to Washington County in provision of water for agricultural, industrial, recreational uses, while at the same time involve less economic and environmental disruption. The Mt. Richland site would use—site would use 40 percent less land than the Gaston 1 site. Cherry Grove site would use 60 percent less land than the Gaston 1 site and would involve the loss of no prime farmland while displacing the fewest families. Both sites would involve the significantly smaller impact on the Washington County tax base. It is for these reasons, gentlemen, that I respectfully urge this committee to instruct the Bureau of Reclamation to study in depth other possible sites for the Tualatin River project phase 2 and to present their findings for the

consideration of the site selection committee which will be made up of persons directly affected: farmers, land owners, Tualatin Valley Irrigation District, Washington County Planning and Wildlife Agency and other interested parties. Thank you.

Senator HATFIELD. Thank you very much, Mr. Hutchinson.
Mr. Clifford Perry.

STATEMENT OF CLIFFORD PERRY, GASTON, OREG.

Mr. PERRY. My name is Clifford Perry, my address is route 1, box 311, Gaston. Much of what I plan to say has already been made today and I am very glad to hear that it has. I will make it briefer than it was. I have also been a member of the environmental quality team that you have already heard mentioned several times today, and I have been concerned that, that what has been said at these environmental quality team meetings, I have been hoping that they, it would come out today and so I am here, so I am glad to hear that other members have come and made statements about what has been happening here. We have been considering the environmental quality of two reservoir projects located at two other sites and what the—well, the—building the reservoir at the lower Gaston site, of course. These two sites have been mentioned and there are maps up of them and you now have maps of the Gaston No. 3 and the Cherry Grove site. It has been the consensus of the environmental quality team members that the Mt. Richland and Cherry Grove site would probably have, in each instance, considerably less adverse impact than with the lower Gaston site.

Even though the two upper sites may be in many ways environmentally superior, they never would have been even considered had not the environmental quality team resisted the Bureau of Reclamation's suggestion that they evaluate only the lower Gaston site. The environmental quality team fortunately requested information on alternative sites, though this optimal site could be determined, it was only under the pressure of the environmental quality team that the Bureau of Reclamation has made up these maps that you now have copies of and generated some data on the Mt. Richland-Cherry Grove site to enable the environmental quality team to evaluate them as well. As you have heard, the major difference between the three possible sites is the amount of good value farmland inundated by each project.

A dam at Mt. Richland would inundate considerably less than one at lower Gaston; furthermore, one at Cherry Grove would inundate virtually none of the good land on the floor of the Patton Valley. Our farmland is one of our most important natural resources, and it's a poor trade when we decide to save money on construction costs at the expense of several thousand acres of farmland.

Farmland has value to us, far beyond its present market value and computations of the overall costs of the reservoir project should reflect that. Another advantage of the Cherry Grove site is that a dam built there would displace the least number of people. Once again, this has value again beyond the simple monetary saving involved, having to buy fewer houses, in disturbing fewer people's lives.

During the environmental evaluation process, I have learned that the Bureau of Reclamation had not investigated in any degree any of the other alternative dam sites within Patton Valley before arriving at

their choice of the lower Gaston site. The Bureau of Reclamation wasn't willing to secure much additional information on the upper sites. The Bureau is committed to their choice on the lower Gaston site. I am very glad to hear now the money is being asked for to study those other sites. The sites, from reading the Bureau of Reclamation's site study at that time, appear that the original selection of the lower Gaston site or the Mt. Richland-Cherry Grove was based upon the amount of fill needed to build the dam; the site requiring the less amount of earth in order to back up 119 acre-feet of water was chosen. That kind of narrow focus is much too limited to deal with today's complex problems. It is possible that placing the dam in Mt. Richland or Cherry Grove greatly lessens the adverse economic, social, and environmental impacts of the project, but still providing the same benefits, so it is imperative that the Mt. Richland-Cherry Grove be investigated to the same degrees as the Gaston No. 1 site in order to identify the optimum site to comply with State and local land use goals and policies.

I have heard today that the Bureau of Reclamation is recommending a wildlife management area of 500 acres. Now, I know this differs from other wildlife management areas I have heard mentioned that the Fish and Wildlife Service is proposing. And I wonder if there might be, if it's possible that you could ask someone from the Fish and Wildlife Service to explain the difference.

Senator HATFIELD. They are here so we can ask the question. We can get the question answered for the record.

Mr. PERRY. OK. But, you don't want to express them now?

Senator HATFIELD. Well, I'd rather not at this point.

Mr. PERRY. Fine. I would like to point out that I would like questions asked of them because I am not sure I am correct on this, and that is, what the impact would be and what the compensation needed for the, would be for the upper sites because, of course, they'd only be able to estimate at this time, not having fully studied it, but I think that would be important.

Senator HATFIELD. Such questions that have been raised by you and other witnesses will be propounded to the agency most directly concerned.

Mr. PERRY. I believe it's true that if the lower Gaston site were used, we can only protect wildlife resources at the expense of the private owner because the land flooded by the dam is fertile by the dam is fertile farmland that is of a type of wildlife habitat that can only be replaced by buying more fertile farmland. So this is why the proposed fish and wildlife management areas are below fertile farmlands along the river below the damsite.

Now, if you take the Cherry Grove site, this is another reason why it is preferable. The land involved and acquired for the dam is steep ridge mountain-type timberland area, and so that the land needed for wildlife compensation would be of the same type and similar habitat and you wouldn't need to take out good farmland for, good fertile farm on the bottom of Patton Valley for your wildlife compensation area.

For concluding my statement, I'd like to briefly point out that the environmental quality projects that any large project in the valley, whether at the lower Gaston, Mount Richland, or Cherry

Grove site, contributes to the deterioration of the future environment several ways. In comparing the future without the project verses the future with the project, the future with a project was given a low environmental quality rating as far as land, air, and sound quality, areas of natural beauty, open space, and greenbelt and historical and archaeological resources. The reasons for the projected deterioration were many. They included the influx of large concentrations of people and motorboats in one area, the permanent flooding of natural historical and archaeological resources, the extended mudflats created in the fall and as you can see on that map there and the pressure created by any other project to try to cause rezoning of areas and abandoning of land-use plans.

In conclusion I have serious doubts as to the advisability of building any dam in the Patton Valley. Furthermore, I am convinced that if the dam must be built, the Bureau of Reclamation has chosen the wrong site for it. The Cherry Grove and Mount Richland area appear very clearly from the environmental standpoint more preferable from a social and economic standpoint but up until now no one has studied them sufficiently to make that determination. So I am glad to hear that they will be studied. I hope it will be sufficiently.

Senator HATFIELD. Thank you very much, Mr. Perry.

Dr. Peter Bours.

STATEMENT OF DR. PETER BOURS, FOREST GROVE, OREG.

Dr. BOURS. I just have an oral statement, too. My business address is 2011 Cedar Street in Forest Grove and my home address is Route 1, Box 240, Forest Grove. I can't, it just doesn't make sense to me, most of the things I have heard. I won't really say very much—I can't understand why there is any point at all in building this dam for agricultural use. You are giving up an equal number of agricultural acres. Much of what isn't irrigated, some further down the stream for municipal and industrial uses—well, those aren't for the benefit of this area. That's for the benefit of Beaverton and Tigard and places further on. They have nothing to do with us out here, and why should we pay the price of giving up farmland, homes, natural beauty of this area to further wreck Tigard and Beaverton.

And for recreational uses, that doesn't make sense, either. Anybody in this area who doesn't have enough things to do with the recreational time already has got to have something wrong with them. Maybe the recreational uses that have been discussed are so that the people from Portland can bring their motorboats out here and clog up our roads on weekends and put gas slicks all over the water and leave all their litter out here, but not for the recreational benefit to us out in this area.

For my own purposes, I'd much rather ride bicycles through the Patton Valley as it presently stands than have to look at those mudflats. I mean, that's not going to be a very nice place to ride a bicycle if the dam goes through.

In summary, like a lot of people around here I moved in this area because I chose to live in a rural setting, in an area where natural beauty still does exist and where efforts are being made to preserve it.

I don't want to see this area turn into another Beaverton or Tigard. I want it to stay like it is now.

Sentor HATFIELD. Thank you very much. We have now completed one-half of our witness list, and in due deference to our good reporter, we shall declare a 10-minute recess.

[Whereupon, a recess was taken.]

Senator HATFIELD. The hearing will please come to order.

I'd like to invite Mr. Harold Meyer. Mr. Meyer, we are happy to hear from you.

STATEMENT OF HAROLD MEYER, PROFESSIONAL REAL ESTATE APPRAISER, HILLSBORO, OREG.

Mr. MEYER. Senator Hatfield, for the record my residence address is 406 Skyline in Forest Grove. My business address is 131 S. First Avenue in Hillsboro, Oreg. I have been a resident of the Tualatin Valley and Washington County for 57 years, and was raised on a dairy farm in that, in this area. I am a member and designated member of three national appraisal associations dealing with real estate and land value, and in that capacity my work has taken me over perhaps a third to a half of the farms in this county plus a great deal of the urban area of the county. I have been and am a member of the Washington County Planning Commission for 4 years. I was chairman for 2 years. However, I wish to speak and emphasize this, that I speak strictly as an individual person.

Now, my experience and study in my occupation indicates that the augmentation of the supply of water to this county is vital to the economy of the county. I became interested in the Tualatin project in the 1950's. And I was on the original committee working with the late Mr. Hagg and others who went around the county promoting the project. This county grew in the decades from 1960 to 1970 at a compounded annual growth rate of 5.5 percent per annum. It is now growing in the area of plus 3 percent. This growth can be expected to continue and with it an increased demand for water for all usage from agriculture to urban and to manufacturing.

With the present high price of wheat, water does not seem as important to some farmers as it will a little bit later on and it has, as it has in the past. Our low rainfall in the summer makes irrigation for intensive cropping which needs water necessary. There were approximately 6,000 acres on standby in the Tualatin phase No. 1 who could not get water after the project was completed. This project will provide water for another 7,500 acres and contrary to some of the testimony you have heard, much of this will be a net gain. Statistical data on this will be given by an agricultural expert, Mr. Palmer Torvend, who's county agent in this county for many years. I am not attempting to go into that field myself.

This county is presently, other than this dam, dependent almost entirely on Bull Run water owned by the city of Portland for domestic and manufacturing purposes. As the city of Portland grows eastward toward Gresham and toward the source of their water supply, it just seems logical that they will reduce the amount of water that they will allow to flow into Washington County. From the adoption of the comprehensive framework plan in 1973, we have the basis for land use for

a balanced agricultural and industrial economy together with the basis for a population growth nearing 350, the 350,000 mark in the year 2000. Nothing can be done without adequate water. Water is vital to the maintenance of life and to the maintenance of industry; thus I continue to support Tualatin phase 2, the Tualatin project phase.

Location of the dam is an engineering decision best left to those experts. I do know the so-called Patton Valley, the site of the reservoir which is the present location of this project from first-hand inspection over the years, and it's my personal opinion that only the Mt. Richland location or the location presently proposed is feasible. The location at Cherry Grove is economically and physically unfeasible in my opinion because of all kinds of engineering and topographical difficulties.

The Tualatin River is best known for its annual floods but not best known or known for its annual floods. This project as presently outlined would aid in reducing the frequency of flooding up to the 25-year frequency. I wholeheartedly support the Tualatin project and urge Congress not to lay the bill aside but to enact legislation authorizing the project. I thank you for your attention.

Senator HATFIELD. Thank you, Mr. Meyer.

Mrs. Martha Carroll.

STATEMENT OF MARTHA CARROLL, GASTON, OREG.

Mrs. CARROLL. Senator Hatfield, my name is Martha Carroll, Route 3, Box 44-D, Gaston. My presentation here today is on behalf of the people living in the valley itself. I have for you petitions signed by areas colored in green and also petitioners supporting the opposition to this project at Gaston site 1. They are signatures of the local people from the Laurelwood community outside the take line. That green area on the map indicates farmers, any citizen living, owning or operating property that do oppose the site No. 1. We wish to enter into your committee records and I would like to say that that would cover just about 95 percent of the area within the take line of, based on the acreage. That's a guess on my part. But, we feel the citizens of this community have not been accorded the opportunity to participate in open discussions or evaluation of any alternate site as is required under the principles and standards set forth by the water resources council.

Therefore, the citizens of this community would like to go on record to request that no funding be approved by Congress for phase 2 project, Senate bill 2301, until we have had an opportunity to discuss alternatives, since this project, a project of this size will have an overall reflection on the quality of the life we now hold.

Senator HATFIELD. I would assure you, Mrs. Carroll, there'll be no decision made on S. 2301 until all such matters have been cleared up and everyone has had an opportunity to fully participate, not only in this hearing but in the selection of alternative sites when additional reports and material are available.

Mrs. CARROLL. Yes. You made that clear earlier, Senator. Thank you.

Senator HATFIELD. Thank you, Mrs. Carroll.

Palmer Torvend? Now, Mr. Torvend, we have your printed statement here and you may proceed to highlight or summarize as you choose.

STATEMENT OF PALMER S. TORVEND, MANAGER, TUALATIN
VALLEY IRRIGATION DISTRICT

MR. TORVEND. I will assure you, Mr. Chairman, I will highlight it. And I would like to speak as one who has lived in the Tualatin Valley for 39 years, and 34 of which have served as county extension agent working with the farmers of this area. Water was the problem long before I came here. The first studies were made back when a grant was secured by Senator McNary to study the flood problems of this area back in 1934, and since that time there has been four other major studies of the Tualatin Basin, two of them who incorporated irrigation as well as flood control, and the earlier ones that incorporated primarily flood control and channel improvement and clearance.

