

## CITY ATTORNEY OPINIONS

From	To	Regarding	Date		
City Attorney	Comm. Boody	<u>Utilization of Power at Bull Run</u> Dams	August 7, 1958		
Mayor Schrunk	City Attorney	Installation of Power Producing Plants at Bull Run	August 15, 1958		
City Attorney	Mayor Schrunk	<u>Opinion on Electric Generation</u> Facilities at Dams	August 20, 1958		

#### CITY OF PORTLAND

## INTER-OFFICE CORRESPONDENCE

(NOT FOR MAILING)

From Dept. of City Attorney

August 7, 1958

To Dept. of Public Utilities

Addressed to Commissioner Boody

Subject Utilization of power at Bull Run Dams

RECEIVED AUG 7 1958 COMMISSIONER OF PUBLIC UTILITIES

Dear Commissioner Boody:

The Bureau of Water Works has asked for an interpretation of the legal aspects of the development of power at Bull Run Dams No. 1 and 2. As we understand the situation, the City does not intend or wish to get into the field of generation of electrical power as a primary business, but rather desires to utilize surplus water at existing Bull Run Dam No. 1, and the proposed Bull Run Dam No. 2 for the generation of electricity. At the outset we must look to the Charter to determine what, if any, authority the City has to get into the field of electrical energy.

Section 2-105 (13) states that the Council has authority:

"To provide for lighting the streets, public grounds buildings and places and furnishing the City with electric, gas or other lights by contract or by means of its own plant, subject to the conditions and limitations contained in this charter and the Constitution of the State of Oregon."

We note here that Article 31 of the Public Works Code (Secs. 5-3101 et seq.) contains specific authority for the acquisition of an electric power plant and system, including engines and dynamos. It further provides that bonds may be issued up to \$300,000, or the acquisition paid for by tax moneys, or a combination of both. These sections are intended to cover the acquisition of a complete city lighting plant, however, and before any of the powers may be exercised, the Council must submit the matter to a vote of the people. These sections are now ordinances, but were originally a part of the 1903 Charter.

ORS 225.020 et seq. provides in substance that a City may build, own, operate and maintain electric light and power plants within and without its boundaries for the benefit and use of its inhabitants and for profit provided that the power to do so is contained in its Charter. It is clear that under present Charter authority the City may provide for furnishing electricity by Commissioner Boody August 7, 1958 Page 2

contracts (which is presently being done) or to construct or condemn an electric power system for supplying electricity for municipal use. It is our understanding that the City at most would install generators in its two dams and sell electrical energy created to a private power company for eventual distribution through the Bonneville Power pool.

It is our opinion that present Charter authority exists for the City to install generators and sell power, provided its contract for disposal of power is limited to the same amount as the City uses for municipal purposes, including street lighting and power for municipal buildings, parks, etc. (Sec. 2-105 (a) (13) of the Charter.)

A more formidable objection to the City creating power by its own generators lies in the lack of specific authority to purchase and install the same, since the cost of generators for these two dams would probably involve expenditures of substantial sums of money. It is our opinion that the Charter would have to be amended to provide specifically for issuance of bonds for purchase of generators. The matter of using funds under the water bond section of the Charter, Sec. 11-201, has been discussed with a local bond attorney. Based upon this conversation and a careful reading of this section, it is our opinion that moneys raised thereunder cannot be used for the purpose of purchasing generators, since there is no mention anywhere of electricity or generation of power as being connected with the water works system of the City of Portland. Municipal ownership of generators installed in Bull Run Dams No. 1 and 2 would be subject to a minimum of state regulation, because of certain exemption sections.

ORS 543.150 provides generally that the provisions of Chapter 543 dealing with hydroelectric power projects do not apply to cities, towns or other municipal corporations. ORS 757.005 states that the term "public utilities" for the purposes of giving the State Public Utilitity Commissioner jurisdiction does not apply to any plant owned or operated by a municipality.

However, if the City should get into the field of electrical power, it appears that it would be required to obtain permits from the Federal Power Commission, and probably the Federal Secretaries of Agriculture and Interior.

We are informed that heretofore permits for the construction of dams in the Bull Run timber reserve have been acquired through the local agent for the Mt. Hood National Forest who cooperates in obtaining the necessary consent and permits in Washington, D.C. Commissioner Boody August 7, 1958 Page 3

A permit from the Federal Power Commission is not required until dams, conduits, reservoirs, etc. are constructed, operated or maintained which are necessary or convenient for the purpose of developing, transmitting and utilizing power. (U.S.C.A. Title 16, Sec. 797 (e) ).

The Federal Power Commission has two main grounds for obtaining jurisdiction; the first is that the dam involved in the generation of power is upon a navigable stream or river; the second area of acquiring jurisdiction is that of affecting public lands or reservations of the United States. We are of the opinion that Bull Run River is not a navigable stream. (Title 16, Sec. 796 (8), U.S.C.A.). As we understand it almost all the watershed of the Bull Run Reserve and almost all the lands used in connection with the dams are within either a national forest or classified as public lands. The site of the proposed Bull Run Dam No. 2 is upon land privately owned in fee by the City, but generation of power would very likely involve transmission across federally owned land, and we believe the Power Commission could take jurisdiction since, as aforesaid, most of the watershed involves federal lands. In any event, it is our opinion that a permit should be requested from the Federal Power Commission.

We have been informed that one of the local power companies has expressed an interest in the possibility of placing generators in the dam at no initial expense to the City, either under a long term contract or under a franchise or lease. The City recently has entered into an agreement with Portland General Electric Company for the sale of surplus water by diversion into Roslyn Lake. Under this agreement the Company expects to amortize its original investment within a five year period, but if that is not possible there is a provision for extension for an additional five year period, pursuant to Sec. 2-105 (4) of the Charter. An agreement of this type might be feasible, except for the contract limitation period contained in this section. Apparently amortization of costs of generators within a ten year period is not feasible.

A third possible method for generation of power of Bull Run Dams No. 1 and 2 would be a lease of space in the dam sites (ORS 271.310). It is our opinion that this could be done under the statutory provision for a period up to 99 years notwithstanding the 5 year limitation in the Charter, Sec. 2-105 (a) (10). But than, the property, including not only the generator sites but possibly also the dams, would be subject to taxation under ORS 307.110. This might reduce the City's revenue to little or nothing. However, a lease could provide for the lessee to pay the taxes. Commissioner Boody August 7, 1958 Page 4

It is our opinion that grant of franchise would not be appropriate since the court would probably construe it only as a lease, and the provisions required to be included are not suitable.

- In summary, it is our opinion that:
- Under state law (ORS 271.310) the City can lease generator sites up to 99 years regardless of Charter limitation of 5 years (Sec. 2-105 (a) (10, but
  - a. Such sites will be subject to taxes, and the dams themselves might be subject to taxes (ORS 307.110)
  - b. The generators would remain the property of the lessee.
- The City can put in generator facilities itself if it can find the money, <u>but</u>
  - a. Public utility certificates cannot be used. These are limited to operation of utilities within the city ( Sec. 10-104, Charter).
  - b. The City cannot issue revenue bonds without special Charter authority (Sec. 2-105 (a) (24) Charter ).
  - c. The City needs special Charter authority to sell the power unless its contract for disposal of the power is limited to the same amount as the City uses for municipal purposes, including street lighting and power for municipal buildings, parks, etc. (Sec. 2-105 (a) (13) Charter).
  - d. Water Bureau funds cannot be used ( Sec. 11-201 Charter).
- 3. If the Council wishes to submit to the voters a charter amendment authorizing revenue bonds, such charter amendment should take care of all the other problems mentioned by giving specific authority and might authorize a contract with a power company for supervision, labor and materials of maintenance.
- 4. Federal permits will have to be obtained for this use of the dams, but should not be any real problem. (Federal Power Act, Title 16, Sec. 796, U.S.C.A.).

Copies of this opinion are enclosed for each commissioner and for Mr. Anderson, Water Engineer.

Very truly yours, all A, Brown ALEXANDER G. BROWN

City Attorney

EWC:gm Encl. OFFICE OF THE MAYOR

TERRY D. SCHRUNK



CITY OF PORTLAND OREGON

August 15, 1958

Mr. Alexander G. Brown City Attorney City of Portland Portland, Oregon

Dear Mr. Brown:

Confirming our various conversations relative to the installation of power producing plants at Bull Run Dam No. 1 at the present time, and Bull Run Dam No. 2 when it is completed, I respectfully submit the following suggestions for your serious study and research in order that a recommendation can be made to the City Council in time for a necessary ballot measure for 1958, should such be required to accomplish this objective.

Since I will be out of the city for three or four days next week. I thought that I should emphasize again how important I consider such a decision being reached at an early date.

It is my objective to see that power generating facilities are installed by the City of Portland, or one of its agencies, as soon as possible at Bull Run Dam No. 1, and that the power produced be contracted to the Portland General Electric Company or sold to the Northwest Power Pool via Bonneville power lines for distribution and sale by private companies. It actually does not matter to the City of Portland whether the power is sold outright to one of the companies or is traded for a credit on our street lighting bill. It is my belief, based upon engineering reports, that the amount of power that can be produced in the Bull Run Reserve would not certainly under present conditions justify a city owned distribution system. However, I do feel that since the power that can be produced in the Bull Run Watershed would be produced during the low flow period of the Columbia River, it would be an important block of power to the power supply of this community and state. I further feel that it is an economic waste to allow this God given natural resource to go unused. It would appear that after paying the cost of operation, a net return could be expected to the City of Portland of some \$250,000.00 per year for the sale of power when both dams have generating facilities. The approximate cost of the two installations would amount to somewhere around \$4,000,000.00, according to engineering estimates.

COPY

OFFICE OF THE MAYOR CITY HALL

TERRY D. SCHRUNK MAYOR



CITY OF PORTLAND OREGON

August 15, 1958

Mr. Alexander C. Brown City Attorney City of Perfland Fortland, Cregon

Dear Mr. Brown:

Confirming our various conversations relative to the installation of power producing plants at Bull Run Dam No. 1 at the present time, and Bull Run Dam No. 2 when it is completed, I respectively submit the following suggestions for your serious study and research in order that a recommendation can be made to the City Council in time for a necessary ballet measure for 1938, should such be required to accomplish this objective.

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COPY

Mr. Alexander G. Brown August 15, 1958

The estimate on Dam No. 1 is approximately \$2,000,000.00 and should be the first item given immediate consideration.

It is my hope that the installation of such power facilities can be financed and installed by the City of Portland without going to general obligation bonds.

My first preference would be the use of water bonds pledging financial credit of the Water Bureau to this installation. However, should that be impractical, or for some reason impossible. I would further respectfully suggest that the Charter be so amended, if necessary, to allow the City of Portland to expend income derived from the sale of timber to finance such an installation.

I am informed at the present time there is some \$25,000,000.00 worth of timber available in the Bull Run Reserve that should be harvested on a sound sustained yield program. During 1957 and 1958 some \$1,500,000.00 was realized through the sale of timber from areas that were going to be flooded or where access roads were being constructed. This money apparently has mostly been used to date in construction of water facilities. It would appear to me that this income from city owned land probably should have been put in a special reserve fund for capital improvement of power generating facilities at the dam. I am further informed that additional timber must be logged to provide additional access roads for dam construction and/or fire protection in the area. This additional income, which could easily amount to more than sufficient money to install power generating facilities, could be set up as a special fund for such a purpose. Water bonds can carry the cost of any needed improvement of the water system, the reserve system, and the reserve.

It should be strictly understood for the record that I am not in favor of promiscuous logging on city lands, but I do believe, based upon the statements of competent forestry officials, that Oregon's economy for the years ahead is going to be predicated on the intelligent use of its fine timber resources through sustained yield programs. I feel confident that such a program is in the best interests of the taxpayers of the City of Portland, the water users, and certainly the economy of the State of Oregon.

There are several important policy matters that must be determined by the City Council, but in order for the Council to approach these problems on a sound basis, we need to have from you answers to the following:

 Can the City of Portland commit monies received from the sale of timber on city owned Bull Run land for such a capital improvement program as the generation of power at Bull Run Dams? Mr. Alexander G. Brown August 15, 1958

- 2. If the above can not be accomplished under the present charter, what changes in the charter are necessary to accomplish this simple objective?
- 3. Does state law or the City Charter forbid the use and credit of water revenues for the construction of such power facilities ?
- 4. If No. 3 is forbidden by state law or the charter, what changes must be made in order to allow the use of such credit for this purpose?

I realize this is a difficult problem and that there are many ramifications; however, it is my sincere belief that means must be found to stop the economic waste to the taxpayers of Portland and the economy of Oregon caused by our inability to turn into hydroelectric power the energy now flowing down Bull Run River.

Thank you for your attention to this matter.

Yours truly,

TDS:ld

cc: Commissioner Stanley W. Earl cc: Commissioner Nathan A. Boody cc: Commissioner Wm. A. Bowes cc: Commissioner Ormond R. Bean

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Page 3

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Thank you for your attention to this matter.

Yours truly,

## MAYOR

TDS:ld

cc: Commissioner Stanley W. Earl cc: Commissioner Nathan A. Boody cc: Commissioner Wm. A. Bowes cc: Commissioner Ormond R. Bean



OFFICE OF CITY ATTORNEY CITY HALL PORTLAND 4, OREGON ALEXANDER G. BROWN CITY ATTORNEY

August 20, 1958



# MAYOR'S OFFICE

Mayor Terry D. Schrunk City of Portland 303 City Hall Portland 4. Oregon

Subject: Opinion on Electric Generation Facilities at Dams

#### Dear Mayor Schrunk:

You have asked for study and research by this office for the purpose of presenting to the Council methods of financing installation of electric generation facilities at Bureau of Water Works dams, so that if necessary a ballot measure can be prepared during the next week and presented to the Council for placing on the November ballot.

