

Reservoir Permit No. 2610

Application for a Permit to Construct a Reservoir and to Store for Beneficial Use the Unappropriated Waters of the State of Oregon

I, City Manager, City of Baker, Oregon (Name of Applicant) of City Hall, Baker (Mailing Address)

State of Oregon, do hereby make application for a permit to construct the following described reservoir and to store the unappropriated waters of the State of Oregon, subject to existing rights.

If the applicant is a corporation, give date and place of incorporation 1874 Baker, Oregon

1. The name of the proposed reservoir is Goodrich Reservoir

2. The name of the stream from which the reservoir is to be filled and the appropriation made is Goodrich Creek tributary of Powder River

3. The amount of water to be stored is 600 233.2 acre feet.

4. The use to be made of the impounded water is municipal water supply (Irrigation, power, domestic supply, etc.)

5. The location of the proposed reservoir will be in Sec. 4 (Give sections or townships to be submerged) Tp. 9 S., R. 38 E., W.M., in the county of Baker

(a) State whether situated in channel of running stream and give character of material at outlet Dam is to be constructed across the channel of Goodrich Creek. The material at the outlet is a well-graded glacial till.

(b) If not in channel of running stream, state how it is to be filled. If through a feed canal, give name and dimensions

6. The dam will be located in NE 1/4 SE 1/4 (Smallest legal subdivision), Sec. 4, Tp. 9 S., R. 38 E., W.M. The maximum height will be 65 feet above stream bed or ground surface on center line of dam. The length on top will be 385 feet; length on bottom approx. 10 feet; width on top 20 feet; slope on front or water side 3 to 1 (Feet horizontal to 1 vertical); slope on back 2 to 1 (Feet horizontal to 1 vertical); height of dam above water line when full 8 feet.

* A different form of application should be used for the appropriation of stored water to beneficial use. Such forms can be secured without charge, together with instructions, by addressing the State Engineer, Salem, Oregon.

7. The construction of dam, the material of which it is to be built, and method of protection from waves are as follows: The dam is to be constructed of earth, with an impervious core of sandy silt and silty gravel and an upstream and downstream pervious shell. The abutments will be blanketed with an impervious layer. The outer portion of the pervious shell will be riprapped to provide wave protection.

8. The location of wasteway with dimensions are as follows: Normal flows will be discharged over a morning glory type spillway in the upstream face of the dam. An emergency spillway will be excavated in the east abutment.

9. The location of outlet from the proposed reservoir, with character of construction and dimensions are as follows: The outlet pipe will be an 18" reinforced concrete pipe, joining the 24-inch spillway pipe; both discharge into a 27-inch pipe. The length of the entire outlet conduit will be 450 ft. The outlet will be controlled by an 18" dia. sluiceway on the upstream end of the outlet. The gate stem will be buried on the upstream face of the dam.

10. The area submerged by the proposed reservoir, when full, will be 22.8 acres, with a maximum depth of water of 40 feet; and approximate mean depth of water 35 feet.

11. The estimated cost of the proposed work is \$ 130,000

12. Construction work will begin on or before 1 July, 1961

13. Construction work will be completed on or before 15 Nov, 1961

[Handwritten Signature]
(Signature of applicant) X
City Manager, Baker, Oregon

STATE OF OREGON, }
County of Marion, } ss.

This is to certify that I have examined the foregoing application, together with the accompanying maps and data, and return the same for

In order to retain its priority, this application must be returned to the State Engineer, with corrections on or before , 19

WITNESS my hand this day of 19

STATE ENGINEER

By ASSISTANT

The following supplementary data is presented to complete the description of the project.

1. The drainage area above the dam site is 500 acres. The slopes are very steep with rock faces and talus slopes.
2. There are only intermittent streamflow records available for Goodrich Creek. The maximum runoff was determined by the rational method, using a one-hour storm of 2 inches per hour with a runoff coef. of 1.3 (for rain or snow). The flood produced by this storm can be stored above normal water surface in the reservoir.
3. The normal spillway will handle approx. 60 cfs before the emergency spillway operates. Maximum recorded streamflow is 15.8 cfs in May, 1913, 3 miles below the dam site.
4. The dam will be constructed on a lightly cemented glacial till. The abutments are pervious talus deposits. In order to reduce leakage in the abutments, the upstream face will be blanketed; a cutoff trench will be constructed at the toe of this blanket.
5. The leakage through the dam foundation and abutments is estimated to be between 0.1 and 0.4 cfs.
6. Sandy silt and silty gravel are available for the impervious portions of the dam. Gravel with limited fines is available for the pervious shell. The borrow areas are located on each abutment of the dam.
7. The creek channel below Goodrich Dam is narrow and steep, dropping approx. 3,000 ft. in 4 miles. In event of a failure of the dam, there could be considerable flooding and damage to farm lands along the lower reaches of Goodrich Creek.

Remarks:

STATE OF OREGON, }
County of Marion, } ss.

This is to certify that I have examined the foregoing application and do hereby grant the same, subject to the following limitations and conditions: The right herein granted is limited to the construction of Goodrich Reservoir and storage of water from Goodrich Creek to be appropriated under application No. 34874, permit No. 27371 for municipal use, and the dam shall be constructed under the supervision of a registered professional engineer.

The right hereunder shall be limited to the storage of 233.2 additional acre feet.
The priority date of this permit is May 4, 1961
Actual construction work shall begin on or before June 26, 1962 and shall thereafter be prosecuted with reasonable diligence and be completed on or before October 1, 1963.

WITNESS my hand this 26th day of June, 1961

Lewis A. Stanley
STATE ENGINEER

52

Application No. R-34873
Reservoir Permit No. R-2615

PERMIT

To construct a reservoir and store for beneficial use the unappropriated waters of the State of Oregon.

This instrument was first received in the office of the State Engineer at Salem, Oregon, on the 17th day of July, 1961, at 10 o'clock A.M.

Returned to applicant:

Approved:

June 26, 1961
Recorded in Book No. 10 of
Reservoirs, on Page 1111

LESLIE A. STANLEY
State Engineer

Drainage Basin No. 1 page 377

Fees