These studies are all done by competent engineers of the Corps of Engineers, the Bureau of Reclamation and one private engineering firm. And sites for reservoirs, some 27 of them have been considered in this valley. It wasn't until local people found out the cost of any project that would be of significant benefit was beyond what the local people could pay that they went to the Federal Government for assistance.

In my earlier experience in water work in this county, I did have extensive experience in areas such as drainage, domestic water supplies, irrigation and flood control and erosion. Irrigation started in the early 1940's as a coming enterprise on many farms, but it wasn't until after World War II that irrigation expanded tremendously with the invasion of aluminum sprinkler pipe which much more efficiently used the limited supply of water available from the natural flows in the Tualatin Valley. I might also comment that someone was speaking about the wonderful land in the Patton Valley. It kind of reminds me of the farm I grew up on in the Willamette Valley. I had been gone for about 30 years away from there, then came back and then it was a small farm that would really have difficulty in providing a family living. I might say in Patton Valley there are 20 less growing days per crop than in Sherwood, from which you also heard testimony today.

I believe that the reason we should consider authorization of a project in the very early future are these points: That it would make possible the continuation of viable agriculture that has many alternatives and avoid the problems of crop failure that have happened for crops that many times cannot be grown without irrigation in years when we have a short water supply. That fits in with a county land use plan as I am sure you have heard two, three times already, and I disagree with those who said it would lose jobs.

Experience in every irrigation project that has ever been developed is that it increased jobs, not only in agriculture but in agriculturally related business. The reduction of damage from the annual flooding not only affects farmers but it affects the public in that we have to rebuild roads and bridges with public funds, the road funds that are badly needed for roads. The quality of the water in the Tualatin River is affected by a lot of things and erosion is one of them. The upper third to half of the Patton Valley where the best soil is located is subject to annual erosion. This erosion plugs up the stream even as nearby as just below Gaston and continues to plug up the stream from there on

down, and every log jam and hindrance in the flow. This water quality is affected also in the, in terms of this fine silt that will make it much more expensive for M and I water to be cleaned up until the project is built that eliminates this erosion.

And now, analysis of the soil types, and I am using the latest figures the Bureau has given us. Of the 4,000, 620 acres consisting of five major types, that's as classified by the U.S. Soil Conservation Service, only one of the types is with minimum problems except for this erosion, and that's the most serious problem. The others had drainage problems, eggshell loam soil and are not the top quality soils of Tualatin Valley as classified by soil experts.

I might also say that on record with the Oregon Department of Water Resources are natural flow water rights in the Patton Valley for 696 acres. And that's land that on many years the water master has had to shut off pumping because of shortage, so that there are even years when less than 10 percent of that land could depend on that natural flow to irrigate those 696 acres. That approximately 1,870 acres are classified as being in pasture and other dry land crops. The rest of the valley is surrounded by moderately to steep rock slopes which, even by forest service standards of the proposed reservoir, are not of high forest land value. This amounts to 1330 acres. Roads and buildings occupy 145 acres, the river itself occupies 46 wetlands, 40, and then there are 500 acres outside the reservoir that's proposed for wildlife management. The 7,500 acres that are considered in the project I believe are the minimum that will be considered, because the interest in the irrigation and the opportunity to improve the district—valley farmers transport water on a cooperative basis from the river—is going to encourage that type of use. Tualatin Valley Irrigation District was established by vote of the people in 1962, and that district is prepared to negotiate a contract with the U.S. Government for irrigation water when it becomes available.

Positive action will divert serious problems for building except for those that are living in the valley themselves and I can understand their concern. Thank you.

Senator HATFIELD. Thank you very much, Mr. Torvend, for your succinct excellent statement.

[The prepared statement of Mr. Torvend follows:]

STATEMENT OF PALMER S. TORVEND, MANAGER, TUALATIN VALLEY IRRIGATION DISTRICT

Thank you Mr. Chairman and honorable members of the committee for this opportunity to speak in support of the second phase water resources development of the Tualatin project.

Water problems have been apparent to residents of the Tualatin Valley for many years. Originally most consideration was centered around the problems of drainage and winter flooding. According to records in the Courthouse, in 1934 a group of farmers in the Banks area organized in an effort to try to get something done to prevent the serious flooding and drainage problems in their general area.

The County Court employed a Portland engineering firm to make a study of what was needed. When the farmers were informed of the scope of the project, they felt it was too large for their small group of individuals alone. As a result they went to the Federal Government for assistance. Through efforts of this group an appropriation for a thorough study of the problem was obtained through Senator McNary. This study was done by the Corp of Engineers and encompassed the entire drainage basin of the Tualatin Valley. Since that time addi-

tional studies have been made by the Corps. The last detailed one having been completed in 1949. These studies included feasibility analysis of all possible reservoir sites available in the Tualatin system.

The Corp's report indicated in 1949 that Patton Valley was the best site from the standpoint of flood control because of the volume of water coming from the valleys, (approximately 140,000 acre feet run-off per year). Approximately half of that project also included straightening the Tualatin River channel and lining a portion with concrete. For this reason, people who owned property along the rivers did not give it the support necessary for authorization.

My experience in working with water problems in the County began in 1939. I have had extensive experience in working with farmers and agribusiness people in the areas of drainage, domestic water supplies, irrigation and flood control, and erosion.

A limited amount of flood irrigation was practiced in the County from the early 1900's until the early 1940's. After World War II a major expansion took place in the field of irrigation.

The introduction of aluminum pipe and sprinkler irrigation were ingredients that fitted irrigation to small and irregular shaped farms of the Tualatin Valley. By the early 1960's, farmers in the valley had filed with the State Water Resources Department water right applications to irrigate about 35,000 acres. The primary source of these water right permits was the Tualatin and its tributaries from natural flows. A very small percentage can be irrigated from wells which are experiencing the problem of a lowering of the ground water table, and a limited number of acres from small farm ponds. On a low water year such as may occur on the average of once every five years, there is sufficient natural flow water available to adequately irrigate around 1,000 acres during the last part of July and August.

Scoggins Dam Phase I is supplying water to a little more than a third of the farmers who have natural stream flow rights which are not good enough to guarantee a crop. Approximately 10,000 acres of new land will be supplied water once the first phase project is completed. We recognize that the cost of water will be affected by inflation along with everything else which is subject to such changes in our economy.

My major reasons for urging the early authorization of the project are as follows:

A. To make it possible to maintain a viable agricultural production from the excellent soils that lend themselves so well to irrigation in this valley, thereby providing an adequate income that will keep farmers on the land and production will bring new wealth to the entire area.

B. A multipurpose project providing for a wide variety of benefits to a much larger number of our people and, at less cost per benefit to each group than a single purpose project, thus improving the quality of living and life for a greater number of people.

C. Expanded irrigation fits in with the county's master land use plan by providing one of the essential ingredients that will help agriculture maintain the open spaces and still grow and produce crops which maximize yields, reduce the risk of crop failure, and promote shifting to higher value crops. See supplementary chart No. 1.

D. Additional water will create more jobs both on farms and in related agribusiness.

E. Phase II will reduce damage from annual flooding on farms and to public and private property, roads and bridges.

F. It will greatly improve the quality of water in the Tualatin River. It will also aid in greater propagation of fish and wildlife and make it a recreation area. See supplementary chart No. 2.

G. The Phase II reservoir would essentially eliminate a very serious stream bank erosion problem which affects approximately 3 miles of the 5 river miles of the channel. Soil deposits from this erosion leaves deposits which reduce the capacity of the channel further down the river. Deposits of fine silt are left on the banks so that every time the river rises it brings a new load of fine muddy water down stream. This is a problem for all water users and their equipment.

H. An analysis of the soil types and topographical characteristics of the 4,620 acres that are proposed to be involved in the project consists of five different soil types as classified by the Soil Conservation Service.

The highest quality soils are located in the same areas that are subject to serious erosion. A majority of the soil in these areas are below average quality of the county.

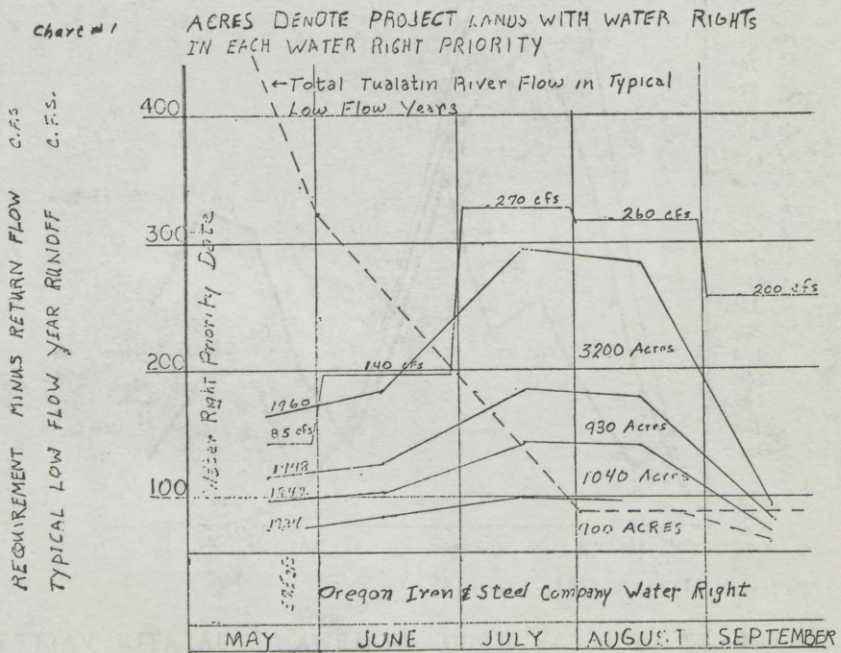
According to records of the Oregon Water Resources Department, water right permits for use of natural flows have been issued for 698 acres in this valley. More than half of these rights are subject to shut-down almost every year because of water shortage, and in low water years more than 90% will be effected.

Approximately 1,870 acres are classified as being in pasture and other dry land crops. The valley is surrounded by moderately to steep rocky slopes that by Forest Service standards are of low forestland value. This amounts to about 1,330 acres. Roads and buildings occupy 145 acres; the river 46; wetlands 40; about 500 acres outside the reservoir area are proposed for wildlife management. From the food producing capability the 7,500 to 8,000 acres or more of new land brought into irrigated agricultural crops in other areas of the valley where there are more stable soils will tremendously offset the lost production of the land which will be inundated.

I. The Tualatin Valley Irrigation District was established by election as a municipal corporation in 1962, and is prepared to negotiate a contract with the U.S. Government for any irrigation water that becomes available and to provide for the operation and maintenance necessary.

J. The citizens of Washington County who are inside the boundaries of the United Sewerage Agency District are supporting an investment in a new sewerage treatment facility that has a design capacity of over 42 million gallons per day. At a 1 to 5 gallon fresh water requirement, this alone would require 210 million gallons per day. Phase II will protect the investment that these citizens are making in sewerage treatment facilities.

K. The time to move forward is at hand. Positive action now will avert serious problems for consumers, farmers, and enhance the living of the people of this valley.

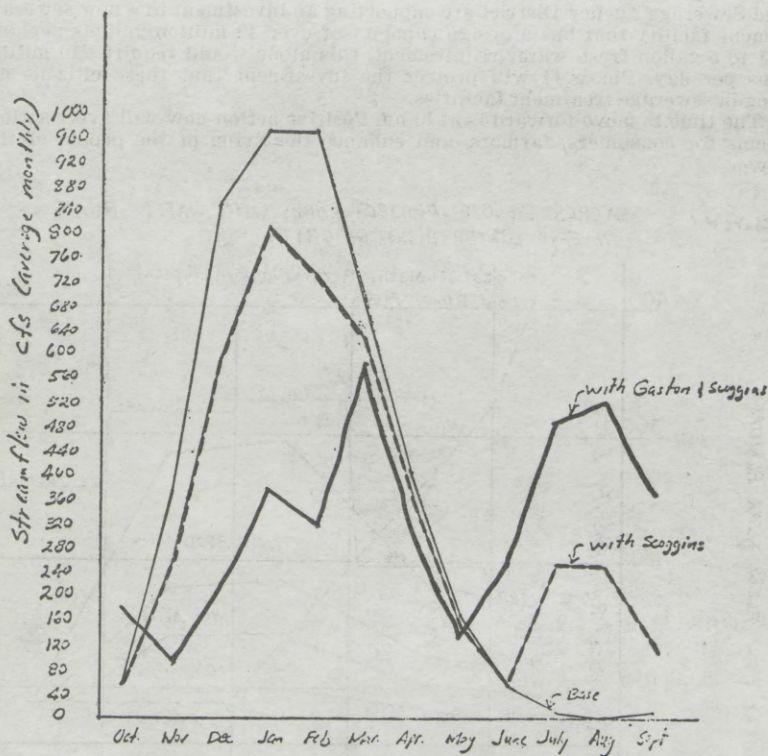


Bureau of Reclamation

Chart #2

BY <i>RJS</i>	DATE <i>12-4-75</i>	PROJECT <i>Tualatin Project Phase II</i>	SHEET <i>01</i>
CHKD BY	DATE	FEATURE <i>Channel Capacity Study</i>	
DETAILS <i>Flows at Dilley</i>			

<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>
(flows w/o any project)											
60	375	852	967	935	689	402	173	64	9	0	9
(flows with Scoggins)											
56	259	578	812	728	652	365	152	63	253	242	121
(flows with Scoggins & Gaston)											
180	86	215	377	315	583	310	142	252	487	521	367



Senator HATFIELD, Mr. Oscar Hagg.

STATEMENT OF OSCAR HAGG, CHAIRMAN, TUALATIN VALLEY IRRIGATION DISTRICT

Mr. HAGG. Thank you, Senator. I thank you for this opportunity to testify on behalf of the directors of the Tualatin Valley irrigation district of which I am chairman. I have also been a lifelong resident of the Tualatin Valley.