You have mentioned the possibility of timber sales. In the past, revenues from timber sales on lands held by the Water Bureau have been credited to the Water Bond Sinking Fund or to the Water Construction Fund so as to eliminate need for additional bonds or increased rates. At the present time it is roughly estimated by Water Bureau officials that approximately 2,000 acres in the Bull Run area contain timber totalling perhaps 250,000,000 board feet. This footage could not be realized without a "clear cut" which removes all trees of every size from the land. "Sustained yield" requires either strip cutting or individual tree selection, which would probably halve the amount available. Depending on size of available logs, bids received recently have ranged from \$40 to \$20 on fir, down to \$8 on hemlock. If a \$20 average is obtained, the total revenue to be received from timber sales would approximate \$5,000,000, with \$2,500,000 the probable total for immediate cut on "sustained yield." This would probably have to be spread over a period of several years for cutting.

Since the Water Bureau is operated as a utility under Section 11-201 of the City Charter, revenues from lands held by the Bureau for Water Bureau purposes purchased with earmarked funds, have to date been credited to Water Bureau accounts. Without special authority by Charter amendment to divert the revenues from timber sales to a special purpose, there is a possibility of litigation if such revenues are used for acquisition and installation of generation facilities.

August 20, 1958 Page Two

Concerning authority of the City under the present Charter to install generation facilities, as we pointed out in an opinion to Commissioner Boody on August 7, 1958, a copy of which is enclosed for your information, the City already has authority to install generators and sell power on an exchange basis as a credit or offset for the City's cost of street lighting, if the City can find the money to purchase the equipment and install the facilities. The City, however, cannot contract for an exchange of power as an offset to its street lighting bill for more than five years, with the option of renewal for an additional five years (Section 2-105 (a) (10) of the City Charter).

Theoretically, the City could sell its power on an exchange basis for street-lighting energy to either Portland General Electric Company or Pacific Power & Light Company; or the City could sell to Bonneville Power Administration if it had specific authority to sell power without regard to street lighting. From any of such purchasers the power would flow into the Northwest Power Pool under the contract for interchange of electric energy with a clearing house system of settlement for net charge or credit during a particular period. At the present time, the main contract for street lighting is held by P.G.E. Company. The City would have to install transmission lines to deliver its power to the purchasing company or agency, and P.G.E. Company is nearest to the Bull Run dam sites.

The City, of course, has no absolute assurance that at the end of any five or ten year contract for offset on street lighting, the company would desire further renewal. If the electric systems in this area obtain sufficient generation facilities through coal or atomic energy to meet all peak demands during periods of water shortage, the salability of the City's electric energy is not secure, since electric energy cannot be stored but must be used as produced. Theoretically, also, since street lighting contracts are let on bids, the City might be faced in the future with the necessity to build additional transmission lines in order to continue any trade of electric energy as an offset for its street lighting bills.

With reference to revenue bonds, such bonds probably would not be salable at all unless there was a safe and secure source of steady income sufficient to cover the principal and interest for the bond issue, and the interest might be very high. In our judgment, an exchange of power for street lighting purposes does not afford such security and is not of sufficiently certain duration to cover issuance of revenue bonds at reasonable interest rates

August 20, 1958 Page Three

and terms. Also, timber sales are not fully safe as a potential source of revenue since timber is subject to destruction by forest pests and is especially vulnerable to any forest fire, resulting in the possible loss of the entire source of revenue.

The City cannot issue any bonds, even revenue bonds, without special Charter authority (Section 2-105 (a) (24) City Charter). Public utility certificates are not available, since they are limited to acquisition or establishment of utilities operating within the City (Section 10-104 City Charter).

If the City could finance the acquisition and installation of generation facilities by immediate timber sales, which would require a complete timber cruise and evaluation of land management practices to select the areas for immediate cut, the City could then, without a Charter amendment, enter into a contract (if P.G.E. is willing) to exchange the power produced for a credit on the City's lighting bill from P.G.E. However, if this contract is not renewed in the future, the City is without authority unless there is a Charter amendment, to sell the power in any other way.

The City cannot use Water Bureau funds nor finance generation facilities by water bonds, nor include the debt service on bonds in the basis for water rates without a Charter amendment. (See our opinion to you dated July 23, 1958, with attached memorandum written in 1949). If electric generation is mixed into Water Bureau functions, we will probably be faced with another bill similar to the one which we kept from success during the last session, to make all Water Bureau installations in Clackamas County taxable.

We therefore conclude that various alternatives are open to you and other members of the Council to accomplish the purpose you have expressed; and we shall present our comments under each of those alternatives:

Alternative A. Charter amendment authorizing revenue bonds, limited to particular sources of revenue: Timber sales and sale of energy.

(If such an amendment includes general authorization to sell the electric energy, bonds might be salable but the interest rate would probably be high and the bonds would probably have to run for a fairly long period, since future timber sales are not completely safe, and sales of energy do not afford sufficient revenue by themselves. In any event, such a Charter amendment should also contain a provision permitting longer contracts for sales of energy, with a minimum of 20 years).

August 20, 1958 Page Four

# Alternative B.

ive B. Revenue bonds which are also general obligations of the City, with a Sinking Fund established from timber sales and sale of energy.

(This would probably obtain a good interest rate, since making the bonds general obligations also would safeguard bondholders. The period could be cut down and the salability would be certain, but the City could not use the revenues from energy sales until the Sinking Fund for the bonds was built up to cover the full cost of bonds and interest and could not use this revenue for immediate offset on street lighting or any other general fund purpose).

Alternative C. Revenue bonds also general obligations, with a Sinking Fund from timber sales.

(These bonds also would be completely salable and would have a low interest rate. If the timber sales proved to be sufficient to cover the bonds, taxpayers would not be burdened with debt service. In the event of disaster to the timber, the taxpayers would have to cover the debt service; but the City could use the revenue from the sale of energy for its own purposes. This, of course, could be earmarked for offset from the City's street lighting bill).

Alternative D. General obligation bonds, with a Sinking Fund from timber sales.

(This would have the same net effect as Alternative C, though not as palatable to the voters).

Alternative E. General obligation bonds with a Sinking Fund established from timber sales and any deficiency from water revenues.

(Such a Charter amendment would have to include specifically a provision that any deficiency in the Sinking Fund after revenues from timber sales are placed in the Fund would be included as a part of the costs of the operation of the Water Works. This would in effect include the bonds in the general status of water bonds, with the special allocation of timber sales for the term of bonds until the Sinking Fund was completely built up. This alternative would forestall

August 20, 1958 Page Five

any contention that revenues from lands assigned to the Water Bureau must be used for Water Bureau purposes. Such a Charter amendment would doubtless provide that the installation of generation facilities and the generation of electric power would be deemed an adjunct to the Bureau of Water Works. However, there would have to be special provision for use of the revenues from sale of electric energy as an offset to street lighting bills or for other municipal purposes. Otherwise the revenues from sale of electric energy would go only to reduce water rates).

If you will let us know which of these alternatives you wish to present to the Council, we shall be glad to write a draft of Charter amendment to accomplish this purpose.

Yours very truly,

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MARIAN C. RUSHING Chief Deputy City Attorney

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WATER BUREAU DATA

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## WATER BUREAU DATA

FROM	To	REGARDING	DATE
Chief Engineer	Commissioner Boody	Construction Program	Dec. 18, 1956
Chief Engineer	Commissioner Boody	Five & Ten Year Program	Jan. 28, 1957
Chief Engineer	Geo. Marshall, Supt. Water Engineers	Billing Linnton Plywood for Timber Removal	March 1, 1957
Chief Engineer	Geo. Marshall, Supt. Water Engineers	Billing Linnton Plywood for Timber Removal	April 1, 1957
Chief Engineer	Francis J. Ivancie	Roslyn Lake Diversion	Sept. 22, 1958

Bureau of Water Works Room 209, City Hall Portland 4, Oregon

#### December 18, 1956

Honorable Nathan A. Boody Commissioner of Public Utilities

#### RE: CONSTRUCTION PROGRAM

Dear Sir:

Presented herewith is the Construction Program of the Bureau of Water Works:

1. Contracted with Stevens & Thompson, Consulting Engineers, for a preliminary report on a second dam in the Bull Run Reserve. The report is to be completed by April 15, 1957 and tentative expectations are that plans and specifications for the dam should be completed by September 15, 1957 for bidding in order to take advantage of the early spring construction period of 1958. It is further contemplated that the dam will be ready to receive water in the summer of 1959. Preliminary considerations indicate that it will be highly desirable to install penstocks. Surplus water will be available for further power after passing through Bull Run Dam No. 1 (original dam) and thence through Bull Run Dam No. 2 (proposed dam), thence flowing through Conduits Nos. 2 and l<sub>1</sub> to be emptied into Portland General Electric Company's Roslyn Lake and thence again through turbines for further power generation. The use of the water three times for power generation should be financially advantageous to the Bureau of Water Works.

2. In order to back the water up behind Bull Run Dam No. 2, it will be necessary to log and clear approximately 1/00 acres of Bureau of Water Works land. In order to expedite the logging of the lands to be flooded, it is highly desirable to construct roads in the area prior to logging. Surveys and plans are partially complete on the proposed roads and construction has been started.

#### Commissioner Nathan A. Boody

-2-

3. A 7,500 foot portion of the Southeast 36-inch supply line was completed in the spring of 1956 and another contract has been awarded to continue the supply line to the intersection of S. E. Henry Street and S. E. 36th Avenue which will serve the East side intermediate area. The job is scheduled to be started in the early spring of 1957 with completion prior to the summer demand.

4. The Washington Park Standby Pump Station was constructed in the summer of 1956 and pumps and piping are being installed in order to meet the heavy West side summer demands of 1957.

5. The present Headworks was installed in 1925 with a capacity of approximately 175 million gallons per day. The capacity has been reached and a contract has been let for additional facilities. Construction is well in progress and should be completed in the summer of 1957.

6. Conduit No. 3, laid in 1925-26, has developed a considerable number of leaks. A contract has been awarded for centrilining, that is, adding a 3/8-inch cement lining to the inside of the conduit from Gresham to S. E. 67th Avenue and S. E. Powell Boulevard.

7. Bids will be opened on December 20, 1956 for a 400,000 gallon elevated storage tank to be constructed at the intersection of N. Emerson Street and N. Interstate Avenue. The tank will partially alleviate the low pressure in the North and Northeast sections of the City.

8. The high summer demands on the Bull Run storage necessitates the using of Bull Run Lake water and a road is being constructed to the Lake. The breached earthen dam and outlet works will be rehabilitated with completion scheduled for August, 1957.

9. A road is being constructed from the Headworks on the South side of Bull Run River to parallel the Lake to be formed above Bull Run Dam No. 2. Commissioner Nathan A. Boody

-3-

December 18, 1956

10. A contract has been let for the core drilling investigation of Bull Run Dam No. 2.

11. A cooperative water shed study and experimentation study has been started with the U.S. Government.

12. In 1955, a contract was let for the painting of the Bull Run bridge at Bowmans and the Sandy River bridge at Dodge Park. Due to inclement weather the painting had to be delayed until the summer season of 1956. The job was satisfactorily completed.

13. On January 1st, the hillside near the intersection of Walker Prairie Road and the Headworks Road began sliding. The slide was of such size that a joint was pulled apart on Conduit No. 4 and 100 feet of pipe was crushed. It was necessary to excavate for six months in order to clear the material. During the interim, the City was served through Conduits Nos. 2 and 3.

14. 200 acres of timber above the proposed dam (Bull Run Dam No. 2) has been auctioned. The high bidder was Linnton Plywood Association with a bid of \$52.25 per thousand. The logging is scheduled to be started on January 1, 1957, with completion by December 31, 1957.

Very truly yours,

H. Kenneth Andusan

H. Kenneth Anderson Chief Engineer Bureau of Water Works

HKA:gr

## Bureau of Water Works Portland, Oregon

## Honorable Nathan A. Boody Commissioner of Public Utilities

### Re: FIVE AND TEN YEAR PROGRAM

## Dear Sir:

In answer to your request to submit a Tentative Five and Ten Year Program, I am pleased to offer the following:

A Five Year Program has already been presented in the Sixtythird Annual Report of the Bureau of Water Works dated December 10, 1956.

Following is a short resume of that submitted in the Sixtythird Annual Report with approximate cost figures:

1.	Southeast Supply Line\$1,500,000.00
2.	East side storage 1,500,000.00
3.	West side storage 750,000.00
4.	Pump house, pump line and storage for Southwest area 250,000.00
5.	Pump station and lines at Washington Park 50,000.00
6.	Headworks and chlorinator building 550,000.00
7.	By-pass line at S.E. 145th Avenue 50,000.00
8.	Supply line to St. Johns 2,000,000.00
9.	New high service on West side 200,000.00
10.	Enlargement of warehouse and meter shop 1,000,000.00
11.	Additional pump and pump line on Mt. Tabor 50,000.00
12.	Centrilining 1,500,000.00

Continued - Page #2

 Commissioner Boody
 -2 January 28, 1957

 Continued from Page #1
 \$9,400,000.00

 13.
 Construct roads for fire protection and access to Bull Run Lake
 600,000.00

 14.
 Bull Run Dam #2
 4,000,000.00

 15.
 Bureau of Water Works Building
 1,500,000.00

 16.
 General Expansion
 4,500.000.00

 Total

ESTIMATED SELECTIVE LOGGING RETURN \$10,000,000.00

#### TEN YEAR PROGRAM

1.	Camps	Butte	storag	;e		*****	****	r an ma an do an co a	\$1	10,000,	,000.00
2.	Major	supply	lines	in in	City		in au 117 48 au 118 -			5,000,	,000.00
3•	Local	storag	;e			dar und die cas een gan t				3,000,	,000.00
4.	Genera	l expa	nsion		A 200 <b>40</b> 40 40 10	10 cg gy an dy an i	100 algu 200 500 algu 200 va	1 ch 11 de ca == en co		7,000	000.00
				Tot	al		us 623 623 car 6ar rea te	· · · · · · · · · · · · · · · · · · ·	\$2	25,000,	,000.00

REVENUE FROM TIMBER SALES ----- \$10,000,000.00

The Bureau of Water Works' expansion is financed by revenue and in periods of necessity from revenue bonds which do not require a vote of the people.

. . . . . . . .