A resolution in support of the second phase of the Tualatin Valley irrigation district strongly supports the need for additional water storage facility in this area for these reasons:

1. A large number of farmers who cannot be served by phase 1, but who need irrigation water have signed applications for more than 14,000 acres of land which they have requested to be included in phase 2 feasibility study.

2. The irrigation district has on file a long waiting list of farmers who have requested to be on standby should any surplus water become available from phase 1. However, the district experiences to date has demonstrated that farmers who signed up even as long ago as late 1950 for phase 1, and will be served by it, are holding on to all the acreage that they had signed up, indicating that the interest in irrigated agriculture remains high. The minor adjustments that have been requested represent a very few acres. For practical reasons these standby people have also signed up for phase 2.

3. The annual flooding of farmland in the valley is a problem for 12,000 to 15,000 acres of land. It is not unusual for land to be flooded several times during the winter and serious damage is caused every year. This flooding limits the types of crops that can successfully be grown, causes erosion of good top soil, brings in much decaying logs and other debris, weed seeds, and leaches out soil fertility. The necessary land preparation for crop planting in the flood plain is also more expensive because of drainage and limited time factor for preparation. With a lower height of flood, especially in the spring, it would be of significant value to the farmers.

4. Agriculture is an annual new wealth producing industry which irrigation allows to be more diversified and economically sound. Irrigation is an important ingredient for preserving the family farm. The consensus is that it brings with it a number of other spinoff benefits such as the creation of more jobs, greater financial sources from which to support local, county, State, and Federal governmental services and functions for everyone. Irrigated agriculture is largely compatible with the multipurpose project concept.

by Congress. Passed this 13th day of April 1976 at a regular board meeting held at the district office in Forest Grove, Oreg.

I wish to call your attention to the names of the other four directors: Remi Coussens, who farms somewhere between 800 and 1,000 acres out north of Hillsboro. He is the vice chairman of this committee. He was born and raised in this county. Richard Peschka, who operates a large farm and seed-cleaning plant out north of Forest Grove here. Richard is a relatively young man, about 40 years old. I am sure he was born in this county; if not, he came at an early age. Curtis Ritchey, who operates a big farm just out west of Forest Grove here came here when he was a little boy about 3, 4 years old. He's worked for phase 1 for many, many years, and is interested in phase 2. And Dale McCulloch who came to us from California in about 1958 and has been very active in the phase 1, is now still on the board and is very much interested in phase 2.

So, I want to point out to you, Senator, there's a bunch of substantial citizens there, excepting myself, I will, I will except myself in this case, that are behind this project and very much interested. They have made a great contribution to Washington County.

Senator HATFIELD. Thank you very much.
Mr. Bob Santee.

**STATEMENT OF BOB SANTEE, ADMINISTRATIVE ENGINEER,
TIGARD WATER DISTRICT**

Mr. SANTEE. Senator Hatfield, I am Bob Santee, administrative engineer with the Tigard Water District. The Tigard Water District does not desire to take a position on where or if this dam should be built. We do take a position that some water impoundment is necessary in this coast range, whether that be McKay Dam or wherever it might be. We feel that the water needs of the county, particularly eastern Washington County are going to get so severe here in the future that we are going to need this impoundment. We in Tigard probably realize this more than others because we, over the others, have been the weather vane for the water shortages in the metropolitan area.

It was not until 5 years ago when we made application to the city of Portland for assistance from the Lake Oswego-Clackamas River source that we were able to survive the summer. For this reason we have taken an active role and a leadership role in attempting to develop new sources of water. If we take a look for a moment at what sources are available in eastern Washington County, first of all we have wells and the Clackamas River and the Bull Run. Those are the only three sources. Well water in the Bull Run-Crew Mountain area has, is very restricted because the Oregon State Engineer has declared this a critical ground water area. We have four wells in the Tigard Water District but they are on restricted pumping. And the more we build and the more blacktop that goes on the top, of course that means the water does not percolate down into the well so we can use more water. The Clackamas River's water rights already seek the amount of, of water that's actually in the river, and the city of Lake Oswego has advised us that they cannot supply the Tigard Water District after 1995, nor can they supply the city of Tualatin after 1995.

The last source and, of course, the biggest one is the Bull Run. Contrary to popular belief, the Bull Run source is not unlimited as Portland is finding out. The entity water districts and cities in the eastern Multnomah County, namely, Bull Creek Water District, city of Beaverton, West-Slope-Raleigh Hills, and Metzger Water Districts are solely dependent upon Bull Run water. By Oregon law they can only buy surplus water and that's all that the city of Portland can sell surplus to the needs of the city of Portland, so these entities including the Tigard Water District are all vulnerable. They have no water, and even in addition, even now, they are subject to the political and economic whims of other entities.

In conclusion, we support the impoundment of some water somewhere in the coast range. We have subscribed to 2,500 acre feet of the Scoggins Dam water and we would endorse additional water from the coast range somewhere. Thank you.

Senator HATFIELD. Thank you, Mr. Santee.
Mr. Merton Sahnov.

STATEMENT OF MERTON SAHNOW, FARMER, FOREST GROVE, OREG.

Mr. SAHNOW. Senator Hatfield, staff, this is testimony presented in support of Senate bill 2301. My name is Merton Sahnaw. I am a farmer. I reside at Star Route, Box 255, Forest Grove. My farm is located on the Gales Creek tributary of the Tualatin River. This farm consists of 450 acres, 212 acres of which can be irrigated. My family came to this farm in 1962, principally because I am a row crop farmer and this place had more potential for irrigation than where I formerly lived.

Presently my personal water problems may not be as crucial as those of many other farmers in the area. This is because I have worked out a water exchange program with the district and the watermaster for 100 acres of water from Scoggin Reservoir. This permits taking water from Gales Creek with a like amount to be replaced lower down from the project.

I believe the second phase is justified for a number of reasons, but I have listed just those that pertain to agriculture.

1. Nearly 14,000 acres have been signed and are on record for wanting water from the second phase.

2. The Washington County comprehensive land plan calls for a 38-acre minimum lot size. This means that not only our country officials but also the voting public see the need to maintain open space and agricultural production.

3. High land costs and taxes require that we maximize returns to justify holding as farms.

4. The Tualatin Valley soils are among the most productive in Oregon and respond to irrigation well with two- and threefold production increase.

5. I think this is rather important, we have a class of farmers on the land well equipped and have the expertise to utilize irrigation to its fullest potential.

6. While we have lost a number of processors in recent years, we are close to large markets and I have faith that as we develop our production, we will also develop our marketing systems.

Along with my farming operations I have also been privileged to serve as chairman of the county ASC committee. In this role I have had the opportunity to be on many farms, watch a number of farm operations and visit with many farmers about their plans and desires for the future.

In nearly every case the farmers I have visited with see irrigation as a way of improving their operations. They see water as a very definite aid to vegetable and small fruit production and seed production, ornamental horticulture, and small grains and pasture lands. I feel we do have some potential for growing silage crops for the dairymen on the coast.

As an A.S.C. committeeman and chairman, I am well acquainted with the area where the dam and reservoir would be located. In the upper Patton Valley erosion has been extremely heavy and we have

been asked to cost share on stream bank improvement practices. The estimated costs of this could run as high as three-quarters of a million dollars. Since this area is small and has more limitations on cropping alternatives than the balance of this Washington County area, we have been reluctant to authorize this project. I believe usage of the area as a reservoir to store water for the many watery needs of Washington County has a much higher priority.

In view of these considerations, I could only urge you to proceed with all haste to secure authorization for the project so construction can be started before construction costs get any higher. Thank you.

Senator HATFIELD. Thank you very much.

Mr. Lloyd Baron.

STATEMENT OF LLOYD C. BARON, WASHINGTON COUNTY EXTENSION AGENT, HILLSBORO, OREG.

Mr. BARON. I am Lloyd Baron, Washington County extension agent, residing in Hillsboro. I have been a landowner in Washington County of over 30 years and have been extension agent here for the last 19. And as such, I feel that I have had an opportunity to see what the trends in agriculture are going to be, are, and what the farm and farmer capabilities amount to and some of their desires for the future. And also as county extension agent, I am somewhat concerned with the total development of our area and the total population rather than perhaps a small segment of the county.

We have, basically our soil survey shows over 60,000 acres of prime irrigable land with an additional 25,000 acres on the valley floor that would benefit from irrigation, perhaps not quite as much as listed in the 60,000 class. The 1969 farm census showed that we were actually irrigating less than 14,000 acres and it's rather interesting to note that this is 2,000 acres less than the farm census showed 5 years earlier. So really, up to now we are going backwards insofar as maximizing our farm returns from the use of irrigation. And of course, that's why the Scoggins project was brought on the line to provide full supply of water for 17,000 acres. But you are not going to be able to add that to the 14,000 listed in the census to give you the total amount that's irrigated, because the water master has had in many years to cut off acreage because there was a limited amount of water. So, much of that is a partially irrigated land and not totally irrigated, and this has changed our cropping system considerably over the years, because people are not willing to put investments into a group when they wouldn't be assured of water enough to carry it on to its maturity and conclusion.

So actually the new project we have now is going to take about a fourth of that water to give a full water supply to the previously irrigated acreage, therefore supplying water for something less than 27,000 acres we are probably going to end up with now.

Some of our earlier irrigated lands were and still are irrigated from wells and ponds and our well water and our ground water is not real reliable in many cases, and it's possible that these sources won't hold up in the future. So, even to maintain the acreage we now claim, we'll have to have new sources of water to do this. We are not

saying that we want to irrigate our total and that's irrigable, because we do need dry land to work into our rotations to make for the best management of our soils. But when we have farms that are currently growing perhaps a sixth or seventh wheat crop on the same land, we don't feel that this is a very good justification or utilization of our land and we need a better potential to get crop rotations and give our people a better chance to maximize their returns.

Now, last year our farm gain receipts were \$50 million and this is new money coming in to the county. Better than \$8 million of that was in the ornamental horticultural area which as an industry provides more labor, more opportunity for labor than any other farm enterprise, and we feel that this one should be encouraged and nurtured because of the fact that it is a good clean industry and it does provide for employment as well as a high return crop.

And in growing these crops, they are going more and more to container growing where they utilize abundance of water. Most of them it takes about 3 feet of water to grow this kind of crop. We are going to have to have an abundance of water in the future if we are going to proceed in that area.

Other crops requiring irrigation, vegetable crops, small fruit crops, and some other miscellaneous crops, but these past years have amounted to about \$17 million of our farm income or that would be about one-third of our total gate receipts and the interesting thing is that it was done on less than 9 percent of our total land. And so this is about what you can expect from irrigation if we maximize it and use it to its fullest extent.

Now, you may know that there are several fruit and vegetable processing plants that have discontinued operations here in the county, and you may wonder why. And the answer, at least partially, is because of lack of water. It requires about 9,000 to 16,000 acres of land to provide the raw product to carry on a food processing plant operation, even of a modest size, and depending somewhat on the crop selections and the lengths of season they want to operate. At one time we had four such organizations competing for the 14,000 acres that we irrigated, and of course, it wasn't possible to do this. So some of them have left so we now, we are at a point where we need to redevelop our production and seek other markets, but water is still the key to do both of these. And the longer we wait for water and, the more stress we are facing on our farms and on our farmers.

Now, the farm investments are anywhere from \$100,000 to \$1 million to get set up to operate the way we have been talking, and to make a good viable operation, and this operator should be entitled to a fair return on his investment if he's to stay in business and in an attempt to do this, some farmers have already, have done some things that are really not good farming practices. So we feel that water will help them, too, to do better, and I am convinced that we must do everything possible to develop more water in Washington County. I think we are already 10 years too late. I believe the things that we have heard of water today are saying, is basically they are rather mild on the subject because they need water today and rather than to wait until it can possibly develop a number of years from now, so I would strongly urge that we don't delay any longer.

I have no quarrel with when the dam is constructed, but I know that we need water and we need lots of it, so I would hope, Senator, that we could proceed and get early authorization of the project.

Senator HATFIELD. Thank you very much.

[The prepared statement of Mr. Baron follows:]

STATEMENT OF LLOYD C. BARON, WASHINGTON COUNTY EXTENSION AGENT,
HILLSBORO, OREG.

Having been an extension agent in Washington County for 19 years working in the areas of Horticulture, land use and water development, I believe I have a fair knowledge of the agricultural trends that have taken place, our farm and farmer capabilities and future needs if we are to operate our farms as viable units and do our bit in the current needs for world food production.

Our soil surveys show 60,000 acres of Tualatin Valley land as being prime irrigable land with an additional 25,000 acres that would show some benefit from irrigation. In contrast to this the 1969 U.S. Farm Census showed 13,936 acres as being irrigated which was 2,000 less than the figure shown for 1964. Thus we have been going backwards with respect to maximizing production through irrigation.

When the Scoggin water comes on the line it will provide a full water supply for 17,000 acres but since the irrigated acres reported in the census were not fully supplied, at least one-fourth of this new water will go to provide a full supply for the previously irrigated acreage. Therefore, when all is said and done, we will have a full water supply for about 26,686 acres, leaving in excess of 33,000 acres of prime irrigable land without water.

Some of our earlier irrigated lands were and still are irrigated from wells and farm ponds. Over the years many of our wells have experienced reduced water flows and we are not now certain how dependable a water source they will be in the future.

We do not want nor would it be feasible to provide water for every irrigable acre. We can use dry lands in our crop rotations to advantage especially as long as wheat and legume hays command a strong marketing position. However, our major thrust in farming has to be in the areas of crops that have a high return potential if the farmer is to keep pace with the other segments of our economy and maintain the open space intended and desired by our planners and general public.

Our last year's farm gate receipts show ornamental horticulture as one of our fastest growing and larger enterprises with a \$8,000,000 gross return out of our total \$50,000,000 farm gate receipts. These crops must have irrigation water with container grown stock requiring three feet of supplemental water annually. Since we are in one of the most favored areas of the world for this type of production and since marketing systems and production expertise have already been established, and since this enterprise provides more opportunities for employment than any other farm enterprise, we feel it should be nurtured and encouraged to its fullest potential.

Other crops requiring irrigation that thrive here include vegetable crops, small fruits and some other miscellaneous crops. Last year the total value of these crops amounted to \$16,870,000 or one-third of our total farm gate receipts. This was done in 9 per cent of our cropland.

You no doubt know that we have lost several fruit and vegetable processing plants over the past few years. Why did they go? The answer is simple--no water. It requires from 9,000 to 16,000 acres of irrigated land to produce the raw product to support even a modest plant operation, depending on crop selection and length of processing season desired.

At one time we had four such organizations competing for our 14,000 acres of irrigated land trying to run this kind of operation. There was no way it could be done and new water was too long in coming so processors left.

Another problem was plant waste dilution and disposal. Plants were in continual trouble with not enough water to meet sanitary requirements.

We now are at a point of having to build both production and markets and the key is still water. The longer we wait for water, the more stress we place on the farmer and his land. Farm investments in land and equipment run from \$100,000 to over one-half million per operation. He is entitled to and must have a fair return on this investment if he is to stay in business. In an attempt to do this

some farmers have already produced wheat for five and six consecutive years on the same land trying for a high enough income level to maintain their place in society. Water would give them other enterprise choices that would provide for rotations and land conserving practices.

I am, therefore, convinced we must do all that is in our power to develop more water in Washington County. In saying this I realize that agriculture will be only one of the minor benefactors in such a multi-purpose project. You will hear today or later from our water purveyors in the eastern part of the County who may appear to be only mildly interested in this water development. Yet I know for a fact that with trying to supply water to more than one-half of the people in Washington County on short term, interruptible contracts, they are gravely concerned about new and better water resources. Their problem is that the project is about 10 years too late. They need water now. They would be the strongest supporters of the project if they could be assured of an early development.

In view of the foregoing facts I can only urge that everything possible be done to get early authorization of the Tualatin Second Phase Project as it will be in the best interests of a vast majority of the people in Washington County.

Senator HATFIELD. Mr. Fred Knox.

STATEMENT OF FRED KNOX, GASTON, OREG.

Mr. KNOX. Senator Hatfield, I do not have a written statement to file with you.

Senator HATFIELD. All right.

Mr. KNOX. My name is Fred Knox, Route 1, Box 165, Gaston, Oreg. 97119.

For many years we lived on the farm in Scoggins Valley where the Scoggins Dam is now built. My parents moved there in 1900 and raised their family. My wife and I raised our family on the same farm. We understand how many of the land and homeowners may feel about phase 2 of the Tualatin project, and the thought of having to move. When the Scoggins project became a reality, we decided to build on some of our remaining land.

We sold in June 1971 and the contractor began clearing land for the damsite in August. We began to build in May of 1971 and moved to our new home in April 1972. Telephone lines and electric lines had to be moved. In June 1972 the general contractor moved in and began building a new road past our new home and started on the dam itself. During all the construction, dust and noise was kept to a minimum. They even moved the equipment farther from our house on the late night shift.

The engineer and his staff for the Bureau of Reclamation were very cooperative and kept our inconvenience to a minimum. In other words, during all this time we had a temporary road and temporary means of getting up to our new home, but they were very cooperative, the contractor, the Bureau of Reclamation, and so forth. Naturally, we dreaded the thought of having to rebuild and move, but we now, we are now enjoying our new home overlooking the lake. Thank you.

Senator HATFIELD. Well, Mr. Knox, I have to comment that in all the hearings that I have sat through during 9 years in the Senate, this is a rather unique testimony that you have offered us. Thank you.

Mr. KNOX. Well, we have had many questions on how the Bureau of Reclamation was to deal with, and our experience has been very satisfactory with them. They first came in in 1955, made their test hole drillings. We got along well with their crews. They did it by permission only, the trespassing part, and in 1968 they came back

with several crews in August. They made test hole drillings of over 100 holes clear through till the following May. We found their crews very cooperative, very friendly. We furnished room in our barn that we were not using for them to put their surplus things in, and we cooperated with them and they did with us.

Senator HATFIELD. Thank you very much.

Mr. KNOX. Thank you very much.

[The prepared statement of Mr. Knox follows:]

STATEMENT OF FRED KNOX, GASTON, OREG.

My name is Fred Knox, RH Box 165, Gaston, Ore. 97119. For many years we lived on the farm in Scoggins Valley where the Scoggins Dam is now built. My parents moved there in 1900 and raised their family there. My wife and I raised our family on the same farm.

We understand how many of the land and home owners may feel about phase 2 of the Tualatin project and the thought of having to move. When the Scoggins project became a reality, we decided to build on some of our remaining land. We sold in June 1971. A contractor began clearing land for the dam site in August. We began to build in May 1971 and moved to our new home in April 1972. Telephone lines and electric lines had to be moved.

In June 1972 the general contractor moved in and began building a new road past our new home and started on the dam itself. During all the construction, dust and noise was kept to a minimum. They even moved the equipment farther from our house on the late night shift.

The Engineer and his staff for the Bureau of Reclamation were very cooperative and kept our inconvenience to a minimum.

Naturally we dreaded the thought of having to rebuild and move, but we are now enjoying our new home overlooking the lake.

Senator HATFIELD. Mr. Don Scott. Well, if he wishes to submit his testimony in writing, it will be included in the record. Let me again repeat at this time that anyone who was not able to be here today and who wishes to submit testimony, the record will be kept open until May 5.

Mr. Wendell Haley? Glad to see you, Mr. Haley.

STATEMENT OF WENDELL HALEY, REPRESENTING THE OREGON
DIVISION OF THE IZAAK WALTON LEAGUE

Mr. HALEY. Thank you very much. Mr. Senator, I am Wendell Haley, reside at 1840 NE 92d, Portland, Ore. I am representing the Oregon Division of the Izaak Walton League. Now, our organization stands for multiple use of our natural resources for the majority of the people. So probably we are looking at this a little bit different level than the local people on it. And the main two points that I want to bring out. I want to keep this short; we are in close proximity to a large metropolitan area. Recreational potential is greatly needed. This project will provide some of that recreational potential.

Second, the water quality we are greatly interested in and the Tualatin River is no great example of water quality, and we believe that this project will improve it. And we would like to see an improvement in the water quality, and the farther down the river you go, I guess it works until it gets into the Willamette, to an extent, which we have improved quite a bit.

Now, for compensation we definitely believe that all people being displaced should have adequate compensation and under all conditions. Now, as far as site location, there's a lot of different opinions here.

We'll take no stand on that. We'll let the local experts, the expert engineers decide on it. The only thing we requested that due to the recreational potential and the water quality improvement that the project will bring about that you expedite the project in some form or another as soon as possible. I thank you very much.

Senator HATFIELD. Thank you very much.

Mr. Vic Madsen? Mr. Vic Madsen?

Mr. MADSEN. I submitted mine in writing.

Senator HATFIELD. Yes, all right. We will receive it and make it a part of the record.

Mr. MADSEN. It has been repeated several times.

Senator HATFIELD. Thank you.

[The prepared statement of Mr. Madsen follows:]

STATEMENT OF VICTOR S. MADSEN, HILLSBORO, OREG.

Enclosed is a clipping from the Hillsboro, Argus. It states that you solicited further comments and reports from County Water Purveyors, and asked reaffirmation of support. I am a member of the Phase II steering committee. However, I was not notified of the purveyors meeting which may be a different committee. I am in favor of the building of Phase II as it serves for flood control and it's esthetic value in the Willamette Valley. Now would be a time to build it for future water use should it be needed. I have disagreed with members of the Bureau of Reclamation and the Board of Directors of the Irrigation District as to their attempt to justifying so great an amount to irrigation users.

I feel that there was some promotion in shirting this project from the Army Corps of Engineers to the Bureau of Reclamation that should not have happened. It has placed a great burden on the irrigating farmers of Washington County. The Bureau required that irrigation stand 50% of the costs. To get a sign up intent, it brought a threat that the Oregon Iron works at Oswego would revive their water right which would take all of the stream flow during the low water season. This was carried out in a hearing to the extent that the farmers lost the water to the Iron Works. The farmers were not organized to defend their rights, nor has the Iron Works been required to rebuild their diversion dam to meet what should be required of them under present day standards.

Another disagreement is the method of charging for water. The users on the main stem of the Tualatin are charged \$10.00 an acre for the total acreage that they wish to irrigate and are allowed 1 acre foot of water per acre. I believe from experience and my dealing with FHA water facility lending that the average use will not exceed 8 inches per acre in the Willamette Valley. The charge should be based on the number of acre feet of water used. This would cause a more efficient use of water and serve more acres. It would also leave some value to the present natural stream flow water rights which should be good up until July 1.

The Board of Directors blame the Bureau for the above requirement and the Bureau blames the State Water Resources Board and the Water Resources Board denies it as a requirement, but the contract is that way.

Another point of disagreement is that those who are now irrigating out of the main stem of the Tualatin are being charged \$10.00 per acre to pay operating expenses and a reserve for payment of capital cost while those irrigating from the tributaries pay only \$2.00 an acre even though it takes the water from the tributaries to furnish the water required by the Oregon Iron Works. All those irrigating out of the stream should share equally.

If the Phase II is to be handled in the same way that Phase I is, then I believe that the Army Corps of Engineers should build the dam and improve the Tualatin Channel outlet based on flood control justification. It is my opinion that this is very much needed and much more justifiable than for water use at this time.

I have hesitated to write this information which might not lead to the building of a dam that so many of us see is needed. We must however, recognize that the district consists of all land owners of 4 acres or more whether they use water or not. The irrigators are a very small percentage and have a small vote in the regulations for which they pay. No members of the Board of Directors irrigate from the main stem of the Tualatin.

Please consider this information in making your recommendation and requests.

[From the Hillsboro Argus, March 18, 1976]

CONGRESSMAN TESTS PHASE II SUPPORT

Need of additional water for municipal-industrial uses in the future was expressed Monday when Washington County water purveyors met in Portland with Congressman Les RuCoin (D-Forest Grove).

AuCoin said he needs expressions as to local interest in Phase II (Gaston Dam of the Tualatin Project).

He said the next few weeks will determine what, if anything, will happen in Congress. Project authorization is the best that could be achieved this year, he stated.

Attending the meeting with AuCoin and Bureau of Reclamation officials, who are responsible for planning Phase II, were representatives of Wolf Creek Highway Water District, cities of Hillsboro and Tualatin, Metzger Water District, Tualatin Valley Irrigation District, County Planning Dept. and County Board of Commissioners.

Purveyors stressed the future need of municipal and industrial water, some in as few as seven years.

AuCoin solicited further comments and reports from county water purveyors, and asked reaffirmation of support which has been expressed by various agencies for Phase II in the last two years.

Senator HOLIFIELD. Mr. Erik Engdahl.

STATEMENT OF ERIK ENGDAHL, GASTON, OREG.

Mr. ENGDAHL. My name is Erik Engdahl, I live at Route 1, Box 100-B, Gaston, Oreg. I am 14 years of age. My father cannot be free at this time—

Senator HATFIELD. Excuse me. Would you read that a little bit slower for our lady to take it down, please?

Mr. ENGDAHL. Oh, sorry. My name is Erik Engdahl, I live at Route 1, Box 100-B, Gaston, Oreg. I am 14 years of age. My father cannot be free at this time and has asked that I make a statement for the family.

First, we own bottom land on the Tualatin River. We farm it and raise cattle on it. We also use it for many kinds of recreation. Our family purchased it nearly 4 years ago and we use it extensively. We were shocked last Sunday when a neighbor showed us a map with our bottom land in a proposed wildlife management area. We will assume that it was our lack of political awareness which kept us from knowing earlier. Hopefully, before the final decisions are made, the affected landowners will be consulted.

Second, the days of the economic impact statement are at hand. We suggest that the complete impact, including increased tax burdens already imposed by Tualatin phase 1, be prepared. It is no longer sufficient to predict impact from planning offices without doing inventory of the negative and positive impacts on the farmers involved in phase 1.

We urge that further genuine two-way communication precede final decisions. Respectfully submitted, Lynn and Erik Engdahl. Thank you.

Senator HATFIELD. Thank you very much for your testimony.

Senator HATFIELD. Mr. David Saucy. I will insert Mr. Saucy's prepared statement in the record and also a statement by Mr. May.

[The prepared statements follow:]

STATEMENT OF DAVID SAUCY, JR., FLAVORLAND FOODS, INC., FOREST GROVE, OREG.

My name is David Saucy, Jr. I live at 1405 Birch Street, Forest Grove, Oregon 97116. I have lived in this immediate area since 1950. I was a self employed row crop farmer for ten years and since 1960, I have been with Flavorland Foods, Inc. as part owner and General Manager.

I am speaking today on behalf of myself personally and on behalf of Falvorland Foods, Inc. I wish to urge the continued effort to build Phase II or the second dam in the Tualatin Project. I do this after carefully considering the facts in the issue.

The facts that seem to prevail are these:

- (1) Additional water will be needed for projected increases in population.
- (2) As this area becomes more heavily populated, it will be necessary to provide more water for industries and for waste treatment facilities and the discharge of these wastes.
- (3) As we program more leisure time for our work force, more recreation facilities will become necessary and water facilities are most popular.
- (4) Additional water is still needed for agriculture.