The City of Portland should look forward to a Metropolitan Water System and the production of power for sale when Bull Run Dam #2 is completed.

Very truly yours. Anderson H. Kenneth Anderson

Chief Engineer

HKA:gr

Water Engineers Bureau of Water Works George A. Marshall, Superintendent Re: Billing Linnton Plywood Association for Timber Removal, for Month of Feb. 1957

Dear Sir:

C O P Y

> During the month of February 1957, seven hundred and seventy-six (776) logs of douglas fir totaling five hundred ninety-five thousand four hundred and forty (595,440) Board Feet at \$52.25 per thousand amounting to \$31,111.74 and one hundred forty-seven (147) logs of "other species" totaling thirty-eight thousand one hundred thirty (38,130) Board Feet at \$10.00 per thousand amounting to \$381.30 were removed by Linnton Plywood Association, 10504 N. W. St. Helens Road, Portland, Oregon, on the above-referred-to sale; plus a charge of six hundred thirty-three thousand five hundred seventy (633,570) Board Feet at \$1.00 per board ft. for slashing, for a total of \$633.57.

Please bill the Linnton Plywood Association for same and send a copy to me.

Very truly yours,

H. Kenneth Anderson Chief Engineer

HKA: gr

April 1, 1957

Water Engineers Bureau of Water Works George A. Marshall, Superintendent re: BILLING LINNTON PLYWOOD ASSOCIATION FOR TIMBER REMOVAL FOR THE MONTH OF MARCH 1957

Dear Sir:

C O P Y

> During the month of March 1957, two thousand twenty-two (2,022) logs of Douglas Fir totaling one million eight hundred ninety-four thousand three hundred and forty (1,894,340) Board Feet at \$52.25 per thousand amounting to \$98,979.26 and four hundred and eight (408) logs of "other species" totaling one hundred forty-one thousand six hundred ninety (141,690) Board Feet at \$10.00 per thousand amounting to \$1,416.90 were removed by the Linnton Plywood Association, 10504 N.W. St. Helens Road, Portland, Oregon, on the above-referred-to sale; plus a charge of two million thirty-six thousand thirty (2,036,030) Board Feet at \$1.00 per thousand board feet for slashing, for a total of \$2,036.03.

Please bill the Linnton Plywood Association for same and send a copy to me.

Very truly yours,

H. Kenneth Anderson Chief Engineer

# CITY OF PORTLAND

\_rom Dept. of Water Engineers

September 22, 1958

To Dept. of Mayor's office

Addressed to Francis J. Ivancie, Executive Assistant

Subject

RE: ROSLYN LAKE DIVERSION

MAYOR EXEC. ASST. ADM. ASSI

MAYOR'S OFFICE

Dear Sir:

At the meeting of last Friday morning, September 19, 1958, I noted that the Mayor was of the opinion that the Roslyn Lake diversion was only going to cost \$56,000. The \$56,000 bid was the bid of the Riverside Construction Company. The Bureau of Water Works advertised for the necessary valves for the job approximately 90 days before because of the long time required for delivery. The Riverside Construction Company will install same and the amount will be slightly over \$80,000; however, the overage has been agreed upon by the Portland General Electric Company.

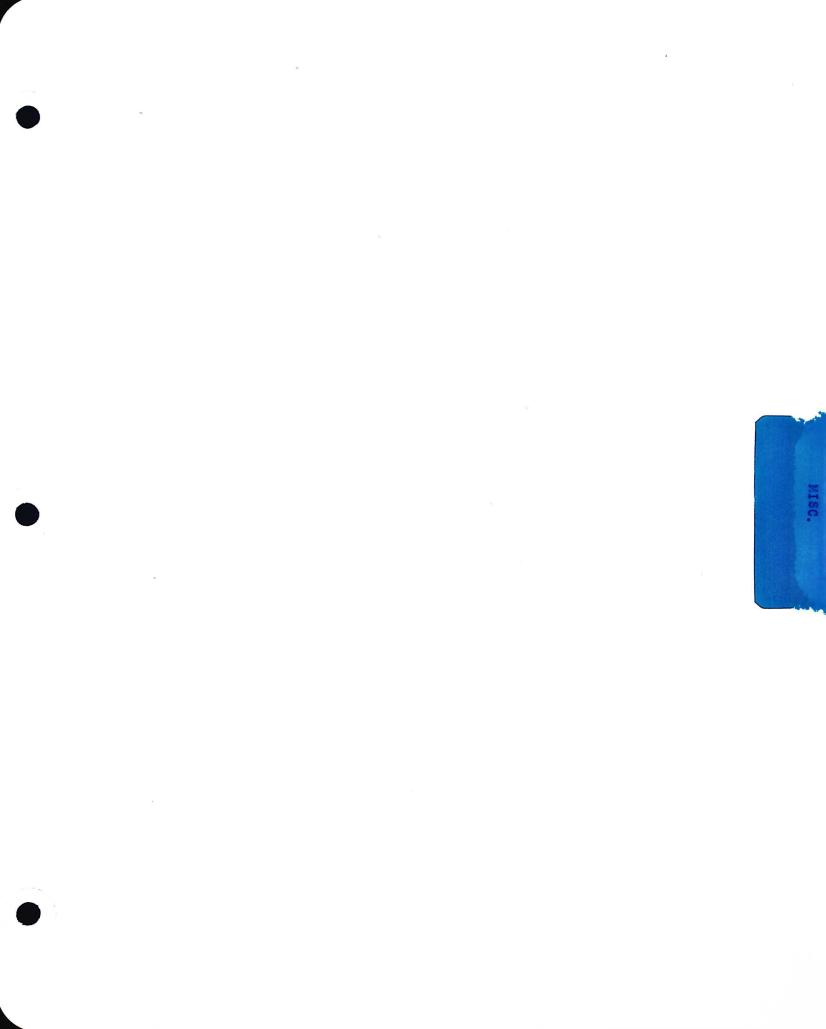
The above is a general description only and if further details such as exact amounts, etc., are required, I shall be glad to furnish same.

Very truly yours.

meth Ander

H. Kenneth Anderson Chief Engineer

HKA:gr



#### MISCELLANEOUS

Corres.	Regarding	Date
An Act		August 26, 1958
Brown and Brown (letter)	Cruising of timber	Sept. 4, 1958
Sen. Neuberger & Sec. Benson	Transfer of Bull Run watershed	August 1958
F.M. Warren, Jr., Pres. PGE	Sale or trade of Bull Run electrical energy	Oct. 7, 1958
List of persons attending meeting re: Bull Run Timer	Bull Run Timber	Sept. 5, 1958
Open letter from Mayor	Bull Run Power Development Proposal	Oct. 10, 1958

H/G Itas wien vert weel ballot LAST day vert weel ballot other wise

To amend an Act of the Legislative Assembly of the State of Oregon entitled: " An Act to incorporate the City of Portland, Multnomah County, State of Oregon, and to provide a charter therefor, and to repeal all acts or parts of acts in conflict therewith," approved by the Governor and filed in the office of the secretary of state January 23, 1903, as subsequently amended by said Legislative Assembly and by the people of the City of Portland from time to time, and as recodified, revised, arranged and annotated pursuant to Ordinance No. 76832, by adding a new section to be numbered Section 11-203, to authorize the Council to establish hydroelectric power facilities in connection with Bureau of Water Works dams and installations, on certain conditions, authorizing sale of electric energy produced and authorizing contracts for not exceeding 30 years, authorizing issuance of general obligation bonds outside debt limitations in the total sum of \$5,000,000 payable primarily from certain revenues, establishing a sinking fund and authorizing subsequent use of certain timber and energy sale revenues for certain purposes.

BE IT ENACTED BY THE PEOPLE OF THE CITY OF PORTLAND, OREGON:

Section 1. The Act of the Legislative Assembly of the State of Oregon entitled: "An Act to incorporate the City of Portland, Multnomah County, State of Oregon, and to provide a charter therefor, and to repeal all acts or parts of acts in conflict therewith," approved by the Governor and filed in the office of the secretary of state January 23, 1903, as subsequently amended by said Legislative Assembly and by the people of the City of Portland from time to time, and as recodified, revised, arranged and annotated, pursuant to Ordinance No. 76832, hereby is amended by adding thereto a new section to be numbered, entitled and to read as follows:

Section 11-203 HYDROELECTRIC POWER FACILITIES BONDS. In order to utilize the electric power potential available in municipal water supply facilities of the City of Portland, and in order to alleviate power shortages presently recurring in western Oregon at periods of low water flow in the Columbia River, whenever the Council determines that the revenues to be expected from electric power generation facilities together with certain other revenues specified in this section can reasonably be expected to equal or exceed costs of operation and maintenance and the annual payments on principal and interest of bonds issued pursuant to this section to finance such electric power facilities, the Council of the City of Portland may acquire, construct, install, replace, enlarge, maintain, operate and cause to be maintained and operated, hydroelectric power generation facilities, equipment and appurtenances, together with transmission lines, transformer and substation facilities and all other equipment or facilities necessary or appropriate for hydroelectric power generation and transmission in connection with water supply facilities of the City of Portland. The Council may sell the electric energy produced or use the same for municipal purposes, and may enter into contracts for sale of energy and contracts for maintenance and operation of power facilities for periods not exceeding 30 years, and public bidding shall not be required for such contracts.

To provide necessary funds, the Council of the City of Portland is authorized in the name and under the corporate seal of the City to issue and sell bonds from time to time in the name of the City of Portland, Oregon, in a total amount not exceeding \$5,000,000 of such denomination as the Council may determine and in such form as the Council shall select, with interest coupons attached thereto. Said bonds shall bear the facsimile signature of the Mayor and the countersignature of the Auditor of the City of Portland, and each of said coupons shall have the signature of the Mayor and Auditor of the City printed thereon, and the City by each of such bonds shall be held in substance and effect to undertake and promise to pay to the bearer of each of said bonds at the expiration of the time specified therein, the sum named therein in lawful money of the United States of America, together with interest thereon in like lawful money at such rate as the Council may determine, not exceeding five and one-half per cent (5 1/2%) per annum, payable semi-annually as shall be provided in said coupons. The Council shall prescribe the dates for the redemption of such bonds, provided that no such period of redemption shall be less than three (3) years nor more than twenty-five (25) years from the date of issuance. The bonds issued pursuant to the authority herein granted shall be known as Hydroelectric Facilities Bonds of the City of Portland, Oregon, and such bonds shall be general obligations of the City of Portland, Oregon. Such bonds may be issued and sold from time to time as the Council may direct within the limitations of the amounts fixed herein. None of such bonds shall be sold without prior advertisement in the manner prescribed by law and all sales shall be to the bidder whom the Council finds to be the highest responsible bidder. The Council may in its discretion provide that competitive bidding shall be partially or wholly upon the rate of interest and in that case the rate shall be fixed according to the rate which in the opinion of the Council would be most advantageous to the City. The Council has the right to reject any and all bids and to proceed to readvertise when bids are not satisfactory, so as to obtain new bids, which may be called for on the same or a different basis. The Council may exercise such other and additional powers and authority within the restrictions above mentioned relating to the issuance of bonds, as may be necessary or convenient for accomplishing the objectives hereof. The amount of all the bonds authorized by this act shall not be counted in calculating the debt limitation otherwise applicable to the City of Portland fixed by charter or Constitution

2

of the State of Oregon or otherwise, but shall be exempt from such limitation.

The proceeds from the sale of said bonds shall be placed in a special fund to be designated Hydroelectric Power Facilities Fund and the City Treasurer shall have the care and custody of all moneys deposited in said fund. The money in said fund shall be expended in the payment of all the cost of advertising, issuing and selling such bonds, including legal and other expenses connected therewith, and for the cost and expense of construction, acquisition, purchase, installation and equipment of hydroelectric power generation facilities in relation to municipal water supply facilities and property related thereto, transmission lines, transformers, substations and all other facilities and equipment necessary or convenient for the production and transmission of electric energy, and for the reconstruction, alteration, enlargement, repair or replacement of the same, or additions thereto and related appurtenances. The Council shall set aside an annual amount for a sinking fund for the retirement of the outstanding bonds herein authorized, which amount shall, with the anticipated accumulations of interest on moneys or securities in such fund be sufficient, at the time when the various bonds issued under authority of this section become due, to retire said bonds. Into said sinking fund the Council shall deposit revenues from sales of timber on lands owned by the City of Portland and assigned to the Bureau of Water Works, and income from the sales of electric energy produced by the facilities authorized in this section, over and above the costs of maintenance and operation anticipated for the fiscal year. Any deficiency in said sinking fund shall be made up from tax revenues as other general obligations of the City. If the sum of timber sale revenues and income from the sales of electric energy, as anticipated for the fiscal year over and above the cost of maintenance and operation, exceed the sinking fund requirements set forth above, and when there are no fund requirements for a sinking fund, the Council may use such excess amounts for additional electric power facilities or replacement of facilities, for payment of the cost of street lighting and other municipal uses of electricity, for sewer operation, maintenance or additional facilities, or for additions to or improvement of water supply or distribution systems or facilities.

Order of Council 8-26-58 MCR:gm **BROWN AND BROWN** 

## FOREST ENGINEERS

614 LEWIS BUILDING

#### PORTLAND 4, OREGON

EUGENE R. WALSH PETER M. WALSH THURSDAY SEPTEMBER FOURTH 1958 TIMBER ESTIMATORS CONSULTANTS APPRAISERS

MAYOR

EXEC.

ASST

ADM.

ASST.

Mr. Francis J. Ivancie Executive Assistant to The Honorable Mayor Schrunk 303 City Hall Portland, Oregon

Dear Mr. Ivancie:

In response to your inquiry of September 3, concerning the cost of cruising approximately 4,000 acres of <sup>C</sup>ity timber in the Bull Run Watershed, we have come to the following conclusions:

On the basis of a four-time run or 20% cruise, we estimate the job will cost approximately \$7500. Since we do not have the exact acreage involved, and have not had time to examine the property, the above figure can only be considered a rough estimate.

If it is the City's intention to have this timber cruised before the November election, it should be commenced immediately; however, our feeling is that a better job could be done if the work did not have to be completed by a specified date.

Very truly yours,

MAYOR'S OFFICE

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PMW:iw

NAME & ADDRESS AV. ADDRESS

CRAND L. CALLAGONNI, BRUT GLUD

Minited States Denate

AUGUST 6, 1958





Honorable Terry Schrunk, Mayor Oity Hall Portland, Oregon

MAYOR'S OFFICE

Dear Terry:

I enclose a copy of Scoretary Benson's reply to the proposal you forwarded suggesting the transfer of the Bull Run watershed to the City of Portland.

The facts set forth seem compelling, and the conclusion that such a transfer not be contemplated appears sound. I appreciate your calling the suggestion to my attention.

With best wishes, I am,

Sincerely,

Richard L, Neuberger United States Senator

RLN:eg Englosupe es: Honorable Wayne Morse es: Honorable Edith Green

\$/18/58 - Copy to Commissioner Boody for his information.

## <u>COPY</u> DEPARTMENT OF AGRICULTURE WASHINGTON 25 D.C.

August 1, 1958

Hon. Richard L. Neuberger United States Senate

Dear Senator Neuberger:

Reference is made to your letter of April 22, 1958, requesting the views of this Department on a draft of a proposed bill, "To authorize the sale of certain lands to the City of Portland for the protection of the sources of its water supply."

This Department would oppose enactment of the draft bill.

The draft bill would direct the Secretary of the Interior to convey for a consideration of \$1.00, an area of approximately 93,000 acres of Federally-owned nationalforest land in Oregon to the City of Portland to be used as a watershed for the city's water supply. The land which would be conveyed is a part of the Mt. Hood National Forest administered by the Forest Service, is located on the upper reaches of Bull Run River, and is now the source of the city's water supply.

In 1892 the Bull Run Forest Reserve was established by Presidential proclamation under the provisions of 16 U.S.C. 471. The Bull Run National Forest later was made a part of the Mt. Hood National Forest, and is now known as the Bull Run Division of that national forest. It includes about 138,000 acres. The actual watershed above the city's waterworks is about 68,000 acres, of which the city owns about 2,600 acres. The bill would provide for the conveyance to the city of the approximately 65,000 acres of Federally-wwned land in the watershed plus about 28,000 acres outside the rim of the watershed, making a total of about 93,000 acres of national-forest land that would be conveyed to the city.

The city's interest in Bull Run River as a source of water started in the late 1880's when most, if not all, of the land on the river's watershed was unreserved public domain. Since then the city has steadily expanded its water system facilities to keep pace with population growth in the Portland area, and, in doing so, the city has depended upon the Federally-owned national-forest land in the Bull Run watershed as its source of supply.

This Department can see no justification for conveying the area to the city as proposed. There are a number of reasons why the Department would oppose such a proposal:

1. The City's water supply is being, and can continue to be, amply safeguarded. In the administration and protection of the approximately 65,000 acres of nationalforest land in the watershed, this Department has cooperated with the city and recognizes the dominant importance of water over the other forest resources. This is consistent with the spirit of the Act of April 28, 1904 (33 Stat. 526) which

### 2-Hon. Richard L. Neuberger

contained special provisions against trespass in order to protect the city's source of water supply. Coordinated use of other resources, including timber, may be permitted and is carried out in such a way as not to affect adversely the water supply.

2. In addition to supplying water for Portland, the property has become a valuable national asset, which certainly should not be sold for the price of \$1.00. The total worth of the area which would be conveyed is large. It contains an estimated 4.4 billion board-feet of timber now worth nearly \$96 million. The land itself is worth an estimated \$1.5 million.

The area which could be conveyed to the city by the draft bill will contribute a sustained timber cut of about 40 million board-feet per year, giving due regard to watershed and other values. At current prices the Federal revenue from this cut would be about \$873,000 per year. The city itself has recently sold about 25 million board-feet of timber from some of its lands inside the watershed; and the value of Federal timber may be a factor in the city's interest in obtaining title.

- 3. Future road and school programs of six Oregon counties would be adversely affected by the sale of the more than 93,000 acres of national-forest land to the city as proposed. Clackamas, Hood River, Jefferson, Marion, Multnomah and Wasco counties receive 25 percent of the annual receipts of the Mt. Hood National Forest. The conveyance would reduce future payments to these counties an estimated \$218,000 per year.
- 4. Similar proposals have been before Congress before and did not receive favorable consideration. There is no evidence of changed circumstances warranting favorable action now. Identical proposals to convey the area to the city have been made on four previous occasions: (1) S. 3167, 69th Congress; (2) S. 2956, 70th Congress; (3) S. 3717, 71st Congress; and (4) S. 735, 72nd Congress. These bills were referred to the Committee on Public Lands and Surveys, and in each case this Department recommended against enactment. Congress took no action.
- 5. Favorable action on this proposal might set a precedent for undesirable disposition of other national-forest community watersheds. About 1,800 communities obtain the major part of their municipal water from the national forests. Enactment of this bill would encourage proposals for similar grants to other communities obtraining their water from the national forests. This would be unwarranted donation of Federal property; and could seriously impair the national-forest system.

In compliance with your request we are returning Commissioner Boody's letter of April 7, 1958, to the City Council, together with the draft bill attached thereto.

The Bureau of the Budget advised that there is no objection to the submission of this report.

Sincerely yours,

E. T. Benson

Enclosure

OFFICE OF THE MAYOR



CITY OF PORTLAND OREGON

October 7, 1958

Mr. Frank M. Warren, Jr., President Portland General Electric Co., 621 S. W. Alder St., Portland, Oregon

Dear Mr. Warren:

This communication will confirm our verbal discussion on the subject of starting negotiations between your company and the City of Portland for the possible sale, or trade, of electrical energy generated at Bull Run Dam No. 1, now existing in the City of Portland Watershed, and for the purchase, or trade, of electrical energy generated at Dam No. 1, which is now under construction in the Portland Watershed. 1 was happy to learn from you that your Company is still interested in entering into such a negotiation for the total output of both of these potential power generating facilities, and that you would be willing to start negotiating a long term contract to cover such an arrangement.

Our engineers inform us that we can expect to produce at these two sites some ninety-eight million kilowatts of power. Much of this power will be generated at the period of time when the Golumbia River is at its lowest flow, and consequently producing the least amount of power. It is our feeling that this block of power will be of material assistance in firming up our power requirements in this community, and will, at the same time, provide either funds or credit not only to liquidate the cost of installation of the project, but to provide an offset for public expenditures such as street lighting. Naturally, such a program would be beneficial to the entire community. It would appear that it is the city's desire to contract for the disposal of this power at or near the generating facility.

There is at the present time a measure to amend the City Charter that will be voted on by the people at this November election, which authorizes the city to move forward with the installation of generating facilities at the Bull Run Watershed. When and if this measure is approved by our citizens, it is our desire to be in a position to know what we can reasonably expect to realize from the power so generated, in order to develop a sound financing program, not only to liquidate the cost of the project, but to, at as early a date as possible, provide funds for an offset in the cost

# COPY

Mr. Frank M. Warren, Jr. October 7, 1958

of our street lighting program. Other contacts have already been made with the City of Portland relative to the use of this power, but since you have generating facilities in the near area and transmissions lines, it would appear to the best interests of the City of Portland, and to your company and your customers, that an agreement be reached between the two of us, if at all possible. Based upon this belief, I am confirming my willingness, on behalf of the City of Portland, to immediately enter into negotiations for such a possible contract.

I shall ask Mr. Loren Thompson, independent consulting engineer, and Mr. Kenneth Anderson, Chief Engineer of the Water Bureau, to act as our preliminary negotiating committee on this matter. As negotiations progress, it will be necessary that our City Attorney pass on any and all of the legal questions that might become involved in such a contract. Upon hearing officially from you as to who will represent your company is such preliminary negotiations, I will request the above two persons to meet with your staff members on this subject, and to keep the City Council informed as to their progress.

Not two long ago, your company and the City of Portland successfully negotiated a mutually acceptable contract for the sale of falling water from one of our conduits that passes near Roslyn Lake. I am confident that a similar contract can be arranged to the advantage of the citizens of Portland and to Portland General Electric Company at an early date for the transfer of power generated at the Bull Run Dams,

Thank you for your attention to this matter.

Yours truly,

and A Schunk

MATOR

TDS:ld



Page 2

### LIST OF PERSONS ATTENDING MEETING RE: BULL RUN TIMBER

Mr. Paul Neff, Supervisor Mt. Hood National Forest 340 N.E. 122nd Avenue

Mr. Ray Grefe, Regional Engineer U.S. Forest Service 729 N.E. Oregon Street

Mr. Dwight L. Phipps State Forester 2600 State Street Salem, Oregon

Mr. Lyle F. Watts 1426 N.E. Thompson St.

Mr. Kermit W. Linstedt Assistant Regional Forester Division of Watershed Management 729 N.E. Oregon Street

Date of Meeting: sept. 5, 1958

### BULL RUN POWER DEVELOPMENT PROPOSAL

On November 4, 1958, the citizens of Portland will have an opportunity to vote on a ballot measure amending the City Charter to provide for hydro-electric power facility bonds which will enable the city, if feasible, to install and operate generating facilities in Bull Run Dam No. 1 and Dam No. 2, upon its completion. The passage of this amendment will give the City Council the long awaited opportunity to put the hydroenergy now flowing down the Bull Run River to work for the benefit: and tax relief of the entire community.

In 1929 when Bull Run Dam No. 1 was constructed, penstocks for the eventual production of hydro-electric energy were installed in the dam, but funds were not provided for the installation of a power plant to turn water energy into electricity. Consequently, the "white horses" of water energy that are so important to the economic development of this northwest country have for some 29 years gone to waste.

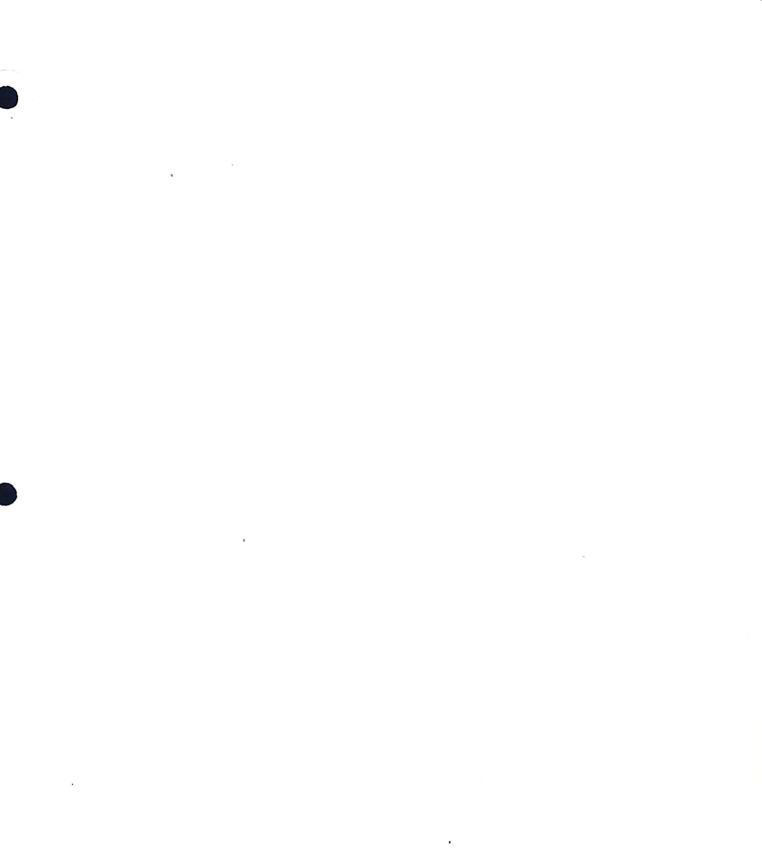
Our engineers informed the Council that some 50 million kilowatts of electric energy can be produced at the present dam, and that some 47 million kilowatts of energy can be produced at Dam No. 2 presently under construction. This total of approximately 100 million kilowatts per year could easily be utilized either for lighting our streets or turning the wheels of our factories. The revenue produced from the sale of such energy to a private power company (as contemplated) could produce a sizable offset in our street lighting program, and at the same time, could provide electrical energy for our area at a critical time during the year when the Columbia River is at its lowest flow, and consequently, its power production is at a minimum.

The Charter Amendment authorizes up to \$5,000,000 in power facility bonds. According to our present engineering studies, this program would be entirely selfliquidating and would produce a fair return to our taxpayers.

Recently a contract was negotiated by the City of Portland with Portland General Electric Company for the sale of surplus water from one of our conduits that passes near their Roslyn Lake project. A similar contract could be negotiated for the sale of the power produced in the Bull Run Watershed to a private or public utility. The Portland General Electric Company has already indicated, and specifically stated, that they definitely are interested in the power produced in the Bull Run Watershed and that they will enter into negotiations with the City of Portland to write a contract to buy all the power produced. This proposed Charter Amendment, while authorizing bonds, provides one of those rare opportunities to the taxpayers of the City of Portland to vote for progress and at the same time vote for a measure that would make them, the taxpayers, money, instead of costing them money. As Mayor of the City of Portland, I strongly urge the active support of every taxpayer of this community of this important Charter Amendment.