A few comments on this last item are in order since I personally am most familiar with this category. Most of the crops grown in this valley will yield substantially better with additional water at a critical time in their production. This includes the grain crops. As the farming necessarily becomes more intensified with the influx of people, this need for supplemental water will be even more important.

At the present time, the food processing industry is plagued with a surplus situation in most of the items that might be grown here. This is a cyclical situation and one should not confuse the fact that the food needs are continually growing in the world and these needs are growing at an ever increasing rate.

This valley is blessed with an unusual combination of soil and weather that lends itself to abundant production. We have made a commitment in our land use planning to continue agriculture as a major industry. We now need to follow through with that commitment and provide the water that is needed to make this a viable plan.

I strongly urge the committee to take affirmative action on this proposal in favor of the Gaston Project.

STATEMENT OF ELDON M. MAY, FOREST GROVE, OREG.

I am speaking principally as a private citizen but also as a Regional Vice President of the Oregon Izaak Walton League. I was born here in 1913 and have lived here most of my life so I am quite familiar with this area both as to business and economic conditions.

I believe that accomplishment of the second phase (Senate Bill 2301) and Carlton Division, Willamette River Project (Senate Bill No. 3228) will be a very valuable addition to this area in several ways. It will provide municipal and industrial water supply for the county, enhancement of fish resources of the Tualatin River, flood control, improved water quality in the river, irrigation water, and wonderful outdoor recreation opportunities through the dam and reservoir above the town of Gaston. The same would apply to the Carlton Division although I am not as familiar with the tributary of the North Yamhill River. These impoundments will probably also be valuable to migratory waterfowl as a resting place during their migrations.

Please convey my feelings on the many benefits of these projects to the proper people in the Bureau of Reclamation and Congress. Thank you.

Senator HATFIELD. I now have completed our list of names of those who submitted to us their desire to be heard. Any other persons wishing to be heard at this time? If not, I'd like to—

AUDIENCE MEMBER. Would you answer my question I submitted?

Senator HATFIELD. Yes. We are going to submit your answer to your question in writing. At this time I would like to express my appreciation to Senator Frank Church of Idaho who is the chairman of the subcommittee for making the arrangements for this hearing, and to Mr. Russ Brown on my right who is the senior professional staff of the subcommittee, and Mr. Tom Imeson who is my legislative assistant; and to Mrs. Avis O'Leary for being here to assist us in the logistics of this hearing; to Pacific University for making the room available, and again to Janet Roberts for her wonderful help in compiling the written record of this hearing. Again I would emphasize the point that we

would be happy to hear from anyone on this subject. There are no decisions that have been made concerning the project, because there is yet to be prepared the feasibility report on site No. 1 Gaston and the alternative sites as well, related environmental impact studies and other such reports to be evaluated. Throughout all of this ample opportunity will be provided for the public to participate and their voices to be heard.

I want to thank all of you for your interest, those who gave testimony, those who were here to demonstrate your interest by your presence. At this time I would finally announce again that the record will be open until May 5 to welcome any additional information or testimony. With that statement, the hearing is adjourned.

[Whereupon the hearing was adjourned.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

MEMORANDUM FROM THE CHAIRMAN

Many persons have requested that their comments be made part of the printed record. Not all could be accommodated. This volume, however, contains a broad sampling from the mail we have received. We have tried to ensure that all points of view have been included and that the weight of comments pro and con has been preserved. Those letters which were not reprinted here remain as part of the Committee's file and they, too, will be considered in our further work on the problems under study.

32640 S.W. Wohler Street
Hillsboro, Oregon 97123
April 22, 1976

To: The Senate Interior Committee
Field Hearing on Water Resource Development
Phase II - Tualatin Project

Attached is a copy of a letter I recently sent to Congressman Les AuCoin regarding the Tualatin Project - Phase II which I respectfully submit for your consideration.

I am not opposed to water resource development in this area, but feel that Phase II as proposed is not the answer. Within this letter I have suggested some alternatives.

Thank you for this opportunity to express these ideas.

Respectfully,

E. Lynne Smith

E. Lynne Smith

32640 S.W. Wohler Street
 Hillsboro, Oregon 97123
 October 28, 1975

The Honorable Les AuCoin
 Member of Congress
 329 Cannon House Office Bldg.
 Washington, D.C. 20515

Dear Congressman AuCoin:

I am a thirty-three year old housewife, landowner, taxpayer and voter in Washington County. I would like to register my opposition to the proposed Gaston Dam, Phase II - Tualatin Project.

We are told that this dam is necessary to the welfare of this region and yet, after talking to some of the people involved, I would like to know just what the need is. We already have the Scoggins Dam, which provides flood control, water and recreation. We have the Trask Reservoir, which, it has been proposed and studied, could be modified to meet the needs of western Washington County for years to come. Why, with the economy in such a sorry state and with so many more urgent needs, do we have to spend \$80,000,000 on such an unnecessary and burdensome project?

It would destroy over 2000 acres of prime agricultural lands, something the land use planning laws were designed to prevent. It would remove the residents of Patton Valley, forcing them to relocate. Most of these people will lose considerable money and will then find it difficult to replace homes and land with inflation and under the strict zoning regulations of the land use planning laws. (Where formerly homeowners invested money in banks, securities, etc., they are now putting money into improving their homes and land. Homeowners have a lot to lose.)

The dam would eliminate the natural flooding in the flood plain lowlands of the Tualatin River, the winter home of the magnificent wild ducks, geese and swans. (We live on several acres adjacent to the river, right where these beautiful birds spend the winter. We would miss them very much.) It would create the need for new roads to accomodate the heavy load of traffic to the recreation areas. We are told there is not adequate money to maintain our existing roads properly.

After growing up in Alaska and spending approximately ten years in Southern California, I was delighted when we were transferred to Oregon. Things like the 'see a river, build a dam' philosophy were not supposed to happen here. Oregon was famous everywhere for its imaginative leaders and innovative solutions to the problems it faced. This was the Oregon Dream.

AuCoin
Page Two

October 28, 1975

I believe that, in this case, the Dream can be achieved; that progress and conservation can be achieved without sacrificing either. If Congress wishes to spend such monies specifically in this area, why not spend part of it on the modifications to the Trask Reservoir, thus preserving the Tualatin River in a mostly natural state, and on judiciously cleaning up the rubble and deadfall that now clutter up the river and its tributaries?

We could improve the quality of the water in the river (as it is now, the fish won't go near it) and stock the river with fish for the fishermen. We could put parks and recreational facilities along the river so that many communities could benefit, thus spreading the incoming tourists and vacationers over a wider area. We could connect these parks with trails and bridges; perhaps even create a River Preserve. The Tualatin could be a beautiful river; or we could build the dam, perhaps cement the riverbed and then change its name to the Los Angeles River. I personally would prefer the former.

I sincerely hope you will listen thoughtfully to all the people of the Tualatin River area. I hope, too, that you will explore all the possibilities before proceeding with this project. I know yours is a difficult job and I thank you for your attention to these many problems.

Yours very truly,

E. Lynne Smith

ELS

cc: Mrs. G.A. Carroll
Concerned Citizens Against
the Gaston Dam



DEPARTMENT OF FISH AND WILDLIFE

307 STATE OFFICE BLDG. • 1400 S.W. 5th AVE. • PORTLAND, OREGON • 97201

ROBERT W. STRAUB
GOVERNOR

COMMISSIONERS

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Chairman

FRANK POZZI
Vice Chairman

MRS. ALLEN BATEMAN
Member

JOHN BOYER
Member

WALTER H. LOFOREN
Member

McKEE A. SMITH
Member

JACK STEIWER
Member

JOHN W. MCKEAN
Director

May 4, 1976

Honorable Mark O. Hatfield
463 Russell Senate Office Building
Washington, D. C. 20510

Dear Senator Hatfield:

Enclosed are brief statements containing this department's thoughts about the proposed Tualatin Project, Second Phase and Carlton Division.

From conversations with your staff, this appeared to be a more satisfactory way to transmit our views than to present statements at the hearings last Friday and Saturday.

Sincerely,

William E. Pitney
WILLIAM E. PITNEY, SECTION HEAD
ENVIRONMENTAL MANAGEMENT

Enclosures

STATEMENT
OREGON DEPARTMENT OF FISH AND WILDLIFE
ON THE TUALATIN SECOND PHASE PROJECT

FIELD HEARING SUBCOMMITTEE ON ENERGY, RESEARCH AND
WATER RESOURCES OF THE COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE

The Department of Fish and Wildlife has worked with the Bureau of Reclamation, Fish and Wildlife Service and National Marine Fisheries Service on the fish and wildlife aspects of the Tualatin, Second Phase Project. Considerable time was given to the habitat unit evaluation for the wildlife impacts, and the selection of an area needed to compensate those losses. Based on the habitat unit evaluation, the Fish and Wildlife Service recommended acquisition of 1,550 acres for wildlife management as an offset. The Bureau of Reclamation is recommending acquisition of 500 acres. We support the 1,550 acres recommended by the Fish and Wildlife Service to compensate for wildlife losses.

The selected Gaston No. 1 reservoir is not the best reservoir site for fish resource management. The upstream alternates do not have as serious fish and wildlife impacts. The reservoir created by the Gaston No. 1 site is quite marginal for salmonid rearing. We believe a trout fishery in this reservoir is possible; however, during poor water years, the fishery could fail.

The upstream sites would provide deeper reservoirs with more favorable conditions for trout and juvenile salmon. The Cherry Grove site would leave several miles of good salmon and steelhead spawning area below the dam which would be inundated if Gaston No. 1 were developed. The upper sites have not been evaluated by the habitat unit method for wildlife, since the Bureau of Reclamation did not include them in its study. However, it is reasonable to assume because of the smaller reservoir areas, different types of habitat, and fewer fish and wildlife involved, those sites would have lower wildlife compensation requirements.

We recommend the authorizing legislation permit complete evaluation of the upstream alternates and provide for the construction of one or the other if found feasible.

STATEMENT OF THE
OREGON DEPARTMENT OF FISH AND WILDLIFE
ON THE CARLTON DIVISION PROJECT

FIELD HEARING SUBCOMMITTEE ON ENERGY, RESEARCH AND
WATER RESOURCES OF THE COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE

The Department of Fish and Wildlife has worked with the Bureau of Reclamation and other agencies on the fish and wildlife aspects of the Carlton Division. It is compatible with continued management of the fish and wildlife resources.

The Bureau of Reclamation recommended that Moores Valley reservoir be intensively developed for recreation. Scoggins and the proposed Gaston reservoirs are located quite close to the Moores Valley reservoir and has been developed for intensive water oriented recreation. Additional recreation is being planned for the unauthorized Gaston reservoir. It would be appropriate to recommend a more restrictive recreation plan for Moores Valley. That might provide a more quiet environment for angling and other slow types of use by restricting kinds of use and/or boat speed. Such a plan may be more acceptable to the local people, who seem frightened by the prospects of hordes of recreational users.

WOLF CREEK HIGHWAY WATER DISTRICT

INCORPORATED

12845 N. W. Cornell Road
PORTLAND, OREGON 97229

April 12, 1976

The Honorable Senator Mark O. Hatfield
463 Russell Senate Office Bldg.
Washington, D. C. 20510

RE: Tualatin Project - Phase #2

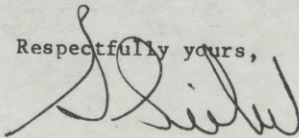
Dear Senator Hatfield:

It is the general view point of officials in most water districts and cities in Eastern Washington County that Phase #2 of the Tualatin Project would be a viable and much needed source of potable water for a long range period. It is believed that prior to the turn of the century, every available drop of water will be needed to support and enhance the liveability of the residents in Washington County. In that regard we support the Project.

Unfortunately our needs are immediate and extensive. Capital improvements and commitments must be made now or within the next few years. These decisions may have a far reaching effect upon the water sources in the future. The decision for the long range has not been made. Accordingly, it is believed that to subscribe to or make a commitment for specific amount of water at this time would be inadvisable.

In summary we support Phase #2 - Tualatin Project but we are not prepared to make a commitment for water consumption from this source at this time.

Respectfully yours,

Gene Seibel
Assistant Administrator

RESOLUTION NO. 114-W

A RESOLUTION OF ADVICE PERTAINING TO TUALATIN SECOND PHASE PROJECT

WHEREAS, the City of Hillsboro, Oregon, along with the other municipal and industrial water purveyors of Washington County, has been given the opportunity to respond to the question of determination of need for Tualatin Second Phase as applied to municipal and industrial water, and,

WHEREAS, two adopted plans are presently in existence: (1) The Tualatin Basin Water Master Plan drafted by the consulting engineering firm of Stevens, Thompson and Runyan for Washington County, Oregon (as revised July 1973) establishing a Year 2000 total County average daily need of 59.4 million gallons per day, and (2) ,

The Washington County Comprehensive Framework Plan subsequently adopted, establishing a lower population projection for Washington County than the Tualatin Basin Water Master Plan and reflecting a lesser need for water, and,

WHEREAS, projects already constructed or eligible for construction provide a considerable amount of water by drawing fully on impounded water for 200 days out of the calendar year and relying upon the stream flow capability for the other 165 days; (1) the present impoundment level (4,000 acre feet) of the Trask River Project with an additional 16,000 acre foot lift available since dam base and transmission line are already constructed, and the City is in ownership of the necessary land and water rights to effect the increase to a total of 20,000 acre feet, which would have a yield over 200 days of some 32.5 million gallons per day. (2) The Scoggin Phase I project has M and I reservations for 22.5 million gallons per day, bringing the total of these two sources to 55 million gallons per day, and (3) the projected McKay project of some 19,000 acre feet of M and I water would increase this by an additional 31.5 million gallons per day to a total of 86.5 MGD, and,

WHEREAS, the most optimistic plan, population-wise, which has heretofore been adopted for Washington County indicates the need for 59.4 MGD M and I water for the year 2000 and that need will be exceeded by approximately 45%, and,

CERTIFIED TO BE A TRUE AND
CORRECT COPY OF THE ORIGINAL

John Davis
Recorder, City of Hillsboro

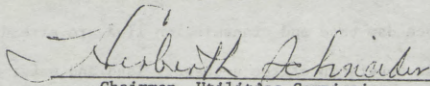
WHEREAS, the Utilities Commission of the City of Hillsboro cannot request nor afford additional M and I impoundment for which no need can be projected or demonstrated, and,

WHEREAS, we believe we have, as accurately as possible upon data available today, addressed the M and I needs as may be forecast with the possible exception of the matter of stream flow augmentation for sewage treatment plant effluent discharges, and recognizing that mandated elimination of such discharge to receiving streams is scheduled to become effective well within the time frame under our consideration, it would then appear that the necessity to bring any residual waste discharges to drinking water standards would preclude this item from our consideration.