Somy & Schnun

Terty D. Schrunk, Mayor City of Portland



PRESS CLIPPINGS

Poor Marriage	Oregonian	July 11, 1958	Page 1
Council Eyes Power-at-Bull Run Measure	Oregonian	August 13, 1958	Page 2
Mayor Asks Power Plan	Journal	August 13, 1958	Page 3
<u>City Power Investment</u>	Oregonian	August 17, 1958	Page 4
<u>Mayor Offers 2 Plans To Finance Generators</u>	Journal	August 21, 1958	Page 5
Still Time For Bull Run	Oregonian	August 23, 1958	Page 6
Council To Weigh Plan For Bull Run Power	Oregonian	August 28, 1958	Page 7
City Vote On Power Gets Study	Oregonian	August 28, 1958	Page 8
Council To Weigh Plan For Bull Run Power	Oregonian	August 28, 1958	Page 9
City To Vote On Bull Run Power Plan	Journal	August 29, 1958	Page 10
First Step At Bull Run	Oregonian	August 30, 1958	Page 11
Foresters Vow Help On Bull Run Program	Oregonian	Sept. 6, 1958	Page 12
Forester Advises Caution	Journal	Sept. 9, 1958	Page 13
Bull Run Ballot OKd	Journal	Sept. 17, 1958	Page 14
Council Has Final Say On Bull Run Power	Oregonian	Sept. 18, 1958	Page 15a
Map (with preceeding article)	Oregonian	Sept. 18, 1958	Page 15b
Extra copy of Pages 15a and 15b	Oregonian	Sept. 18, 1958	(Extra)
Bull Run Logging Feasible	Oregonian	Sept. 19, 1958	Page 16
To Save Wasted Kilowatts	Journal	Sept. 24, 1958	Page 17
Simply Good Business (Editorial cartoon)	Oregonian	Oct. 10, 1958	Page 18
Mayor Ready To Talk Pact	Oregonian	Oct. 11, 1958	Page 19

### Poor Marriage

Last spring a group calling itself the Citizens' Committee for Recreation Without Taxation asked the City Council to place on the May election ballot a two million-dollar bond issue to finance a new public golf course, a pitch-andputt course, a golf driving range, a Willamette River small boat moorage and an ice skating rink. All would have been built on land already owned by the Park Bureau; all had been studied by the City Planning Commission and adjudged to be practical, self-liquidating projects. With the great public interest in recreational activities, the measure almost certainly would have been approved by the voters.

But the Council would not place the proposition on the ballot. Now that Mayor Schrunk has revealed his advocacy of a plan to lump these recreational features along with a sewer rehabilitation project in one capital improvements package, to be financed by a continuing two-million-dollar-a-year levy over a period of five to ten years, his strategy becomes obvious.

The idea of paying for sewers is not nearly as attractive to voters as the idea of providing facilities for sparetime fun. Two years ago Portlanders voted down a \$5,000,000 levy for construction of badly needed new sewers and rebuilding of some overloaded old ones. The mayor evidently figures that wrapping everything up in one package will put the sewers across along with the golf, skating and boating propositions.

The only excuse for thus linking to tally dissimilar projects is one of expediency. One who believes in sound planning and orderly governmental processes cannot defend it. The recreation proposal should stand or fall on its own merits, and so should the sewer proposal.

If the mayor feels it is necessary to link sewers with something else to improve their voter acceptance, another and more logical way to do so suggests itself. The City Water Bureau is in a very strong financial position, having some 40 million dollars in assets and only about 10 million, in outstanding bonds. Right now the Water Bureau's authority is limited under the City Charter to sell bonds for water supply purposes only. But the linking of water supply and sewerage functions in the financial sense is a reasonable idea, since water users also are sewer users. People are accustomed to paying for sewer service through extra charges lacked onto their water bills; right now this is done only to simplify the city's bookkeeping, but the Charter could just as well be revised so that sewer construction could be financed by bonds backed on by water revenues

well also amend it to allow the Water Bureau to take advantage of the reve nue-producing proposals contained in the Stevens & Thompson report on the feasibility of installing hydroelectric generating facilities at Portland's Bul Run dams. This work, too, could be financed by water revenue bonds if the voters would approve. In his year-end report to the Council, the mayor indorsed the Bull Run hydro proposal, which would yield an estimated 100,000,-000 kilowatt-hours of electricity a year. with a profit of some \$200,000 to the city from its sale to private utilities or others in the Northwest Power Pool. Viewed in this company, the sewer project might look better to the voters than standing alone. But alone is the way the recreation proposal should tand.

If we are going to amend the Chartes

to make this possible, we might just as

OREGOMIAN July 11, 1953

# Council Eyes Power-at-Bull Run Measure

ure up to the voters this November.

Mayor Terry Schrunk laid the ballot proposal before his Council colleagues with a strong recommendation that it be seriously considered.

Whether such a ballot issue can be drawn and approved in i e for a fell vote, however, is anyone's guess. The ballot deadline is this Friday. If the Council as a whole

agrees, the suggested p o w e r measure could be offered on a special election ballot at the

positive go-ahead approach. It brought only general, but not certain, reaction, however.

power business. City Atty, Alexander G. Brown volunteered an opinion that a power venture would almost certainly subject Portland's power system to some taxation.

#### Potential Power Wasted

sistently wasted over the spill- to spell out the method of disway of the existing Bull Run tribution immediately. Dam.

He proposed that a charter amendment be so drawn that the city, by adding power gen-eration facilities, could make a trade of energy for what it now uses in its own city services

By the mayor's estimate, the sale of power at Bull Run dams —including the second dam to be built—would offset some of the cost the city now pays in its annual light bill. It amounts to about a million dollars a year. Commissioner N. A. Boody.

See City Council toyed Tues-set with the possibility of put-sing a power at Bull Run meas-The question of adding power of power additions if the water generators to Portland's huge water facilities on Mt. Hood's western foothills h as been talked of for more than a tree

western foothills h as been talked of for more than a year. Mayor Schrunk's proposal Tuesday was the first hint of a positive go-abead approach. It

certain, reaction, however. His four commissioner colleagues expressed uncertainty about the possible ramifica-tions that may come as the re-sult of the city's going into the power business problem of large power genera-

> He said power facilities would cost the city about \$4,000,000 and return a net of about \$250, 000 annually or—"a quarter of the present light bill we are paying."

The mayor said it was his desire to see something done "to prevent millions of dollars" worth of water being con-the transmissioner Stanley W. Earl suggested that any ballot act could provide enabling authority for power facilities. It would not necessarily have

August 13, 1958

OREGOMIAN

# Mayor Asks Power Plan

### Dollars Reported Flowing Downstream

Mayor Terry D. Schrunk said Tuesday he would like the people to vote on a charter amendment in November which would authorize the financing of power generating facilities at Bull Run.

He discussed his plan with, other council members but received no commitment from them. Were such a measure to go on the regular general election ballot, the council would have to approve it by Friday. If it is to go on a special election ballot, the council would have 21 days after Friday in which to act on it.

The proposal to harness Bull Run power potential is one that has been discussed off and on by the council for years. Mayor Schrunk said "it just makes good sense" to generate the power so it can be used to offset part of the \$1,000,000 annual bill the city has to pay power companies for street lighting.

"THE POWER potential of Bull Run is perhaps only one quarter and not over one half of the city's annual power expense," Schrunk said. "But I'm interested in having the people take advantage of those stray dollars that are now floating downstream. The Good Lord gave us Bull Run, and we should use His gifts to the fullest."

The city already has authority, through its charter, to generate electric power. A charter amendment is needed, however, to finance the installation either through revenue bonds or general obligation bonds.

Mayor Schrunk said he thought the ballot measure should ask the people for the right to issue \$5,000,000 in bonds. JOURNAL August 13, 1953

BOTH Commissioners William A. Bowes and Ormond R. Bean questioned the advisability of putting such a measure on the ballot in November. They expressed fear it would jeopardize the chances of the \$39,555,000 capital improvements measure.

Besides, they argued, those groups that have complained to the council that the "package" long-range improvements program should have been broken down into individual components for separate votes in November would have material to support their position if the power generating measure were on the ballot by itself Nov. 4. The majority of the council told Schrunk they would be willing to talk over his proposal further but no definite time of a future meeting was set.

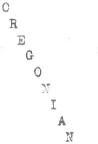
### City Power Investment

It is not logical for the City of Portland to be paying a million dollars a year to utilities for its lighting program when it could reduce that cost measurably by installing generators at Bull Run dams now used only for water supply. Power generated there could be swapped to the utilities in a kilowatt exchange with profit both to the utilities and the city.

Hence, it is encouraging to find Mayor Schrunk and Commissioner Boody, after more than a year of delay since the city obtained the Stevens and Thompson engineering report, proposing that the Council place on the November ballot a measure to bring this about. It is unfortunate that the Council did not see fit to give serious study to this proposal earlier. But it has three weeks to make up that deficiency.

The ballot proposal could be so worded as to leave the Council discretion in the means of financing. Or it could be a straightforward amendment to the Charter authorizing the city to draw on the reserve funds of the Water Bureau to finance generators to use water now wasting to the sea.

The Water Bureau is in strong financial position. Its outstanding bonds total about 11 million dollars and its bond rates are exceedingly low. Bureau assets are above 45 million dollars. Mayor Schrunk proposed initial generating facilities costing about \$4,000,000 which would earn a net of about \$250,000 a year. This is an investment the city should make, and it is feasible to put the proposal on the Nevember ballot.



August 17. 1958

JOURNAL August 21, 1958

# **Mayor Offers 2 Plans To Finance Generators**

### **By Jack Pement**

Journal Staff Writer The best way to finance power generating facilities at the city's Bull Run dams would be to issue water bu-reau bonds, in the opinion of Mayor Terry D. Schrunk.

If this legally cannot be done, Schrunk would like to finance the power program through sale of timber in the city's vast reserve in the Mt. Hood national forest.

Before he went on a brief vacation this week, Schrunk asked City Atty. Alexander G. asked City Aity. Alexander G. 1957-58 the city realized some of sold to the total these port Brown to prepare a report to \$1,500,000 through the sale of determine the most proper method of financing the oper-ation. Brown has not complet-ed his report, but he said it appeared highly questionable whether the undertaking could

submitted to a vote of the peo-

ple in November, along with possible enabling acts to legal-ize the matter. Since the deadline for putting measures on the regular ballot of Nov. 4 has passed, the issue would have to be considered by the voters on a special ballot the day of the general election. Schrunk pointed out that in

1957-58 the city realized some

er generators. Schrunk said he had been advised that the generators could be placed in Bull Run dam No. 1 now for \$2,000,000. He said he would like to see similar facilities included in Bull Run dam No. 2 as soon as it is finished next year.

THE POWER generated either could be contracted to hallot Portland General Electric Co. or sold to the Northwest pow-

be financed with the bonds of a utility like the water bureau, SCHRUNK said he is eager that the power question be solution be be below be be below be be below below below be below below below below be below ing the light water flow period of the Columbia river, thus helping to alleviate possible shortages, Schrunk maintained.

> Other council members have talked over the issue with Schrunk but have not voted to put the question on the

### Still Time for Bull Run

City Atty. Alexander G. Brown, on being asked to interpret the legal aspects of the proposed development by the City of Portland of the hydroelectric power potential at its Bull Run dams Nos. 1 and 2, has discovered all manner of technical difficulties to hinder an early start on this most desirable plan.

In the first place, says Mr. Brown, the City Charter doesn't say we can raise money to build electric generators. It would have to be amended. There's another Charter conflict if we want to use the fat revenues of the Bureau of Water Works to finance the generators. Public utility certificates can't be sold to finance the project since these, under the Charter, are legal only for the operation of utilities inside the city limits. Probably a permit from the Federal Power Commission would be required.

Of course, the City could avoid all this fuss and bother merely by allowing one of the private utility companies to build and operate the generating facilities and take the power, paying the city simply for the use of the water. But this might not be very profitable. The Bull Run dams are in Clackamas County, and their entire structures, along with the privately-owned hydro facilities, might become subject to real property taxation if a private utility participated in the project.

The best thing for the City to do is go ahead under the recommendations of the Stevens & Thompson report, an exhaustive engineering study which shows clearly that the falling water at Bull Run can be harnessed profitably. The legal bramble patch cited by Mr. Brown is by no means impenetrable. The voters will need to approve whatever financing method is chosen, anyway, and there is no reason why appropriate Charter amendments cannot be placed on the same ballot to legalize whatever method is deemed most practical.

In our opinion, hydro development at Bull Run logically would fall under the province of the Bureau of Water Works. Therefore it seems most logical that the proper course would be to amend the Charter so this bureau could finance the hydro facilities just as it now finances its own dams and pipelines, through water revenues. Since the hydro facilities would produce highly salable kilowatts, there would be no additional burden on water users in the form of higher rates. If the City did no more than trade the kilowatts to the Portland General Electric Co. to apply against the abrual

### OREGONIAN August 23, 1958

"It is not too late for the Council to ask Mr. Brown to prepare the appropriate charter changes in the form of a measure that could go on a special election ballot at the November general election. Mayor Schrunk and Commissioner Boody have said they favor the Bull Run hydro plan. Surely the other commissioners will not hold back and continue to permit the wasting of this valuable resource.

# **Council to Weigh Plan** For Bull Run Power

A proposal to put the city Thursday declares its purpose in the power business by in-to be "to utilize the electric stallation of generating facili-power potential available in stallation of generating facilities in water system dams in municipal water supply facili-the Bull Run Reserve will be ties of the city of Portland" considered by the City Council and "to alleviate power short-Thursday afternoon.

The proposed amendment to the city charter, which will go on the November election ballot if approved by council members, would authorize the city to sell \$5,500,000 of general obligation bonds to finance the project.

Three sources of revenue would be provided in the proposal to pay off the bond principal and interest-sale of electricity, sale of timber on cityowned land in the Bull Run watershed and property taxes.

#### **Tax Levy Doubted**

The proposal contemplates, however, that no property tax would be levied unless revenues from power and timber sales were insufficient to meet the bond payments and operate the power facilities.

The proposal further pro-vides that Bull Run power development will not be undertaken until members of the City Council are satisfied that revenues from power and tim-ber sales would be enough to pay off the bonds and operate and maintain the generating

equipment. The city, under the proposal, would set up a special "Hydroelectric Power Facilities Fund" into which would go proceeds from the bond sale and income from power and timber sales above the amount needed for operating the power plant. This money would be used to install generators, transmission lines, substations and other equipment, and, after these were completed, to pay off the bonds. A tax levy would make up any deficit.

#### **Profit Uses Outlined**

Any profit from the project would be used "for additional electric power facilities or replacement of facilities, for payment of the cost of street lighting and other municipal uses of electricity, for sewer operation, maintenance or additional facilities, or for additions to or improvement of water supply or distribution systems of facilities."

The bonds would run a maximum of 25 years and carry no more than 51/2 per cent interest.