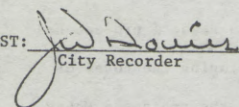
NOW, THEREFORE, BE IT RESOLVED by the Utilities Commission of the City of Hillsboro, Oregon, that, while we do not object to the proposal for the construction of Tualatin Second Phase, we do not find ourselves in a position to encourage its construction on the basis of predictable needs for Municipal and Industrial water supplies for those municipal and industrial water purveyors accommodating the public needs of the people of Washington County.

BE IT FURTHER RESOLVED that we express our appreciation to Senator Mark Hatfield and Representative Les AuCoin for providing us the opportunity to express our position on this matter.

Introduced and passed this sixteenth day of April, 1976.


Chairman, Utilities Commission

ATTEST:


City Recorder

CERTIFIED TO BE A TRUE AND
CORRECT COPY OF THE ORIGINAL


Recorder, City of Hillsboro

EXTENSION SERVICE

Washington County
OfficeOregon
State
UniversityMailing Address:
Courthouse
Hillsboro, OR 97123Branch County Bldg.
27280 S. W. T. V. Hwy.
(503) 648-8771

May 3, 1976

The Honorable Senator Mark Hatfield:

Some concerns have surfaced since the hearing Friday, April 23, on the Tualatin Second Phase Project which " feel should be brought to your attention. Number one is the rather low-key interest or lack of interest shown by the water purveyors of Eastern Washington County. Their situation is really quite critical, and the main reason they were not out in force is because they feel water could not be obtained soon enough through the second phase project to fill their needs. Actually they have three major obstacles:

1. Growth in the area requiring increased amounts of water.

<u>District</u>	<u>People Served-1969</u>	<u>People Served-1975</u>
Metzger	7,080	16,100
Tigard	9,200	18,800
Beaverton	12,800	23,648
Wolf Creek	22,050	60,580

A number of other smaller districts are showing the same growth patterns.

2. Short term water supply contract.

All the above depend on Bull Run water from Portland or Clackamas River water through the city of Lake Oswego. They are operating on four to five year contracts with interruption clauses, so they could be cut off on short notice.

3. There is no good alternate source of water that is any better than Phase II water. Some districts are exploring the Willamette River at Wilsonville as a source.

Just recently the Oregon Department of Health declared the Willamette a very unsatisfactory water source for domestic use. We also understand that water from that source would have to be purchased from the Corps of Engineers who have not yet said what the price would be or even if they could or would guarantee a supply.

In view of the above, I am of the opinion that if some real progress could be shown on Phase II development these water districts would come out in support of the project.



Agriculture, Home Economics, 4-H Youth, Forestry, Community Development, and Marine Advisory Programs
Oregon State University, United States Department of Agriculture, and Washington County cooperating

I am also concerned about the amount of emphasis being placed on the effect this project will have on our environment. Having sat on the Environmental Quality Review Committee I heard most of the arguments pro and con. In the first place the team got the idea their charge was to determine the feasibility of the project and not just evaluate what effect a given project would have on the environment. Secondly, some of the people showing up on the committee were those that are against the project and appear to feel using the environmental approach is a good way to delay or kill a project. It seemed to me that the concern was more about how to kill the project rather than how to set up a viable project that would do the most good for the most people.

I hope these comments will be considered when the hearing statements and correspondence on the Tualatin Phase II project are reviewed.

Sincerely,

Lloyd C. Baron

Lloyd C. Baron
Washington County Extension Agent

LCB:bj

CITY OF TUALATININ THE HEART OF THE BEAUTIFUL
TUALATIN VALLEY**OREGON****97062**

April 30, 1976

United States Department
of the Interior
Bureau of Reclamation
Washington, D. C.

Gentlemen:

Second Phase-Tualatin River
Project, Oregon

Please accept this as written testimony of the City of Tualatin's interest in the construction of the second phase of the Tualatin River project.

Our primary concern is the periodic flooding of the Tualatin River which causes thousands of dollars damage in the Tualatin core area. We have been told that Phase I will have little remedial affect on the serious flooding problems of this area.

As are many cities in the Portland metropolitan area, we are in the process of searching for a long range water source and the Tualatin River is being seriously considered. In addition to the municipal needs our city is experiencing rapid industrial development due to our location on the I-5 and I-205 freeways, two major railroads, and the availability of industrial land.

Finally, the results of the completion of the first phase, Scoggin Dam, have had a tremendously pleasant effect in our area. We have learned from observation and the comments of many of the old timers that the Tualatin River water quality is greatly improved and there is good fishing again. The stream implementation no longer allows a person to walk across the river on rocks which stick out of the sewage flow in the summertime. We are very grateful for the improvements.

Very truly yours,

Yvonne L. Addington
Yvonne L. Addington
City Administrator

cc: Senators and Representatives

Mailing List-Letter of April 30, 1976
Second Phase-Tualatin River Project

United States Dept. of Interior
Bureau of Reclamation
Attention: Rodney J. Vissia
Regional Director
Washington, D. C.

Senator Mark Hatfield
Senate Office Building
Washington, D. C. 20510

Senator Bob Packwood
Senate Office Building
Washington, D. C. 20510

Representative Les AuCoin
House Office Building
Washington, D. C. 20515

Representative Al Ulman
House Office Building
Washington, D. C. 20515

Representative Robert B. Duncan
House Office Building
Washington, D. C. 20515

Representative James Weaver
House Office Building
Washington, D. C. 20515

Mr. Oscar Haag, President
Tualatin Valley Irrigation District
Washington County Court House
Hillsboro, Oregon 97123

Washington County Commissioners
Court House
Hillsboro, Oregon 97123

Mr. Palmer Torvend
Washington County Extension Agent
Court House
Hillsboro, Oregon 97123

5-12-76

Mayor & City Council
Al Emmons
Lee Gensman

WASHINGTON COUNTY



Soil and Water Conservation District

215 S.E. 6th Ave.
HILLSBORO, OREGON 97123
April 7, 1976

Interior Committee
Honorable Mark Hatfield
475 Cottage NE
Salem, Oregon 97310

Dear Senator Hatfield:

This concerns water resource development involving the Tualatin River and construction of a dam above the town of Gaston.

At the last meeting of the Board of Directors of the Washington County Soil and Water Conservation District we voted to recommend that the proposed Gaston dam be built to serve the following purposes:

1. Provide flood control
2. Recreation
3. Enhance fish and wildlife resources
4. Stream augmentation, improving water quality
5. Make water available for future needs of the increasing population growth.

We believe that this should be accomplished before inflation makes it increasingly prohibitive.

We also recommend that limited channel improvement on the lower reaches of the Tualatin River should be accomplished as has been recommended to be feasible by the Army Corps of Engineers.

We ask that these recommendations be considered as a written statement from the Washington County Soil and Water Conservation District Board of Directors.

Respectfully submitted,

Eldon Boge

Eldon Boge, Chairman
Board of Directors

EB:mb

Donald Corwin Jones

ROUTE 1, BOX 127B, GASTON, OREGON 97119

30 April 76

Senator Mark O. Hatfield
United State Senate
Washington, D.C.

Dear Senator Hatfield:

Please accept CPO # 11's appreciation for your thorough and fair hearing on the Phase II Project, last Friday. I have checked the members who attended the hearing, read the newspapers and have listened(a bit), to some of the proponents of the current BOR proposal and the consensus seems to be that you clearly and responsively "heard us out". We do trust your intelligence and judgement so are most hopeful that you will require a much better job of planning by BOR before you give final support to an enabling bill to build this dam and reservoir.

These additional materials are included here in order to meet your announced deadline of 5 May for additional data to be included as part of the record of this hearing:

1. A letter from the 1000 Friends of Oregon. It arrived too late to be given to you last Friday. It is an excellent document and outlines how both the County Government and the BOR have failed to include the land-use planning laws of Oregon in the development of the current project proposal.
 2. In our testimony we promised an analysis of the water conservation needs of Washington County as these were defined and made a part of BOR's current project plan. The first draft of this study is enclosed in order to meet the deadline. We regret it has not been refined as intended but time is against us. The essential information is included, however, and I would like to underline that two key reasons for the project, flood control and irrigation are very poorly provided for in the BOR proposal. This is, of course, a major reason why we believe that the Phase II project as currently designed is not ready for Congressional action.
 3. So that all hands know what the others hold I enclose a copy of a letter I have written to Congressman Les AuCoin.
- Senator Hatfield, now that the action has moved back to Washington, D.C. we feel a sense of remoteness--a loss of control over our serious interests--and seek your guidance as to how we can continue to be actively involved in working out a sound water development plan for our County. Immediately we have these questions:
- a. Apparently there will be another hearing there in Washington on this project. How can we participate in that affair?

CPO # 11

page 2

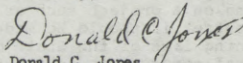
Phase II Project 30 Apr 76

b. A Social-Economic Impact Study has been contracted for by BOR, but has not been more than just started. It is limited to a study of the current BOR proposal which, as you know, is limited to only one dam site location. Since at least two other dam sites in Patton Valley are now to be studied, how can we be assured that the Social-Economic Impact Study will include these alternative sites?

c. We believe it proper that a citizens advisory committee be set up as a part of the BOR study of the alternative sites. CPO # 11 would like to participate on such an advisory committee. How can this be arranged?

Again, we appreciate your interest and look forward to further contact. If you require additional information or action which our CPO can provide do not hesitate to ask.

Sincerely,



Donald C. Jones
Chairman, CPO # 11
Gaston, Oregon

Ph: 503/357-3802

DONALD CORWIN JONES
Route 1, Box 127-B
Gaston, Ore. 97119

1000 FRIENDS OF OREGON

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Martin T. Winch
Bend
Henry R. Richmond, III
Director

April 26, 1976

Mr. Donald C. Jones
Chairman, CPO 11
Route 1, Box 127B
Gaston, Oregon 97119

Dear Mr. Jones:

You asked me for an explanation of the ways in which comprehensive planning, and Oregon's state-wide land use planning program, affect or should affect decision-making on a project such as the proposed Gaston Dam. At the outset it should be made clear that the land use planning laws of the State of Oregon do not bind a federal agency such as the Bureau of Reclamation except to the extent that Congress requires its agencies to observe state law. At present Congress has imposed no such requirement except in connection with land use planning programs for coastal areas under the Coastal Zone Management Act of 1972. Although Oregon has a coastal planning program, it does not, of course, cover the Gaston project area.

However, Oregon's land use planning laws do govern the plans and decisions of the state agencies, cities and counties. Because construction of the dam and reservoir would have direct effects on existing land uses in the immediate area, and because justification for the dam is based upon a number of projected future water needs in Washington County, comprehensive planning should have a major role in determining whether the Gaston facility is needed.

The applicable state law is the 1973 land use planning act, often called Senate Bill 100 (ORS Ch. 197). The law established the Land Conservation and Development Commission (LCDC), and required all cities and counties to enact comprehensive land use plans, together with implementing ordinances such as zoning, which would comply with planning regulations adopted by the LCDC. These regulations, called goals and guidelines, are binding rules of law applicable to planning, zoning, and individual land use actions - such as the issuance of permits or subdivision plat approvals. However, they address only subjects of statewide interest or importance. Matters of strictly local concern are left to local plans and ordinances.

3709 S.E. BELMONT PORTLAND, OREGON 97214 TELEPHONE: (503) 233-5408

Mr. Donald C. Jones
 April 26, 1976
 Page 2

The deadline for adopting or revising plans and ordinances with LCDC goals was January 1 of this year. Few cities or counties have achieved compliance, and LCDC has granted time extensions so that these jurisdictions may complete their planning efforts. Washington County has such a planning extension. However, during this extension of time, the LCDC goals apply directly to land use and planning decisions as they are made.

I understand that Washington County supports BOR's dam proposal.

The construction of a dam is clearly an "action affecting land use" in the language of the state planning law, and Washington County's sponsorship of the Gaston proposal is an exercise of the county's planning responsibilities. As such, it comes under the authority of the statewide planning goals and guidelines.

Several of the goals are applicable to the proposal. Goal 3, Agricultural Lands, requires the county to preserve and maintain agricultural lands for farm use. Goal 4 imposes a similar requirement for forest lands. Goal 5 requires the county to develop programs which will conserve open space, scenic and historic areas, and natural resources, and protect them for future generations. Goal 6 prohibits waste discharges which would exceed the carrying capacity of the applicable river basin. Goal 11 requires the county to limit the provision of public facilities and services to the level of development of the area being served. Goal 14 requires the county and its cities to establish urban growth boundaries beyond which urban development will not be permitted.