The city, if the people adopt the proposal, would be authorized to use the power for municipal purposes or to sell it,

ages presently recurring in western Oregon at periods of low water flow in the Columbia River."

#### Taxes To Make Up Deficit .

Brown said that if the city either could not sell the power to Bonneville, PGE or other private industry, or elected to use it directly for city purposes and not to sell it, the tax rev-enue now collected to pay cost of street lighting and other power needs would be divert-ed to nayment of bonds up to ed to payment of bonds up to the amount needed. The city now spends about a million dol-

The money saved on power. The money saved on power costs would be spent on re-tiring bonds and operating the system along with timber sale income. Any deficit would be made up by additional property

While officials said the proposal precludes use of a prop-erty tax for bond retirement, except to make up a deficit, the city would elect to use all pow-er generated, rather than sell it, and in that case revenue would be derived solely from timber sales and property taxes

This would not result in addi-tional costs to the taxpayers, however, unless the city found itself unable to save enough on power costs and realize enough from timber sales to meet its bond obligations.

> OREGOINEAN August 28, 1958

Any profit from the project would be used "for additional electric power facilities or replacement of facilities, for payment of the cost of street lighting and other municipal uses of electricity, for sewer operation, maintenance or additional facilities, or for additions to or improvement of water supply or distribution systems of facilities."

The bonds would run a maximum of 25 years and carry no more than 5½ per cent interest.

The city, if the people adopt the proposal, would be authorized to use the power for municipal purposes or to sell it, negotiating contracts for sale of power and for maintaining and operating the generating facilities for periods up to 30 years.

### Views on Project Differ

The proposal is the fruit of long discussion and dispute, centering to large extent on the methods which should be adopted in getting the project under way.

It ignores suggestions that the city issue revenue bonds and pay them off from Water Department revenues if timber and power sales don't produce sufficient income.

City Atty. Alexander Brown has taken the position that water revenues could not be used for this purpose, even with a charter amendment.

Power sales under the proposal could be sold to Portland General Electric Co. or to the Northwest Power Pool through the Bonneville Power Administration or used directly for city power needs.

Discussion so far has indicated sale of power would return \$250,000 a year to the city, with an unknown additional amount realized from timber sales. Brown has stated that \$250,000 a year would not pay off the bonds with interest in less than 40 years. He based his statement on a probable project cost of four million dollars or 1½ million dollars less than the bond issue authorized.

How much revenue could be derived from sale of timber on a sustained yield basis on the more than 3,000 acres of city-owned land in the watershed is strictly speculative. Officials said Wednesday this could not be determined until the area had been cruised.

There also is some speculation on whether PGE will purchase power generated from the project. Engineers have estimated that the private utility would have to pay in the neighborhood of 5.1 mills per kilowatt hour, depending on the bond interest rate, if the city is to realize \$250,000 annually from generators installed in both dams, the existing Bear Creek Dam and the new dam now under construction.

The proposal to be discussed

OREGONIAN August 28, 1958

# Lity Vote On Power Gets Study

Council Debates Bull Run Source As Auxiliary Aid

Portlanders will vote next November on whether they want to put the city in the hydroelectric power business —if the city council acts favorably on a proposal to come up before it soon.

An act, a resolution and an ordinance were due for council vote during this afternoon's session. The act would set up a proposed c h a r t er amendment authorizing the city to build power generating facilities on its Bull Run dams. The resolution would refer the amendment to the ballot and the ordinance would call for a special election.

The charter amendment would authorize the city to establish hydroelectric power facilities in connection with bureau of water works dams and installations. It would authorize issuance of general obligation bonds outside debt limitations in the total sum of \$5,500,000.

SALE OF power, sale of timber on Bull Run watershed land owned by the city and as a last resort—property taxes could be used to pay off the bonds.

The council would set aside an annual amount for a sinking fund for retirement of outstanding bonds. Into this fund the council would deposit revenues from timber sales and any power sale revenues over and above the cost of maintenance and operation.

If timber and power sale income exceeds the sinking fund requirements, the surplus could be used for building or replacing power facilities, for paying the cost of street lighting, for sewer operation or for water supply and distribution.

### OREGONIAN August 26, 1958

HOWEVER, if the sinking fund falls short, the deficiency would be made up from property tax revenue, according to the initial draft of the act.

A safeguard is the provision that Bull Run power development will not be undertaken until the city council is satisfied that timber and power sale revenues will be enough to pay off the bonds and to operate and maintain the generating facilities.

The power generated could either be sold by the city or it could be used for municipal operations where power is now bought from private companies.

The city-generated electricity would be relatively small in amount and, if sold, would be made available principally during power shortages caused by low water in the Columbia river.

THE PROPOSAL to harness Bull Run power potential has been debated for years by council members. Mayor Terry D. Schrunk has declared that it makes good sense to generate power to offset part of the \$1,000,000 annual bill the city pays power companies for street lighting. The power potential of Bull Run is estimated at about one fourth of the city's annual power need. The city already has char-

The city already has charter authority to generate electric power, but an amendment is needed to finance the installation of power facilities.

ties. Such a measure could have gone on the regular ganeral election ballot next Novem<sup>2</sup> ber if it had been approved by the council by Aug. 15. However, the council has until Sept. 5 to take action to put the proposal on a special election ballot.

# **Council to Weigh Plan** For Bull Run Power

the city charter, which will go on the November election bal-

lot if approved by council members, would authorize the city to sell \$5,500,000 of general obligation bonds to finance the project.

Three sources of revenue would be provided in the proposal to pay off the bond principal and interest-sale of electricity, sale of timber on city-owned land in the Bull Run watershed and property taxes.

#### Tax Levy Doubted

The proposal contemplates, however, that no property tax would be levied unless revenues from power and timber sales were insufficient to meet the bond payments and operate the power facilities.

The proposal further pro-vides that Bull Run power development will not be under-taken until members of the City Council are satisfied that revenues from power and tim-ber sales would be enough to pay off the bonds and operate and maintain the generating equipment.

The city, under the proposal, would set up a special "Hydroelectric Power Facilities tional costs to the taxpayers, Fund" into which would go however, unless the city found proceeds from the bond sale itself unable to save enough on and income from power and timber sales above the amount from timber sales to meet its timber sales above the amount needed for operating the power bond obligations. plant. This money would be used to install generators, transmission lines, substations and other equipment, and, aft-er these were completed, to pay off the bonds. A tax levy would make up any deficit.

#### **Profit Uses Outlined**

Any profit from the project would be used "for additional electric power facilities or replacement of facilities, for payment of the cost of street lighting and other municipal uses of electricity, for sewer operation, maintenance or additional facilities, or for additions to or improvement of water supply or distribution systems of facilities."

The bonds would run a maximum of 25 years and carry no more than 51/2 per cent interest.

The city, if the people adopt the proposal, would be author-

A proposal to put the city in the power business by in-stallation of generating facili-ties in water system dams in the Bull Run Reserve will be considered by the City Council Thursday afternoon. The proposed amendment ito low water flow in the Columbia River."

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The money saved on power. The money saved on power costs would be spent on re-turing bonds and operating the system along with timber sale income. Any deficit would be made up by additional property tax

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This would not result in addi-

ORAGONT AN August 78, 1958



Portlanders will vote Nov. 4 on whether they want the city to harness the hydro-electric power potential of the Bull Run river.

The city council Thursday adopted an act to amend the city charter, a resolution to submit the proposal to the voters and an emergency ordinance to call the special election at the same time as the regular general election.

same time as the regular general election. The amendment to put the city in the power business was approved with one change. The limit on general obligation bonds to finance the project was whittled from \$5,500,000 to \$5,000,000, after some debate by council members.

IF THE charter amendment is voted in this fall, it will authorize the city to install power generating facilities in water system dams on the Bull Run reserve. It is a project that has long been discussed in council chamders.

The power thus generated could either be sold or it could be used for municipal operations and thus reduce city's power bill for street lighting.

The power development would not be undertaken until the city council is satisfied that revenues from sale of power and of timber or reserve lands would be enough for maintenance, appearation and bond retirement. City fathers behave sale of power could bring the city \$250,000 a year. Timber revenue can not be estimated until the timber is cruised.

IF THE sinking fund to be set up for the project falls short, the city may turn to property tax revenue under the proposed charter amendment. However Mayor Terry D. Schrunk feels that the project will pay for itself without putting an extra load on taxpayers.

Paring \$500,000 off the bond limitation came about as the result of a protest by Commissioner Ormond R. Bean. The finance commissioner said he felt that \$1,000,000 should be dropped, and that voters would be more likely to pass the measure if the bond limitation were \$4,500,-000. He added that it would be difficult to convince the public that estimated costs had risen a great deal since a tentative engineering estimate of about \$3,800,000 was made last April.

MAYOR Schrunk pointed out that the council would issue only the amount of bonds actually needed "but it would be shortsighted to tie our hands and find we haven't enough to do the job in the face of a rising market."

Commissioner William A. Bowes moved to compromise on a \$5,000,000 figure, but declared he does not believe the public is yet prepared to vote intelligently on the power measure.

"I'm going to vote for this," he asserted, "but if this issue is approved by the voters I am not going to be a party to any contract or installation until there has been a thorough analysis of this project by people competent in the engineering field."

COMMISSIONER Stanley W. Earl seconded Bowes' motion for the reduced bond amount, but said he believes preliminary engineering studies have been competent and he assumes that the council would take all precautions before beginning installation of power generating facilities.

"I believe the people of Portland are entitled to a start on this, and this is the first step," Earl said. "If they refuse it, that's their responsibility. But I do believe it is the responsibility of the council NOW to give them a chance to vote on it."

Mayor Schrunk agreed and added, "As long as I am mayor I will insist that the bureau in charge provide us with adequate engineering studies before any move is made."

He said that the engineers who made the prelimicary studies agreed that it would be previse to spend any more money on such studies until the council was at least empowered to move on the project.

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### First Step at Bull Run

The City Council showed courage and good sense in its unanimous vote Thursday to lay before the voters a plan to utilize the hydroelectric potential of the Water Bureau dams in the Bull Run Reserve.

There are political risks in their decision to ask Portland taxpayers to approve the expenditure of five million dollars to venture into a field in which the city lacks previous experience. No one can say with certainty as yet how successful the venture will be.

Furthermore, private utilities are upset over what they regard as a foot in the municipal door for public power advocates, and individual commissioners already have felt pressure from them and their influential friends in the community. It is to the Council's credit that it was not deterred by these considerations from taking the first step toward development of a resource which holds so much promise for the city's future.

Before it gets to the point of actually purchasing and installing generators at Bull Run, the City Council needs much more information than it presently has. It has had the benefit of a preliminary engineering report by the respected local firm of Stevens & Thompson, showing the project to be sound. Additional studies, however, are needed.

For one thing, the city must know exactly how much it will cost to install and operate its power houses, so it can calculate how much it will need to earn from power sales to amortize its investment. Armed with this information, it will then need to seek out all possible customers for its power in the Pacific Northwest and find out how much they are willing to pay.

To get these answers the city will have to hire engineers and marketing specialists. Not until these answers are available can a firm decision be made on whether or not to go ahead with the Bull Run project. But it would not be proper to spend the money to get these answers until the voters had given at least preliminary indorsement to the basic idea. Thus the first step is to ask authorization for the sale of bonds to finance the project, when and if.

We believe Portland voters should grant this authorization, and that the project after study will be found to be practical and profitable for the city. All logic points to this conclusion.

### OREGONIAN

Aug. 30, 1958

It would be hard to imagine a more advantageous situation for a hydro installation than that in existence at Bull Run. Here we have the rare circumstance that the cost of the dams will not be charged as part of the cost of generating power. The dams are an essential part of the city water system, and their cost will be paid, power or no power, by water users. The hydro potential is an extra bonus.

While the Northwest's chronic power shortage temporarily has been eased. few believe this situation will prevail very long, Private utilities are building hydro projects of their own to augment the supply of power obtainable from the Bonneville Administration. The Portland General Electric Co., which cannot borrow money as cheaply as the city can and must pay for its dams as well as its generators, has been busy developing new hydro along the Clackamas River. If this is profitable for PGE it is inconceivable that the city's Bull Run power will not be marketable at a price substantially in excess of its cost of production.

Even if, at worst, the Bull Run hydro plant merely broke even on a profitand-loss basis but made it possible for Portland to lure one substantial industry and payroll to the city with the promise of a cheap supply of power, the project would be worth while. And we are confident the voters can expect a much greater return than that.

# **Foresters Vow Help On Bull Run Program**

Federal and state forestry experts pledged their help Fri-clearing program is feasible in the eity's vast watershed. Mayor Terry Schrunk called five timber management of-ficials together with an aim towards possibly logging some of the Bull Run timber for benefit. Logging to date in the 4000-nere water reserve has been restricted to clearing for dam space only or where roads dam space only or where roads were out through for fire protection.

Kermit Linstedt, assitant regional U.S. forester, voiced the general sentiment of the gath-ering that a timber management program could increase the water potential.

#### Five Reach Accord

All five of the consulting experts, however, urged extreme caution to prevent any injury to the watershed.

Joining Linstedt in the con-ference were Ray Grefe, re-gional engineer for the U.S. Forest Service: Paul Neff, Mt. Hood Forest s u p e r v is o r; Dwight Phipps, state forester, and Lyle Watts.

Watts is a former chief of precedent. the U. S. Forest Service with years in regional forestry man-agement. He retired six years ago following 40 years of service.

Boody, Anderson Attend The city was represented by Schrunk: City Commissioner Nathan A. Boody, in charge of the Water Bureau, and H. Ken-neth Anderson, chief water engineer.

Out of the meeting came agreement that the U.S., state and city should pool their technical brains to produce a thorough study of the timbermanagement possibility. Neff said the federal government has under way a pattern

ing into account stream flows and storage possibilities. Mayor Schrunk told the group protection of the watershed itself is primary. Such con-siderations as fire protection and logging would have to be secondary. He said there is much more water potential in the timbered reserve than is the timbered reserve than is being used now. By proper timber cutting, he said, that potential could conceivably be increased.