Goals 3, 4 and 5 speak to the immediate impacts which the dam and its impounded waters would have on the flooded lands and surrounding area. For example, 4000 acres of agricultural land would be flooded or taken under the proposal. The proposed dam would remove 2000 acres of forest land from production immediately. Planned recreational development related to this proposal and nearby Scoggins Dam would increase fire danger and development pressure on additional timberland. LCDC Goal 4 requires forest lands to be protected for forest uses, and existing forest uses to be protected unless the new uses are consistent with the comprehensive plan. The county's plan does not yet address forest land uses in detail. Goal 5 requires the county to inventory each natural, scenic, historic and open space resource. These are required to be preserved unless conflicting uses, such as the dam proposal, are identified. When conflicting use proposals exist, the county must determine "the

Mr. Donald C. Jones
 April 26, 1976
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economic, social, environmental and energy consequences of the conflicting uses" and develop programs to ensure that the resources will be conserved. Washington County has not yet conducted a review of the conflicting uses in the Gaston damsite area, nor has it developed a program to resolve those conflicts.

If these standards in Goals 3, 4 and 5 are not applied by Washington County, the county must justify an exception to each goal under the LCDC exceptions procedure, which requires a statement of "the compelling reasons and facts" justifying the exception, including:

- " (a) Why these other uses should be provided for;
- (b) What alternative locations within the area could be used for the proposed uses;
- (c) What are the long term environmental, economic, social and energy consequences to the locality, the region or the state from not applying the goal or permitting the alternative use; and
- (d) A finding that the proposed uses will be compatible with other adjacent uses."

LCDC Goal 2, Part II, Exceptions.

In other words, Washington County must give reasonable proof that the dam is needed, and that the need at least arguably outweighs the adverse impact to farm, forest and other natural resource lands.

LCDC Goals 6, 11 and 14 are applicable to the justifications which have been advanced for the dam to date. Although the BOP has indicated that recreational, flood control, and irrigation benefits may be derived from the project, these are minor in comparison to the estimated benefits in the form of municipal and industrial water supply and summer stream flow augmentation in the Tualatin River.

At present no governmental body other than the City of Gaston, is firmly committed to purchasing water from the project for municipal needs. However, the Unified Sewerage Agency is strongly interested in purchasing 62,000 acre feet of water which would be released into the Tualatin during summer months to augment the existing low streamflows. The purpose of the augmentation would be to insure that treated effluent from USA's Rock Creek and Durham sewer plants would be sufficiently diluted by the Tualatin's streamflow to meet the Department of Environmental Quality's minimum dilution standards.

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Alternatives to the USA augmentation plan would appear to include on-land disposal (through irrigation uses) of the treated effluent, and operation of the sewer plants at less than their design capacity. This latter alternative is feasible, of course, only if excess capacity exists in the sewer plants. This question, like the question of future demand for municipal water supply, depends upon planning for its answer.

Washington County has adopted a Framework Plan which designates the various portions of the county for urban, natural resource, or rural levels of development. That plan is subject to revision to conform to the Regional Framework Plan now under consideration by the Columbia Region Association of Governments (CRAG). The Plan may also require revision in order to conform to LCDC goals. It is, however, basically in conformance with the principle of LCDC Goal 14. That goal requires urban areas to be separated from non-urban areas by urban growth boundaries. The urban boundaries may include only so much land as is consistent with a "demonstrated need to accommodate long-range urban population growth requirements consistent with LCDC goals."

In other words, to justify the urban areas on its Framework Plan, the county must have a design population which it can show is likely to occur by the "target" year of the plan. That design population must also guide the sizing and scheduling of public facilities such as sewage treatment and public water supply. LCDC goal 11 spells out this relationship:

"Urban and rural development shall be guided and supported by types and levels of urban and rural public facilities and services appropriate for, but limited to, the needs and requirements of the urban, urbanizable and rural areas to be served." Emphasis added.

Sewer and water services, in other words, are to have no more built-in surplus than can be justified by the "demonstrated need to accommodate" future population growth which Goal 14 requires the county to establish. Guideline 7 under Goal 11 establishes a further limitation on sewer and water supply:

"Plans providing for public facilities and services should consider as a major determinant the carrying capacity of the air, land and water resources of the planning area. The land conservation and development actions provided for by such plans should not exceed the carrying

Mr. Donald C. Jones
 April 26, 1976
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capacity of such resources."
 (Emphasis added.)

This guideline echoes a major requirement of LCDC Goal 6 that:

"All waste and process discharges from future development, when combined with such discharges from existing developments shall not...exceed the carrying capacity of [the water] resources [of the applicable river basin], considering long range needs."

The goals define "carrying capacity" to be that

"Level of use which can be accommodated and continued without irreversible impairment of natural resources productivity, the ecosystem, and the quality of air, land and water resources."

At the very least, the Gaston dam proposal would irreversibly damage the natural resource productivity of several thousand acres of farm and forest land. Further, the augmentation of streamflows above the normal summer level in the Tualatin is made necessary by a level of waste discharge which exceeds the natural carrying capacity of the river system. Again, Washington County must justify its departure from this goal standard by complying with the exceptions procedure in Goal 2.

In summary, the county must show the need for the Gaston dam which would justify violations of Goals 3, 4 and 5 through the Goal 2 exceptions procedure. That justification must include a demonstrated need for sewer and water services based on the future population level anticipated by the county plan. The county must justify its projected future population, and limit its provision of services - including the federally provided Gaston dam, which would serve the county sewage agency and potential water needs - to the needs of that future population. Finally, it must observe the carrying capacity limitation of Goal 6 in its sewage treatment plans.

I will repeat that, as a matter of law, these requirements of the state-wide planning goals apply to Washington County, the affected cities, and concerned state agencies only, and not to the Bureau of Reclamation. However, it makes little sense for a federal agency to construct an "improvement" which would violate the applicable regulations of the state which it is designed to benefit. To the extent Washington County has encouraged the BOR's proposal, the federal agency should

Mr. Donald C. Jones
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be excused its nearsightedness. The county, however, must be held to the requirements of the comprehensive planning process. It would seem appropriate for the county planning commission to conduct a study of the effects of and justification for the Gaston proposal, to determine whether it complies with the county plan and LCDC's goals.

I have taken the liberty of sharing these observations with the persons listed below.

If you have any questions about this matter I will be pleased to discuss them with you.

Very truly yours,

Robert E. Stacey, Jr.

Robert F. Stacey, Jr.
Staff Attorney

RES/dse

cc: Mr. Robert Platt
Ms. Alita Pearl
Ms. Denise Von

**WATER SUPPLY AND CONSERVATION NEEDS IN WASHINGTON COUNTY, OREGON --
APPROPOS THE PHASE II PROPOSAL OF THE TUALATIN RIVER ACT.**

Statement by Community Planning Organization Number 11, (CPO #11). Read
by Donald Corwin Jones, Chairman.

23 April 1976

The orderly approach to the analysis of a water supply and conservation project proposal would be; first, identify the needs of the area in question and then to evaluate the proposal for resolving these needs. The fact that the Bureau of Reclamation (BOR) re-defined the water needs of Washington County to support a pre-determined dam site has forced CPO No. 11 to evaluate the site proposal in the same process with evaluating the proposed water needs. This is so because the BOR has interworked the water needs with a single proposal for solution. The Phase 2 Proposal of BOR contemplates water usage volumes of the County based upon present water use patterns carried to the extreme potentials and offers no alternatives to water needs calculations. A single proposal (Gaston Dam Site #1) for solving these water needs has been offered without alternatives. When this proposal did not adequately meet the water needs in terms of effectiveness criteria, the water needs were modified to support the criteria. Further, effectiveness criteria such as Environmental Impact, Social-Economic Impact have been largely ignored and a sole test, the BOR's cost-benefit ratio dominated their calculations. Examples and discussion of water need modifications utilized by BOR to support their pre-determined dam site proposal follow:

1. IRRIGATION WATER. Originally this was the most necessary water need touted to justify both the Tualatin River Act and the current proposal with that Act, the Phase II Project. However, in the Phase II BOR proposal, irrigation water is the lowest demand need, identified in terms of specific water volume to be supplied of all of the various needs used to justify the project. This is so because the estimated cost of supplying irrigation water from the Phase II Proposal is so high, few farmers have signed up to buy this water. In fact the irrigation benefit is so small that BOR estimates that the expected increased productivity of farm lands which will result from the availability of irrigation water will be no more than sufficient to replace the lost farm acreage which will be flooded in Patton Valley. The Federal Government investment in this project will result in no gain in farm productivity. Even this productivity replacement is an estimate-- a probability and needs to be evaluated against the irrevocable loss of prime farm land in Patton Valley, if BOR's proposal is carried out.

This result of BOR planning is indeed unfortunate. Adequate irrigation water at reasonable cost in the Tualatin River Valley would indeed be a great contribution to the farm economy of this area. Some estimates suggest that in some cases adequate irrigation would increase farm productivity to as much as five fold current experience. BOR's Phase II proposal fails in large measure to meet this need and opportunity.

2/ FLOOD CONTROL. This need too, originally, was a seriously discussed objective of the Phase II project. However, BOR will not now give any economic value to whatever flood control does result. In fact there is evidence that the Phase II project as proposed will result in year 'round flooding in certain stretches of the Tualatin River bottom land. This result arises because the amount of water that is planned to be put down the river by both the Phase I and the Phase II projects and because the Wildlife Commission intends to take a considerable portion of the river bottom land below Gaston for a wildlife management area is a volume greater than the river can hold within its banks. Since migratory water birds are a major consideration of the wildlife project water in the river throughout the year to the extent of, at least minor flooding, will be desired. Thus, the serious water need of flood control will not be met by the current proposal and apparently remains in the discussions for promotion purposes only. In fact BOR proposes to solve the flooding problems caused by the Phase II proposal (in the area between Gaston and the Springhill Pumping Station) by buying up the farm land which would be flooded. Finally, flood control in the lower reaches of the river where it is a most serious problem will not be dealt with at all in this proposal as the flood waters from the down stream tributaries to the Tualatin River are not included in this proposal.

3/ WATER QUALITY IN THE TUALATIN RIVER. This problem is considered a major justification for the Phase II Project. During the dry months of the year when the water running in the river is at very low levels, the river becomes (almost) no more than an open sewer. That the river is slow-moving and warms up due to this slow movement of the water and its shallowness during the summer months adds to the seriousness of the problem. Principle pollution sources are municipal sewage combined with drainage from rural septic systems. There are no point sources of pollution known to be consistently exceeding State water quality standards. High water flows from November through June tend to wash out the wastes at concentration levels below established water quality standards. In general water quality in the

in the Tualatin system is judged to meet State standards, at present and to be average in nature compared to other streams in the Puget-Willamette lowlands. It is noted that the Tualatin River empties into the Willamette River just above the City of Portland. Water quality in the Willamette River has been seriously below acceptable health standards until a year or two ago when through considerable effort and expense Willamette River water quality has been improved to a remarkable degree.

Efforts of pollution abatement have occurred and are continuing. Enlarged and modernized sewage treatment plants have been installed or are under construction in several parts of the County. Restrictions on new installations of private septic systems are being applied by the County Government. However little change for the better is expected in the future and it is believed that the additional improvements currently contemplated in pollution abatement procedures are not expected to do more than maintain quality at present standards.

In summary water quality in the Tualatin River is acceptable quality except for approximately two to three months of the year. Current approaches to pollution abatement utilize only conventional technology. These improvements are expected to accomplish no more than maintain present quality standards under the constant pressure of ever increasing population.

The solution to this potential problem offered by the Phase II Project is to pour the necessary volume of water down the river from a reservoir in Patton Valley sufficient to keep the pollutants diluted to the State's quality standards. As indicated, this action will be required only during two or three months of the year. A large portion of the cost of the dam and reservoir construction proposed by BOR is assigned to this water quality scheme.

The unresolved problems and unanswered questions with this approach to water quality as proposed by the BOR project are several:

a. Merely flushing out the Tualatin River does not reduce the pollution in absolute terms, it merely dilutes the continued pollution in more water and dumps it into the Willamette River where it will be "enjoyed" by the metropolitan area of Portland. Aggressive attempts to reduce the amount of sewage effluent dumped into the river and its tributaries have not been maximized. The County's Comprehensive Land-Use Plan with its restrictions on private septic systems is just beginning to take effect. Positive and strong inducements to builders to install non-water using toilets (such as chemical toilets) has hardly been talked about, let alone seriously studied.