"There are lots of things we don't know about timber out-ting in a watershed," conceded Linstedt. "But experimental studies are under way now to find some of the answers." State Forester Phipps suggested that the city might de velop a work program for jail prisoners within the shed to get some of the cleanup work done He pointed to use of state pris-oners in the Tillamook burn as

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Sept. 6, 1958

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# Forester Advises Caution

Leo Watts, retired chief U. S. forester, has advised the city of Portland to "go slow" in logging its small part of the Bull Run watershed.

The former chief forester warned, "There are a lot of things we don't know yet about watershed logging. You will be dealing with a vital water supply and mistakes could be disastrous."

He spoke Friday at a meeting called by Mayor Terry D. Schrunk in his office to explore logging problems in the whole drainage. The city owns only 4800 acres of the total Bull Run drainage of some 75,000 acres. Logging of the federal part of the basin must be coordinated with that of the city's tract.

WATTS cautioned the city should "not just have dollars in mind" in harvesting timber from its holding. The income would pay for a part of the cost of installing power units in Bull Run storage dams if the people vote for a \$5,000,-000 bond issue next November.

Watts urged, logging a patch of dead trees in the drainage which was caused by a fire several years ago.

### JOURNAL

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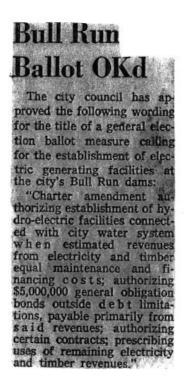
A JOINT forest service and city water department project has studied water flow, precipitation and other data in the basin for the past two years. The studies will serve as a guide to logging. The meeting also was attended by Kermit W. Kinstedt, dssistant regional forester, Paul E. Neff, supervisor of ML Hood national forest, Commissoner Nathan A. Boody and H. Kenneth Anderson, the water bureau's chief engineer. The foresters recommended that the city first make a cruise of the timber to see what it has. They estimated that cost from \$7000 to \$10,-000. The mayor said he expected the cruise would be undertaken.

Neff suggested that the city might desire to have its logging done under direction of the forest service.

the forest service. The mayor emphasized that "we must make our real objective the protection of our reservoir."

He told the group that he was considering the employing of "minimum security city prisoners" to clean out the dead trees which are a great fire hazard in dry weather.

### JOURNAL



September 17, 1958

### Council Has Final Say on Bull Run Power

city to develop the hydroelectric power potential of the Bull Run watershed, for 65

years the source of Portland's drinking water.

drinking water. Back in 1926, when the oity was planning construction of its first big Bull Run storage dam at Bear Creek, consulting engineer D. C. Henny suggest ed that penstocks be installed in the dam to draw off water for future power generation. Since the embedding of the big steel pipes in the dam struc-ture was no more costly than merely filling the space with concrete, the suggestion water adopted without argument. Engineering News Record magazine, in its issue of May 26, 1927, contains an exhaustive description of Bear Creek Dam. The 90-inch penstocks in its base are dismissed perfunc-torily in a single sentence as intended "for the development of such power as the utility may need." Difference to the development of such power as the utility may need." drinking water. Back in 1926, when the oity was planning construction of its first big Bull Run storage dam at Bear Creek Dam. The magazine's reference to drinking water. Back in 1926, when the oity is stell pipes in the dam struc-ture was no more costly than merely filling the space with concrete, the suggestion water adopted without argument. Engineering News Record magazine, in its issue of May 26, 1927, contains an exhaustive description of Bear Creek Dam. The magazine's reference to The magazine's reference to

The magazine's reference to "the utility" evidently was to the Portland Electric Power the Portland Electric Power Co., forerunner of today's Port-land General Electric Co., which operates a hydro plant on the Bull Run River below the lower boundary of the reserve.

It is plain that 30 years ago there was small interest, and nothing controversial, in the matter of Bull Run hydro development. This was in the period of Coolidge prosperity, before the depression of the '30s fostered the concept of public development and marketing of hydroelectric power. In 1927 there was no thought other than that PEPCO might be in-terested in Bear Creek Dam as a source of power. Since the company at that time had ample generation at its own dams and steam plants, it was not receptive to the offer, and the Bear Creek Dam penstocks have not been used.

When man he have at

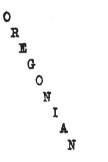
PORTLAND VOTERS will be are Creek Dam (henceforth to be known as Bull Run Dam the City Council to cooperate to be known as Bull Run Dam the City Council to cooperate with the city in developing Bull has an annual potential of 57. Bun power, preferably with the city in developing Bull sector to say whether or not they want the city to develop with the city for reasons of they want the city to develop the company. But, the letter continued, they are the city to develop the base of the dam. two 8,000 Tourn of the twin pen-tocks at the base of the dam. Bull Run Dam No. 2, an earthfull structure now under construction five miles down-stream, is only 115 feet high and thus less valuable as a power producer. One 8,000 KVA generator, working more stead-ily than its upstream sisters because of a more even flow from Dam No. 2 to the head-works below, will yield some 40,042,000 kilowatt hours. While this is no great amount of power, if is power of iccularly desirable

On paper the Bull Run power plan thus looks good, but still it is well the ballot measure has been drawn to leave the final decision to the Council. No one presently can be sure how much interest the city will have to pay on power bonds, or how much it can earn from power sales. Until these answers are pinned down the cautious Council won't plunge into the power business.

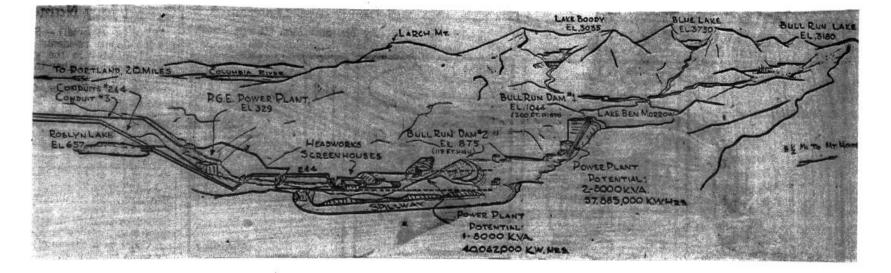
It may be guessed Bull Run power would earn enough to service its bonds and yield a worthwhile profit at 41/2 to 5 mills per kilowatt hour. This is high alongside the rate of 2.78 mills private utilities pay for power on long-term Bonneville contracts. But private util-ities can't get all the power they need from Bonneville. The Portland General Electric Co., for example, must rely on its own generation or purchase from other sources for half its

supply. The prospective Bull Bun rate

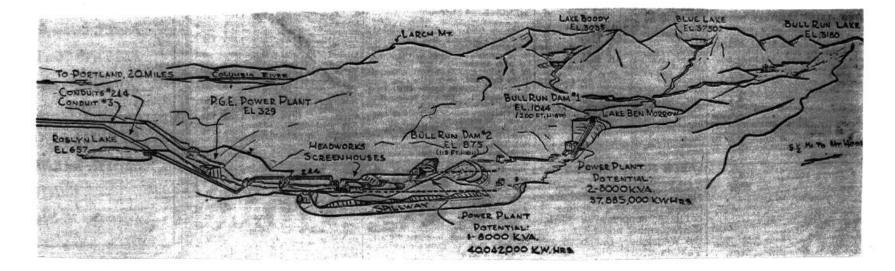
BY ALBERT McCREADY Associate Editor, The Oregonian



September 18, 1958



OREGONIAN September 13, 1958



OREGONIAN September 18, 1958

# Council Has Final Say on Bull Run Power

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26, 1927, contains an exhaustive description of Bear Creek Dam. description of Bear Creek Dam. Secondly, the daily water The 90 inch penstocks in its flow into Bull Run Dam No. base are dismissed, perfunc- 1 can be stored during the low torily in a single sentence as water periods and released intended "for the development through the generators when of such power as the utility needed for "peaking power." base are dismissed , perfuncmay need."

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PORTLAND VOTERS will Bear Creek Dam (henceforth have their first chance at this to be known as Bull Run Dam No. 1) with its 200-foot head has an annual potential of 57,-885,000 kilowatt-hours of electric energy. The report recommends installation of two 8,000 KVA generators in a powerhouse in front of the twin penstocks at the base of the dam.

Bull Run Dam No. 2, an earthfill structure now under construction five miles downstream, is only 115 feet high and thus less valuable as a power producer. One 8,000 KVA generator, working more stead-ily than its upstream sisters because of a more even flow works below, will yield some 40,042,000 kilowatt hours.

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### -BY ALBERT MCCREADY Associate Editor, The Oregonian

ren Jr. offered in a letter to the City Council to cooperate with the city in developing Bull Run power, preferably with generators installed and owned by the company.

But, the letter continued, "Should the city, for reasons of its own, decide that it should install the power equipment, we believe it would then be to the city's advantage to negoti-ate for the sale of such power at the bus bar, and we stand ready to discuss the purchase



Sept. 18, 1958

(see map on following page)

### Bull Run Logging Feasible

Wist ye not that that same Gifford Pinchot, the greatest exponent of forestry the world ever knew—God rest his soul in peace—in his book, "The Fight for Conservation" (1909) on page 53, states. "The con-mection between forests and rivers is like that between to be and con No forests and

America will be a desert. These are but two examples of the floods of falsification -with which our country was submerged at the turn of the century over the effects of for-ests on water supplies; just two drops in the deluge. There was a reason. Unless it could be shown that forests were es-sential to paying ion there was

ests on water supplies; just two drops in the deluge. There was a reason. Unless it could be shown that forests were es-sential to navigation there was no legal lever by which our government could purchase the nation's timber lands and create forest reserves. "The end justifies the means. Go to it, boys. Pull out all the stops. Make America forest conscious. Never m i nd the facts. We've got to create for-est reserves!" Can't you just hear Teddy Roosevelt saying that to his "tennis cabinet"? The folks back home prop-agandized, heckled, badgered and brow-beaten into accept-ing these falsehoods as scientif-ic facts. Finally Congress sucagandized, heckled, badgered and brow-beaten into accept-ing these falsehoods as scientif-ic facts. Finally Congress suc-cumbed and established what is now the U.S. Forest Service, well financed and well admin-istered by a courteous and co-operative personnel. We're proud of them. The end did iustify the means. Out of false

To the Editor: Shades of Gif-ford Pinchot! What damnable from The Oregonian of Sept. 9. "Federal and state forestry experts pledged their help Fri-clearing program is feasible in the eity's vast water-shed." Wist ye not that that same Gifford Pinchot, the greatest ties.

One of the first voices to be raised against this flood of mis-Fight for Conservation" (1909) on page 53, states: "The con-father and son. No forests, no rivers." And, again in the crescendo of direful prophe-cies this one from the Scrap Book of September, 1908, wins the blue ribbon: "When our for-ests are gone, the streams will dry up, the rivers will cease to run, rain will fall no more and America will be a desert." These are but two examples of the floods of falsification with which our country was submerged at the turn of the conception was that of the

the many protagonists  $wh \in n$ the sparks were flying and the bombardment was the heaviest were:

genic microbes.

8. Forests induce greater uni-formity of stream flow than would obtain without them. 9. Forests increase precipitation.

What grasping for straws! Every one of these claims, is

### OREGONIAN September 19, 1958

captions and railacious. They have been well proved so by abundant research during the past 50 years here and abroad. Two well recognized benefits of the forests are (1) to prevent soil erosion and (2) as a source of lumber. A third is a sort of back-handed benefit—like salt that makes potatoes taste bad when you don't put any on— and that benefit is most ger-mane to the present inquiry. A forest is a great consumer of waters If the forest is removed, the waters formerly consumed the waters formerly consumed and dissipated — evaporation from rain and snow intercepted from rain and snow intercepted by the branches, and transpira-tion from the leaves during the processes — become available for other uses. This is no small amount. On the city's forested water-sheds this loss is between a half and a third of the precision a half and a third of the precip-itation. Not all of this is recovable, however, because when the trees are removed the susceptible areas will then support a vigorous growth of brush and brambles that is just as effective, or even more so, in preventing soil erosion than a permanent forest and the water consumption is far less. The most serious hazard is the most serious hazard is the soil erosion that may be induced by haphazard and un-scientific logging and that is the piece de resistance of this entire projected enterprise. J. C. STEVENS, 6639 SE Yamhill Ct.

# To Save Wasted Kilowatts

There is nothing new about the idea of payment of total operating costs and debt mixing Bull Run water storage with pow- service, an annual profit from \$130,000 er production, but it has taken the idea to \$155,250. The city could use the reva long time to come into proposal form. 1927 when Bear Creek dam, now called Bull Run dam No. 1, was constructed, for both a penstock and the foundation for a powerhouse were provided.

until a year ago last spring, when a report by Stevens & Thompson, consulting engineers, recommended that the city install generating facilities at both this dam and Bull Run dam No. 2, now under construction.

The city council delayed action on the recommendation until recently, when it in it. It has also expressed willingness to decided to give the voters an opportunity to vote Nov. 4 on whether they want the city to go into the power production business.

The measure on which the people will vote is permissive only. It calls for the approval of \$5,000,000 in general obligation bonds to finance the project, but it would still give the council the final word on whether to build it.

Preliminary studies have put the cost of the two generators at \$4,250,000. These studies have assumed the sale of power at 5 mills per kilowatt hour, though the council has no marketing commitment. Depending on the interest rates on the bonds, which would mature over a 25- build the project, if anything develops

enue for a variety of purposes, including, The power potential was seen back in if it chose, an offset to street lighting costs.