Enlarged and more effective sewage treatment systems are being utilized and planned but these are coming into use much more slowly than the potential crisis demands, partially due to the assumption that the Phase II Project will solve the water quality problem. Further, these sewage treatment systems use conventional technology. There is a research project underway which at this stage offers high promise, which is examining the process of dumping the sewage plants' waste water onto farmers' fields as irrigation water. Success of this process would solve to large measure the river pollution problem. However, these types of approaches are not considered seriously in the BOR Phase II Proposal.

b. Who is to provide the "pay back" costs of this river flushing system? This question is not resolved in the BOR proposal. It is assumed that the United Sewage Agency (USA), which is seeking to consolidate into a single system the County's sewage treatment needs, will "buy" the water necessary to dilute the effluent from its treatment plants to meet the State's water quality standards. USA however, expect to buy only what it needs and anticipates the improvement of its treatment systems. Since the treatment plants are not the only source of pollution the matter of how the remaining cost will be handled is serious. The Washington County Government originally requested BOR to make the study out of which the current Phase II proposal came. USA is an instrumentality of the Washington County Government. The conditions suggest that in the end it will be the Washington County Government who must pick up the tab. This will require taxation of the citizens of the County which cannot be done without a tax referendum. It would seem practical (and there is a legal question), that the County Government should ask the citizens whether or not they are willing to be taxed to solve the water quality problem in the Phase II manner before the County Government makes a commitment to the Federal Government for building the Phase II Project.

c. A part of the issue on water quality is the assumption that there will continue to be a steady and heavy increase in population in the County. The population now stands under 200,000. Various estimates project the population to grow by the year 2000 to between 300,000 and 400,000. BOR and the Washington County Government have used the extreme estimate of 400,000 in their calculations of water needs. The most prestigious studies, the Census Bureau studies and the Bonneville Power Authority study, project the population increase to between 300,000 and 350,000. Obviously, it makes a serious difference as to the probable dimensions of the water quality problem if the population growth will be 300,000 or 400,000. For

Water Needs and Phase II Proposal Analysis -- CPO #11 Page 5

the BOR to use the largest extreme projection (taken from a minor study which is several years old), in calculating the size of the reservoir needed is to manipulate the water need to support the dam site already selected.

d. The Phase I Project (The Scoggin Valley Dam) is anticipated by BOR to provide water which will help to resolve the pollution problem. This project, in terms of flowing water down the river, is just now getting underway. It will take two or three years to assess fully what effect the Scoggin Valley project will have on water quality. No plans have been made beyond preliminary studies for use of the other tributaries of the Tualatin to help supply the necessary water quality. If alternatives to the Phase II Project to supply water for water quality and/or alternatives to reduce the amount of water needed were utilized the demand for water from the Phase II project would not be so great and this lesser water demand on the Phase II project would make it more difficult to justify the cost of construction of the predetermined project. Reasoning in this circular way has resulted in the BOR making no proposals for alternative methods of securing the necessary water quality of the Tualatin river.

4. MUNICIPAL AND INDUSTRIAL WATER (M&I). This water need is another of the major justifications for the Phase II Proposal. The same circular reasoning has occurred here as with the Water Quality need. By loading all projected increasing demand for M&I water on the proposed reservoir, it is possible to assign this need a major purpose and cost support for the project. No alternatives for supplying the project water needs has been seriously proposed. There are other potential water sources in or near the County. Stevens Thompson & Runyan, Inc., an engineering firm proposed a Tualatin Basin Water Master Plan" at the request of the Washington County Commissioners. This study, using a 353,000 population projection for the year 2000, proposed three alternative plans for supplying M&I water, none of which contemplate the need of a reservoir in Patton Valley. Another assumption by BOR is that the Eastern side of Washington County (the heavily populated side) will lose its current water sources and would have no alternatives. The Eastern Side of the County gets most of its water from the City of Portland and there has been questions raised concerning the continuation of this supply source in projecting the long-term future. This assumption included the position that there is no adequate reasonable alternative water sources for that part of the County -- except the Phase II project.

BOR has told this CPO that it used the Stevens, Thompson & Runyan study to estimate M&I water need in the year 2000. As reported above that study used the second highest estimated population growth projection study and still came up with three plans for supplying this water none of which

require a reservoir in Patton Valley. What is evident here is that BOR has again selected the data it needed and avoided alternative solutions it did not want to consider which allowed them to arrive again at its pre-determined Gaston Dam Site #1/

5. RECREATION. In the original planning of the Tualatin River Act, recreation (as a water need, i.e. recreation program designed around the reservoir and a public park surrounding the reservoir), was given limited consideration. When it was discovered that the above identified water needs were falling far short of justifying the Phase II proposal, recreation as a major justification for the project was worked into the needs proposal. A careful reading of the Tualatin River Act will indicate that this emphasis upon recreation was not the intention of Congress when it wrote that law. Recreation represents the single largest justification for the current proposal. It is intended that recreation will use 45% of the water impounded. The point made here is that recreation of this type and magnitude was not originally contemplated and it has not now been justified, to the magnitude proposed, upon its own merits. Instead, the dam and reservoir project was conceived first, then the significance of the recreation factor was designed in, to pick up the necessary portion of the total project justification which the other water needs did not support.

6. ANADROMOUS FISH. Salmon and other anadromous fish do not now use the Tualatin River for several reasons and the one addressed in the Phase II project is the fact that the water quality of the river tends to discourage the fish. Any reasonable solution to the water quality matter would provide the water conditions which would make possible putting salmon and steelhead fish into this river. The opportunity to stock the river with salmon is offered as another justification for the proposed project and while a dam in Patton Valley would provide the necessary water, the dam sets up a barrier preventing the fish to utilize the full length of the river and the tributary streams. Proposed in the current Phase II plan is a program of fish management which would include transporting both the mature fish and the smolts around the dam. This is, obviously, an expensive way to put into and maintain salmon in this small river and it is noted that in the Phase II project proposal, enhancement of the anadromous fish in the river is considered a nonreimbursable item. That means the Federal Government will pay the entire cost of this phase of the project.

1. Stevens, Thompson & Runyan, Inc., Tualatin Basin Water Master Plan, 1973 Revision. A study Prepared at the Request of the Washington County Board of Commissioners.

Donald Corwin Jones

ROUTE 1, BOX 127B, GASTON, OREGON 97119

29 April 76

Congressman Les AuCoin
House of Representatives
Congress of the United States
Washington, D.C.

Dear Les:

Probably you have received a report on Senator Hatfield's public hearing last Friday concerning the Phase II Dam Project in Patton Valley. Frankly, I am concerned that you may not be getting the complete story on this Phase II business and this letter is to attempt to add to your information.

The hearing went well, I believe. Senator Hatfield conducted a balanced, reasonable approach and (assuming everyone was listening) a fairly solid report on the proposed project was obtained. These highlights of the hearing would appear to be important to you:

a. CPO # 11's position of being strongly for a water development project, strongly against the proposed selection of the Gaston Dam Site # 1 as the location of the dam and deeply worried that the Bureau of Reclamation (BOR) current proposal (plus Washington County Government's complete lack of a financial plan for paying the local share of costs), will result in failure to get any Phase II project, seemed well received by Senator Hatfield and by most of the audience.

b. Most of the principal proponents of BOR's current proposal did not strongly endorse that proposal in its current form. In fact they said little about it. The County Commissioners reported the long-range water needs of the County as they understand them and generally endorsed "a" Phase II project as a way of helping to solve those needs. Palmer Torvend spoke of the seriousness of flood control. Lloyd Baron had a good paper on the value of irrigation for enhancing our farm economy. Both implied that the BOR proposal would provide lots of flood control and irrigation. The proposal supplies very little of either of these fine objectives and there-in lies a major fault of the proposal. Lloyd Baron stated he did not care which site in Patton V lley was selected and Torvend did not even discuss this issue.

c. The site selection of the dam and reservoir is a major issue with almost all of the people in the Gaston area. Obviously, if the major supporters of a Phase II Project do not see the site selection as a serious problem, there should be little difficulty in making a decision for the selection of an alternative site which will meet the needs of all of us.

Enclosed are three documents which I urge you give special attention:

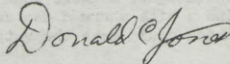
1. CPO # 11's testimony at Senator Hatfield's hearing.
2. The independent testimony of a Dr. Lolita Carter.

3. A legal opinion from the "1000 Friends of Oregon" concerning the violations to the State's and the County's land-use laws which would result if BOR's current proposal were put into effect. The information in this statement would be a basis for legal action to stop BOR's current proposal if it must come to that. The "1000 Friends--" state^{and} was not included in the testimony collected at the Hatfield hearing. I am sending him a copy of it.

Les, I understand that you believe that since the County Commissioners have asked that an enabling bill for a Phase II Project be submitted to the House of Representatives, you should assist them. Our CPO has no disagreement with that judgement. I urge however, that you talk in depth with Mrs. Virginia Dagg, the Commission Chairwomen. You will discover that the Commissioners have not studied the BOR's proposal, they do not have a firm position on the dam site location and they have no financial plan which will stand the light of day for supporting the project. They just know that the long-range water needs of the County must be planned for and they "hope" others will figure out how all of that can be done. This, clearly, is not a sound basis for writing a law.

I know you have been disabled and appreciate your impatience with the way your knee trouble has put you behind in your work. On a personal basis I express my concern and hope you are recovering without serious long-term complications. Perhaps, shortly we can get together and discuss this Phase II project in detail. I know you will want to do so.

Best wishes,



Chairman, CPO # 11
Gaston, Oregon

Ph: 503/357-3802

DONALD CORWIN JONES
Route 1, Box 127-B
Gaston, Ore. 97119



TUALATIN VALLEY IRRIGATION DISTRICT

PALMER S. TORVEND, Manager

2330 Elm Street, Forest Grove, Ore. 97116
P.O. Box 215 Phone 357-3118

April 30, 1976

The Honorable Mark O. Hatfield
Suite 463
Old Senate Office Building
Washington D. C. 20510

Dear Senator Hatfield:

Several concerns have surfaced since the hearing you conducted on Phase II Tualatin Project on Friday April 23, in Forest Grove. Of the people who gave testimony in opposition of the project, and used location of the dam as their major point, only three are actual residents of the area directly involved in the project.

Those pushing for investigation of other sites for the dam are doing so in some cases to kill the project by trying to create need for long delays. Those who sincerely want more engineering and environmental study of the two other sites which they have thought, or were lead to believe, to be good alternatives could conceivably find a site where a dam could be built but at a much greater cost of construction which could make the water costs beyond the users ability to pay.

For the irrigation feature, the projected costs of water delivery in the Tualatin River is reported as \$22.00 per acre foot. This is high but for those farmers who want and need irrigation water for higher value crops it is acceptable. However, inflation and/or a more expensive location for the project would have the effect of causing some farmers to not be able financially to take advantage of water for irrigation. The point is that in addition to paying O&M on the project and repaying on the capitol costs on Phase II, the farmers will have to buy their own irrigation pumps, motors, pipe, sprinklers and pay their own power bills. Our best estimate based on 1975 cost figures are \$14.40/year interest on irrigation equipment, \$8.00 per year depreciation, \$12.50/year electric power or \$34.90/year, plus water charges of \$22.00 or a total of \$56.90 per acre. Farmers on Phase I, again using 1975 costs, will be paying a total per acre of \$47.00, or a difference of \$9.90 per acre.

Because both Phase I and Phase II water users will be growing basically the same crops, the difference in cost of water is significant. The point is that the interests of water users who pay the project bills must be protected.

Another concern is that the Environmental Quality Evaluation Team representing a number of local, county, state organizations, and certain governmental departments have acquired, during recent months, six members from the Gaston area who are opposed to the project and who business leaders and city government officials of

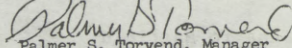
April 30, 1976

Senator Hatfield - page 2.

Gaston say do not represent their community. Unfortunately, because of the great amount of time taken up by this team, some members are dropping out giving this evaluation effort a slant which does not represent the majority interest.

Each delay in authorization and construction funding lays the Phase II project open to increasing costs because of inflation.

Very truly yours,



Palmer S. Torvend, Manager

TUALATIN VALLEY IRRIGATION DIST.

PST:gm

441 Birchwood Rd.
Hillsboro, Ore. 97123
April 20, 1976

Honorable Mark O. Hatfield
Senate Office Building
Washington, D.C. 20510

Dear Senatro Hatfield:

Please include the enclosed report, by the sub-committee on flood control, in the material you are gathering in connection with hearing recently held on the Gaston Dam project.

Sincerely,

James A. Sullivan
James A. Sullivan
Secretary for the
Flood Control Com.

cc: copy of report

April 15, 1976

REPORT OF THE FLOOD CONTROL COMMITTEE OF THE SCOGGINS PHASE TWO PROJECT

The Committee charged with the responsibility of evaluating the seasonal flooding problem of the Tualatin river and the effect a dam at Gaston would have in controlling the flood stage of the river, made a comprehensive study of the flood problem and corrective measures that should be taken.

Approximately 25,000 to 30,000 acres of land suffer some flooding at certain periods of the year. A major percentage of this land can only be used for agricultural purposes on a limited scale because of the threat of high water. The principal cause of the flooding is the inability of the stream bed to pass the water over a rock reef and small dam near the mouth of the river. Providing a secondary obstruction are numerous log jams and low overhanging trees along the stream banks. The meandering course of the river creates silted areas and sloughed banks hinder water passage.

Prolonged inundation of the cropland often forces the farmer to fall plough his land in order to have it ready to plant when the water recedes in the spring. This procedure causes considerable sedimentation to pollute the stream when high water washes the cultivated land.

A report made by the Corp of Army Engineers, several years ago, documented these problems and indicated that if the obstructions were removed the flood stage of the river could be lowered by three to four feet.

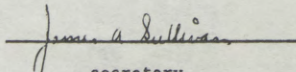
SUMMARY

Although the Gaston Dam, when it is constructed, will have a measurable affect on the flooding of the Tualatin on its upper reaches it will have only a minimal affect on the total flooding problem because the major streams enter the Tualatin river below the Gaston and Scoggin dam sites.

It is the recommendation of the committee that the emphasis be placed on the implementation of the plan proposed by the Army Engineers, to clear the obstructions from the lower river, improve the channel upstream to the proposed dam site and to delay the construction of the Gaston Dam until this work has been completed.

The results would be much more beneficial to the people living down stream than would the construction of the Dam. The flood plain could be reduced considerably and a large number of acres of good soil would become available for more intensive cropping. The sedimentation level of the water would drop which would be highly beneficial to aquatic life and the quality of the water would show an improvement.

From the economic viewpoint it would be less costly to correct the deficiencies of the main Tualatin channel than to build the Dam, and the work could be done in a much shorter period of time.


secretary

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REPORT OF THE COMMISSIONER OF THE LAND OFFICE

The following is a list of the lands which have been surveyed and patented to the State of New York, and which are now in the possession of the State of New York.

The lands which have been surveyed and patented to the State of New York, and which are now in the possession of the State of New York, are as follows:

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