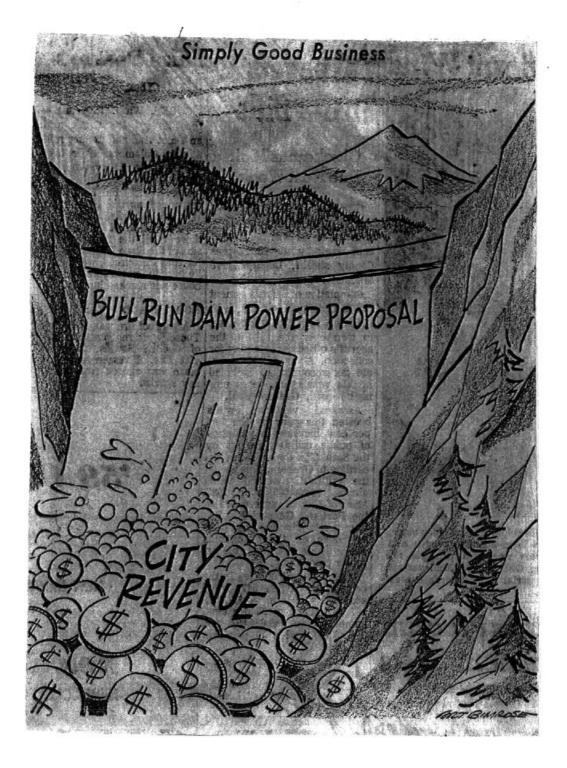
Output from the two dams would not be great in terms of over-all production in our area, but it would have a peculiar But nothing was done with the idea value in that the peak of Bull Run generation would come at a time when hydro production in the Bonneville system is low and when supplemental steam generation is often needed.

> Portland General Electric company would be the logical purchaser of Bull Run power. PGE has expressed interest build its own power facilities at Bull Run. The city has other potential buyers, however, including Pacific Power & Light.

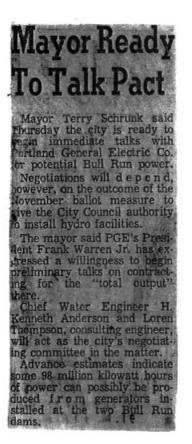
The city is looking at timber sales in its part of the reserve as a backstop to financing the project, although studies so far indicate it can stand on its own feet. The proposal appears to make sense, both from the standpoint of revenue for the city and the saving of wasted kilowatts. The city would do well, however, and this it plans to do, to determine more definitely before Nov. 4 what millage rate it might receive for the power. There is the further safeguard that passage of the measure does not require the city to year period, the city might realize, after to convince the council it is not feasible.

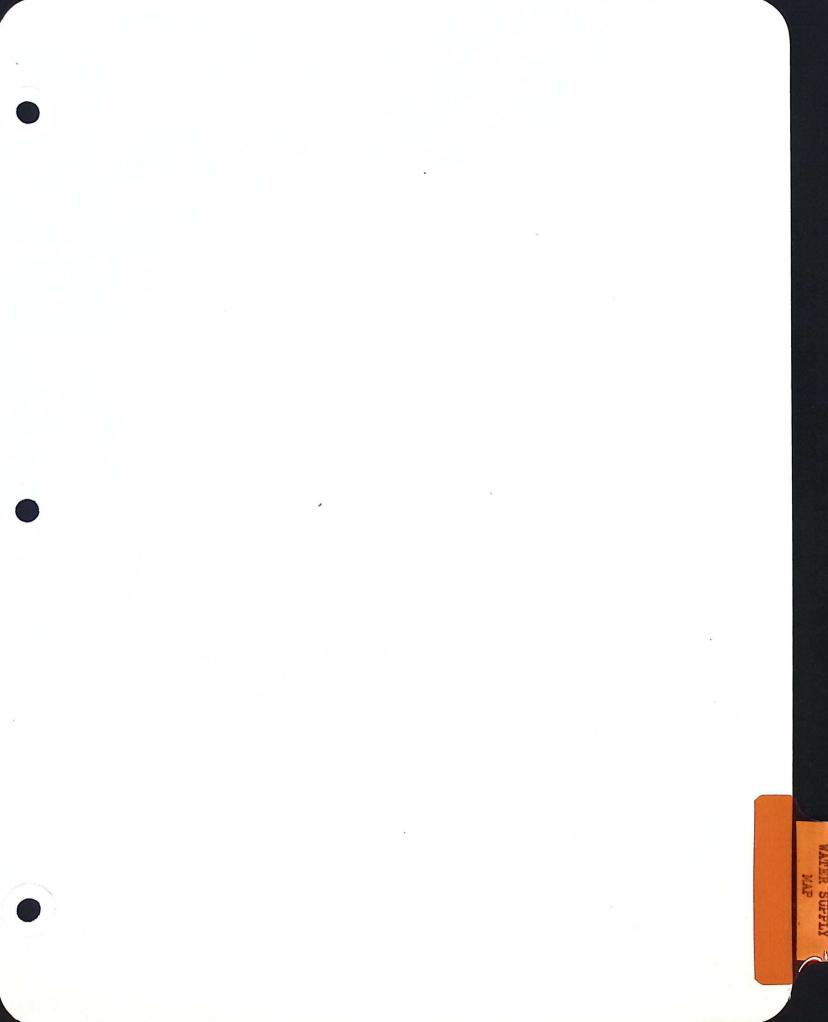
#### JOURNAL September 24, 1958

### OREGONIAN 10-10-58



### OREGONIAN 10-11-58





# MAP AND STATISTICAL DATA BUREAU OF WATER WORKS

### DEPARTMENT OF PUBLIC UTILITIES PORTLAND, OREGON

### NATHAN A. BOODY

COMMISSIONER

SUPERINTENDENT GEORGE A. MARSHALL H. KENNETH ANDERSON . CHIEF ENGINEER Incorporated—February 1851. Present area—70.541 square miles. Population - Est. 417,522.

Maximum daily consumption Daily per capita consumption

Total Fire Hydrants in service

Stop Gates in service, 4-inch diameter and over -9,524. -5.229.Stop Gates in service, under 4-inch diameter -119.128.Number of connected services - 100%. Percent of services metered -40 to 125 pounds. Range of pressure in mains Average pressure in congested business area — 80 pounds.

Number of Water Districts and private companies — 55. Total population supplied outside of city (estimated) - 134,000.

### Location

Reservoir No. 1 — Mt. Tak Reservoir No. 2 - Mt. Tab Reservoir No. 3 — City Par Reservoir No. 4 — City Par Reservoir No. 5 - Mt. Tab Reservoir No. 6 — Mt. Tabor

In addition to these Reservoirs there are 32 concrete or steel tanks and standpipes located in various parts of the city, mainly on the hillside areas of the West Side. These vary from 50,000 to 1,000,000 gallons in capacity and in elevation from 200 to 1096.5 ft. The pumped water approximates 8% of the total consumption. There are twelve widely separated pumping stations having a combined maximum daily capacity of 24,500,000 gallons from 28 pumps, 3 of which are hydraulic and 25 electric.

Capacity at Bull Run Lake — 3,000,000,000 gallons. Storage at Bull Run Project - 10,000,000,000 gallons.

To Outside Companies and Districts the rate varies from 9 cents to 31 cents, depending upon the total consumption and the elevation supplied.

### CITY OF PORTLAND—WATER BUREAU

### STATISTICAL DATA FOR 1956

```
Average daily consumption inside city limits - 47,000,000 gallons.
Average daily consumption outside city limits - 9,100,000 gallons.
                                         - 175,000,000 gallons. (inside & out)
                                               -110 gallons.
                                              _____
Miles of water mains, 4-inch diameter and over - 1,009.406.
Miles of water mains, under 4-inch diameter -323.860.
                                               _____ 1,333.266.
                                               - 7,232.
```

Conduit No. 1 — Completed 1894 — 42", 35", 33" riv. steel — Length 24.3 miles — Abandoned 1953. Conduit No. 2 — Completed 1911 — 52", 44" Lock Bar — Length 24.76 miles — Capacity 50,000,000 gals. day. Conduit No. 3 — Completed 1925 — 58", 50" Lock Bar — Length 25.10 miles — Capacity 75,000,000 gals. day. Conduit No. 4 — Completed 1953 — 66", 56" Welded Steel — Length 25.5 miles — Capacity 100,000,000 gals day.

### **RESERVOIRS AND STANDPIPES**

n	Material	Elevation	Gal's Capacity	When Built
bor	Concrete	411.6	12,000,000	1894
bor	Brick	229.2	20,500,000	1894
ark	Concrete	299.5	16,400,000	1894
ark	Concrete	229.5	17,600,000	1894
abor	Concrete	411.6	50,000,000	1911
abor	Concrete	305.0	75,000,000	1911

WATER RATES: --- Mimimum charge based on size of meter.

First 20.000 cu. ft. — 14 cents per 100 cu. ft.)

Next 100,000 cu. ft. - 10 cents per 100 cu. ft. Inside City Limits.

All over 120,000 cu. ft. — 6 cents per 100 cu. ft.)

The present municipally owned water system of this city had its inception in the year 1887, when the "Water Committee," authorized by the legislature of 1885, purchased the entire holdings of the old Portland Water Co., which had served the city since 1862, the water being variously obtained from wells, creeks and finally the Willamette River. The earliest system of mains laid in 1857 consisted of bored logs.

The committee, soon after its organization, hired Col. I. W. Smith as engineer and authorized him to investigate several available sources. The following year the Bull Run River was chosen but it was not until 1891 that the work was undertaken and completed four years later. On January 1, 1895, Bull Run water first entered the city through Conduit No. 1. Coincident with this installation four reservoirs with a combined storage capacity of 65 m.g. were constructed, two on the east and two on the west side of the city.

This initial supply was augmented in 1911 by the construction of Conduit No. 2 and again in 1925 by Conduit No. 3 with capacities of 50 and 75 m.g.d. respectively. Also in 1911 reservoirs 5 and 6 were completed with respective capacities of 50 and 75 million gallons. Conduit No. 4, with capacity of 100 m.g.d. was completed in 1953, at which time No. 1 was abandoned.

The City of Portland obtains its water supply from the Bull Run River at a point 30 miles east of the city. The entire 102 square miles of watershed is located within the Bull Run Forest Reserve, a heavily timbered, uninhabited area of 218 square miles, set aside by the Government in 1892 for the water supply of the city. Trespassing and grazing of stock on the reserve are prohibited by an act of Congress.

The Bull Run River at the point of diversion has an average flow of 500 m.g.d. but as is true of all streams in the western Cascades, this flow is subject to wide seasonal variations. The maximum flood reaches 21,000 sec. ft. and the minimum as low as 64 sec. ft. or 41 m.g.d.

The waters of the Bull Run River comes from innumerable springs, small creeks and lakes fed by melting snow and rainfall, which is very heavy on the western slopes of the Cascades.

The main branch of the river has its source in Bull Run Lake which lies close to the summit of the Cascades about seven miles northwest of Mt. Hood at elevation 3175. This lake is one and three-quarters miles long and threequarters of a mile wide and has a capacity of approximately 3 billion gallons. The lake is supplied entirely by springs fed by snow and rain on the slopes surrounding it.

Contrary to an old popular belief none of the water of the Bull Run River comes from the glaciers of Mt. Hood. Deep canyons of the West Fork of Hood River and the Sandy River lie between the Bull Run watershed and the mountain.

The Bull Run Storage Project was constructed on the Bull Run River at a point five miles above the Headworks. A concrete gravity dam 200 ft. in height and 950 ft. in crest length was completed in 1929 at a cost of approximately \$3,000,000. This project provides storage of nine billion gallons, and the storage reservoir extends 3½ miles along the river. In 1955 steel lift gates were installed to increase the reservoir height by 8 feet and the capacity to ten billion gallons.

The Headworks is located five miles down the river from the storage dam. At this point a gravity dam 40 ft. in height diverts the water into three steel conduits: (52", 58" and 66" diameter), which carry it 24 miles to Reservoirs Nos. 1 and 5 on Mt. Tabor at elevation 411.6. The three conduits have a combined capacity of 225 million gallons per day.

Four distribution reservoirs are located on Mt. Tabor and two in Washington Park. The combined storage capacity within the city is 200 million gallons. The supply for the West Side is carried across the Willamette River in two submerged pipe lines, 24" and 30" diameter, laid in trenches dredged in the bottom of the river, and in two 24" diameter lines located on the Ross Island Bridge.

There are four gravity distribution areas on the East Side-High, Vernon, Intermediate and Low-supplied respectively from elevations 411.6 ft., 362.4 ft., 305.0 ft. and 229.5 ft. On the West Side there are two gravity distribution areas, High and Low, supplied respectively from elevations 299.5 ft. and 229.5 ft. In addition to these the Mt. Tabor section on the East Side and several higher elevations on the West Side are supplied by pumps, the total pumpage being approximately 8% of the entire consumption. Due to the varying topography of the city further changes in pressure are created by 78 regulating valve installations ranging in size from  $2^{\prime\prime}$  to  $24^{\prime\prime}$ . Twenty-six large meters of from 6 to 58 inch diameter furnish an index of the daily flow throughout the city. Automatic Recording Gauges are maintained at 18 widely separated points where daily readings give a constant record of pressure conditions. Normal pressures vary from 40 to 70 lbs, in residential areas and from 60 to 80 lbs, in the business section. In the layout of the distribution system it has been the policy to use not less than 6 inch mains in the residential

and 12 inch mains in the business areas, for permanent installation.

The total investment in the water system represents an outlay of over \$40,000,000.

In addition to furnishing the supply for the city proper the Water Bureau also supplies 55 water districts and companies, in outside areas adjacent to the city. This water is sold to them through master meters at the city limits. They operate their own systems and supply an estimated population of 134,000.

Portland is unusually fortunate in having an ample supply of pure and soft mountain water from a source not subject to pollution. The existing system of supply is ample for an estimated population of a million persons. The Water Department is one of the few major water supplies in the United States which is completely supported by revenues of consumers, with no tax subsidies, hidden or otherwise.



# WATER SUPPLY

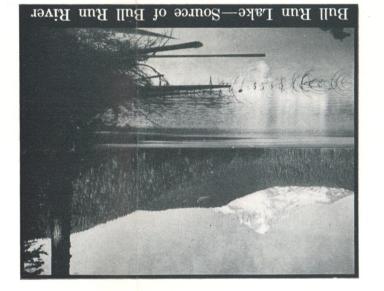
# PORTLAND, OREGON



AERIAL VIEW BULL RUN RESERVOIR AND DAM







Mt. Hood and Timber Line Lodge 8 Miles S. F. of Bull Run Lake

